

MINUTES

FEBRUARY 4, 2015 WORKSHOP MEETING

LOWER SWATARA TOWNSHIP BOARD OF COMMISSIONERS

The February 4, 2015 Workshop Meeting of the Lower Swatara Township Board of Commissioners was called to order at 7:00 P.M. by President Thomas L. Mehaffie III. President Mehaffie called for the pledge of allegiance followed by a moment of silence.

Roll call was taken with the following officials in attendance:

- Thomas L. Mehaffie III, President
- Laddie J. Springer, Secretary
- Michael J. Davies, Commissioner
- Dominic D. DiFrancesco II, Commissioner
- Samuel D. Monticello, Township Manager
- Peter R. Henninger, Solicitor
- Erin G. Letavic, HRG, Engineer
- Richard D. Brandt, Police Chief
- Robert S. Greene, Planning and Zoning Coordinator
- Daniel L. Wagner, Public Works Superintendent
- Jean R. Arroyo, Recording Secretary

Absent:

- Jon G. Wilt, Vice President

Residents and visitors in attendance:

PLEASE SEE ATTACHED SIGN-IN SHEET

President Mehaffie welcomed the visitors to the meeting and noted that prior to public comment, the Board would be hearing from a guest speaker. Ruth Hocker, from the City of Lancaster, has graciously agreed to share the city's experience with its MS4 program.

MS4 GUEST SPEAKER: RUTH HOCKER

Erin Letavic, HRG, explained to the audience that Lower Swatara Township has had an MS4 permit for over a decade now. "MS4" stands for Municipal Separate Storm Sewer Systems,

and is basically a water quality permit that is tied back into the Chesapeake Bay. It is a DEP permit with oversight from the EPA, with the goal of improving water quality into the Susquehanna and ultimately the Chesapeake Bay. Lower Swatara Township is interested in improving its MS4 program and felt that it, and its neighboring municipalities, could benefit from the experiences of the City of Lancaster. She introduced Ruth Hocker, Stormwater Program Manager for the City of Lancaster.

Ms. Hocker explained that the City of Lancaster was found to be in violation by the EPA, and was facing possible penalties of \$37,500 per day. Doing nothing was not an option. She gave a PowerPoint presentation (see attached) of the development of the City's stormwater management program and green infrastructure, as well as challenges overcome and successes achieved. The presentation highlighted the specifics of the green infrastructure plan which was implemented to be in compliance, and explained how this was done in parks, playgrounds, public and private parking lots, green streets and alleys, green roofs, etc. Also discussed was paying for these improvements through loans, grants, and the City's implementation of a fee as opposed to a tax. A rate structure was implemented with four "tiers" based on impervious area. Average fee per quarter is \$10 for residential and \$139 for commercial. Solicitor Henninger noted that in municipalities such as Lower Swatara Township where 1/3 of properties do not pay real estate taxes (schools, churches, government entities, etc.) a fee as opposed to a tax seems more fair. Ms. Hocker stressed that she is not advocating for or against a fee or any specific program, but rather sharing what the City of Lancaster has done to meet its challenges. President Mehaffie noted that he believes the Township budgeted \$70,000 this year towards its MS4 program. Mr. Monticello confirmed that this is correct. President Mehaffie stressed that the MS4 is not going away and Lower Swatara Township is making efforts to move forward to meet the requirements and mandates. Ms. Letavic agreed, and stated that the Township is in preventative mode at this point.

Ms. Hocker stated that there are two things that she would strongly recommend. First, she suggested that the municipalities get ahead of their public education and outreach by having additional public meetings on this subject, and engaging the public upfront. She suggested that municipalities be as transparent as possible during this process. Secondly, she suggested municipalities explore grants and look for creative opportunities to use them. Ms. Hocker concluded her presentation by referencing the City of Lancaster's "Save It!" website (saveitlancaster.com) which has detailed information regarding all the City's programs, policies, etc. The City of

Lancaster has taken a very transparent approach to what it is doing with green infrastructure and stormwater. She also offered her assistance in any way, and provided her contact information.

President Mehaffie thanked Ms. Hocker for the informative presentation this evening. The Board and public gave Ms. Hocker a round of applause.

PUBLIC COMMENTS: None

DEPARTMENT REPORTS:

Fire Department – Chief DeHart – reported that calls for the month of January totaled 56. The new Rescue is in service, and the old Rescue has been sold. The new special unit should be here next Monday. Chief DeHart noted that he has a letter for the next meeting pertinent to action on the payment for the chassis. He will provide this to Solicitor Henninger for review.

Police Department – Chief Brandt –referenced the monthly report and reviewed call and crime statistics for the month of January. Overall, it was a good month with 723 calls for service, 25 total arrests, 12 DUI’s, 70 traffic citations, 9 non-traffic citations, and 62 warnings. Chief Brandt noted that he had also indicated the locations where the Department had provided assistance. President Mehaffie asked if the Police Department had a chance to look into the concerns expressed about speeding on Meade Avenue. Chief Brandt responded that he was prepared to address this tonight with the resident who had expressed the concern. Mr. Monticello explained that she does plan to attend the February legislative meeting. Chief Brandt continued that the Police Department did conduct traffic detail on Meade Avenue. While there is a high volume of traffic there during peak times, speeding does not appear to be an issue. He added that after checking the statistics, he found that there has only been one accident since the Township took control of Meade Avenue, and that was not related to speed, but rather a drunk driver. The Police Department will continue to monitor this area.

Planning and Zoning Report – Robert Greene – referenced the printouts of inspections and permits and highlighted plan reviews, job site visits, and completed jobs. Mr. Greene updated the Board on the Final Land Development Plan for Penn State University Student Enrichment Center. The Planning Commission took action at its meeting on December 18 to recommend approval of five waivers for the plan, and took further action at the January 22 meeting to recommend approval of the plan with conditions. The plan is expected to be presented to the

Board of Commissioners at its February 18 meeting for action. The Zoning Hearing Board took action at its meeting on January 28 to approve the request for a variance to install a second wall sign for Holiday Inn located at 815 Eisenhower Boulevard. The additional wall sign area will be 76 square feet and placed on the south side wall. The Zoning Hearing Board also heard a zoning variance request at the January 28 meeting on an application for a Variance to allow a building that houses animals or poultry to be placed 45 feet from the property line, where 100 feet is the minimum. The application was filed by Kimberly Neely and Frank Munoz for their property located at 22 Davis Drive in the Residential Agriculture zoning district. The Zoning Hearing Board took action to grant the request. Mr. Greene, Mr. Monticello, and Mr. Fure met with Mylin and Joe Messick to discuss several matters relative to the Woodridge Development including bonding and escrow funds for remaining uncompleted improvements, approximate date for final paving of streets and private road, completion of undeveloped area Phase 2, Section 9, and maintaining existing storm water inlets and sanitary manholes. Mr. Greene reported that he attended a Preconstruction/Ground Breaking meeting on January 29 for the new Sheetz Store. The meeting was held at HIA with representatives from SARAA, Sheetz, Dauphin County Conservation District, York Excavating Co., HRG, and K&W Engineers. Construction was scheduled to start on February 2, but Mr. Greene noted that he does not believe this took place. The Building Code Appeals Board will conduct a hearing on February 17 on a request from Karen's Catering regarding numerous building code issues relating to construction and change of Use and Occupancy for Harmony Hall located at 1400 Fulling Mill Road. Mr. Greene, Mr. Monticello, and Mr. Fure met with Michael Peter of General Code Company on January 5 to discuss the current codified ordinance and to compare and look at possible options for updates. The final draft of the Sign Ordinance amendment is completed and ready for acceptance by the Board. Once that is done, the proposal will be submitted to the Township Planning Commission and the Dauphin County Planning Commission and a copy forwarded to adjoining municipalities for comment. Solicitor Henninger explained that after it goes before the Township and County Planning Commissions for comment, it will then come back to this Board for a Public Hearing. He added that the purpose of this sign ordinance amendment is to allow for signs and banners at the recreation facilities in order to provide the athletic associations more leeway for fundraising opportunities. President Mehaffie inquired if the fire ordinance is also ready for action. Mr. Greene noted that he believes Mr. Knoche has the latest draft, but will make sure the Board

has the revised copy tomorrow. Commissioner Davies referenced the draft sign ordinance amendment, and asked if the Board members would feel comfortable tonight with taking action to forward it to the Dauphin County Planning Commission and Lower Swatara Township Planning Commission for comment. He noted that this might help the athletic organizations by moving the process along. The Board agreed, and a motion was made by Commissioner Davies, seconded by Commissioner DiFrancesco, to authorize that the proposed sign ordinance amendment be forwarded to both the Dauphin County Planning Commission and the Lower Swatara Township Planning Commissions for review and comment. The motion was unanimously approved. President Mehaffie also asked Mr. Greene the status of construction of the new High School. Mr. Greene responded that the project is at a standstill right now due to the weather. The under slab plumbing, however, should be complete this week.

Public Works Department – Daniel Wagner – reported that the Nissley Drive bridge replacement project will be starting this month. There have been a few challenges with the Riverview Drive project, but the major work should be wrapped up this week. Mr. Wagner noted that he would like to thank Gary from HRG for being a tremendous help. He also informed the Board that one truck is out of service as the transmission went out again for the fourth time. It is currently being fixed under warranty at Sutliff. It is hoped that it will be back this week. Two of the three new trucks that were ordered are scheduled for delivery this week. There is an ongoing problem with the traffic signal at Meade Avenue. It appears mice have gotten in and chewed the electrical wires. Telco did come out and get it back on-line, but additional work will need to be done in the near future, and is estimated to cost around \$1,500. There is also an issue with the traffic signal on North Union Street. It is thought to be a camera issue, and will be checked out tomorrow or Friday. Commissioner Springer verified that this signal was not working correctly again today. Mr. Wagner also reported that the Municipal Authority will be proceeding with a project on Pennsylvania Avenue, as there are some real issues there that need taken care of. The Board will be kept updated on this. The dumpster will be available to residents this Saturday from 8:00 A.M. to Noon.

MANAGER'S REPORT:

Mr. Monticello reported on the Nissley Drive Bridge Replacement Project. Susquehanna Valley Construction Corporation is the company that was awarded the contract by the Pennsylvania Turnpike Commission. The intent is to implement the detour and begin construction activities on February 16. Work will take place all summer long, with the goal to reopen Nissley Drive by September 25 of this year.

Mr. Monticello stated that he had one item requiring formal action this evening. A motion was made by Commissioner DiFrancesco, seconded by Commissioner Springer, to approve the appointment of Alexander D. Langan, J.D. of Langan Group Financial to assist Lower Swatara Township with the process of selecting a provider for its pension plans pursuant to their proposal of \$2,500. The motion was unanimously approved.

Mr. Monticello requested the Board convene into executive session immediately upon conclusion of this evening's meeting.

ENGINEER'S REPORT:

Erin Letavic, HRG, updated the Board on the Greenfield Well & Irrigation Project which is on hold for delivery and installation of the pump controller. All other work that can be completed has been completed. Restoration (topsoil, seeding, and asphalt) is anticipated to be completed by early April 2015.

The Riverview Storm and Sewer Replacement Project storm sewer work is approximately 50% complete. HRG staff is conducting storm installation inspection.

Ms. Letavic reported that she and Mr. Monticello had met with an installer of a poured-in-place rubber product that can be used in the parks. The Township was awarded a grant last year to improve two of its parks (Shopes Gardens and Old Reliance Farms), so this is something that will be considered. President Mehaffie referenced the City of Lancaster's stormwater improvements in its parks, and asked if there is anything that can be done in this regards when the Township addresses these two parks. Ms. Letavic agreed that this will definitely be looked into during the process. She added that when the Township works on future projects, it will be appropriate to incorporate green infrastructure in them.

Ms. Letavic noted that the agenda includes action on a payment request for the Riverview Drive Sewer and Drainage Improvements Project. The staff and HRG looked into this request,

and the dollar figure as stated on the engineer's report is not being recommended. What is being recommended is payment in the amount of \$53,603.75. The reason for this recommendation, which is roughly half of the amount requested, is that there is a significant amount of testing results that have not yet been received on the sanitary sewer pipe installation. A motion was made by Commissioner Davies, seconded by Commissioner Springer, to approve Payment #1, in the amount of \$53,603.75 to B.P. Paterson, Inc. for the Riverview Drive Sewer and Drainage Improvements Project, Contract No. 2014-02. The motion was unanimously approved.

SOLICITOR'S REPORT:

Solicitor Henninger noted that Mr. Monticello's request for an executive session this evening is in regards to personnel issues.

FINAL COMMENTS:

President Mehaffie again acknowledged Ms. Hocker for the MS4 presentation this evening. Commissioner DiFrancesco agreed that he is very appreciative of the time that Ms. Hocker provided to share the City of Lancaster's experience with the MS4 requirements.

Commissioner Davies noted that he is glad that the Township is moving forward with the sign ordinance to assist the sports teams with their fundraising efforts. He also advised the Board that he will not be in attendance of the next meeting.

