

◆ CELEBRATING 10 YEARS ◆

JERSEY WATERWORKS CONFERENCE 2024

DECEMBER 13 ◆ THE COLLEGE OF NEW JERSEY ◆ EWING

Unlocking the Potential of Stormwater Utilities:
Perspectives and Progress in New Jersey

◆ CELEBRATING 10 YEARS ◆

JERSEY WATERWORKS CONFERENCE 2024

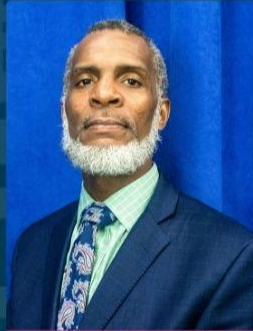
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Unlocking the Potential of Stormwater Utilities: Perspectives and Progress in New Jersey



NATHAN WALKER,
AICP

Senior Water Resources
Planner,
Gannett Fleming
TranSystems



KAREEM ADEEM

Director, Department of
Water and Sewer Utilities,
City of Newark



VICTOR DELUCA

Committeeperson,
Maplewood Township



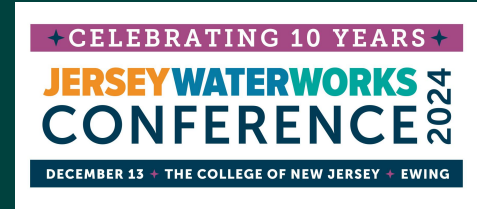
**TIMOTHY
EBERSBERGER**

Environmental Engineer,
New Jersey Department of
Environmental Protection

1.3 CPC CREDITS

THE POWER OF COLLABORATION: TOWARDS A ONE WATER FUTURE

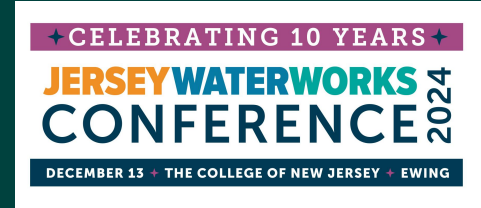
Unlocking the Potential of Stormwater Utilities



Agenda

- Overview of Stormwater Utilities
 - Nathan Walker, Gannett Fleming, Inc.
 - Panelist Introductions
 - Timothy Esberger - NJ DEP Environmental Engineer
 - Kareem Adeem - City of Newark Director of Water and Sewer Utilities
 - Victor De Luca - Maplewood Twp Committeeperson
 - Questions for Panelists
- ➔ Questions from Audience

Overview of Stormwater Utilities



Drivers for Stormwater Management

- Aging infrastructure
- Flood mitigation
- Regulatory mandates
- Water quality
- Development pressure
- Drinking water supply protection

Overview of Stormwater Utilities

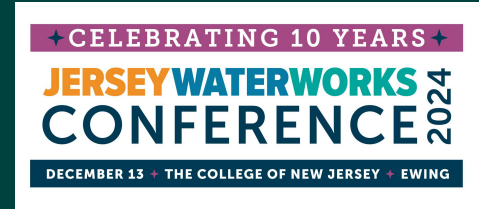
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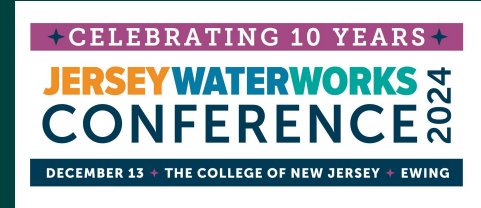
Overview of Stormwater Utilities



Funding a Stormwater Program

Primary Methods	Secondary Methods
General Fund Stormwater User Fee	Inter-governmental Cooperation Regional Planning Public Private Partnerships State/Federal Grants Foundation Grants Improvement Districts

Overview of Stormwater Utilities



	General Funds	User Fee
Who Pays?	Taxed properties	Developed properties
Basis of Contribution (\$)	Property value	Impervious cover
Credits for On-site Management	None	Consideration of services that offset the need for public services



