

Preliminary Stormwater Cost Study

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BOROUGH of LIGONIER

Presentation Outline

- Potential funding from a stormwater fee
- Estimated cost of stormwater system replacement
- Basic financing calculations



Stormwater Fee - Overview

- Determine the average impervious area for a single-family dwelling within the Borough
- This average becomes the equivalent residential unit (ERU)
- Each single-family dwelling is charged the same rate regardless of actual impervious surface
- Commercial/other parcels
 - Total impervious surface divide by ERU
 - This value is rounded up and multiplied by the cost per ERU



Single Family Dwelling

- Use aerial imagery to determine impervious surface
- 574 parcels
- Min: 493 sf
- Max: 8,184 sf
- Average: 2,358 sf



Commercial/Other

- Use aerial imagery to determine impervious surface
- 175 parcels
- Min: 854 sf
- Max: 128,458 sf
- Average: 9,593 sf



Equivalent Residential Unit

Ligonier Borough

- \$100 per ERU per year (assumed)
- Min. 400 sf
- Average: 2,358 sf

Commercial/Other:

- Not charged less than 1 ERU
- Not charged more than 30 ERU

Ebensburg Borough

- \$96 per ERU per year
- Min. 400 sf
- Average: 2,830 sf

Commercial/Other:

- Not charged less than 1 ERU
- Not charged more than 30 ERU



Stormwater Fee Estimated Income

Single Family Dwellings:

- \$100 per ERU per year (assumed)
- 574 parcels with 400 sf impervious area or more
- Income: $\$100(574) = \$57,400$ per year

Commercial/Other:

- Average: 2,358 sf (assumed 2,400 sf for ERU)
- ERU computed for each parcel
- Average ERU: 4
- 13 parcels with ERU 10 to 30
- Two parcels with ERU = 30
- Income: \$74,900

$$\$57,400 + \$74,900 = \$132,300$$

Estimated Income = approx. \$132,000 per year



PennVest



- Fund sewer, water, and stormwater projects
- Recommend stormwater fee to be 0.25% of the median household income
- Median household income: \$68,523 (US Census Data)
- $(0.0025)(\$68,523) = \171 per household per year
- Total households = 776 (US Census Data)
- $\$171(776) = \$132,696$
- DOES NOT ADDRESS COMMERCIAL PROPERTIES

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Estimated Income = approx. \$132,000 per year



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PennVest



- $(0.0025)(\$68,523) = \171 per household per year
- 574 single-family parcels with 400 sf impervious area or more
- 175 commercial/other parcels with 400 sf impervious area or more
- $574 + 175 = 749$ parcels
- $\$171(749) = \$128,079$

Estimated Income = approx. \$128,000 per year



Replacement Cost Estimate

Currently installed system:

- 21,035 linear feet of pipe
- 44 Outfalls
- 513 Inlets
- 14 Manholes

\$10 - \$15 million for replacement



Financing



- PennVest recommended funding source
- \$10 million limit per application for stormwater projects
- Grant money can be included with the funding package
- Do not have to charge a stormwater fee to receive a loan/grant
- 20-year loans
- 1.000% for years 1-5, 1.743% for years 6-20



Financing



- Can split the project into phases
- Estimated stormwater fee: \$130,000 per year
- \$10 million principal, 1.743%, 20-year loan
 - Approx. \$600,000 per year repayment (\$50,000 per month)
 - \$470,000 per year budget shortfall
- \$2 million principal, 1.743%, 20-year loan
 - Approx. \$120,000 per year repayment (\$10,000 per month)

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Questions?

