



Mayor Keisha Lance Bottoms

ATLANTA'S STORMWATER MANAGEMENT PROGRAM

National Stormwater Roundtable

February 20, 2018





Overview



Delivers 97 MG of drinking water per day
Treats 150 MG of wastewater per day

1.2M

Customers
Served

\$546M

FY 2017
Operating
Budget

\$1.22B

5-YR Capital
Improvement
Program

WATER SYSTEM

3,028 miles of pipeline
62,204 valves
24,385 fire hydrants
18 pump stations
3 water treatment plants

WASTEWATER SYSTEM

1,900 miles of pipeline
47,327 manholes
22 pump stations
4 water reclamation centers
2 water quality control facilities

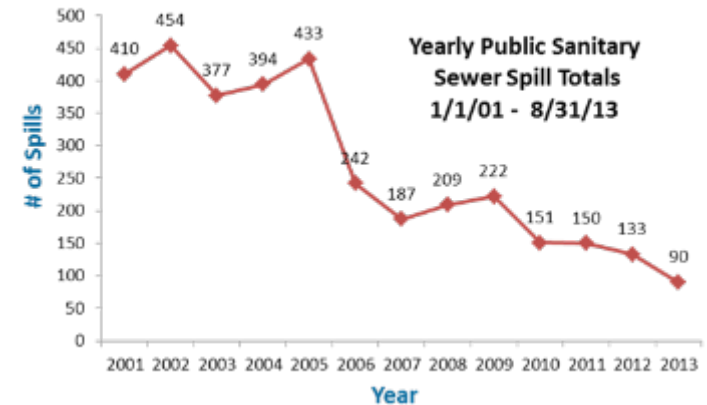
WATERSHED PROTECTION

603 miles of pipe
47,351 inlets
2,349 culverts
6,175 outlets
10 drainage basins



Consent Decrees

- CSO – completed 2008
 - Reduced CSOs from ~100/yr to an expected average of 4/yr
- \$2B in improvements since 1998
- Second CD extended until 2027
- Rehabilitation of 363 miles of collection system; 97% reduction in spill volume
- W&S rates among highest in the country





Stormwater Challenges

Damaged Infrastructure



Street Flooding

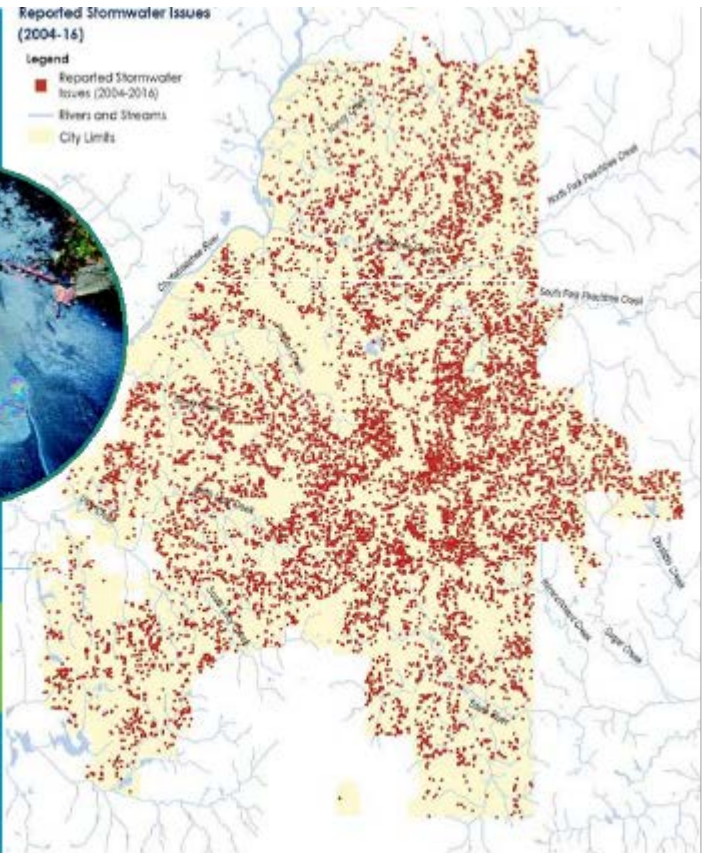


Water Quality Issues



DWM receives about 1,300 complaints about stormwater issues every year.

Issues are city-wide.