ADJOURN AND CONVENE INTO EXECUTIVE SESSION:

With no further business to discuss, a motion was made by Commissioner Davies, seconded by Commissioner DiFrancesco, to adjourn the meeting and convene into executive session. The motion was unanimously approved, and the meeting adjourned at 8:45 P.M.

ATTEST:

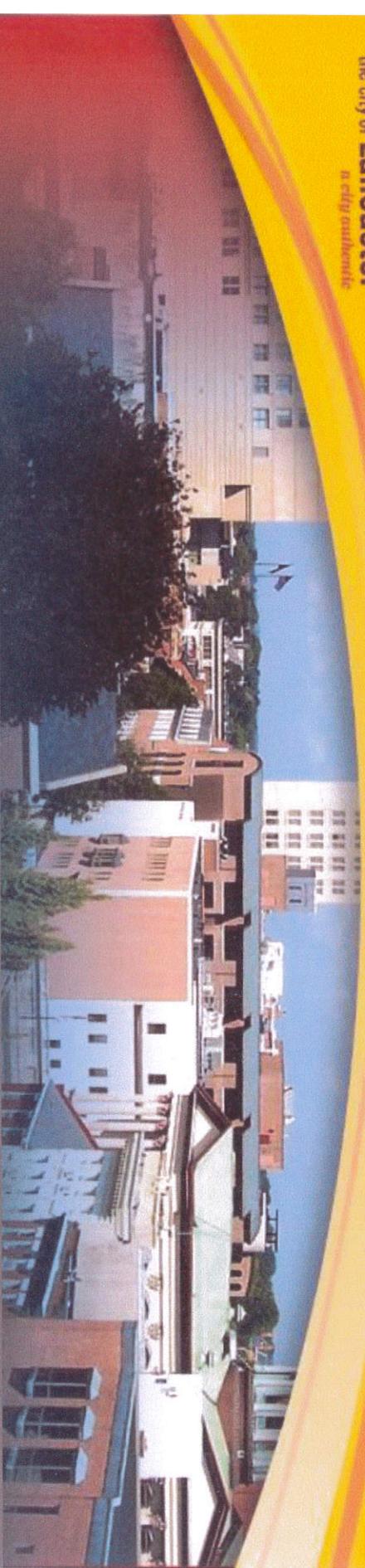


Jean R. Arroyo, Recording Secretary

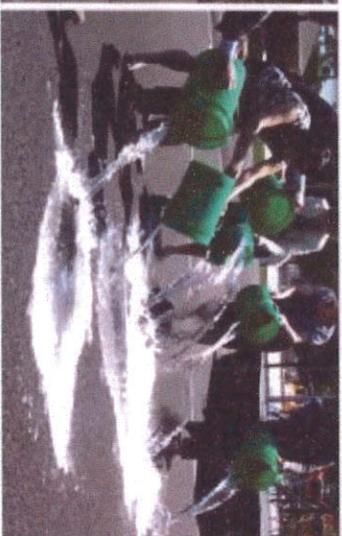
PLEASE PRINT NAME CLEARLY

Board of Commissioners Workshop Mtg. - February 4, 2015

NAME	ORGANIZATION (IF APPLICABLE) OR ADDRESS
Don Martino	LSTA
Chris Burkholder	Borough of Middletown.
CHAUNCEY KNOPP	LSTwp
Todd F. Truntz	LST Municipal Authority
Amy Burrell	Borough of Royaltown
Gary Givler	Borough of Royaltown
Ken Klinghofer	Borough of Steelton
Allison Funk	Londonderry Township
SIAH PRITCHARD	LONDONDERRY TWP. NSH
Rich Wilkinson	LSTA
Nancy Avolese	N. Union St
Eric Wise	Press And Journal
Lester Lanman	Middletown Borough
Alan Magnus	CCLST Pleasant Run Rd.
ERIC BRUN	LST PLANNING COMM
Phyllis Zimmerman	PennLive/Patriot-News
Chris Nelson	ISDLS
Lisa Bayda	Strasburg Bars



LESSONS LEARNED FROM STORMWATER MANAGEMENT PROGRAM DEVELOPMENT IN THE CITY OF LANCASTER

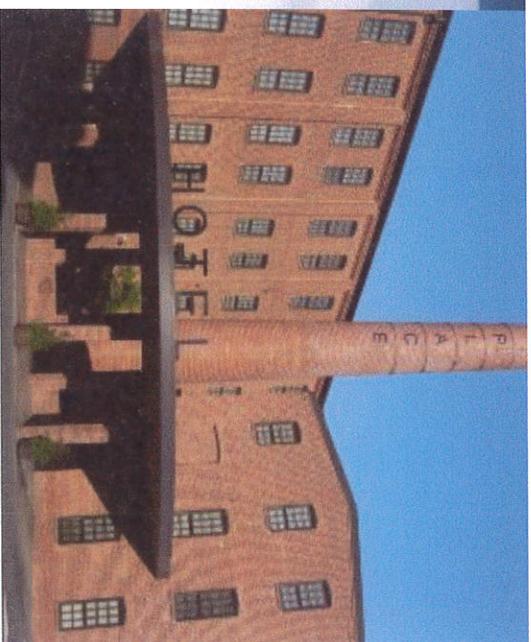


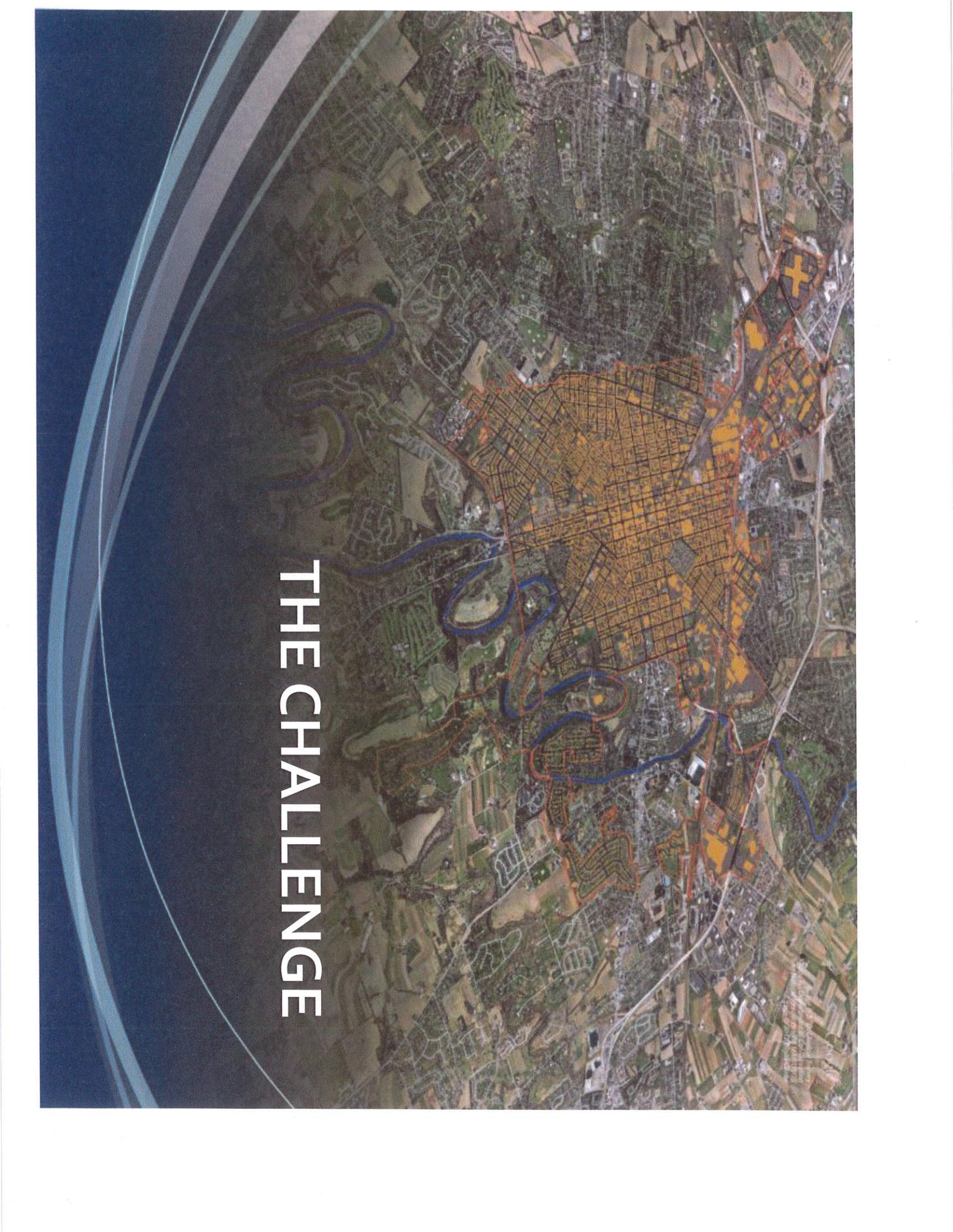
Lower Swatara Township Board of Commissioners
February 4, 2015



The City of Lancaster – Overview

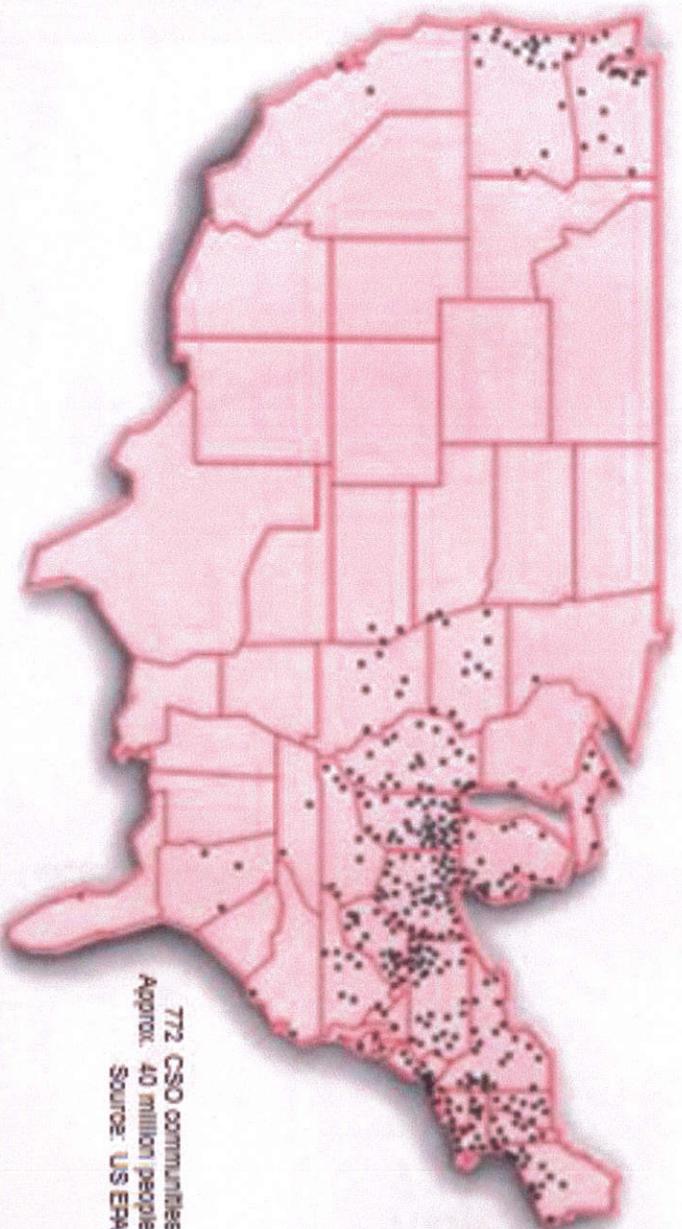
- Incorporated in 1742 as a borough and in 1818 as a City
- Served as the temporary National Capital during the Revolution
- ~60,000 residents in the 2010 census
- 7.34 square miles
- Historic building stock (median home age of 100 years)
- Surrounded by some of the most productive non-irrigated farmland in the U.S.



