



BEAUFORT COUNTY
STORMWATER MANAGEMENT UTILITY BOARD AGENDA
Tuesday, November 10, 2020
2:00 p.m.
WebEx
843.255.2805



In accordance with South Carolina Code of Laws, 1976, as amended, Section 30-4-80(d), all local media was duly notified of the time, date, place and agenda of this meeting.

1. CALL TO ORDER – 2:00 p.m.
 - A. Approval of Agenda
 - B. Approval of Minutes – October 14, 2020 ([backup](#))
2. INTRODUCTIONS
3. PUBLIC COMMENT
4. REPORTS
 - A. Utility Update – Katie Herrera ([backup](#))
 - B. Monitoring Update – Katie Herrera ([backup](#))
 - C. Stormwater Related Projects – Katie Herrera ([backup](#))
 - D. Upcoming Professional Contracts Report – Katie Herrera ([backup](#))
 - E. Regional Coordination – Katie Herrera ([backup](#))
 - F. Municipal Reports – Katie Herrera ([backup](#))
 - G. MS4 Update – Katie Herrera ([backup](#))
 - H. Maintenance Projects Report – Matthew Rausch ([backup](#))
5. UNFINISHED BUSINESS
 - A. Malind Bluff Presentation – Tanner Powell ([backup](#))
6. NEW BUSINESS
 - A. Mossy Oaks Presentation – Neal Pugliese ([backup](#))
 - B. Shellfish Presentation- Katie Herrera ([backup](#))
 - C. Ex Officio Members discussion - Neil Desai
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
 - A. December 9, 2020 ([backup](#))
9. ADJOURNMENT





Beaufort County Stormwater Management Utility Board (SWMU Board) Meeting Minutes

October 14, 2020 at 2:00 p.m. via WebEx.

Board Members

Present

Allyn Schneider
James Clark
James Fargher
Marc Feinberg
Patrick Mitchell
Steven Andrews
William Bruggeman

Absent

Ex-Officio Members

Present

Kim Jones
Scott Liggett
Van Willis

Absent

Nate Farrow

Beaufort County Staff

Jennifer Smith
Katie Herrera
Matthew Rausch
Carolyn Wallace

Visitors

Ellen Sturup Comeau, Clemson Extension
Jeff Netzing, Town of Hilton Head

1. Meeting called to order – William Bruggeman at 2:00 pm

- A. Agenda – Approved
- B. Approval of Minutes – Approved

2. Introductions – Completed.

3. Public Comment(s) – None.

4. Reports

Report attached in agenda

Highlights:

A. **Utility Update** – Katie Herrera

- ✓ Southern Lowcountry Regional Board (SoLoCo)
 - The current schedule for completion and finalization on the document and activities of Center for Watershed Protection (CWP) are completed.
 - Municipalities to work through individual implementation schedules

- ✓ If anyone has any suggestions for special presentation please let Katie or Jennifer know.
- ✓ Reminder: Annual Financial report from the Municipalities are due – Per the Intergovernmental Agreements for the Utility, each year on September 30th, the City and Towns are required to submit a summary of revenue and expenditures for the previous fiscal year.
 - Beaufort County – Not received.
 - Town of Hilton Head Island – Not received.
 - **Town of Bluffton – Received.**
 - Town of Port Royal – Not received.
 - City of Beaufort – Not received

B. Monitoring Update – Katie Herrera
Report attached in agenda. Nothing additional

C. Stormwater Related Projects – Katie Herrera
Report attached in agenda

Highlights:

- ✓ Graves Property / Pepper Hall Public / private partnership – Engineer has submitted conceptual Stormwater Permit plans for roads and infrastructure on the Graves Property. Staff received the Stormwater Master Plan from Davis and Floyd on August 18th. Staff met with Davis and Floyd team to discuss and provided a formal response on September 18th. Waiting on comments to be addressed before moving forward with acceptance of Stormwater Master Plan.

D. Professional Contracts Report – Katie Herrera
Report attached in agenda

Highlights:

- ✓ RFQ for Stormwater engineering consulting services was advertised on May 25th, 2020. RFQ closed on June 30th, 2020. Staff received 10 proposals for review. Evaluation and discussion of proposals occurred on August 7th, 2020. A consultant was chosen on August 27th. The contract was approved for award by Council on September 28th, 2020. The contract was awarded to Woolpert.

E. Regional Coordination – Katie Herrera
Report attached in agenda

Highlights:

- ✓ Town of Bluffton –
 - Kim stated that they are hiring for a Stormwater Coordinator/Field Tech Assistant. Qualified applicants should apply on their website.

F. Municipal Reports – Katie Herrera

Report attached in agenda

Highlights:

Reports information.

1. Town of Hilton Head Island
 - Report attached in packet
2. Town of Bluffton (From Kim Jones, Watershed Management Division Director)
 - Report attached in packet
3. City of Beaufort (From Nate Farrow, Public Works Director)
 - No information was available at the time of this report.
4. Town of Port Royal (From Van Willis, Town Manager and Tony Maglione, consultant)
 - No information was available at the time of this report.

G. MS4 Update – Katie Herrera

Report attached in agenda

Highlights:

- ✓ Permits and inspections has increased.
- ✓ Plan Review – Katie went over chart information which is included in the packet.
- ✓ Energov permitting software – Tyler Technologies, the group building our Energov software experienced a security breach. Due to this, the Energov implementation schedule is anticipated to be affected. Staff continues to test all aspects of the product already built.
- ✓ Public Education
 - Slowing down. Still doing Water Wednesday webinars for the master gardeners.
 - Preparing for the annual report

H. Maintenance Projects Report – Matthew Rausch

Report attached in agenda

Highlights:

- ✓ Six minor projects
 - Sheldon Bush Hog – Sheldon (SWUD 5): \$86,125.45.
 - St. Helena Island Vacuum Truck – St. Helena Island (SWUD 8): \$14,018.61.
 - Milkweed Lane – Lady’s Island (SWUD 7): \$10,020.50.
 - Royal Pines Subdivision – St Helena Island (SWUD 8): \$3,969.91.
 - Port Royal Island Sinkhole Repair – Port Royal Island (SWUD 6): \$1,496.60.
 - Town of Bluffton – Bluffton (SWUD 4): \$1,373.12.

5. Unfinished Business –

- ✓ SoLoCo Design Manuel and Stormwater Ordinance- Katie Herrera
 - Seeking approval of adoption of the Southern LowCountry Design Manual and the Stormwater Ordinance changes
 - ***Board unanimously agreed to pass the motion to accept the SoLoCo Design Manuel and Stormwater Ordinance***

6. New Business

A. Draft 2021 SWUB calendar - Neil Desai

- Change meeting to quarterly basis and/or as needed.
 - ***Board unanimously agreed to change meetings to a quarterly basis and/or as needed.***
- ✓ *Van Willis with the Town of Port Royal requested when we are in the budget review process in March, he would like an answer to how the funding for special assessment tax bill regarding the county owned infrastructure were spent.*
 - *Neil stated we can provide that*
 - *Information will be provided during the budget process in March.*

B. Virtual Meeting Sessions - Katie Herrera

- ***Board unanimously agreed to continue virtual meetings until the end of the year***

7. Public Comment(s) – None

8. Next Meeting Agenda – Approved with the following changes

- ✓ Billy Bruggeman asked Kim Jones about the Publix presentation from September's meeting
 - Kim stated that she spoke with her staff. Publix is not a good project for presentation because it's not much there to present. Kim also stated she does not have the staff capacity to put together a presentation, but proposed a presentation or a general outreach pool in December on how the Town of Bluffton Stormwater permit process unveils through our inter gov. system since everything is online. Kim also stated that the design for the Bridge Street Streetscape project should be available and the project can be used as a tool for the SoLoCo design.
 - Billy asked for Beaufort County to give a presentation on the Stormwater plans and how it's been approved.
 - Neil stated that he will get with Katie and give a presentation on the current standard for the November meeting.
- ✓ James Clark suggested adding the Stormwater presentation for Shell Point to have the contracts presented
 - Neil stated the goal was to come back after the model was finalized. Close to finishing but not complete.
- ✓ Scott Liggett asked for Beaufort County to get with DHEC to update to the board the report since the 2020 Shellfish season is approaching.
 - Billy asked Katie to update to the board.
 - Presentation to be given at the November or December meeting

9. Meeting Adjourned



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November 10th, 2020

Stormwater Manager's Report for the Stormwater Utility Board Meeting

Utility Update

1. Southern Lowcountry Regional Board (SoLoCo)
 - a) The current schedule for completion and finalization on the document and activities of Center for Watershed Protection (CWP) is as follows:

All project milestones have been completed.

2. Regionalization
 - a) Regional Stormwater Design Standard and Model Ordinance Project – See update above.
 - b) Regionalization of programs – With the finalization of the Regional Stormwater Design Standard and Model Ordinance it is hoped each participating jurisdiction will adopt these policy documents for implementation to provide consistent administration of Stormwater Management guidelines and policies in the region. Discussions of a Regional Stormwater Authority to administer the adopted guidelines and policies holistically within the region/jurisdictions can be fostered.
 - c) SoLoCo Manual and Ordinance adoption presented at the November 2nd Natural Resources Committee meeting.
3. Special presentation suggestions –
 - Suggestions for Future Meetings
 - Street-scape presentation – Town of Bluffton – December meeting
 - Wetlands as carbon sinks - TBD
 - DHEC Shellfish Program – TBD. Based on annual report, written in Spring. Local staff is willing to present on updates. Shellfish harvesting ground updates to be presented at November SWUB meeting.
4. Military installation and other State and Federal properties SWU fees – See “Delinquent Accounts” below. Staff continues to work with GIS to update impervious area layers for the military installations.
5. Delinquent accounts – Phase I Investigations with Gentry Locke Attorneys (looking at data, laws, ordinances, synopsis of case law) to provide recommendations and likely outcomes of either negotiations or litigation.
 - Gentry Locke continues to do research on delinquent fees.
6. Reminder: Annual Financial report from the Municipalities are due – Per the Intergovernmental Agreements for the Utility, each year on September 30th, the City and

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Towns are required to submit a summary of revenue and expenditures for the previous fiscal year.

- a) Beaufort County – Not received.
- b) Town of Hilton Head Island – Not received.
- c) Town of Bluffton – Received.
- d) Town of Port Royal – Not received.
- e) City of Beaufort – Not received.

Monitoring Update

- 1. Lab Update (From Dr. Alan Warren and Lab Manager Danielle Mickel)
 - i. No information was available at the time of this report.

Stormwater Related Projects

- 1. Easements – Staff is working on easement requests and meets monthly to review status. A few condemnations are still being pursued using outside legal counsel.
- 2. Complaints – Staff continually works numerous drainage related complaints each month.
 - a) Flyover bridge preventative maintenance and deferred maintenance repairs – Last update: Consultant working on preliminary design and permitting. Consultant is proceeding to apply for the wetland/critical area permit from the state & federal agencies.
 - b) Shell Point Community Meeting –Cranston Engineering has finalized the field drainage inventory work and are now working on creating a model for the region.
- 3. Factory Creek Watershed Regional Detention Basin “Phase I” & Academy Park Subdivision (Design Cost \$49,873, Tree Mitigation Cost \$18,200 & \$18,200, Construction Cost by the Developer) – Construction on-going and estimated to be 60% complete. Project anticipated completion date is March 2021. Staff requested drone imagery to be done on project. Images should be available before November SWUB meeting.
- 4. Factory Creek Watershed Regional Detention Basin “Phase II” (Design Cost = \$63,390, Tree Mitigation Cost is pending, Construction Cost by the Developer) – Construction on-going and estimated to be 80% complete. Staff coordinating easement with property owner. Staff requested drone imagery to be done on project. Images should be available before November SWUB meeting.
- 5. Graves Property / Pepper Hall Public / private partnership – Engineer has submitted conceptual Stormwater Permit plans for roads and infrastructure on the Graves Property.

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Staff received the Stormwater Master Plan from Davis and Floyd on August 18th. Staff met with Davis and Floyd team to discuss and provided a formal response on September 18th. County staff met with Davis and Floyd staff member about how to move forward with Master Plan mid October. Was given permission from another consultant to provide example Master Plan documents for guidance. Staff continue to work with Davis and Floyd, other departments, and property owner.

6. Whitehall property purchase – County staff met to review the conceptual Stormwater masterplan for the property with the engineer on June 1st, 2020. No further updates at this time.
7. US 278 “super street” widening on Jenkins Island (Windmill Harbor area) – No update at this time.
8. Lady’s Island Plan, Sea Level Rise, and “no-fill” ordinance – No updates at this time.

Professional Contracts Report

1. CIP FY 18 Grouping Stormwater Projects – (Design - Ward Edwards \$202,000, Andrews Engineering \$560,490, Const. est. \$5,512,900) – All projects are in early design phase.
 - a) Salt Creek and Shanklin Road – 90% design for both projects. Still waiting for property owner interest. Still need to acquire all permits, but land acquisition needs to happen first.
 - b) Brewer Memorial – DOT, DHEC, OCRM, permits obtained. Ward Edwards is waiting on final feedback from Clemson before submitting to SRT for final permits. Clemson to provide plant list for shorescaping. Anticipated completion date of construction is mid to late Spring 2021. Staff working with Clemson Extension regarding educational opportunities.
2. Evergreen Regional Pond 319 grant project – (Design=\$89,286, Construction=\$590,000. Grant=\$229,124) – 100% Design submittal. Staff met with the Engineer on October 26th. Town of Bluffton has not released final SWPPP approval. Bid documents are being prepared for construction phase. Project completion date is July 2021.
3. RFQ for Stormwater engineering consulting services was awarded on September 28th, 2020. Staff met with Consultant on October 13th to discuss program goals. Consultant to put together first scope of work for County approval.

Regional Coordination

1. Town of Bluffton and Beaufort County Joint meetings on Sanitary Sewer in the May River

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watershed – No update at this time.

2. Mossy Oaks Task Force – Neal Pugliese of City of Beaufort presenting today. No further updates at this time.
3. Charleston Area MS4 managers group – No update at this time.
4. May River Watershed Modeling – See municipal reports for more information.
5. Port Royal Sound Conservation Working Group – No additional update at this time.

Municipal Reports

1. Town of Hilton Head Island (From Jeff Netzing, Stormwater Manager and Brian Eber, MS4 Coordinator)
 - i. [See Attached.](#)
2. Town of Bluffton (From Kim Jones, Watershed Management Division Director)
 - i. [See Attached](#)
3. City of Beaufort (From Nate Farrow, Public Works Director)
 - i. No information was available at the time of this report.
4. Town of Port Royal (From Van Willis, Town Manager and Tony Maglione, consultant)
 - i. No information was available at the time of this report.

MS4 Report

1. Plan Review – [See the attached chart](#) for Beaufort County Stormwater staff plan review workload for the past 12 months.
2. Stormwater Permits – [See the attached chart](#) for Beaufort County Stormwater permits issued for the past 12 months.
3. Monthly Inspection summary - [See the attached chart](#) for Beaufort County Stormwater staff inspection, complaint, IDDE, and violations summary for the past 12 months.
4. Weather Station Data. [See attached report.](#)
5. Public Education – [See attached report.](#)

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6. Energov permitting software – Due to last month’s security breach, implementation has been delayed until February 2021. This will allow for additional testing and training to be completed before going live. Will coincide with SoLoCo requirements.
7. MS4 Statewide General permit – Draft 2020 Annual Report [See Attached](#)
 - i. No further updates at this time.
8. Statewide General permit for Construction
 - i. No update at this time.

**Stormwater Utility Board Meeting
Town of Hilton Head Island
Report for November 2020**

1. Items of Note

A. October MS4 Audit

The Town's MS4 program was audited by DHEC on October 21. The audit consisted of a questionnaire covering pertinent aspects of all 6 minimum control measures, including supporting documentation, and field inspections at a number of locations including a Town-owned post-construction BMP (the Town Hall pond), a watershed outfall (the Palmetto Hall system at Fish Haul Road), and active construction at a commercial site (a Harris Teeter gas station), an industrial site (Arbor Nature), and a residential development (Hammock Breeze). The Town is waiting to hear back from DHEC on their assessment of the Town's program.

B. Expanding use of Cartegraph for Asset Management

In 2018, the Town Storm Water Utility implemented Cartegraph OMS in an effort to improve efficiency, responsiveness and accountability. Based on early positive results experienced by the Utility, the Town is expanding use of the Cartegraph system to manage additional assets including parks, pathways, roads, and other infrastructure. SWU staff will be lending the benefit of their experience with Cartegraph to assist the Engineering and Facilities Management Departments as the implementation ramps up over the next few months.

C. Implementing SeeClickFix for Resident and Visitor Issue Reporting

The Town has been looking for ways to improve issue reporting for Town residents and visitors for several years. The solution needed to satisfy many criteria including the ease of making it widely available, the easy to use, efficiency of use for managing and tracking internally, and efficient at providing feedback to requestors and the public at large. The Town recently selected SeeClickFix to help address this long-standing issue and currently in the planning stages of implementation.

D. PUD/POA Drainage Maintenance Agreements

Roughly 70% of residents on the Island live in private communities (PUDs or POAs). In an effort to provide more equity in utilizing SWU resources, the Town entered into drainage maintenance agreements with 11 of these communities between 2007 and 2014. In 2018, The Town Council Finance and Administrative Committee tasked staff with reviewing each of these agreements and drafting a boilerplate for a new standard agreement that addressed inconsistencies between terms of the agreements and improve clarity. Over the intervening months, Town Staff developed a draft and worked with the Town Attorney to finalize language for a new, standard agreement. In the interim, eight (8) additional communities have also requested agreements. Town Council will consider directing staff to proceed with updating all existing agreements and offering new agreements based on the standard language at their November 4, 2020 meeting.

2. MS4 Update (EBER/SCHUMACHER)

MCM1 Public Education & Outreach	<ul style="list-style-type: none"> • Healthy Pond Series online webinar 10-22-2020 • Changing Tides newsletter issued on 9-14-2020: <ul style="list-style-type: none"> • Topic: Protecting Tidal Creeks with Buffers. • Can it, Cool it, Trash it: Fats, Oils & Grease Fact Sheet
MCM2 Public Involvement & Participation	<ul style="list-style-type: none"> • Low Impact Development Lunch-and Learn with Clemson and LSP 8-19-2020. • Pet Waste Outreach Plan Pledge.
MCM3 Illicit Discharge Detection & Elimination	18 H2O quality monitoring sites tested & analyzed 2 Complaints received 2 Investigated with Code Enforcement 2 Resolved
MCM4 Construction Site SW Runoff Control	6 Plan reviews w/ corrections required 32 Plan reviews approved 2 Utility Permits 19 Active permitted construction sites 93 Inspections completed 9 NOV issued
MCM5 Post-Construction SW Management	<ul style="list-style-type: none"> • 2 PCBMP investigated this month: <ul style="list-style-type: none"> • Harris Teeter • Cotton Hope Subdivision • 2 PCBMP assets have been updated in GIS • All 2016 – 2020 PCBMP have been updated and vetted (94 total as of 8-31-2020)
MCM6 Pollution Prevention/Good Housekeeping	<ul style="list-style-type: none"> • 2020 training presentations to Town staff completed via virtual meetings, including a quiz. <ul style="list-style-type: none"> • Community Development completed 7/3 & 8/7 • Facilities completed September 9, 2020

NPDES Permit Compliance Notes/Items of Interest

- Pond Management: Seven Town-owned ponds being treated and monitored for algae growth. The water temperature and the lack of rainfall within the ponds are making it very challenging to remove all of the algae growth.
- Received another Post Construction BMP inspection report, this one from the property owners at Salt Creek Landing. The Town had not received any BMP inspection reports from private property owners until the Town initiated efforts to increase compliance with this important maintenance agreement obligation.
- Cartograph data now includes inspection reports that the Town has conducted and also includes the annual re-inspection date with notification triggers to help us comply with our NPDES permit obligations.

3. Service Requests (MARTIN)

E. October 2020 Service Request Activity:

- New requests: 2 (32, FY21 to date)
- Requests closed: 0 (44, FY21 to date)

F. Open Requests as of October 31, 2020:

- Open Qualifying: 291
 - Public (92)
 - Private* (199)
- Open Enforcement 6
 - IDDE (2)
 - Other (4)
- Open Referrals 37
 - County (15)
 - SCDOT (22)

** Located in residential POAs with current maintenance agreements*

G. Service Request Totals as of October 31, 2020:

- Open: 305 change in last 31 days: +1
- Closed: 1066 change in last 31 days: +1
- Total: 1371 change in last 31 days: +2

4. Major Capital Improvements Update (NETZINGER/LADD)

A. Lawton (Sea Pines) SW Pump Station – Electrical System Rehabilitation

An electric system assessment was completed by Chatham Engineering in November 2019. The assessment report recommended replacement of all major components of the electrical system due to age. Due to the magnitude of changes required, the need for flood-proofing, and the age of the facility, the project also includes demolition and replacement of the existing control building. Design for replacing the pump station's electrical system and the control building are complete.

- Contract
 - Prime: BRW Construction (utilizing current on-call services contract)
 - Town received final construction drawings and specifications in August
 - Total construction cost: \$1.6 million.
 - **NTP issued on October 9, 2020**
 - Estimated completion date: May 28, 2021 (8 Months).
- Permitting
 - Sea Pines ARB approved (9/2)
 - Town Minor DRP approved (9/30)
 - Town Building Permit pending approval
 - Town Demolition Permit pending approval

5. Pump Station and Routine Maintenance Projects (LADD)

A. Completed October 2020

- Pump Station Projects
 - None
- Work shelf/Access Clearing Projects
 - Dianah's Ditch (Phase 2)
- Routine Channel Maintenance Projects
 - None

B. Planned/Underway for November 2020

- Pump Station Projects
 - Lawton Canal Pump Station – Repairs & Upgrades Phase 2
- Work shelf/Access Clearing Projects
 - Mid-Island Tract
- Pipe Cleaning Projects
 - Mid-Island Tract
- Routine Channel Maintenance Projects
 - Old Woodlands
- Channel/Ditch Excavation Projects
 - Mid-Island Tract
 - Ashmore Channel

C. Future Projects (Planning)

- Pump Station Projects
 - Wexford Pump Station – Electrical & Structural Assessment
 - Wexford Pump Station – Repairs & Upgrades Upgrades
- Work shelf/Access Clearing/Excavation Projects
 - The Oaks/Sea Turtle Channel
 - Victoria Square Outfall
 - Mathews Side Streets - Channel/Basin
 - Blazing Star Road - Pond
- Routine Channel Maintenance Projects
 - Marshland Road Outfall
 - Arrow Road Ditches

6. CIP and Maintenance Projects (UYESUGI)

A. Underway or Completed in October 2020

- Canvas Back Road Drainage Improvements (SP)
- 5 Resolute Place/ 150 S. Port Royal Dr – Channel Stabilization (PR)
- 59 Shelter Cove Lane/ Veteran’s Park – Dam Stabilization (XN)
- 29 Primrose Lane – Sediment Removal (IR)

B. Planned for November 2020

- 25 Lenox Lane & 19 Clyde Lane Lagoons – Sediment Removal (PH)
- 53 Aberdeen Court – Sinkhole Repair (IR)
- Wexford Power Line/RV Park – Sediment Removal (WE)
- 232 S. Sea Pines Drive – Additional Pipe Replacement (SP)
- 33 Battery Road – CCTV (SP)

C. Future Projects (Planning)

- 35 Lawton Drive – Channel Maintenance (SP)
- 46 Sussex Lane – System Cleaning (IR)
- Cordillo Courts Drainage Improvements (XN)
- 5 Blackgum Place – Point Repairs (HHP)

7. Inventory & Modeling Program (NETZINGER)

A. Lower Jarvis Creek Study (FY19 Budgeted Watershed)

The Town is utilizing Woolpert to conduct a study of the Lower Jarvis Creek Watershed. The study involves collecting data for the existing stormwater system in the field, and identifying infrastructure deficiencies and flood hazards. The study area includes portions of William Hilton Parkway, Wild Horse Road, Gum Tree Road, Spanish Wells Road and Jonesville Road and within portions of the Indigo Run Community. The project is scheduled to be complete by December 2020. GIS data received on August 31. ***Status meeting held on October 14. Identification of problem areas determined; Woolpert to develop solutions in 10 locations. Refer to 10-14-20 meeting minutes attached.***

B. Squire Pope/HH Plantation/Port Royal/Point Comfort Model 2D Conversions

The Town is utilizing Woolpert to revise and update models developed in previous studies from 1D to 1D/2D and to develop inundation maps for each watershed (GIS shapefiles). ***Woolpert is making final adjustments to the models based on comments received from the town in a meeting held on August 27. Final deliverables to be submitted in November.***

C. South Forest Beach/Lawton Creek Study (FY20 Budgeted Watershed)

The Town will utilize an on-call consultant to study this watershed once we have the on-call contracts in place. ***We anticipate work beginning on this project in December.***

D. North Forest Beach/Shipyard/Wexford Study (FY21 Budgeted Watershed)

The Town will utilize an on-call consultant to study this watershed once we have the on-call contracts in place. ***We anticipate work beginning on this project in February 2021.***

Meeting Minutes

Date of Meeting: October 14, 2020 | 1:00PM -3:30 PM

Location: Microsoft Teams Meeting

In Attendance: Jeff Netzinger, Christina Martin, J.P. Johns, Brian Bates, Steve Godfrey, Kate Lui, Crystal Muller

ITEMS DISCUSSED: Jarvis Creek Model Problem Area Identification and Potential Alternatives Analysis

General Items

1. Woolpert reviewed how the Problem Area Identification information is presented.
 - a. LOS was based on the 475 inlets, but also looked at pipes of concern and road crossings to verify flooding.
 - b. 16% of the inlets did not pass the 2-year LOS.
 - c. Woolpert notes that the recently surveyed points (12) flood threshold is based on the pipe invert rather than the road elevation – this will be corrected.
2. Revisit the Problem Area Identification color scheme.
 - a. The maps should identify the worst areas, which ones are fixable, and which ones aren't.
 - b. Prioritize structural flooding, then move on to nuisances.
 - c. Consider using different colors, and then shades of those colors.
 - d. The potential for upgrade should not drive the dominant color on an exhibit.
 - e. Want to color code Zones with how bad they are, and sub-code with shading where we can/can't fix.
3. Need to determine the threshold.
 - a. Woolpert took the approach of looking at inlets/road crossings that are LOS Score 3 or higher – the higher priority ones.
 - b. Woolpert also considered if there were any structural impacts.
 - c. Currently, 6 inches of flooding is the trigger for a LOS Score 5.
 - d. Woolpert will look at revised LOS Score to include 6 inches of depth with the different return intervals to investigate if it changes the number of LOS Score inlets/crossings.
4. Jeff would like to field truth the identified areas of flooding with data and reports from Hurricane Matthew.
5. Private versus public systems:
 - a. Condos or apartments: One parcel/owner owns everything, the common grounds is one owner, so the Town doesn't service those.
 - b. For areas with shared drives and multiple parcels, the Town could help with these areas.

Discussion of Zones:

6. Zone 1: No reported flooding issues on Spanish Wells Road. Miller Road isn't really used.
 - a. LOS Score reflects issue of not using the road elevation with the new survey points. Will be corrected.
7. Zone 2: Identifies a current problem the Town is aware of, but no buildings are being impacted.