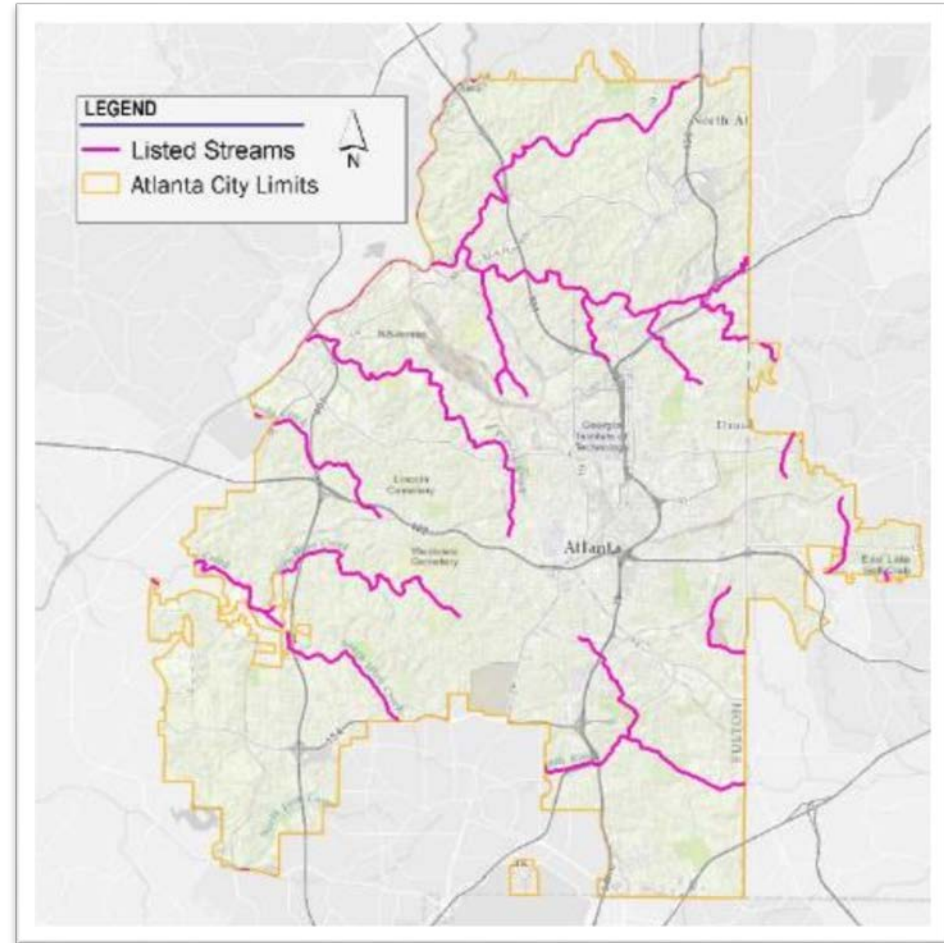


No dedicated funding



303(d) Listed Streams

- 22 listed stream segments
- 71 miles of listed streams
- All listed for fecal coliform
- Several listed for Biota-M and Biota-F





Atlanta's Stormwater Program

- MS4 Program
- General Fund/Emergency Response
- Post-Development Construction
- Watershed Improvement Plans
- Green Infrastructure
- Drainage system repairs (temp. funding)
- Public Education



MS4 Program Components

- Facilities Inspection Program
 - Municipally-owned Facilities
 - Industrial Facilities
 - Highly Visible Pollutant Sources
- Illicit Discharge Detection and Elimination Program
- Construction Site Management Program
- 303(d) Stream Monitoring (TMDL listed stream segments)