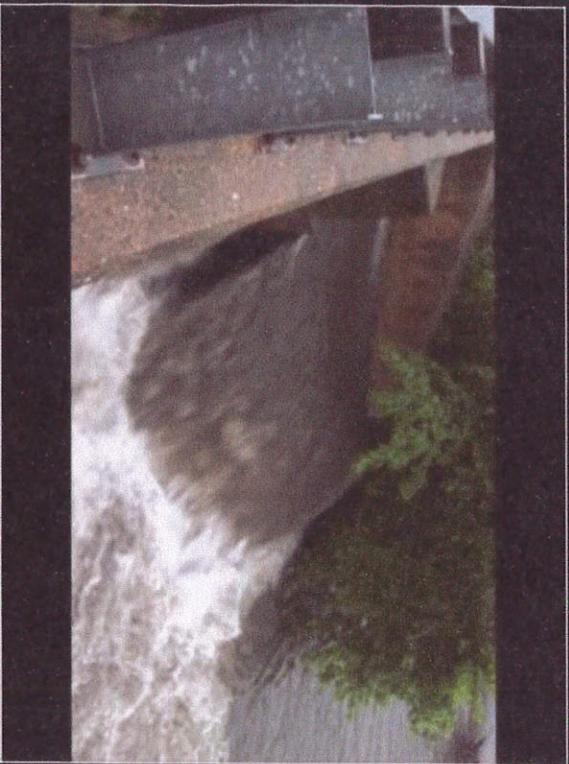
An aerial photograph of a city, likely in a developing region, showing a dense urban grid. A prominent river winds through the city. Overlaid on the image are several colored lines: a thick blue line tracing the river's path, and orange lines forming a grid-like pattern across the urban area, possibly representing a proposed infrastructure or zoning plan. The surrounding landscape is a mix of green fields and brownish terrain. The text 'THE CHALLENGE' is printed vertically in white on a dark blue background that curves along the left edge of the image.

THE CHALLENGE

We are not alone! Many municipalities have combined sewer overflows (CSOs).



772 CSO communities
Approx. 40 million people
Source: US EPA



750 million gal. polluted
stormwater discharge
= 1150 Olympic-
sized swimming
pools



Cost of Solutions Are Significant

Previous
Solution



Proposed
Solution

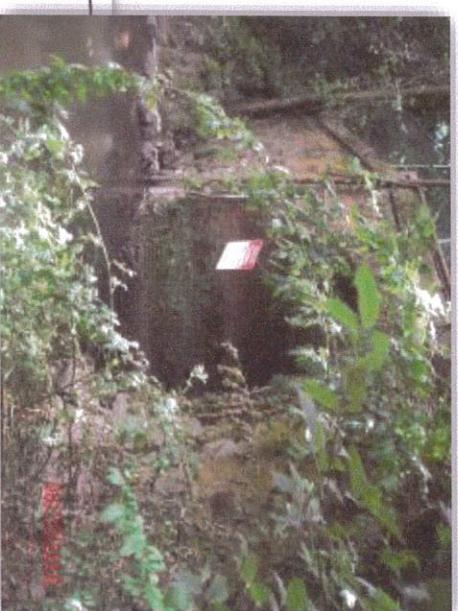
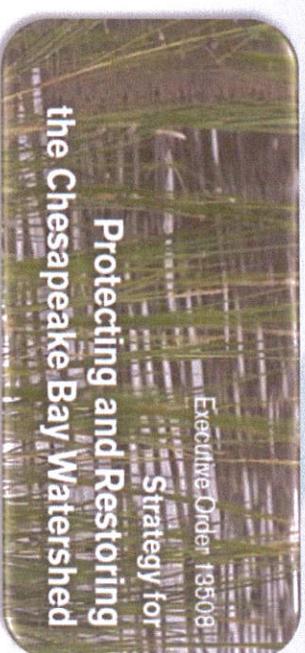


Doing Nothing is
Not an Option

"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 Additional 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



Part VII

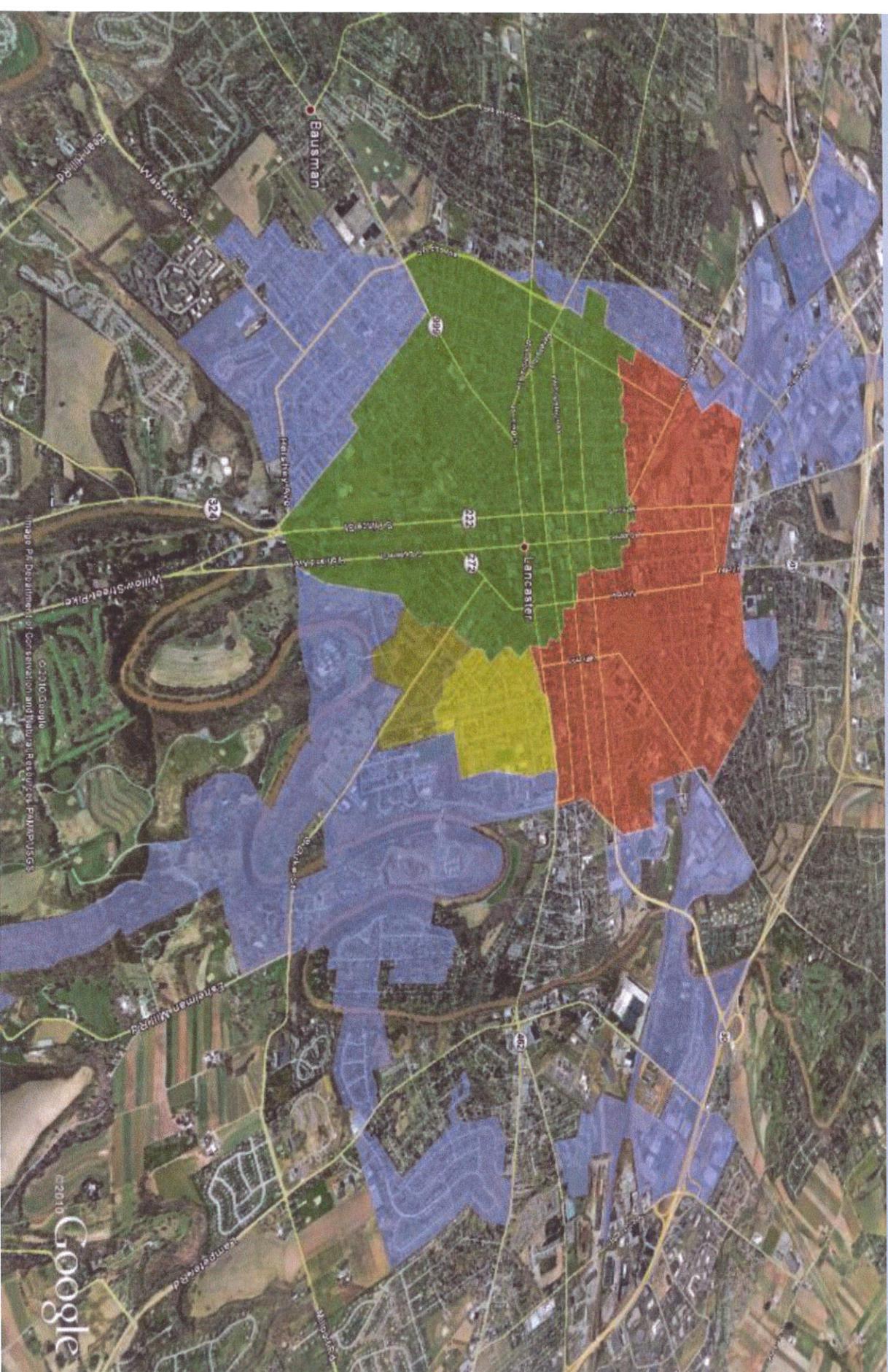
Environmental Protection Agency

Combined Sewer Overflow (CSO) Control
Policy: Notice

45% of the City is Served by Combined Sewers



Separate Stormwater Areas



Defining Integration

- Recent EPA Integrated Municipal Planning Framework
- Integrated approach needs to go beyond just CWA programs
- Integrated Infrastructure
- Source Water protection & recharge

Draft Integrated Municipal Stormwater and Wastewater Framework

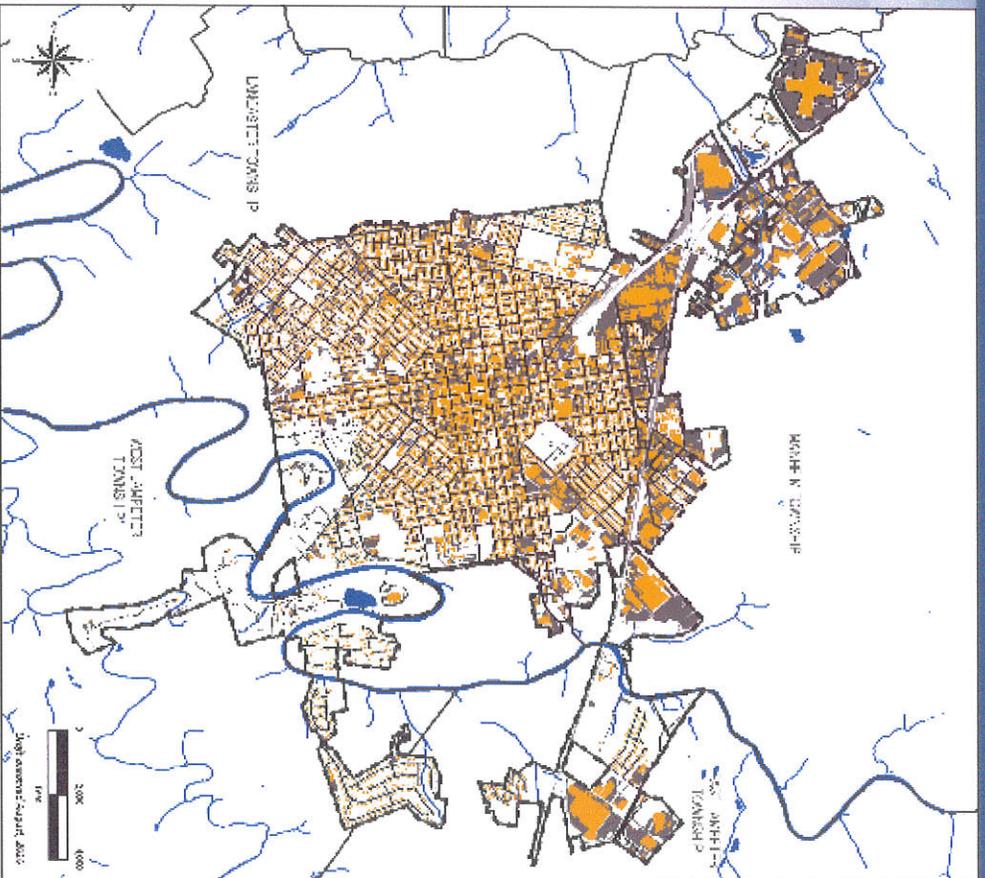
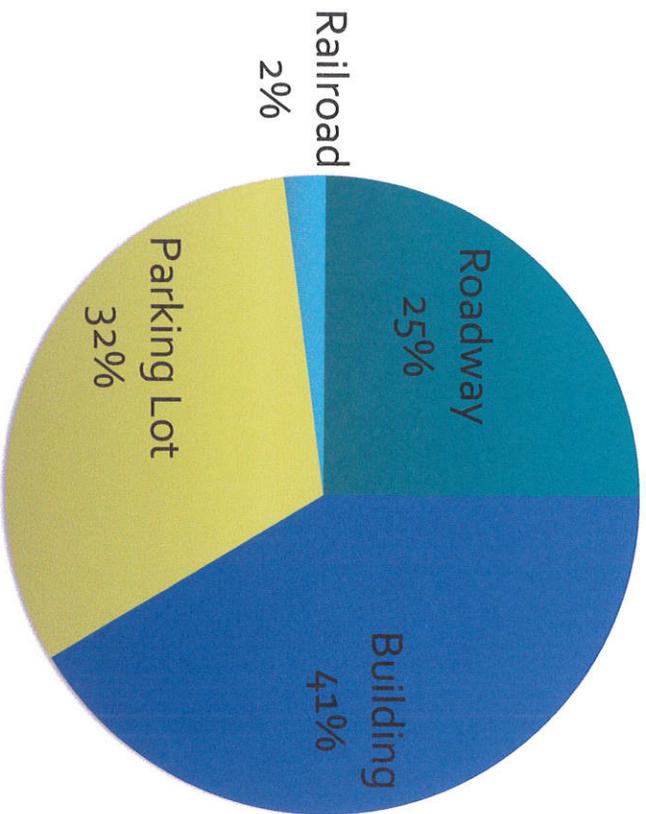


NACWA Stakeholders Meeting
December 13, 2011

What is an Integrated Approach?

