



**GEORGIA**  
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

**MS4 + 319 = ...**



**Veronica Crow, Manager**  
NonPoint Source Program

**ACWA Mid-Year Meeting**  
March 18, 2020



# OUTLINE

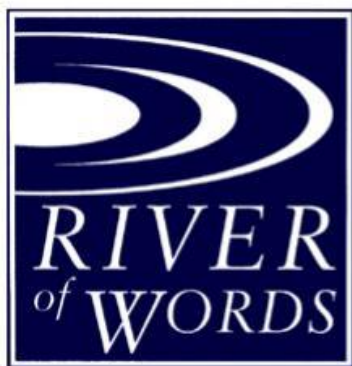
- History of stormwater management in Georgia
  - Permitting
- New methods of stormwater management
  - Green infrastructure
  - Low Impact Development
- Funding and Training Options
  - 319(h)
  - Outreach





# GEORGIA RIVER OF WORDS

<https://projectwet.georgia.gov/ga-river-words>



## Georgia River of Words

Connecting kids to their watersheds  
and imaginations through poetry & art







# STORMWATER ACROSS GEORGIA





# STORMWATER PERMITTING IN GEORGIA

- 1972: Federal Clean Water Act and NPDES
- 1987: Federal Clean Water Act Amendments
- November 16, 1990: US EPA promulgated Phase I Stormwater Regulations
- December 8, 1999: US EPA promulgated Phase II Stormwater Regulations





# CLEAN WATER ACT

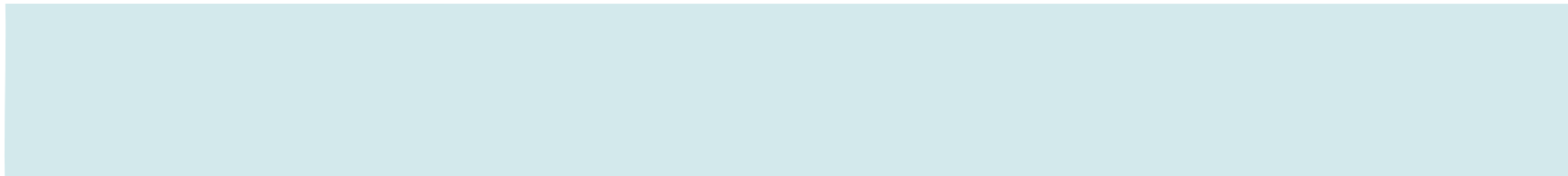
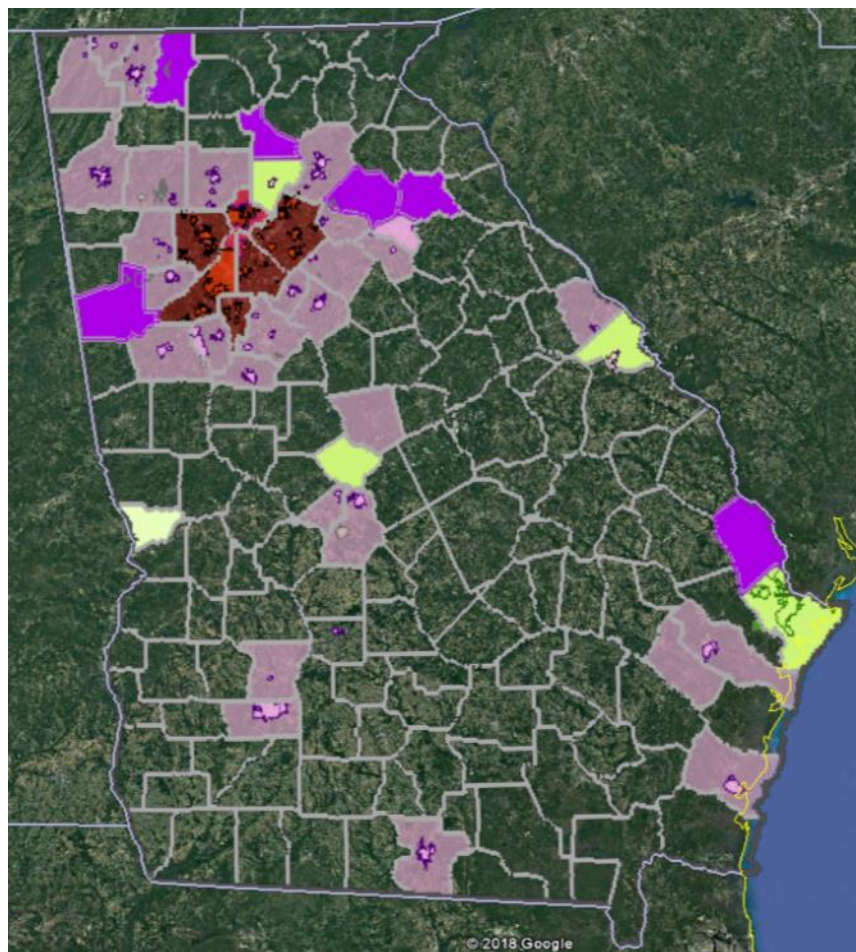
- **National Pollutant Discharge Elimination System (NPDES)**
- Georgia authorized by EPA to administer the NPDES program
  - Phase I Large – 45 municipalities
  - Phase I Medium – 12 municipalities
  - Phase II Small – 107 municipalities
  - Phase II also includes GDOT and 6 DOD facilities







