

# Gwinnett County MS4 Gap Analysis: Navigating Permit Compliance

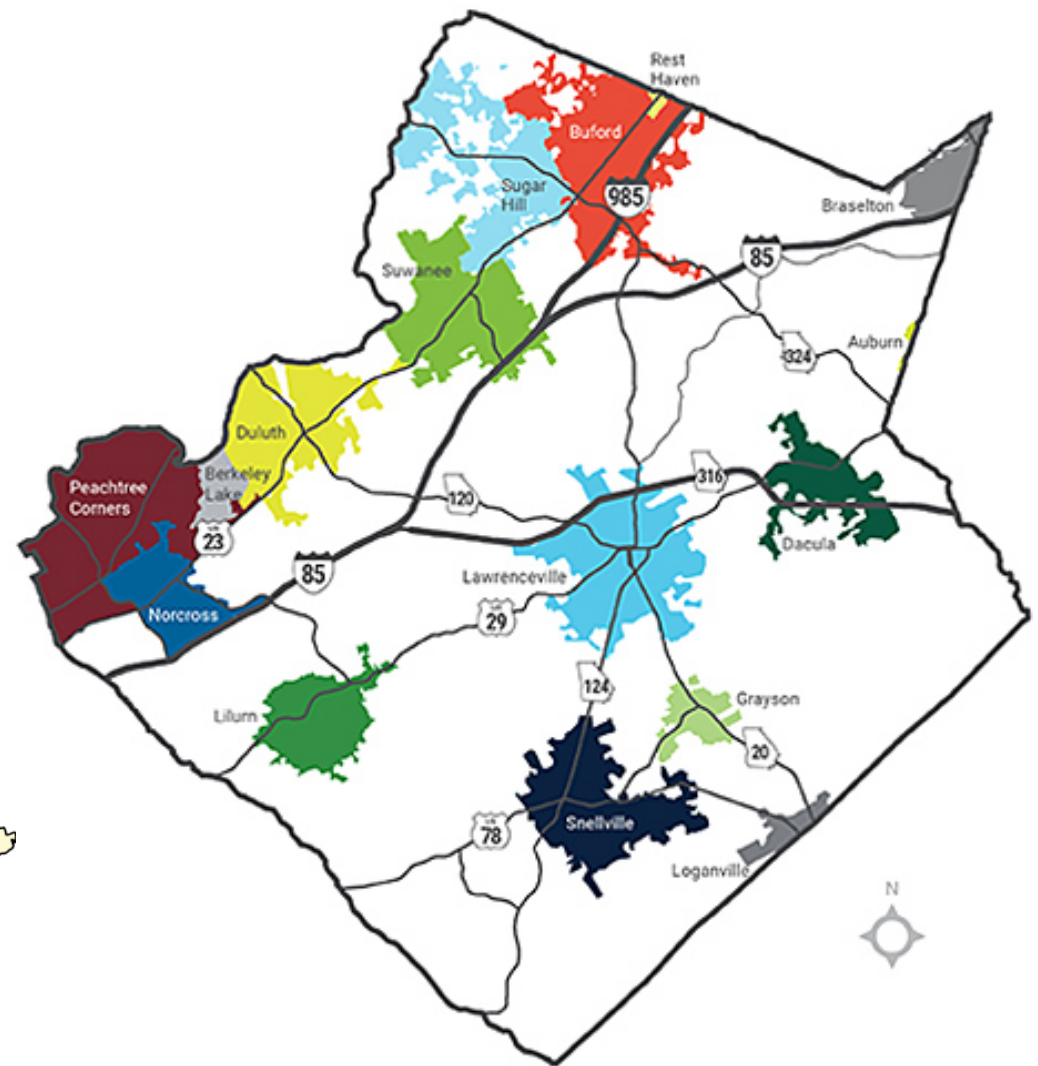
Presented by:

Gwinnett County Department of Water  
Resources  
&  
RK&K

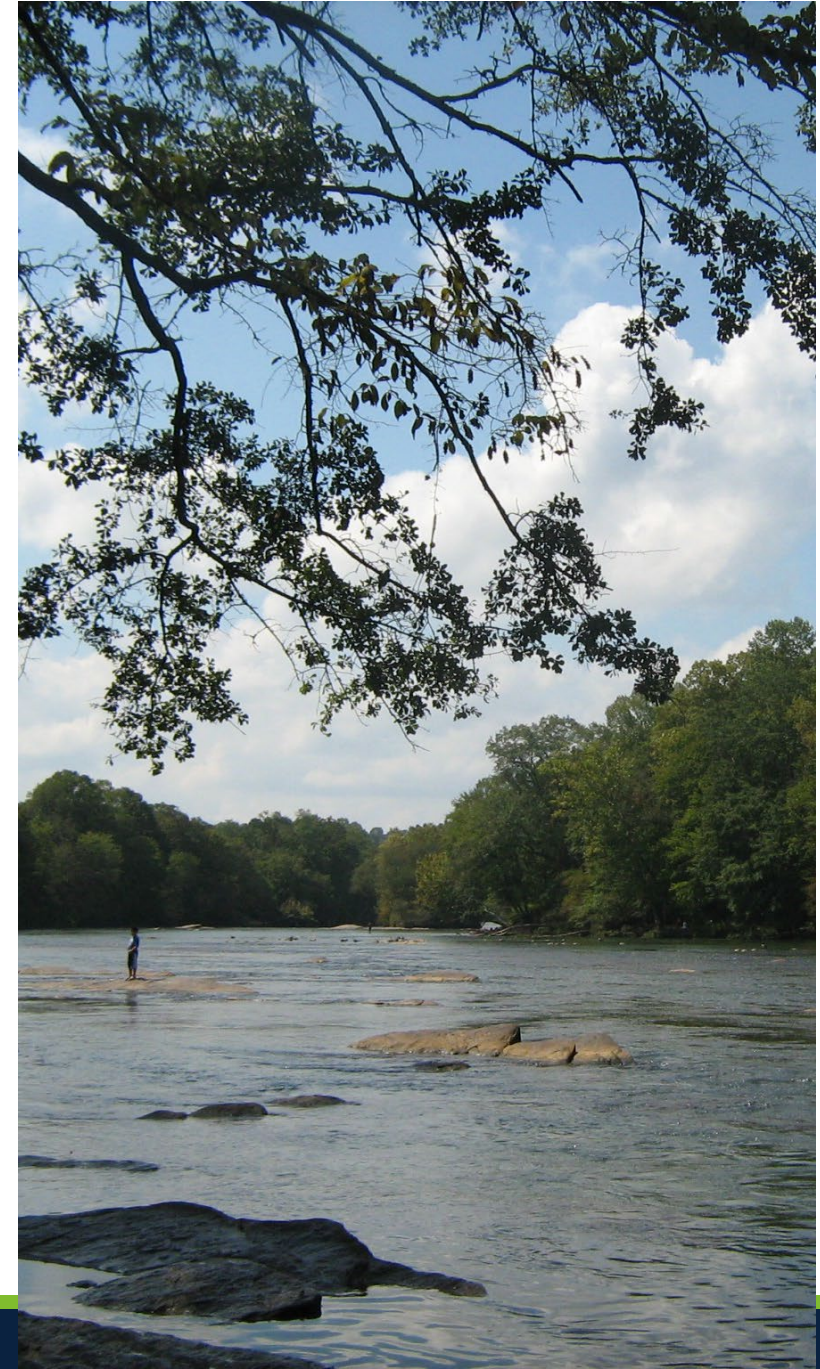
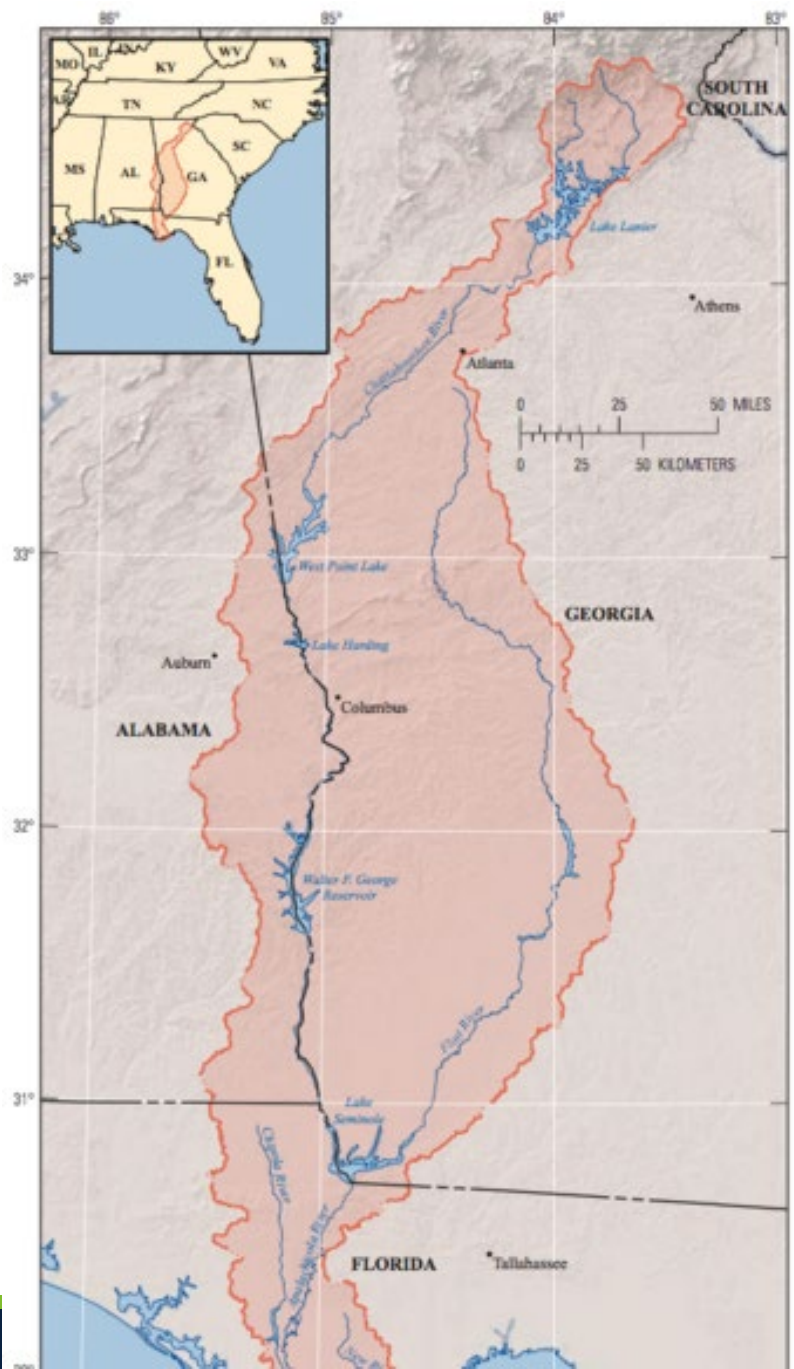


Gwinnett














# Goals

Take advantage of the rollover of the 5-year MS4 Permit cycle to:

- Identify what we are doing well
  - Identify opportunities for growth and improvement
- 



What is a Gap Analysis?

