



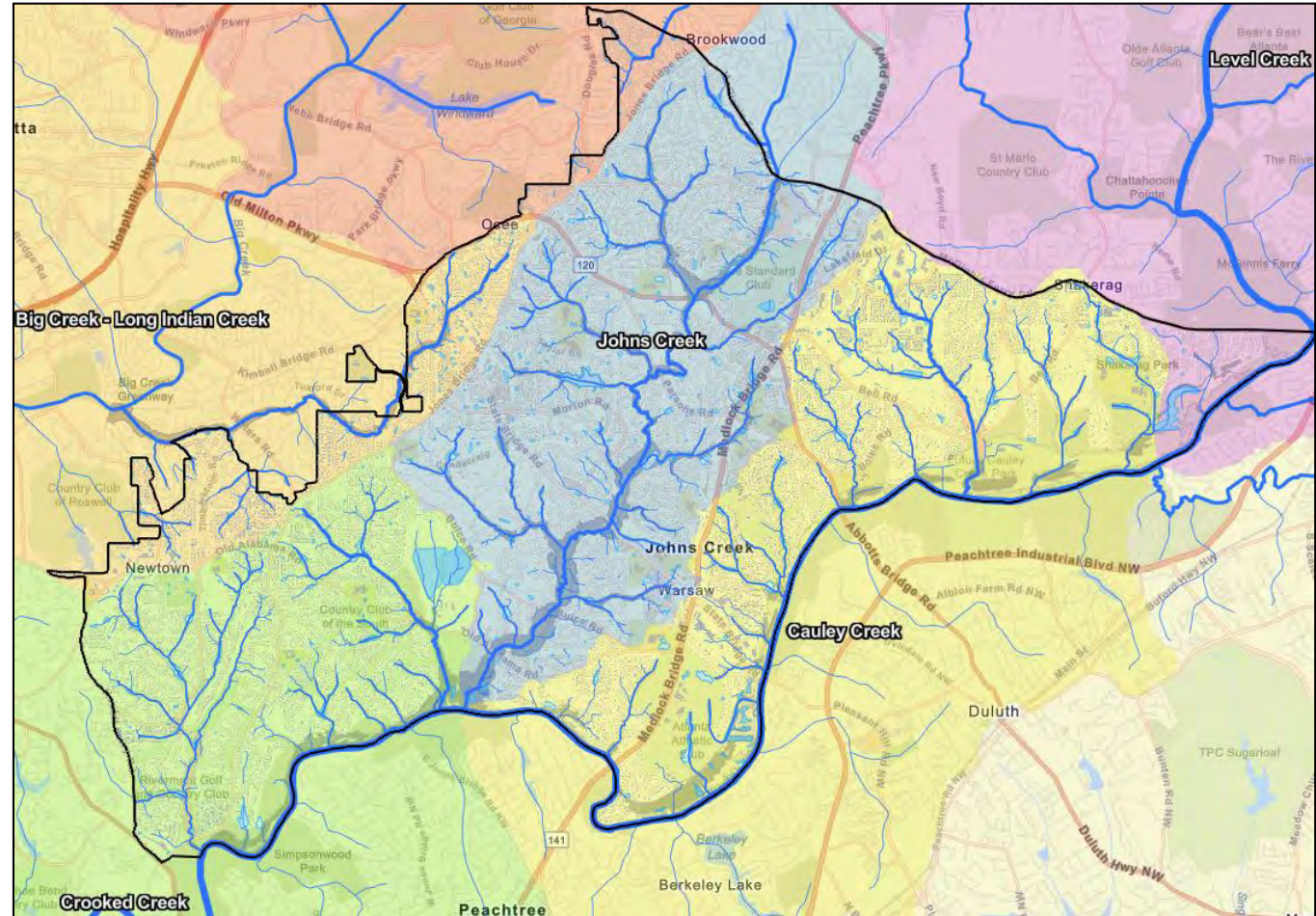
# Stormwater Utility Update

***City Council Work Session***

*4/11/23*

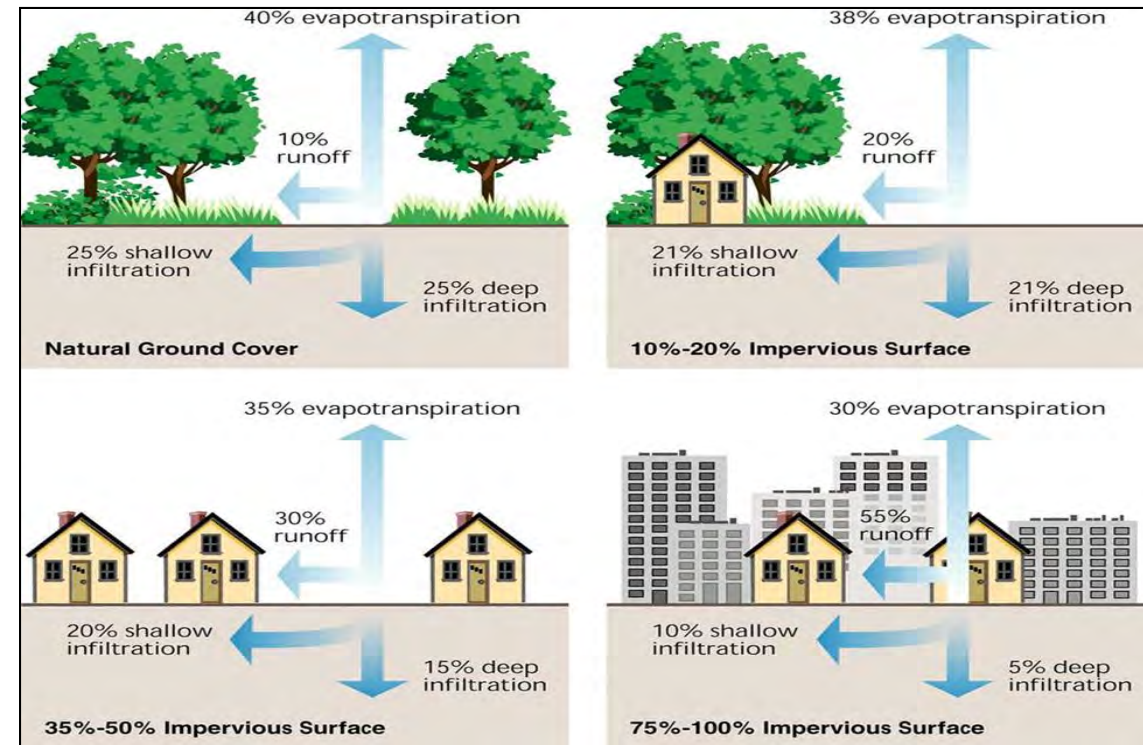
# Overview

- Stormwater Utility Recap
- 4 Pillars Updates
  - Operations
  - Engineering
  - Outreach
  - Processes
- Financial Impact
- Next Steps