# STORMWATER – MS4 PERMITTEES





# GREEN INFRASTRUCTURE & LOW IMPACT DEVELOPMENT

- **Green infrastructure** –stormwater management systems that mimic nature by soaking up and storing water (neighborhood or site scale)
- **Low Impact Development** –an approach to land development or redevelopment that seeks to emulate the natural water cycle and reduce the negative impacts of impervious cover (regional scale)

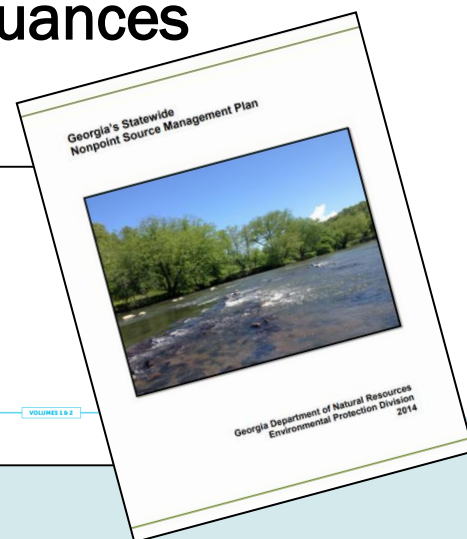
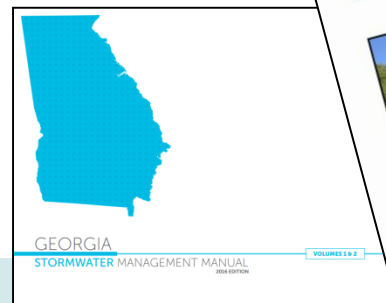






# MOVING TO GREEN INFRASTRUCTURE

- **2014 Nonpoint Source Management Plan**
  - Dedicated section for GI/LID
  - Urban runoff management beyond MS4 permitting
- **2016 Second version of the Georgia Stormwater Management Manual**
  - Big focus on LID
  - New GI BMPs
- **2017-2019 MS4 stormwater permit reissuances**
  - Water quality/runoff reduction standard



