

LOWER ALLEN STORMWATER FEE STUDY

Presentation to Board of Commissioners

10/8/18

Meeting Agenda

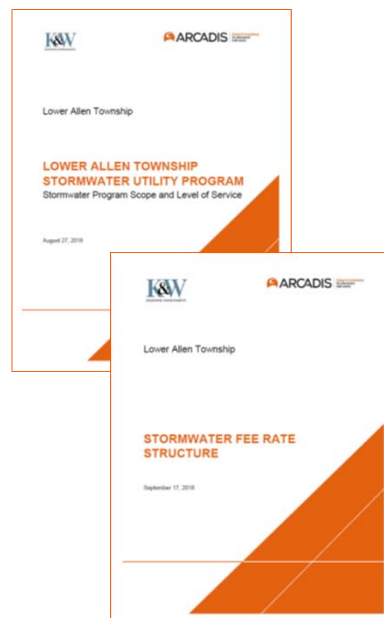
-  Introduction
-  Stormwater Program
-  Credit Policy
-  Next Steps

A. Introduction



Scope of Study

1. Parcel Data Evaluation
 - Digitizing Impervious Area
 - ERU Calculation
2. Develop MS4 Program Scope and Budget
3. Fee Analysis
4. Public Meetings
 - 6/11/18
 - 10/8/18



Key MS-4 Permit Requirements

1. Map MS4, including conveyances through private property.
2. Identify and investigate potential pollution sources.
3. Prepare Chesapeake Bay PRP.
4. Implement 6 Minimum Control Measures.
5. Maintain adequate funding to implement the Stormwater Management Program

6 Minimum Control Measures

1. Public Education
2. Public Involvement
3. Illicit Discharge Detection/ Elimination
4. Construction Site Runoff Control
5. Post Construction Stormwater Management
6. Pollution Prevention / Good Housekeeping



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Chesapeake Bay Pollution Reduction Plan

- Pollutant Removals
 - TSS (10%) ~ 317,000 lb/yr
 - N (5%)
 - P (3%)
- Types of BMPs
 - Convert 10 dry detention basins to bioretention facilities
 - 4 are Twp-owned and 6 are privately owned

**LOWER ALLEN TOWNSHIP
CUMBERLAND COUNTY
PENNSYLVANIA**

**National Pollutant Discharge
Elimination System (NPDES)**

**Small Municipal Separate Storm
Sewer System (MS4)**

**Pollution Reduction Plan (PRP)
September, 2017**

Final: 9-16-17

B. Stormwater Program



Stormwater Services

- Operations & Maintenance
 - Stormwater/drainage system and BMP maintenance
 - MS4 Permit and water quality compliance
 - Review and inspection services
- Capital
 - Stormwater compliance projects
 - Drainage and watershed projects



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Level of Service

Activity	Current	
Street Sweeping	4-5 times/yr	
MH & Inlet Cleaning	Annual	
MH & Inlet Repair	Reactive repairs < 5/yr	
Pipe Inspection/ Assessment	Minimal, reactive	
Pipe Rehab	Minimal, reactive	
Flood Abatement	Limited	

* - Includes pipes that take public road/stormwater system drainage across private property to outfall. This does NOT include private stormwater networks.

Level of Service

Activity	Current	Target
Street Sweeping	4-5 times/yr	No change
MH & Inlet Cleaning	Annual	No change
MH & Inlet Repair	Reactive repairs < 5/yr	Rehab 19 structures/yr (2.5% system)
Pipe Inspection/ Assessment	Minimal, reactive	Pole camera screen 110,600 ft (100%) over 2 yrs; then 20%/yr. Full inspect CCTV 5,530 ft/yr (5% system), proactive
Pipe Rehab	Minimal, reactive	1,600 ft/yr (1.5% system) for 5 yrs, then 2,765 ft/yr (2.5% system)
Flood Abatement	Limited	No change