# STORMWATER 101

- The more impervious surface, the more runoff during a rainstorm
- Runoff picks up pollutants
- Water Quantity (flooding) and Water Quality (impaired streams) impacts
- Historically, minimal dedicated funding for preventative maintenance and prioritized repairs





# Stormwater Impacts

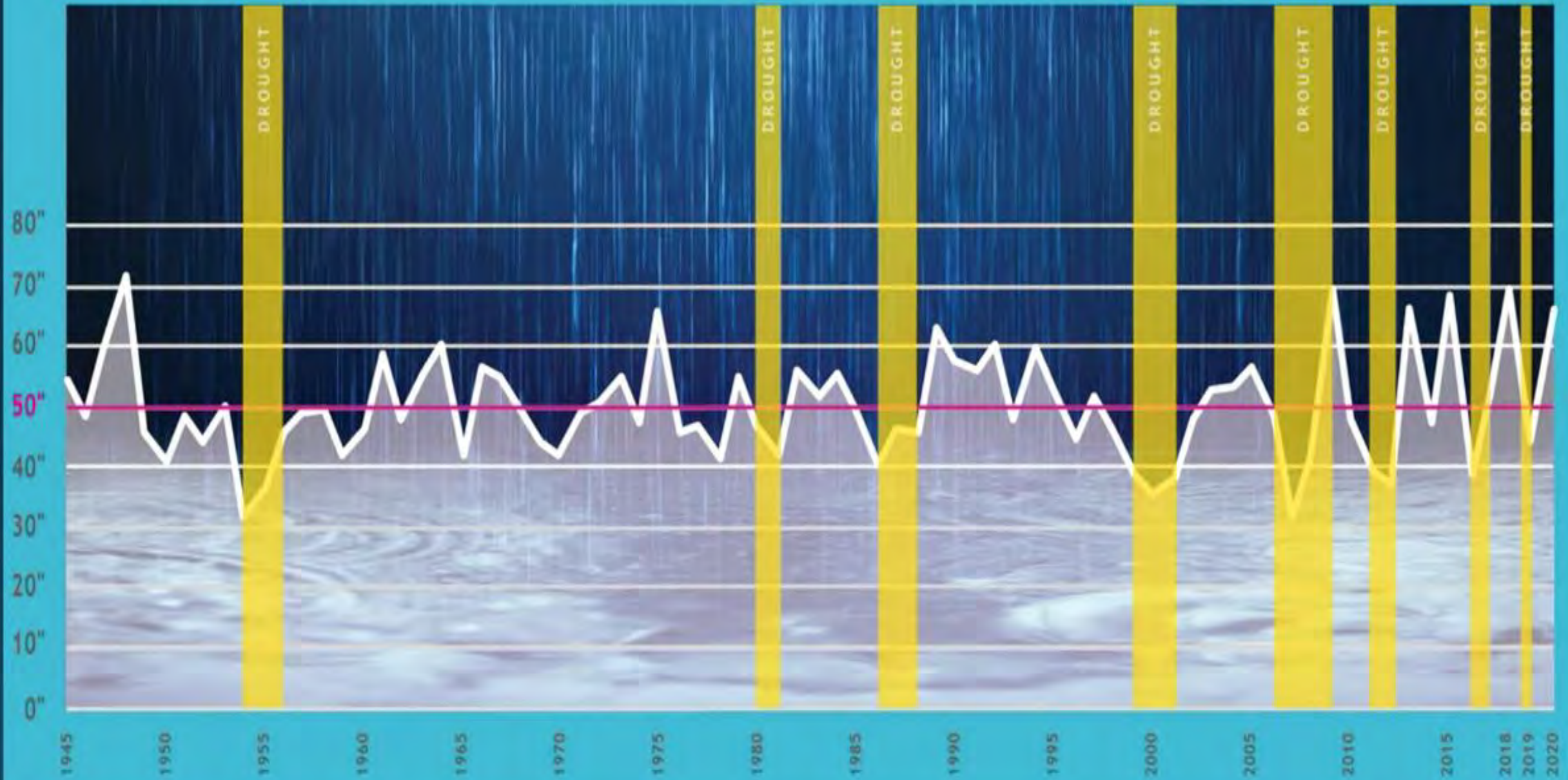
- Quality of Life
- Recreation
- Ecosystem and wildlife
- Drinking water resources
- Regulatory enforcement
- Road culverts
- Flooding
- Property Damage
- Loss of Life





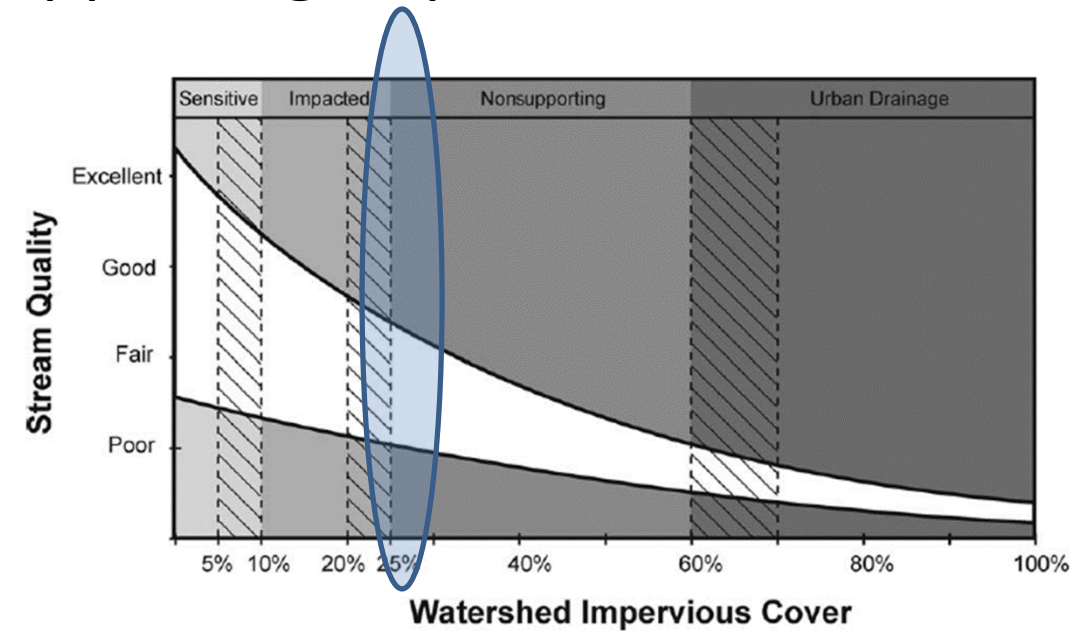
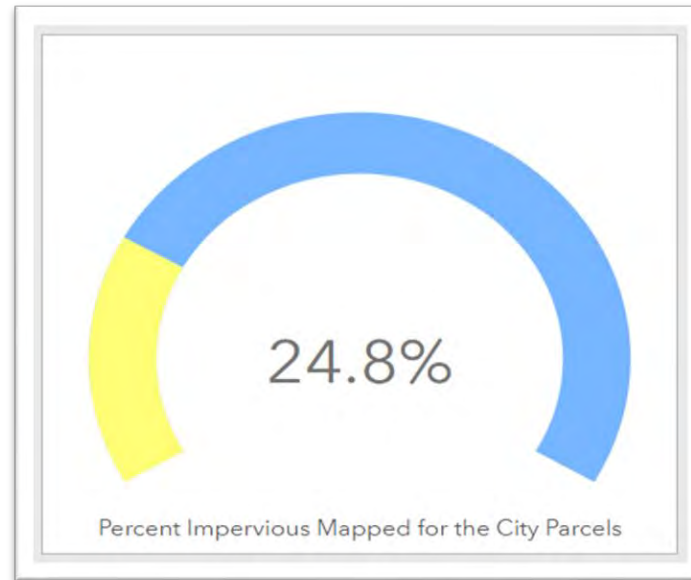
# Annual Rainfall

