

# BUILDING A WORLD OF DIFFERENCE

## Transformative Approach to Stormwater Funding

### Clean Water Council Meeting - New Jersey

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BUILDING A WORLD OF DIFFERENCE®



BLACK & VEATCH

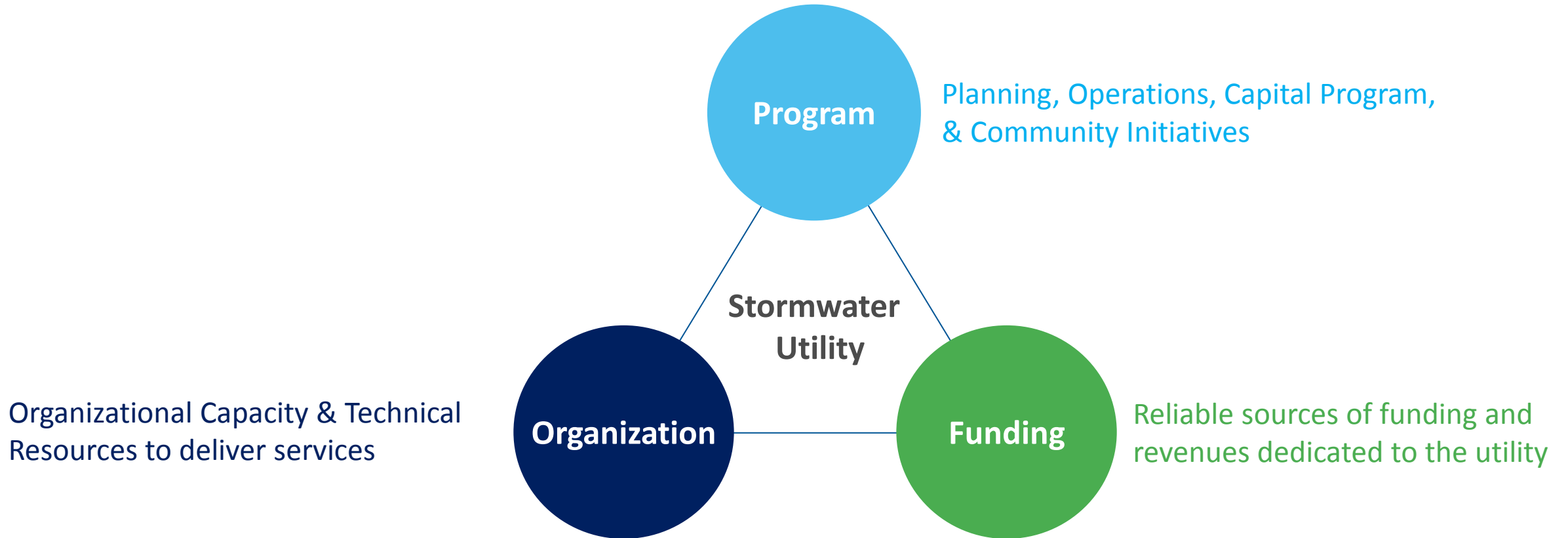


# Discussion

- **The Utility Concept**
- **National Trends At-a-Glance**
- **Stormwater Management Programs**
- **Stormwater Funding Considerations**
- **User Fee Development Framework**
- **Stakeholder Engagement**
- **New Localism: A Plausible Approach?**



# Stormwater Utility Encompasses Three Facets



# General Perspectives ....



# Stormwater Management Priorities

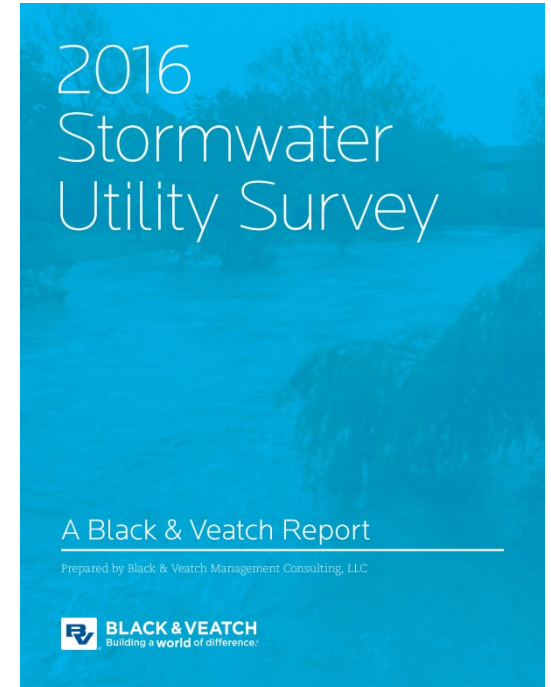
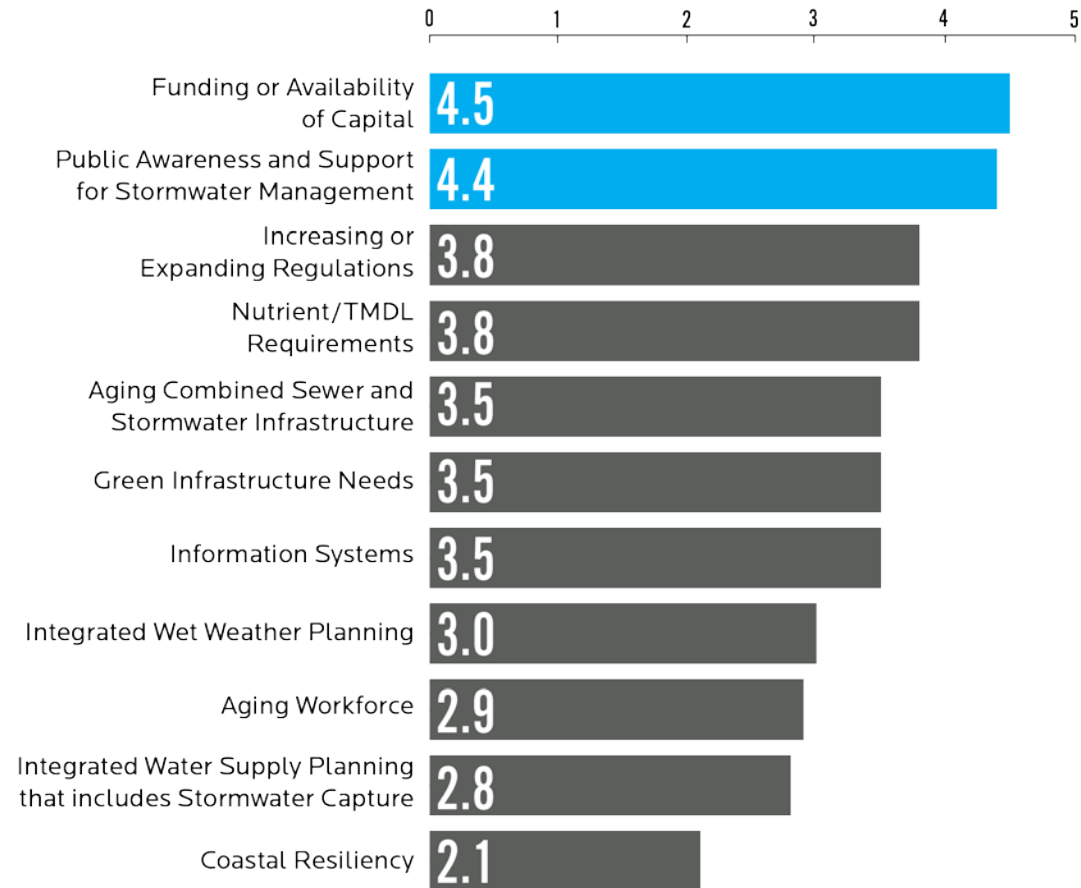
## Four Priority Issues for the Utilities