- Under an integrated approach, EPA and States would use the flexibility of EPA's existing regulations and policies and allow municipalities to evaluate how best to meet all of their CWA requirements and their financial capability to better allow—
 - sequencing wastewater and stormwater projects in a way that allows the highest priority environmental projects to come first, and
 - innovative solutions, such as green infrastructure

Impervious Area = 48% of city



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

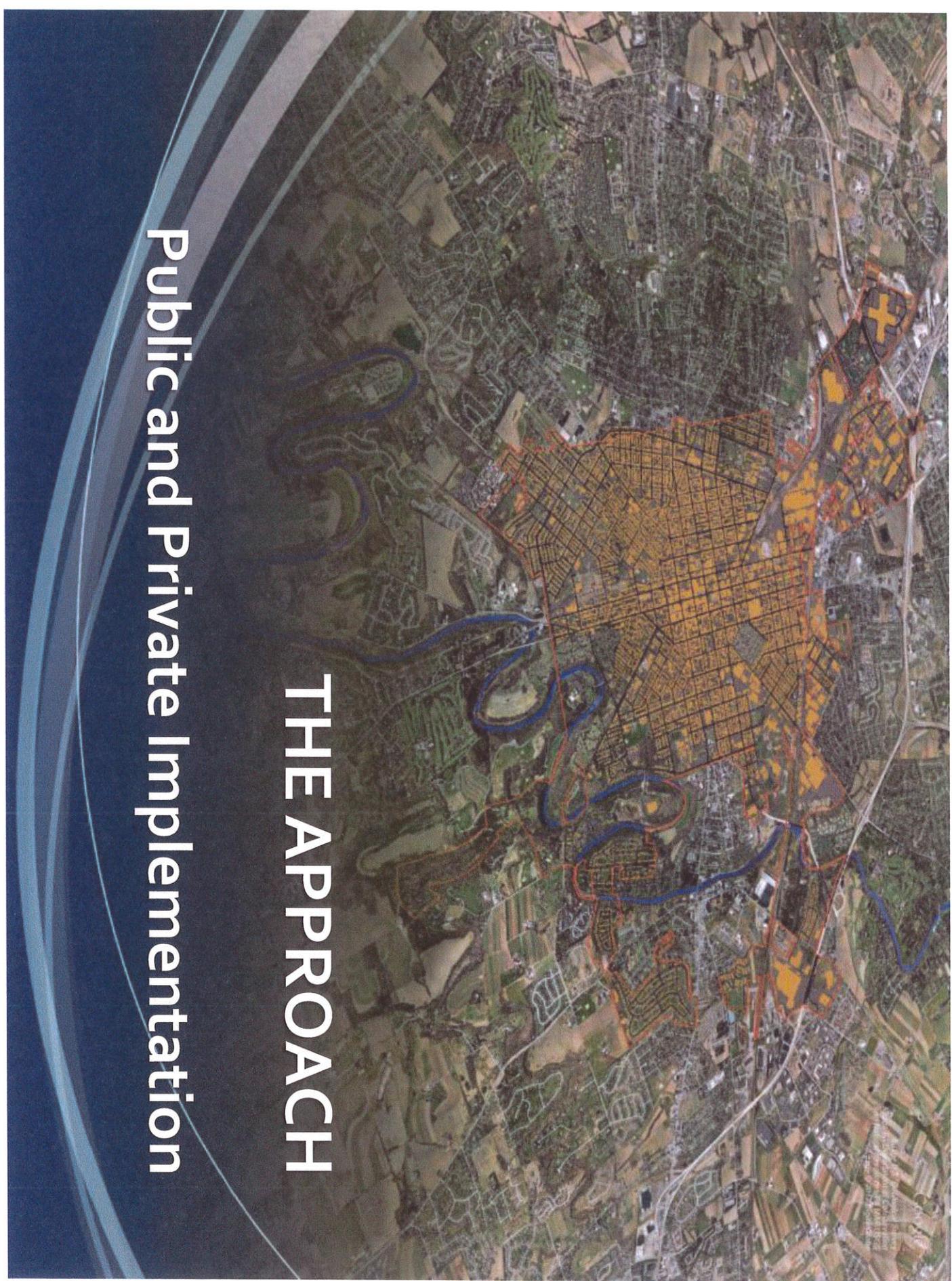
Impervious Area / Impervious Source Area Type	Impervious Contributing Area (acres)	Percent Impervious	Green Infrastructure Project / Technology	As Impervious Area Managed	Total Assumed Annual Runoff / BMP Runoff Reduction (MG/yr)	Runoff Reduction		
Roads / Alleys	529	100%	Green Streets	30%	513	1.0	86%	132.4
Parks	241	8%	Park Improvements / Greening	85%	19	1.0	86%	14.2
Sidewalks	124	100%	Disconnection, Porous Pavement	35%	120	1.0	86%	36.1
Parking lots	648	100%	Porous Pavement, Bioretention	20%	130	2.0	97%	121.3
Flat Roofs	218	100%	Vegetated Roofs / Disconnection	15%	628	1.0	86%	27.3
Sloping Roofs	654	100%	Disconnection/Rain Gardens	25%	212	1.0	86%	27.3
Street Trees	N/A	N/A	Enhanced Tree Planting	N/A	635	1.0	86%	136.5
Public Schools	175	29%	Green Schools	75%	44	0.3	49%	21.5
Various (Ordinance)	1274	100%	First-Flush Ordinance	50%	50	1.0	86%	32.0
Total					1,265	1.0	86%	531.6
								1,053
								55%

Pollutant	Average Stormwater Concentration* (mg/l)	Average CSO Discharge Concentration (mg/l)	Pollutant Reduction from Stormwater (lb/yr)	Pollutant Reduction from CSOs (lb/yr)	Total Est. Pollutant Reduction (lb/yr)
Total Suspended Solids (TSS)	1.2	5.5	3,485	24,267	1,457,000
Total Phosphorus (TP)	0.7	13.5	2,033	59,564	27,800
Total Nitrogen (TN)					61,600

*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 over 1 Billion Gallons of Stormwater Runoff over the long term





THE APPROACH

Public and Private Implementation

Public - Green Parks



6th Ward Park Plan – 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 Re-dedication Ceremony



First Demonstration Projects at 6th Ward Park Reveals High Cost Benefit

Runoff Reduction	694,600	gallons / yr
Bid ¹	\$ 116,300	
Cost of Court Only ²	\$ 49,650	
Marginal Cost of GI	\$ 66,650	
Total Cost	\$ 0.17	/gallon
Marginal Cost of GI	\$ 0.10	/gallon
Grey Storage Cost	\$ 0.23	/gallon

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

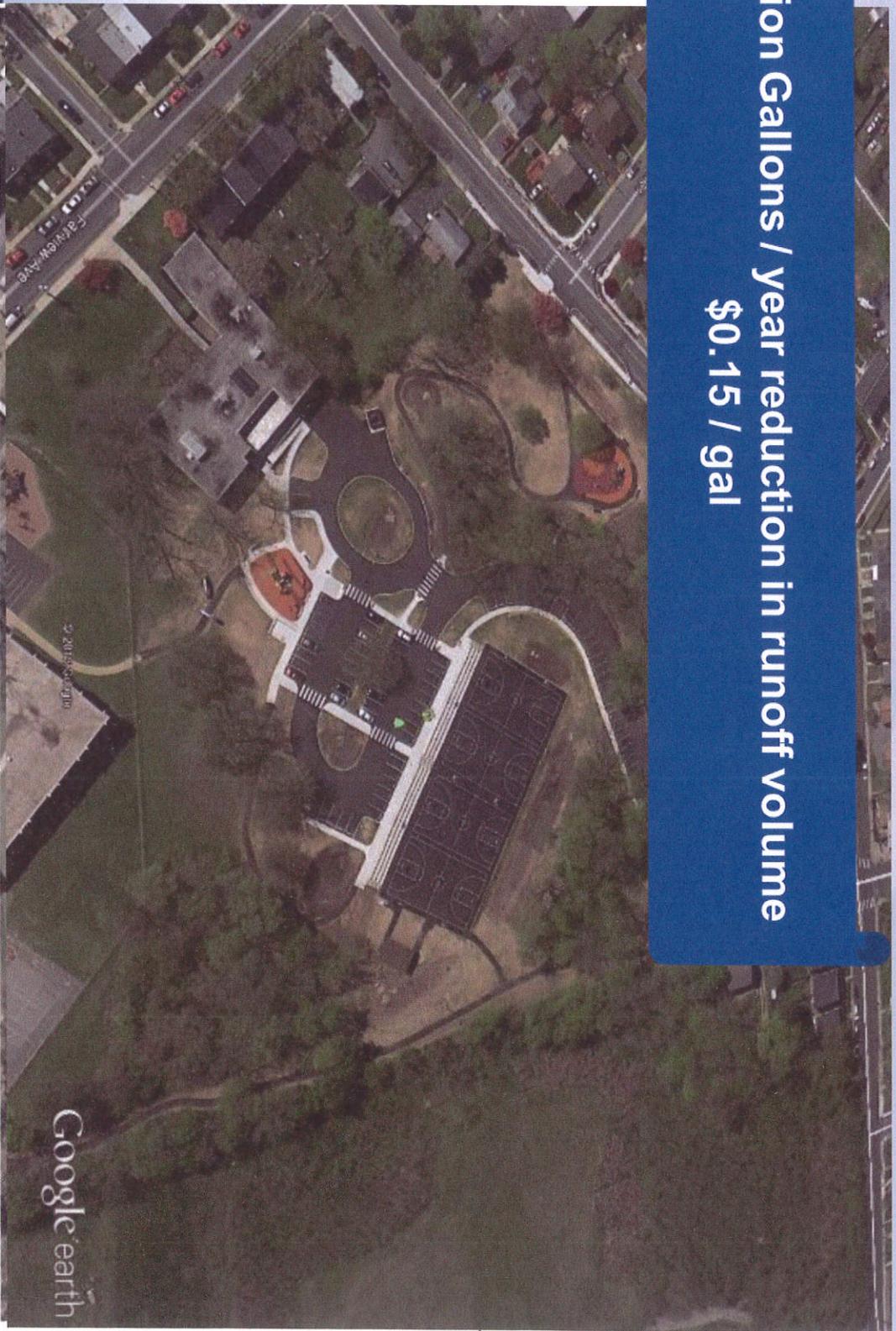


Public – Green Parks



Brandon Park

4 Million Gallons / year reduction in runoff volume
\$0.15 / gal



Brandon Park – Wabank St. Curb Extensions



Brandon Park



Brandon Park



Public/Private - Parking Lots



Public – Mifflin Street Parking Lot



Public - Plum Street Parking Lot



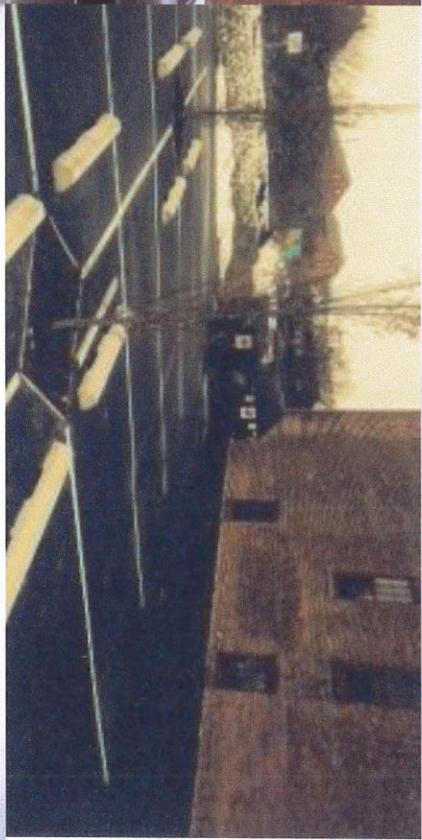
Public - Penn Ave Parking Lot



Public - Dauphin Street Parking Lot



Private – Mulberry Partners

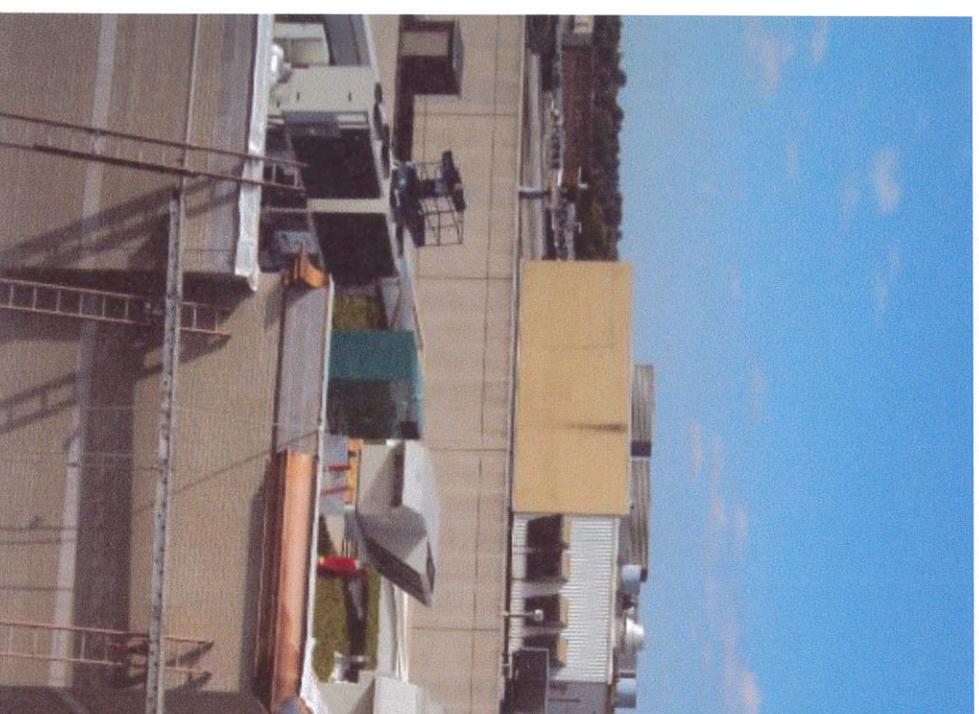


Private – Mulberry Studios



Public/Private - Green Roofs

Over 100,000 square feet of green roofs in Lancaster City. Ten green roofs in PENNVEST funding planned. This is the green roof being added onto the city hall annex project.