- a. Historically water ponds in the yards because there is no outfall. No historical structural flooding but it gets close to the structure and the yards stay soggy.
 - b. Woolpert to investigate adding a pipe to alleviate the inundation. But since there is no structural or road crossing issues, need to determine the actual priority.
 - c. Don't want a new pipe system but investigate adding an inlet and pipe.
8. Zone 3: There is some road flooding at the crossing to the cul-de-sac. Probably not a priority
9. Zone 4: Change Zone category from Green to Not Identified.
10. Zone 6: No issues in Zone 6, but Zone 6 can impact upstream areas/zones.
 - a. Woolpert to investigate improving the inverts/capacity of that cross-drain under Sol Blatt by adding flap gates to existing pipe and look at new pipe(s) with lower inverts to help conditions in Zones 6, 7 and 9.
 - b. This could impact the one home on the pond that floods in Zone 9.
11. Zone 7: LOS Sore 5 inlets are in the golf course, not a concern.
12. Zone 10: Water is backing up on Berwick Drive.
13. Zone 13: This zone was in HHI model but included with this analysis due to additional data added to the model and downstream pump station is now included in model.
 - a. No complaints in this zone.
 - b. Jeff thinks that church sits low, he will verify.
 - c. It looks like mostly the church parking lot that is flooding.
14. Zone 14: Existing known drainage issues, but the Town can't get easements. No drainage network in the mobile home community.
15. Zone 18: Need to extend watershed boundary slightly in include both road inlets.
 - a. Pond in Zone 22 may be able to improve conditions in Zone 18 with new pipe system.
16. Zone 21: Area seems to be controlled by the pond not the culvert.
17. Zone 22: Entirely private development.
 - a. Town has not had any flooding complaints.
 - b. Jeff to talk to property manager.
 - c. Not looking to improve the inlets.
18. Zone 24: Residents have made observations that water doesn't move in the Gum Tree ditch.
 - a. Gum Tree ditch outfall inadequate.
 - b. Inlet on Kings Court could be upgraded to provide relief.
19. Zone 26: Crossing at Gum Tree appears undersized.
20. Zone 27: Just south of Wild Horse, the Town put in a new box culvert.
21. Zone 29: Private, no known complaints.
22. Zone 31: Jeff indicates known flooding issues here, not sure if there is a viable solution.
23. Zone 32: New development, no known flooding complaints.
24. Zone 34: All private, pond needs modifications.
25. Zone 36: Wendy's parking lot has flooding issues, but owner does not want to install outlet ditch.
26. Alternative: Combining Zones 22, 19 (maybe), 18, and 17 may provide a solution to the problem.
27. Alternative: Combine analysis of Zones 6, 9, and 11.
 - a. Increase capacity at the outfall.
 - b. Add new lower pipe and add backflow preventers to existing and new pipe(s).

28. HH Plantation Towhee Road: Known complaints in the cul-de-sac.

- a. Potential for improvements by the clubhouse?
- b. 3-foot of head difference in water surface elevation.

29. Coopers Hawk Road

- a. Pond has a wall in it.
- b. DEM and model do not include this weir/wall.

Proposed Potential Alternatives Analysis:

1. **Zone 6:** Increase the capacity of the crossing under Sol Blatt and add flap gates. Evaluate impacts of upstream inundation areas in Zones 6, 9, and 11.
2. **Zone 10:** Investigate options in Zone 10 if revised LOS Score is still high along streets.
3. **Zone 12:** Investigate options in Zone 12.
4. **Zone 15:** Investigate option in Zone 15 along only-entrance road to neighborhood, if revised LOS Score is still high along streets.
5. **Zone 22:** Investigate options in Zone 22 to potentially help inundation zones in Zones 22, 18, 17, and possibly 19. Set up meeting with Jeff to discuss the specific alternatives to model.
6. **Zone 2:** Investigate adding a pipe or inlet to alleviate yard flooding and extended periods of wet conditions.
7. **Zone 24:** Investigate option to add an inlet to alleviate flooding on Kings Court.
8. **Zone 25:** Investigate option in Zone 25, if revised LOS Score is still high along only-entrance streets.
9. **Towhee Road:** Investigate options around Towhee Road related to flooding complaints in the cul-de-sac. There appears to be a 3-foot head difference between this area and downstream receiving ponds.
10. **Cooper Hark Road:** Areas around Cooper Hark Road flood. Investigate potential options in this area.

TOWN COUNCIL

STAFF REPORT

Engineering Department



MEETING DATE:	November 10, 2020
SUBJECT:	Engineering Department Monthly Report
PROJECT MANAGER:	Bryan McIlwee, Director of Engineering

CAPITAL IMPROVEMENTS PROGRAM (CIP) AND SPECIAL PROJECTS UPDATE

PATHWAYS

1. Goethe-Shults Sidewalks Phase 2

- Construction documents, permitting and easement acquisitions are underway.
- **Next Steps**
 - Complete easement acquisition, permitting and construction documents in November 2020.
 - Begin construction in February 2021.

2. Buck Island-Simmons ville Neighborhood Sidewalks and Lighting

- Phase 5 Kitty Road to 301 Buck Island Road, construction is complete.
- Phase 6A along Simmons ville Road from Grayco northward to Sugaree Drive is under design and permit review.
- Phase 6B along Simmons ville Road from Sugaree Drive northward to the existing New Mustang Road sidewalks is under design.
- **Next Steps**
 - Phase 5 from Kitty Road to lot 310 Buck Island Road inspection and permit closeout.
 - Phase 6 design and construction of the remaining Simmons ville Road sidewalks, to be completed in FY 2021-2022.

3. Bridge Street Streetscape

- Construction documents and permitting are underway for Phase 1 streetscape, Burnt Church Road to Calhoun Street. 90% construction drawings are complete and under review by Staff.
- SCDHEC 319 grant application was awarded for \$179,700 for drainage and water quality improvements.
- **Next Steps**
 - Complete engineering design and update street lighting plans.

- Execute contract with Cranston Engineering to complete design modifications and reporting related to the 319 Grant.
- Prepare easement plats, appraisals, obtain easement and issue bid documents in FY 2021.
- Construction to start in FY 2022.

4. Boundary Street Streetscape

- RFQu solicitations for engineering services were obtained on 10/8/2020
- **Next Steps**
 - Review and evaluate engineering submittal and select a consultant to negotiate a scope of services and fee.
 - Submit for contract approval at the 12/8/2020 Town Council meeting.

5. New Riverside Linear Trail

- **Next Steps**
 - Begin planning and prepare a Conceptual Master Plan in FY 2022 pending budget approval.

SEWER & WATER

1. Buck Island-Simmons ville Sewer (Phases 5A-5E)

- Construction and home connections are complete on Phase 5E -Poseys Court.
- Construction is underway on Phase 5A-D.
- **Next Steps**
 - Complete construction on Phase 5A-D.
 - Start house connections after the main line is approved by DHEC.

2. Historic District Sewer Extension Phase 1 - Pritchard Street

- Construction has started.
- **Next Steps**
 - Start house connections after the main line is approved by DHEC.

3. Historic District Sewer Extension Phase 2 - Bridge Street

- Received SCDHEC permit to construct.
- Continue negotiations with property owners for right of entry agreements.
- **Next Steps**
 - Obtain road ownership from SCDOT.
 - Advertise for bids.

4. Historic District Sewer Extension Phase 3 – Colcock Street

- Started surveying and design.
- **Next Steps**
 - Review design drawings.

5. Historic District Sewer Extension Phase 4 – Lawrence Street

- Started surveying and design.
- **Next Steps**
 - Review design drawings.

6. Historic District Sewer Extension Phase 5 – Green Street

- Started surveying and design.
- **Next Steps**
 - Review design drawings.

7. Historic District Sewer Extension Phase 6 – Water Street

- Started surveying and design.
- **Next Steps**
 - Review design drawings.

8. Jason-Able Neighborhood Sanitary Sewer

- Construction is complete on the sewer main to serve the additional lots fronting the May River Road.
- **Next Steps**
 - BJWSA to finalize project closeout.

HISTORIC DISTRICT IMPROVEMENTS**1. Boundary Street Lighting**

- Phase 2 photometric plans complete.
- Received Phase 2 encroachment permit from SCDOT.
- Lighting agreements approved by Town Council in May.
- Agreement has been executed by both parties.
- Dominion Energy has reported delays in manufacturing and shipping of fixtures and poles.
- **Next Steps**
 - Obtain easements as needed for Phase 2 street lighting.
 - Begin installation of street lighting in December 2020.

2. Historic District Enhancements

- Lawrence and Boundary Street intersection drainage improvements are complete.
- Watershed Management Staff is evaluating survey data collected along Boundary Street to prepare drainage solutions at AME Church.
- Traffic calming guidelines and plan are being negotiated with Engineer.
- ADA ramps and crosswalks are being mapped in Cartegraph by GIS/IT.
- Engineering design and bidding of drainage improvements at the end of Calhoun Street (hammerhead and dock area) are complete

- **Next Steps**

- Implement Stormwater Management features to address drainage issues in the area.
- Continue planning of lighting, signage, crosswalks and ADA improvements.
- Complete drainage improvements at the end of Calhoun Street.

3. Calhoun Street Streetscape

- Conceptual Master Planning complete and reviewed at the July Quarterly Workshop.
- Obtained RFQu submittals for Engineering services on 10/8/2020.
- **Next Steps**
 - Evaluate RFQu submittals to select an Engineering Consultant.
 - Submit engineering consultant contract to Town Council of approval on 12/8/2020.
 - Continue to follow up with Staff and Dominion Energy for planning of underground power.

4. Squire Pope Carriage House Preservation

- Meadors completed Preservation Plan on 9/3/2019.
- Staff commissioned Meadors Architectural to provide A&E drawings on 4/28/2020.
- Biddable Construction Documents are 90% complete.
- **Next Steps**
 - Meadors Architectural to complete Construction Documents.
 - Staff to review and approve completed Construction Documents.
 - Awaiting budget approval for future construction

PARK DEVELOPMENT

1. Oyster Factory Park

- Garvin-Garvey exterior signage has been installed.
- Updated conceptual master plan is underway based on Town Council input provided at the July Quarterly Workshop.
- **Next Steps**
 - Submit ACOE and DHEC Permit application for installation of salvaged dock components from Calhoun Street.
 - Obtain draft Conceptual Master Plan and cost estimate from Witmer, Jones, Keefer.
 - Update Conceptual Master Plan options for playground, services access power service.
 - Begin final design of next phase of improvements per Town Council direction provided at the Workshop.

2. 68 Boundary Street Park Renovations

- Construction and maintenance contracts complete.
- Temporary dedication sign complete and ready for installation. Awaiting date for park opening to finalize the permanent dedication sign.

- **Next Steps**
 - Fabricate permanent Martin Family sign prior to park dedication.
3. **Calhoun Street Dock and Public Riverfront Access Improvements**
- Dock construction is substantially complete.
 - **Next Steps**
 - Complete punch list items and signage by 11/06/20.
 - Opening of Dock will coincide with the completion of Dock Plaza area and Calhoun Street Hammerhead drainage and paving.
4. **Wright Family Park**
- Bulkhead, boardwalk, restroom building, perimeter sidewalks and parking area are complete.
 - Site signage, and furniture are 80% complete. Joggle Board on order with two to three-week delivery
 - Interpretive signage installation is complete.
 - Dominion street lighting fixtures have been delivered and will be installed by 11/1/20.
 - Completed revised drainage improvement design of dock plaza and hammerhead area to improve drainage and eliminate erosion wash outs. Executed Change order with Steadfast, Malphrus Utilities and Hilton Head Landscape.
 - **Next Steps**
 - Complete drainage modifications and street lighting in November.
 - Construction of the revised Calhoun Street plaza by 11/30/2020. Additional benches are on reorder and will be installed upon receipt.
 - Hilton Head Landscape to Install arbor at main entry and plaza pavers.
5. **Oscar Frazier Park**
- Obtained new bids for sidewalk construction on 2/24/20.
 - **Next Steps**
 - Execute construction contract for sidewalk construction.
 - Continue planning of future improvements in FY 2022.
6. **Veterans Memorial**
- Dedication plaque and recent order of engraved pavers installed for Veterans Day.
 - Project is complete.
 - **Next Steps**
 - n/a
7. **New Riverside Barn/Park**
- Received initial Concept Plans and submitted for a review at the 11/10/20 Town Council meeting.
 - Submitted grant application to LWCF for initial phase of the project. Application is under review by PRT.

- Execute contract to provide Archeological Report needed for Grant eligibility.
- **Next Steps**
 - Hart Howerton to complete Conceptual Master Plan and submit to Town Council in December for approval.
 - Complete permitting and construction drawings of Phase 1 development by June 2021.
 - Phase 1 bidding and construction anticipated to begin in FY 2022.
 - Complete archeological report by 12/31/20.

TOWN FACILITIES AND MISCELLANEOUS PLANNING

1. Buckwalter Place Multi-County Commerce Park

- Buckwalter Place Park and Veterans Memorial are complete. Additional work was approved to modify irrigation system conversion from irrigation pond to BJWSA system.
- Executed contracts for Buckwalter Park restroom design with Thomas and Hutton and Pearce Scott Architects.
- Site planning for future development parcel underway with Cranston Engineering.
- **Next Steps**
 - Complete irrigation conversion at Park by 11/15/20.
 - Review progress plans for restroom building at Buckwalter Park.
 - Continue site planning for future development parcel.

2. Town of Bluffton Housing Project

- Surveying and geotechnical services complete for 1095 May River Road and 115 Bluffton Road sites.
- **Next Steps**
 - Preparation of Joint Venture Partners Agreement.
 - Planning and design to begin in FY 2021 as directed by Joint Venture Agreement.

3. Law Enforcement Center Facility Improvements

- Executed contracts for construction with CBG Siteworks Construction.
- Interior paint of Substation complete.
- **Next Steps**
 - Complete Pre-con meeting with contractor, BJWSA and Watershed Management by 11/16/2020.
 - Information Technology department coordinating upgrades to building security systems.

4. Ghost Roads

- Surveying and easement exhibits are complete.
- Pritchard Street Quit Claim Deed exhibits are complete. The Town Attorney is working on finalizing the document with Beaufort County.
- Staff is meeting with property owners to raise awareness of the acquisition efforts and communicate next steps.

- **Next Steps**
 - Continue meeting with property owners and obtaining quit claim deeds.
- 5. **Community Safety Cameras**
 - Cameras have been installed at Bluffton Road Public Parking Lot, Veterans Park and 14 older cameras in the network have been replaced.
 - **Next Steps**
 - Waiting on power at Calhoun Street Dock for camera installs. Waiting on light poles to be installed at Wright Family Park for cameras to be installed at that location.
- 6. **Public Works Facility Improvements**
 - Finalize the plans for expanding of Public Works yard.
 - Install new plumbing/ electric for the washer and dryer.
 - **Next Steps**
 - Begin permitting and bid for the expansion of the yard FY21.
 - Bid the installation of the plumbing/ electric FY21.
- 7. **Rotary Community Center Facility Improvements**
 - Replace the hardwood floor in the main area.
 - **Next Steps**
 - Request bids for the replacement of the new floor.
- 8. **Watershed Management Facility Improvements**
 - Remove the carpet and install new flooring in the rear office space.
 - **Next Steps**
 - Request quotes on completing the new flooring in the office.

DIVISION/STAFF UPDATES

Project Management

Thirty-two (32) CIP projects are currently in progress. Don Ryan Center, Veteran Memorial, Buckwalter Park and Phase 4 sidewalks have recently been completed. CIP projects including Wright Family Park, Calhoun Street Dock, BIS Phase 5E sewer, Pritchard Street sewer and BIS Phase 5 sidewalks are currently under construction and nearing completion. The LEC Expansion, BIS Phase 5A-D Sewer, and the Boundary Street Lighting projects are expected to start construction in the fall of 2020. The remaining CIP projects are in the design phase and are ongoing.

Watershed Management

1. **Southern Lowcountry Regional Board (SoLoCo)**
 - a. **Regional Southern Lowcountry Post Construction Stormwater Ordinance and Design Manual**

- Via concurrence of the Mayor and direction by the Town Manager, staff has participated in the SoLoCo Technical Working Group to develop a regional stormwater model ordinance and design manual and investigate the viability of a regional stormwater authority.
- Final documents have been delivered and staff is conducting internal review for consistency with the Unified Development Ordinance prior to Legal Review.
- **Next Steps**
 - 11/10/20 Town Council – 1st reading
 - 12/8/20 Town Council – Public Hearing and 2nd reading

b. Sea Level Rise Task Force

- Following Beaufort County's presentation and request for regional participation at the 10/22/19 SoLoCo meeting, staff is attending the Sea Level Rise Task Force meetings to discuss a possible No Fill Ordinance and county-wide sea level rise adaptation strategies.
- Meetings continue to discuss projected impacts of sea level rise on the region with a focus on ways that local government can respond through policies, ordinances and projects to mitigate the potential impacts of sea level rise.
- Internal staff reviews of draft documents complete and feedback provided to Task Force.
- **Next Steps**
 - Beaufort County to present and request a recommendation from SoLoCo for regional partners to adopt.

2. Joint Councils Meeting for Watershed Management Initiatives

- BJWSA developed their CIP list for FY 2020 sewer projects which does not include any projects in the County's jurisdiction in the May River Headwaters without cost-sharing.
- Following the Joint Councils Meeting with BJWSA, held on 2/25/20, staff from Beaufort County and Town of Bluffton met to discuss sewer extension scope and strategy on 2/27/20.
- Staff from the Town, County, and BJWSA met via Zoom 3/27/20 to confirm project scope, cost, and potential project manager. the last project cost estimate to extend, connect, and abandon septic in the Stoney Creek project area is \$4.7 million (B. Chemsak email 7/22/19) but they anticipate those numbers increasing to \$5.5 million. The proposal is 1/3 cost-share, so the Town's portion would be approximately \$1.83 million. Beaufort County has not formally agreed or committed any funding.
- Neither BJWSA nor Beaufort County have committed funds in FY 2021 to begin sewer extension.
- Town Manager, Director of Engineering and staff met with BJWSA General Manager, Engineer and staff on 6/5/20 to discuss how to move the project forward.
- Staff to work with BJWSA staff to prepare Project Information Sheet to include scope, cost, cost-share, exhibits, and timeline for project implementation.

- **Next Steps**
 - Staff is drafting a Memorandum of Agreement with Beaufort County and BJWSA to agree on project scope and cost-sharing.
- 3. **SC Department of Health and Environmental Control May River Shellfish Harvesting Monitoring Data Year-to-Date and May River Shellfish Harvesting Status Exhibit – Attachments 1 and 1a**
- 4. **May River Watershed Action Plan Implementation Summary - Attachment 2**
- 5. **MS4 Minimum Control Measure (MCM) - #1 Public Education and Outreach, and MS4 MCM - #2 Public Participation and Involvement**
 - Staff participated in the Beaufort County Stormwater Utility Board meeting on 10/14/20.
 - The May River Watershed Action Plan Advisory Committee was canceled for 10/22/20. **Attachment 3**
- 6. **MS4 MCM – #3 Illicit Discharge Detection and Elimination**
 - Stormwater Infrastructure Inventory Map - **Attachment 4a**
 - *E. coli* Concentrations Trend Map - **Attachment 4b**
 - Monthly, Microbial Source Tracking (MST) Maps - **Attachments 4c and 4d**
 - Town staff coordinates with the SC Department of Health and Environmental Control (SCDHEC) to pull MST samples concurrently with the state’s routine shellfish harvesting water quality sampling at stations 19-19, 19-19A, 19-19B, 19-19C, 19-24, and 19-16. SCDHEC conducted sampling on 10/22/20. Staff will notify Council and Senior Staff of any pertinent findings from this sampling event via email.
 - Illicit Discharge Investigations – **Attachment 4e**
- 7. **MS4 MCM – #4 Construction Site Stormwater Runoff Control – Attachment 5**
- 8. **MS4 MCM – #5 Stormwater Plan Review and Related Activity – Attachment 6**
- 9. **MS4 MCM – #6 Good Housekeeping (Staff Training/Education)**
 - Staff Underwent a MS4 Program audit from SCDHEC on 10/27/20.
- 10. **Citizen Drainage, Maintenance, and Inspections Concerns Map – Attachment 7**
- 11. **Citizen Request for Watershed Management Services & Activities – Attachment 8**

Public Works

1. **MS4 MCM – #6 Good Housekeeping (Ditch, Drainage and Roadside Maintenance)**
 - Performed weekly street sweeping on Calhoun Street, Highway 46, Bruin Road, May River Road, Pin Oak Street, and curbs and medians on Simmonsville and Buck Island Roads.
 - Performed ditch inspections
 - Arrow ditch (2,569 LF)
 - Red Cedar ditch (966 LF)
 - Buck Island roadside ditch (15,926 LF)
 - Simmonsville roadside ditch (13,792 LF)
 - Ongoing roadside mowing, litter clean-up and maintenance of Masters' Way, McCracken Circle, Hampton Parkway, Buck Island and Simmonsville Roads, Goethe Road, Shults Road, Jason and Able Streets, Whispering Pine Road, May River Road and Eagles Field.
 - Ongoing mowing of the New River side trail and field at New River barn.
 - Beautification Program –Landscape Maintenance - ongoing routine.
2. **Facilities**
 - Facilities and Parks Maintenance - ongoing routine.
3. **Public Works Activities Report - Attachment 10**

Attachments

1. SCDHEC Shellfish Harvesting Monitoring Data Year-to-Date
 - a. SCDHEC May River Shellfish Harvesting Status Exhibit
2. May River Watershed Action Plan Implementation Summary*
3. MS4 Minimum Control Measures #1 and #2 – May River Watershed Action Plan Advisory Committee Cancellation Notice
4. MS4 Minimum Control Measure #3 – Illicit Discharge Detection and Elimination
 - a. Stormwater Infrastructure Inventory Map
 - b. *E. coli* Concentrations Trend Map
 - c. Microbial Source Tracking Trend Map – Human Source
 - d. Microbial Source Tracking Map – All Sources
 - e. Illicit Discharge Investigations
5. MS4 Minimum Control Measure #4 – Construction Site Stormwater Runoff Control
6. MS4 Minimum Control Measure #5 – Stormwater Plan Review and Related Activity
7. Citizen Drainage, Maintenance and Inspections Concerns Map
8. Citizen Request for Watershed Management Services and Activities Map
9. Beautification Committee Meeting Cancellation Notice
10. Public Works Activities Report

* Attachment noted above includes the latest updates in bold and italic font.

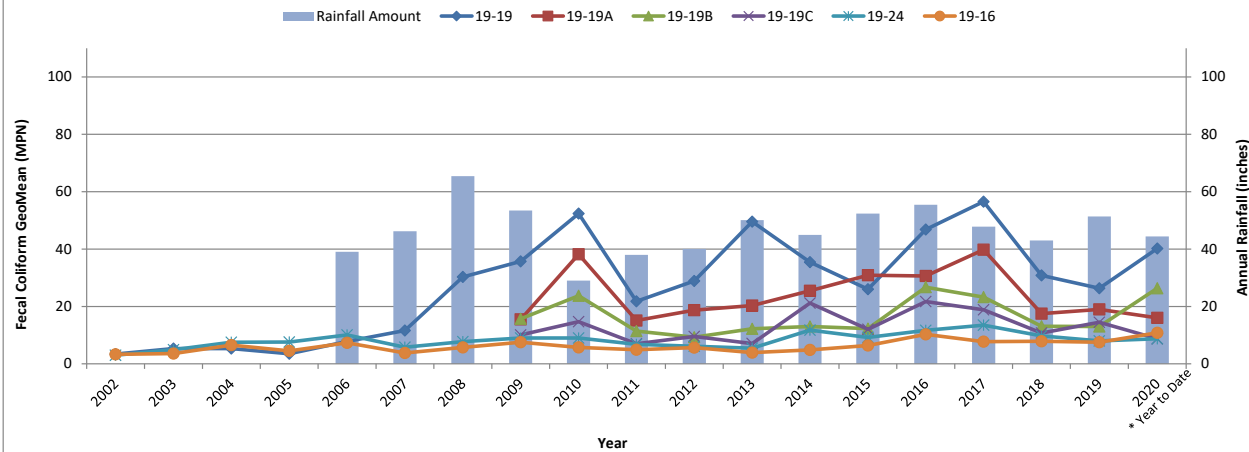
	19-19				19-19A				19-19B				19-19C				19-24				19-16			
	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020	2017	2018	2019	2020
	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)
December	1600.0	79.0	170.0		920.0	49.0	33.0		540.0	33.0	140.0		240.0	46.0	33.0		220.0	23.0	13.0		49.0	21.0	110.0	
November	49.0	49.0	17.0		33.0	13.0	6.8		7.8	23.0	7.8		31.0	17.0	11.0		2.0	17.0	4.5		2.0	7.8	2.0	
October	22.0	79.0	7.8	49.0	49.0	23.0	4.5	79.0	33.0	7.8	2.0	31.0	23.0	7.8	4.5	21.0	6.8	7.8	1.8	33.0	2.0	2.0	2.0	79.0
September	17.0	49.0	79.0	110.0	7.8	23.0	33.0	49.0	11.0	13.0	6.8	49.0	4.5	17.0	17.0	33.0	2.0	17.0	4.5	33.0	1.8	17.0	1.8	33.0
August	79.0	70.0	70.0	49.0	70.0	23.0	49.0	49.0	21.0	13.0	33.0	23.0	33.0	4.5	22.0	23.0	33.0	7.8	7.8	17.0	33.0	17.0	17.0	22.0
July	350.0	23.0	4.5	33.0	110.0	33.0	13.0	13.0	130.0	11.0	7.8	23.0	49.0	7.8	17.0	7.8	49.0	13.0	22.0	7.8	22.0	4.5	13.0	17.0
June	23.0	11.0	33.0	NS	49.0	23.0	49.0	NS	13.0	23.0	49.0	NS	17.0	7.8	46.0	NS	7.8	4.5	13.0	NS	4.5	1.8	4.5	NS
May	17.0	17.0	7.8	70.0	23.0	33.0	9.2	49.0	7.8	17.0	7.8	23.0	2.0	13.0	2.0	22.0	23.0	23.0	6.8	6.8	4.5	13.0	4.5	4.5
April	7.8	33.0	23.0	33.0	23.0	13.0	13.0	33.0	4.5	17.0	7.8	13.0	7.8	17.0	6.8	6.8	13.0	49.0	23.0	13.0	4.5	17.0	6.8	13.0
March	350.0	22.0	23.0	170.0	11.0	21.0	23.0	49.0	33.0	4.5	6.8	130.0	13.0	11.0	13.0	49.0	13.0	7.8	7.8	70.0	33.0	9.3	4.5	33.0
February	13.0	17.0	64.0	17.0	7.8	7.8	33.0	7.8	13.0	17.0	23.0	21.0	9.3	17.0	31.0	4.5	4.5	2.0	6.8	4.5	1.8	7.8	13.0	6.8
January	95.0	13.0	23.0	95.0	79.0	2.0	23.0	33.0	31.0	4.5	13.0	33.0	49.0	2.0	33.0	17.0	27.0	1.8	7.8	17.0	33.0	4.5	23.0	17.0
Additional Samples																								
Additional Samples																								
Average Annual GeoMean	56.5	30.8	26.4	56.1	39.8	17.5	19.0	33.3	23.3	13.1	13.0	30.3	18.8	10.7	14.5	16.0	13.5	9.8	8.0	16.0	7.7	7.9	7.5	18.2
** Truncated GeoMetric Mean	44.0	42.0	35.0	24.0	36.0	29.0	23.0	21.0	20.0	20.0	16.0	16.0	16.0	15.0	14.0	13.0	10.0	10.0	10.0	10.0	7.0	8.0	7.0	9.0
** Truncated 90th Percentile	203.0	176.0	168.0	107.0	133.0	115.0	89.0	59.0	83.0	71.0	63.0	52.0	57.0	56.0	52.0	38.0	37.0	44.0	38.0	32.0	29.0	30.0	32.0	36.0

NS = No Sample

AS = Additional Samples

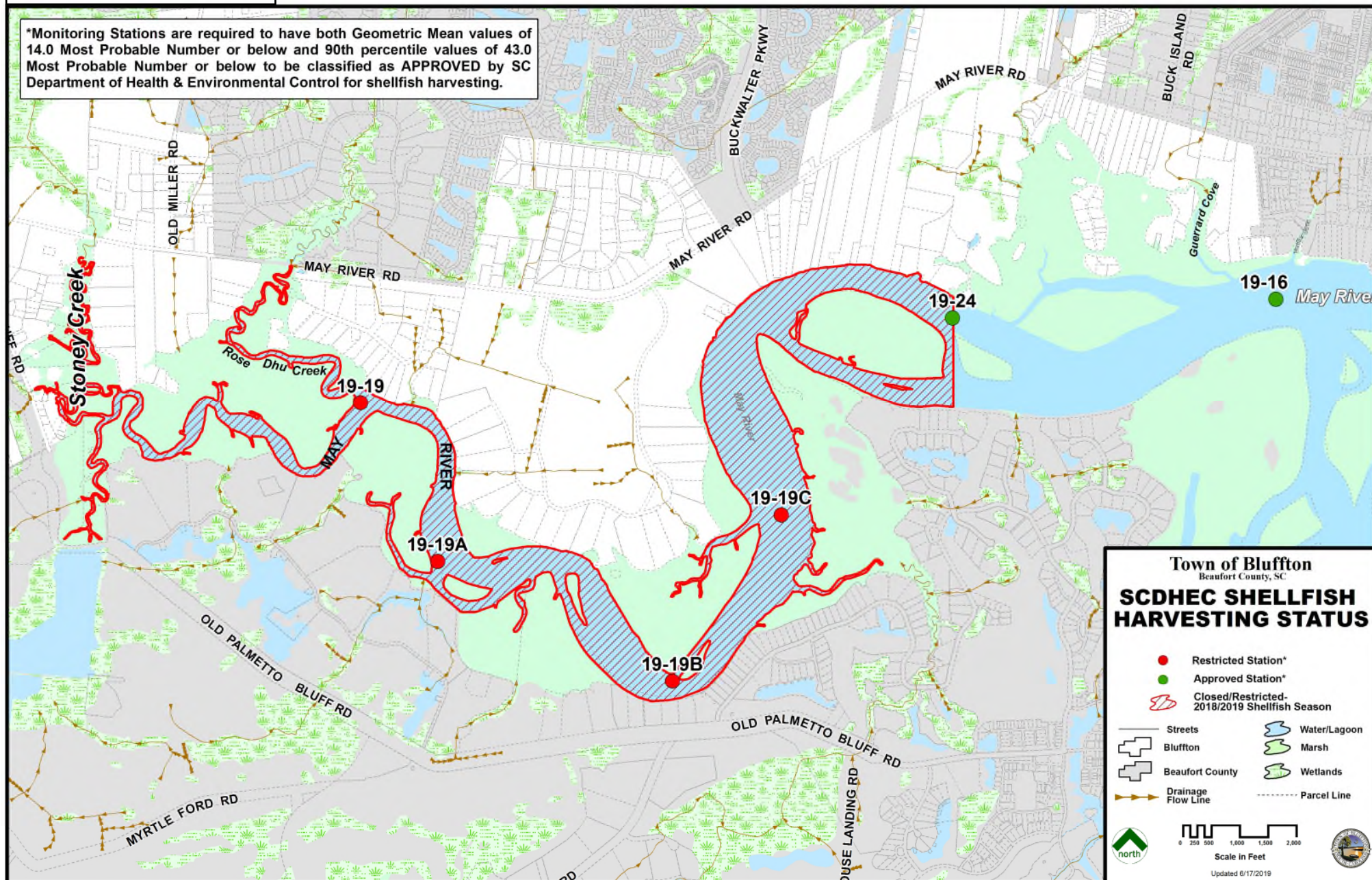
** Town staff calculations utilizing DHEC statistics

SC DHEC May River Headwaters Shellfish Stations Average Annual Fecal Coliform



May River Headwaters

*Monitoring Stations are required to have both Geometric Mean values of 14.0 Most Probable Number or below and 90th percentile values of 43.0 Most Probable Number or below to be classified as APPROVED by SC Department of Health & Environmental Control for shellfish harvesting.