#1 Availability of adequate funding

#2 Enhancing public awareness and support

#3 Management of expanding regulations

#4 Water quality – Nutrient/TMDLs

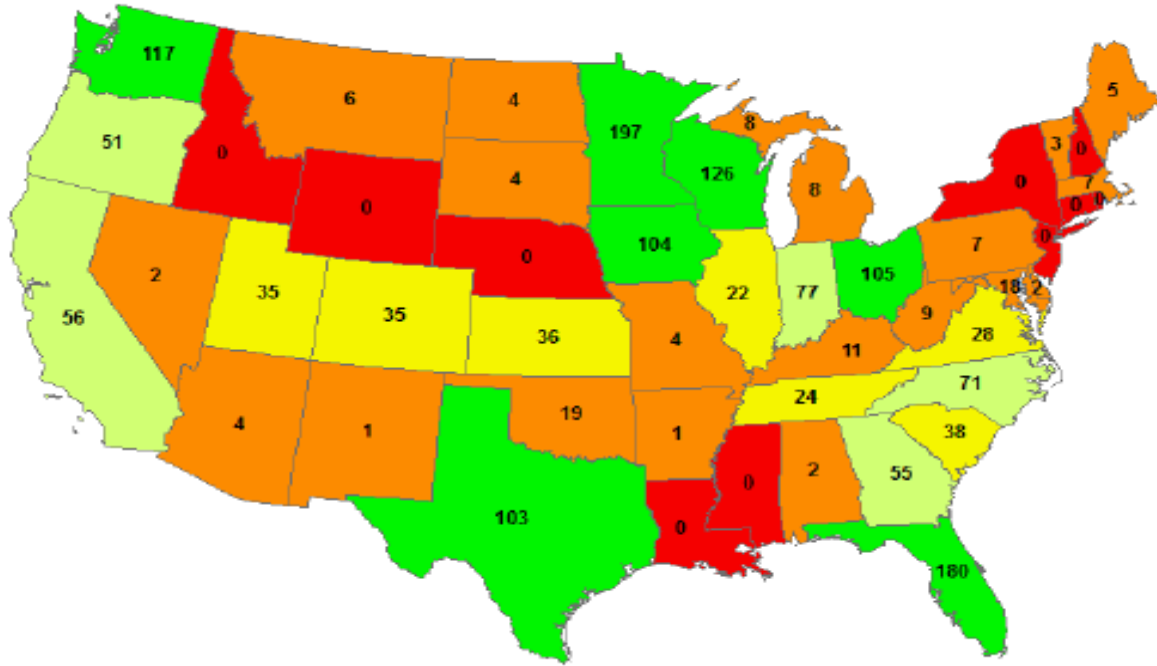


Source: 2016 Stormwater Utility Survey: A Black & Veatch Report



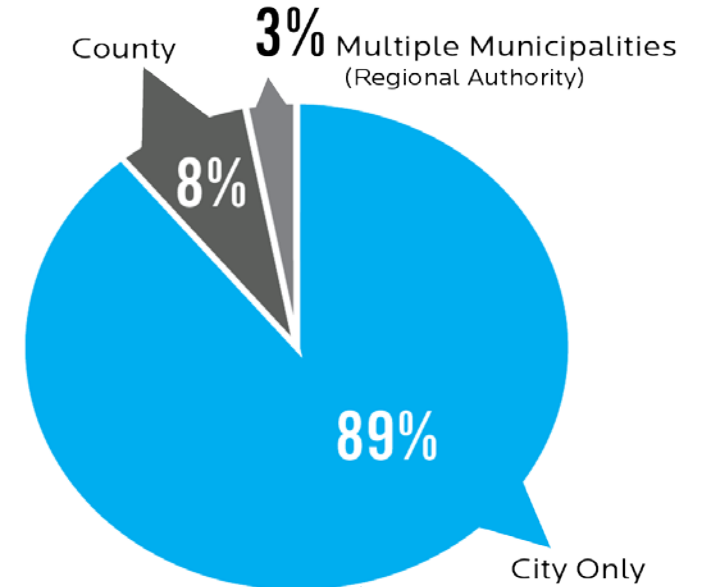
# Stormwater Utilities: A Nationwide Look

