DEMYSTIFYING THE STORMWATER MANAGEMENT FEE: IMPLEMENTING A STORMWATER FEE TO PAY FOR INTEGRATED STORMWATER SOLUTIONS

January 28, 2016
3 Rivers Wet Weather
The City of Lancaster: Overview

- Incorporated in 1742 as a borough and in 1818 as a City
- Served as the temporary National Capital during the Revolution
- ~60,000 residents in the 2010 census
- 7.34 square miles
- Historic building stock (median home age of 100 years)
- Surrounded by some of the most productive non-irrigated farmland in the U.S.
- Environmental Justice Community
Lancaster’s Clean Water Act
History
We are not alone! Many municipalities have combined sewer overflows (CSOs).

US EPA:
- 772 CSO Communities
- Approximately 40 million people
45% Combined, 55% Separate Storm Sewers
“Lancaster is in violation of the AO, and needs to address these deficiencies as soon as possible. Violation of the terms of the AO may result in further EPA enforcement action for violation of the order and for the underlying violations including, but not limited to, imposition of administrative penalties, 33 U.S.C § 1319(g), and/or initiation of judicial proceedings that allow for civil penalties of up to $37,500 per day, 33 U.S.C § 1319 (b) and (d), for each day of violation.”
Multiple Clean Water Challenges Require An Integrated and Equitable Solution

- CSO Discharges
- MS4 Permits
- TMDLs: Chesapeake Bay Requiring 60% reduction in nutrients by 2017

Integrating these efforts and implementing them consistently can greatly reduce CSO discharges and nutrients from the urban area such as MS4 Communities
48% of the City is Impervious Cover

- Buildings: 41%
- Roadways: 25%
- Parking Lots: 32%
- Railroads: 2%
The Green Infrastructure Benefit Calculator Projects Future Benefits for CSO and MS4 Areas

Table 5-11 – Green Infrastructure Calculator for long-term (approximately 25-year period)

<table>
<thead>
<tr>
<th>Impervious Area Type</th>
<th>Impervious Area</th>
<th>Green Technology</th>
<th>Impervious Area Managed</th>
<th>Annual Runoff / Runoff Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads / Alleys</td>
<td>529</td>
<td>Park Streets</td>
<td>30%</td>
<td>159</td>
</tr>
<tr>
<td>Parks</td>
<td>241</td>
<td>Disconnection, Porous Pavement</td>
<td>85%</td>
<td>17.0</td>
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<tr>
<td>Sidewalks</td>
<td>218</td>
<td>Porous Pavement, Bioretention</td>
<td>20%</td>
<td>3.3</td>
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<tr>
<td>parking Lots</td>
<td>648</td>
<td>Vegetated Roofs / Disconnection</td>
<td>15%</td>
<td>32.7</td>
</tr>
<tr>
<td>Flat Roofs</td>
<td>218</td>
<td>Disconnection/Rain Gardens</td>
<td>25%</td>
<td>1.64</td>
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<tr>
<td>Sloping Roofs</td>
<td>654</td>
<td>Enhanced Tree Planting</td>
<td>N/A</td>
<td>45.1</td>
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<tr>
<td>Street Trees</td>
<td>N/A</td>
<td>Green Schools</td>
<td>75%</td>
<td>38.4</td>
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<tr>
<td>Public Schools</td>
<td>175</td>
<td>First-Flush Ordinance</td>
<td>50%</td>
<td>637</td>
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<tr>
<td>Total</td>
<td>1,265</td>
<td></td>
<td></td>
<td>3,752</td>
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55%

Pollutant Load Reductions

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Average Stormwater Concentration (mg/L)</th>
<th>Average CSO Discharge Concentration (mg/L)</th>
<th>Pollutant Reduction from Stormwater (lb/yr)</th>
<th>Pollutant Reduction from CSOs (lb/yr)</th>
<th>Total Est. Pollutant Reduction (lb/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Suspended Solids (TSS)</td>
<td>1.2</td>
<td>6.3</td>
<td>3,205</td>
<td>445</td>
<td>1,457,000</td>
</tr>
<tr>
<td>Total Phosphorus (TP)</td>
<td>0.7</td>
<td>3.5</td>
<td>2,053</td>
<td>445</td>
<td>27,800</td>
</tr>
<tr>
<td>Total Nitrogen (TN)</td>
<td>0.7</td>
<td>13.5</td>
<td>59,564</td>
<td>2,053</td>
<td>61,600</td>
</tr>
</tbody>
</table>