ACTIVITY - FINANCIAL	STATUS
Funding Opportunities	Council unanimously adopted \$115 SWU Fee and NPDES-related Fees on 6/9/20. Staff received notification that SCDHEC and EPA have approved an award of \$179,700 for drainage and water quality improvements as part of the Bridge Street Streetscape project. <i>Contract anticipated by mid-November.</i>
ACTIVITY - POLICIES	STATUS
Sewer Connection & Extension Policy	<i>Completed 2017.</i>
Septic to Sewer Conversion Program	<i>Completed 2018.</i>
Sewer Connection Ordinance and Ordinance Amendment	<i>Completed 2015 and 2018, respectively.</i>
Southern Lowcountry Regional Stormwater Ordinance and Design Manual	<i>Current project updates are included in Engineering Consent Agenda under "Southern Lowcountry Regional Board (SoLoCo)."</i>
ACTIVITY - PROJECTS	STATUS
Sanitary Sewer Extension	<i>Completed Buck Island/Simmons Road (BIS) Phases I, II, III, IV; Toy Fields; and Jason/Able. Six project phases of Historic District sewer extension are proposed in the 5-year Capital Improvement Program. Current project updates are included in Engineering Consent Agenda under "Sewer & Water."</i>
May River 319 Grant Phase 1 - New Riverside Pond (Grant award of \$483,500 in 2009)	<i>Completed 2013.</i>
May River 319 Grant Phase 2 - Pine Ridge (Grant award of \$290,000 in 2011)	<i>Completed 2016.</i>
May River 319 Grant Phase 3 - Town Hall Parking Retrofit (Grant award of \$231,350 in 2016)	<i>Completed 2019.</i>
May River 319 Grant Phase 4 - Sanitary Sewer Connections (Grant award of \$365,558.36 in 2019)	Grant to construct 49 sewer lateral connections in Poseys Court, Little Aaron and Historic District Phases 1 and 2. <i>Current project updates are included in Engineering Consent Agenda under "Sewer & Water."</i>
Stoney Creek Wetlands Restoration: Preliminary Design Phase	Project on hold following Council direction on 5/31/17.
May River Watershed Water Quality Model	Contract awarded to McCormick Taylor with final deliverables anticipated 10/20.
ACTIVITY - PROGRAMS	STATUS
Public Outreach/Participation/Involvement (MS4 Minimum Control Measures #1 & 2)	Outreach and involvement efforts continue through county-wide partnership with Carolina Clear as Lowcountry Stormwater Partners - Neighbors for Clean Water, through local cleanups, civic group presentations, and the May River Watershed Action Plan Advisory Committee. <i>Current updates are included in Engineering Consent Agenda and Attachment 3.</i>
Infrastructure Mapping/GIS (MS4 Minimum Control Measure #3)	Data points continue to be collected with new development to meet MS4 requirements & populate water quality model. <i>Current updates are included in Engineering Consent Agenda Attachment 4a.</i>

ACTIVITY - PROGRAMS continued	STATUS continued
Water Quality Monitoring Program (MS4 Minimum Control Measure #3)	1. SCDHEC Shellfish monitoring results and map 2. <i>E. coli</i> bacteria "hot spot" concentrations 3. Microbial Source Tracking of bacteria 4. Illicit Discharge investigation and monitoring 5. BMP efficacy monitoring 6. MS4 monitoring <i>Current updates are included in Engineering Consent Agenda Attachments 1, 1a, 4b - 4d.</i>
Illicit Discharge Detection & Elimination (IDDE) Program (MS4 Minimum Control Measure #3)	Response to reported and observed non-stormwater discharges to the stormwater drainage system. <i>Current updates are included in Engineering Consent Agenda Attachment 4e.</i>
Construction Site Stormwater Runoff Control Program (MS4 Minimum Control Measure #4)	Sediment and erosion control inspections with escalating enforcement response. <i>Current updates are included in Engineering Consent Agenda Attachment 5.</i>
Stormwater Plan Review & Related Activity Program (MS4 Minimum Control Measure #5)	SCDHEC delegated plan review-related activities. <i>Current updates are included in Engineering Consent Agenda Attachment 6.</i>
Ditch Inspection/Maintenance Program (MS4 Minimum Control Measure #6)	Continued coordination with SCDOT, Beaufort County and Town Public Works to inspect and maintain ditches within the Town's jurisdiction. <i>Current updates are included in Engineering Consent Agenda Attachment 7.</i>
Neighborhood Assistance Program - Septic System Maintenance Program	On-going assistance offered to Town residents regardless of financial status through Neighborhood Assistance Program (NAP). <i>Current updates are provided in Growth Management Consent Agenda.</i>



PUBLIC NOTICE

The May River Watershed Action Plan Advisory Committee
(WAPAC) meeting scheduled for

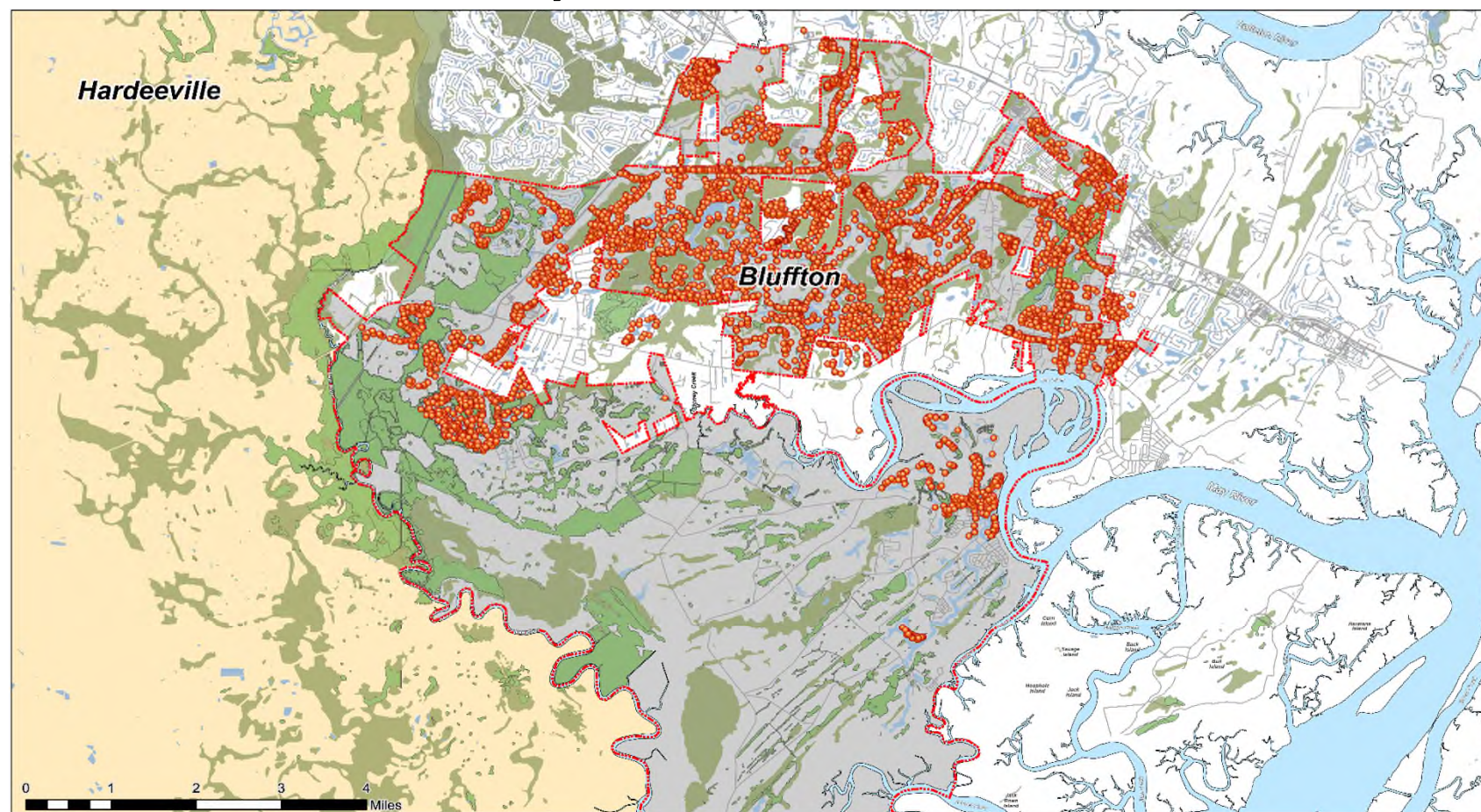
Thursday, October 22, 2020 at 9:00 A.M.

has been CANCELED due to lack of quorum.

The next meeting is scheduled for
Thursday, December 3, 2020

If you have questions, please contact
the Watershed Management Division
at: 843-706-7811

MS4 Minimum Control Measure #3 – IDDE (Illicit Discharge Detection & Elimination): Stormwater Infrastructure Inventory



Town of Bluffton
Beaufort County, SC

STORMWATER INFRASTRUCTURE

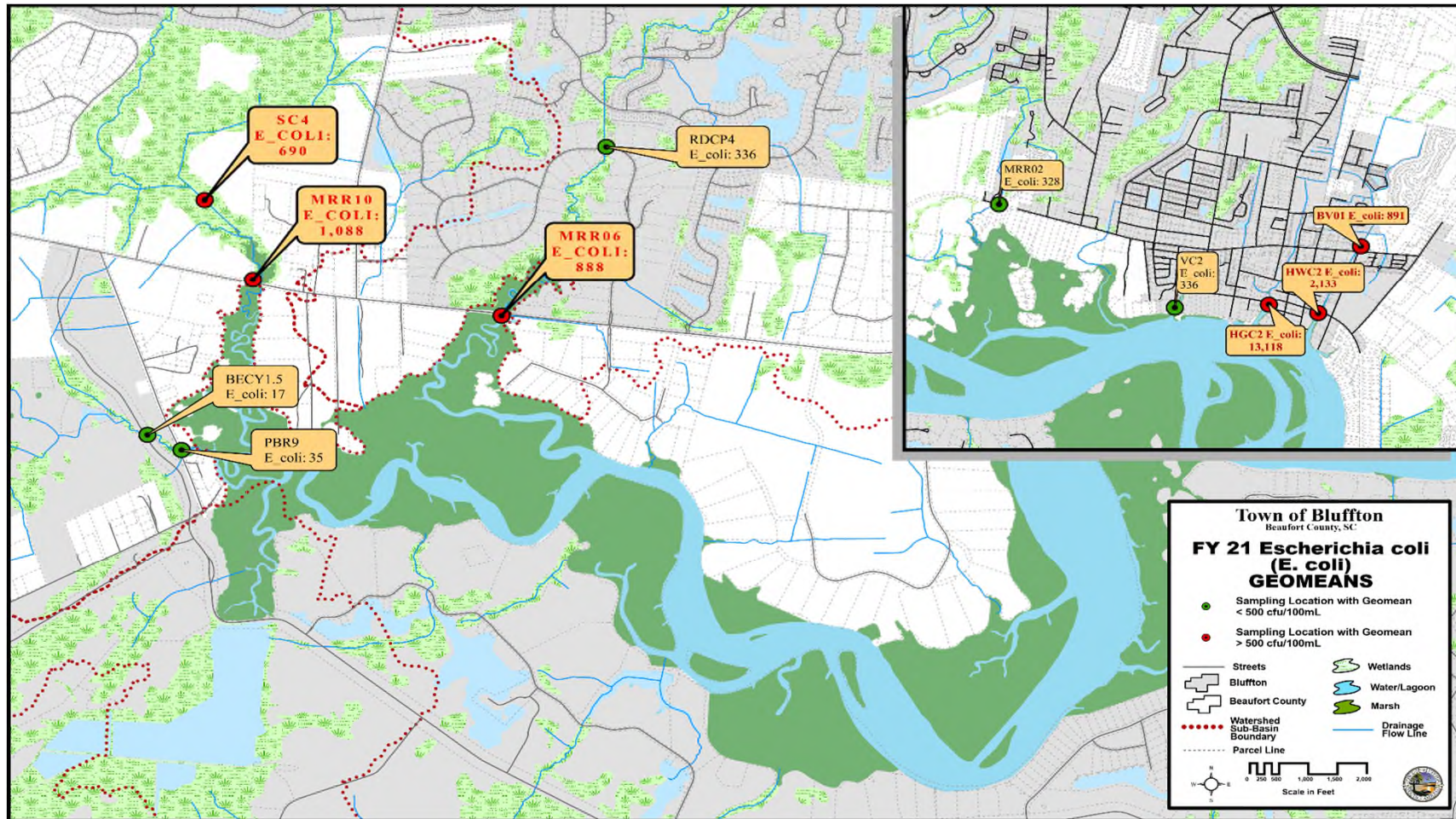
The information contained herein is for informational purposes only and does not constitute a warranty or representation of any kind. The information is provided as is, without any guarantees of accuracy, completeness, or reliability. The information is subject to change without notice.



Updated Date: 10/19/2020

Stormwater Infrastructure Inventory Collection Status	
FY 2021 YTD Collection Totals	608
FY 2020 Collection Totals	4,878
FY 2019 Collection Totals	2,925
FY 2018 Collection Totals	3,777

MS4 Minimum Control Measure #3 – IDDE: *E. coli* Concentrations Trend Map



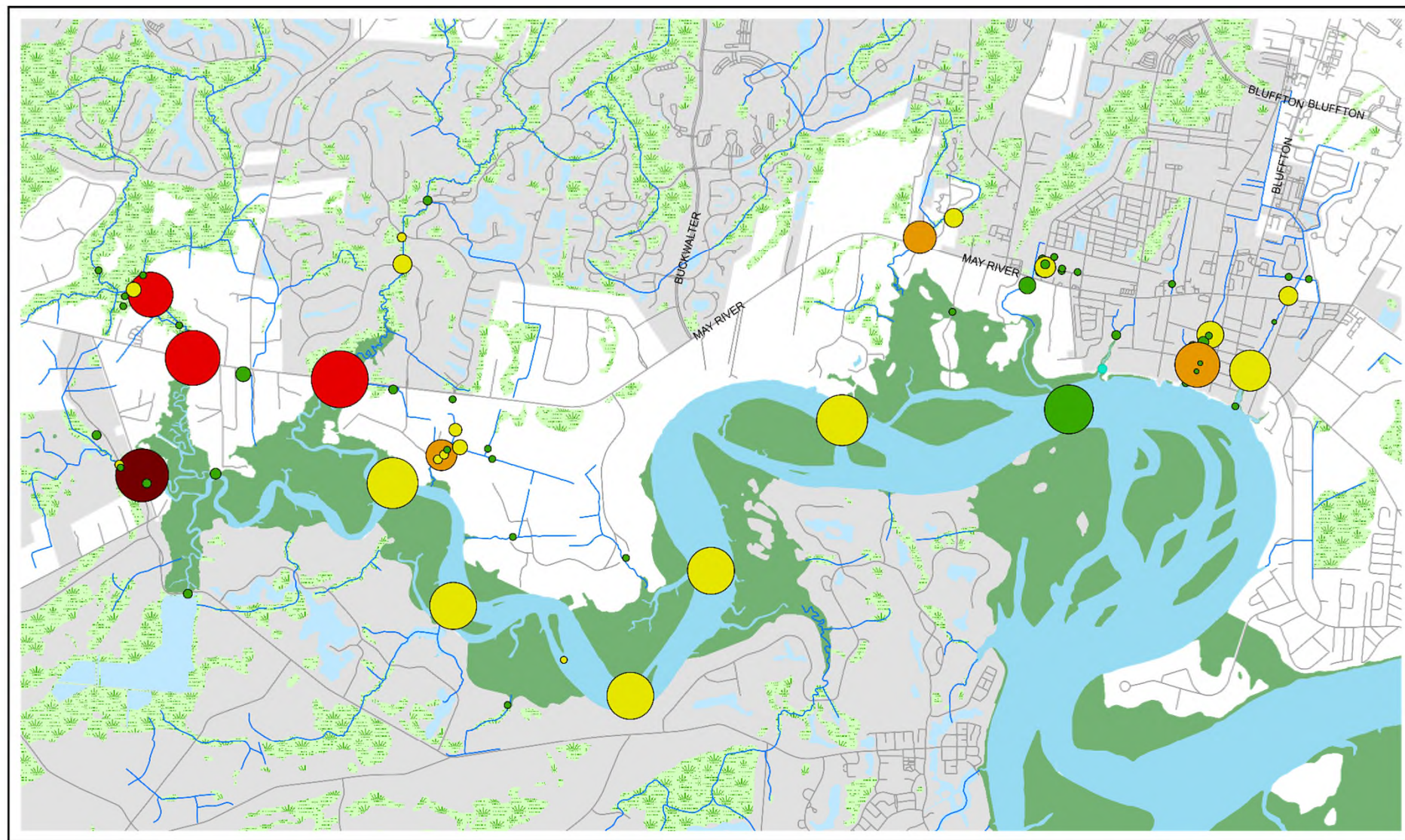
E coliform geomeans updated as of: 9/22/2020

	USCB Water Quality Samples	Microbial Source Tracking Samples	MS4 Quarterly Samples Collected
FY 2021 YTD Totals	95	38	54
FY 2020 Totals	223	115	123
FY 2019 Totals	280	193	264
FY 2018 Totals	216	217	224

10/22/2020

- MST program began November 2016; MS4 Quarterly Sampling initiated 2/2017
- Totals include only samples submitted for laboratory analysis, and not *in situ* parameters.

MS4 Minimum Control Measure #3 – IDDE: Microbial Source Tracking (MST) Trend Map – Human Source



 Town Jurisdiction
 Beaufort County
 Drainage Flow Lines

Positive Hits

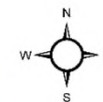
● 0 ● 1-3 ● 3-6 ● 6-9 ● >10

Times Sampled

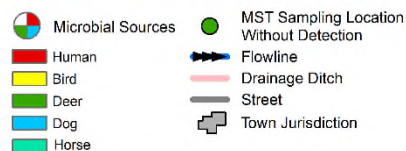
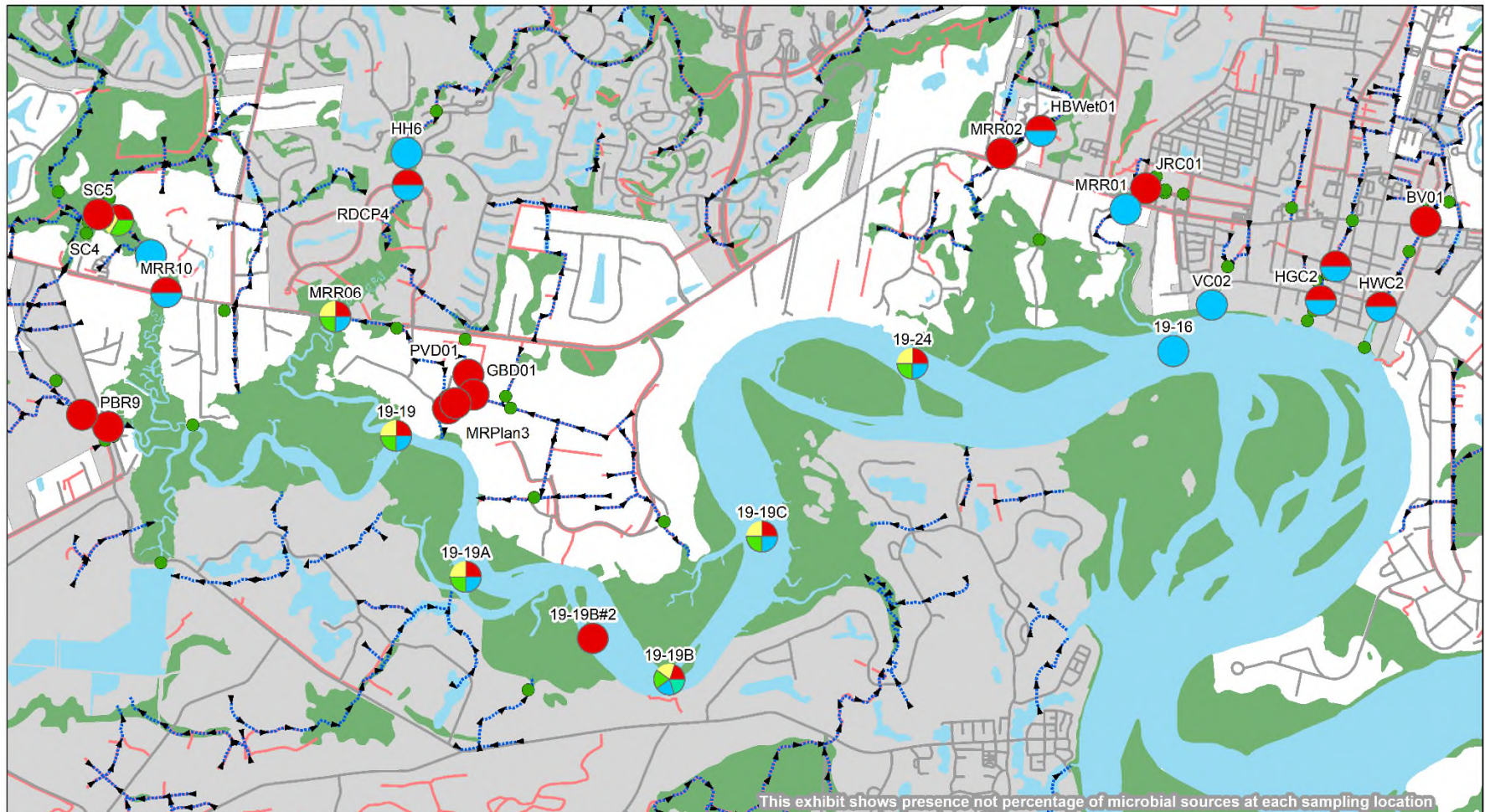
● 1-3 ● 4-6 ● 7-10 ● >10

Size of dot correlates to # of times the site has been sampled.

Updated Date: 10/19/2020



MS4 Minimum Control Measure #3 – IDDE: Microbial Source Tracking (MST) Map – All Sources

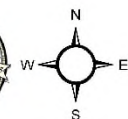


Microbial Sources Detected Within the May River 2017 - 2020

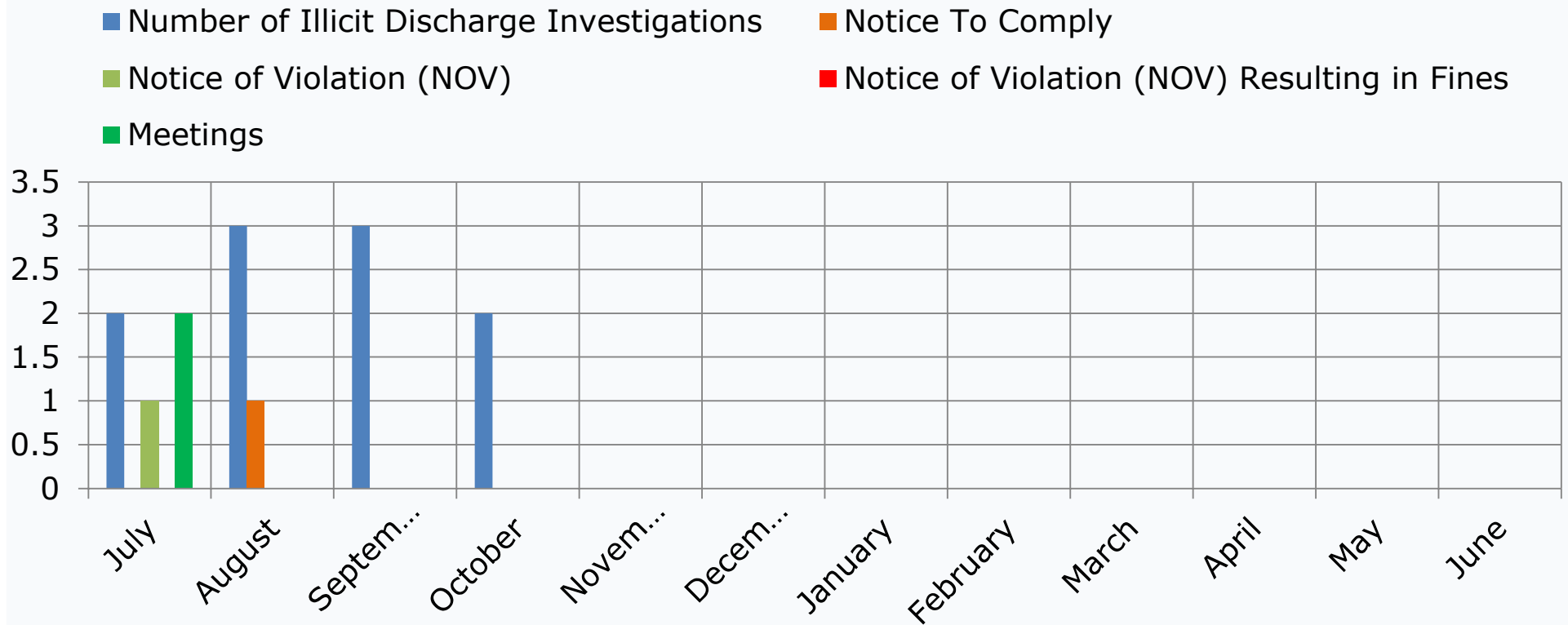
Town of Bluffton
Beaufort County, SC

Date: 10/19/2020

DISCLAIMER:
This map was created by the Department of Planning and Development, Town of Bluffton, for informational purposes only. It is not intended to be used as a legal document. The Town of Bluffton is not responsible for any errors or omissions in this map. The Town of Bluffton is not responsible for any damages or losses resulting from the use of this map. The Town of Bluffton is not responsible for any claims or liabilities arising from the use of this map. The Town of Bluffton is not responsible for any claims or liabilities arising from the use of this map.