1,600+ Stormwater Utilities in the US



Source: Western Kentucky University Survey - 2016

## Jurisdictional Responsibility for Stormwater Management

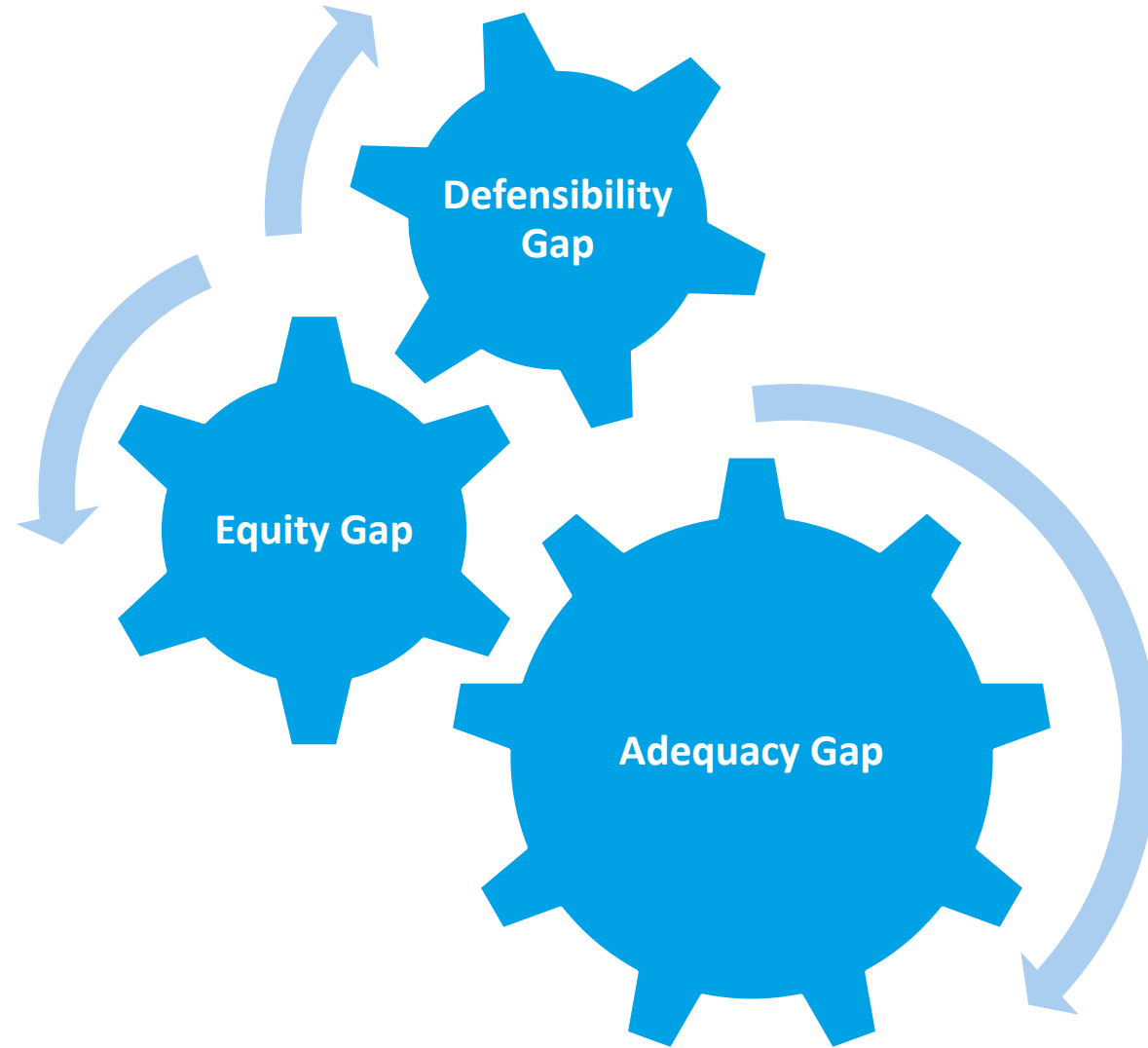


*Enforcement of a user fee is administratively easier within a municipality rather than across multiple jurisdictions*

Source: 2016 Stormwater Utility Survey: A Black & Veatch Report

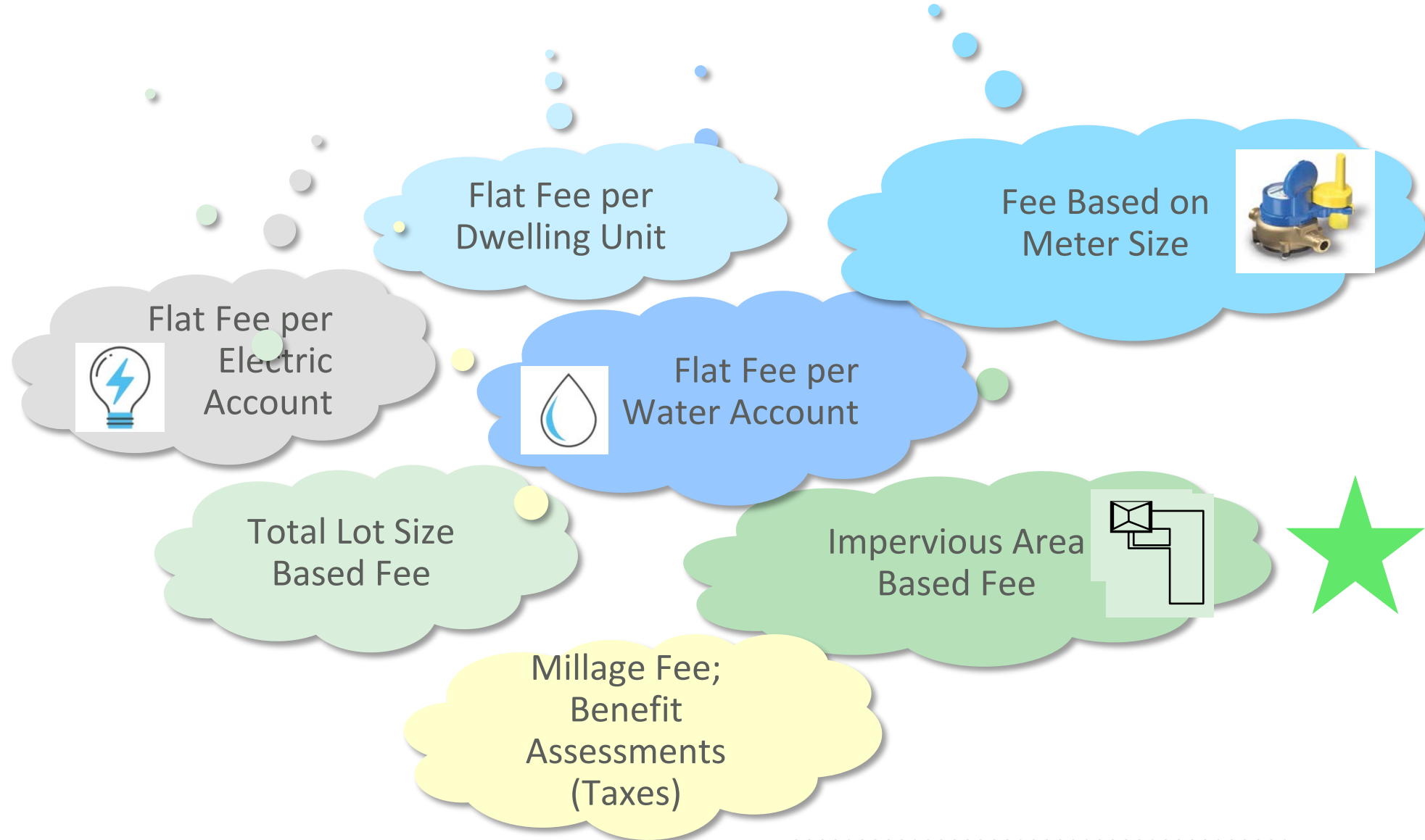


# What are the Common Alignment Gaps in Funding?



# The Stormwater Fee Structure: A Hodge-Podge?

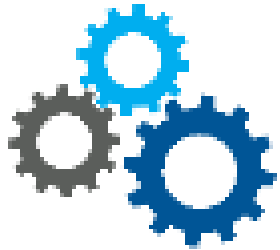
*What do we see nationally with respect to Stormwater Fee Structure?*





# Why is Stormwater “User Fee” Not a “Tax?”

Services Provided



Annual Costs Incurred



Costs Recovered through User Fees

Services Received



## Key Tests of a User Fee



Fee is assessed to address a regulatory purpose?



Fee is in exchange for benefits received by the general public?