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Level of Service – MS4

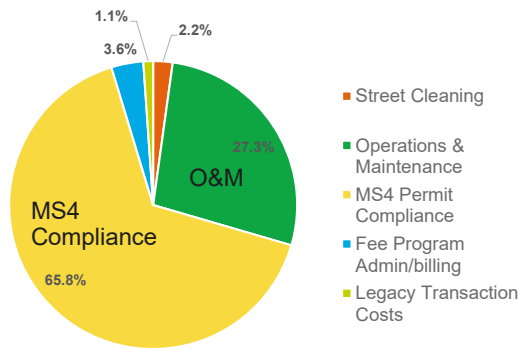
Activity	Current	Target (5-yr avg)
New BMP – Design & Construction	\$0	\$675,000
New BMPs – O&M	\$0	\$13,000
Other MS4 Permit Work (outfall inspections, public outreach, reporting)	\$170,000	\$186,000

5-Year Budget

Current						
Category	2018 Est.	2019	2020	2021	2022	2023
Street Sweeping	\$23,768	\$24,481	\$25,215	\$25,971	\$26,751	\$27,553
Operations & Maintenance	\$144,500	\$304,724	\$331,466	\$321,371	\$331,012	\$340,942
MS4 Permit Compliance ¹	\$87,300	\$185,870	\$726,649	\$1,234,586	\$887,170	\$890,198
Fee Program Admin/billing	\$0	\$85,000	\$45,300	\$30,609	\$26,077	\$26,860
Legacy Transaction Costs	\$0	\$65,000	\$0	\$0	\$0	\$0
Total	\$255,568	\$665,074	\$1,128,630	\$1,612,537	\$1,271,010	\$1,285,553

1 - 88% of MS4 Permit Compliance costs are associated with new BMPs. 2024 budget to drop based on completion of CBPRP projects.

5-Year Budget



~\$1.2M/yr

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Rate Structure

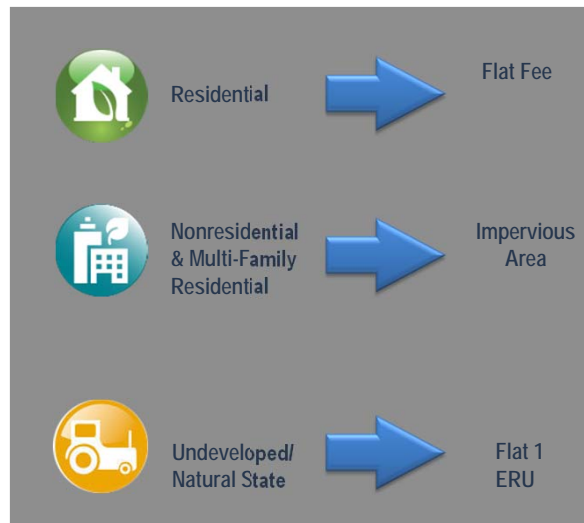
Designed to Meet Township Needs:

Keep it simple

- Accurate, fair, and defensible
- Representative of local conditions

Link to benefits

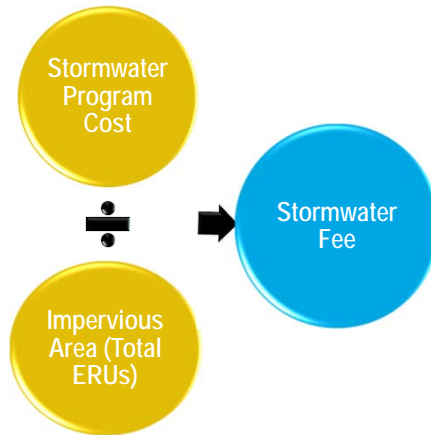
- Service area
- Program
- Projects



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Rate Structure Based on *Impervious Surface Area*