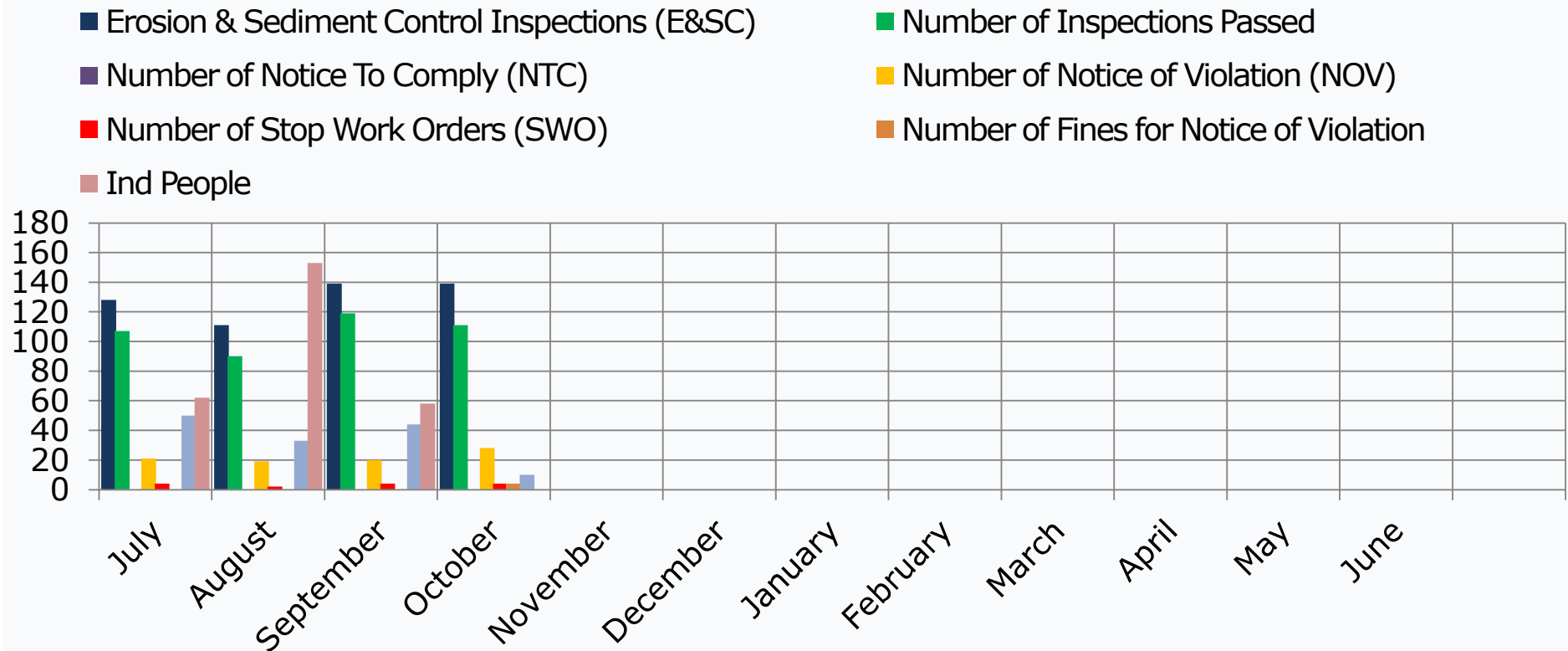


MS4 Minimum Control Measure #3 – IDDE: Illicit Discharge Investigations



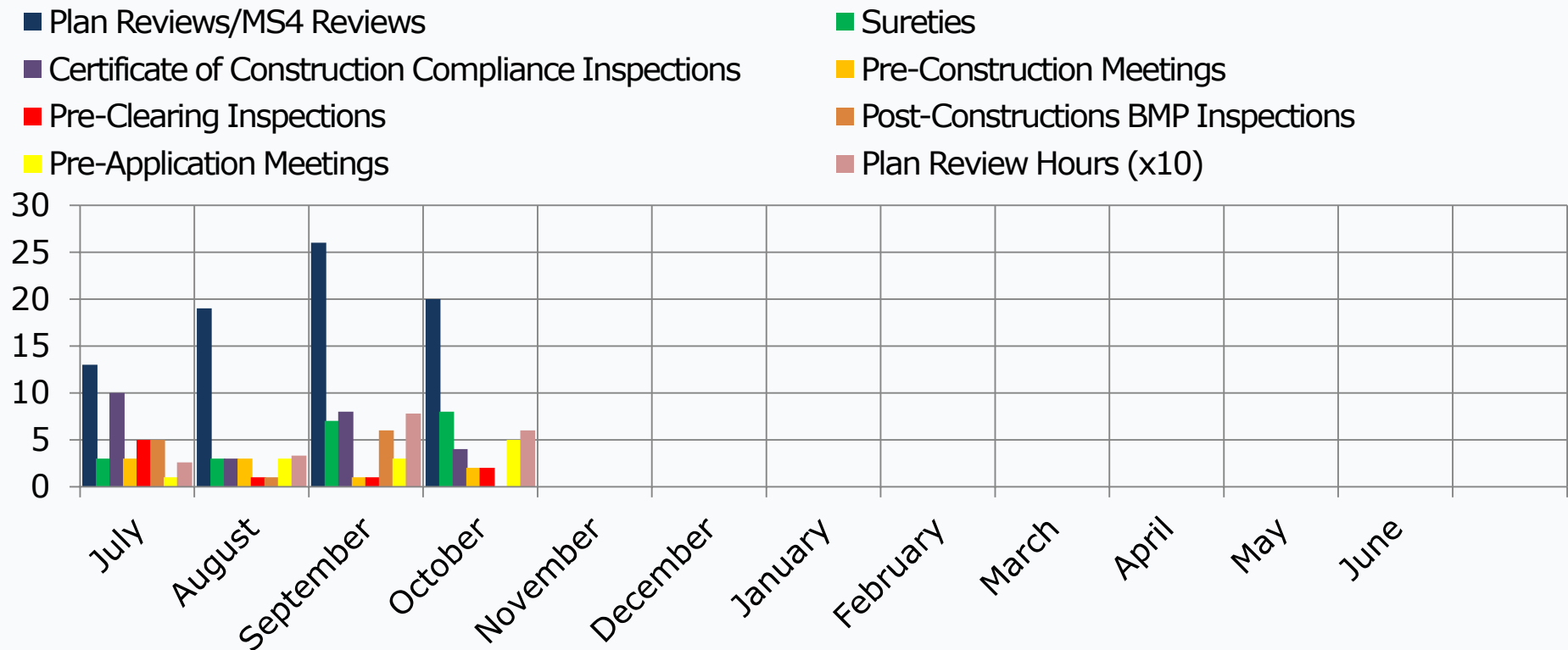
	Number of Illicit Discharge Investigations	Number of Notices To Comply Issued	Number of NOV Issued	Number of NOV Enforcement Actions	Number of Meetings
FY 2021 YTD Totals	10	N/A	1	0	2
FY 2020 Totals	45	10	8	6	49
FY 2019 Totals	38	20	3	1	61
FY 2018 Totals	48	20	4	2	60

MS4 Minimum Control Measure #4 - Construction Site Stormwater Runoff Control



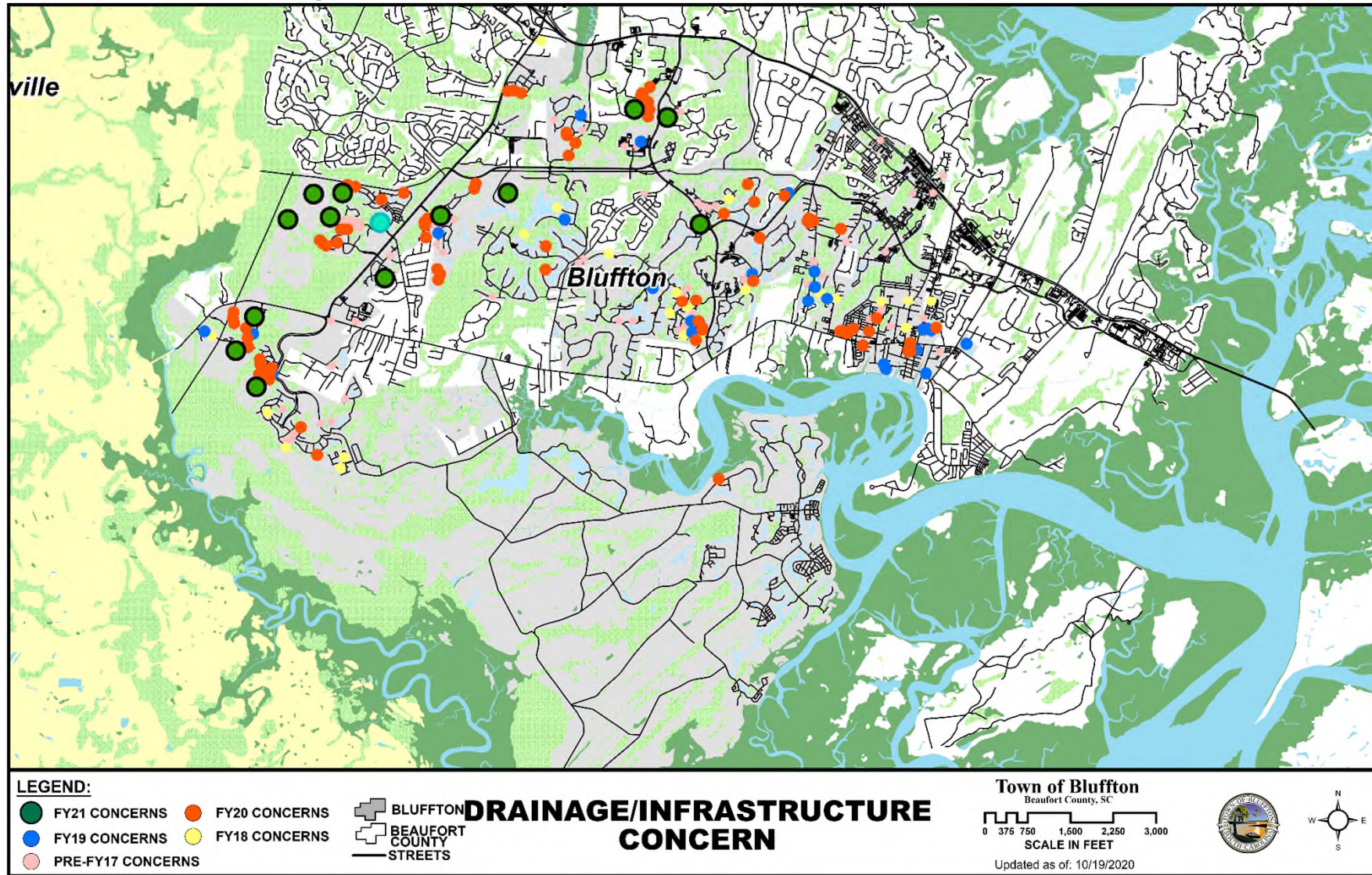
	Number of Sediment & Erosion Control Inspections	Number of Inspections Passed	Number of NTC Issued	Number of NOVs Issued	Number of SWO Issued	Number of NOV Enforcement Actions	Number of E&SC Meetings
FY 2021 YTD Totals	517	427	N/A	88	14	4	137
FY 2020 Totals	1,517	1187	128	185	16	9	496
FY 2019 Totals	1,688	1,384	254	72	N/A	7	403

MS4 Minimum Control Measure #5 Stormwater Plan Review & Related Activity



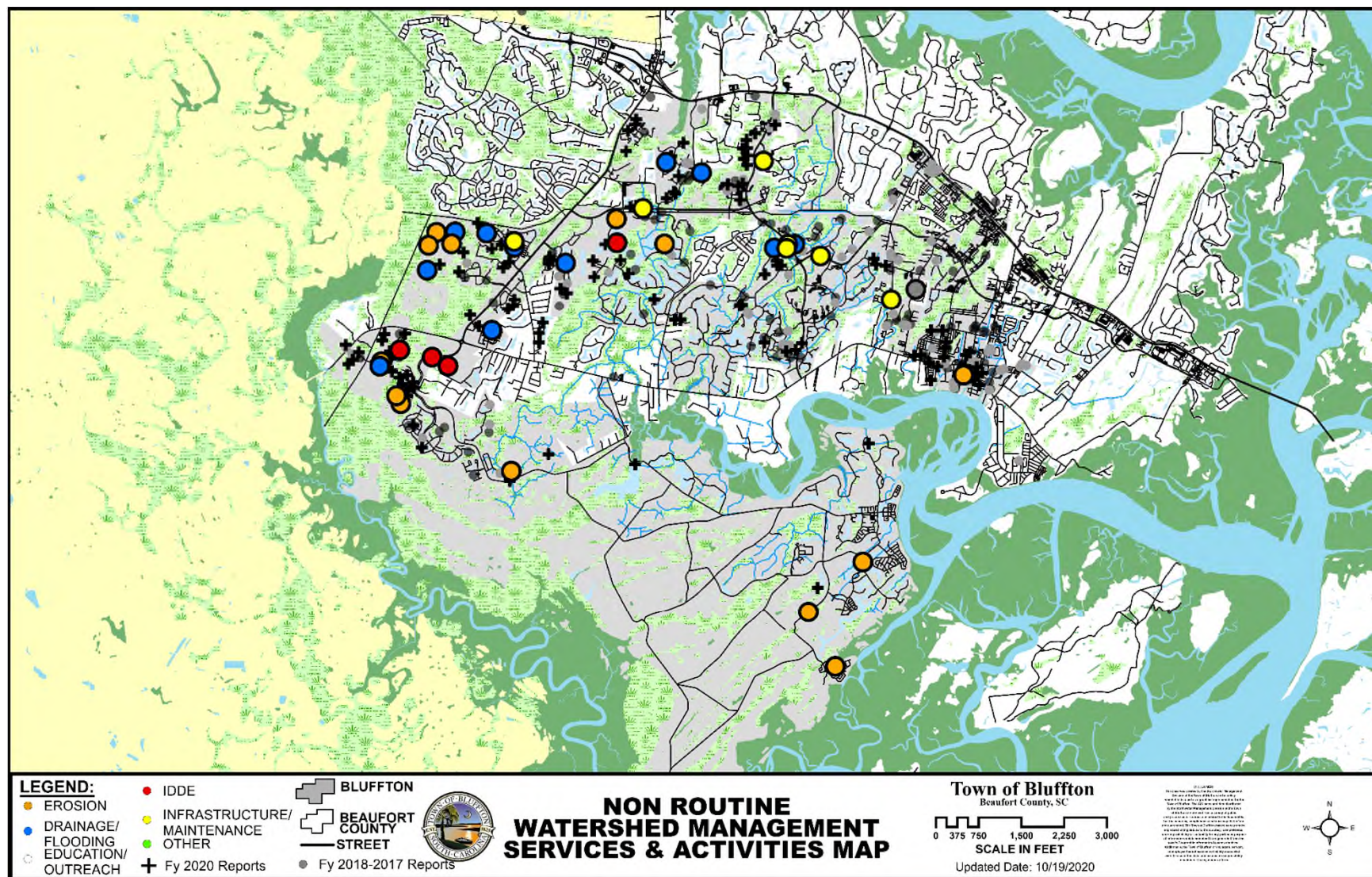
	Plan Reviews MS4 Reviews	Sureties	Certificate of Construction Compliance Inspections	Pre- Construction Meetings	Pre-Clearing Inspections	Post Construction BMP Inspections	Pre-Application Meetings	Total Plan Review Hours
FY 2021 YTD Totals	78	21	25	9	9	12	12	197 Hrs.
FY 2020 Totals	176	53	46	36	17	8	36	789 Hrs.
FY 2019 Totals	208	52	53	47	37	27	63	1,040 Hrs.

Citizen Drainage, Maintenance and Inspections Concerns Map



	Number of Drainage Concerns Investigated	Number of Meetings
FY 2021 YTD Totals	17	11
FY 2020 Totals	68	76
FY 2019 Totals	54	59

Citizen Request for Watershed Mngt. Services & Activities Map



	Number of Citizen Requests Investigated	Number of Meetings
FY 2021 YTD Totals	23	7
FY 2020 Totals	99	102
FY 2019 Totals	75	79



PUBLIC NOTICE

The Beautification Committee (BC)
Meeting scheduled for

Thursday, October 15, 2020,
at 10:00 a.m.

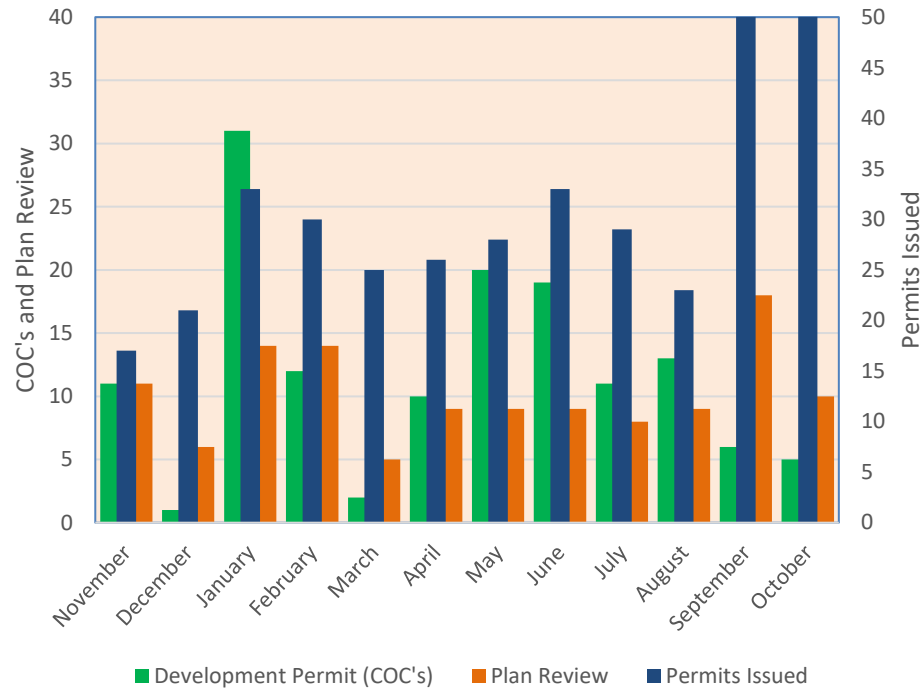
Has been CANCELED
due to lack of agenda items

The next meeting is scheduled for
Thursday, January 21, 2021

If you have questions, please contact
Engineering at: 843-706-4599

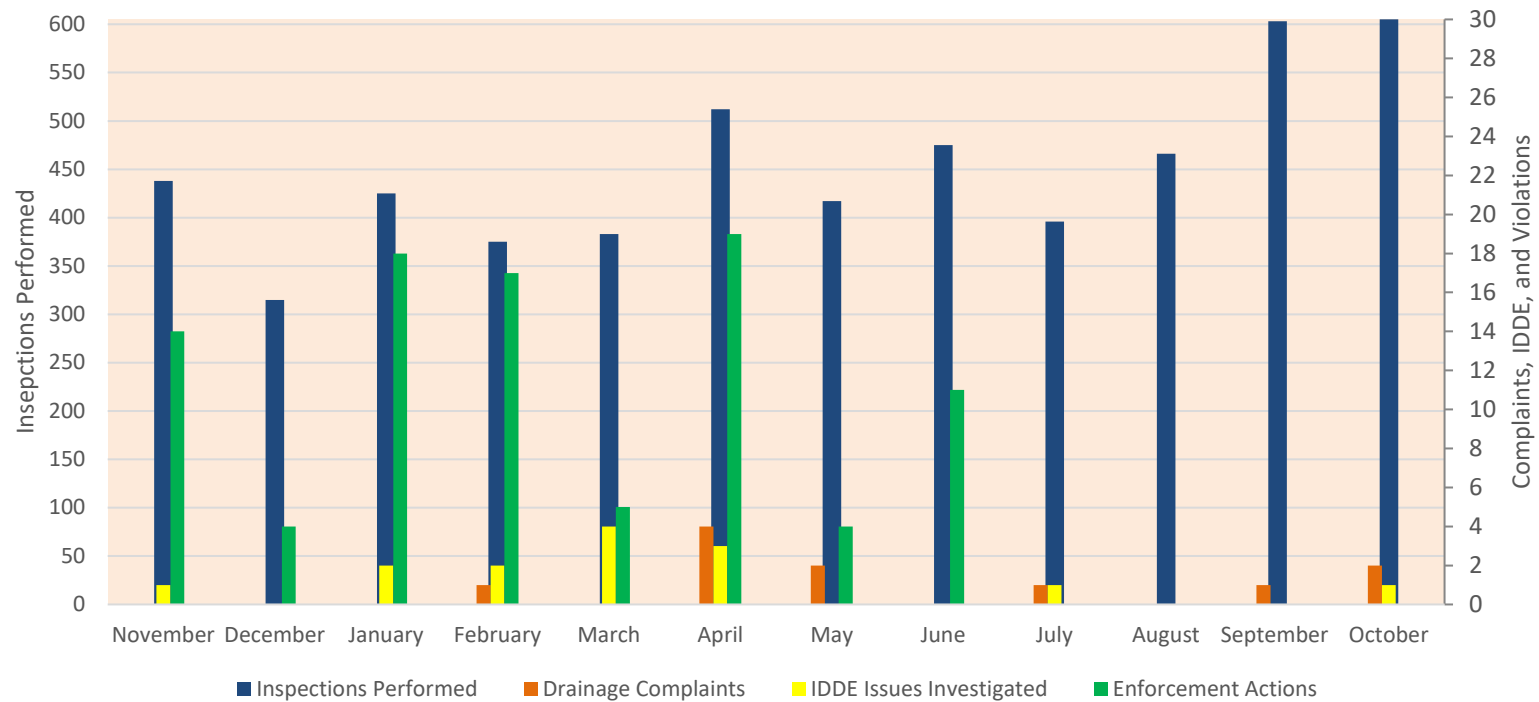
Week	# of Activities	Labor Cost	Equipment Cost	Other Cost	Total
FY21WK1	61	\$4,397.00	\$3,188.00		\$7,584.00
FY21WK2	56	\$5,474.00	\$3,574.00	\$121.00	\$9,168.00
FY21WK3	48	\$4,880.00	\$3,502.00		\$8,382.00
FY21WK4	62	\$5,828.00	\$3,970.00		\$9,799.00
FY21WK5	45	\$4,706.00	\$3,575.00		\$8,281.00
FY21WK6	54	\$5,645.00	\$3,114.00		\$9,126.00
FY21WK7	60	\$4,855.00	\$4,232.00		\$9,087.00
FY21WK8	67	\$5,118.00	\$4,221.00		\$9,339.00
FY21WK9	50	\$5,784.00	\$3,923.00		\$9,707.00
FY21WK10	54	\$6,131.00	\$4,248.00	\$21.00	\$10,400.00
FY21WK11	41	\$4,677.00	\$2,740.00		\$7,417.00
FY21WK12	70	\$5,580.00	\$2,587.00	\$326.00	\$8,494.00
FY21WK13	94	\$5,864.00	\$5,084.00		\$10,949.00
FY21WK14	49	\$6,171.00	\$4,261.00		\$10,431.00
FY21WK15	53	\$5,870.00	\$4,059.00		\$9,929.00
FY21WK16	62	\$5,239.00	\$3,531.00		\$8,771.00
FY21WK17					
FY21WK18					
FY21WK19					
FY21WK20					
FY21WK21					
FY21WK22					
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FY21WK48					
FY21WK49					
FY21WK50					
FY21WK51					
FY21WK52					
Total	926	\$86,219.00	\$59,809.00	\$468.00	\$146,864.00

MS4 Minimum Control Measure #5 Stormwater Plan Review



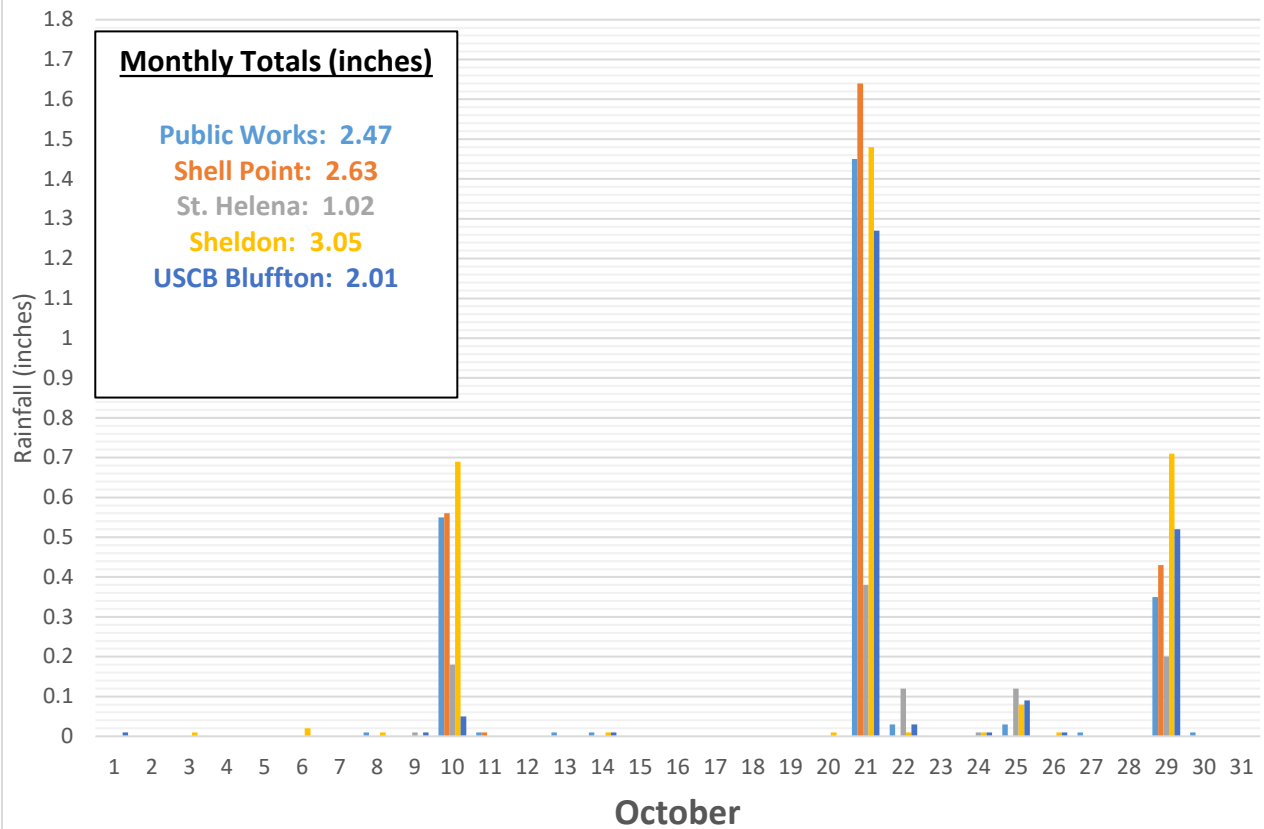
TYPE	November	December	January	February	March	April	May	June	July	August	September	October	Last 12 Months
Development Permit (COC's)	11	1	31	12	2	10	20	19	11	13	6	5	141
Plan Review	11	6	14	14	5	9	9	9	8	9	18	10	122
Permits Issued	17	21	33	30	25	26	28	33	29	23	51	53	369

MS4 Minimum Control Measure #4 Erosion Sediment Control Inspections



TYPE	November	December	January	February	March	April	May	June	July	August	September	October	Last 12 Months
Inspections Performed	438	315	425	375	383	512	417	475	396	466	603	615	5420
Drainage Complaints	0	0	0	1	0	4	2	0	1	0	1	2	11
IDDE Issues Investigated	1	0	2	2	4	3	0	0	1	0	0	1	12
Enforcement Actions	14	4	18	17	5	19	4	11	0	0	0	0	92

Beaufort County Weather Stations Daily Rainfall Amounts - October 2020



Lowcountry Stormwater Partners (LSP) Monthly Report
10/6/20 – 11/2/20

Completed Stormwater Outreach/Involvement Activities:

- LSP Changing Tides Newsletter
 - The Changing Tides is an informative publication for the general public. It includes a small article on a stormwater-related topic and information on past, current, and future events.
 - 10/14/20, online, 131, [Find a copy here](#)
- Big News for Small Ponds
 - The "Big News for Small Ponds" mailing list is intended for both pond managers and owners in Beaufort, Jasper, Colleton, and Hampton Counties. By signing up for the mailing list, participants will receive emails or direct mailers about local, pond-related trainings, events, and certification opportunities.
 - 10/6/20, online, 43, [Find a copy here](#)
- Master Gardener Water Wednesdays: Stormwater Ponds and Floating Wetlands
 - Stormwater ponds are one of the most frequently used engineering practices to manage flooding around our homes and protect the health of downstream waterways from polluted runoff. However, without proper maintenance, stormwater pond failure can mean costly repair expenses to you, and flood and water quality concerns in your neighborhood. Join us as we discuss stormwater pond management basics, including the use of floating wetlands, a good for the pond practice that also helps get your green thumb a little wet.
 - 10/14/20, online, 18
- Healthy Pond Series
 - The Healthy Pond Series is a community-based discussion series for pond owners to learn and share stormwater pond management solutions. Participants will learn best practices for communicating pond management strategies with their community, as well as the basic elements of social marketing techniques to motivate actions that support healthy ponds. There will also be time for discussion, questions and sharing stories about communication in your own community.
 - 10/22/20, online, 9
- Master Gardener Water Wednesdays: Vegetated Buffers
 - Living in South Carolina is often defined by life along the water's edge. Vegetative buffers can help your local waterway by providing habitat, stabilizing soil, and protecting downstream water quality. Join us to learn about this unique way of gardening as we cover design, plant selection, and maintenance of buffers for freshwater and tidal water bodies.
 - 10/28/20, online, 40

Ongoing Stormwater Outreach/Involvement Activities:

- Annual Report Writing
 - The LSP finished a draft of the 2020 Lowcountry Stormwater Partners Annual Report and sent it out for comment on 10/23/20. This report will be submitted to SC DHEC as part of MCM 1 and MCM 2 compliance. All comments will be received by 11/6/20 and the final copy will be published on 11/18/20. A supplemental brochure will also be created to highlight the 2020 success of the LSP in a more accessible and readable form.