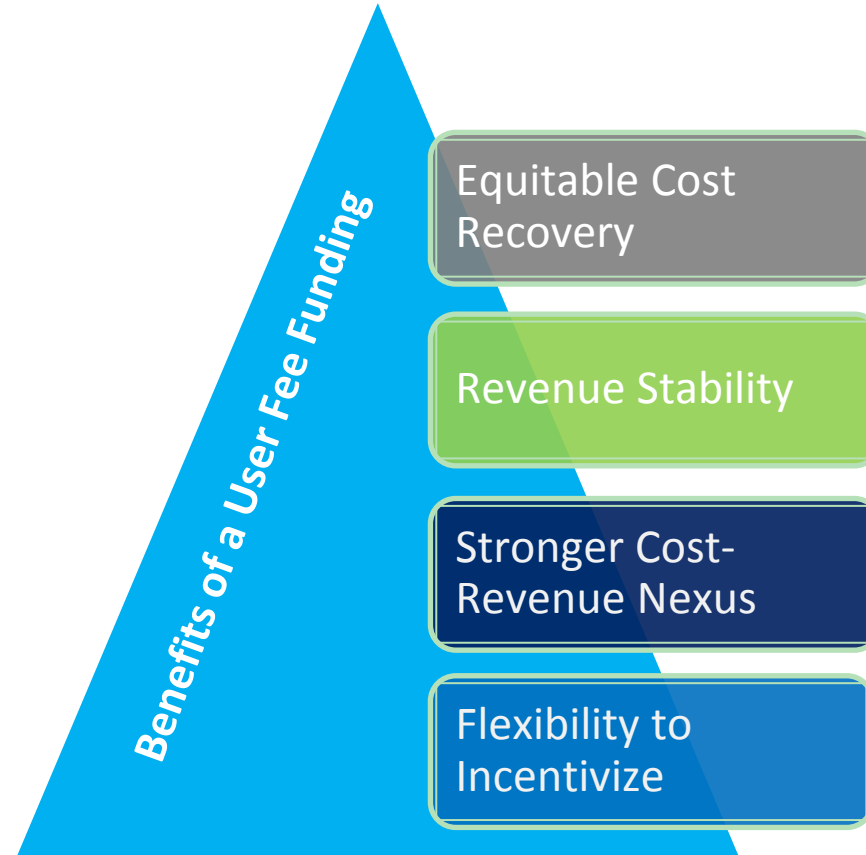
Fee is voluntary?



Fee is a fair approximation of costs incurred in providing services?



# Stormwater Funding Considerations



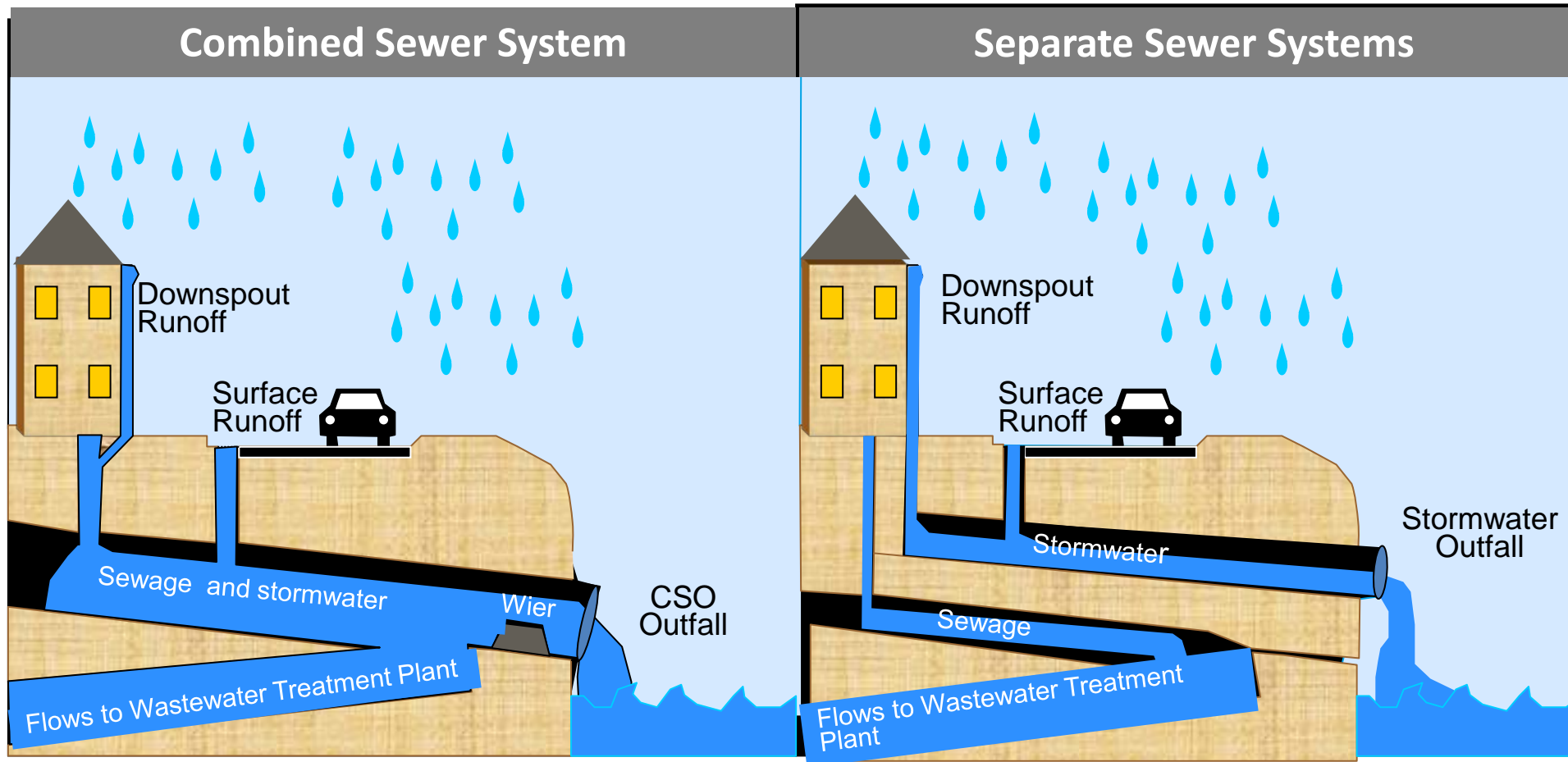
# Program Considerations ....