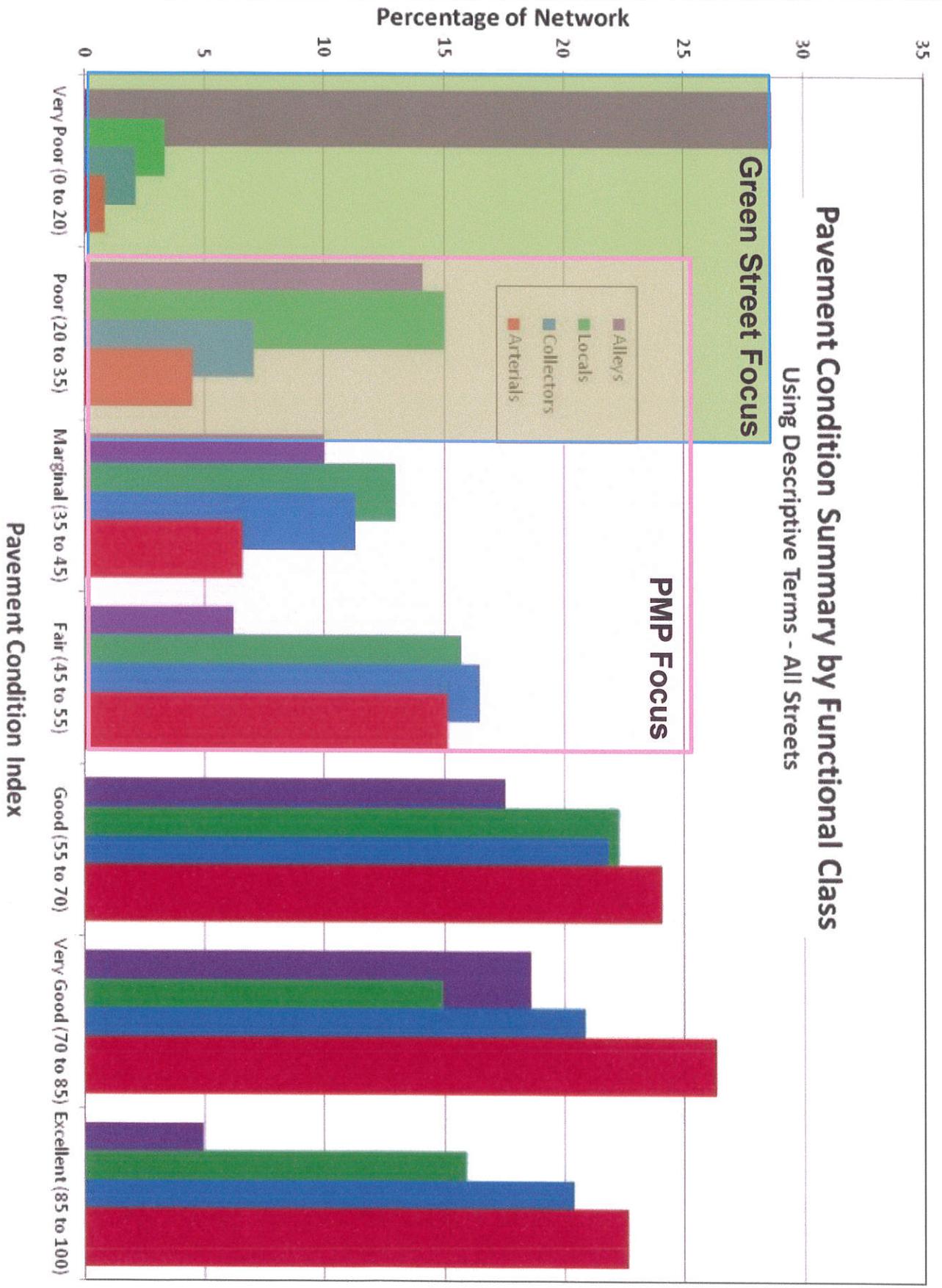


Public/Private - Green Streets & Alleys

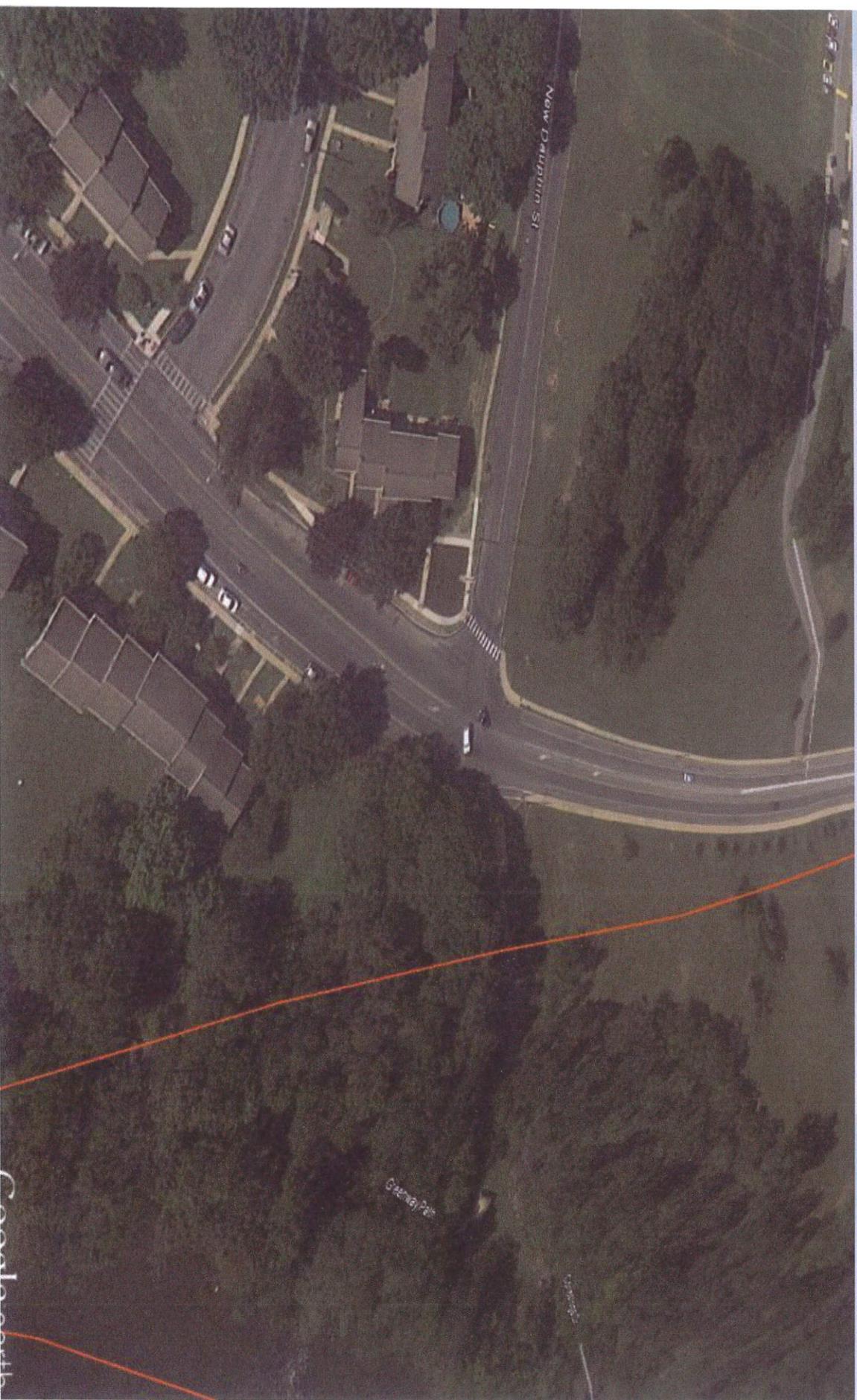


Pavement Condition Summary by Functional Class

Using Descriptive Terms - All Streets



Broad St & New Dauphin Street Green Street





Broad St & New Dauphin Street Green Street

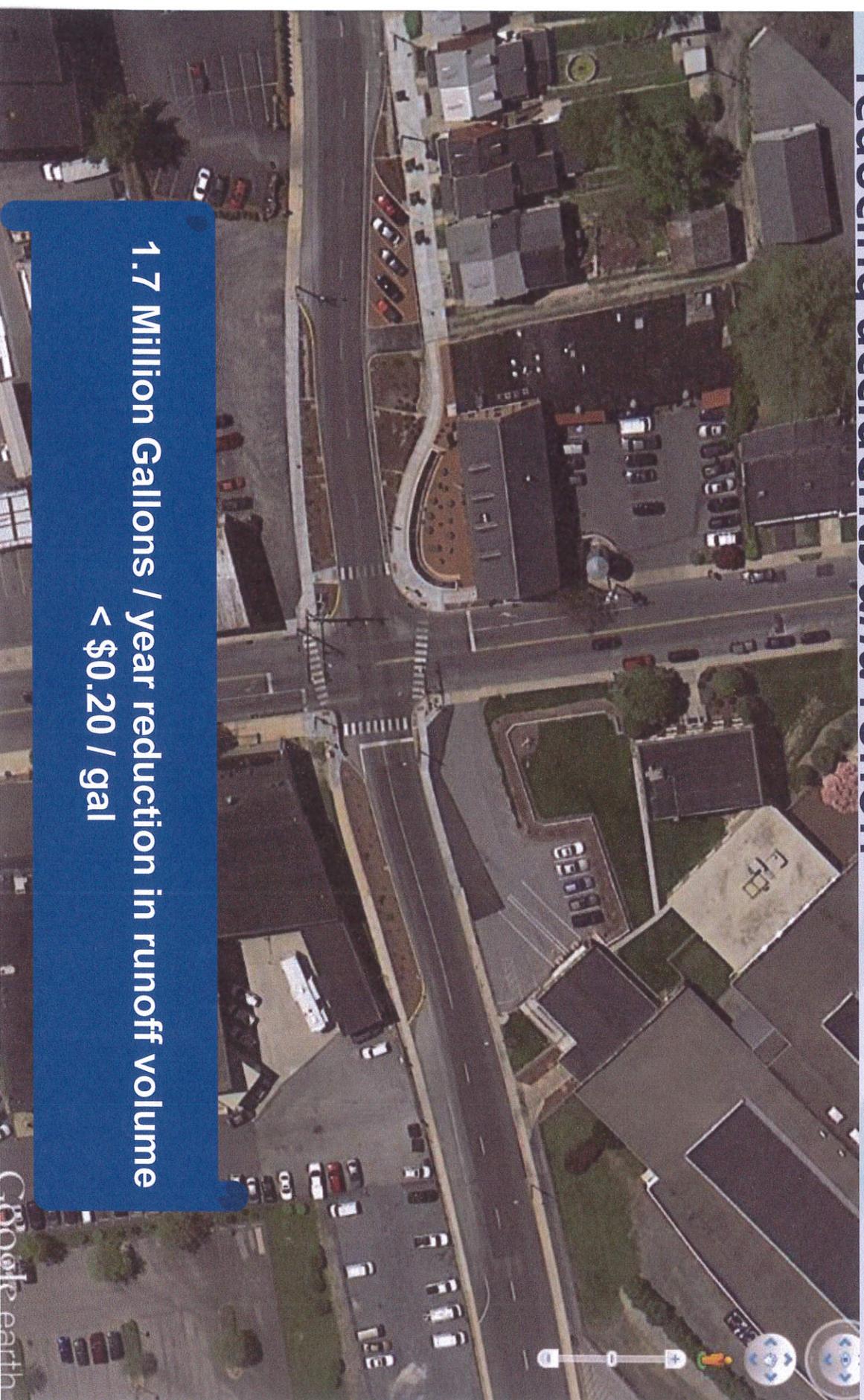


560,000 Gallons / year reduction in runoff volume

2019

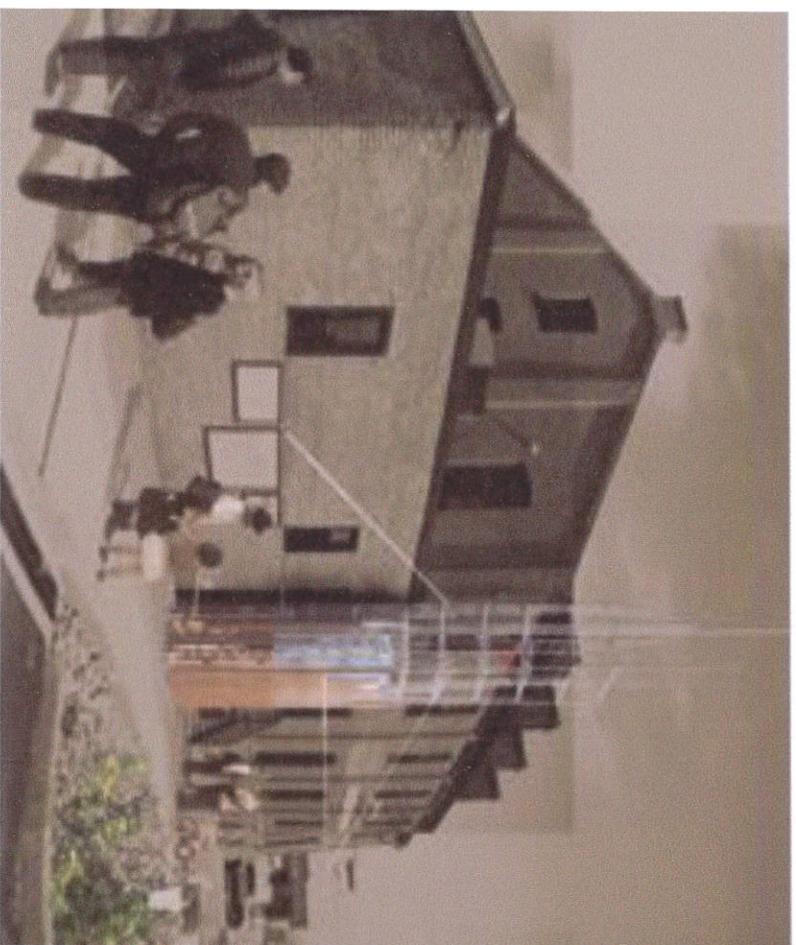


Public/Private – Plum and Walnut Sts. reducing accidents *and* runoff



1.7 Million Gallons / year reduction in runoff volume
< \$0.20 / gal

700 Gallon Cistern functions as public art and irrigates planters



LBC Educational Placemat

HEY
KIPPS!