Average Annual Rainfall = 50 inches



# Watershed Impacts

- The higher percentage of Impervious surfaces, the more impacted the watershed
- Currently between 'Impacted' and 'Nonsupporting' aquatic wildlife





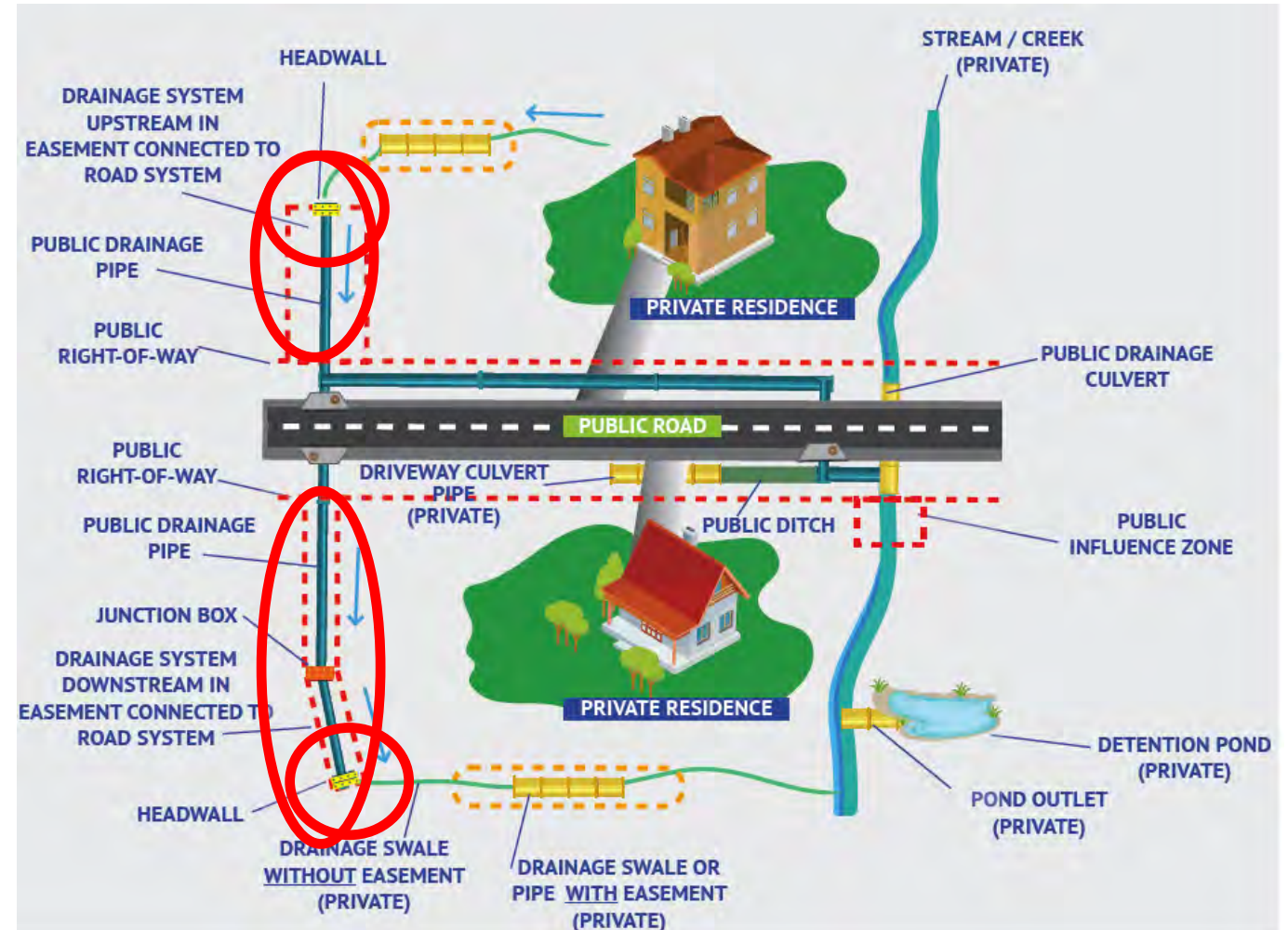
# Stormwater Utility

- Adopted June 2021
- Fee collected from all property owners to fund maintenance and repair of the Stormwater System
- 1 ERU = \$5.80/month or \$69.60/yr



# Adopted Extent of Services (EOS)

- Headwall to Headwall approach
- Maintain pipes and structures that are directly connected to the City's public right of way
- Expands # of assets from 11,000 to 23,000





# Our Assets

- **23,265 Stormwater Assets**
  - Pipes, catch basins, headwalls, etc.
- **152 miles of stormwater pipes**
  - Around 60% are Corrugated Metal Pipe (CMP)
- **5,300 catch basins**
  - Drain the roads and neighborhoods
- **Replacement Cost: \$569M**



# Operations

- Inspections and Assessment
- Cleaning – vacuum trucks
- Pipe Lining – trenchless technologies
- Pipe Repair – dig it up
- 4 On-Call Contractors
- Projects prioritized using 2020 Conditions Assessments