Single-Family

Impervious: 3,525 SF

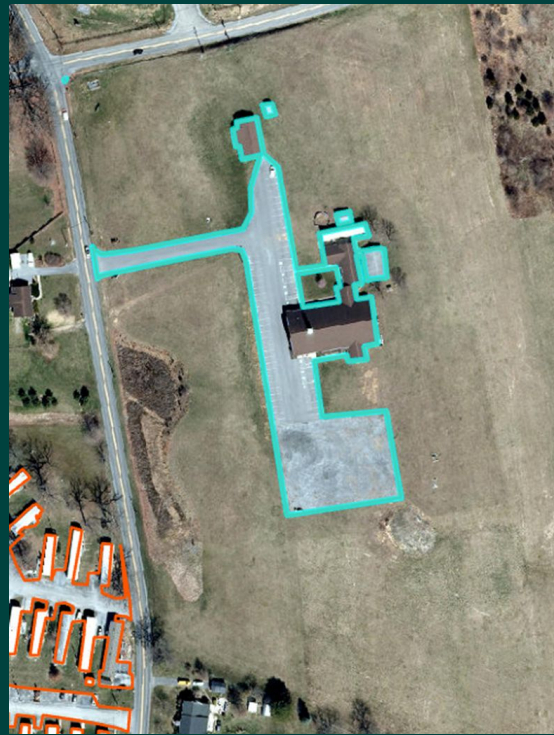
Eq. Residential Units: 1



Industry

Impervious: 9,083,226 SF

Eq. Residential Units: 2,577



Non-profit

Impervious: 66,284 SF

Eq. Residential Units: 19



School

Impervious: 1,345,949 SF

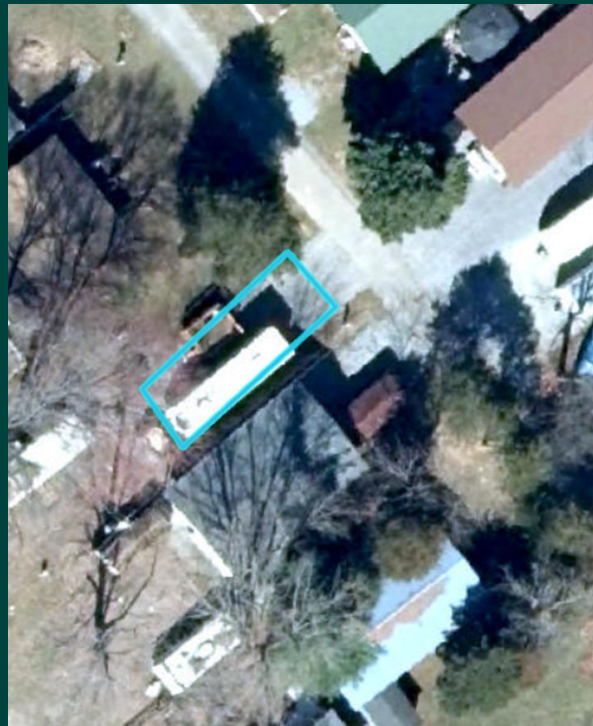
Eq. Residential Units: 382



Single-Family

Impervious: 3,525 SF

Eq. Residential Units: 1



Single-Family

Impervious: 789 SF

Eq. Residential Units: 1

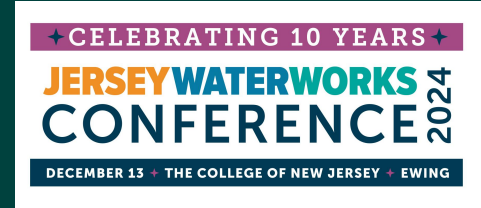


Single-Family

Impervious: 17,154 SF

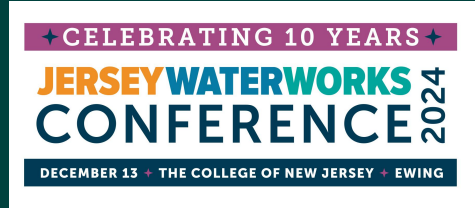
Eq. Residential Units: 1

Overview of Stormwater Utilities



Benefits	Challenges
Distributes costs	New public policy
Defined program of services	Community education
Earning credits can reduce fee	Data and billing maintenance
Stable revenue source	Distributes costs

Overview of Stormwater Utilities



PUBLIC EDUCATION



STAKEHOLDER ENGAGEMENT

Tim Ebersberger

New Jersey Department of Environmental Protection

Bureau of NJPDES Stormwater Permitting

- Clean Stormwater and Flood Reduction Act (2019)
- NJDEP Stormwater Utility Guidance (2020)
- Feasibility Study for the Creation of Stormwater Utilities (2024)
- 319 Competitive Stormwater Grants (Ongoing)
- Ongoing assistance with interpretation of Act and Department guidance