Ongoing Stormwater Outreach/Involvement Activities (cont.):

- 4-H20 Ambassador Project Book
 - The LSP partnered with Beaufort County 4-H to create a 4-H project record book based upon 4-H curriculum. The record book will be used by 4-H participants across the Lowcountry and participation could qualify them for awards. The book is going through the final review and will be available to 4-H members by the end of the month.
- Mossy Oaks Rain Garden Workshop
 - I will schedule a rain garden workshop to install the BMP in the spring once the school district approves the plan.
- Septic System Resources
 - The septic system website written content has finished the review process and the website is under construction. It should be complete by the end of the month.
- Pet Waste Outreach Plan
 - This plan involves the creation of PSAs, a pledge, and bag giveaways. I will package the PSAs, pledge materials, and bags together. These packages will be used at in-person events and dropped off at participating pet stores, shelters, and veterinary offices. I will use the pledge cards to collect email addresses and invite participants to join our listservs.
 - The following items should be ready to print:
 - Business-card sized pledge cards
 - A pledge sign-up sheet
 - A poster with the pledge and a link to sign-up online. These can double as additional pet waste station signage as well as part of a display.
 - An online pledge sign-up form
 - A pledge card file that can be customized and sent to people who pledge through the online sign-up form.
- Creation of an HOA Direct Mailing List
 - I began creating a list of mailing addresses for existing HOAs/PUDs to send pond training announcements and an invitation to join the Big News for Small Ponds listserv.
- Direct Contacts
 - During this time frame, I helped five (5) individuals who directly contacted me. Two were located in Hardeeville and were experiencing a fish kill. One client needed help with plant selection for a brackish pond shoreline, one client needed help finding available pond management resources, and the final client had a question on marsh dieback.
 - 5, emails
- LSP Facebook page
 - The LSP Facebook page serves to engage and involve citizens in water-quantity and water-quality information. I also use the Facebook page to announce local, regional, and state-wide events.
 - 294 Likes, 559 People Reached with 19 posts made between 10/7/20 and 11/1/20

Planned Stormwater Outreach/Involvement Activities:

- Brewer Memorial Park Stormwater Pond Plant List
 - I am providing a list of plant species for the Brewer Memorial Park project. This list will be used in a vegetated buffer design.
 - 11/6/20, online

Planned Stormwater Outreach/Involvement Activities (cont.):

- LSP Changing Tides Newsletter
 - The Changing Tides is an informative publication for the general public. It includes a small article on a stormwater-related topic and information on past, current, and future events.
 - 11/12/20, online
- Big News for Small Ponds
 - The "Big News for Small Ponds" mailing list is intended for both pond managers and owners in Beaufort, Jasper, Colleton, and Hampton Counties. By signing up for the mailing list, participants will receive emails or direct mailers about local, pond-related trainings, events, and certification opportunities.
 - 11/12/20, online,
- LSP Consortium Meeting
 - 11/17/20, online, [find a copy of the agenda here](#)

Other Activities for Strategic Plan Compliance:

- LID Lunch-and-Learns
 - After collaborating with Chuck Jarman, we concluded that we should schedule these events when Clemson and other parties lift restrictions on in-person workshops. The ACE BASIN CTP is interested in partnering with this effort and we will meet in December to discuss launching these programs in 2021.

Completed Strategic Plan Items:

- Pond training listserv and direct mailer list
- Pet waste mass media campaign
- 2019 Beaufort Area Stormwater Pond Conference
- Master Pond Manager
- Pond mass media campaign
- Pond management website
- Soil sample trainings (satisfied by Cultivating a Carolina Yards workshops)
- Soil sample bags at festivals, nurseries, farmer's markets, and Master Gardener events
- Construction site trainings for contractors (satisfied by CEPSCI courses)
- LID factsheets
- LID training for design professionals (will be satisfied when DNR's Coastal Training Program reschedules to LID Manual Training)
- LID signs
- BMP workshops for homeowners (satisfied by Cultivating a Carolina Yards workshops, rain garden presentations, and Being a Neighbor for Clean Water Webinar Series)
- Master Rain Gardener
- Step-stake sign for rain gardens
- Rain Garden Rack Card
- Pond Rack Card
- Buffer Packets

South Carolina NPDES Permit # SCR030000
Small Municipal Separate Storm Sewer System (SMS4)
Annual Report Template

Permit Coverage #SCR30000

Reporting Period: 10/01/2019 – 09/30/2020

Permittee: Beaufort County

Program Name: Beaufort County MS4

Reporting for more than one Program: ☐

(Prepare copies of this page for each Program and attach to this report.)

Responsible Official Information

(Enter the information of the principal executive officer, mayor, or other duly authorized employee/elected official.)

Name: Eric Greenway

Title: Acting County Administrator

Telephone Number: 843-255-2026

E-mail Address: egreenway@bcgov.net

Mailing Address: 100 Ribaut Rd Beaufort, SC 29902

Program Manager Information

(Enter the information of the person who is responsible for daily implementation of the program.)

Name: Neil Desai

Title: Public Works Director

Telephone Number: 843-255-2740

E-mail Address: Nilesh.desai@bcgov.net

Mailing Address: 120 Shanklin Rd Beaufort SC 29906

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Responsible Official Signature: _____ **Date:** _____

(The responsible official may authorize another person or person occupying a specific position to certify this report if this authorization is made in writing and submitted to the Department. Please attach a copy of the authorization with this report, if applicable)

Submit the annual report to:

South Carolina Department of Health and Environmental Control
Bureau of Water, Water Pollution Compliance Section
2600 Bull Street
Columbia, SC 29201-1708

Questions? Contact (803) 898-4300

I. Special Conditions Applicable to Stormwater Discharges to Sensitive Waters

A. General (3.1)

1. Has an assessment been conducted to determine if the MS4 discharges to sensitive waters as described in the Permit Part 3? ☒ Yes ☐ No (what is the target date of completion of the assessment?) _____

2. Does the SWMP specifically address these sensitive waters through BMP, system design, etc.? ☒ Yes ☐ No

3. Does the MS4 discharge to waters classified as Outstanding Resource, Trout, or Shellfish Harvesting? If so, list the waters (3.5): ☐ No ☒ Yes May River, Colleton (Okatie) River, New River, Whale Branch West, Coosaw River, Beaufort River, Morgan River, Broad River, Calibogue Sound, Coastal Waters of St. Helena Island.

B. TMDL Monitoring and Assessment Plan (3.2)

1. Does the MS4 discharge to receiving waters within a TMDL watershed? If yes, list the water body and the pollutant(s) of concern. ☐ No ☒ Yes Okatie River – Shellfish – Fecal Coliform; Beaufort River – Aquatic Life – Dissolved Oxygen; Chechessee Creek – Shellfish – Fecal Coliform.

2. Which of the TMDL pollutant(s) of concern listed above have the potential to occur within the MS4? Fecal Coliform, Dissolved Oxygen

3. Report the current stage of development of a monitoring and assessment plan. Mark one or more that most accurately reflects the current status of the program as a whole:

☐ Not started

☒ Research/Development

☐ Implementation

4. Has the plan been submitted to the Department?

☒ Yes ☐ No, target date for submission: Program has completed Year 1 and Quarters 1-3 of Year 2.

5. Has monitoring been conducted for the pollutant(s) of concern in the past reporting year?

☒ Yes (**SEE ATTACHED EXHIBIT A**) ☐ No, target date to begin monitoring: _____

6. Are there any updates to the plan for this reporting year?

☒ No ☐ Yes (updates attached)

7. Provide a brief description of the progress made on the plan in this reporting year and evaluate its effectiveness. The County is currently almost through 2 full years of data collection with it's new monitoring plan. The previous plan was amended when the MS4 permit went Unincorporated County wide. The data collected has allowed the County to begin seeing trends in data and assist with creating the implementation plan for our TMDL watersheds. The County continues to evaluate data as it is available.

C. Discharges to Impaired Water Bodies (3.4)

1. Does the MS4 discharge to receiving waters on the 303(d) list of impaired waters? If yes, list the water body and the pollutant(s) of concern. ☐ No ☒ Yes

BASIN	HUC_12	DESCRIPTION	STATION	USE	CAUSE(S)
SALKEHATCHIE	030502070704	COMBAHEE RVR AT US 17 10 MI ESE YEMASSEE	CSTL-098	AL	DO

SALKEHATCHIE	030502070704	COMBAHEE RVR AT US 17 10 MI ESE YEMASSEE	CSTL-098	FISH	HG
SALKEHATCHIE	030502071101	COOSAW RVR NEAR MOUTH OF BULL RVR	RO-02005	AL	CU, TURBIDITY
SALKEHATCHIE	030502071101	BULL RIVER WHERE WILLIMAN CREEK AND WIMBEE CREEK MEET WITH THE BULL RIVER BETWEEN CHISOLM AND BUZZARD ISLANDS CLOSE TO THE CHISOLM ISLAND SIDE OF BULL RIVER.	RO-09367	AL	TURBIDITY
SALKEHATCHIE	030502071101	TRIBUTARY TO BULL RIVER, 7.5 M NE OF BEAUFORT	RT-01643	AL	TURBIDITY
SALKEHATCHIE	030502071101	WIMBEE CK 0.7 MI SE OF MOUTH OF S WIMBEE CK	RO-036037	AL	TURBIDITY
SALKEHATCHIE	030502071102	TIDAL CK NEAR CONFL OF COOSAW AND BULL RVRs CHISOLM ISL	RT-02015	AL	CU, TURBIDITY
SALKEHATCHIE	030502071102	CAMPBELL CREEK AT WHALE BRANCH	14-02	SHELLFISH	FC
SALKEHATCHIE	030502071102	FIRST SPLIT ON HALFMOON CREEK ON SOUTHERN SIDE OF BROWNS ISLAND	14-13A	SHELLFISH	FC
SALKEHATCHIE	030502071102	MCCALLEYS CREEK 2.4 MILES UPSTREAM OF SHELLFISH SITE 15-33	RT-11015	AL	TURBIDITY
SALKEHATCHIE	030502071103	TRIB TO SPARROW NEST CK NEAR DATHA ISLAND	RT-02027	AL	CU
SALKEHATCHIE	030502071103	COFFIN CREEK MOUTH AT MORGAN RIVER	16A-27	SHELLFISH	FC
SALKEHATCHIE	030502071103	COFFIN CREEK, HEADWATERS AT SHRIMP DOCKS	16A-28	SHELLFISH	FC
SALKEHATCHIE	030502071103	EDDING CR AT SMALL TRIBUTARY BETWEEN STATIONS 9 AND 18	16A-23	SHELLFISH	FC
SALKEHATCHIE	030502071103	EDDING CREEK AT SHRIMP DOCK	16A-18	SHELLFISH	FC
SALKEHATCHIE	030502071103	JENKINS CREEK, 500FT. NORTH OF STORMWATER AT DAWTAW ISLAND GOLF COURSE,	16A-30	SHELLFISH	FC
SALKEHATCHIE	030502071103	PINE ISLAND CREEK NEAR CONFL VILLAGE CREEK	16A-38	SHELLFISH	FC
SALKEHATCHIE	030502071103	ROCK SPRINGS CREEK, UPPER REACHES	16A-19	SHELLFISH	FC
SALKEHATCHIE	030502071103	COFFIN CK 0.7 MI SE OF CONFL W/ MORGAN RVR	RT-032033	AL	TURBIDITY
SALKEHATCHIE	030502071104	COOSAW RIVER, MIDCHANNEL BETWEEN BULL RIVER AND COMBAHEE RIVER, 1 MILE EAST OF SHELLFISH SITE 14-04	RO-11314	AL	TURBIDITY
SALKEHATCHIE	030502071104	COOSAW RVR NEAR MOUTH OF COMBAHEE RVR	RO-02001	AL	TURBIDITY
SALKEHATCHIE	030502071104	PARROT CREEK AND COOSAW RIVER MARKER #1 SHELLFISH 14-10	MD-281	AL	TURBIDITY
SALKEHATCHIE	030502071104	SAINT HELENA SOUND, 7 M SW OF EDISTO BEACH	RO-01163	AL	TURBIDITY
SALKEHATCHIE	030502071104	ST. HELENA SOUND BELOW THE CONFLUENCE OF THE MORGAN RIVER AND THE COOSAW RIVER BETWEEN THE TIPS OF ST. HELENA ISLAND AND OTTER ISLAND.	RO-09371	AL	TURBIDITY
SALKEHATCHIE	030502080501	BATTERY CREEK - DOWLINGWOOD TRIBUTARY (C6-97)	15-25	SHELLFISH	FC
SALKEHATCHIE	030502080601	POCOTALIGO RVR AT US 17 AT POCOTALIGO	MD-007	REC	ENTERO
SALKEHATCHIE	030502080601	POCOTALIGO RVR AT US 17 AT POCOTALIGO	MD-007	AL	TURBIDITY
SALKEHATCHIE	030502080602	HUSPAH CREEK AT BULL POINT - WHALE BRANCH POG	14-18	SHELLFISH	FC
SALKEHATCHIE	030502080602	HUSPAH CREEK AT RAILROAD TRESTLE	14-14	SHELLFISH	FC
SALKEHATCHIE	030502080605	HABERSHAM CREEK ABOVE STATION #16, FIRST SPLIT	17-16A	SHELLFISH	FC
SALKEHATCHIE	030502080606	COLLETON RIVER AT MOUTH OF CALLAWASSIE CREEK, 4.5 M N OF BLUFFTON	RO-01125	AL	DO
SALKEHATCHIE	030502080607	CHECHESSEE RVR 1.4 MI SE CONFL W/ COLLETON RVR	RO-036032	AL	DO

SALKEHATCHIE	030502080607	CHECHESEE RIVER, 6.5 M WEST OF PORT ROYAL	RO-01146	AL	DO
SALKEHATCHIE	030502100101	JOHNSON CK WEST OF HARBOR ISLAND 1.75MI SW OF WEST END OF US 21 BRIDGE OVER JOHNSON CK	RT-10115	AL	TURBIDITY
SAVANNAH	030601100202	NEW RIVER 3.4 MI SSE OF SC 170 BRIDGE OVER NEW RIVER	RT-06021	REC	ENTERO
SAVANNAH	030601100301	BEND IN MAY RIVER NEAREST HIGH BLUFF OF PALMETTO BLUFF	19-19B	SHELLFISH	FC
SAVANNAH	030601100301	FIRST UNNAMED TRIBUTARY LEADING FROM GASCIOGNE BLUFF	19-19C	SHELLFISH	FC
SAVANNAH	030601100301	MAY RIVER AT FIRST DOCK IN HEADWATERS PAST BLUFF	19-19	SHELLFISH	FC
SAVANNAH	030601100301	UNNAMED TRIBUTARY NEAR SW CORNER OF CASCIOGNE BLUFF	19-19A	SHELLFISH	FC
SAVANNAH	030601100304	HILTON HEAD ISLAND LANSEND DRIVE	LC-111	REC	ENTERO
SALKEHATCHIE	030502080608	PORT ROYAL SOUND 1.8 MI SW OF TIP OF PARRIS ISLAND	RO-036034	AL	CU

2. Which of the 303(d) pollutant(s) of concern listed above have the potential to occur within the MS4? Fecal Coliform, Enterococcus, Mercury, Turbidity, Dissolved Oxygen, Copper.

II. Storm Water Management Program

A. Ordinance Information (4.1)

(Insert your website address if the ordinance is posted online. If your ordinance is not posted online, please submit a hard copy with this report.)

Website:

https://library.municode.com/sc/beaufort_county/codes/code_of_ordinances?nodeId=PTIIBULADEOR_CH99S_TMA

Hard copy attached: ☐

B. Storm Water Management Plan (SWMP) (4.1, 4.5)

(Answer the questions below about the SWMP for the current reporting year.)

1. Have there been any changes to the area covered by the MS4? If yes, is this reflected by updates to the SWMP?

X No ☐ Yes (explain): _____

2. Are there any proposed changes to the goals or BMP (best management practices) in the SWMP?

X No ☐ Yes (explain): _____

3. Do you have adequate resources to implement your SWMP?

X Yes ☐ No (explain): The position of Beaufort County Stormwater Manager has been vacant since March of this year. Currently the role of SW manager is filled by our Public Works Director. At the end of the reporting period the County hired a consultant to assist staff in the absence of a SW manager.

4. Provide information below about staffing levels for each Minimum Control Measure (MCM). This information should be presented as the amount of individuals performing duties directly related to each MCM and the

estimated percentage of their time spent doing so. If you share responsibility for the MCM with another entity, indicate that in the corresponding spaces.

- MCM 1: (2) 1 at 30% and 1 at 10% - Clemson University Carolina Clear
(4) 1 at 25% and 3 at 10% - Beaufort County Staff
- MCM 2: (2) 1 at 30% and 1 at 10% - Clemson University Carolina Clear
(4) 1 at 25% and 3 at 10% - Beaufort County Staff
- MCM 3: (4) 1 at 25% and 2 at 10% - Beaufort County Staff
(1) 1 at 5% - Bluffton Stormwater Staff
- MCM 4: (4) 1 at 25% and 2 at 10% - Beaufort County Staff
(1) 1 at 5% - Bluffton Stormwater Staff
- MCM 5: (9) 9 at 5% - Beaufort County Staff
(1) 1 at 5% - Bluffton Stormwater Staff
- MCM 6: (5) 1 at 25% and 4 at 10% - Beaufort County Staff

5. Has training been provided to staff as required by the permit in the last reporting year?

X Yes (fill in the table below) ☐ No (explain, and provide implementation dates): _____

Date	Topics Covered
<u>10/28/2019</u>	<u>OSHA 10 HR GENERAL INDUSTRY TRAINING</u>
<u>01/14/2020</u>	<u>OSHA CHEMICAL SPILL RESPONSE</u>
<u>01/16/2020</u>	<u>Beaufort County IDDE training</u>
<u>08/16/2020</u>	<u>Beaufort County Stormwater permit requirements</u>
<u>08/18/2020</u>	<u>Beaufort County: What is Stormwater?</u>
<u>08/20/2020</u>	<u>Beaufort County Facilities SWPPP Creation</u>

III. Minimum Control Measures (MCM)

A. Sharing Responsibility (4.4)

1. Is responsibility shared for any minimum measures through an agreement with another entity?

☐ No X Yes (name the entity in the chart below)

MCM 1	CLEMSON UNIVERSITY CAROLINA CLEAR
MCM 2	CLEMSON UNIVERSITY CAROLINA CLEAR
MCM 3	TOWN OF BLUFFTON

MCM 4	TOWN OF BLUFFTON
MCM 5	TOWN OF BLUFFTON
MCM 6	USC BEAUFORT (some sample collection and all analysis

If you have indicated that you are sharing responsibility above in any MCM, answer the questions below:

2. Have you submitted notice to the Department that you are relying on another entity?

X Yes ☐ No (submit a copy of any agreements that have not previously been sent to the Department)

3. If applicable, provide the date of submission of the agreement(s) to the Department: Clemson agreement was submitted to the department with Year 4 Annual Report. Town of Bluffton and USC Beaufort agreements were submitted with Year 2 Annual Report.

4. Are all control measures as stringent as the permit requires?

X Yes ☐ No (if no, provide an explanation) _____

5. Did the other entity agree in writing to implement the measure on your behalf?

X Yes ☐ No (if no, provide an explanation) _____

6. Did the other entity implement the measure and agree to report on your behalf?

X Yes ☐ No (if no, provide an explanation) Clemson report and Bluffton data incorporated into this report.

7. Is the agreement maintained as part of the SWMP?

X Yes ☐ No (if no, provide an explanation) _____

8. Have you dissolved any agreements with entities this reporting year?

X No ☐ Yes (if yes, who?) _____

III. Minimum Control Measures (MCM)

B. Minimum Control Measure 1: Public Education and Outreach on Storm Water Impacts (4.2.1, 5.3)

1. Use the table below to summarize outreach strategies, goals, and progress for the current reporting year. In the “activities conducted and planned” section, focus on activities that were conducted in the last reporting year and those that are planned for the upcoming reporting year, providing implementation dates. Add rows where needed and attach additional sheets if necessary.

SEE ATTACHED CLEMSON REPORT IN EXHIBIT B.

C. Control Measure Evaluation (5.3)

1. Evaluate the success of this MCM. Refer to goals implemented and achieved, and adherence to the implementation schedule: SEE ATTACHED CLEMSON REPORT IN EXHIBIT B.

2. Provide an evaluation of where the program needs improvement and explain any actions that will be taken to achieve objectives: SEE ATTACHED CLEMSON REPORT IN EXHIBIT B.

III. Minimum Control Measures (MCM)

D. Minimum Control Measure 2: Public Involvement/Participation (4.2.2, 5.3)

1. How can the public find information about the SWMP? The County's SWMP is published on the Stormwater page of the Beaufort County website (www.beaufortcountysc.gov). The County's SWMP is also Appendix G of the County's BMP Manual.

2. Use the table below to summarize public involvement opportunities, goals, and progress for the current reporting year. In the "activities conducted and planned" section, focus on activities that were conducted in the last reporting year and those that are planned for the upcoming reporting year, providing implementation dates. Add rows where needed and attach additional sheets if necessary.

SEE ATTACHED CLEMSON REPORT IN EXHIBIT B.

E. Control Measure Evaluation (5.3)

1. Evaluate the success of this MCM. Refer to goals implemented and achieved, and adherence to the implementation schedule: **SEE ATTACHED CLEMSON REPORT IN EXHIBIT B.**

2. Provide an evaluation of where the program needs improvement and explain any actions that will be taken to achieve objectives: **SEE ATTACHED CLEMSON REPORT IN EXHIBIT B.**

III. Minimum Control Measures (MCM)

F. Minimum Control Measure 3: Illicit Discharge Detection and Elimination (IDDE) (4.2.3, 5.3)

1. How can the public notify the MS4 of suspected illicit discharges? Citizens of Beaufort County can report illicit discharges in a variety of ways. Citizens may contact the Stormwater staff via telephone, email, online citizen-gram, or using the Beaufort County Connect App. A summary of complaints received through the Beaufort County Connect App can be found in **EXHIBIT C.** A summary of Illicit Discharge investigations can be found in **EXHIBIT D.**

2. Complete the list below for the last reporting year:

- Total number of suspected illicit discharges: 13
- Total number of illicit discharges found: 5
- Number of illicit discharges with enforcement escalation (action taken beyond written warning): 0
- Total number of illicit discharges eliminated: 5

3. Use the table below to summarize priority areas (and associated rationale for selection) for screening. If these areas have changed since the last reporting year, provide a brief explanation. Add rows where needed and attach additional sheets if necessary.

Priority Areas	Rationale for Selection	Changed within last reporting year? (If so, provide an explanation.)
Construction Sites	The County has prioritized construction sites due to the increase of development.	No.
TMDL and Impaired Waterbodies	The County has prioritized the screening schedule based on last year's monitoring data, septic failure	No.

	reports, land uses, and SSO data provided by local water authority.	
Non Sewer areas	The County has prioritized these areas due to shellfish beds located near these areas.	No.

4. Use the table below to summarize IDDE action items, goals, and progress for the current reporting year. In the “activities conducted and planned” section, focus on activities that were conducted in the last reporting year and those that are planned for the upcoming reporting year, providing implementation dates. Add rows where needed and attach additional sheets if necessary.

IDDE Action Item	Measurable Goal(s)	Progress on Goal(s)	Activities Conducted and Planned <i>(specific implementation dates)</i>
Adequate Legal Authority	Develop an Ordinance, establish authority	<input type="checkbox"/> In Planning <input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Completed <input type="checkbox"/> Evaluation	For Year 5, continued implementation.
Outfall Inventory Map Collection	Map outfalls for screening and inspection.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	By Milestone Year 2, 50% of all County owned outfalls were to be inspected. During 2017, post-Hurricane Matthew we visually inspected 100% of the system, but did not map. By 12/01/18 the County has 75% of all outfalls inventoried and mapped. By 12/01/2019 the County intends to have all outfalls inventoried and mapped. By 10/01/2019 the County has approximately 85% of the County outfalls mapped. The County intends for the remainder to be mapped by 12/01/2020. By 09/30/2020 the County has approximately 92% of outfalls inventoried and mapped. The County intends the remainder to be mapped by mid reporting year 2021.
Outfall Screening for Illicit Discharge	Develop a citizen reporting tool. Conduct dry weather screening of outfalls.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	The BC Connect app was designed to allow residents to communicate with the County regarding IDDE and complaints. Currently the app is live with 609 784 active members, and we anticipate a more robust media outreach program to increase members to 3000-5000.
Prioritize Other potential Illicit discharges and non-stormwater discharges	Prioritize screening based on complaints, monitoring results, land use, and survey results.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	In Year 3 we outlined 2 hotspot areas based on proximity to consistently impacted shellfish beds and lack of sewer authority connections. Year 4 the County conducted dry weather screening in the 2 hotspot areas. The County also kept track of sanitary sewer overflows from the local water authority. The County also works closely with the Town of Bluffton regarding potential IDDE’s relating to

			<p>septic tanks in the May River Watershed. Year 4 the County participated in the monitoring of an issue outside county lines, but who's runoff led to a TMDL watershed. SEE APPENDIX F. In Year 5 the County continued to prioritize potential illicit discharge screening by performing dry weather screening in previously identified potential hot spot areas. The County also performed dry weather screenings at outfalls based on water quality monitoring data. The County continues to keep track of sanitary sewer overflows from the local water authority.</p>
Education on IDDE	Educate the Public on IDDE	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	<p>Carolina Clear will continue to provide this MCM. SEE ATTACHED EXHIBIT B.</p>
Enforcement	Establish authority to inspect and enforce	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	<p>The IDDE ordinance has been adopted and enforcement continues. In Year 2 we began using MUNIS to track IDDE activities. In Year 3, we continued the use of MUNIS to track IDDE activities, and began tracking IDDE activities via the BC Connect app. In Year 4, we continued the use of the app and MUNIS and began working more closely with County Environmental Officers. In Year 5 we anticipate we will be upgrading to another software with expanded capabilities, while continuing use of MUNIS and BC Connect app. In Year 5 the County continued working closely with Code Enforcement and County Environmental Officers. The County continues the use of our app and MUNIS. With COVID-19, there have been delays with implementing our new tracking software. It is anticipated to go live during year 6.</p>
Monitoring Plan	Establish a program to track and sample POCs	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	<p>The County is ahead of schedule on implementation of the plan. In Year 3, we redeveloped the monitoring plan due to expanding the permitted area (Permit by Rule) in 2017. In Year 4 we implemented a new plan focused more on TMDL and 303d listed watersheds. In Year 5 we will continue to implement</p>

			the new monitoring plan. In Year 5 the County continued to implement the new monitoring plan. As of 12/31/2020 the County will have 2 full years of monitoring data to begin working on its TMDL implementation plans.
Staff Training	Train applicable staff on IDDE	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	<p>During MCM evaluation, the need to report and document public and staff training separately was identified. A BMP to focus education on staff for the IDDE program was added for Year 3. Additional training was planned for Year 4, but will be pushed back to Year 5. Training will continue annually. IDDE training for staff was performed on 1/16/2020 and 1/18/2020. The County training opportunities became limited in early 2020 due to COVID 19 and staff working remotely. The County has hired a consultant and will begin assisting with staff training in Year 6.</p>
Asset Mapping	Map the storm sewer system and assess condition	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	<p>Upon evaluation of program needs, it was determined that storm sewer system inventory and inspection should be documented in MCM3 rather than MCM 6. Staff continues to map the system. We are approx. 85% complete. SEE ATTACHED EXHIBIT G. Staff is approximately 92% complete with asset inventory. The anticipated completion date is early 2021. SEE ATTACHED EXHIBIT F.</p>

G. Control Measure Evaluation (5.3)

1. Evaluate the success of this MCM. Refer to goals implemented and achieved, and adherence to the implementation schedule: All goals were achieved by implementing an IDDE violation database and obtaining the authority to enforce all non-stormwater discharges. We actively investigate all citizen complaints through all reporting methods. We have established MOA's with other MS4's for monitoring and continue to coordinate with our local DHEC office in response to failing septic tanks and all other illicit discharge complaints.