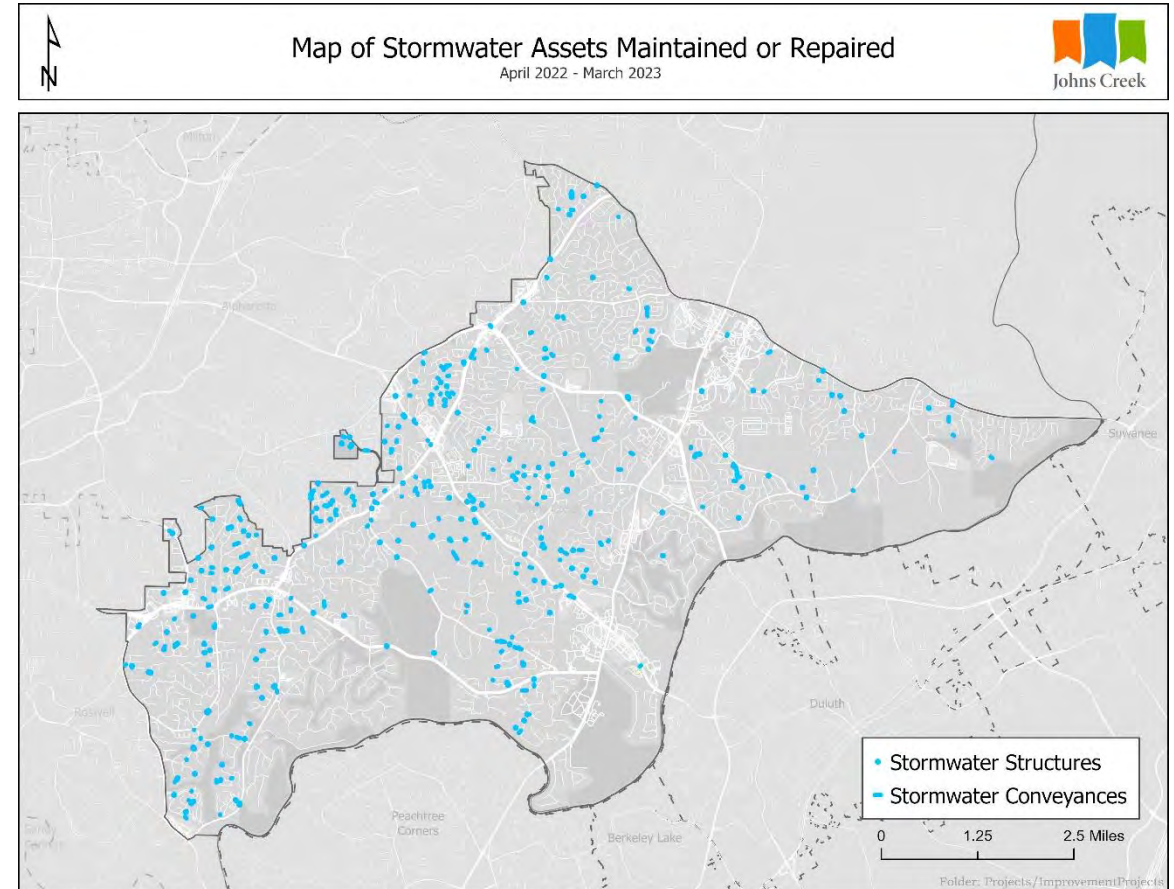




# Operations Summary

## Since April 2022

- 1,350 stormwater assets maintained, repaired, or replaced
  - 390 pipes (CMP, RCP, HDPE)
  - 960 structures (catch basins, headwalls, junction boxes)
- 30,200 feet (5.7 miles) of pipe cleaned
- 11,400 feet (2.2 miles) of pipe lined