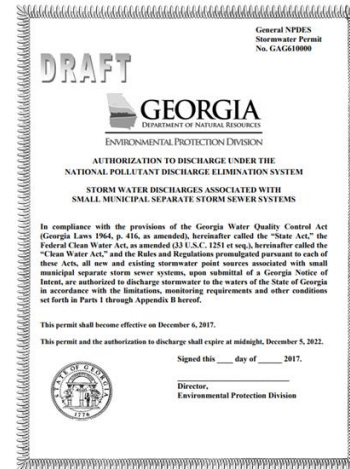


# MS4 PERMIT REQUIREMENTS

- **Post-Construction Stormwater Management**
  - For all MS4s, new and redevelopment projects that disturb at least 1 acre of land or create at least 5,000 square feet of impervious surface must:
    - Protect water quality by:
      - Retaining the first 1 inch of rain onsite, or
      - Treating the first 1.2 inches of rain to reduce pollutants by 80%
    - Protect stream channels from getting eroded
    - Protect downstream areas from flooding from 25 year and 100 year storms



Bioretention Area





# MS4 PERMIT REQUIREMENTS

## 3.3.11(b) Green Infrastructure/Low Impact Development

The permittee must implement a program to address post construction runoff. At a minimum, the program must contain the elements listed in Table 3.3.11(b)(2) below to address post-construction runoff and descriptions of how they are implemented:

- Legal Authority
- GI/LID Program
- GI/LID Structure Inventory
- Inspection and Maintenance Program







# FUNDING FOR GI/LID

- 319(h) grants
  - Implementation of BMPs to protect or restore water quality
  - State law prohibits funding non-profits
    - O.C.G.A.12-5-33 restricts grants to public entities for projects that qualify under the provisions of “Title II of the Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500), 33 U.S.C. Section 1281, et seq., as amended by the Clean Water Act of 1977 (P.L. 95-217) or as may hereafter be amended.”
    - *“The State of Georgia is further authorized to make grants as funds are available to any county, municipality, or any combination of the same, or to any public authority, agency, commission, or institution,...”*






# “ABOVE AND BEYOND”

## “Above and Beyond” NPDES Permit Requirements

Some activities recommended in a watershed-based plan may be considered eligible for funding or as match in a 319(h) grant project if they represent efforts, approaches or applications “above and beyond” any elements associated with a NPDES permit. Congruently, grant-funded activities entered in any NPDES permit report MAY NOT be counted as compliance.

 **Applicants must include a signed letter on official letterhead** verifying that activities proposed for the project represent practices that are “above and beyond” NPDES permit requirements and will never be counted as meeting compliance in any NPDES permit reports.

Watershed monitoring under a NPDES permit will not qualify for 319(h) Grant funding. However, the grant applicant can state that ongoing NPDES water quality data will be delivered with the project Quarterly Progress Reports in order to contribute to BMP and water quality assessments in support of the 319(h) project.

### Examples of Activities “Above & Beyond” NPDES Permits

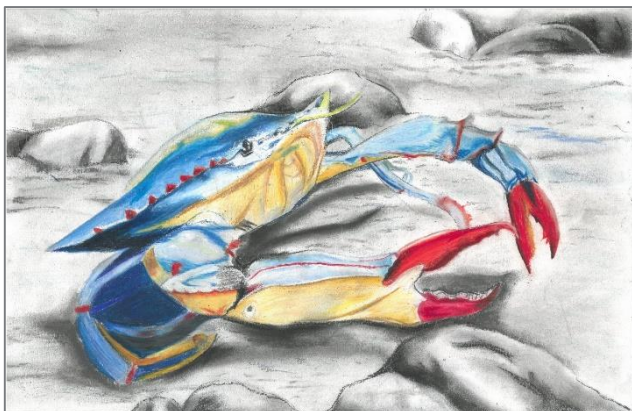
**Add to Specified Number of Activities or Tasks Quoted in the NPDES Permit.**

**Example:**

- The permit itemizes installation of nine septic system replacements.
- The 319(h) grant application would request funds to replace septic systems number 10 and up, and explain that these qualify as “above and beyond” the permit requirement.
- The applicant would replace the additional septic systems (10 and up), and would never count the additional installations as compliance with any NPDES permit requirements.