2. Provide an evaluation of where the program needs improvement and explain any actions that will be taken to achieve objectives: Overall the IDDE program is a success. Training of all staff who participate in illicit discharge complaints has been instituted. COVID-19 has hindered our staff training opportunities but it has not slowed our response to complaints in the field. We continue to utilize our application and web based reporting avenues to continue inspections on complaints. The County has hired a consultant to evaluate our program and we anticipate working closely with them to make our program even better.

III. Minimum Control Measures (MCM)

H. Minimum Control Measure 4: Construction Site Storm Water Runoff Control (4.2.4, 5.3)

1. How can the public notify the MS4 of possible noncompliance at construction sites? Citizens can call our main phone line, send an email using our citizengram link on our website. Citizens can also utilize the Beaufort County Connect App. A summary of complaints received through the app can be found in EXHIBIT C.

2. How does the MS4 communicate with construction operators to ensure understanding of requirements and improvements that may be needed? The County, at time of Stormwater permitting, hands out information regarding requirements for compliance with the MS4 permit. A pre-construction meeting is held for all new construction to ensure understanding of compliance. Inspectors keep in constant communication with contractors and all proposed changes are communicated with the building community. Construction BMP's are inspected on the cycle dictated by the SMS4 permit. Any deficiencies are communicated with the respective parties.

3. Has an enforcement response plan (ERP) been developed and utilized?

X Yes ☐ No (*explain*): The County is adopting new Stormwater Design Standards in early 2021. During this update, the ERP has been restructured. This information will be included in the next Annual Report.

4. Complete the list below for the last reporting year:

- Number of new construction sites: 354. SEE ATTACHED EXHIBIT E.
- Total number of active construction sites: SEE ATTACHED EXHIBIT E.
- Total number of inspections performed: 5230. SEE ATTACHED EXHIBIT E.
- Number of sites with unsatisfactory/noncompliant inspection results: 103. SEE EXHIBIT E.
- Number of sites with enforcement escalation (action taken beyond written warning): SEE ATTACHED EXHIBIT E. The attached exhibit E has summary information for all Stormwater enforcement actions. The County hoped to be further along in implementing new enforcement software. This software is schedule to go live in reporting Year 6.
- Number of sites inspected past the deadline specified in the permit: SEE ATTACHED EXHIBIT E.

5. Use the table below to summarize construction site action items, goals, and progress for the current reporting year. In the “activities conducted and planned” section, focus on activities that were conducted in the last reporting year and those that are planned for the upcoming reporting year, providing implementation dates. Add rows where needed and attach additional sheets if necessary.

Construction Site Action Item	Measurable Goal(s)	Progress on Goal(s)	Activities Conducted and Planned (specific implementation dates)
Plan Review and Permitting	The BC BMP Manual contains plan review and permitting requirements and is reviewed and updated annually to assist applicants in the permitting process.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	The plan review process requires applicants to provide BMP's on all construction plans and provide drainage calculations to ensure sediment is controlled on site. During routine inspections, if sediment is not being controlled on site, Stormwater staff work with contractors on adding more, to the MEP. In Year 5, we continued implementing standards. Year 6 design standards will be updated with the adoption of a new design manual. All contractors and applicants will be provided training.
Stormwater Permit	Educate the community regarding when a SW permit is required for all land disturbance greater than 5000 square feet.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	Issue press release to notify all applicants of new permit procedures. Year 4 there were no updates to the permit. Year 5 there are no pending updates to the permit. The County anticipates updates will occur at time of permit update with DHEC.
Enforcement	Continue to educate the contractors and public regarding construction site permitting and enforcement.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	Increase inspection and training for contractors. In Year 4, we will be switching to another software with expanded capabilities. In Year 5 we held public meetings for proposed updates to the current design standards. In Year 6 before the updates are implemented, we are planning to host educational trainings so contractors remain in compliance as the regulations change.

I. Control Measure Evaluation (5.3)

1. Evaluate the success of this MCM. Refer to goals implemented and achieved, and adherence to the implementation schedule: All goals were achieved prior to projected year and are currently being implemented through the ordinance and new BMP manual. Additionally, Preconstruction meetings are held to ensure that initial BMPs are installed prior to grading. A certificate of completion check list was created to ensure all pipes, ditches, and ponds are built per design and free of debris and sediment.

2. Provide an evaluation of where the program needs improvement and explain any actions that will be taken to achieve objectives: The Construction Inspection program was a success in tracking projects via the Stormwater permit data base. Site Plan review has required a more detailed check list to ensure all aspects of the SWPPP are addressed. The County will be changing to a new data base to track plan review, inspections and enforcement which will link to the close out of permits. The new database development was delayed in 2018 due to contracting issues with the vendor. In 2019 The County began the implementation process with the vendor, and hope the product comes available for use in early 2021.

III. Minimum Control Measures (MCM)

J. Minimum Control Measure 5: Post-Construction Storm Water Management (4.2.5, 5.3)

1. Complete the list below for the last reporting year:

- Number of newly completed construction sites: 189. **SEE ATTACHED EXHIBIT G.**
- Number of inspections performed within 30 days of construction completion: 9
- Total number of inspections performed: 15.
- Number of sites with unsatisfactory/noncompliant inspection results: 0.
- Number of sites with enforcement escalation (action taken beyond written warning): 0. **See ATTACHED EXHIBIT E.**

2. Use the table below to summarize post-construction action items, goals, and progress for the current reporting year. In the “activities conducted and planned” section, focus on activities that were conducted in the last reporting year and those that are planned for the upcoming reporting year, providing implementation dates. Add rows where needed and attach additional sheets if necessary.

Post-Construction Action Item	Measurable Goal(s)	Progress on Goal(s)	Activities Conducted and Planned (specific implementation dates)
Ordinance	Develop an ordinance, or other regulatory mechanism, adequate legal authorities to meet the objectives of the Post-Construction Site Runoff Controls program.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	Ordinance is reviewed on an annual basis and modified when necessary to ensure that all site design review and approval, inspection, and monitoring are implemented and maintained.
Maintenance Agreement	To ensure that all stormwater control measures meet the County's performance standards and are being maintained pursuant to the maintenance agreement.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	The County has begun recording maintenance easements. Easements are also connected to the inspection data base to allow better tracking of annual inspections. In Year 5 the County improved tracking of maintenance agreements to ensure compliance.
Enforcement	The County has authority to enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to stormwater discharges to determine whether there is compliance the Post-Construction Stormwater Management Program. Also, the County has an agreement with the Town of Bluffton to allow each	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	The County tracks all enforcement through the inspection database, which allows reports to be created and violations issued. The data base also has the ability to schedule re-inspection to ensure compliance. In Year 4, we will be upgrading to another software with expanded capabilities. In Year 5 the County continued working on the development of our new enforcement software. It is anticipated to go live in early 2021.

	municipality to access each other's jurisdiction.		
Reporting and Inspection	A Stormwater Permitting database and inspection program was developed to provide structural stormwater controls to be installed pursuant to the County's post-construction program.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	The County tracks inspection reports, monitoring results, and other information deemed necessary to evaluate compliance with the Post-Construction Stormwater Management Program. In Year 5 the County continued to evaluate compliance with Post-Construction SW management.

K. Control Measure Evaluation (5.3)

1. Evaluate the success of this MCM. Refer to goals implemented and achieved, and adherence to the implementation schedule: All goals were achieved and implemented ahead of projected time line. In Year 5 the County will reassessed the effectiveness of the program and made changes to improve the process.

2. Provide an evaluation of where the program needs improvement and explain any actions that will be taken to achieve objectives: The County will continue to improve the data management system and continue educating BMP owners during the annual inspection. The County performed education of staff regarding Post Construction BMP maintenance procedures to encourage compliance with signed maintenance agreements. The County then reevaluated and revised the process of accepting Stormwater maintenance agreements to ensure proper record keeping and tracking. With the new permitting and inspection software being made available in early 2021, we anticipate it streamlining the process of post construction BMP management.

III. Minimum Control Measures (MCM)

L. Minimum Control Measure 6: Pollution Prevention/Good Housekeeping for Municipal Operations (4.2.6, 5.3)

1. Has a comprehensive assessment of the pollutant discharge potential for all municipally owned facilities been conducted? If not, indicate a status and planned completion date in the chart below.

X Yes ☐ No ☐ In Progress (explain): _____

2. Have yearly comprehensive inspections been conducted at high priority facilities? If not, indicate a status and planned completion date in the chart below.

X Yes ☐ No ☐ In Progress (explain): _____

3. Has training been conducted for employees? If not, indicate a status and planned completion date in the chart below.

X Yes ☐ No ☐ In Progress (explain): _____

4. Use the table below to summarize municipal facility pollution prevention action items, goals, and progress for the current reporting year. In the "activities conducted and planned" section, focus on activities that were conducted in the last reporting year and those that are planned for the upcoming reporting year, providing implementation dates. Ensure that the maintenance and inspection of MS4 catch basins and structural storm water controls are addressed in the chart. Add rows where needed and attach additional sheets if necessary.

Pollution Prevention Action Item	Measurable Goal(s)	Progress on Goal(s)	Activities Conducted and Planned (specific implementation dates)
SPPC Plans	Develop Spill Prevention plans for County Facilities	<input type="checkbox"/> In Planning <input type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	SPCC is a specific EPA program not entirely related to Stormwater and MS4. Three County facilities have SPPC plans (2 airports and Mosquito Control).
Facilities SWPPP Development	Identify priority facilities and develop SWPPPs, SOPs, etc.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	All High Priority facilities were prioritized based on chemicals stored and potential hazardous materials. Audit / Evaluation of facilities was completed and follow up inspections were completed by 12/1/2018. Follow up inspections will be completed again by 10/1/2019. In Year 4 the County developed SWPPP's for 12 of it's high priority facilities. In Year 5, follow up inspections were completed by 09/30/2020.
Training	Provide training program for grounds maintenance, landscaping crews, and roadway and drainage staff.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	Continue to train staff for grounds maintenance, landscaping crews, and roadway and drainage staff.
Parking Lot and Street Cleaning	Inventory and prioritize roads for cleaning.	<input type="checkbox"/> In Planning <input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input type="checkbox"/> Evaluation	Due to the increase in development in certain areas of the County the road inventory prioritization has not changed and the County will continue to maintain on an as needed basis. The County continues to use a contract sweeper. SEE ATTACHED EXHIBIT G. The County purchased a sweeper and hired an operator to expand the program, and is keeping the contract sweeper on retainer through mid 2019. In Year 5 The County continued to operate a sweeper schedule to ensure good housekeeping at County facilities as well as on County roads to continue efforts to improve water quality goals. SEE EXHIBIT H.
Asset Management	Asset management of facilities and high priority areas	<input type="checkbox"/> In Planning <input type="checkbox"/> Ongoing <input type="checkbox"/> Completed <input checked="" type="checkbox"/> Evaluation	Upon evaluation of program needs, it was determined that storm sewer system inventory and inspection should be documented in MCM3. Further, facility inventory should be linked with priority assessment and SWPPP development; Facilities were added to a revised BMP A above. In Year 5, the County continues to inventory, inspect, and document in MCM 3.

M. Control Measure Evaluation (5.3)

1. Evaluate the success of this MCM. Refer to goals implemented and achieved, and adherence to the implementation schedule: Staff training continues to occur each year. Year 5, additional staff training is planned. Overall, County owned facility inspections exceeded expectations. All compliance issues were

forwarded to respective management teams for addressing. The County has implemented a street sweeping plan.
SEE ATTACHED EXHIBIT H.

2. Provide an evaluation of where the program needs improvement and explain any actions that will be taken to achieve objectives: Additional training will be designed particularly for the potential pollutants of each facility. Facility operators need to have more of a hands on approach to training for their particular facility. Training of those staff members is a priority. Several County facilities will require extensive upgrades to reach compliance. The County will perform inspections and monitoring, as needed, to ensure compliance. This was completed before 10/01/2020. The County has hired a consultant to address facility related goals.

DRAFT

Introduction

This Stormwater Management Plan (SWMP) is designed to reduce the discharge of pollutants from Beaufort County, South Carolina Small Separate Storm Sewer System (SMS4) to the maximum extent practicable, to protect water quality and to satisfy the appropriate requirements of the Clean Water Act. The contents are expected to change with time due to the interactive process of developing the SWMP recognized by the Environmental Protection Agency (EPA). EPA permit cycle is over a 5-year term. The first permit term focused highly on data collection, organization, development of programs and public education. During the current cycle the County is required to update the SWMP. This document is a living document and will be updated on an annual basis to reflect accomplishment, potential revisions to program and additions if deemed necessary based on the previous year's program.

This SWMP meets the requirements of the NPDES General Permit for discharges from regulated SMS4's; Permit No. SCR030000, effective December 1, 2015.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Acting County Administrator

Signature

Title/MS4

Date

**South Carolina Department of Health and
Environmental Control
Bureau of Water**

STORMWATER MANAGEMENT PLAN (SWMP)

Prepared in accordance with SCDHEC Permit (SCR030000)



October 1, 2019
October 1, 2020

Beaufort County
120 Shanklin Road
Beaufort, South Carolina
843-255-2805

Introduction

...

This Stormwater Management Plan (SWMP) is designed to reduce the discharge of pollutants from Beaufort County, South Carolina Small Separate Storm Sewer System (SMS4) to the maximum extent practicable, to protect water quality and to satisfy the appropriate requirements of the Clean Water Act. The contents are expected to change with time due to the interactive process of developing the SWMP recognized by the Environmental Protection Agency (EPA). EPA permit cycle is over a 5-year term. The first permit term focused highly on data collection, organization, development of programs and public education. During the current cycle the County is required to update the SWMP. This document is a living document and will be updated on an annual basis to reflect accomplishment, potential revisions to program and additions if deemed necessary based on the previous year's program. Revisions made during the permit year are reflected as Highlighted Text and/or Strikethrough Text.

This SWMP meets the requirements of the NPDES General Permit for discharges from regulated SMS4's; Permit No. SCR030000, effective December 1, 2015.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for falsifying information, including the possibility of fine and imprisonment for knowing violations."

gfat



Signature

Interim County Administrator

Title/MS4

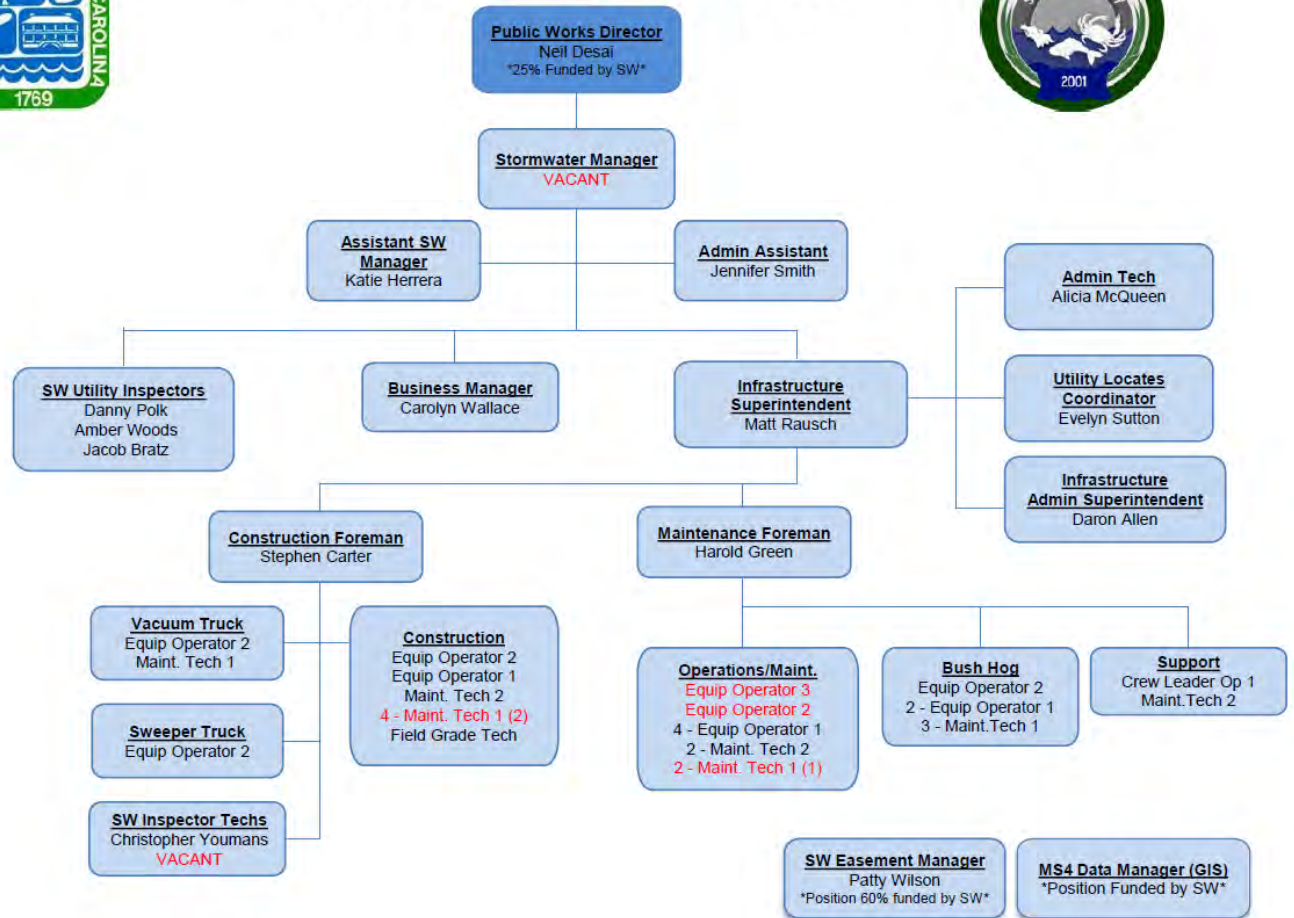
1/28/2019
Date

South Carolina Department of Health and Environmental Control
Bureau of Water
2600 Bull Street
Columbia, South Carolina 29201-1708

Organizational Chart



Beaufort County Stormwater



() Indicates Vacancies

Updated 7.29.20

PART I
ADMINISTRATIVE INFORMATION

Name of municipal entity / tribe / state agency / federal agency / or public institution that owns / operates a small MS4:

Beaufort County

MS4

N/A

NPDES Small MS4 Permit Coverage Number

Ashley Jacobs- Eric Greenway

Responsible Elected Official or Officer

Acting County Administrator

Title

100 Ribaut Road

Beaufort

SC

29902

Street Address

City

State

Zip Code

Indicate whether the SMS4 is a:

☒

Municipal Entity

☐

Tribe

☐

State Agency

☐

Federal Agency

☐

Other Public Institution: _____.

PROGRAM CONTACT

Dan Rybak Neil Desai, PE

Name

Nilesh.desai@bcgov.net

Email Address

(843) 255-2805

Phone Number

TECHNICAL CONTACT

Dan Rybak Neil Desai, PE

Name

Nilesh.desai@bcgov.net

Email Address

(843) 255-2805

Phone Number

PART II
SMS4 INFORMATION

ITEM A
MS4 SYSTEM

Urbanized Area (UA), or Core Municipality (if the SMS4 is not located in an UA)

Beaufort County, SC

Latitude and Longitude of the center of the SMS4

32° 14' 50" N, 80° 50' 19" W

Jurisdiction in square miles within current corporate boundaries:

≈ 71 sq miles (Black Outline)

Area of additional urban growth boundary:

≈ 51 sq miles (Orange Outline)

The permit will be used to regulate the:

☒ Entire Jurisdiction

☐ UA portions, as follows (Counties only):

Unincorporated Area

≈ 596 sq miles

Total Area:

596 sq. miles

Unincorporated, Urbanized Area

≈ 71 sq miles (Black Outline)

Other potential MS4s adjacent to Urbanized Area within Beaufort County:

1. Town of Hilton Head Island, SC
2. Town of Bluffton, SC
3. SCDOT
4. University of SC, Beaufort New River Campus
5. Parris Island

6. MCAS

ITEM B STORM DRAINAGE INFRASTRUCTURE

Give figures for the following features of stormwater drainage infrastructure. For a county government, indicate whether the figures represent the entire county or only the urbanized area. Figures for length and number of culverts and catch basins may be rough estimates. **Figures represent the entire County**

Entire Jurisdiction	≈ 596 sq. miles (Beaufort Co. is 732 sq. miles including other MS4 jurisdictions including military bases, Towns, and City.) (Beaufort County)	Urbanized Area(s)	≈ 71 sq miles	COUNTIES ONLY
Storm Sewers	≈ 528,000 Feet	Open Ditches	≈ 10,560,000 Feet	
Culverts	Included in Storm Sewers	Catch Basins	≈ 12,000	
Retention and / or Detention Basins	≈ 1,000			

ITEM C STATE THE FOLLOWING, INCLUDE ITEMS IN A COPY OF THE SMS4 MOST CURRENT MAP AS POSSIBLE

Zoned areas for commercial or industrial activity	No Change	State vocational, technical, college or universities	No Change
Actual areas of commercial or industrial activity	No Change	Federal vocational, technical, college or universities	No Change
Other municipally owned/operated industrial activities	No Change	City Roads	No Change
Municipal or County Wastewater Treatment Plants	No Change	County Roads	No Change
Vehicle Fleet Maintenance Centers	No Change	Perennial and intermittent streams	No Change
Power Plants	No Change	Topography or Drainage Patterns	No Change
Airports	No Change	Landfills (Garbage Convenience Stations)	No Change
Military Installations	No Change	Indian Country lands, if any	No Change
	No Change	Drainage Pipe and Structures	No Change

ITEM D IDENTIFYING IMPAIRED STREAMS AND ALL SENSITIVE WATER BODIES

Identify water bodies (located throughout the SMS4 jurisdiction, or extending one mile beyond the SMS4 service boundaries if cost effective) listed in Part 3 of the permit. Impairments, indicating the nature of pollution (cause) and their sources should be listed below. Visit: <http://www.scdhec.gov/tmdl>

STREAM NAME	WQMS	Impairment(s)
See list of water bodies on the 2016 303(d) List for Beaufort County, located in the 2017 Annual MS4 report, Section 1.C.		

ITEM E		
HAS THE STATE OR EPA ISSUED A TDML FOR ANY STREAMS LOCATED THROUGHOUT THE SMS4 JURISDICTION OR EXTENDING ONE MILE BEYOND THE SMS4 SERVICE BOUNDARY?		

Yes ☒ No ☐ If yes, list stream, WQMS, and parameter(s) of concern, visit: <http://www.scdhec.gov/tmdl>:

STREAM	WQMS and PARAMETERS OF CONCERN
Okatie River	Shellfish Sites: 18-07, 18-08, 18-16, 18-17; Fecal Coliform
Chechessee Creek	Shellfish Sites: 18-03, 18-09, 18-10, 18-11; Fecal Coliform
Beaufort River	Sites: MD-001, MD-002, MD-003, MD-004, RO-02003; Dissolved Oxygen

PART 3 STORMWATER MASTER PLAN

SECTION 1 PUBLIC EDUCATION

SECTION ONE		
TABLE 1: BMP MEASURABLE GOALS AND IMPLEMENTATION MILESTONES		
	Name	DESCRIPTION
A.	Identify Target Pollutants & Audience Messages	Beaufort County POC are; Bacteria, sediment, nutrients, litter, metals, hydrocarbons, pesticides and other that may be identified.
B.	Brochures	Create and distribute target audience based brochures on SW management & pollution protection
C.	Website	Create a standalone SW Website that provided all audiences with quick access to SW pollution prevention information. Update current "SW Kiosks"
D.	Event Participation	Trained staff will attend local events (e.g. Water Festival), will have a display station for face to face contact with public on SW quality goals and objectives and will have information for distribution
E.	School SW Programs	Develop various school curriculum for Elementary, Middle and High School level science programs that can be presented by teachers and/or County SW staff
F.	Community Surveys	Conduct Community wide surveys to gauge the public's knowledge of Stormwater issues
G.	Public Input	Provide opportunities via website or public meetings to citizen input on Stormwater issues
H.	LSP Strategic Plan	Support and implement the Lowcountry Stormwater Partners (LSP) regional stormwater outreach plan through Carolina Clear/Clemson. The outreach plan encompasses the activities and audiences identified in BMPs A-G above. Beginning in year 3, the County will implement public education and outreach primarily through the LSP initiative to be consistent with other MS4s in Beaufort County, to streamline reporting and to adapt to local needs more effectively.

TABLE 2: ADMINISTRATIVE INFORMATION	
PRIMARY CONTACT	POSITION OR TITLE
Dan Rybak	Stormwater Manager
OTHER DEPARTMENT	ROLE
GOVERNMENT ENTITY	ROLE
Beaufort County SW Utility	Primary Responsible Party

OTHER INSTITUTION	ROLE
Carolina Clear/Clemson	Primary provider of Public Education services as a contractor to the County
County	Events
EQUIPMENT NEEDS (IF APPLICABLE)	
NA	
GROUP	TARGET DESCRIPTION
Carolina Clear/Clemson	Carolina Clear will assist in educating citizens about the impacts of stormwater and means to improve stormwater management and since this program provides outreach opportunities to address a broad range of water quality issues including the impact of stormwater on natural resources, Clemson and the County will collaborate to address stormwater public education and outreach and public involvement/participation. Carolina Clear is a comprehensive approach developed by Clemson University Cooperative Extension Service (CUCES) to inform and educate communities about, among other issues, water quality, water quantity, and the cumulative effects of stormwater. Carolina Clear addresses the special significance of South Carolina's water resources and the role these resources play in enhancing the state's economy, environmental health, and overall quality of life.

ADDENDUM
TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)
BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES
These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION ONE

TABLE 3: BEST MANAGEMENT PRACTICES

The purpose of this addendum is to record the measurable goals for each BMP, and the dates (month and year) by which interim actions are to be accomplished. Space is given for four BMPs for each of the six minimum measures.