*Based on the midpoint pollutant concentrations in USEPA's CSO Report to Congress, 2001

25-Year Plan to manage over 1,200 Acres of Impervious Area Capture nearly 750 Million Gallons of Stormwater Runoff over the long term
Green Parks
6th Ward Park: Extending the Benefit of the Playcourt

B. Revised Sketch Without Formerly Proposed Frederick Street Connection and with Fewer Proposed Pathways (September, 2008)
6th Ward Park Rededication Ceremony
First Demonstration Project at 6th Ward Park Reveals High Cost/Benefit

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Runoff Reduction</strong></td>
<td>695,000</td>
<td>gallons / yr</td>
</tr>
<tr>
<td><strong>Bid</strong></td>
<td>$116,300</td>
<td></td>
</tr>
<tr>
<td><strong>Cost of Court Only</strong></td>
<td>$49,650</td>
<td></td>
</tr>
<tr>
<td><strong>Incremental Cost of GI</strong></td>
<td>$66,650</td>
<td></td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td>$0.17</td>
<td>/gallon</td>
</tr>
<tr>
<td><strong>Incremental Cost of GI</strong></td>
<td>$0.10</td>
<td>/gallon</td>
</tr>
<tr>
<td><strong>Grey Storage Cost</strong></td>
<td>$0.25-0.30</td>
<td>/gallon</td>
</tr>
</tbody>
</table>

[Funding from DCNR, DEP and Chesapeake Bay Stewardship Fund (NFWF)]

[Add'l GI Cost $66,650 57%]
[Base Cost $49,650 43%]
[43% savings through integration]
Green Parks
Brandon Park

4 Million Gallons / year reduction in runoff volume → $0.15/gal
Brandon Park – Wabank St. Curb Extensions
Garden of Distinction recognition from Pennsylvania Horticultural Society
Brandon Park
Brandon Park
Rodney Park

704,000 Gallons / year reduction in runoff volume
Crystal Park

1,320,000 Gallons / year reduction in runoff volume
Parking Lots
Mifflin Street Parking Lot

281,000 Gallons / year reduction in runoff volume
Plum Street Parking Lot

731,000 Gallons / year reduction in runoff volume
Penn Ave Parking Lot

538,000 Gallons / year reduction in runoff volume
Dauphin Street Parking Lot

452,000 Gallons / year reduction in runoff volume
Summary of City-Owned Parking Lot Retrofit Projects

<table>
<thead>
<tr>
<th>Parking Lot</th>
<th>Drainage Area</th>
<th>GI Area</th>
<th>Capture Volume</th>
<th>Capital Costs with Contingency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plum Street</td>
<td>23,402</td>
<td>4,680</td>
<td>511,000</td>
<td>$89,862</td>
</tr>
<tr>
<td>Dauphin</td>
<td>20,582</td>
<td>4,516</td>
<td>411,000</td>
<td>$61,822</td>
</tr>
<tr>
<td>Penn</td>
<td>22,758</td>
<td>4,219</td>
<td>455,000</td>
<td>$60,749</td>
</tr>
<tr>
<td>Mifflin</td>
<td>13,242</td>
<td>1,324</td>
<td>265,000</td>
<td>$27,013</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>1,642,000</td>
<td>$239,446</td>
</tr>
</tbody>
</table>

COST PER GALLON = $0.14/gallon
Green Roofs

- Over 100,000 sf of green roofs in Lancaster City.
- 10 green roofs in PENNVEST funding planned.
- Approximately 1.5 square foot per person!
- Additional 50,000 sf under design for next year using PENNVEST funds
Pavement Condition Scores Guide Selection of Green Streets & Alleys
Pavement Condition Summary by Functional Class

Using Descriptive Terms - All Streets

Green Street Focus

PMP Focus

Percentage of Network

Pavement Condition Index

- Very Poor (0 to 20)
- Poor (20 to 35)
- Marginal (35 to 45)
- Fair (45 to 55)
- Good (55 to 70)
- Very Good (70 to 85)
- Excellent (85 to 100)
Lowest Overall Green Street Cost

Integrated Infrastructure: Finding Cost-Effective Green Streets Opportunities

- Road Type
  - Width
  - Traffic
  - Ownership (City, State, private alleys)

- Tree Canopy
- Flooding locations
- Overhead Wires
- Sidewalk Condition
- Inlet Condition

- Pavement Condition

- ADA Priority

- Street Slope & Other Factors

- Basin Priority (CSO vs MS4)

- Lowest Overall Green Street Cost
1st Green Alley
### Alley 148 Greened for 10% Additional Cost