# “ABOVE AND BEYOND”



## Fulfill Numerical Quota for Activities with No Specified Number in the NPDES Permit.

### Example:

- The permit describes installing unspecified numbers of signs, disposal bags / stations, and receptacles to address pet waste in areas of high pet traffic, parks or picnic sites.
- The 319(h) grant application would request funds to install a specific numerical quota (3 signs, 300 bags, 3 bag stations, 3 receptacles), and explain that this quota would be “above and beyond” any permit requirement.  
In this case, the applicant would receive grant reimbursement until the numerical quota had been reached; but would never count those installations as compliance with any NPDES permit requirements.

## Propose Completely New Activities or Approaches Not Included in the NPDES Permit.

### Example:

- The permit proposes particular feasible structural controls to reduce urban run-off pollution; but, does not include bio-swales as an effective management practice.
- The 319(h) grant application would request funds to install bio-swales or to reimburse other activities not specified in the permit, and explain these practices as “above and beyond” the permit requirements.
- The applicant would never count the grant-funded installations or activities as compliance with any NPDES permit requirements.





# "ABOVE AND BEYOND"



October 30, 2017

Georgia Department of Natural Resources  
Watershed Protection Branch  
Nonpoint Source Program  
2 Martin Luther King Jr. Drive  
Suite 1462 East  
Atlanta, GA 30334

RE: LETTER OF ASSURANCE CITY OF BROOKHAVEN PROJECT IS ABOVE AND BEYOND NPDES PERMITS

Let this letter show that the City of Brookhaven has performed due diligence in the application procedures for the Georgia EPD 319 (b) FY 2018 Grant. The City conducted staff and independent review, and attained assurance from Sustainable Water Planning and Engineering, LLC Principal Engineer, Kimberly Shorter, PE that the Project: *Stream Restoration of North Fork Nancy Creek from the downstream of 4785 to Murphy Conolly Lake* is outside the City of Brookhaven's National Pollutant Discharge Elimination System Permit requirements.

Please see attached letter from Sustainable Water Planning and Engineering, LLC as supporting documentation of the City's assurance.

Sincerely,

Christina Sigman  
City Manager

CC: Hari Kanikaran, Patricia Hanson

City of Brookhaven  
4502 Peachtree Road, Brookhaven, GA 30141  
Phone: 404-337-3600 • Fax: 404-337-4885  
[www.brookhaven.ga.gov](http://www.brookhaven.ga.gov)



## ENGINEERING DEPARTMENT

Able L. Ladson, PE, CPESC,  
Director

Hameed Malik, Ph.D., PE,  
Assistant Director

To Whom It May Concern:

This letter verifies that the proposed project activities for this grant entitled, *Stormwater and its best management practices (BMPs): BMP installation and education curriculum implementation at a school in Augusta-Richmond County*, is above and beyond Augusta Richmond County's NPDES Permit requirements.

Hameed Malik, Ph.D., P.E.  
Assistant Director - Engineering  
Augusta Engineering Department  
Augusta, GA

Augusta Engineering Administration Division  
333 Teftel Street, 8th Floor, Augusta, GA 30901  
(706) 796-5040 • Fax (706) 796-5045  
[www.augustaga.gov](http://www.augustaga.gov)



# HISTORIC ROSWELL

## East Alley – Roswell

Historic District GI/LID

- Streets and ROW
- Permeable Pavers
- Additional Benefits - sewers

BEFORE



AFTER





# MARSH CREEK – SANDY SPRINGS

Historic District GI/LID

- Stormwater
- Bioretention Pond
- Education







# PUBLIC INVOLVEMENT AND PARTICIPATION



## Minimum BMPs Required Per Permit:

- <10,000: 2 BMPs
- >10,000: 4 BMPs
- Each BMP must be executed annually
- Each BMP must have measurable goal



# FUNDING FOR PUBLIC INVOLVEMENT

## 3.3.10 Public Involvement

Conduct a public involvement program that creates opportunities for citizens to participate in the SWMP. This can include involving the public in planning and implementation of activities.