# Pipe Cleaning



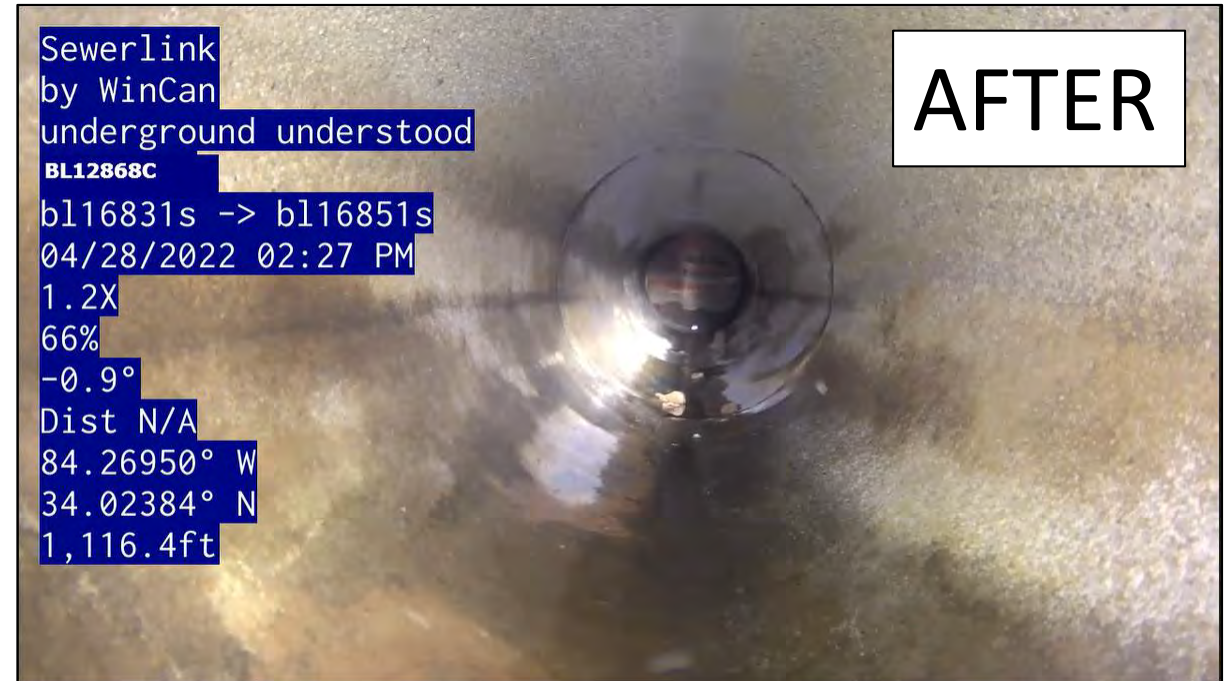


# Pipe Cleaning





# Pipe Cleaning



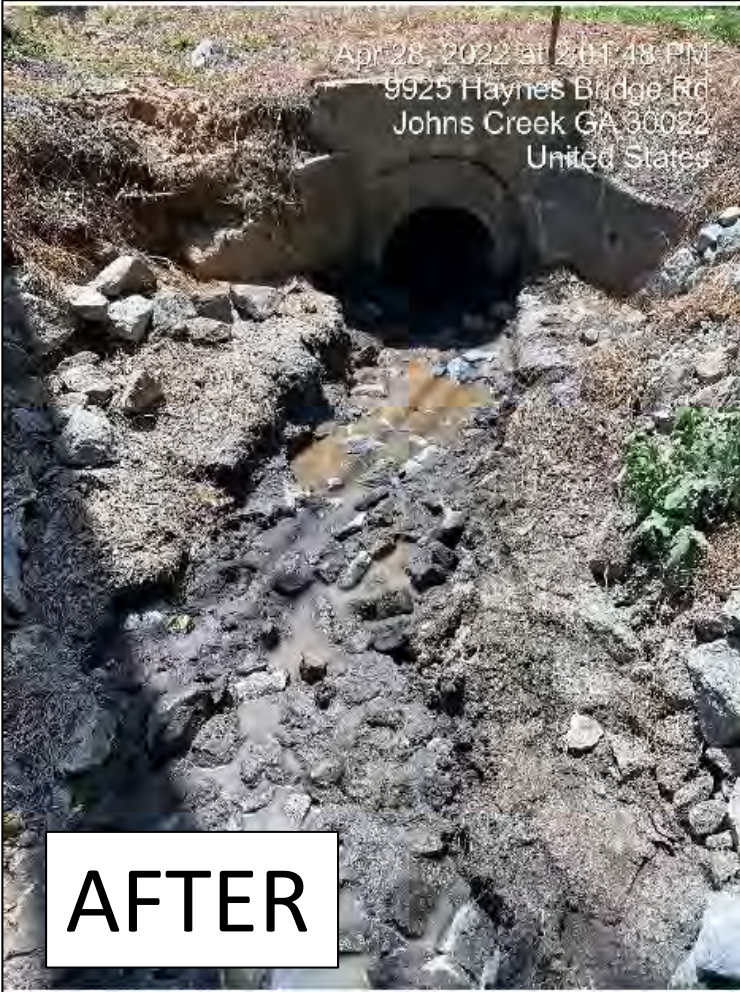
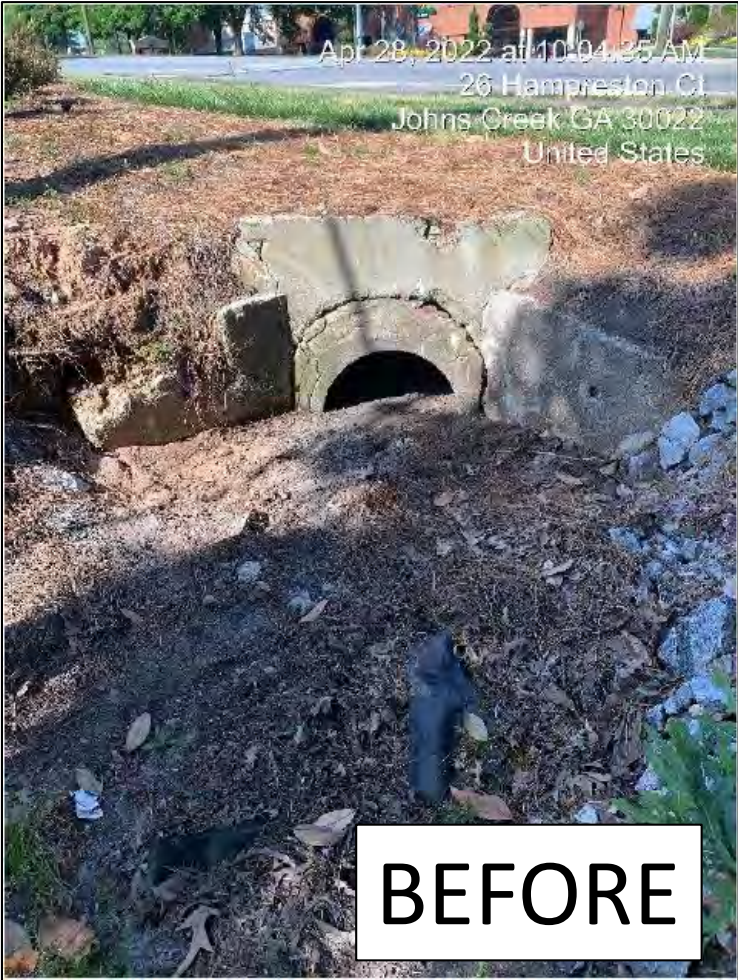


# Catch Basin Cleaning





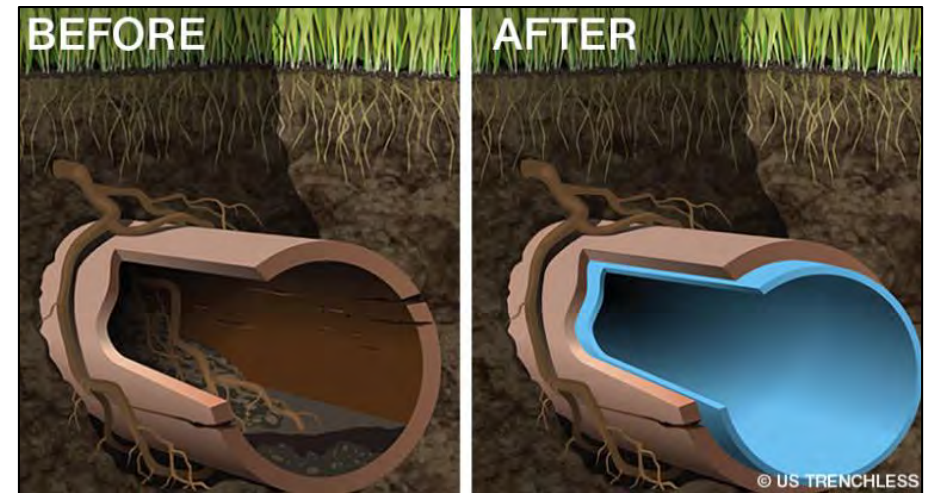
# Headwall Cleaning





# Pipe Lining

- Trenchless Technologies
  - Cured-In-Place Pipe (CIPP) and Spincasting
- Prevents road closures, digging up yards, and saves time
- 1/3 the price of traditional open-cut pipe replacement