A gap analysis looks for the reasons you aren't achieving certain business goals. It considers where you are, where you want to be and looks for the reasons preventing your success. - **Forbes Advisor**

In compliance initiatives, a gap analysis can compare what is required by certain regulations with what currently is being done to abide by them.

- **TechTarget**

A Gap Analysis is a strategic planning tool to help you understand where you are, where you want to be and how you're going to get there.

– **NQA Global Certification Body**

# Gap Analysis Objective(s)



Review the Gwinnett County  
DWR MS4 Program and Permit  
Compliance Activities



Assess MS4 Annual Reporting  
and Compliance with Current  
& Future NPDES Phase I MS4  
Permit Requirements



Perform Gap Analysis to  
Identify Potential Gaps in the  
DWR MS4 Program



Develop Recommendations to  
Close Gaps and Reinforce  
Permit Compliance Efforts



- ✓ Performed evaluation for current 2019 – 2024 Permit Term
- ✓ Compared County compliance activities vs. permit requirements
- ✓ Produced Performance Ratings

- ✓ Evaluated the Gwinnett County MS4 Program with other local Phase I Large Permittees
- ✓ Reviewed the 2023 GA EPD MS4 Compliance Audit

- ✓ Performed evaluation for next 2024 – 2029 Permit Term
- ✓ Identified revisions to the new permit requirements

- ✓ Developed recommendations to support MS4 Permit compliance and increase efficiency where feasible



# Gap Analysis Process



Material Review

Establish  
Performance  
Baseline

Project Future  
Performance

Identify Areas of  
Enhancement


Develop  
Recommendations



## Material Review

- ☐ 2019-2024 NPDES Phase I Large MS4 Permit No. GAS000118
- ☐ 2023-2024 Gwinnett County Phase I Large MS4 Annual Report
- ☐ Gwinnett County Stormwater Management Program (SWMP)
- ☐ 2024 – 2025 NPDES Phase I Large MS4 Permit [Template]
- ☐ Phase I Large MS4 Public Comments and Responses
- ☐ Phase I Large MS4 Annual Reports By Others

Phase I Large MS4  
NPDES Permit No. GAS000118


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


AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

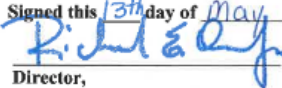
Discharges From The  
Gwinnett County  
Municipal Separate Storm Sewer System

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 covered under this permit are authorized to discharge stormwater from this municipal separate storm sewer system to the waters of the State of Georgia in accordance with the limitations, monitoring requirements and other conditions set forth in Parts I through 5 and Appendix B hereof.

This permit shall become effective on June 11, 2019.

This permit and the authorization to discharge shall expire at midnight, June 10, 2024.



Signed this 13<sup>th</sup> day of May, 2019.  
  
 Director,  
 Environmental Protection Division

**State of Georgia**  
**Environmental Protection Division**

**Phase I Large**  
**Municipal Separate Storm Sewer System**  
**Annual Report**

**Return to:**

Georgia Environmental Protection Division  
Watershed Protection Branch  
NonPoint Source Program

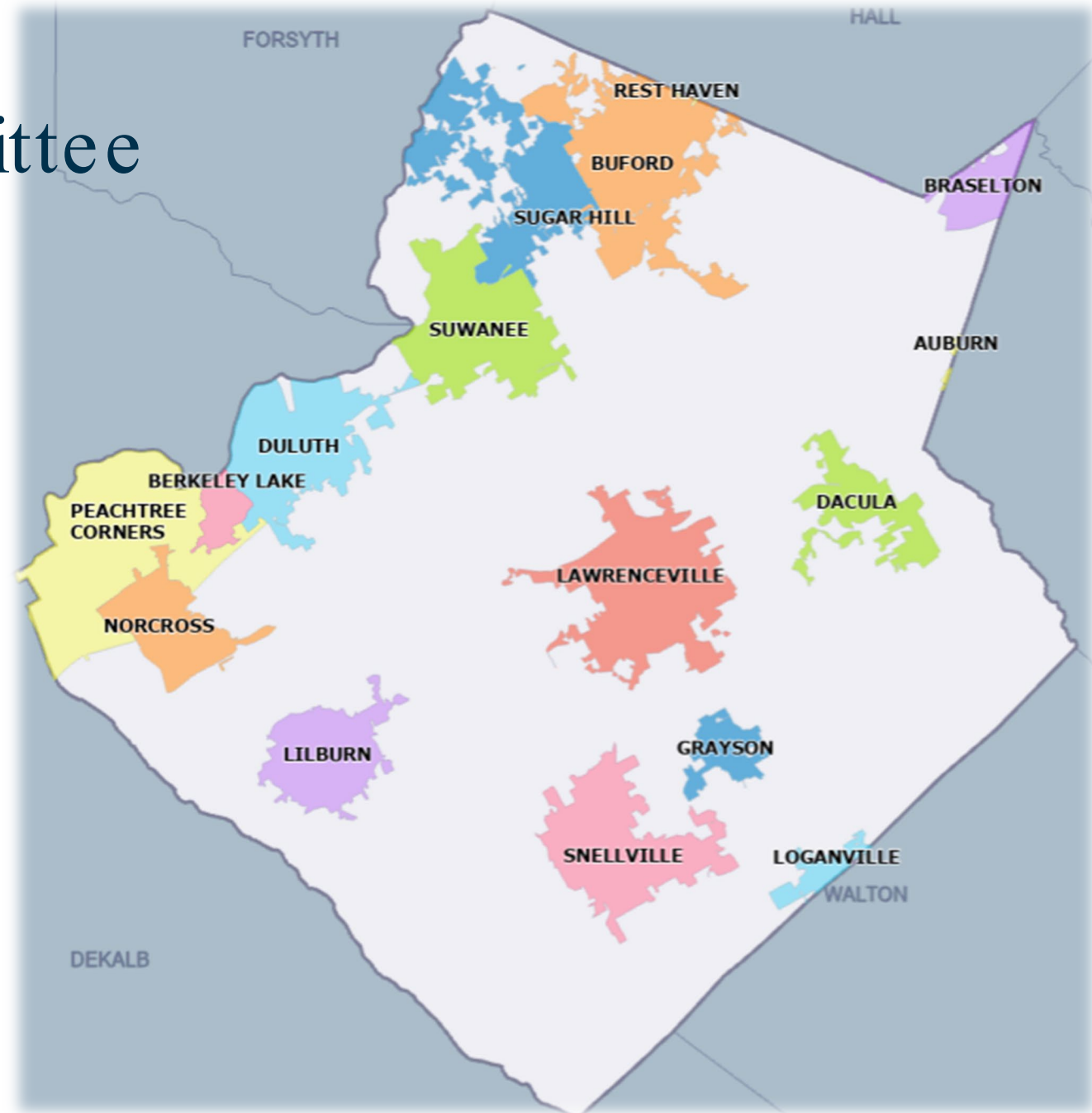
2 Martin Luther King, Jr. Dr., Suite 1462 East  
Atlanta, Georgia 30334