# Types of Stormwater Systems in New Jersey

(Examples: Newark; Perth Amboy; Gloucester)

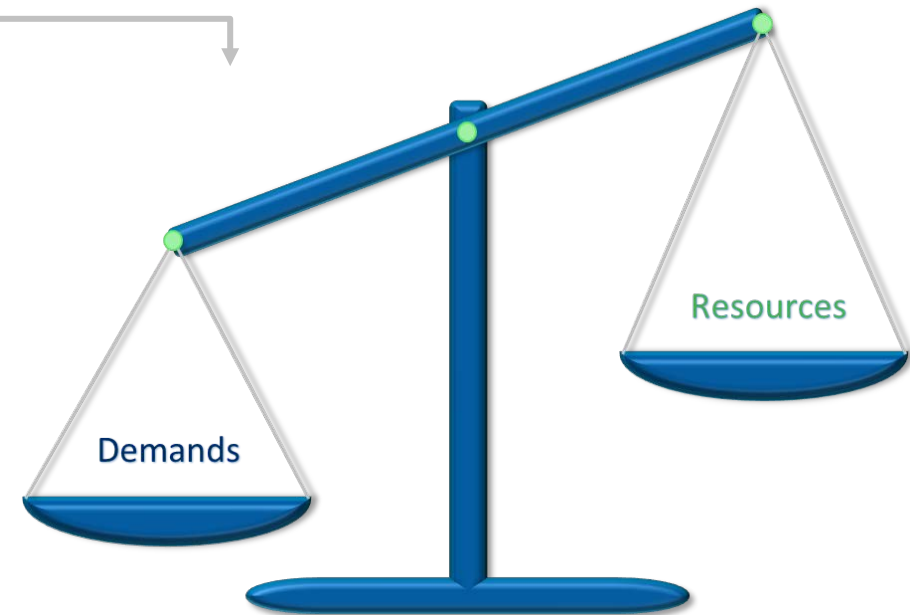
(Examples: New Brunswick; Princeton)



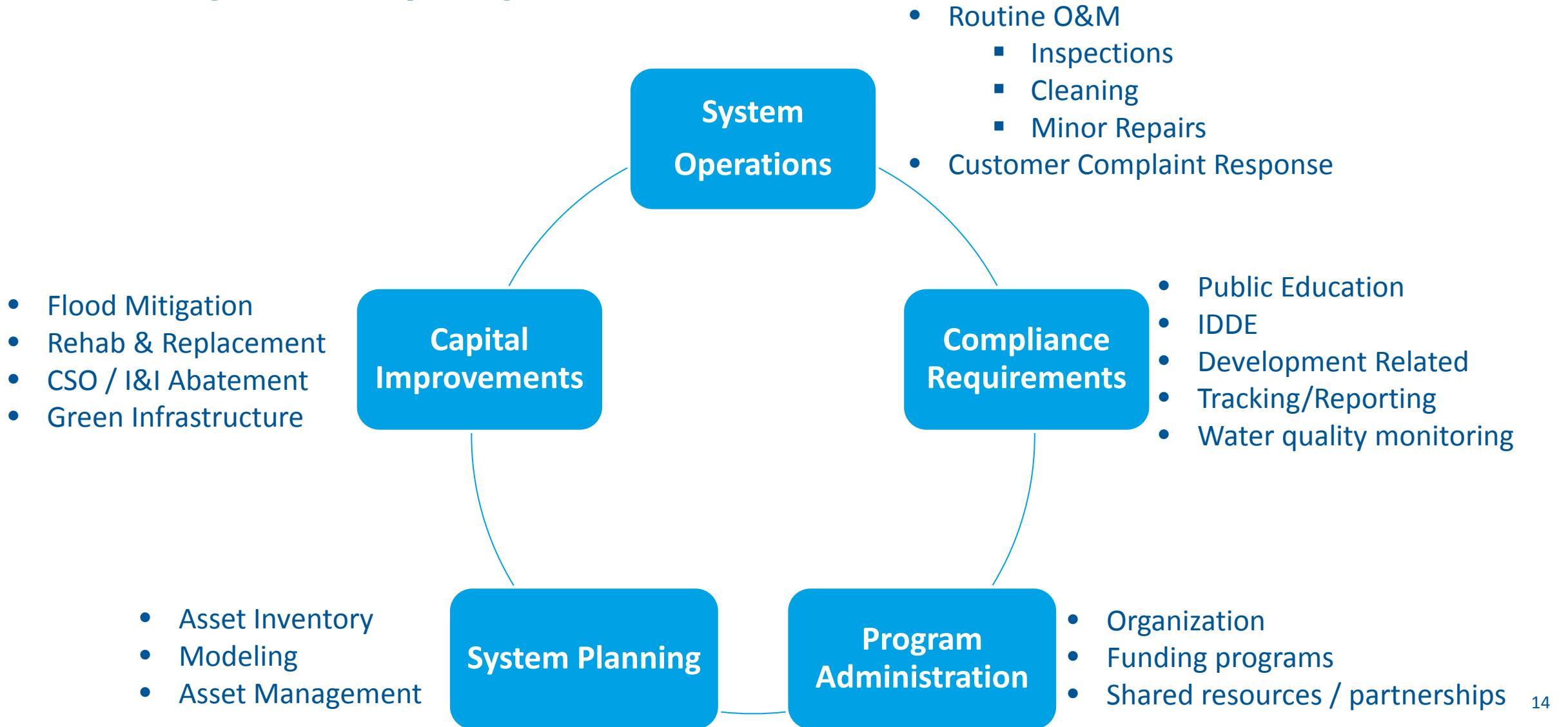
# Stormwater Management Program Drivers



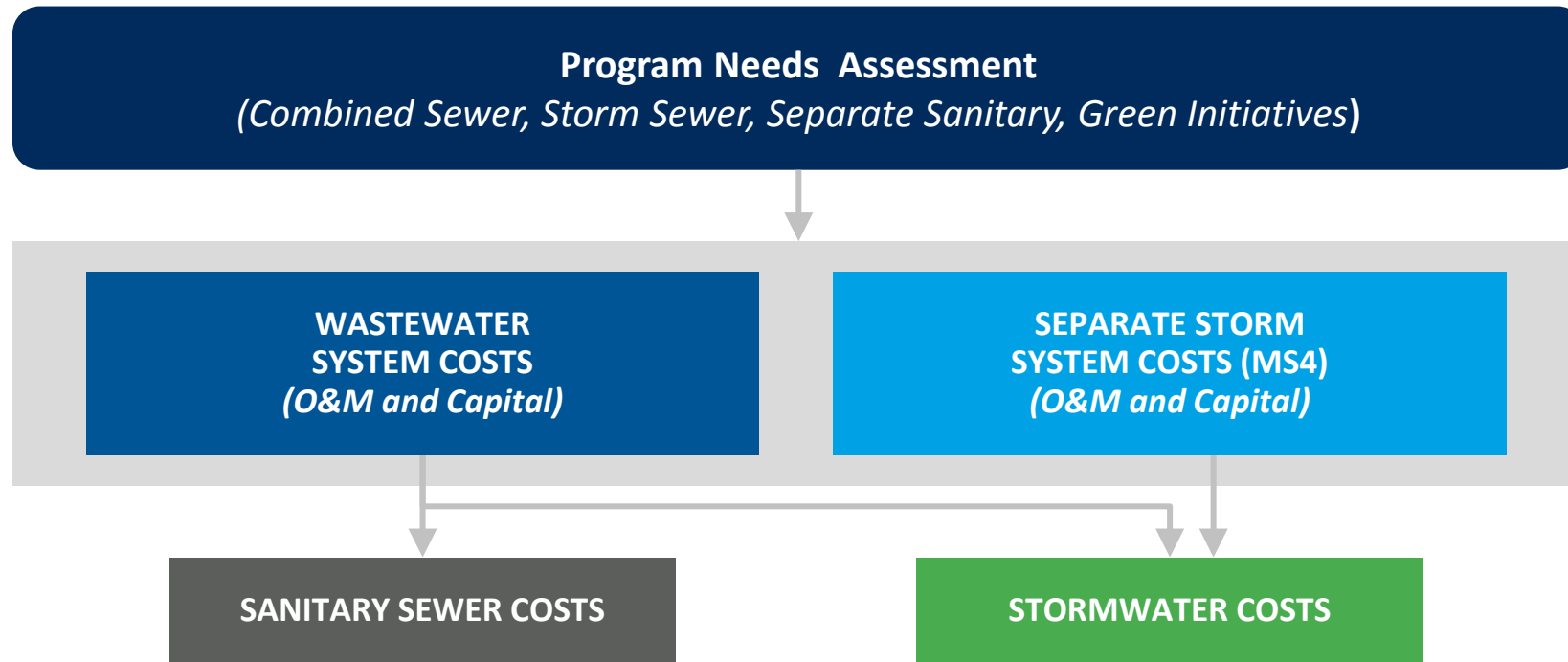
Utilities must balance multiple, sometimes competing demands with limited resources