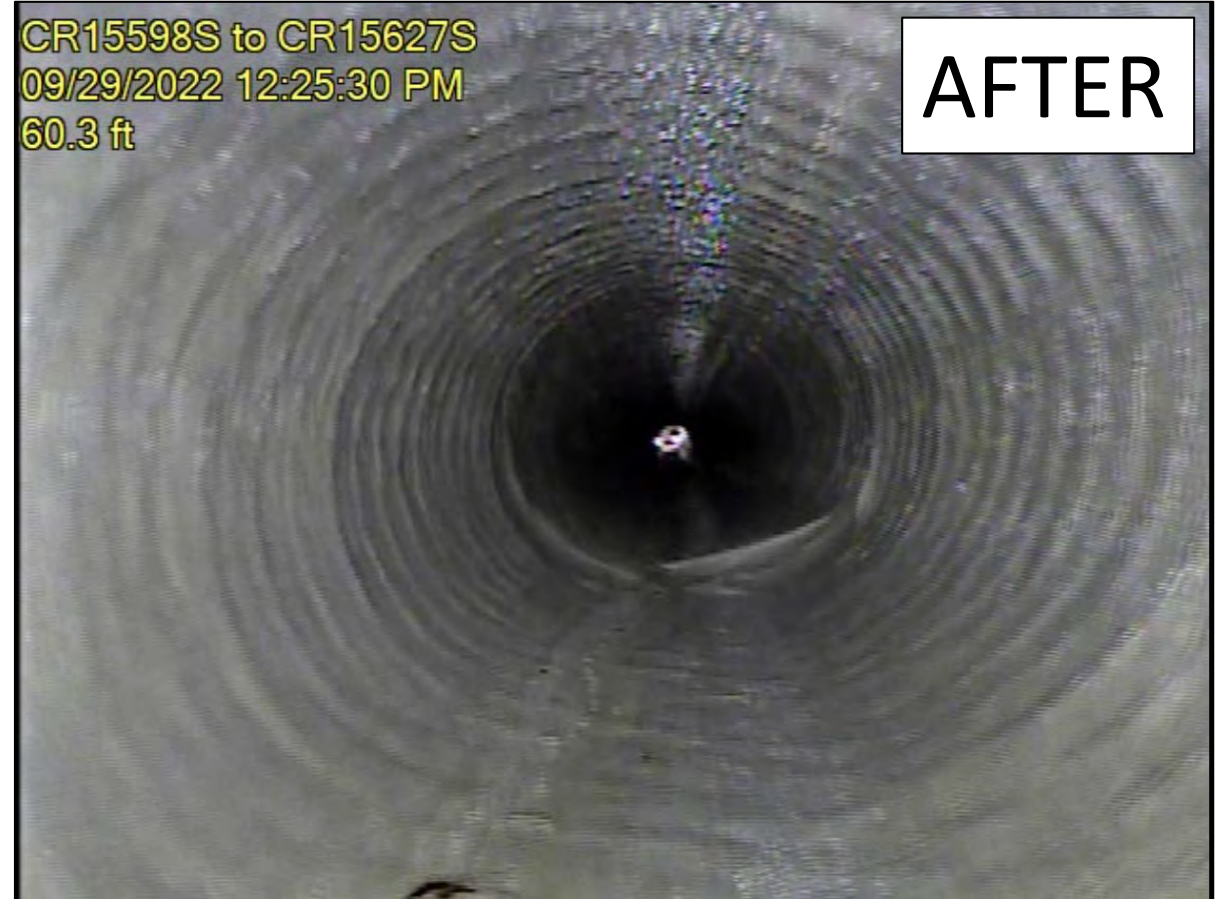


# Pipe Lining





# Point Repair, Pipe Lining





# Pipe Extension, Headwall Installation

**BEFORE**



**AFTER**





# Headwall Repair



**BEFORE**



**AFTER**



# Headwall Repair









# Foxworth Drainage Improvements





# Creekside Park - Engineering





# Constructed Wetlands at Lower Pond

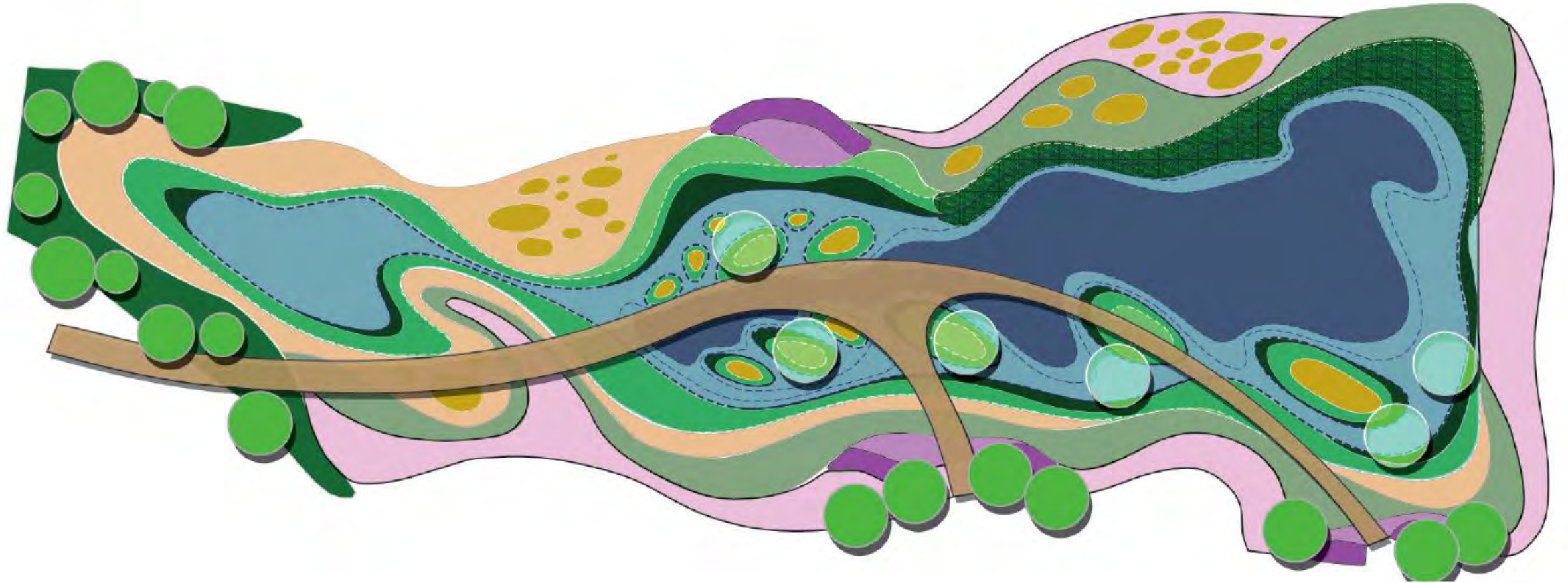