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.

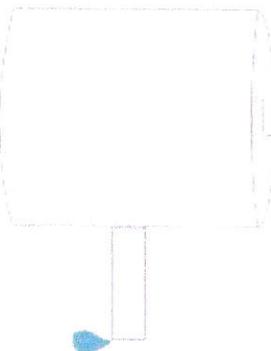
And one of those ways is right here where you are eating—the cool Public Artwork outside this restaurant, called "Lancaster's Gateway Bundle."

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.

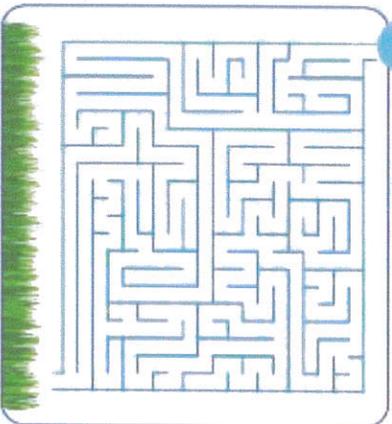
Now that's cool!

TURN THIS CISTERN INTO YOUR OWN PIECE OF ENVIRONMENTAL ART!



Don't forget to draw all the drains the cistern will help water!

HELP THE RAINDROP FIND ITS WAY TO THE RAIN GARDEN



Lancaster's
Gateway
Bundle

**SAVE
THE WATER
WITH
A WATER
CONSERVATION
KIT**



A+M

gsim
INDUSTRIAL
Special Enclosures &
Installation Contractor
www.gsimgroup.com

Urban Tree Canopy

■ Current: 28%

■ Potential: 45%

■ Goal: 40%

Not just about Environmental

Benefits:

- Clean Air
- Curbing Heat Island Effect (shading and cooling)
- AND of course Stormwater Management



Status

Summary of Green Infrastructure Program Implementation

Status as of 03/28/14

Status	Number of Projects	Impervious Area Managed (sq. ft.)	Impervious Area Managed (acres)	Annual Runoff Capture (Gal/yr)
Constructed / Under Construction	44	891,000	20	17,146,000
In Design for Construction	12	530,000	12	7,798,000
Conceptual Designs (non-PV/GGP)	26	696,000	16	8,358,000
PENNVEST Concepts	25	555,000	13	11,360,000
Growing Greener Plus Concepts	1	14,000	0.3	280,000
In Project Planning	51	-	-	-
Total	159	2,686,000	62	44,942,000



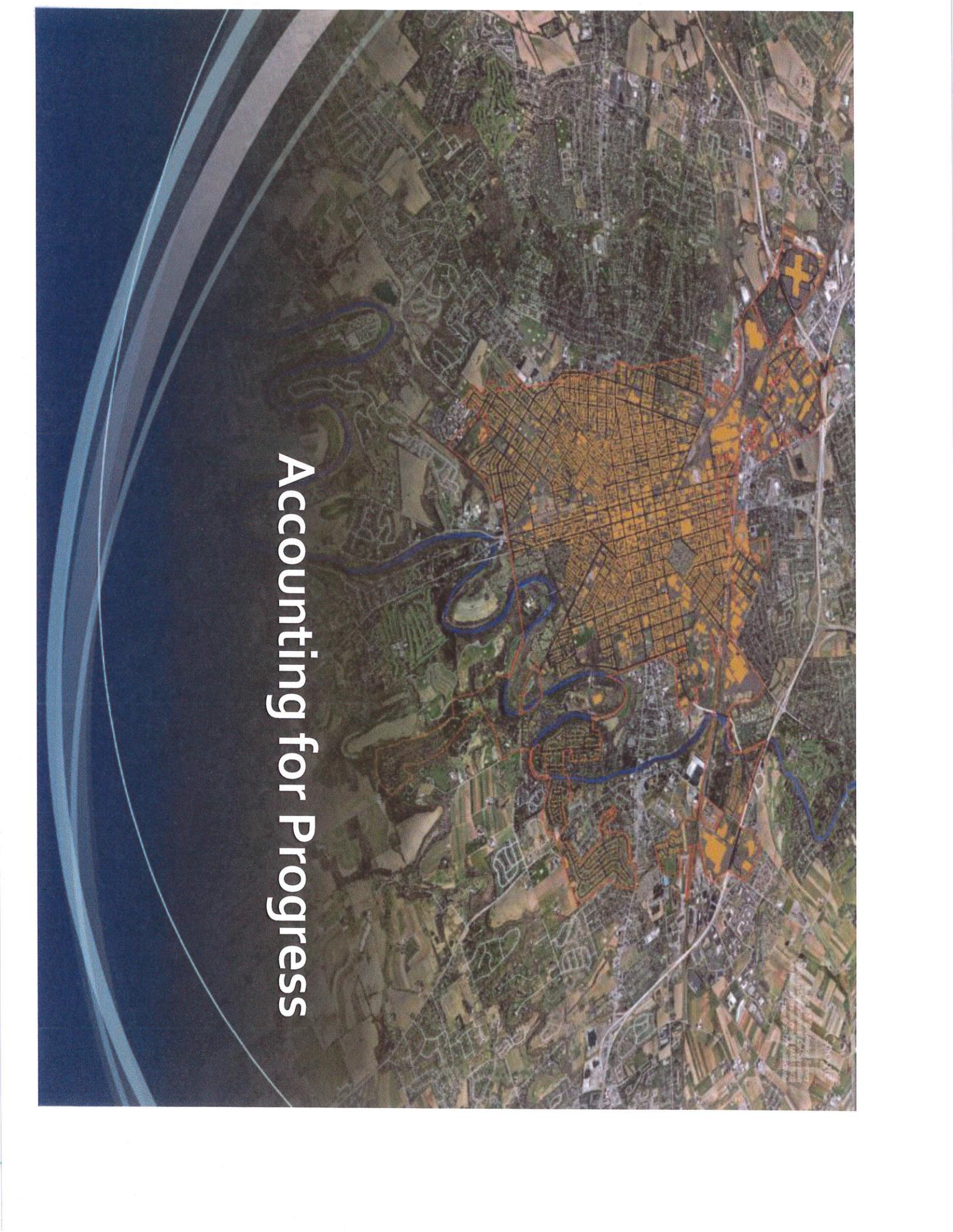
\$3.64 M in grants used to date
Matched by \$3.7 M in local/city funds

the city of **Lancaster**
a city with heart
 Green Infrastructure Project Status

Legend

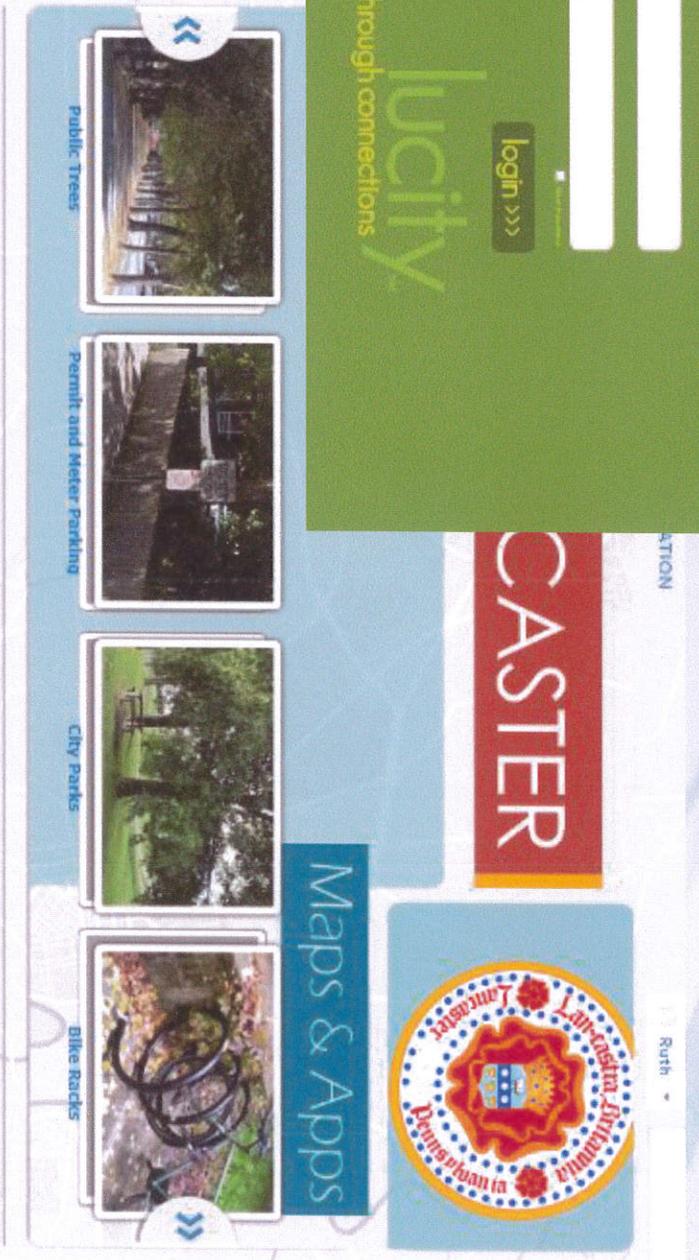
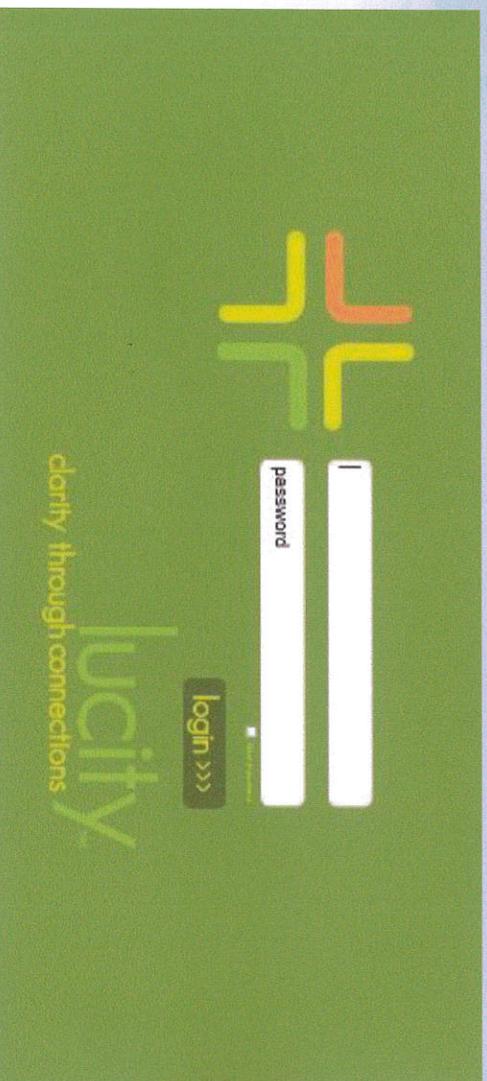
- Complete
- Concept
- Design
- Idea
- City of Lancaster Boundary
- Surface Water Features
- Water Features