MS4 Program Highlight

IDDE – Stream Walk Assessment

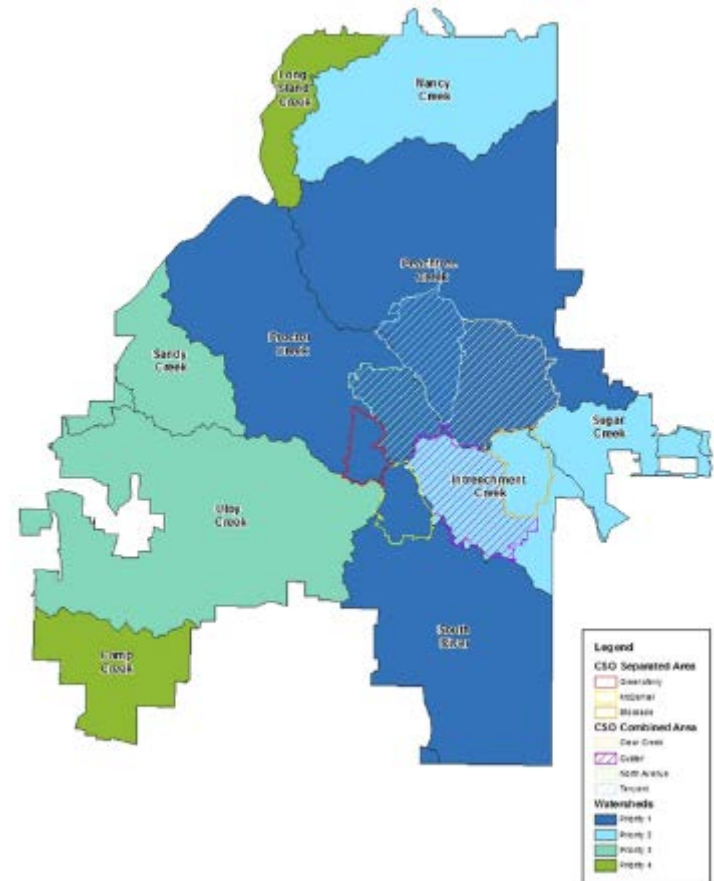
- Stream walks were implemented in 2013 as an alternative to outfall inspections
- With outfall inspections, we were not finding any structures with dry weather flow
- Requirement:
 - walk 20% percent of the streams each year.
 - 226 miles of streams within the City of Atlanta
 - 45 miles of stream per year
- We have been far more successful in finding outfalls with dry weather flow, tracing the source, and eliminating pollutants into the waters.





Integrated Planning

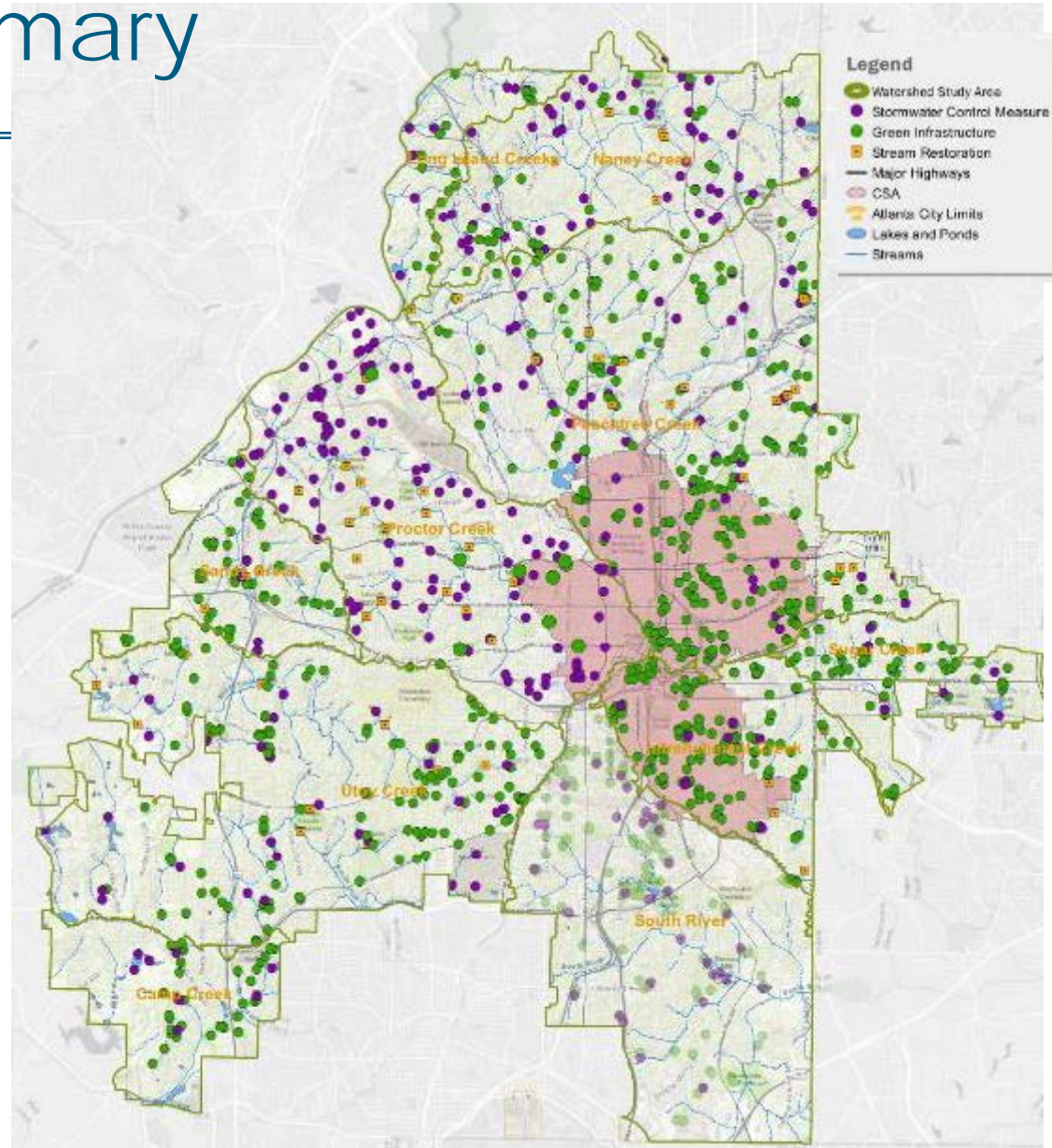
- 10 watersheds prioritized
- Watershed Improvement Plans (WIPs) completed
- Underpinned by
 - GI Strategy
 - Clean Water Atlanta
 - Urban Waters Fed. Partnership
 - Water Supply Program