Measurable goals are BMP design objectives, or goals that will quantify the progress of implementing the actions or performance of a BMP. They are ways to measure activities or effects of a BMP. For each of the six minimum measures and for each BMP, define the measurable goal you will use to monitor effectiveness of this BMP.

For each BMP, establish milestones for implementation. These tables are set up for once/year milestones. You may change the milestone dates to time frames less than one year. Also, certain BMPs - e.g., an ordinance - should be put in place within one year.

BMP A	MEASURABLE GOALS AND MILESTONES
Goals	Identify Target Pollutants & Audience Messages
Milestone Year 1	Clemson will lead a regional effort that includes strategic identification of behaviors and pollutants that can be addressed through stormwater education programming; implementation of an outreach campaign that seeks to address target behaviors, pollutants, and audiences; website presence and information made available to the public about pollution prevention; annual data report regarding program activities.
Milestone Year 2	Identified possible causes and sources of pollutants.
Milestone Year 3	Began developing target audiences to reach with stormwater pollution messages and educational materials *delete highlight*****
Milestone Year 4	Development of 5 year strategic plan. Continued to develop target audiences and educational materials.
Milestone Year 5	Implemented 5 year strategic plan.
BMP B	MEASURABLE GOALS AND MILESTONES
Goals	Distribution of SW Pollution Prevention Brochures to the public
Milestone Year 1	Created SW Pollution Prevention target audience brochures (e.g. general public, sportsmen, etc.). Develop a portable SW display booth

Milestone Year 2	Participated as a partner when possible at public events (festivals, etc.), set up booth and man, distributed audience specific brochures- Goal to reach an additional 1,000 people with SW education.
Milestone Year 3	Participated as a partner when possible at public events (festivals, etc.), set up booth and man, distributed audience specific brochures. Goal to reach an additional 1,000 people with SW education.
Milestone Year 4	Participated as a partner when possible at public events (festivals, etc.), set up booth and man, distributed audience specific brochures- Goal to reach an additional 1,000 people with SW education.
Milestone Year 5	Participated as a partner when possible at public events (festivals, etc.), set up booth and man, distribute audience specific brochures, until the onset of COVID-19 restrictions. Goal was to reach an additional 1000 people with SW education.
BMP C	
MEASURABLE GOALS AND MILESTONES	
Goals	Create an interactive Website, with standalone citizen report and complaint link and continue to use the existing stormwater educational kiosks
Milestone Year 1	Clemson University/Carolina Clear and Consortium utilizes their website, facebook and blogs to provide Stormwater Information and Education Website, with links to other programs (both public and private) that promote water quality and preservation practices. Utilize mass media outlets to provide statewide education at an increased cost-effectiveness; as needed, locally utilize mass media such as newspapers, radio, interviews and advertisements to address specific needs. Created billboards banners and promotional giveaways to provide education on POC which served as a way to attract audiences and increase regional consortium visibility. Reached approximately 42000 citizens with the billboards.
Milestone Year 2	Maintained and Updated Website based on customer input, availability of new information and input from both the development and environmental community.
Milestone Year 3	Maintained and updated website based on customer input availability of new information and input from both the development and environmental community.
Milestone Year 4	Maintained and updated website based on customer input availability of new information and input from both the development and environmental community.
Milestone Year 5	Maintained and updated website based on customer input availability of new information and input from both the development and environmental community.
BMP D	
MEASURABLE GOALS AND MILESTONES	
Goals	Event Participation
Milestone Year 1	Attended 32 events and reached 555 citizens with 6400 participants.
Milestone Year 2	Clemson University/Carolina Clear delivered public education and outreach and public involvement/participation with a goal to influence a more aware and involved public in regards to stormwater management decisions. The educational programs included components designed for various residential and commercial audiences and others targeted for their impact to stormwater and nonpoint source pollution. Events were held at available facilities in such a way to reach diverse and regionally distributed audiences. Such instruction included the furnishing of informational handouts, instructional manuals, promotional materials, webpages, logos, slogan, symbols, and similar such materials, as deemed appropriate by Clemson and the County.
Milestone Year 3	Clemson University/Carolina Clear delivered public education and outreach and public involvement/participation with a goal to influence a more aware and involved public in regards to stormwater management decisions. The educational programs included components designed for various residential and commercial audiences and others targeted for their impact to stormwater and nonpoint source pollution. Events were held at available facilities in such a way to reach diverse and regionally distributed audiences. Such instruction included the furnishing of informational handouts, instructional manuals, promotional materials, webpages, logos, slogan, symbols, and similar such materials, as deemed appropriate by Clemson and the County. Efforts have impacted over 1,000,000 individuals.
Milestone Year 4	i

Milestone Year 5	Clemson University/Carolina Clear delivered public education and outreach and public involvement/participation with a goal to influence a more aware and involved public in regards to stormwater management decisions. The educational programs included components designed for various residential and commercial audiences and others targeted for their impact to stormwater and nonpoint source pollution. Events were held at available facilities in such a way to reach diverse and regionally distributed audiences. Such instruction included the furnishing of informational handouts, instructional manuals, promotional materials, webpages, logos, slogan, symbols, and similar such materials, as deemed appropriate by Clemson and the County. Efforts have impacted over 1,000,000 individuals.
BMP E	MEASURABLE GOALS AND MILESTONES
Goals	School Stormwater Programs
Milestone Year 1	Presented Enviroscapes at 16 schools and reached over 1400 students. Created a portable SW display and train staff to man the display for major local events. Goal – Have ready for 2015 Beaufort Water Festival.
Milestone Year 2	Provided multiple programs within the region such as Adopt-A-Watershed which uses a local

	watershed, Storm Drain Marking, 4-H Wetlands Project explores estuaries, marshes, and swamps, 4H2O Pontoon Classroom, Engaging teachers in new watershed and stormwater curriculum meeting SC Standards, and EnviroScape.
Milestone Year 3	Provided multiple youth programs within the region such as "That's MY Truck", a coloring contest which incorporated Stormwater Infrastructure equipment and how we use it to keep our County clean, Storm Drain Marking, 4-H Wetlands Project explores estuaries, marshes, and swamps, Engaging teachers in new watershed and stormwater curriculum meeting SC Standards, and EnviroScape
Milestone Year 4	Provided multiple youth programs within the region such as "That's MY Truck", a coloring contest which incorporated Stormwater Infrastructure equipment and how we use it to keep our County clean, Storm Drain Marking, 4-H Wetlands Project explores estuaries, marshes, and swamps, Engaging teachers in new watershed and stormwater curriculum meeting SC Standards, and EnviroScape
Milestone Year 5	Planning a creek clean up for Summer 2020
BMP F	MEASURABLE GOALS AND MILESTONES
Goals	Community Surveys
Milestone Year 1	Created community wide stormwater public knowledge on line survey to integrate which was advertised on television, radio, internet and hard copies at the libraries. Received over 600 responses which will be used to create the Counties. The County will use the results to assist in the POC.
Milestone Year 2	None
Milestone Year 3	None
Milestone Year 4	
Milestone Year 5	
BMP G	MEASURABLE GOALS AND MILESTONES
Goals	Public Input Opportunities
Milestone Year 1	Held 7 town hall meetings in various locations within the County in order to receive input on the BMP manual, stormwater master plan and ordinance. We had 83 citizens attend town hall meetings and received 60 comments from residences within all areas of the County. We have monthly Stormwater Utility Board meetings that allow the Public to present their concerns or suggestions.
Milestone Year 2	Planned, developed, presented, and participated in more than 10 community and public programs with emphasis on stormwater education. Provided resources to encourage continued learning and practice adoption. Presented programs that addressed pollution prevention and alternatives for a target audience, as per the region's priorities. Developed and provided for the general public, within means, items such as banners and promotional giveaways to serve as a way to attract audiences and increase regional consortium visibility. [Note that the survey activity is captured in the BMP above.]
Milestone Year 3	Planned, developed, presented, and participated in more than 10 community and public programs with emphasis on stormwater education. Provided resources to encourage continued learning and practice adoption. Presented programs that addressed pollution prevention and alternatives for a target audience, as per the region's priorities. Developed and provided for the general public, within means, items such as banners and promotional giveaways to serve as a way to attract audiences and increase regional consortium visibility. [Note that the survey activity is captured in the BMP above.]
Milestone Year 4	Planned, developed, presented, and participated in more than 10 community and public programs with emphasis on stormwater education. Provided resources to encourage continued learning and practice adoption. Presented programs that addressed pollution prevention and alternatives for a target audience, as per the region's priorities. Developed and provided for the general public, within means, items such as banners and promotional giveaways to serve as a way to attract audiences and increase regional consortium visibility. [Note that the survey activity is captured in the BMP above.]
Milestone Year 5	Planned, developed, presented, and participated in more than 10 community and public programs with emphasis on stormwater education. Provided resources to encourage continued learning and practice adoption. Presented programs that addressed pollution prevention and alternatives for a target audience, as per the region's priorities. Developed and provided for the general public, within means, items such as banners and promotional giveaways to serve as a way to attract audiences and increase regional consortium visibility. [Note that the survey activity is captured in the BMP above.] Hosted the 2019 Regional Pond Conference with over 50 people in attendance.

BMP H	MEASURABLE GOALS AND MILESTONES
Goals	Support and implement the Lowcountry Stormwater Partners regional stormwater outreach plan through Carolina Clear/Clemson.
Milestone Year 1	
Milestone Year 2	
Milestone Year 3	Implement the activities identified in the LSP 2016-2018 Strategic Regional Stormwater Outreach Plan. Work with the LSPs to develop the strategic plan for 2018 – 2020.
Milestone Year 4	Implement the LSP Strategic Stormwater Outreach Plan.
Milestone Year 5	Implement the LSP Strategic Stormwater Outreach Plan.

SECTION 2
PUBLIC INVOLVEMENT AND PUBLIC PARTICIPATION

1. Have (or will, within the first year of permit coverage,) the public been invited to participate in the development and implementation of all parts of the community's SWMP?

Yes ☒
No ☐

If no, explain

2. Are (or will, during the permit term) opportunities created for citizens to participate in the implementation of stormwater controls (e.g., stream clean-ups, storm drain stenciling, volunteer monitoring, and educational activities)?

Yes ☒
No ☐

If no, explain

3. Has the permittee (or will, during the permit term,) ensured that the public can easily find information about the SMS4 SWMP? If available in the web, provide link

Yes ☒
No ☐

<http://www.clemson.edu/public/carolinaclear>

4. Are (or will) written procedures for implementing the **Public Involvement / Participation MCM** incorporated into the SWMP?

Yes ☒
No ☐

If no, explain

Complete Tables 1, 2, and 3 (BMP Measurable Goals and Milestones) in the addendum of this NOI. Identify and outline measurable goals and milestones. Attach completed Section 2 tables to this NOI.

ADDENDUM
TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)
BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES

These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION TWO

TABLE 1: BMP MEASURABLE GOALS AND IMPLEMENTATION MILESTONES

	Name	DESCRIPTION
A.	Storm Drain Stenciling	Install new drain markers via volunteers by advertising at events, community meetings.
B.	Public Meetings/Citizen Panels	Set up formal advertised meetings in various areas of the County to that the County can present SW information and gain citizen input and can raise concerns and/or problems
C.	Community Clean Ups	Set up formal community clean up days for cleaning trash and debris for roadsides, ditches, etc. in the watershed areas
D.	LSP Strategic Plan	Support and implement the Lowcountry Stormwater Partners (LSP) regional stormwater outreach plan through Carolina Clear/Clemson. The outreach plan encompasses many of the activities and audiences identified in BMPs A-C above. Beginning in year 3, the County will implement public education and outreach primarily through the LSP initiative to be consistent other MS4s in Beaufort County, to streamline reporting and to adapt to local needs more effectively.

TABLE 2: ADMINISTRATIVE INFORMATION

PRIMARY CONTACT	POSITION OR TITLE
Neil Desai, PE	Stormwater Manager
OTHER DEPARTMENT	ROLE
Clemson	Clemson University will assist County staff with various levels of expertise concerning stormwater compliance requirements as promulgated by SC DHEC and USEPA; and PUBLIC awareness and

University/Carolina Clear	education about natural resources is crucial to the process of protecting and restoring water quality.
BEST MANAGEMENT PRACTICES (BMPs) MEASURABLE GOALS AND IMPLEMENTATION MILESTONES (Continued)	
GOVERNMENT ENTITY	ROLE
Beaufort County SW Utility	Primary responsible party
OTHER INSTITUTION	ROLE
Clemson University/Carolina Clear	<p>Clemson University will assist County staff with various levels of expertise concerning stormwater compliance requirements as promulgated by SC DHEC and USEPA; and PUBLIC awareness and education about natural resources, as public education is crucial to the process of protecting and restoring water quality.</p> <p>Clemson will deliver public education and outreach and public involvement/participation with a goal to influence a more aware and involved public in regards to stormwater management decisions. The educational programs will include components designed for various residential and commercial audiences and others targeted for their impact to stormwater and nonpoint source pollution. This effort will be delivered through various means. Events will be held at available facilities in such a way to reach diverse and regionally distributed audiences. Such instruction may include the furnishing of informational handouts, instructional manuals, promotional materials, webpages, logos, slogan, symbols, and similar such materials, as deemed appropriate by Clemson and the County.</p>
EQUIPMENT NEEDS (IF APPLICABLE)	
Storm drain markings	
GROUP	TARGET DESCRIPTION
County	Organize and promote marker installation events

<p align="center">ADDENDUM TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI) BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES <u><i>These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)</i></u></p>	
SECTION TWO	
TABLE 3: BEST MANAGEMENT PRACTICES	
<p>The purpose of this addendum is to record the measurable goals for each BMP, and the dates (month and year) by which interim actions are to be accomplished. Space is given for four BMPs for each of the six minimum measures.</p> <p>Measurable goals are BMP design objectives, or goals that will quantify the progress of implementing the actions or performance of a BMP. They are ways to measure activities or effects of a BMP. For each of the six minimum measures and for each BMP, define the measurable goal you will use to monitor effectiveness of this BMP.</p> <p>For each BMP, establish milestones for implementation. These tables are set up for once/year milestones. You may change the milestone dates to time frames less than one year. Also, certain BMPs - e.g., an ordinance - should be put in place within one year.</p>	
BMP A	MEASURABLE GOALS AND MILESTONES
Goals	Storm Drain Marker Program
Milestone Year 1	Installed 244 storm drain markers and reached 412 residences.
Milestone Year 2	Identify groups (e.g. Boy & Girl Scouts, Service clubs, etc.) that can provide volunteers to place markers on SW structures. Goal – Complete 25% of SW structures in the County. 58 drain markers were

	installed. Additional advertisement to encourage public involvement is needed to achieve better public participation. To ensure all drains are marked the County may allow in house staff to place markers since public involvement for this task has been very limited.
Milestone Year 3	Installed 30 storm drain markers. Worked to identify additional groups that may be willing to participate in installing markers.
Milestone Year 4	*Insert Ellen's information here*
Milestone Year 5	
BMP B	MEASURABLE GOALS AND MILESTONES
Goals	Public Meeting Citizen Participation Panels
Milestone Year 1	Held 7 town hall meetings in various locations within the County in order to receive input on the BMP manual, stormwater master plan and ordinance. We had 83 citizens attend town hall meetings and received 60 comments from residences within all areas of the County. We have monthly Stormwater Utility Board meetings that allow the Public to present their concerns or suggestions. Established and documented procedures for advertising Citizen Input meeting, conducting such meeting, areas to be targeted, program for such event Goal – Conduct first event.
Milestone Year 2	The County has monthly Stormwater Utility Board meetings and quarterly Lowcountry Stormwater Partners (Clemson) meetings. The meetings are open to the public and televised to allow citizen input.
Milestone Year 3	The County has monthly Stormwater Utility Board meetings and quarterly Lowcountry Stormwater Partners (Clemson) meetings. The meetings are open to the public and televised to allow citizen input.
Milestone Year 4	The County held monthly Stormwater Utility Board meetings and quarterly Lowcountry Stormwater Partner meetings. The meetings are open to the public to allow citizen input, with the Stormwater Utility Board meetings being televised.
Milestone Year 5	The County held monthly Stormwater Utility Board meetings and quarterly Lowcountry Stormwater Partner meetings. The meetings are open to the public to allow citizen input, with the Stormwater Utility Board meetings being televised as well as shared live on the Beaufort County Facebook page.
BMP C	MEASURABLE GOALS AND MILESTONES
Goals	Community Clean Up Days
Milestone Year 1	Create and document a Community Cleanup program, identify liabilities and responsibilities, insurance requirement, areas to be targeted, traffic and pedestrian protection procedures, collection and disposal of bags, etc. Goal – Written program in year one.
Milestone Year 2	Organized teams in targeted areas, advertised and promoted cleanup days, provided on-site program management, arranged for collection and disposal, etc. Goal – two cleanup program trials, assess results and modify program as may be necessary. Clemson prepared an annual report detailing milestones achieved in Year 2.
Milestone Year 3	Organized teams in targeted areas within Beaufort County, provided on-site program management, arranged for collection and disposal. Clemson prepared an annual report detailing milestones achieved in Year 3.
Milestone Year 4	Organized teams in targeted areas within Beaufort County, provided on-site program management, arranged for collection and disposal. Clemson prepared and annual report detailing milestones achieved in Year 4.
Milestone Year 5	Organized teams in targeted areas within Beaufort County, provided on-site program management, arranged for collection and disposal. Clemson prepared and annual report detailing milestones achieved in Year 5. Due to COVID 19, community clean up days scheduled after March 2020 were cancelled. The County hopes to host 2 community clean ups in 2021.
BMP D	MEASURABLE GOALS AND MILESTONES
Goals	Support and implement the Lowcountry Stormwater Partners regional stormwater outreach plan through Carolina Clear/Clemson.
Milestone Year 1	
Milestone Year 2	
Milestone Year 3	Implemented the activities identified in the LSP 2016-2018 Strategic Regional Stormwater Outreach Plan. Work with the LSPs to develop the strategic plan for 2018 – 2020.
Milestone Year 4	Implemented the LSP Strategic Stormwater Outreach Plan.

Milestone Year 5	Implemented the LSP Strategic Stormwater Outreach Plan.
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SECTION 3
ILLCIT DISCHARGE DETECTION AND ELIMINATION

The following are common sources of illicit discharges to an MS4:

- Sanitary Wastewater
- Car wash wastewaters
- Radiator flushing disposal
- Spills from roadway accidents
- Carpet cleaning wastewaters
- Effluent from septic tanks
- Improper oil disposal
- Laundry Wastewaters/gray water
- Improper disposal of auto and household toxics

STORM SEWER SYSTEM MAP

Does the MS4 currently have a storm sewer system map completed for the entire regulated municipal separate storm sewer system? The map must depict, at a minimum: city streets, topography or drainage patterns, streams, and outfalls (points where the city or county-operated MS4 discharges into the streams or adjacent MS4s).

Yes ☒

No ☐ If no, explain

Beaufort County has a working map that has storm structures identified. The map is constantly being updated to capture new stormwater structures and address all parameters mentioned above.

PRIORITY AREAS, FIELD SCREENING, TRACING AND ELIMINATION OF ILLICIT DISCHARGES

Has (or will, within the first year of permit coverage,) the MS4 identified priority areas documenting its basis for the selection?

Yes ☒

No ☐ If no, explain

Does the MS4 currently have (or will have) written field screening and analytical protocol to detect and eliminate illicit discharges to the MS4 within one year from the effective date of coverage?

Yes ☒

No ☐ If no, explain

See BMP Manual Appendix C.

Does the MS4 currently have procedures for tracing the source of an illicit discharge?

Yes ☒

No ☐ If no, explain

See BMP Manual Appendix C.

INSPECTION/SCREENING AND ENFORCEMENT PROCEDURES

1. Does the MS4 presently have personnel and procedures in place for inspection and/or screening for non-stormwater discharges? If yes, please describe and indicated percentage of system inspected and/or screened.

Yes ☒

No ☐

As of Dec. 1, 2019~~20~~, It is estimated that 76~~92~~% of the system has been mapped, inventoried, and inspection for condition assessment.

2. Does the MS4 presently have procedures and personnel in place for enforcement of violations of the illicit discharge ordinance? If yes, please describe.

Yes ☒

No ☐

See the Stormwater Ordinance in BMP Manual Appendix G. There have been no changes since Year 1.

3. How are enforcement actions documented?

Enforcement actions are documented through the new stormwater data base.

4. Has the MS4 defined "hot spots" for non-stormwater discharge screening and inspections? If yes, please describe and provide a map of illicit discharge screening priority areas.

Yes ☒

Mapped in Year 1, and again in Year 3. Utilizing DHEC information regarding shellfish bed status, as well as local water authority maps, two locations within the MS4 boundary have been identified as potential hot spots for our illicit discharge screening priority areas.

PUBLIC INPUT AND COMPLAINTS

1. Does the MS4 presently have procedures in place to receive and consider information and complaints about non-stormwater discharges that are submitted by the public? If so, provide brief description: responsible departments, personnel, steps followed.

Yes ☒

No ☐

The General Public, municipalities and in house staff can submit a complaint through a new citizen "connect" app. that was created to assist in reporting non-stormwater discharges. The app. will allow the complaints to be identified by type of discharge such as: automobile fluids, chemicals, construction site runoff, restaurant grease trap, SSO, yard clippings etc. The County will disburse the complaint to the appointed staff members to investigate complaint. The application will allow the County to run reports to track complaints.

EDUCATION

1. Has the MS4 educated the public and businesses including, but not limited to, auto parts supply, auto repair shop and restaurants, regarding ways to detect, prevent and eliminate illicit discharges? If yes, briefly describe the educational materials, including media used (e.g., written brochures, public service announcements, etc.), the topic(s) covered, intended target audience(s), and the distribution method.

Yes ☒

No ☐

Clemson University/Carolina Clear and Consortium utilizes their website, facebook and blogs to provide Stormwater Information and Education Website, with links to other programs (both public and private) that promote water quality and preservation practices. Utilize mass media outlets to provide statewide education at an increased cost-effectiveness; as needed, locally utilize mass media such as newspapers, radio, interviews and advertisements to address specific needs. Created billboards banners and promotional giveaways to provide education on POC which served as a way to attract audiences and increase regional consortium visibility. New brochures were created for distribution at the landfills to increase education on how to properly dispose of household chemicals.

ILLICIT DISCHARGE ORDINANCES

1. Does the MS4 currently have an ordinance or regulatory mechanism that prohibits non-stormwater discharges into the storm sewer system? If yes, please attach a copy of the ordinance and give page number(s) of this section of ordinance. If No, proceed to the next section (inspections and enforcement).

Yes ☒ No ☐

BMP Manual App.G, Page Number
Pg. G-19

99-202

Ordinance Section Number

2. Does the ordinance or regulatory mechanism clearly define non-stormwater discharges, either through a written description of a non-stormwater discharge or through a listing of unallowable or allowable non-stormwater discharges?

Yes ☒

No ☐ If no, explain

3. Does the ordinance or regulatory mechanism allow right-of-entry on private property for inspection of suspected discharges?

Yes ☒

No ☐ If no, explain

4. Does the ordinance or regulatory mechanism prohibit dumping?

Yes ☒

No ☐ If no, explain

5. Does the ordinance or regulatory mechanism give the MS4 owner/operator the authority to eliminate non-stormwater discharges in the event of violations? If yes, please note page number and paragraph number.

Yes ☒ No ☐ BMP Manual G-32 Page Number Sec. 99-502 Paragraph Number

6. What is maximum penalty in ordinance or regulatory? Please note maximum penalty, page number and paragraph number.

Yes ☒ No ☐ Criminal Max. Penalty \$1000.00 BMP Manual G-13 Page Number Sec.99-113 Paragraph Number

7. Does the MS4 have ordinance or other regulatory mechanism that prohibits contamination of stormwater runoff from "hot spots" including industrial and commercial properties, restaurants, auto repair shops, auto supply shops, and large commercial parking areas?

Yes ☒ No ☐ If no, explain

Complete Tables 1, 2, and 3 (BMP Measurable Goals and Milestones) in the addendum of this NOI. Identify and outline measurable goals and milestones. Attach completed Section 1 tables to this NOI.

ADDENDUM

TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI) BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES

These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION THREE

TABLE 1: BMP MEASURABLE GOALS AND IMPLEMENTATION MILESTONES

	Name	DESCRIPTION
A.	Adequate Legal Authorities	An ordinance was adopted and the current BMP manual was approved and meets all sections of 4.1.4.2 and was attached to the NOI.
B.	Develop Outfall Inventory Map	The County completed 50% of the outfall inventory map in 2017. Continue to map and inspect 25% per year until complete. As of October 1, 2019 it is estimated that 76 92% of Beaufort County has been mapped.
C.	Outfall Screening for Illicit Discharges	<p>The General Public, municipalities and in house staff can submit a complaint through a new citizen "connect" app. that was created to assist in reporting non-stormwater discharges. The app. will allow the complaints to be identified by type of discharge such as: automobile fluids, chemicals, construction site runoff, restaurant grease trap, SSO, yard clippings etc. The County will disburse the complaint to the appointed staff members to investigate complaint.</p> <p>The County has developed a dry weather screening program and have attached the standard operating procedures in accordance with 4.2.3.2.3.a ii. In addition, we have included the proposed locations for dry weather screening and how we determined location and equipment used. Also, include is the proposed locations of the dry weather screening, explanation on how we determined the location and equipment used.</p>
D.	Prioritize Other Potential Illicit Discharges and Non-storm Water Discharges	The County has prioritized the illicit discharge screening schedule based on the last years monitoring results, septic tank locations, current land use and the most recent survey results. Prioritization will be updated based on revised permit boundary and complaint history. The County has developed an illicit discharge detection elimination program that addresses section 4.2.3.2.3.a ii and was attached with the NOI.
E.	Education on Illicit Discharges	Clemson University/Carolina Clear and Consortium utilizes their website, facebook and blogs to provide Stormwater Information and Education Website, with links to other programs (both public and private) that promote water quality and preservation practices. Utilize mass media outlets to provide statewide education at an increased cost-effectiveness; as needed, locally utilize mass media such as newspapers, radio, interviews and advertisements to address specific needs. Created billboards banners and promotional giveaways to provide education on POC which served as a way to attract audiences and

		increase regional consortium visibility. New brochures were created for distribution at the landfills to increase education on how to properly dispose of household chemicals.
F.	Enforcement	Enforcement policy has been adopted as part of our new stormwater ordinance section 99-501 to 99-504 - Requirements for on-site stormwater systems: enforcement, methods and inspections.
G.	Monitoring Plan	The County has developed a monitoring plan based on the findings from several methods. See Appendix C BMP Manual. We have completed a survey, compiled historical monitoring data, compared last 10 years of land use, location of septic tanks, TMDL and impaired water bodies as the basis of our monitoring program. The monitoring plan will be updated to include the TMDLs in the expanded permit boundaries.
H.	Staff Training on IDDE	Educate staff about IDDE protocols found in BMP Manual to all applicable staff, including inspectors, field personnel, and facility operators.
I.	Stormwater System Asset Mapping	Map the stormwater system throughout the County's unincorporated area. Map and inspect at least 25% of the system per year. The current BMP manual requires new and redevelopment to provide as-builts prior to receiving certificate of completion. This stormwater information will be included in the overall stormwater system asset map to better manage the system and track IDDEs.

TABLE 2: ADMINISTRATIVE INFORMATION

PRIMARY CONTACT	POSITION OR TITLE
Dan Rybak Neil Desai, PE	Stormwater Manager
OTHER DEPARTMENT	ROLE
Stormwater Regulatory	MS4 Coordinator and Stormwater Inspectors
BEST MANAGEMENT PRACTICES (BMPs) MEASURABLE GOALS AND IMPLEMENTATION MILESTONES (Continued)	
GOVERNMENT ENTITY	ROLE
Beaufort County SW Regulatory	Dan Rybak Neil Desai, PE, Stormwater Manager
OTHER INSTITUTION	ROLE
Carolina Clear Clemson University	Ellen, Comeau Coordinator working with all Municipalities in Beaufort County
EQUIPMENT NEEDS (IF APPLICABLE)	
Sampling Equipment	
GROUP	TARGET DESCRIPTION
Beaufort County Stormwater Utility	Equipment necessary for sampling
USCB	Routine and special projects water quality sample collection, Lab services

ADDENDUM
TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)
BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES

These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

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SECTION THREE

TABLE 3: BEST MANAGEMENT PRACTICES

The purpose of this addendum is to record the measurable goals for each BMP, and the dates (month and year) by which interim actions are to be accomplished. Space is given for four BMPs for each of the six minimum measures.