For those permittees with a population less than 10,000 at the time of the permit issuance, the public involvement program must contain a minimum of **two** activities. For those permittees with a population greater than 10,000 at the time of this permit issuance, the public involvement program must contain a minimum of **four** activities.

SWMP Component	Measurable Goals
1. Public Involvement Program	<p>1.a Evaluate your existing program to ensure that it meets the needs of your community. Implement, and revise, if necessary, the public involvement program described in the SWMP. The Public Involvement Program must include activities chosen from the following list, or other activities proposed for EPD approval:</p> <ul style="list-style-type: none"><li>• Stream cleanup (e.g. Rivers Alive);</li><li>• Great American Cleanup;</li><li>• Citizen hotline;</li><li>• Citizen science/volunteer monitoring (e.g. Adopt-A-Stream);</li><li>• Adopt-A-Road;</li><li>• Storm drain marking;</li><li>• Household hazardous waste disposal event;</li><li>• Recycling event;</li><li>• Local stormwater management panel;</li><li>• Comprehensive planning committees;</li><li>• Stakeholder Advisory committees;</li><li>• Pet waste stations.</li></ul> <p>1.b. The measurable goal must be specified for each type of activity. Each type of activity must be executed at least once during the reporting period.</p>



# OUTREACH UNIT

Key programs:

- **Adopt-a-Stream – Volunteer Water Quality Monitoring**
- **Rivers Alive – Volunteer Water Clean-up**
- **Project WET – Water Education for Teachers**
- **River of Words – K-12 watershed poetry and art**







# GEORGIA ADOPT-A-STREAM

<https://adoptastream.georgia.gov/>

 **Georgia Adopt-A-Stream**  
Georgia's Volunteer Water Quality Monitoring Program

Home | Sign In | About Us | Contact Us | Site Map

Search this site

**Get Involved** | **Confluence** | **Citizen Monitoring** | **Data Views** | **Data Entry** | **Materials & Resources** | **My Profile**

View: All active sites



**Workshop Schedule**

Friday, September 15

Sunday, September 17

1:00pm Savannah Chemical Moni

Thursday, September 21

3:00pm Gwinnett Bacterial Moni

Events shown in time zone: Eastern Time

**Adopt-A-Stream**

**Congratulations to the 2016 Adopt-A-Stream Award Winners!**

**Adopt-A-Stream Trainer Awards**

**Announcements**

**AAS Volunteer Monitoring Conference - Confluence**

**Learn More About Getting Started With Adopt-A-Stream**

Group: [G-1236] Tapestry Community  
Site: [S-1429] Intrinment creek [Return to Site](#)

Filter dates between and Filter Clear date filter

Export

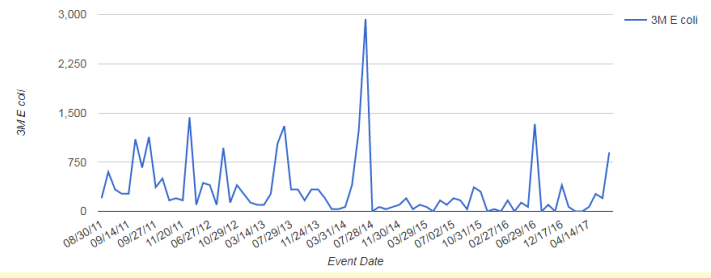
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Time spent monitoring	45	55	45	40	30
3M E coli	-	-	-	-	-
Air Temperature	30	29.45	28.15	30	26.25
Conductivity	205	210	190	190	215
Dissolved Oxygen	5.1	5.9	5.3	4.1	5.8
DO %Saturation	61.53	66.86	60	46.55	58.81
pH	6.5	6.5	6.5	6.5	6.5
Water Temperature	26	22.75	22.7	22.85	17.3
Event ID	25783 <a href="#">form</a>	26032 <a href="#">form</a>	26208 <a href="#">form</a>	29739 <a href="#">form</a>	26941 <a href="#">form</a>