# Boardwalk Accessible

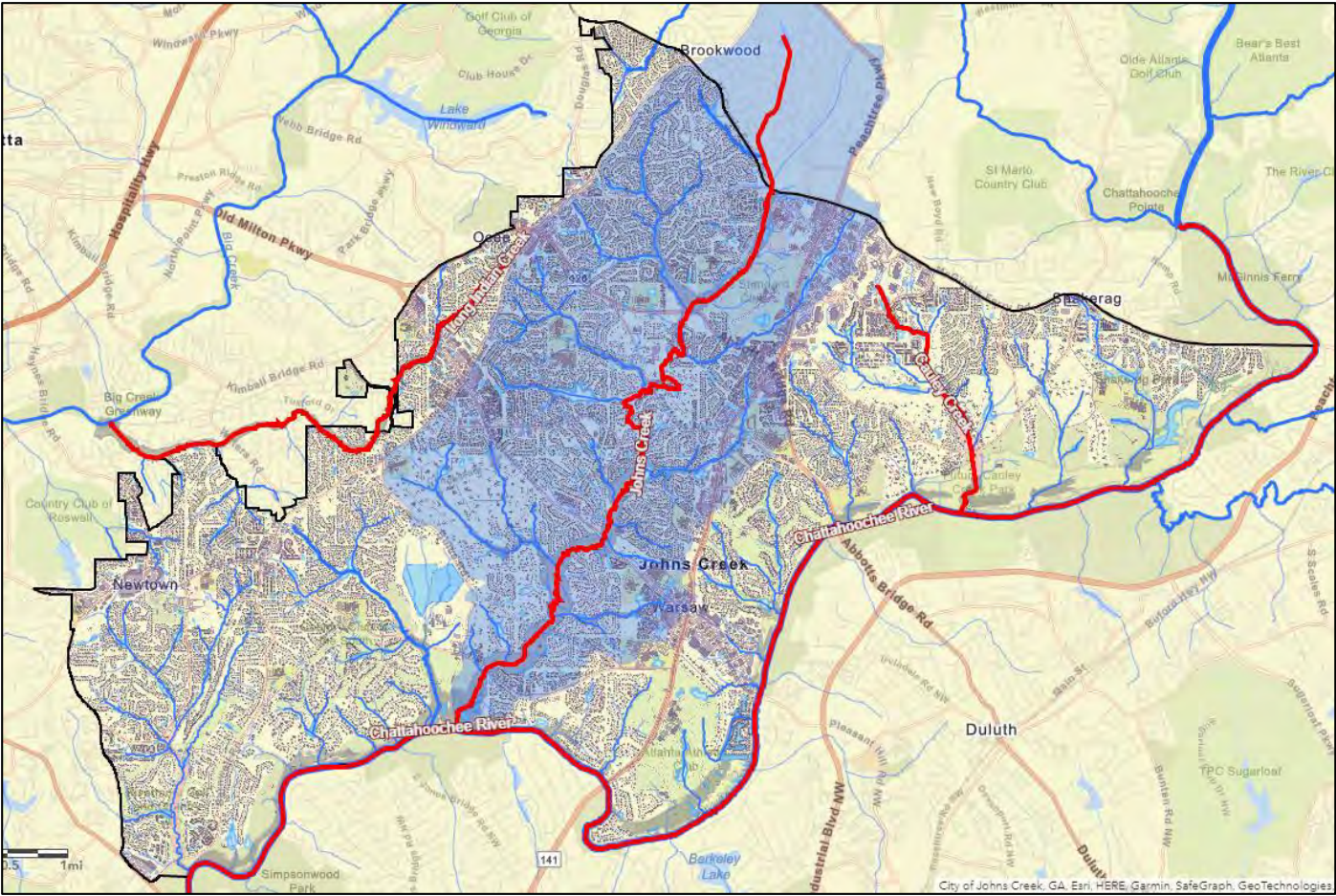








# Johns Creek Watershed Master Plan



JOHNS CREEK WATERSHED  
STORMWATER MASTER PLAN  
January 2023



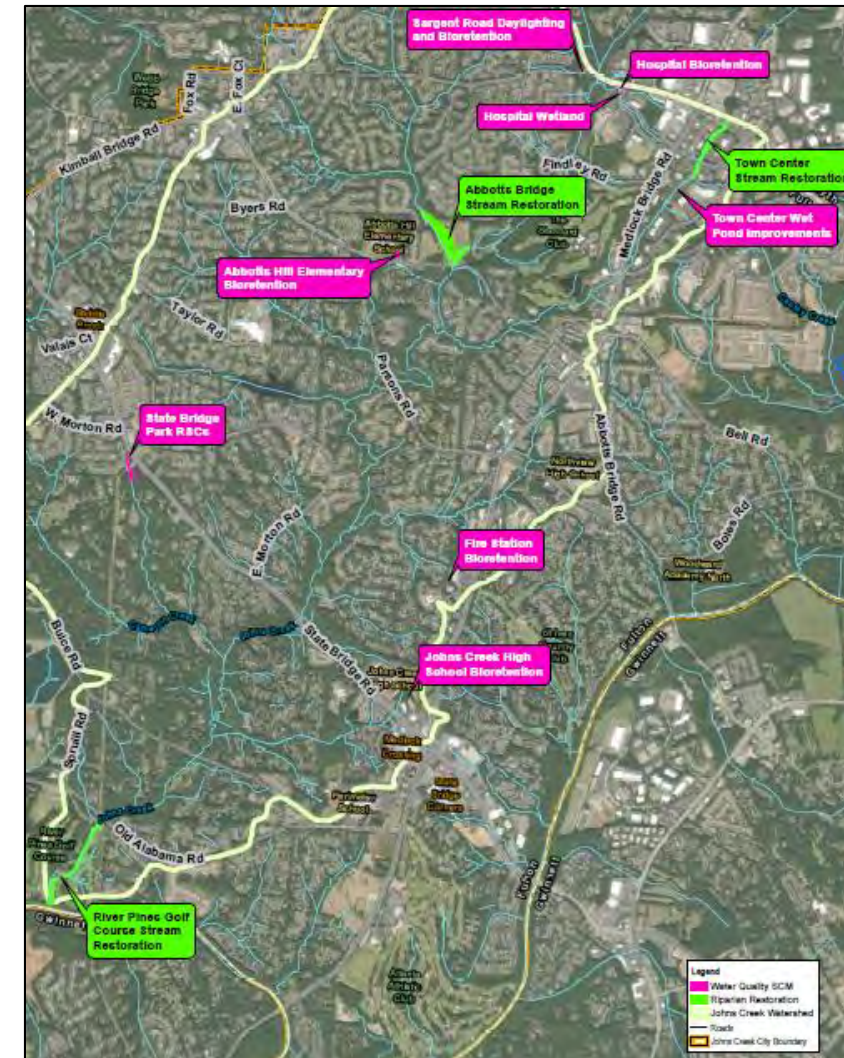


# Johns Creek Watershed Master Plan

- Identifies larger water quality improvement projects and programs to reduce pollutants
- Qualifies the City for state and federal grants