WIP Summary

- 10 Watersheds
- 134 square miles
- 213 SCM projects
- 699 GI projects
- 66 Stream projects
- 978 Total projects
- \$507 million CIP





GI Strategic Action Plan

•Strategic Action Plan Goal

- Through policies, projects, and partnerships, install enough GI to reduce an additional 225 MG runoff volume each year

•Actions - Subcommittees

- Project Implementation
- Policy, Funding, & Planning
- Partnering & Outreach
- Data Tracking & Technical Analysis

GREEN INFRASTRUCTURE GOAL:

225 Million Gallon
Reduction of
Runoff Annually

(Annual 1% reduction in volume
of runoff from a 1" storm)





Gray - Green Coordination

Partnership with Clean Water Atlanta and Watershed Protection

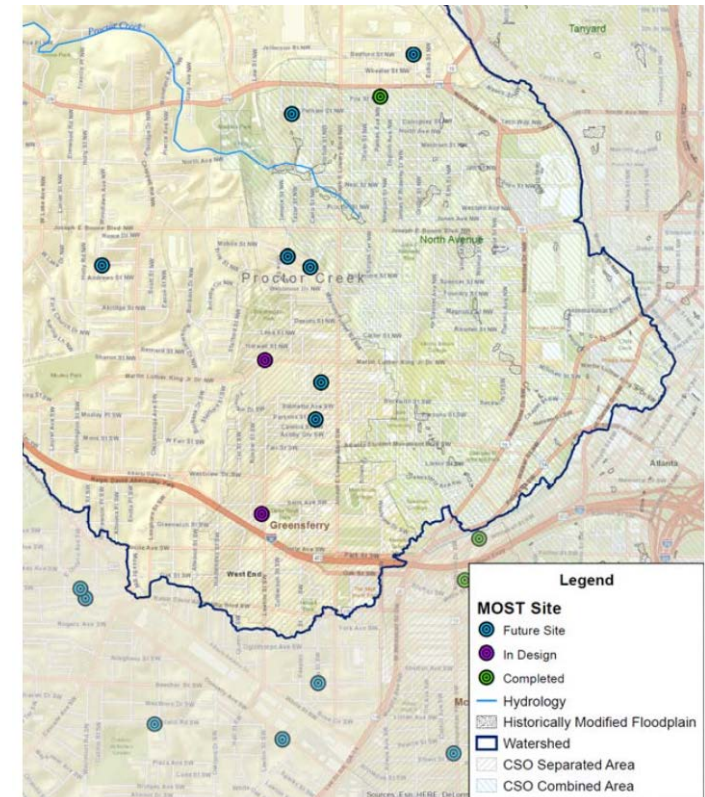
- CWA is a comprehensive initiative to improve water quality in Atlanta through capital construction programs and enhanced operation of the City's drinking and wastewater systems.
- Identify opportunities to integrate cost-effective, mutually beneficial green infrastructure solutions into CWA "gray" projects
- Provide capacity relief and help attain water quality standards.