Select a different parameter to put it on the secondary axis.: 3M E coli

Display: line bar

3M E coli, cfu/100 mL (range 0 - 2933, average 332.43)

**3M E coli value by Event Date**



3M E coli



# GEORGIA RIVERS ALIVE

<https://riversalive.georgia.gov/>

**Rivers Alive**  
Georgia's Annual Waterway Cleanup

[Return to Home Page](#)

Home Locate a Cleanup Results Register and Submit Cleanup Data My Profile

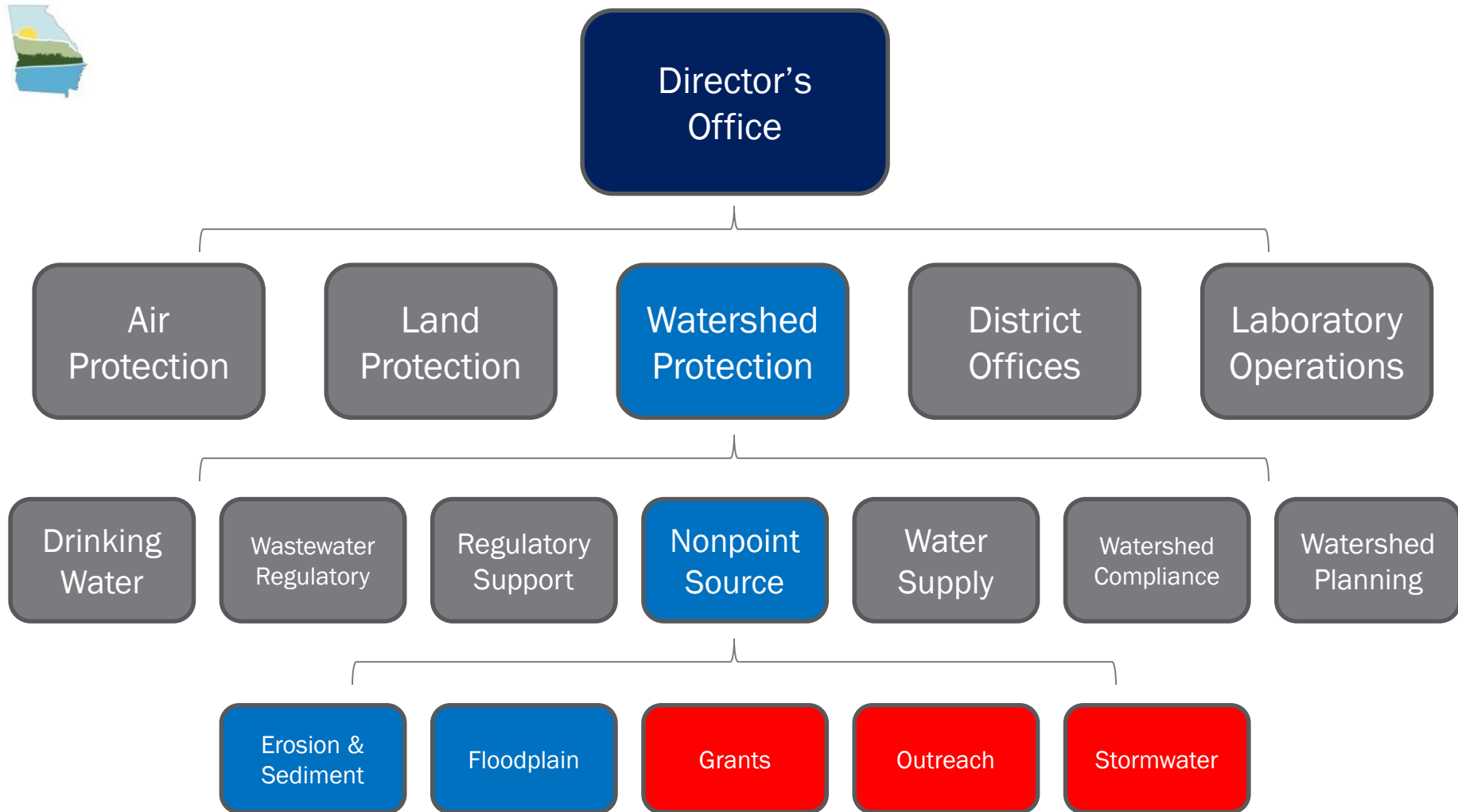
Cleanups during **Future Events** ☐ Zoom map to All Georgia Cleanups ☐ Zoom map to: Abba