**Before (July 2011)**

<table>
<thead>
<tr>
<th>Component</th>
<th>Conventional Unit Cost ($/square foot)</th>
<th>Green Unit Costs ($/SF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pavement Removal/Excavation</td>
<td>$1.08</td>
<td>$1.08</td>
</tr>
<tr>
<td>Crushed Stone w/ geotextile</td>
<td>$0.35</td>
<td>$1.39</td>
</tr>
<tr>
<td>Pipes/Cleanouts/etc.</td>
<td>---</td>
<td>$0.82</td>
</tr>
<tr>
<td>8-inch reinforced concrete</td>
<td>$18.89</td>
<td>$18.89</td>
</tr>
<tr>
<td>Permeable Pavers</td>
<td>---</td>
<td>$19.44</td>
</tr>
<tr>
<td><strong>Total Weighted Average</strong></td>
<td><strong>$20.32</strong></td>
<td><strong>$22.37</strong></td>
</tr>
<tr>
<td><strong>Additional Green Cost ($/SF)</strong></td>
<td>---</td>
<td><strong>$2.05</strong></td>
</tr>
<tr>
<td><strong>Additional Green Cost (%)</strong></td>
<td>---</td>
<td><strong>10%</strong></td>
</tr>
</tbody>
</table>

**After (February 2012)**

~$20.30/SF for conventional reconstruction (8-inch reinforced concrete)

~$22.40/SF for green alley retrofit (permeable pavers with infiltration trench)

195,000 Gallons / year reduction in runoff volume
Broad St & New Dauphin Street Green Street
<table>
<thead>
<tr>
<th>Project Reference ID</th>
<th>P-121</th>
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<tbody>
<tr>
<td>Project Name</td>
<td>Pavement Removal at New Dauphin and N. Broad St.</td>
</tr>
<tr>
<td>GI Prototype Project Type</td>
<td>Alley/Street</td>
</tr>
<tr>
<td>Construction Year (Actual)</td>
<td>2012</td>
</tr>
<tr>
<td>Impervious Area Contributing (ft²)</td>
<td>31,000</td>
</tr>
<tr>
<td>GI Area (ft²)</td>
<td>3,000</td>
</tr>
<tr>
<td>Calculated Estimated Capture Volume (gal/yr)</td>
<td>554,000</td>
</tr>
<tr>
<td>Estimated Constructed Cost (Class 3)</td>
<td>$86,000</td>
</tr>
<tr>
<td>Bid GI Construction Cost</td>
<td>$80,000</td>
</tr>
<tr>
<td>Cost / Stormwater Volume ($/gal)</td>
<td>$0.14</td>
</tr>
</tbody>
</table>

550,000 Gallons / year reduction in runoff volume
Intersection at Charlotte and Orange Streets

Cost $0.12/gal
Orange and Charlotte St
Integrating with water and sewer upgrades – Greening Spruce Street

<table>
<thead>
<tr>
<th>Impervious Area Contributing (ft²)</th>
<th>GI Area (ft²)</th>
<th>Calculated Storage Volume (ft³)</th>
<th>Calculated Capture Depth (in)</th>
<th>Calculated Estimated Capture Volume (gal/yr)</th>
<th>Actual Construction Cost (Bid)</th>
<th>Construction Cost / Stormwater Volume ($/gal)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1.01</td>
<td>250,000</td>
<td>$21,000</td>
<td>$0.08</td>
</tr>
</tbody>
</table>

Integrating with water and sewer upgrades – Greening Spruce Street

![Map of Spruce Street with identified areas](image)

**Legend**
- Proposed Inlets
- Inlet
- Inlets (IMS Surveyed)
- Hydrants
- Manholes
- ADA Ramps
- Gravity Sewer Lines
- 4” - 15” diam.
- 15” - 30” diam.
- 30” - 60” diam.
- 60” - 120” diam.
- Parcel Boundary
- Drainage Areas
- Stormwater Trench
- Existing Tree Canopy

**City of Lancaster Green Infrastructure Program**

**Site 150:** Spruce Street

**CONCEPT PLAN**

**Estimated Drainage Area:** 12,825 ft²

**Estimated Annual Capture:** 250,000 gallons
Spruce Street Greening Project (2014)

250,000 Gallons / year reduction in runoff volume
Using Traffic Safety and Transportation Funding to Reduce Accidents and Runoff

2014 Governor’s Award for Environmental Excellence Commonwealth Award and the 2014 Best Urban BMP in the Bay Award

5 MPH reduction in average traffic speed!
Lancaster Brewing Company (Plum and Walnut)

-Dangerous Intersection Conditions
-Adjacent to National Register Historic Building
-Gateway into the City’s downtown
The Lancaster Brewing Company “Beer Garden” is Coming!
700 Gallon Cistern Functions As Public Art and Irrigates Planters
700 Gallon Cistern Functions As Public Art and Irrigates Planters
EY KIDS!