MOST Funded Stormwater Projects

Municipal Option Sales Tax (MOST)

- 10% of MOST Revenue has been allocated to SW projects across the City
- Approximately \$12.5 - \$13.5M funding generated per year
- 4 years total
- Backlog of drainage issues
- Coordination to integrate GI projects in future phases





Why use Green Infrastructure in Atlanta?

Environmental Protection

- Improves water quality
- Supports Mayor's sustainability initiatives

Compliance

- Complies with NPDES permit – Removing Barriers
- Prepares the City for potential changes in federal stormwater rules

Community


- Addresses drainage issues in redeveloping historic neighborhoods
- Maximizes infrastructure investments by further reducing combined sewer overflows and flooding





Updated MS4 Permits

General NPDES
Stormwater Permit
No. GAR041000

 **GEORGIA**
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

**AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**


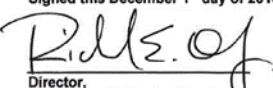
**STORMWATER DISCHARGES ASSOCIATED WITH
MUNICIPAL SEPARATE STORM SEWER SYSTEM**

GEORGIA DEPARTMENT OF TRANSPORTATION

In compliance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the "State Act," the Federal Clean Water Act, as amended (33 U.S.C. 1251 et seq.), hereinafter called the "Clean Water Act," and the Rules and Regulations promulgated pursuant to each of these Acts, all new and existing stormwater point sources associated with the Georgia Department of Transportation municipal separate storm sewer system, upon submittal of a Georgia Notice of Intent, are authorized to discharge stormwater to the waters of the State of Georgia in accordance with the limitations, monitoring requirements and other conditions set forth in Parts 1 through 6 and the Appendices hereof.

This permit shall become effective on January 3, 2017.

This permit and the authorization to discharge shall expire at midnight, January 2, 2022.

 Signed this December 1st day of 2016.

Director,
Environmental Protection Division

Most Recent MS4 Permits

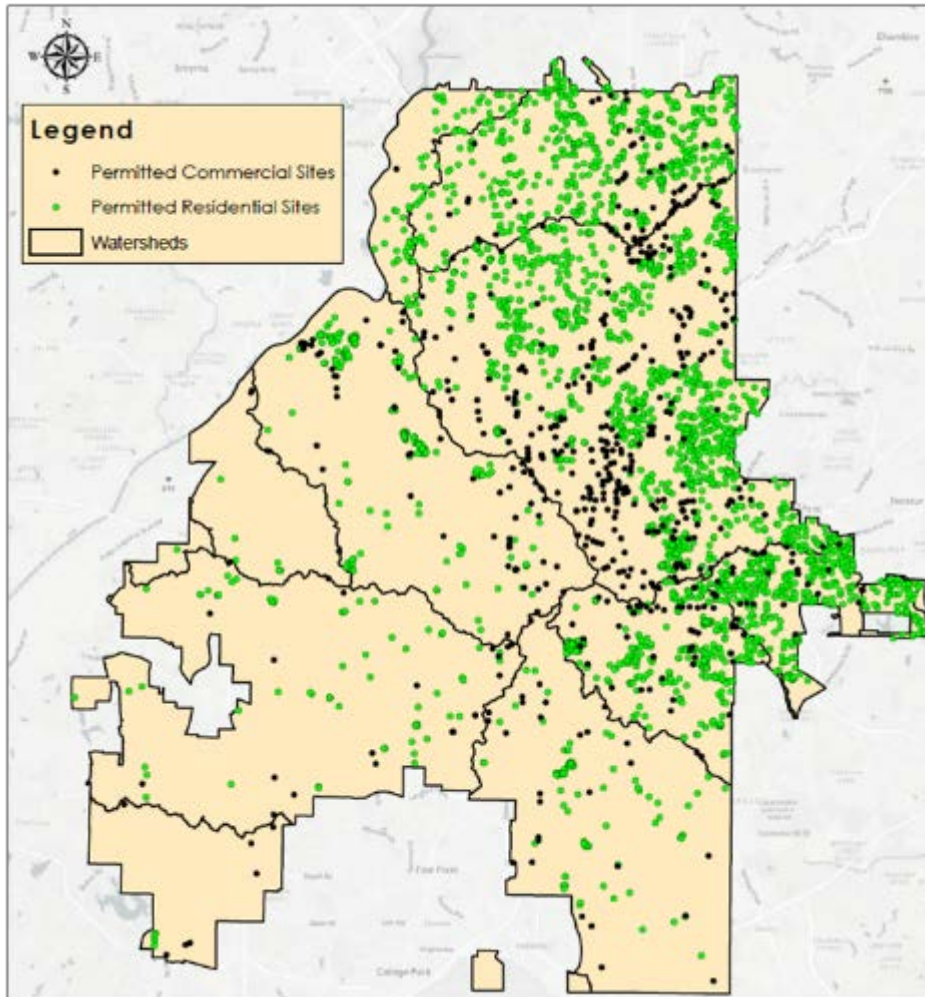
- Georgia DOT
- Phase I Medium
- Phase II