Kareem Adeem
City of Newark
Director of Water and Sewer Utilities

- Stormwater Control Ordinance
- Pet Waste Ordinance
- Wildlife Feeding Ordinance
- Litter Control Ordinance
- Improper Disposal of Waste Ordinance
- Yard Waste Ordinances
- Private Storm Drain Inlet Retrofitting Ordinance
- Illicit Connection Ordinance



Victor De Luca Maplewood Township Committeeperson

Maplewood Leaders Signal Support For New Stormwater Utility

“We don’t want to impose more fees on our residents, but the world is changing. Climate change is happening, infrastructure is aging, and we need to be able to keep our residents safe.” — TC member Deborah Engel

Maplewood Township Committee members indicated that they support the creation of a Maplewood Storm Water Utility and a fee to support such a utility, in light of the increased occurrence of devastating storms and the finding that the town’s infrastructure is lacking.



Written by Mary Barr Mann, September 18, 2024

Existing Stormwater Infrastructure

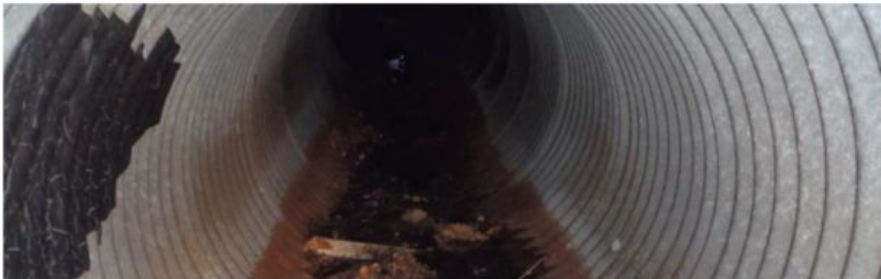
1,812 Storm Inlets



839 Storm Maintenance Holes



39.3 Miles Storm Pipes



80 Storm Outfalls & Discharge Locations



Stormwater Project Examples



Stream Erosion and Undermining at Oakland Road



Sinkhole at Dunnell Road near Memorial Park and Maplewood Train Station

Upcoming Stormwater Projects

Major Capital Projects

	<i>Estimated Cost</i>
1. Maple Terrace General Drainage Improvements	\$ 900,000
2. Kendall Ave Drainage Improvements (Township is receiving a \$960,000 federal grant)	\$4,000,000
3. Nelson Place Bank Stabilization	\$ 400,000

Capital Projects

1. Burnett Terr. & Ivy Place Drainage Improvements	\$ 250,000
2. St. Lawrence Ave Drainage Repairs	\$ 100,000
3. Porter Ave Drainage Improvements	\$ 75,000
4. Boyden Ave Drainage Improvements	\$ 75,000
5. Meadowbrook Ave Drainage Improvements	\$ 300,000
6. Tiffany Place Drainage Improvements	\$ 150,000
7. GIS Update for NJDEP	\$ 250,000
8. Maplecrest Park Drainage Improvements	\$ 100,000
9. Drainage Improvements for Sump Pumps	\$ 300,000/yr

Long Term, Multiple Year Capital Projects

1. Outfall Reconstruction Program \$1,000,000 over 5-year program

Residential Impervious Areas



Source: New Jersey Department of Environmental Protection
Created: 2015 Accessed: August 2023

Questions for Panelists

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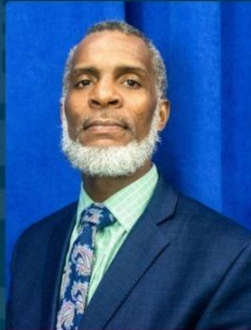
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Questions from Audience

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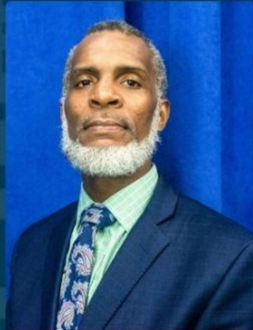
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New JWW Stormwater Utilities Subcommittee Resource!

Stormwater Utilities Can Facilitate Green Infrastructure

(Updated October 2024)

The Stormwater Utilities Subcommittee updated this memo to help towns understand the ways in which stormwater utilities can help them build green infrastructure. Take a look at the resources in this document, consider a stormwater utility, and help your community make a healthier New Jersey a reality!



Scan me!

**THANK
YOU!**