Accounting for Progress

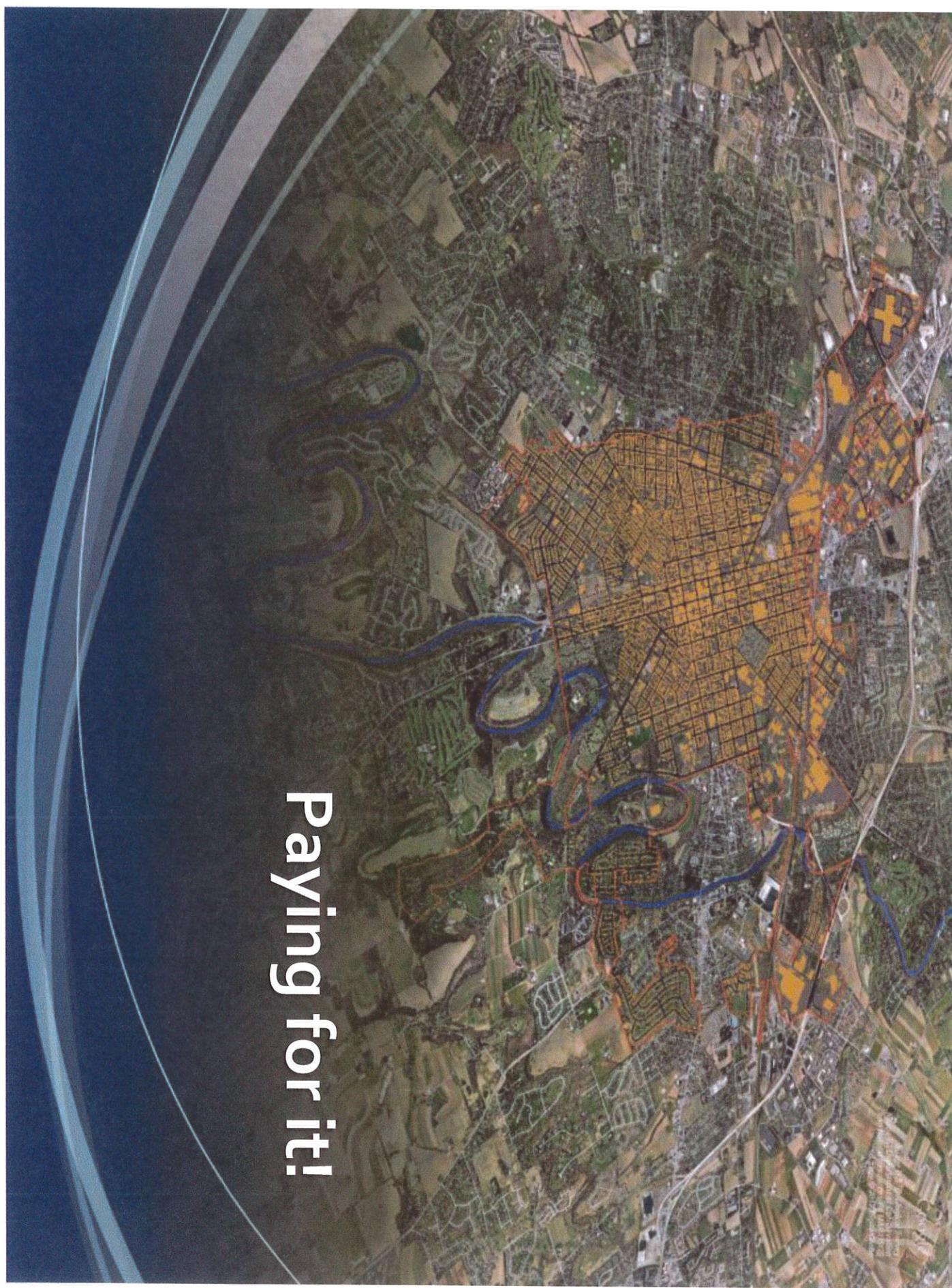
Integrated GIS and Asset Management



- §260-509. "AS-BUILT PLANS MUST BE PROVIDED TO THE CITY IN HARDCOPY, PDF AND AUTOCAD2014. ALL COORDINATES SHALL BE BASED ON THE PA SOUTH ZONE STATE PLANE COORDINATE SYSTEM (NAD83 FOR HORIZONTAL AND NAVD88 FOR VERTICAL)."



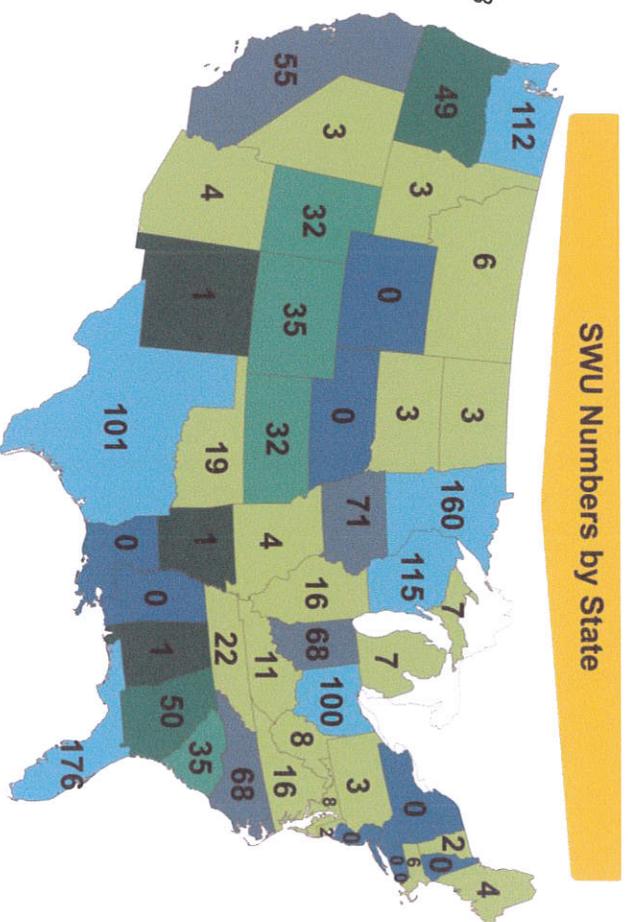
Paying for it!



Stormwater Utilities are increasing across the country

- > 1400 stormwater utilities exist across the country*
- In Pennsylvania, seven (7) are collecting revenues: Lancaster, Philadelphia, Meadville, Mount Lebanon, Radnor Township, Hazleton, Jonestown
- City of Lancaster – passed Feb 2014
- West Chester and six others in Lancaster County had feasibility studies completed

*Source: Western Kentucky University Stormwater Utility Survey, 2013



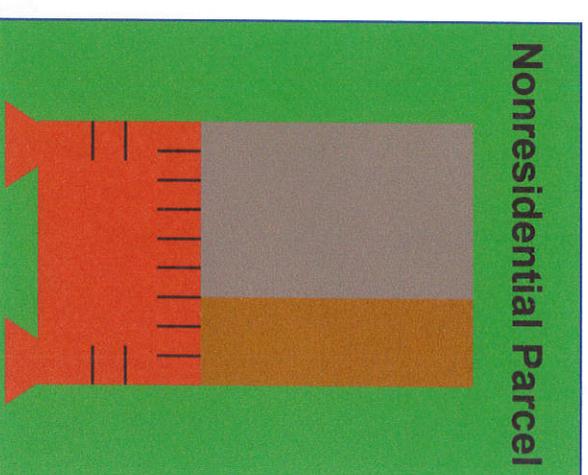
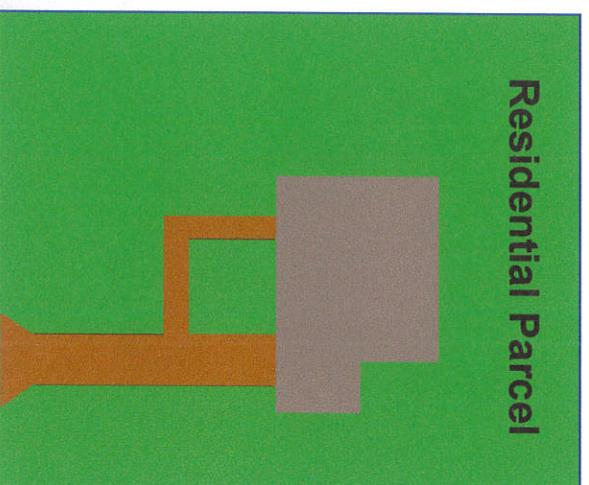
The GIAC :

was convened to evaluate fair and equitable ways to fund the City's stormwater program.

■ Potential funding

sources:

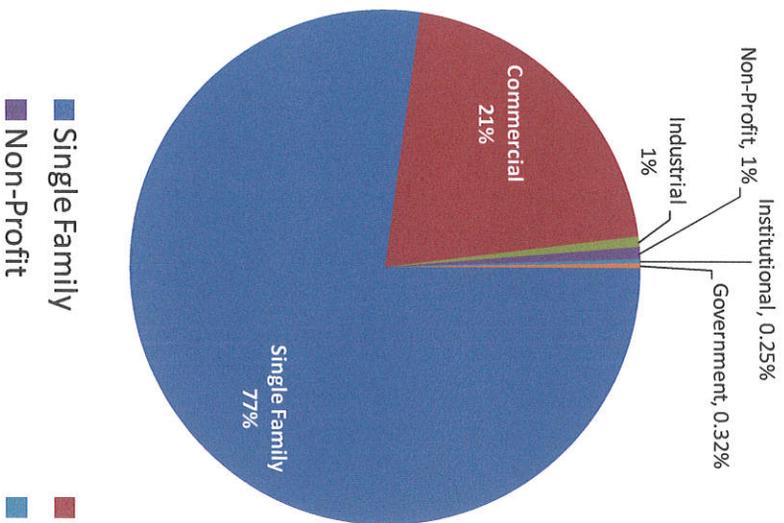
- Increase property taxes
- Raise sewer bills
- Implement a fee based on stormwater runoff



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

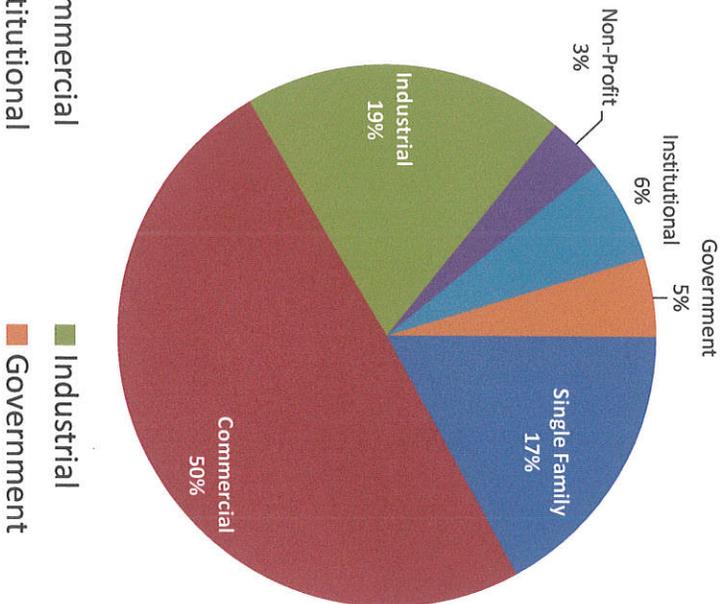
Impervious area fee analysis

Number of Properties



- Single Family
- Non-Profit

Number of ERUS



- Commercial
- Institutional
- Industrial
- Government



The Green Infrastructure Committee studied the funding details

Level of Service Cost Estimate Summary

	Estimated Annual Costs		
	Low (Current/ Status Quo)	Medium	High
Operating and Maintenance			
Green Infrastructure	n/a	\$162,000	\$202,500
Dry and Wet Ponds (inspection)	\$2,300	\$2,300	\$2,300
Street Sweeping	\$168,800	\$168,800	\$234,100
Catch Basin	\$201,000	\$201,000	\$402,000
Storm Drainage	n/a	n/a	n/a

- MIS4 Implementation
- Program Administration
- Capital Costs
- Green Infrastructure
- Storm Drainage
- Catch Basin