Ever wonder where all the rain and snow goes after a storm?

Water that rains down washes over streets, lawns, parking lots and off of roofs, like the one over your head, and eventually into storm drains (the grates you see on sidewalks and streets). Along the way, the water gets really dirty from things like litter, pet waste, chemicals, oils and car fluids.

While some of it can be cleaned up at a treatment center, some of that dirty water ends up in our creeks, ponds and lakes like the Conestoga River, and eventually flows all the way to the Chesapeake Bay!

Each year, 750 million gallons of polluted water from Lancaster City ends up in the Bay. That’s a lot of dirty water! What if we could keep it clean?

There are lots of ways we can all help recycle water.

And one of those ways is right here where you are eating—the cool Public Artwork outside this restaurant, called “Lancaster’s Gateway Bundle.”

When rain falls or snow melts on the roof, it flows right into the giant “bucket” (called a cistern) attached to the building. The cistern catches that water before it flows through the drains into the rivers. It can hold 750 gallons of water (that’s enough to fill your bathtub over 30 times!)

And guess what? Not only do we keep that dirty water from going into our rivers and streams, that water can be used to water the plants in the restaurant’s garden outside.

NOW THAT’S COOL!
274,000 Gallons / year reduction in runoff volume from 15,000 sf contributing area
Mulberry Street Two-Way Conversion Project

Current Conditions

Proposed Design
$3.64 M in grants used to date. Matched by $3.7 M in local/city funds
## Green Infrastructure Implementation Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Number of Projects</th>
<th>Impervious Area Managed (sq. ft.)</th>
<th>Impervious Area Managed (acres)</th>
<th>Annual Runoff Capture (Gal/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructed / Under Construction</td>
<td>52</td>
<td>1,009,587</td>
<td>23</td>
<td>20,172,000</td>
</tr>
<tr>
<td>In Design for Construction</td>
<td>14</td>
<td>943,000</td>
<td>22</td>
<td>17,984,000</td>
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<tr>
<td>Conceptual Designs (non-PV/GGP)</td>
<td>24</td>
<td>640,000</td>
<td>15</td>
<td>12,262,000</td>
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<tr>
<td>PENNVEST Concepts</td>
<td>19</td>
<td>367,000</td>
<td>8</td>
<td>7,033,000</td>
</tr>
<tr>
<td>Growing Greener Plus Concepts</td>
<td>1</td>
<td>46,000</td>
<td>1.1</td>
<td>881,000</td>
</tr>
<tr>
<td>In Project Planning</td>
<td>52</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>162</strong></td>
<td><strong>3,005,587</strong></td>
<td><strong>69</strong></td>
<td><strong>58,332,000</strong></td>
</tr>
</tbody>
</table>
Paying for it!
Innovative Public-Private Partnership enables private investments in CWA progress

- $7M SRF PENNVEST Loan to fund implementation of GI on public & private property
- 45 initial GI/BMP sites
- City pays up to 90% of GI Costs
- Property owner pays remainder and signs on to long-term maintenance agreement
- SW Utility implementation also motivating additional private investment in CWA controls
317 N. Mulberry

- PENNVEST project coordinated with redevelopment
- Challenging coordination/sequencing
- Developer expanded decorative pavers to full driveway
- Captures large neighboring building
- Hosted EPA Press Conference on GI in April 2014

<table>
<thead>
<tr>
<th>Description</th>
<th>Value/Details</th>
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<tbody>
<tr>
<td>Impervious Area Contributing (ft²)</td>
<td>20,000</td>
</tr>
<tr>
<td>GI Area (ft²)</td>
<td>2,000</td>
</tr>
<tr>
<td>Calculated Estimated Capture Volume (gal/yr)</td>
<td>399,000</td>
</tr>
<tr>
<td>Estimated Constructed Cost (Class 3)</td>
<td>$75,000</td>
</tr>
<tr>
<td>Estimated Construction Cost (Class 4)</td>
<td>$75,000</td>
</tr>
<tr>
<td>Bid GI Construction Cost</td>
<td>$75,000</td>
</tr>
<tr>
<td>Cost / Stormwater Volume ($/gal)</td>
<td>$0.19</td>
</tr>
<tr>
<td>Primary Funding</td>
<td>PENNVEST</td>
</tr>
</tbody>
</table>
399,000 Gallons / year reduction in runoff volume
### Two Dudes Painting Company