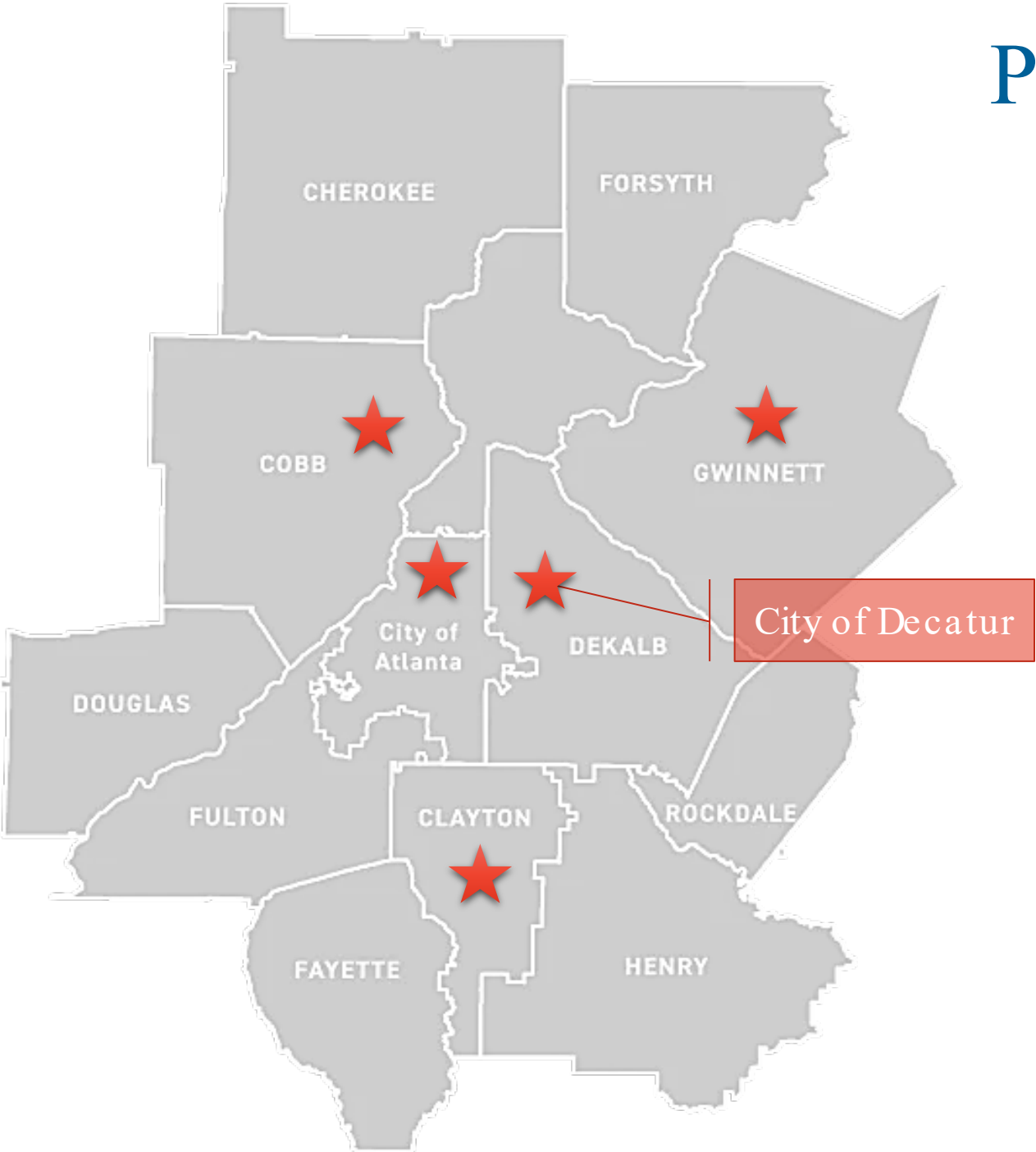
# Gwinnett County Phase I Large MS4 Permittee