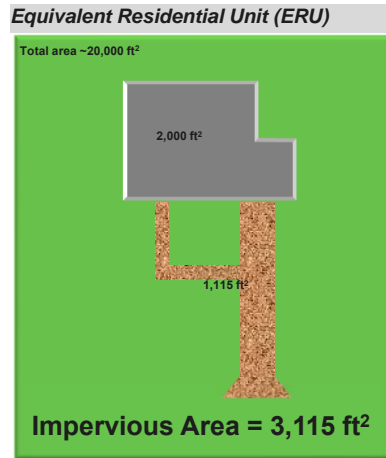
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Digitizing



- Impervious Area digitized includes building, sidewalks and driveways
 - 18% of 5,354 Single-Family Residential
 - 100% of 526 Non-Residential/Multi-family
- Calculated ERU = **3,115 sf** of impervious area
- 10 properties have 200+ ERUs.

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Impervious Area Typical Residence Defines the Base Unit



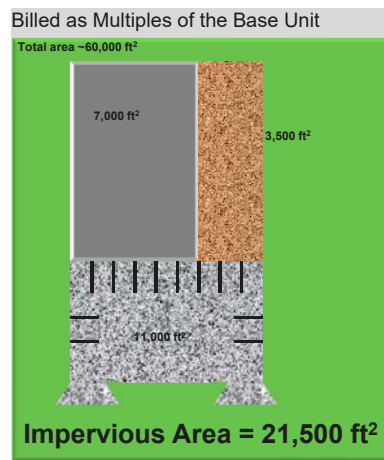
Calculated ERU = 3,115 SF

-  House Area
-  Other Impervious Area

Single Family Residential




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Impervious Area Commercial Properties



Calculation of ERUs

$$21,500 \text{ sf} / 3,115 \text{ sf/ERU} = 6.90 = 7 \text{ ERUs}$$

-  Building Area
-  Parking
-  Other Impervious Area

Nonresidential Parcel

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ERUs - Commercial

- 526 Parcels
- # ERUs = IA / 3,115 SF
- 12,458 Gross ERUs
- Assume 10% loss to credit program
- **11,212 Net ERUs**

	OWNER	Total IA (SF)	ERUs
1	PA INDUSTRIAL SCHOOL	2,689,101	863
2	PR CC LIMITED PARTNERSHIP	1,818,727	584
3	2850 APPLETON ASSOCIATES INC	905,225	291
4	EXETER 4501 WESTPORT LLC	755,534	243
5	SKYLINE STEEL LLC	745,596	239
6	WEST SHORE AREA SCHOOL	694,297	223
7	ASBURY ATLANTIC INC	638,996	205
8	CHRISTIAN LIFE ASSEMBLY OF GOD	636,025	204
9	YETTER COURT ENTERPRISES LLC	606,022	195
10	ARMERACH L P	536,864	172
11	ASBURY ATLANTIC INC	493,803	159
12	WEIS MARKET INCORPORATED	460,753	148
13	LISBURN DEVCO I LP	460,149	148
14	LFGC, INCORPORATED	453,451	146
15	PA BUSINESS CENTER LP	419,836	135
16	ASBURY ATLANTIC INC	416,617	134
17	PENNSYLVANIA POWER & LIGHT	413,635	133
18	ROMAN CATHOLIC DIOCESE OF TR	411,390	132
19	SMITH LAND & IMPROVEMENT CORP	390,201	125
20	LOWER ALLEN BUS CNTR LP	381,447	122
21	WARRELL CORPORATION	377,507	121
22	VITRAN PENNSYLVANIA LLC	351,689	113
23	AMSI INVESTORS	349,944	112
24	ALSTORES REALTY CORPORATION	337,152	108
25	WEST SHORE AREA SCHOOL	337,092	108

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PennDOT and PA Turnpike are not included in table.