# What are the major components of a stormwater management program?



# Reliable Program Cost Estimation Requires Defensible Cost Allocation



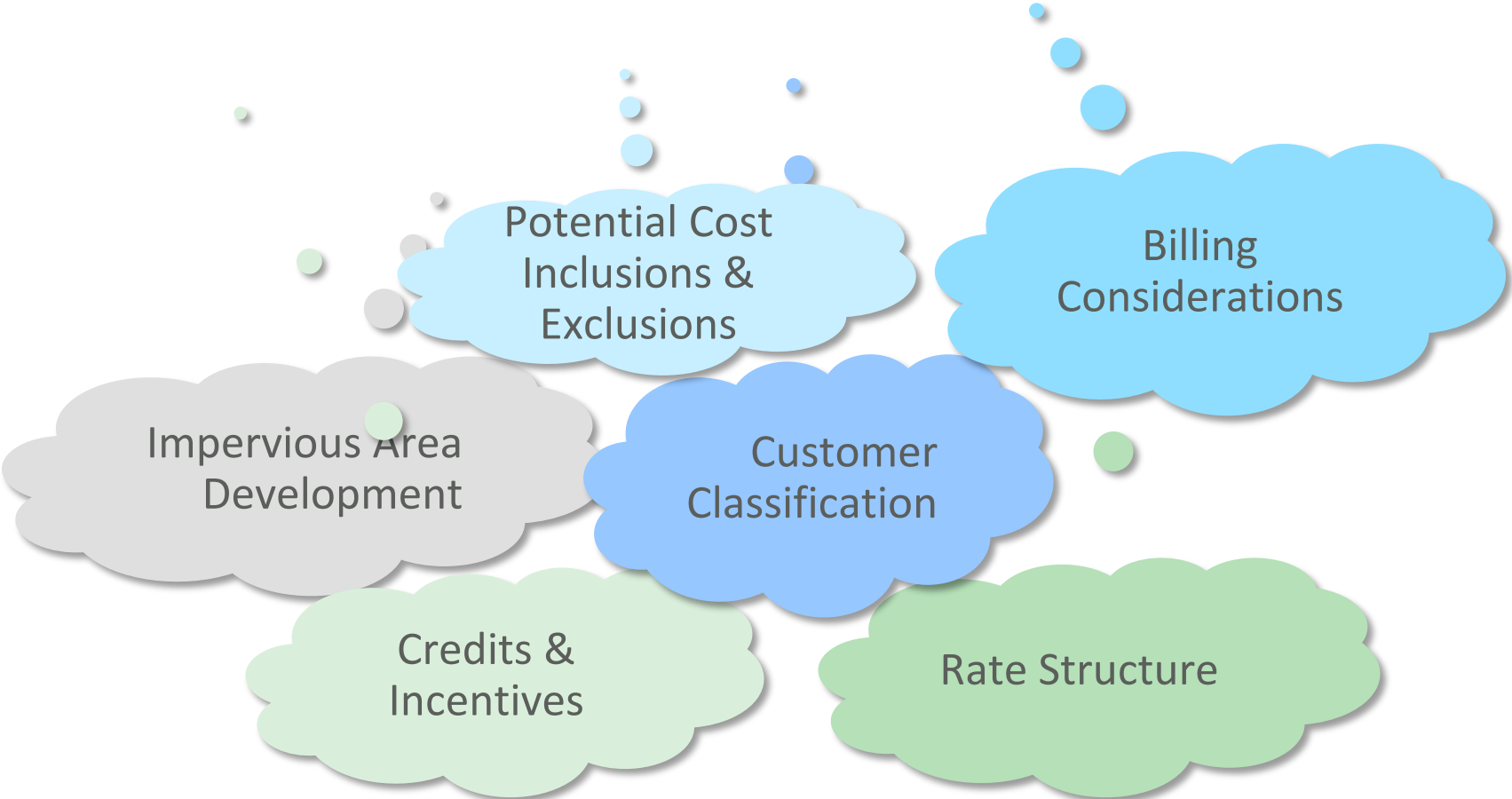
# Funding Considerations



# Six Key Components in Stormwater User Fee Development

- Program and Costs
- Stormwater Policy Development
- Financial Plan & Rate Structure
- Parcel Data Management & Billing Mechanism
- Customer Credits & Incentives Program
- Stakeholder Engagement

# Well defined policies provide a defensible foundation for stormwater user fee programs and initiatives



# A Stormwater User Fee is analogous to a water user fee but with some distinct differences

## WATER USER FEE

### Basis of Fee

- Water Usage

### Unit of Measure

- 100 Cubic Feet (CCF)
- 1,000 Gallons

### Rate Structure

- Rates by customer classes
- Tiered Rates

## STORMWATER USER FEE

### Basis of Fee

- Impervious Area

### Unit of Measure

- Square Feet
- ERU: Equivalent Residential Unit

### Rate Structure

- Rates by customer classes
- Tiered Rates

Impervious Area (Sq. Ft.)	ERUs	Quarterly Fee
0 to 799	1.00	\$8.14
800 to 1,299	1.45	\$11.80
1,300 to 2,399	2.48	\$20.19
2,400 and over	4.40	\$35.82