2022 Census Population:  
975,353 Person(s)

Geographical Area:  
430.80 Square Mile(s)



# Phase I Large MS4 Annual Reports By Others



STATE OF GEORGIA  
DEPARTMENT OF NATURAL RESOURCES  
ENVIRONMENTAL PROTECTION DIVISION

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**Appendix B**  
**Phase I Large MS4s by Population**

**Population less than 10,000:**

Austell	Doraville	Lithonia	Pine Lake
Avondale Estates	Grayson	Lovejoy	Stone Mountain
Berkeley Lake	Hapeville	Morrow	
Clarkston	Jonesboro	Norcross	
Dacula	Lake City	Palmetto	

**Population greater than 10,000:**

Acworth	College Park	Fulton County	Riverdale
Alpharetta	Decatur	Gwinnett County	Roswell
Atlanta	DeKalb County	Kennesaw	Smyrna
Buford	Duluth	Lawrenceville	Snellville
Chamblee	East Point	Lilburn	Sugar Hill
Clayton County	Fairburn	Marietta	Suwanee
Cobb County	Forest Park	Powder Springs	Union City

# Gwinnett County 2019-2024 Permit Term - Phase I Large MS4 Permit Comparison

The comparison presented herein depicts the results of a MS4 Annual Report Comparison performed by RK&K for the 2019-2023 reporting periods.

	Structural and Source Control Measures						
	1. Structural Controls	2. MS4 Inspections and Maintenance	3. Master Plan	4. Street Maintenance	5. Flood Management Projects	6. Municipal Facilities with the Potential to Cause Pollution	7. Pesticide, Fertilizer and Herbicide (PFH)
<b>City of Atlanta</b> <b>2021 - 2022</b> 135.31 Square Miles 499,127 Population (C22)	Catch Basins 9,819 ( <b>Partially Complete</b> ) Ditches 0 ( <b>N/A</b> ) D/R Ponds 7 ( <b>Partially Complete</b> ) SD Lines 965,016 LF ( <b>Partially Complete</b> )	COA utilizes Survey 123, GIS, Work Order System	Document Exists	4,549.537 mi 80,675 Lbs. of Litter Paving/Salt & Brine	18 New w/ WQ Assessment 18 New D/R Structures No Retrofit Assessment	18/19 Facilities	Developed or updated inventory of PFH used by MS4( <b>N/A</b> ) Municipal employee safety training in use, storage, and disposal of PFH ( <b>Yes</b> ) Implemented program for municipal use of native, low-maintenance, or drought-resistant vegetation ( <b>Yes</b> )
<b>City of Decatur</b> <b>2021 - 2022</b> 4.4 Square Miles 24,338 Population (C22)	Catch Basins 897 ( <b>Partially Complete</b> ) Ditches 0 LF ( <b>N/A</b> ) D/R Ponds 30 ( <b>Partially Complete</b> ) SD Lines 72,468 LF ( <b>Partially Complete</b> )	Inspection Log provided in Appendix 2.A.2 (12 KB). GAEPD comments speaks to accuracy rather than submittal format.	Document Exists; Last updated in 2020	496 mi N/A N/A	6 New w/ WQ Assessment 1 New D/R Structures Retrofit Assessment	7/7 Facilities	Developed or updated inventory of PFH used by MS4( <b>Yes</b> ) Municipal employee safety training in use, storage, and disposal of PFH ( <b>Yes</b> ) Implemented program for municipal use of native, low-maintenance, or drought-resistant vegetation ( <b>No</b> )
<b>Clayton County</b> <b>2022 - 2023</b> 141.8 Square Miles 296,564 Population (C22)	Catch Basins 12,821 ( <b>Partially Complete</b> ) Ditches 425,233 LF ( <b>Partially Complete</b> ) D/R Ponds 42 ( <b>Partially Complete</b> ) SD Lines 863,105 LF ( <b>Partially Complete</b> )	Inspection Log provided in Appendix 2.A.2.c (59 KB)	Document Exists; Last updated in 2019	106 mi 894 Tires Tree Maintenance	23 New w/ WQ Assessment 20 New D/R Structures Retrofit Assessment	7/7 Facilities	Developed or updated inventory of PFH used by MS4( <b>N/A</b> ) Municipal employee safety training in use, storage, and disposal of PFH ( <b>N/A</b> ) Implemented program for municipal use of native, low-maintenance, or drought-resistant vegetation ( <b>N/A</b> )
<b>Cobb County</b> <b>2022 - 2023</b> 339.8 Square Miles 771,952 Population (C22)	Catch Basins 9,436 ( <b>Partially Complete</b> ) Ditches 180 mi ( <b>Partially Complete</b> ) D/R Ponds 100 ( <b>Partially Complete</b> ) SD Lines 5,431,054 LF ( <b>Partially Complete</b> )	Documents provided show single page inspection record and an inspection log.	Document Exists	723 mi 120,000 Lbs. of Litter Trash/Litter Cleanup	N/A - None	9/9 Facilities	Developed or updated inventory of PFH used by MS4( <b>Yes</b> ) Municipal employee safety training in use, storage, and disposal of PFH ( <b>Yes</b> ) Implemented program for municipal use of native, low-maintenance, or drought-resistant vegetation ( <b>Yes</b> )
<b>Gwinnett County</b> <b>2022 - 2023</b> 430.8 Square Miles 975,353 Population (C22)	Catch Basins 54,114 ( <b>Partially Complete</b> ) Ditches 446.35 mi ( <b>Partially Complete</b> ) D/R Ponds 311 ( <b>Partially Complete</b> ) SD Lines 1,544.53 mi ( <b>Partially Complete</b> )	Appendix A and B: BMP reports are attached, rather than logged.	Document Exists; Last updated in 2022	2,305.20 mi N/A N/A	18 New w/ WQ Assessment 9 New D/R Structures One-Page Assessment Summary provided in Appendix D w/Inventory Log	87/124 Facilities	Developed or updated inventory of PFH used by MS4( <b>Yes</b> ) Municipal employee safety training in use, storage, and disposal of PFH ( <b>Yes</b> ) Implemented program for municipal use of native, low-maintenance, or drought-resistant vegetation ( <b>Yes</b> )