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impervious Area Contributing (ft²)</td>
<td>17,000</td>
</tr>
<tr>
<td>GI Area (ft²)</td>
<td>4,000</td>
</tr>
<tr>
<td>Calculated Estimated Capture Volume (gal/yr)</td>
<td>295,000</td>
</tr>
<tr>
<td>Estimated Constructed Cost (Class 3)</td>
<td>$93,000</td>
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<tr>
<td>Estimated Construction Cost (Class 4)</td>
<td>$93,000</td>
</tr>
<tr>
<td>Cost / Stormwater Volume ($/gal)</td>
<td>$0.32</td>
</tr>
<tr>
<td>Primary Funding</td>
<td>PENNVEST</td>
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</tbody>
</table>

**295,000 Gallons / year reduction in runoff volume**
Steeple View Lofts

- PENNVEST project coordinated with redevelopment
- Permeable Pavers / Infiltration Trench
- Porous Asphalt / Infiltration Bed

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Impervious Area Contributing (ft²)</td>
<td>11,000</td>
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<tr>
<td>GI Area (ft²)</td>
<td>4,000</td>
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<tr>
<td>Estimated Capture Volume (gal/yr)</td>
<td>237,000</td>
</tr>
<tr>
<td>Estimated Constructed Cost (Class 3)</td>
<td>$76,000</td>
</tr>
<tr>
<td>Estimated Construction Cost (Class 4)</td>
<td>$76,000</td>
</tr>
<tr>
<td>Bid GI Construction Cost</td>
<td>$68,400</td>
</tr>
<tr>
<td>Cost / Stormwater Volume ($/gal)</td>
<td>$0.29</td>
</tr>
</tbody>
</table>

Primary Funding: PENNVEST

237,000 Gallons / year reduction in runoff volume
Stormwater Utilities are increasing across the country

- > 1,400 stormwater utilities exist across the country*
- In Pennsylvania, at least five (5) are now collecting revenues: Philadelphia, Meadville, Mount Lebanon, Radnor, and Lancaster
  - City of Lancaster started Feb 2014
- West Chester and six municipalities in Lancaster County have feasibility studies completed

GREEN INFRASTRUCTURE ADVISORY COMMITTEE

- Included representatives from:
  - business owners,
  - citizens,
  - institutions,
  - environmental groups,
  - state government,
  - Lancaster City government, and
  - Lancaster County government.

- Met 6 times between April and September 2012 on funding options and policy issues
The GIAC was convened to evaluate fair and equitable ways to fund the City’s stormwater program.

- **Potential funding sources:**
  - Increase property taxes
  - Raise sewer bills
  - Implement a fee based on stormwater runoff

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Stormwater runoff is measured by impervious area = roofs and pavement where rain runs off, rather than soaking into the ground.
Impervious Area Fee Analysis

Number of Properties
- Single Family: 77%
- Commercial: 21%
- Industrial: 1%
- Non-Profit: 1%
- Institutional: 0.25%
- Government: 0.32%

Number of ERUs
- Single Family: 17%
- Commercial: 50%
- Industrial: 19%
- Non-Profit: 6%
- Institutional: 5%
- Government: 3%

Legend:
- Single Family
- Commercial
- Industrial
- Non-Profit
- Institutional
- Government
The Green Infrastructure Committee Studied the Funding Details

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Estimated Annual Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Operating and Maintenance</td>
<td></td>
</tr>
<tr>
<td>Green Infrastructure*</td>
<td>n/a</td>
</tr>
<tr>
<td>Dry and Wet Ponds (inspection)</td>
<td>$2,300</td>
</tr>
<tr>
<td>Street Sweeping</td>
<td>$168,800</td>
</tr>
<tr>
<td>Catch Basin</td>
<td>$201,000</td>
</tr>
<tr>
<td>Storm Drainage</td>
<td>n/a</td>
</tr>
<tr>
<td>MS4 Implementation</td>
<td>$451,566</td>
</tr>
<tr>
<td>Program Administration</td>
<td>$142,000</td>
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<tr>
<td>Capital Costs</td>
<td></td>
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<tr>
<td>Green Infrastructure</td>
<td>$730,600</td>
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<tr>
<td>Storm Drainage</td>
<td>n/a</td>
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<tr>
<td>Catch Basin</td>
<td>$164,000</td>
</tr>
<tr>
<td>Total</td>
<td>$1,860,266</td>
</tr>
</tbody>
</table>

GIAC recommended the Medium Level of Service
implementing a rate structure with four “tiers” based on impervious area.