Includes Requirement to Adopt Runoff Reduction / Green Infrastructure Practices

- 3 year transition period
- Atlanta staff participated in both Blue Book update and proposed amendments to MS4 permits



Post-Development Ordinance



Requires GI on:

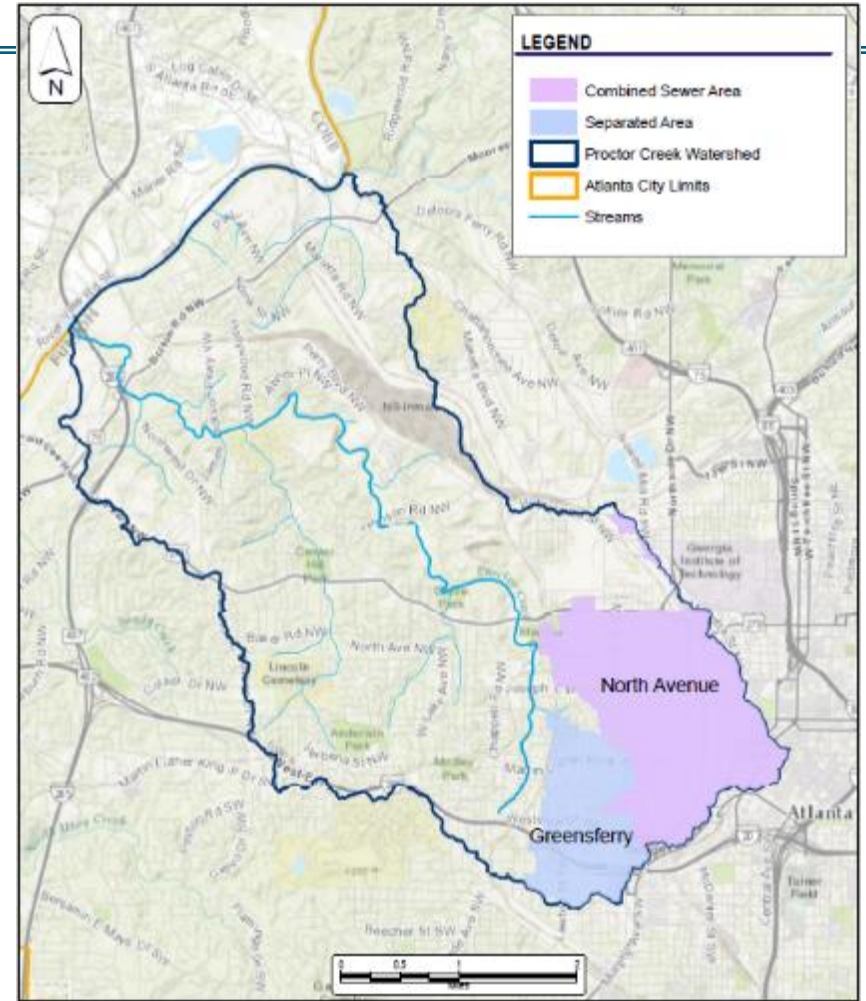
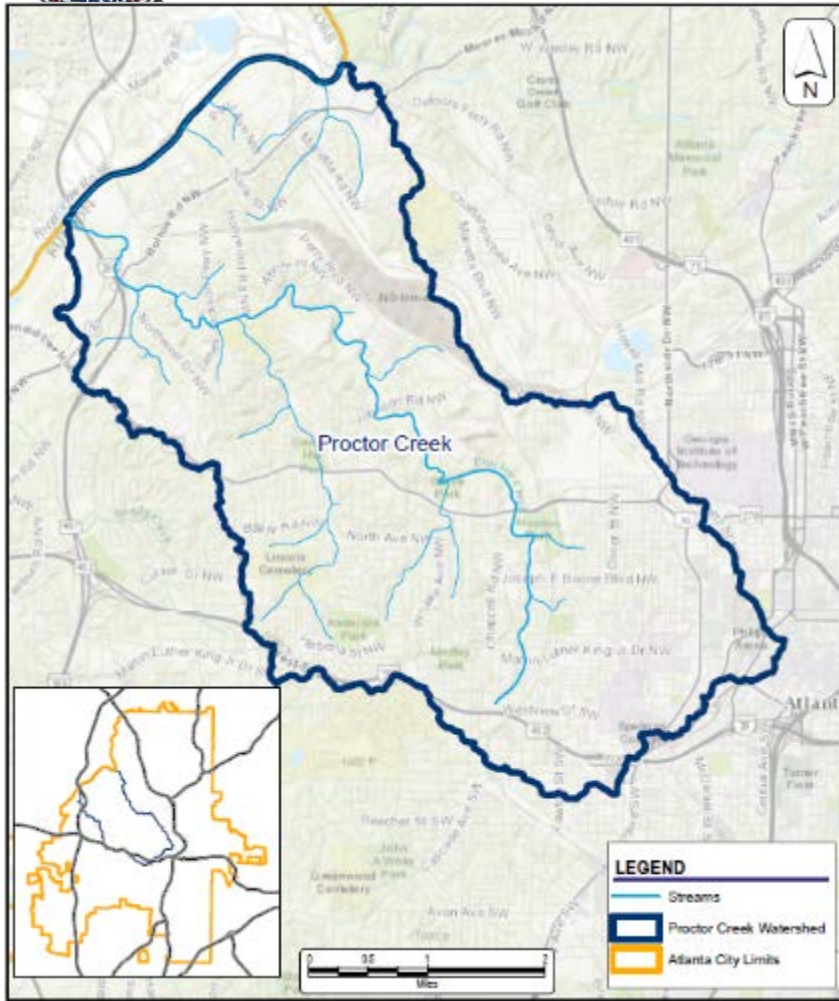
- single family infill
- commercial development/
redevelopment > 500sf
 - 1.0" Runoff Reduction
Volume (RRv)