## Establish Performance Baseline

### PART 3. STORM WATER MANAGEMENT PROGRAM

- 3.1 Legal Authority
- 3.2 Sharing Responsibility
- 3.3 SWMP Components
  - 3.3.1 Structural and Source Control Measures
  - 3.3.2 Illicit Discharge Detection and Elimination Program (IDDE)
  - 3.3.3 Industrial Facility Stormwater Discharge Control
  - 3.3.4 Construction Site Management
  - 3.3.5 Highly Visible Pollutant Sources (HVPS)
  - 3.3.6 Enforcement Response Plan (ERP)
  - 3.3.7 Impaired Waters
  - 3.3.8 Municipal Employee Training
  - 3.3.9 Public Education
  - 3.3.10 Public Involvement
  - 3.3.11 Post-Construction
- 3.4 Program Amendments
- 3.5 Program Approval

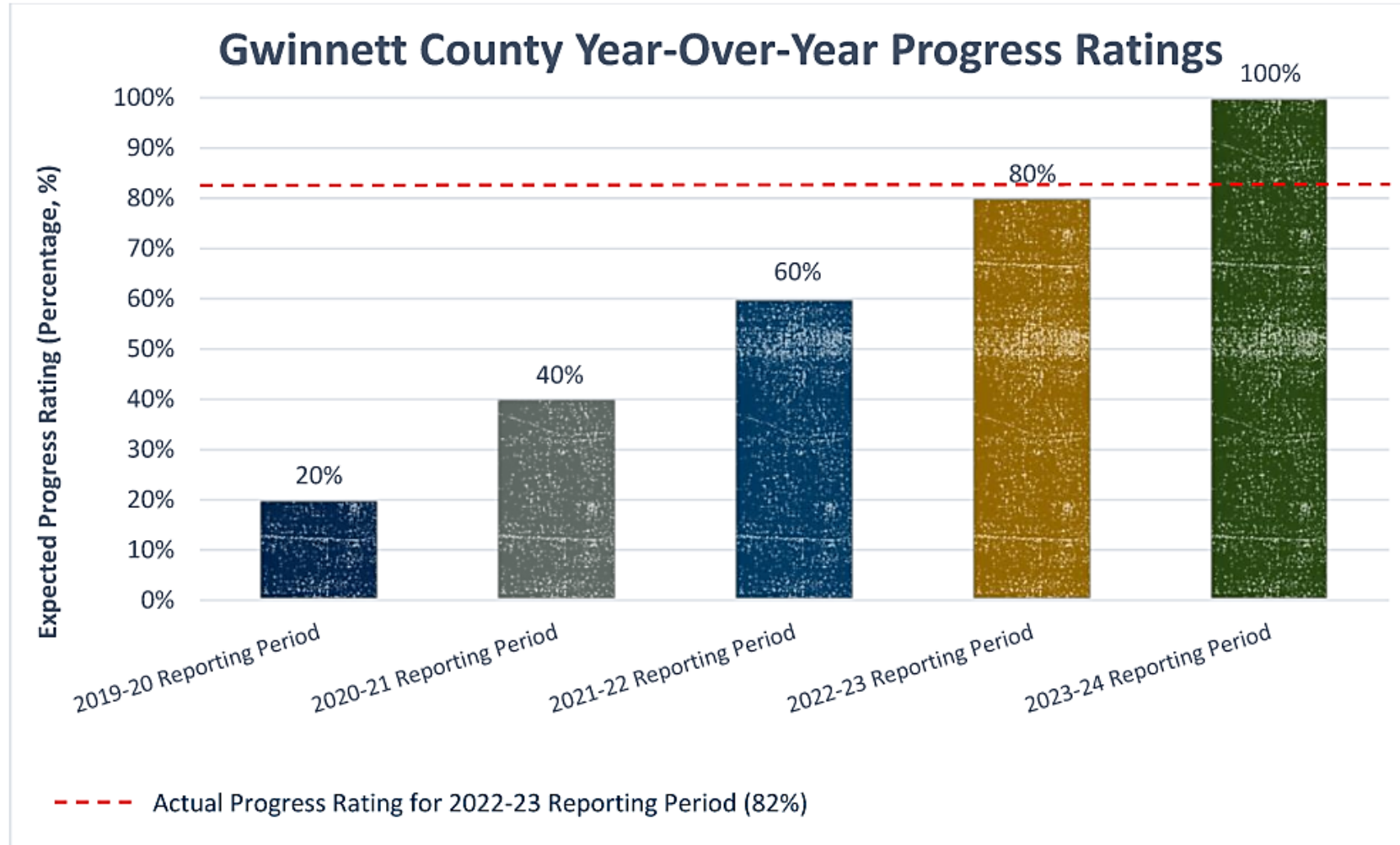
### PART 4. MONITORING AND REPORTING REQUIREMENTS