The GIAC recommends:

- Tier 1 (0-999 sq. ft.): 11%
- Tier 2 (1,000-1,999 sq. ft.): 26%
- Tier 3 (2,000-2,999 sq. ft.): 52%
- Tier 4 (≥3,000 sq. ft.): 11%

Percentages refer to percent of all properties.

Rates are estimated first year fees per quarter, for Medium Level of Service:

For example – average fee per quarter:
- Residential: $10
- Commercial: $139
Comparison of Charges

**Average Residential**

- Stormwater Management Fee: $10
- Property Tax: $24
- Sewer Charge: $20

**Average Industrial**

- Stormwater Management Fee: $10
- Property Tax: $5
- Sewer Charge: $10

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Comparison of Quarterly Charges

**Stormwater Management Fee**
- Quarter 1: $1,815
- Quarter 2: $649
- Quarter 3: $319

**Impervious Area Service Fee**
- Quarter 1: $1,815
- Quarter 2: $649
- Quarter 3: $319

Rates and charges assume medium level of service ($4,800,000 annual program) and rate of $7.74/1,000 square feet/quarter.
including an incentive program to provide fee relief.

- **Rebates or Grants** – 1 time assistance with construction cost (PENNVEST)

- **Credits** – a percentage reduction in the annual impervious area fee
  - Total credit applications: 47 received – 40 approved, 3 denied, 4 under review

- **Appeals** – Total appeals received is 116: 58 approved, 50 denied, 2 withdrawn, 5 on hold and 1 under review

- **Benefits:**
  - Help property owners reduce their annual stormwater fee
  - Provide incentive for implementing green infrastructure on private property
  - Provide incentive to maintain facilities
Typical Residential Stormwater Fees

Typical Residential Annual Fee

- Portland, OR: $237.00
- Philadelphia, PA: $161.76
- Virginia Beach, VA: $115.34
- Norfolk, VA: $99.96
- Mt. Lebanon, PA: $96.00
- Portsmouth, VA: $84.00
- Washington, DC: $73.44
- Gaithersburg, MD: $70.50
- Montgomery County, MD: $70.50
- Newport News, VA: $65.40
- Suffolk, VA: $62.88
- Rockville, MD: $62.48
- Hampton, VA: $55.20
- Chesapeake, VA: $53.40
- Takoma Park, MD: $48.00
- Richmond, VA: $45.00
- Prince William County, VA: $26.36

Lancaster Stormwater Fee
$30.96 per 1000 sf per year ($7.74 per qtr)
Community education and outreach

Save It! Your Water. Your Money. Your City.

What’s the Problem? What Can I Do? Benefits Local Projects Resources What’s New? FAQs

WATER HEROES

Chestnut Hill
For Doreen Landis, Chestnut Hill Cafe’s owner, Lancaster City’s stormwater problem hits home. Literally.

BABY STEPS:
I’ve got 5 minutes, What can I do?
Take a shower instead of a bath

BIG STEPS:
I’ve got 5 hours, What can I do?
Install a rain barrel

GIANT STEPS:
I’ve got 5 days, What can I do?
Install a green roof

Your Water, Your Money, Your City.

Lancaster, you can help
SAVE IT!

Lancaster City needs to save 750 million gallons of water annually from entering its combined sewer system to preserve clean drinking water, avoid costly fines and continue to build a healthy, vibrant community. Join our list serve and stay informed!

Enter your email

Lessons Learned / Keys to Success

• Garner political or high level leadership support early in process
• Start the public education or “setting the stage” from the get go – MESSAGE, MESSAGE, MESSAGE – test the messaging and hone as you proceed.
• Lead by example – NOT “do as I say, not as I (don’t) do”!
• Use stakeholders from all affected rate paying classes and geographical representation on a GI advisory group
• Use demonstration projects to rally neighbors around the issues and garner their support of the overall program
• Figure out your funding strategies; use the GI to leverage other funding; and stretch the limited dollars and resources that we all face – INTEGRATED INFRASTRUCTURE
• Grants, grants, grants!
• Include 3 years of maintenance in contract as part of rain gardens since there is a high mortality rate
• Do NOT underestimate the value of educating the public throughout the process
Questions?

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