ERUs – Residential

- **Flat rate** fee structure for all parcels was selected because:
 - Easy to administer, requiring minimal cost and effort to implement and oversee
 - Fewest anticipated appeals
 - Individually measured impervious area and custom invoices would require significant money and time to implement
 - Residential customers pay a flat rate for wastewater and trash service. Stormwater fee will be a consistent approach.
 - Easy to explain

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Residential ERUs

- 5,354 Parcels = 5,354 Gross ERUs
- Assume 5% of Gross ERUs to be lost to a credit program
- **5,086 Net ERUs**



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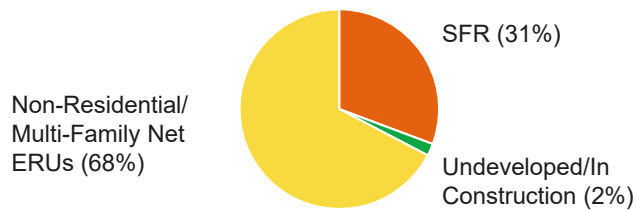
ERUs – Undeveloped

- ~287 Parcels Undeveloped or Under Construction
- Fee is 1 ERU flat charge since all properties produce some runoff and simpler and less effort to administer than a fee structure proportionate to IA and Total Area.
- **287 ERUs**

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Total ERUs Estimate

Category	# ERUs
SFR	5,354
SFR Credits	-268 [5%]
Non-Residential/ Multi-Family	12,458
NR/MF Credits	-1,246 [10%]
Undeveloped	287
Total	16,585



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Rate and Cash Flow Projection

	2019	2020	2021	2022	2023
ERU Rate Change	N/A	0%	0%	0%	0%
ERU Rate (\$/qtr)	19.00	19.00	19.00	19.00	19.00
Net ERUs	16,585	16,585	16,585	16,585	16,585
Total Billed Revenue (\$)	1,260,460	1,260,460	1,260,460	1,260,460	1,260,460
Revenue Collected (\$)	1,226,175	1,226,175	1,226,175	1,226,175	1,226,175
Budgeted Expenses (\$)	665,074	1,128,630	1,612,537	1,271,010	1,285,553
Net Revenue (\$)	561,101	97,546	(386,362)	(44,834)	(59,378)
Year End Cash Balance (\$)	561,101	658,647	272,285	227,451	168,073
Cash Balance (% of Annual Budget)	84%	58%	17%	18%	13%

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Stormwater Fee

Quarterly fees for various properties could be:

	Residential	Gas Station	Church	Box Store
ERUs	1	6	40	150
Stormwater Fee	\$19	\$114	\$760	\$2,850

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Residential Stormwater Utility Charges for Other Municipalities in Pennsylvania

Chambersburg - \$12/quarter (**revisiting in 2019**)

Hampden \$13.25/quarter

Lancaster - \$19.35/quarter for 2,001-3,000 SF IA (tiered on IA)*

Meadville - \$22.50/quarter

Highspire Borough - \$22.50/quarter

Mount Lebanon - \$24/quarter

Radnor - \$7.25 to \$29/quarter (tiered on total area)

Derry Twp – \$19.50/quarter for 3,000-4,999 SF of IA (tiered on IA)**

Williamsport – Exploring \$14.10/quarter

Swatara Twp - \$15/quarter (flat)

Lower Allen - \$19.00/quarter (flat)

* - For properties with greater than 3,000 SF of impervious area charge is proportional to impervious area.

** - 500-2,999 SF is \$9.75/qtr.

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Credits

- Encourage private development of Best Management Practices that will help meet MS4 permit requirements
- Account for varying levels of onsite stormwater management
- Capped at an annual maximum of 50%
- O&M agreements and periodic inspection reports required
- No application fee
- Details and policy to be developed.
- Will monitor and adjust policy over time



D. Next Steps



Next Steps

1. Develop Credit & Appeals Policy
2. Deliver GIS Database to LAT for use in billing setup
3. Pass Rate Resolution/Ordinance
4. Update billing system and issue invoices

Questions?

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