**1. 2017 Satilla Riverkeeper Annual Cleanup**  
Date: Sep 16, 2017 9:00AM  
Organizer: [Rachael Thompson](#)  
Organizing Group: [G-1905 Satilla Riverkeeper & Friends](#)  
Phone:   
Fax:   
Website: [www.satillariverkeeper.org/events.html](#)  
Ages: All Ages  
Partners: Pierce County Chamber of Commerce, Satilla River Water Trail, Satilla Riverkeeper, Keep Brantley Beautiful and Litter Free, Keep Golden Isles Beautiful, Friends of the Satilla River, and more to be listed soon!  
Waterbody: [FFA Camp Landing](#)  
Addition Info: Pierce County tool [Driving directions](#)

**2. Burnt Fork at Mason Mill clean-up**  
Date: Sep 16, 2017 9am  
Organizer: [Gavin MacDonald](#)  
Organizing Group: [G-515 Boy Scout Troop 103](#)  
Phone: 770-557-4024  
Fax:   
Website: [BA only](#)  
Ages: All Ages  
Partners: [Burnt Creek at Mason Mill Park](#)  
Waterbody:   
Addition Info: [Driving directions](#)

**3. City of Gainesville/Hall County Rivers Alive Clean up**  
Date: Sep 16, 2017 8:30  
Organizer: [Brian Wiley](#)  
Organizing Group: [G-172 City of Gainesville](#)  
Phone: 770-532-7462  
Fax: 770-534-1955  
Website:   
Ages: All Ages  
Partners: [Flat Creek](#)  
Waterbody:   
Addition Info: [Driving directions](#)