- 4.1 Annual Report
- 4.2 Monitoring Procedures
- 4.3 Retention of Records

Annual Report	1. SMP Implementation	80%	80%
	2. Changes to the SWMP	80%	
	3. Assessment of Controls	80%	
	4. Summary of Monitoring Data	80%	
	5. Fiscal Analysis Next Reporting Period	80%	
	6. Summary of Enforcement, Inspection, and Public Ed. Programs	80%	
	7. Water Quality Status	80%	
Monitoring Procedures	1. SWMP Monitoring Practices	80%	80%
	2. Monitoring Tests	80%	
	3. Monitoring Parameters	80%	
	4. Monitoring Frequency	80%	
	5. Laboratory and Analyst Accreditation	80%	
Retention of Records	1. Record Retention	80%	80%
	2. Monitoring Records	80%	
	3. Record Submittal	80%	
Monitoring and Reporting Requirements: Overall Performance Rating			80%

# Performance Ratings

# 2019 – 2024 Permit Term Overview







# 2019 – 2024 Permit Term Overview

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Public Education and Outreach

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Illicit Discharge Detection and Elimination (IDDE)

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BMP Structures and GI/LID Inspections

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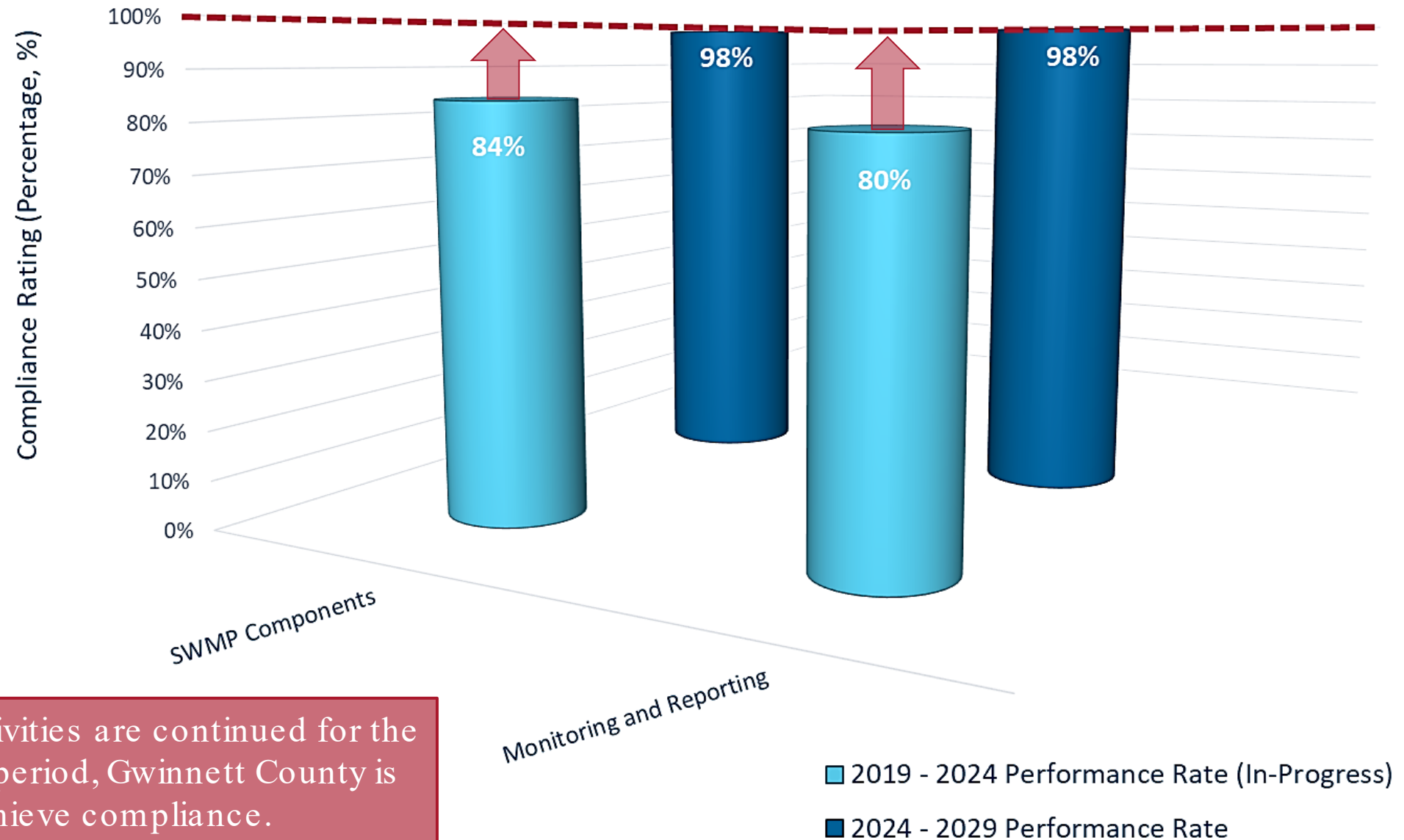
Structural and Source Control Measures