Example: Residential Rate Structure

**Equity in Cost Recovery: Users Pay According to What They Use!!!**



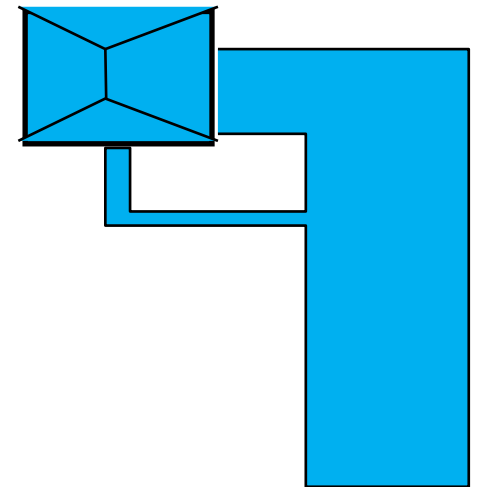
# Impervious Area Analysis: A balanced approach can be used to determine impervious area units

## How Is Impervious Area (IA) Data Developed and Analyzed?

- Approaches to determining impervious area
  - **Customer Classes:** Meaningful classification of parcels in to customer classes
  - **IA Estimation:** Use single or a combination of approaches
    - GIS spatial data / Infra-red and aerial imagery
    - Intensity of development / Runoff Coefficient

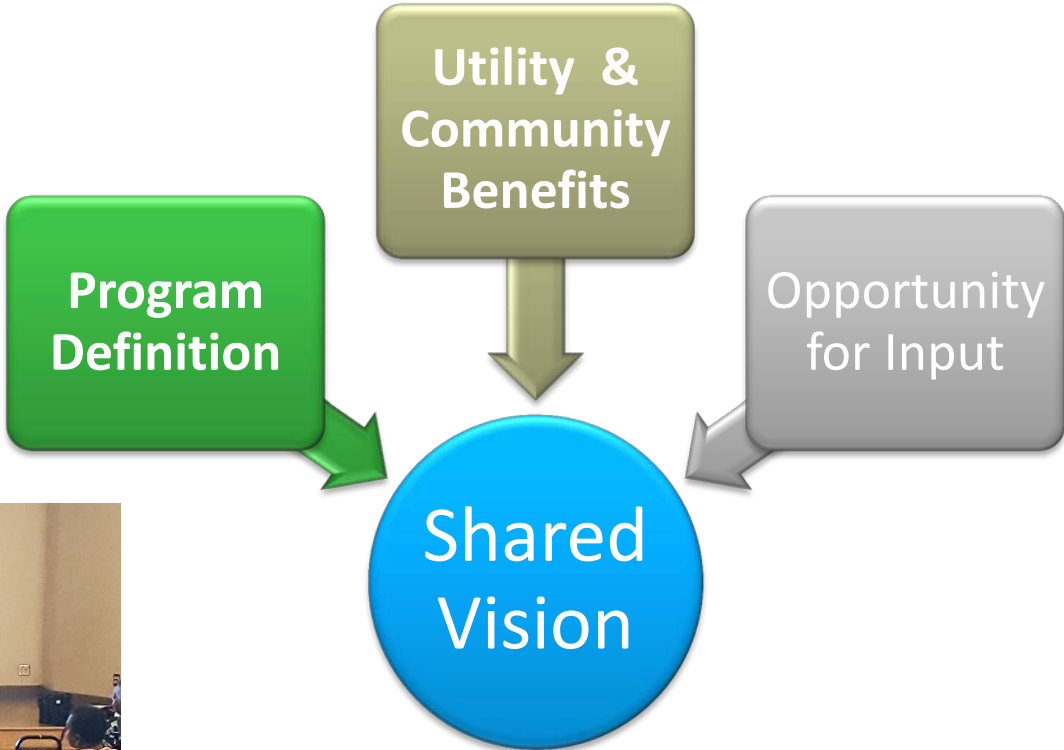
*Factors to Consider:  
Balance efficiency, consistency, defensibility, fairness, timely data management*

One Residential  
Unit = 1 ERU



# Stakeholder Engagement

*Internal and External*





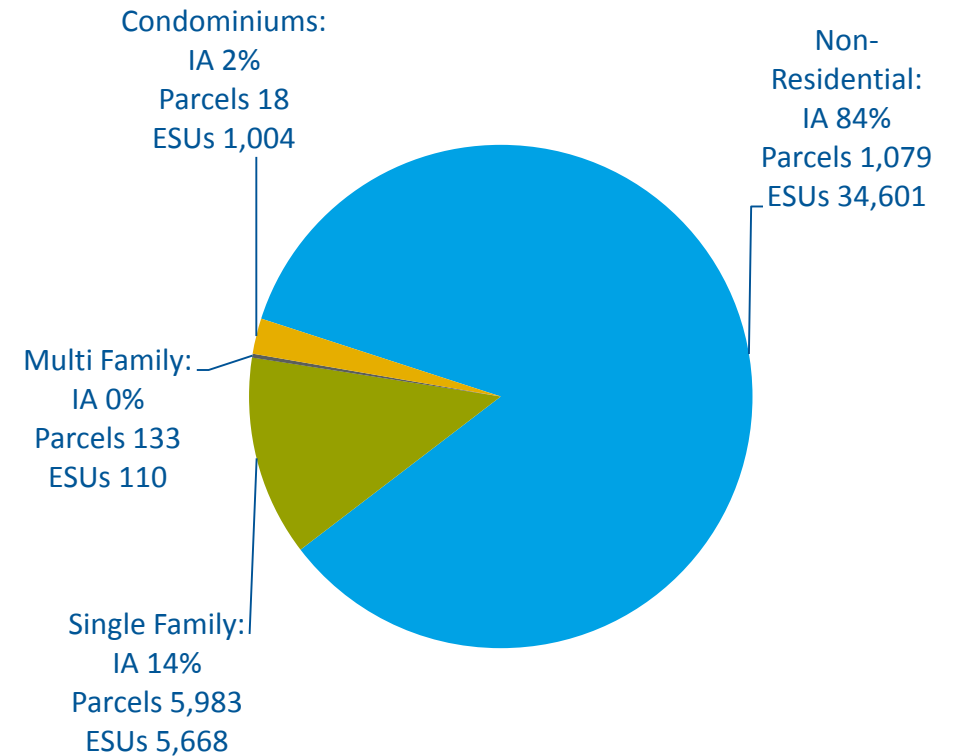
# Successful launch of a stormwater user fee program

