

Corvias®



# Stormwater Authority of the City of Chester Partnership (SACP) Program

Community Outreach Meeting  
Sanai Dior Ballroom  
October 5, 2017



# WHAT IS POLLUTED RUNOFF?

Nonpoint source pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands and coastal waters and ground waters.

Nonpoint source pollution in urban areas can include:

- ✓ Sediment
- ✓ Oil, grease and toxic chemicals from urban runoff and energy production
- ✓ Pesticides and nutrients from lawns and gardens
- ✓ Viruses, bacteria and nutrients from pet waste and failing septic systems
- ✓ Road salts
- ✓ Heavy metals from roof shingles, motor vehicles and other sources
- ✓ Thermal pollution from impervious surfaces such as streets and roof



# GENESIS OF THE STORMWATER AUTHORITY OF CHESTER

The **Clean Water Act** passed in 1972, amended in 1977 and 1987, is U.S. Federal Law that regulates the discharge of pollutants into the nation's surface waters, including lakes, rivers, streams, wetlands, and coastal areas.

The **Stormwater Authority of Chester**, established by City Ordinance No. 17, is the first stormwater authority created pursuant to the Pennsylvania Municipalities Authorities Act, 53 Pa.C.S. Section 5601 et seq. (the Authorities Act)

Dr. Horace Strand appointed as Executive Director by the city to establish the SAC and lead the implementation of its Vision.

- ✓ Dr. Horace Strand has worked closely with EPA Region 3 to develop a Community-Based Public Private Partnership to achieve the implementation and long term sustainability of the City's goals and objectives.
- ✓ The Stormwater Authority of Chester is working with the City and other partners such as the EPA Region 3 Water Division to transition the stormwater program from the City to the Stormwater Authority of Chester.



# THE VISION FOR THE CITY OF CHESTER

The City of Chester (the “City”) established the SAC to:

- ❑ **“Protect”** the City & Delaware County’s water bodies and groundwater and to safeguard the public health, safety and welfare of the residents of the City.
- ❑ **“Take The Lead”** to address stormwater-related issues through planning, management, and implementation of stormwater controls.
- ❑ **“Build Sustainable Community”** through community outreach and implementation of the City’s Vision 2020 Climate Adaptation Plan to Increase Resiliency and Reduce Flooding
- ❑ **“Reduce Pollution”** into its waterways through the implementation of large-scale Green Stormwater Infrastructure
- ❑ **“Create Economic Impact”** that will contribute to the revitalization of the City through creating local job and contracting opportunities





# COMMUNITY BASED PUBLIC-PRIVATE PARTNERSHIP

## The “What”: Project delivery through cost Savings and Project Acceleration

- ✓ Gain economies of scale to reduce costs and accelerate delivery
- ✓ Long-term operations and maintenance plan ensuring sustainable infrastructure program

## The “How”: Deliberate Architecture of Benefits for the Community

- ✓ Improvement of quality of life through opportunities for local small businesses and Chester residents
- ✓ Increased affordability through innovation and standardization
- ✓ New revenue source for Chester
- ✓ Strategic land development benefiting the environment and beautification of the City that has been proven to reduce crime

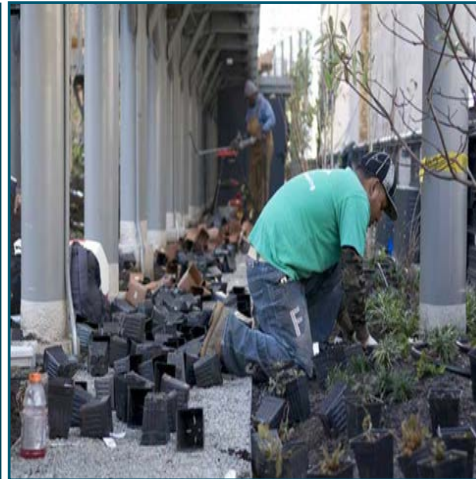


# INVESTMENT IN THE COMMUNITY THROUGH TRAINING AND JOB CREATION



## Installation and Design

- Landscape Architect
- Engineers
- Contractors
- Construction Workers
- Equipment Operators
- Urban Planners
- Construction and Building Inspectors