TABLE ES-1. JOHNS CREEK WATERSHED WATER QUALITY PRIORITIZATION

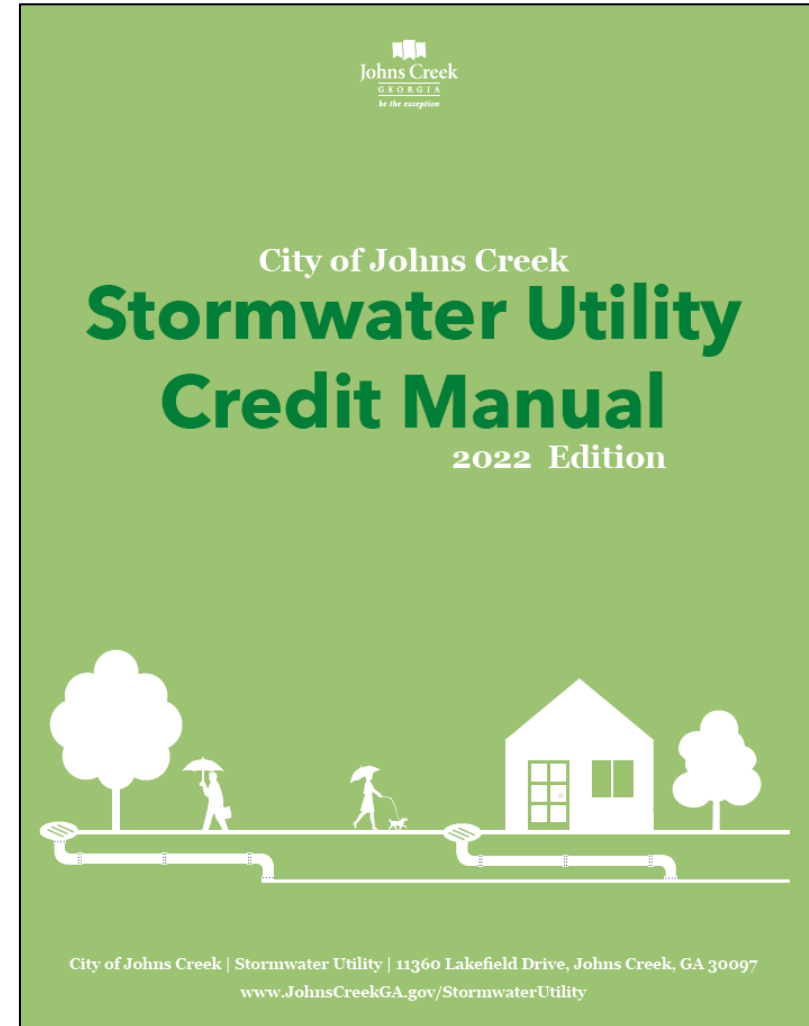
Project ID	Project Name	Project Type	Prioritization Score	Total Cost
Site No. 20	Sargent Road Daylighting and RSC	Pipe Daylighting/Regenerative Stormwater Conveyance	74	\$562,000
Site No. 8	Fire Station Bioretention and Cistern	Bioretention/Cistern/Wet Pond Retrofit	73	\$293,000
Site No. 7	Hospital Stream Enhancements and Bioswale	Riparian Enhancement/Floodplain Storage	69	\$886,000
Site No. 16	Town Center Wet Pond and Stream Improvements	Wet Pond Enhancement and Riparian Enhancement	69	\$2,954,000
Site No. 4	Abbotts Hill Elementary Bioretention/Wetland	Bioretention/Wetland	64	\$732,000
Site No. 3	Hospital Wetland	Constructed Wetland	61	\$148,000
Site No. 25	Abbotts Bridge Stream Restoration	Riparian Enhancement	61	\$6,403,000
Site No. 21	River Pines Golf Course Stream Restoration	Riparian Enhancement	59	\$4,027,000
Site No. 1	Johns Creek High School Bioretention	Bioretention	57	\$958,000
Site No. 15	State Bridge Park RSC	Regenerative Stormwater Conveyance	56	\$1,263,000
Pet Waste Program			\$75,000 per year	
Green Infrastructure Program			\$500,000 per year, may increase based on community interest	
Ditch Retrofit Program			\$500,000 per year, may increase based on road improvement schedule	





# Processes


- Updated Credit Manual
  - Streamlined and simplified
  - 3 New Credits
    - Forest Preservation
    - Soil Restoration
    - Large Pervious Parcels
- Stormwater Utility Billing
  - In house transition
  - 6/30/23 deadline





# Outreach



 **City of Johns Creek, Georgia - Government**  
Sep 27, 2022 · 🌐

🍂 Autumn is upon us and that means leaves are falling to the ground. City of Johns Creek Stormwater Engineer Roman Carey highlights three things to do about leaves and yard debris. **1** Please do not rake or blow leaves into storm drains. **2** Learn ways to dispose of vegetation (mow/mulch, compost, or yard waste). Proper disposal of leaves can help prevent potential flooding in your neighborhood.



 **City of Johns Creek, Georgia - Government**  
Jul 20, 2022 · 🌐

City of Johns Creek Stormwater Engineer Roman Carey highlights how you can find out more information about your 2022 Stormwater Utility Fee.

If you haven't received your 2022 Stormwater Utility bill, you can access it online: <https://www.fultoncountytaxes.org/>.

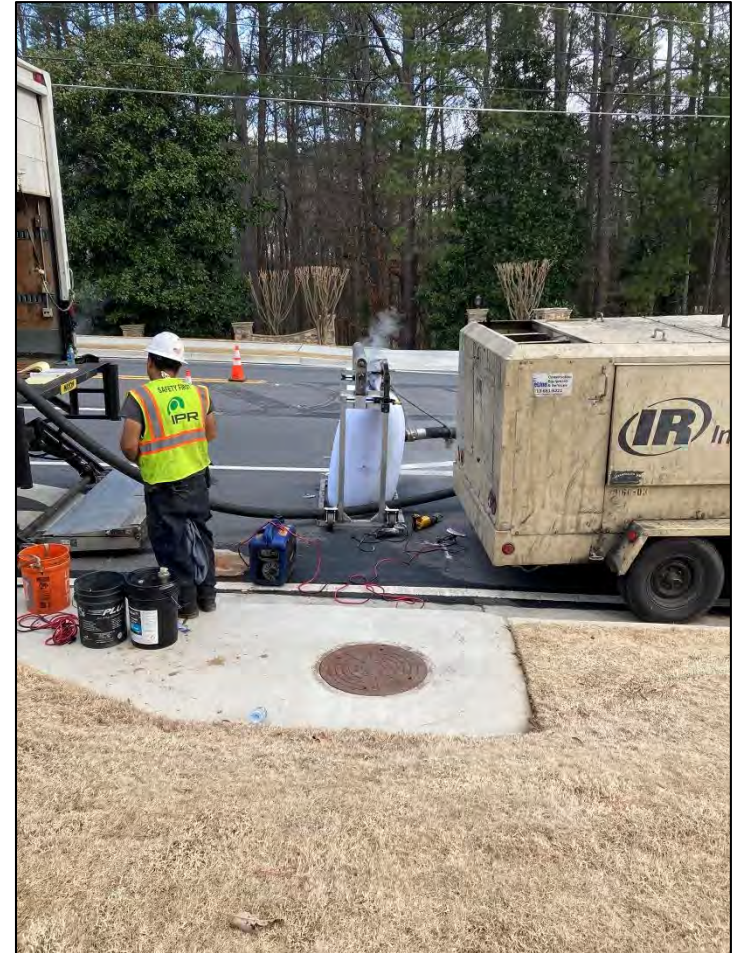
Questions about your bill? Visit [www.johnscreekga.gov/stormwaterutility](http://www.johnscreekga.gov/stormwaterutility) or email [stormwaterutility@johnscreekga.gov](mailto:stormwaterutility@johnscreekga.gov).





# Financial Impact

- Annual Budget (FY23) increased by \$600K to \$3.8M
  - \$2.8M allocated for repair and maintenance
  - \$1.5M encumbered or spent to date
  - On track for spending down by end of fiscal year
- Trenchless technologies (CIPP and Spincasting) saved the City \$3.5M this past year
- Grant opportunities for 2023 through GA EPD and BIL





# Next Steps

- Complete basin-wide master plans to identify large-scale projects to improve water quality and protect downstream property owners
- Identify and apply for additional grants through state and federal agencies
- Coordinate with the Stormwater Task Force





# Questions?