Permitted Sites Since Feb 2013

- 600+ Commercial
- 2,900+ Single Family
Residential



Proctor Creek Watershed - UWFP





Urban Waters Federal Partnership

Federal Partner Activities

- US Army Corps of Engineers Proctor Creek Feasibility Study
 - \$3M Total Cost
 - City has spent \$750,000 of our \$1.5M obligation
 - Tentatively Selected Plan restores approximately 2.43 miles of stream at an estimated cost of \$8.75M
 - USACE incorporating DWM's WIP data into Feasibility Study
- Urban Waters Federal Partnership Work Plan
 - EPA is leading federal agencies to create a short-term unified work plan
- Health Impact Assessment of Proctor Creek Watershed
 - EPA lead - in progress
- Water quality monitoring
 - EPA, USGS

City Partner Activities

- Boone Park West (Park Pride, The Conservation Fund)
 - Providing technical coordination with CWA program
- Proctor Creek Greenway (Ofc of Resilience)
 - Providing coordination support, funding for green infrastructure
- Proctor Park (Emerald Corridor, Ofc of Resilience)
 - Providing design input, coordination, possible land donation
- Atlanta Watershed Learning Network (Eco-Action, Cons. Fund)
 - Community-led citizen training on urban watershed issues and green infrastructure
 - DWM and OoR provided technical support & training
- Proctor Creek Stewardship Council
 - DWM attends monthly meetings, responds to inquiries
- Westside Future Fund Land Use Action Plan
 - Developed fact sheet and comments to respond to concerns re sewer capacity, stormwater management



Boone Boulevard Green Street

Current



Proposed



Leveraging Funding and Partnerships

- Invest Atlanta \$1M Grant for streetscape improvements
- Renew Atlanta \$1.1M
- EPD 319(h) Grant \$387K
- Total \$8.9M



Rodney Cook, Sr. Park at Historic Vine City





Capacity Relief Facility at Rodney Cook Park





Southeast Atlanta Green Infrastructure Initiative

• Combined Sewer Capacity Relief





Multiple GI Practices Used





Questions?



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www.atlantawatershed.org