## Future Performance Projection

## Gwinnett County Permit Compliance Overview



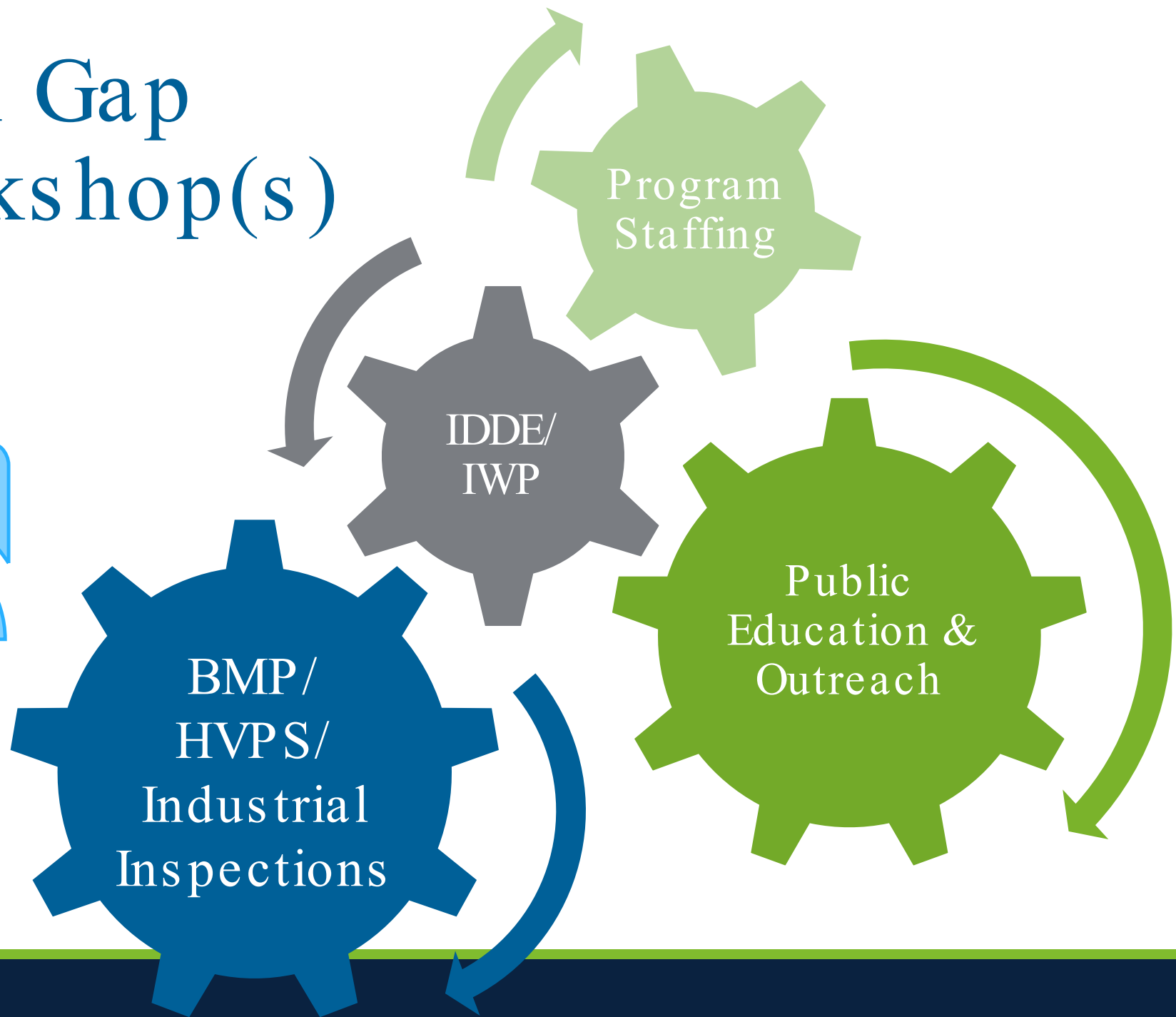
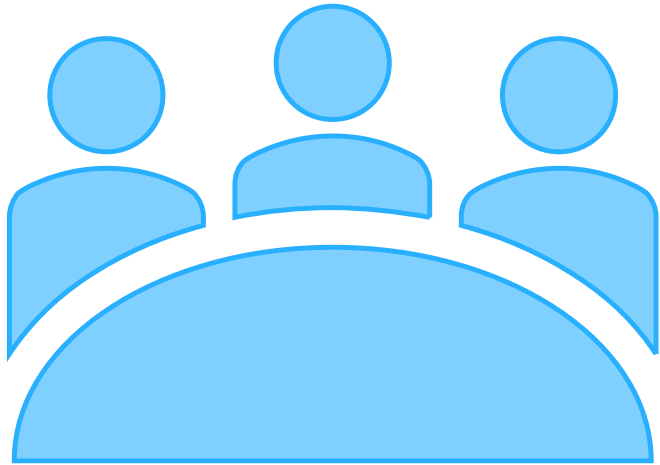
If permit compliance activities are continued for the 2023 – 2024 reporting period, Gwinnett County is expected to achieve compliance.





## Identify Areas of Enhancement

# MS4 Program Gap Analysis Workshop(s)





## Develop Recommendations

# Recommendation Objective(s)



Incorporate Feedback and Suggestions from MS4 Program Gap Analysis Workshops



Promote Compliance with Current & Future NPDES Phase I MS4 Permits



Suggest Solutions to Improve Identified Areas of Enhancement



Increase Efficiency of Existing MS4 Program Processes and Procedures



# Where do we go from here?

- 42 Recommendations
  - 16 Processes & Procedures
  - 19 Reporting & Documentation
  - 7 "Other"
- Stormwater Management Program (SWMP) due December 9, 2024
- Evaluate and categorize
  - Accept- Implemented Currently (7)
  - Accept- Required as an updated permit requirement (2)
  - Accept- Implement in SWMP submittal (19)
  - Accept- Implement in post-SWMP submittal (8)
  - Parking Lot- Further evaluation required (1)
  - Reject (0)



# Thank You For Your Time!



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