## *A Case Study: Newark, Delaware*



# Newark's (Delaware) Compelling Case for Action

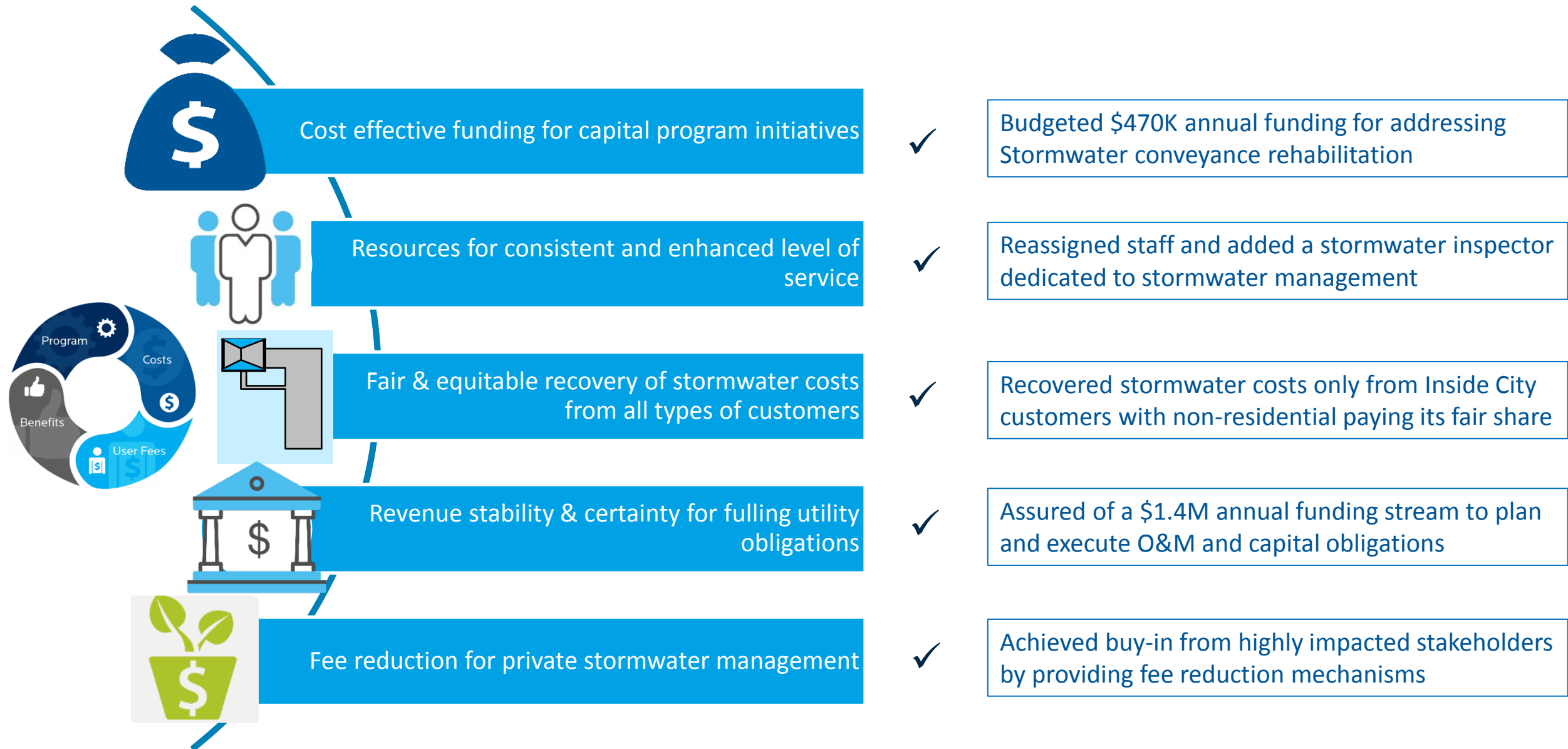
Bill Component	2017 Monthly Charge Without SW Charge	2018 Monthly Charge Without SW Charge	2018 Monthly Charge With SW Charge
Water	\$30.17	\$30.17	\$30.17
Wastewater		\$42.83	
Sewer	\$32.30		\$32.30
Stormwater			\$2.89
Total Charge	\$62.47	\$73.00	\$65.36
Difference from FY 2017 (%)		<b>\$10.53 (16.9%)</b>	<b>\$2.89 (4.6%)</b>



City transitioned to an Impervious Area based stormwater fee in January 2018!!!



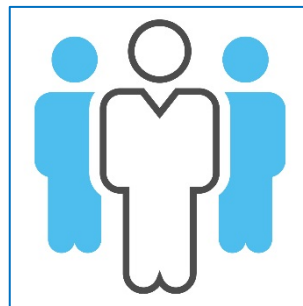
# What were the practical benefits of a fee initiative?







# Peer Utility Collaboration: A New Plausible Paradigm in New Jersey?



Potential Areas of Collaboration

- ■ Enabling Legislation
- ■ Collaborative Resourcing
- ■ Concurrent Execution
- ■ Similar Methodologies
- ■ Sharing of Resources
- ■ Stakeholder Engagement & Public Education



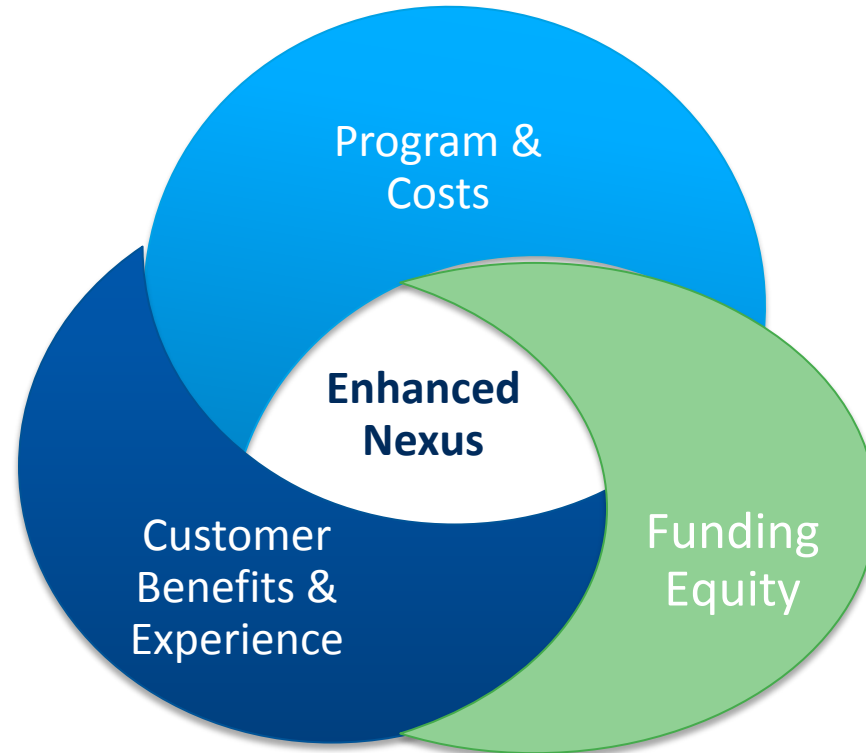
# The Road Ahead for Sustainable Stormwater Management .....



**Diligence & Transformative Approaches**  
Holistic Evaluation & Innovative Solutions



**Leadership Commitment**  
Enhance Equity & Defensibility



**Stakeholder Engagement**  
Educate on Issues & Embrace Ideas



# Thank You!

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