MIS4 Implementation	\$451,600	\$536,400	\$612,400
Program Administration			
Capital Costs			
Green Infrastructure			
Storm Drainage	\$164,000	\$164,000	\$164,000
Catch Basin			

and recommended the
Medium Level of Service

Total

\$1,860,300

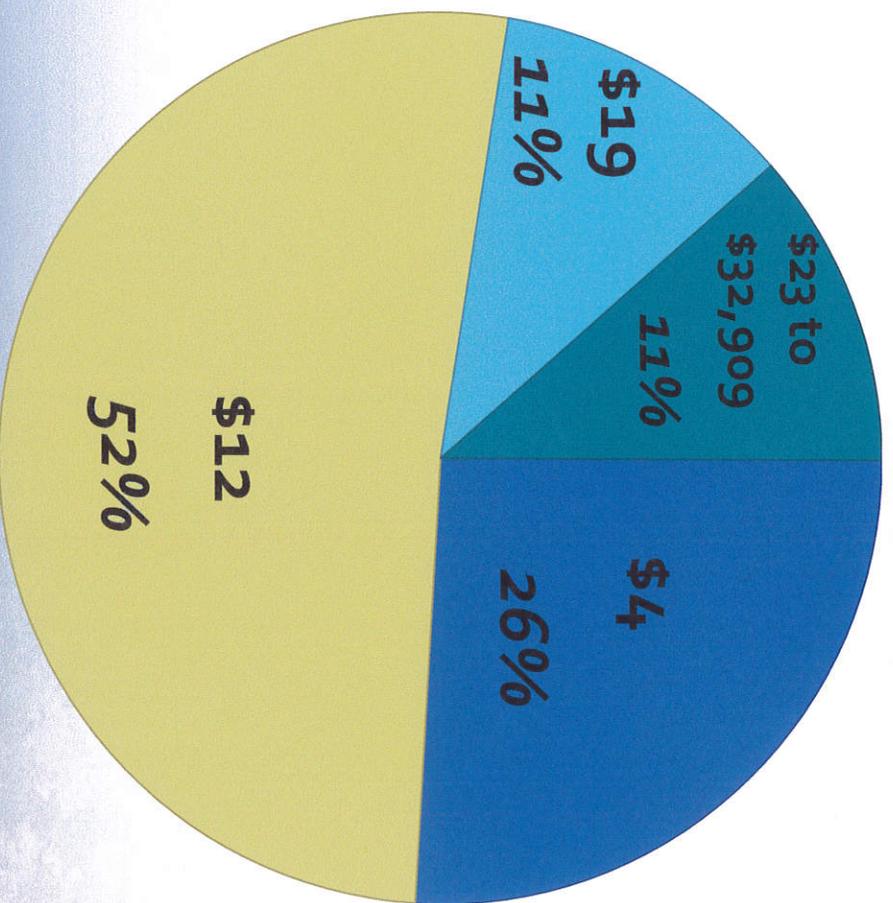
\$4,806,600

\$7,491,700

MS4

The GIAC recommends:

implementing a rate structure with four "tiers" based on impervious area.



- Tier 1 (0-999 sq. ft.)
- Tier 2 (1,000-1,999 sq. ft.)
- Tier 3 (2,000-2,999 sq. ft.)
- Tier 4 (≥3,000 sq. ft.)

Percentages refer to percent of all properties

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

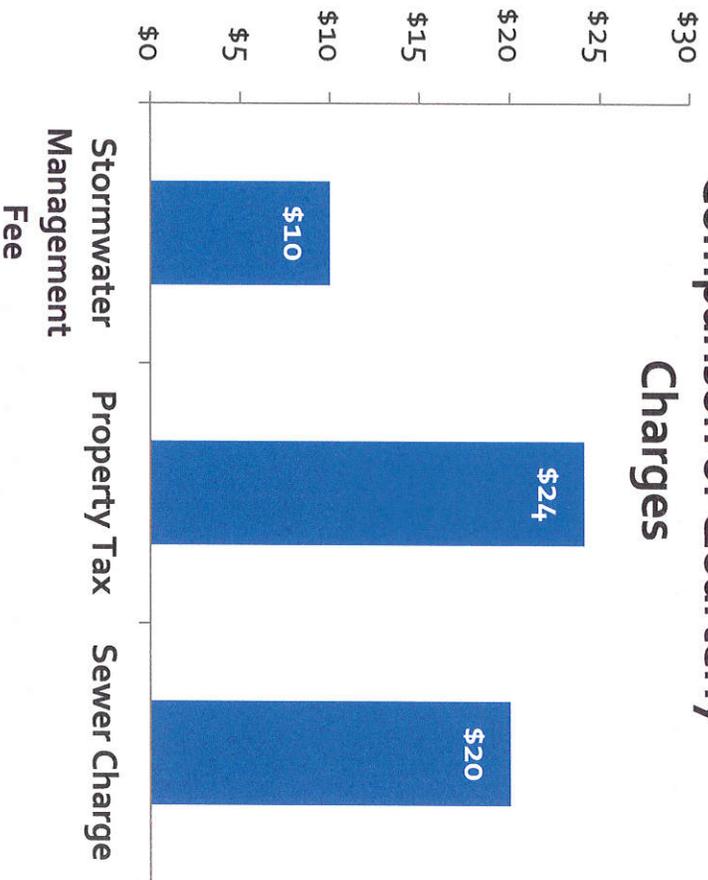
For example – average fee per quarter:
Residential: \$10
Commercial: \$139

Comparison of Charges

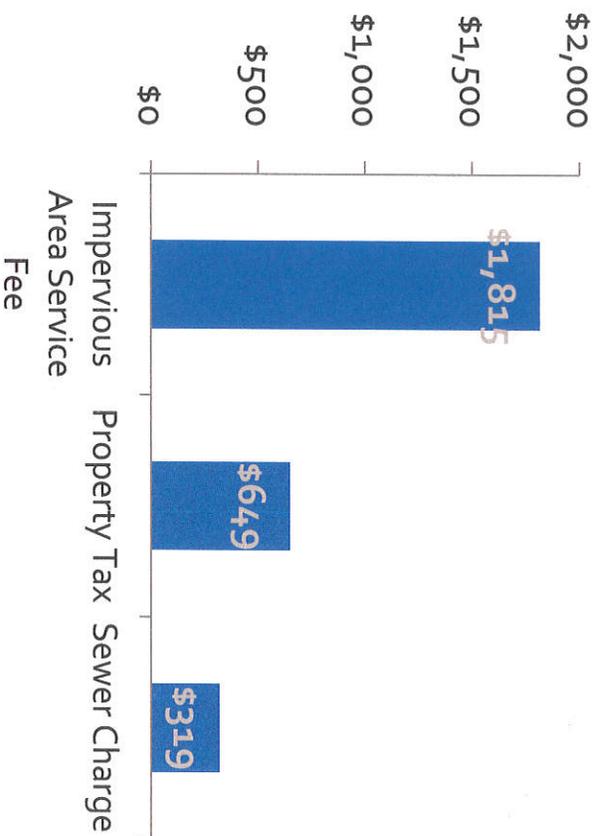
Average Residential

Average Industrial

Comparison of Quarterly Charges



Comparison of Quarterly Charges



Rates and charges assume medium level of service
 (\$4,800,000 annual program)
 And rate of \$7.74/1,000 square feet/quarter

The GIAC recommends:

including an incentive program to provide fee relief.

- Rebates or Grants – 1 time assistance with construction cost
- Credits – a percentage reduction in the annual impervious area fee
- **Benefits:**
 - Help property owners reduce their annual stormwater fee
 - Provide incentive for implementing green infrastructure on private property
 - Provide incentive to maintain facilities

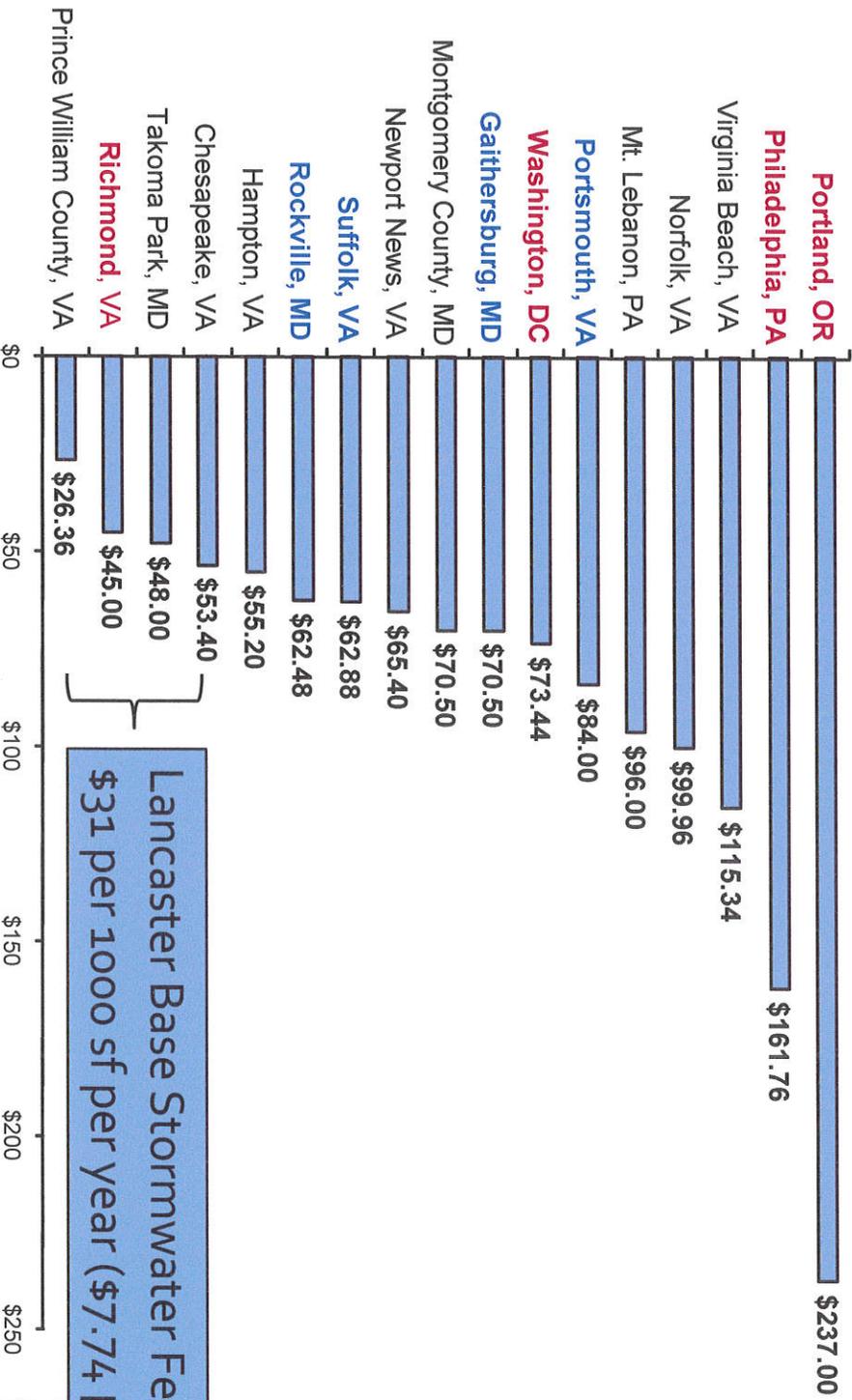
Updated Credit Matrix, with Maximum Credit Assumptions

Credit Type Description	Credit Type ID	Maximum Facility Credit
Peak Rate (Flood) Controls	PR	25%
Volume Controls / Green Infrastructure	VC-GI	50%
Water Quality Controls	WQ	25%
Non-Structural Controls	NS	15%
NDPES Industrial Stormwater Permitted Sites	NPPDES	15%

Maximum % Credit Applied to Annual Charge **50%**

Typical Residential Stormwater Fees

Typical Residential Annual Fee





SAVE IT!

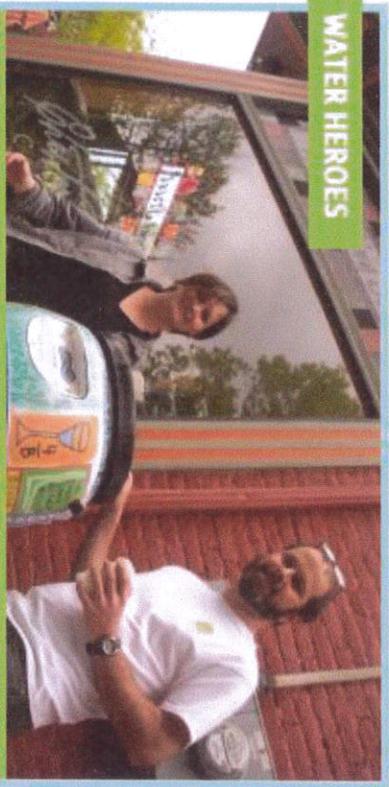
YOUR WATER.
YOUR MONEY.
YOUR CITY.



Home | About | Contact

- What's the Problem?
- What Can I Do?
- Benefits
- Local Projects
- Resources
- What's New?
- FADS

WATER HEROES



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

BABY STEPS:
I've got 5 minutes, What can I do?

BIG STEPS:
I've got 5 hours, What can I do?

Your Water. Your Money. Your City.

Lancaster, you can help.

SAVE IT!

Lancaster City needs to save 7.6 billion 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 first ever and stay informed!

Enter your email

GIANT STEPS:
I've got 5 days, What can I do?



Lessons learned or 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 plant mortality rate
- Do NOT underestimate the value of educating the public throughout the process

QUESTIONS?

Contact information

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Stormwater Program Manager, City of Lancaster
- rhocker@cityoflancasterpa.com
717-735-0350