## Operations and Maintenance

- Landscapers
- Equipment Operators
- Maintenance Staff
- Schedulers
- Supervisors and Foreman



## Supply Chain

- Nursery and Greenhouse Workers
- Community Outreach and Customer Service
- Horticulturists
- Event Planning
- Stock Clerks
- Printing & Signage

# STORMWATER AUTHORITY OF CHESTER IMPERVIOUS COVER ASSESSMENT

<p><b>84%</b> of the City is Developed (11,786 Developed Parcels In the City)</p> <p>Only <b><u>56.8%</u></b> of property parcel owners reside in the City of Chester</p>	<p><b>1,046 Acres</b> (Total Impervious Covered Area) = <b><u>43.5 Million</u></b> Square Feet of Impervious Coverage</p>	<p><b>38,284</b> ERUs in the City (1 ERU = 3,000 SF of impervious cover)</p>
<p><u>Residential</u> uses account for only <b>26%</b> of Impervious Coverage (10K ERUs)</p>	<p><u>Commercial &amp; Industrial</u> Uses account for <b>46.5%</b> of Impervious Coverage (17.8K ERUs)</p>	<p><u>Tax Exempt</u> uses account for <b>27.5%</b> of Impervious Coverage (10.6K ERUs)</p>

# STORMWATER UTILITY RATE METHODOLOGY

- ❑ Establish a stormwater fee to cover costs for the design, construction, operations, maintenance in addition to community engagement and workforce development efforts.
- ❑ A fee structure is the basis by which the revenue requirement of the entire system is allocated to individual customers.
- ❑ SAC chose the impervious cover and Equivalent Residential Unit (ERU) methods to determine the billing basis for customers, a strategy found in many cities across the U.S. Two primary classes of customers will be created; Single-Family Residential and Non-Residential.
- ❑ In order to determine a stormwater rate, first the number of billing units must be determined. Following this analysis the procedure and process for billing and collections will be set up – presently underway.



# ADDRESSING THE CONCERNS

- ❑ The Stormwater Authority of Chester is a chartered City Authority regulated by the EPA to implement and maintain stormwater infrastructure on the separate sewer system as well as provide multiple benefits to the community.
- ❑ A stormwater utility fee is being assessed and will be utilized to fund construction, development, maintenance and operating expenses for the Stormwater Authority of Chester.
- ❑ PennVest awarded the Stormwater Authority a \$1M grant to fund planning and engineering costs and has committed an \$11-14M low interest loan to complete green streets projects throughout the City.
- ❑ Corvias has been hired as a strategic partner to align with the Stormwater Authority to not only implement the regulatory infrastructure needs but ensure the City and community benefit from job creation, education, economic development and educational advancement.

# FOR MORE INFORMATION CONTACT OR VISIT:

- ❑ FOR ALL QUESTIONS AND INQUIRIES  
[chesterstormwaterauthority@gmail.com](mailto:chesterstormwaterauthority@gmail.com)
- ❑ FEDERAL BACKGROUND ON STORMWATER REGULATION  
<https://www.epa.gov/aboutepa/epa-region-3-mid-atlantic>
- ❑ STATE BACKGROUND ON STORMWATER REGULATION  
[www.depweb.state.pa.us](http://www.depweb.state.pa.us)
- ❑ EXAMPLE OF A CBP3 IN MARYLAND  
[www.thecleanwaterpartnership.com](http://www.thecleanwaterpartnership.com)  
<https://thecleanwaterpartnership.com/the-prince-georges-county-clean-water-partnership/>

# WHY IS THIS WORK IMPORTANT?

## NRDC VIDEO: FORGING A NEW VISION

□ [https://www.youtube.com/watch?v=\\_bU3VpoMHs0&feature=youtu.be](https://www.youtube.com/watch?v=_bU3VpoMHs0&feature=youtu.be)