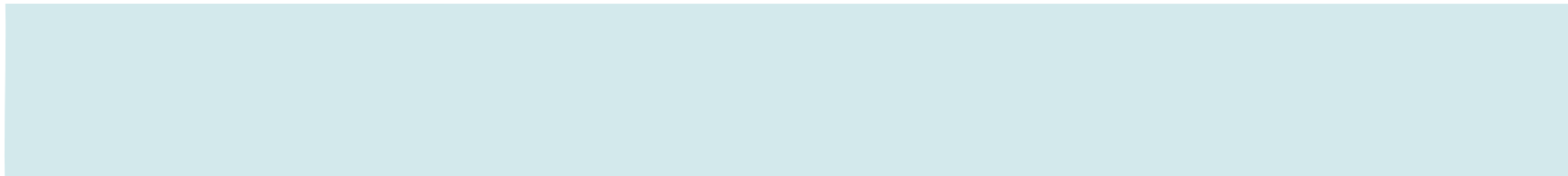
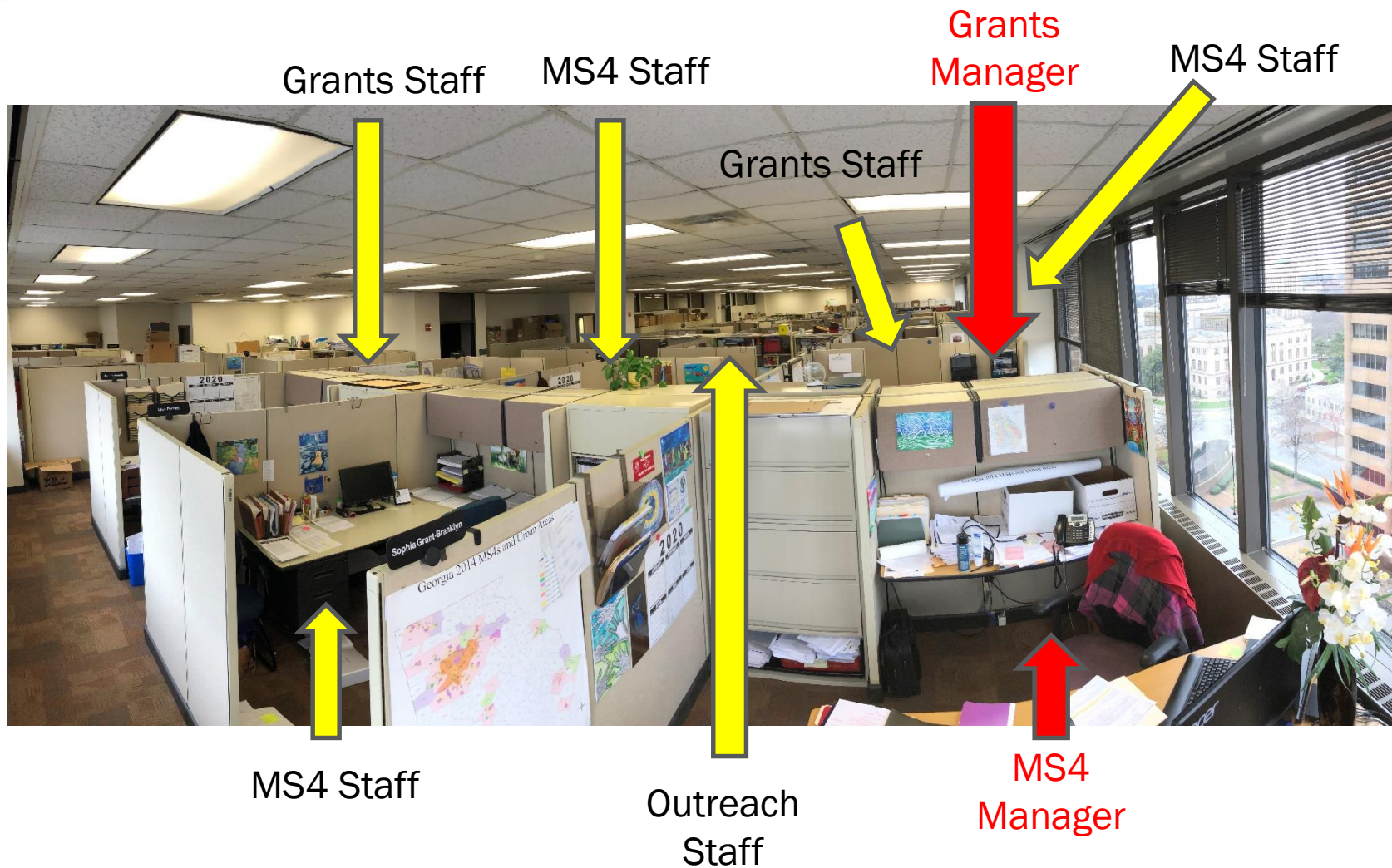








# PRE-CORONAVIRUS PROXIMITY







# QUESTIONS

Veronica Craw

404-651-8548

[veronica.craw@dnr.ga.gov](mailto:veronica.craw@dnr.ga.gov)

Nonpoint Source Manager

Watershed Protection Branch

Georgia Environmental Protection Division