Measurable goals are BMP design objectives, or goals that will quantify the progress of implementing the actions or performance of a BMP. They are ways to measure activities or effects of a BMP. For each of the six minimum measures and for each BMP, define the measurable goal you will use to monitor effectiveness of this BMP.

For each BMP, establish milestones for implementation. These tables are set up for once/year milestones. You may change the milestone dates to time frames less than one year. Also, certain BMPs - e.g., an ordinance - should be put in place within one year.

BMP A	MEASURABLE GOALS AND MILESTONES
Goals	<p>Within 24 months of the effective date of this permit, develop an ordinance, or other regulatory mechanism, adequate legal authorities to meet the objectives of the Illicit Discharge Stormwater Management Program consistent with Sections 4.2.3.2.5 and 4.2.3.2.7 of SCRO300000</p> <p>Establish the authority to request information such as stormwater plans, inspection reports, monitoring results, and other information deemed necessary to evaluate compliance with the Illicit Discharge Stormwater Management Program.</p> <p>Establish the authority to enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to stormwater illicit discharges to determine whether there is compliance of the Illicit Discharge Stormwater Management Program.</p> <p>Establish the authority to issue violations to determined establishments and/or owners when illicit discharges and/or non-storm water discharges are determined.</p>
Milestone Year 1	Developed and adopted a new stormwater ordinance setting forth the illicit discharge program, requiring implementation and continued maintenance of outfall inventory data collection. The ordinance included necessary authorities for determining illicit discharges and non-storm water discharges, outfall screening, authority to enter public or private property with outfalls, trace illicit discharges to source, and enforcement.
Milestone Year 2	Complete development of ordinance setting forth the illicit discharge program, requiring implementation and continued maintenance of outfall inventory data collection. Implemented ordinance and continued progress with programs authorized in the ordinance.
Milestone Year 3	Implemented ordinance setting forth the illicit discharge program, requiring implementation and continued maintenance of outfall inventory data collection.
Milestone Year 4	Continued implementation of ordinance setting forth the illicit discharge program, requiring implementation and continued maintenance of outfall inventory data collection.
Milestone Year 5	Review and reassess ordinance setting forth the illicit discharge program, requiring implementation and continued maintenance of outfall inventory data collection.
BMP B	MEASURABLE GOALS AND MILESTONES
Goals	Develop procedures for field data collection activities and administration tasks for new development. Implement inventory collection of County owned outfalls. Complete overall inventory map and continue to update map as construction plans are approved and developments are constructed.
Milestone Year 1	Inspected 25% off all outfalls. Developed procedures for field data collection activities and administration tasks for data collection of new development. All development will be required to submit as-builts prior to issuance of the certificate of completion. The new stormwater permit data base will allow the staff to track new BMP's that are constructed during monthly or annual inspection. The Stormwater Department also purchased a video camera that will be able to provide field data on possible stormwater pipe failures. All BMP's will be required to record a maintenance agreement.
Milestone Year 2	Inspected 100% of the known storm sewer system within the County after Hurricane Matthew including stormwater infrastructure pipes and outfalls.
Milestone Year 3	Inventoried another 25% of County owned outfalls. Continue to update map as new development and/or changes occur.
Milestone Year 4	Continued inventory of final 25 XX% of County owned outfalls. Continued to update map as new development and/or changes occur.

Milestone Year 5	Complete inventory map by implementing inventory of remaining 25% of County owned outfalls. Continue to update map as new development and/or changes occur.
BMP C	MEASURABLE GOALS AND MILESTONES
Goals	Determine a list of significant illicit discharges. Develop and implement procedures for conducting outfall screening with scheduled visits of all outfalls to locate the problem, determine the source of the problem, remove/correct the illicit discharge, organize data collected, and report illicit discharges determined.
Milestone Year 1	Participated in a survey to determine list of significant illicit discharges. Developed procedures for conducting outfall screening with scheduled visits of all outfalls. Report illicit discharges in annual report.
Milestone Year 2	Implemented outfall screening and inspections of reported violations to determine source of illicit discharge. Performed 23 inspections and created documentation in Munis. Results are reported in annual report.
Milestone Year 3	Performed 11 inspections and created documentation within MUNIS and the BC Connect app. Results are reported in annual report.
Milestone Year 4	Continued to implement conducting outfall screening and determine source of illicit discharge.
Milestone Year 5	(60 months) Conduct outfall screening with a schedule to visit all outfalls during the permit term. Maintain records of all data collected. Continued to implement outfall screening and determine source of illicit discharge.
BMP D	MEASURABLE GOALS AND MILESTONES
Goals	Determine a list of other potential illicit discharges, non-storm water discharges and incidental non-storm water discharges. Prioritize and establish procedures to evaluate the list of other potential illicit discharges and non-storm water discharges.
Milestone Year 1	Completed survey and held a strategic planning meeting with all local municipalities to identify behaviors that contribute to stormwater pollution as well as audiences that need additional education about stormwater pollution and particular areas of concerns.
Milestone Year 2	Implement procedures for determining list of other potential illicit discharges, non-storm water discharges and incidental non-storm water discharges.
Milestone Year 3	Prioritized investigations for the other potential illicit discharges, non-storm water discharges, and incidental non-storm water discharges.
Milestone Year 4	Begin investigating for other potential illicit discharges, non-storm water discharges, and incidental non-storm water discharges.
Milestone Year 5	Continued investigating for other potential illicit discharges, non-storm water discharges, and incidental non-storm water discharges.
BMP E	MEASURABLE GOALS AND MILESTONES
Goals	Establish education and training to the public on illicit discharges.
Milestone Year 1	The five major pollutants based on the strategic planning effort with Carolina Clear are the following: Post Construction, run off volume, littering, bacteria (septic tanks and SSO) and fertilizer. We have determined the target audience for each pollutant of concern and will continue education and training of the public.
Milestone Year 2	Continued education and training to the public.
Milestone Year 3	Continued education and training to the public. Made it easier for public to report accurate illicit discharge complaints through education with our app, BC Connect.
Milestone Year 4	Continued education and training to the public.
Milestone Year 5	Continued education and training to the public. Due to COVID 19, planned trainings after March 2020 were cancelled.
BMP F	MEASURABLE GOALS AND MILESTONES
Goals	Track the issuance of notices of violation and enforcement actions. This mechanism shall include the ability to identify chronic violators for initiation of actions to reduce noncompliance.

Milestone Year 1	Enforcement policy has been adopted as part of our new stormwater ordinance section. Sec. 99-501 to 99-504. - Requirements for on-site stormwater systems: enforcement, methods and inspections. A database was also created to track illicit discharge and enforcement. The database will also provide reports to assist in determining if an area has consistent violations.
Milestone Year 2	Notices of violation and enforcement actions have begun to be tracked through MUNIS.
Milestone Year 3	Continued to track issuance of notices of violations and enforcement actions through MUNIS as well as monthly reports to the Stormwater Utility Board.
Milestone Year 4	Continued to track issuance of notices of violations and enforcement actions through MUIS as well as monthly reports to the Stormwater Utility Board..
Milestone Year 5	Reviewed and reassessed procedures and database. Continued to track issuance of notices of violations and enforcement actions through MUNIS as well as monthly reports to the Stormwater Utility Board.
BMP G	MEASURABLE GOALS AND MILESTONES
Goals	Measure pollutant levels discharged from identified outfalls to water bodies subject to TMDL.
Milestone Year 1	The County has several watersheds within the County that are impaired and one TMDL. The Okatie River TMDL is identified as having an impairment for fecal. The TMDL has over 10 years of data that is being analyzed to determine possible sources of pollutants such as: wild life, agriculture and failing septic tanks. Developed a TMDL Monitoring and Assessment Plan for discharges of concern located in the TMDL watershed draining to impaired WQMS.
Milestone Year 2	Determined a schedule for implementing the developed TMDL Monitoring and Assessment Plan. Developed procedures for implementation of water quality monitoring and monitoring database and implement procedures (30 months). Began analysis of historical data to determine trends and loading by looking at the TMDL watershed, Okatie River.
Milestone Year 3	Continued to implement monitoring schedule and database. Report data and findings of water quality monitoring to DHEC. Update Monitoring Plan for expanded jurisdiction due to change to Permit by Rule.
Milestone Year 4	Continue to implement monitoring schedule and database. Report data and findings of water quality monitoring to DHEC. Implemented newly developed monitoring schedule and database developed for jurisdiction added by change in permit by rule.
Milestone Year 5	Continued to implement monitoring schedule and database. Report data and findings of water quality monitoring to DHEC. Develop an implementation plan for the Okatie River Watershed and Chechessee Creek Watershed. Year 2 of monitoring efforts will be completed December 2020. At that time, data will be reviewed and implementation plans will be designed.
BMP H	MEASURABLE GOALS AND MILESTONES
Goals	Staff training on IDDE
Milestone Year 1	
Milestone Year 2	Develop training materials. Train staff. Provided training program webinar developed by SESWA to applicable county staff and inspectors.
Milestone Year 3	Provided annual refresher training and full training for new staff.
Milestone Year 4	Provided annual refresher training and full training for new staff.
Milestone Year 5	Provided annual refresher training and full training for new staff.
BMP I	MEASURABLE GOALS AND MILESTONES
Goals	Map the County owned storm sewer system.
Milestone Year 1	Developed procedures for mapping and condition assessment of the storm sewer system. GIS created data collection software tools and inventory protocols.
Milestone Year 2	Map and assess 25% of stormwater management system. Report "poor" condition areas to the SW Superintendent. Add new stormwater system components accepted in new developments through the as-built process.
Milestone Year 3	Mapped and assessed 25% of stormwater management system. Report "poor" condition areas to the SW Superintendent. Add new stormwater system components accepted in new developments through the as-built process.

Milestone Year 4	Mapped and assessed 10% of stormwater management system. Report “poor” condition areas to the SW Superintendent. Added new stormwater system components accepted in new developments through the as-built process.
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Milestone Year 5	Map and assess remaining 7% of stormwater management system. Report “poor” condition areas to the SW Superintendent. Add new stormwater system components accepted in new developments through the as-built process.
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SECTION 4
CONSTRUCTION SITE RUNOFF PROGRAM
CONSTRUCTION SITE RUNOFF ORDINANCES

1. Do the current ordinances/regulations for the municipal stormwater management program comply with Local, State and Federal public notice requirements? If yes, describe how the public is notified.

Yes ☒

No ☐

Please see attached section Sec. 99-211. of the Stormwater Ordinance which explains how the Public is notified.

2. Do you currently have an erosion prevention and sediment control - or similar - ordinance or regulatory mechanism? If yes, include a copy and reference the page number(s). If No, proceed to the next set of questions below about construction site plans review.

Yes ☒

No ☐

Sec. 99-201 Appendix G-17,18 and Sec. 99-309 Appendix G BMP Manual & Sec. 4 Page 4-1 to 4-68

3. Does the ordinance or regulatory mechanism require that site operators implement erosion prevention, sediment control, soil stabilization practices and other controls for land disturbance activities?

Yes ☒

No ☐ If no, explain

4. Does the ordinance/regulatory mechanism require (explicitly or implicitly) that controls be implemented for any land disturbances greater than or equal to one acre, or less than one acre if part of a large common plan of development or sale that would disturb one acre or more? If yes, note the page number and paragraph number where this is defined.

Yes ☒

No ☐

A-1

Page Number

Appendix A

Paragraph Number

5. Does the ordinance or regulatory mechanism contain or reference technical standards for erosion and sediment control? If yes, note the page number and paragraph number where this is defined.

Yes ☒

No ☐

4-1

Page Number

Section 4

Paragraph Number

6. Do those technical standards meet with or exceed the current SC DHEC construction general permit sections 3.5 and 4.4?

Yes ☒

No ☐

7. Do technical standards require that construction activities maintain temporary water quality buffers during construction?

Yes ☒

No ☐

8. Does the ordinance or regulatory mechanism clearly define the criteria - primarily who must submit - for submitting erosion and sediment control information or plans? If yes, note page number and paragraph number

Yes ☒

No ☐

4-1

Page Number

Section 4

Paragraph Number

9. Does the ordinance or regulatory mechanism require approval by the local government prior to commencement of land disturbance activities? If yes, note page number and paragraph number.

Yes ☒

No ☐

4-1

Page Number

Section 4

Paragraph Number

10. Does the ordinance or regulatory mechanism require re-submittal of erosion and sediment control information or plans if site plans or conditions change during land disturbance activities? If yes, note page number and paragraph number.

Yes ☒

No ☐

G-5

Page Number

99-103

Paragraph Number

11. Does the ordinance or regulatory mechanism allow right-of-entry for government officials onto construction sites for inspections? If yes, note page number and paragraph number.

Yes ☒

No ☐

G-25

Page Number

99-103

Paragraph Number

12. Does the ordinance or regulatory mechanism give the MS4 owner/operator the authority to STOP WORK in the event of non-compliance violations? If yes, note page number and paragraph number.

Yes ☒

No ☐

G-31

Page Number

99-501

Paragraph Number

13. Does the ordinance or regulatory mechanism give the MS4 owner/operator the authority to effectively prohibit the discharge of pollutants in wash waters, from washouts, in stormwater runoff and from leaks and spills? If yes, note page number and paragraph number.

Yes ☒

No ☐

G-19

Page Number

99-202

Paragraph Number

CONSTRUCTION SITE PLANS REVIEW

1. Does the MS4 presently have in place a technical review process with approval conditioned to meeting all requirements contained in parts 4.2.4 & 5 of the permit (i.e. engineering department, planning department, zoning board) that evaluates new development and redevelopment construction for construction site runoff?

Yes ☒

No ☐ If no, explain

2. Does the technical review process require an erosion prevention and sediment control plan to protect water quality with appropriate BMP rationale?

Yes ☒

No ☐ If no, explain

3. Does the review process include a requirement for pre-construction meeting between the MS4 and site developer, for priority construction sites, including at a minimum those construction activities discharging directly into, or immediately upstream of, waters the state recognizes as impaired or high quality?

Yes ☒

No ☐ If no, explain

4. If there is a review process, provide a brief narrative or a flow chart of the process, describing the process steps, responsible personnel qualifications (by department, title and contact person), and criteria used for evaluation of information or plans that are submitted.

Yes ☒

No ☐ If no, explain

The review process starts with the Community Development Department. This department distributes construction plans to the Stormwater Department for review. New and redevelopment plans cannot be approved without approval by the Stormwater Department. This process is illustrated in the BMP Manual in Appendix B-1.

RESPONDING TO PUBLIC INPUT AND COMPLAINTS

1. Does the MS4 presently have procedures in place for receipt and consideration of information and complaints submitted by the public?

Yes ☒

No ☐

If Yes, please provide a brief narrative of the receipt process and procedures, describing process steps, responsible departments, and personnel (by title). If available, provide information on complaint tracking, documentation, etc:

Before development and permit approval, the public input and complaints are received by the Community Development Department from the public calling the number on the public notice. After construction, complaints are differed to the Stormwater Utility Department which will resolve the problem by involving the necessary department, Engineering and/or Public Works. A citizen "connect" app. has been created for the public to notify the County of concerns in the area. The complaints will be tracked in a new data base.

ENFORCEMENT AND INSPECTION PROCEDURES

1. Does the MS4 presently have personnel and procedures in place for construction site runoff inspection?

Yes ☒

No ☐ If no, explain

2. Does the program provide for monthly inspection of priority sites?

Yes ☒

No ☐ If no, explain

3. Does the MS4 presently have procedures and personnel in place for enforcement to the maximum extend for violations of construction site requirements?

Yes ☒

No ☐ If no, explain-

4. Does the MS4 use a STOP WORK order to enforce non-compliance with construction site policies and requirements?

Yes ☒

No ☐ If no, explain

5. How are enforcement actions documented?

A County Stormwater CEPSCI certified employee will issue enforcement violations and violations are tracked. The County is transitioning to a new database to track inspections and enforcement more efficiently. It is anticipated to be live for use in early 2021.

TRAINING AND EDUCATION

1. Does the MS4 presently make construction site runoff control training/information available to the public, developers, engineers, and contractors? (Clemson University periodically provides training through its Certified Erosion Prevention & Sediment Control Inspection (CEPSCI) course. Local governments are encouraged to refer developers and contractors to these classes.)

Yes ☒

No ☐ If no, explain

2. Has MS4 staff completed states approved training, such as the Clemson CEPSCI program? Enter the number either way

Yes ☒ If yes, how many?

No ☐

5 **6** County staff

Complete Tables 1, 2, and 3 (BMP Measurable Goals and Milestones) in the addendum of this NOI. Identify and outline measurable goals and milestones. Attach completed Section 1 tables to this NOI.

ADDENDUM

TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI) BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES

These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION FOUR

TABLE 1: BMP MEASURABLE GOALS AND IMPLEMENTATION MILESTONES

	Name	DESCRIPTION
A.	Revise Stormwater Management Ordinance/ Adequate Legal Authority	<p>Revised stormwater management ordinance, or other regulatory mechanism, to adequate and clearly state the legal authorities to meet the objectives of the construction site runoff requirements for the Stormwater Management Program.</p> <p>Established the legal authority to review designs and proposals for new development and redevelopment to determine whether adequate stormwater runoff control measures will be installed, implemented, and maintained during construction.</p> <p>Established the authority to request information such as stormwater plans, inspection reports, monitoring results, and other information deemed necessary to evaluate compliance with the Construction Site Runoff Stormwater Management Program.</p> <p>Established the authority to enter private and public property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to construction sites with devices to control erosion and sediment control and other waste at site.</p>
B.	Erosion and Sediment and Other Waste at the Site Control Requirements	Developed requirements for the implementation of appropriate BMPs on a construction site to control erosion and sediment and other waste at the site.
C.	Revise Plan Review Procedures	Developed plan review procedures to determine if the construction site is in compliance with erosion control requirements determined by the County. Set requirements and procedures for a pre-construction meeting and tracking of current construction activities for the County and the public.
D.	Revise Site Inspection Procedures and Penalties	<p>Developed a BMP manual and Stormwater Ordinance to ensure that all erosion control measures meet the County's performance standards to control erosion and sediment and other waste at site. The County developed and implemented a written inspection program for construction site controls installed pursuant to the County's construction site runoff control program.</p> <p>The County also created a database to document and maintain records of inspections, findings and enforcement actions and make them available for review by the permitting authority.</p>
E.	Receipt of Public Inquires	Developed procedures for receiving and consideration of public inquires, concerns, and information submitted regarding local construction activities.

TABLE 2: ADMINISTRATIVE INFORMATION

PRIMARY CONTACT	POSITION OR TITLE
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Dan Rybak Neil Desai, PE	Stormwater Manager
OTHER DEPARTMENT	ROLE
Stormwater Regulatory	Enforcement
Community Development	Enforcement and Development Planning
Legal	Enforcement
Building and Code Enforcement	Enforcement
BEST MANAGEMENT PRACTICES (BMPs) MEASURABLE GOALS AND IMPLEMENTATION MILESTONES (Continued)	
GOVERNMENT ENTITY	ROLE
Beaufort County SW Utility	Primary responsible party
OTHER INSTITUTION	ROLE
Carolina Clear Clemson University	Public Education and Training
EQUIPMENT NEEDS (IF APPLICABLE)	
N/A	
GROUP	TARGET DESCRIPTION
N/A	N/A

ADDENDUM TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI) BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES <i><u>These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)</u></i>	
SECTION FOUR	
TABLE 3: BEST MANAGEMENT PRACTICES	
<p>The purpose of this addendum is to record the measurable goals for each BMP, and the dates (month and year) by which interim actions are to be accomplished. Space is given for four BMPs for each of the six minimum measures.</p> <p>Measurable goals are BMP design objectives, or goals that will quantify the progress of implementing the actions or performance of a BMP. They are ways to measure activities or effects of a BMP. For each of the six minimum measures and for each BMP, define the measurable goal you will use to monitor effectiveness of this BMP.</p> <p>For each BMP, establish milestones for implementation. These tables are set up for once/year milestones. You may change the milestone dates to time frames less than one year. Also, certain BMPs - e.g., an ordinance - should be put in place within one year.</p>	
BMP A	MEASURABLE GOALS AND MILESTONES
Goals	<p>Revised stormwater management ordinance, or other regulatory mechanism, to adequate and clearly state the legal authorities to meet the objectives of the construction site runoff requirements for the Stormwater Management Program.</p> <p>Established the authority to review designs and proposals for new development and redevelopment to determine whether adequate stormwater runoff control measures will be installed, implemented, and maintained during construction consistent with Section 4.2.4.5.f of SCR0300000</p> <p>Established the authority to request information such as stormwater plans, inspection reports, monitoring results, and other information deemed necessary to evaluate compliance with the Construction Site Runoff Stormwater Management Program.</p> <p>Established the authority to enter private and public property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to construction sites with devices to</p>

	control erosion and sediment control and other waste at site.
Milestone Year 1	Developed ordinance setting forth construction site runoff criteria, requiring implementation and continued maintenance of pre-construction BMPs until close out of project. The ordinance will include all necessary authorities for design review and approval, inspection, and monitoring.
Milestone Year 2	Continued implementation of ordinance setting forth construction site runoff criteria, requiring implementation and continued maintenance of pre-construction BMPs until close out of project.
Milestone Year 3	Continued implementation of ordinance setting forth construction site runoff criteria, requiring implementation and continued maintenance of pre-construction BMPs until close out of project.
Milestone Year 4	Continued implementation of ordinance setting forth construction site runoff criteria, requiring implementation and continued maintenance of pre-construction BMPs until close out of project.
Milestone Year 5	Reviewed and reassessed ordinance setting forth construction site runoff criteria, requiring implementation and continued maintenance of pre-construction BMPs until close out of project. Continued implementation of ordinance setting forth construction site runoff criteria, requiring implementation and continued maintenance of pre-construction BMPs until close out of project. No changes will be implemented until the new MS4 permit is issued.
BMP B	MEASURABLE GOALS AND MILESTONES
Goals	Developed requirements for the implementation of appropriate BMPs on a construction site to control erosion and sediment and other waste at the site.
Milestone Year 1	Implemented construction site runoff control standards.
Milestone Year 2	Implemented construction site runoff control standards.
Milestone Year 3	Implemented construction site runoff control standards.
Milestone Year 4	Continued to implement construction site runoff control standards.
Milestone Year 5	Review and reassess construction site runoff control standards. Continued to implement construction site runoff control standards. No changes will be implemented until the new MS4 permit is issued.
BMP C	MEASURABLE GOALS AND MILESTONES
Goals	Developed plan review procedures to determine if the construction site is in compliance with erosion control requirements determined by the County. Set requirements and procedures for a pre-construction meeting and tracking of current construction activities for the County and the public.
Milestone Year 1	Educated County staff of construction site runoff control standards and plan requirements.
Milestone Year 2	Implemented procedures and requirements for construction site compliance, pre-construction meetings, and tracking of current construction activities for erosion and sediment control.
Milestone Year 3	Implemented procedures and requirements for construction site compliance, pre-construction meetings, and tracking of current construction activities for erosion and sediment control.
Milestone Year 4	Implemented procedures and requirements for construction site compliance, pre-construction meetings, and tracking of current construction activities for erosion and sediment control.
Milestone Year 5	Reviewed and reassessed procedures and requirements. Implemented procedures and requirements for construction site compliance, pre-construction meetings, and tracking of current construction activities for erosion and sediment control. No changes will be implemented until the new MS4 permit is issued.
BMP D	MEASURABLE GOALS AND MILESTONES
Goals	Developed BMP manual and stormwater ordinance to ensure that all erosion control measures meet the County's performance standards to control erosion and sediment and other waste at site. The County shall develop and implement a written inspection program for construction site controls installed pursuant to the County's construction site runoff control program. Created database to document and maintain records of inspections, findings and enforcement actions and make them available for review by the permitting authority.
Milestone Year 1	Developed a stormwater ordinance that references a written inspection program; including issuing infractions, development of a database for tracking and inspecting pre-construction control devices, and a draft written inspection program.
Milestone Year 2	Completed stormwater ordinance and written inspection program.

Milestone Year 3	Implemented the stormwater ordinance and inspection program, including to update the database with inspection records, findings and enforcement actions.
Milestone Year 4	Continued to implement the stormwater ordinance and inspection program, including to update the database with inspection records, findings and enforcement actions.

Milestone Year 5	Reviewed and reassessed the ordinance and inspection program. Continued to implement the Stormwater ordinance and inspection program, including to update the database with inspection records, findings, and enforcement actions. Changes to inspection procedures and Stormwater ordinance will occur in early 2021 based on updates to the County's Design standards manual changing.
BMP E	MEASURABLE GOALS AND MILESTONES
Goals	Developed procedures for receiving and consideration of public inquires, concerns, and information submitted regarding local construction activities.
Milestone Year 1	Developed procedures for receiving and distributing to key staff for consideration of public inquires, concerns, and information submitted regarding local construction activities.
Milestone Year 2	Completed procedures for receiving and distributing to key staff for consideration of public inquires, concerns, and information submitted regarding local construction activities.
Milestone Year 3	Implemented procedures for receiving and distributing to key staff for consideration of public inquires, concerns, and information submitted regarding local construction activities.
Milestone Year 4	Continued to implement procedures for receiving and distributing to key staff for consideration of public inquires, concerns, and information submitted regarding local construction activities.
Milestone Year 5	Reviewed and reassessed procedures for receiving and distributing to key staff for consideration of public inquires, concerns, and information submitted regarding local construction activities. Implemented procedures for receiving and distributing to key staff for consideration of public inquires, concerns, and information submitted regarding local construction activities.

SECTION 5
POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT OR
PERMANENT / LONG TERM STORM WATER POLLUTION CONTROL MEASURES

POST-CONSTRUCTION STORMWATER MANAGEMENT PROGRAM

1. Will the Post-Construction Stormwater Management Program require that controls are in place to meet the site performance standards in Part 4.2.5.2 to the MEP and to protect water quality?

Yes ☒

No ☐ If no, explain

2. Does the MS4 currently have in place mechanisms or strategies to address permanent stormwater runoff management from new development or redevelopment projects that result in land disturbance of one acre or more? For example, land use planning requirements, zoning directives, site-based local controls such as riparian buffer zone protection; storage or detention of stormwater prior to release to streams; practices to cause stormwater to percolate the soil rather than runoff immediately; vegetative practices.

Yes ☒

No ☐

If Yes, please provide a brief narrative of - and/or references to - the structural and non-structural strategies, describing strategies implemented, Best Management Practices allowed, technical guidance, responsible departments, and personnel (by title).

Sections 2 and 5 of the BMP Manual states: All development that creates runoff and/or discharge may adversely impact water quality in county streams, lakes and tidal waterbodies. Therefore, all proposed development and redevelopment shall be required to submit a Drainage Plan to show compliance with the peak attenuation, water quality, volume and construction pollution control requirements in this manual

SITE PERFORMANCE STANDARDS

1. Has the permittee established, implemented and enforced a requirement that owners or operators of new development and redeveloped sites discharging to the MS4, which disturb greater than or equal to one acre (including projects that disturb less than one acre that are part of a larger common plan of development or sale), design, install, implement, and maintain stormwater control measures that maintain pre-development conditions and protect water quality to the MEP?

Yes ☒

No ☐

BMP Manual Sect.
2-1

Page Number

Sec.: 2.1.1

Paragraph Number

PERMANENT STORMWATER CONTROLS SITE MANAGEMENT ORDINANCE

1. Do you currently have an ordinance or regulatory mechanism that addresses permanent stormwater runoff management from new development and redevelopment projects? If yes, reference the page number in your ordinance. If No, proceed to the next section on permanent stormwater management plans review.

Yes ☒

No ☐

2-1

Page Number

Sec.: 2.1.1

Paragraph Number

2. Does the ordinance or regulatory mechanism require controls to mitigate pollutants in stormwater runoff? If yes, note page number and paragraph number.

Yes ☒

No ☐

G-14

Page Number

99-115

Paragraph Number

3. Does the ordinance or regulatory mechanism require (explicitly or implicitly) that controls be implemented for any new development or redevelopment projects greater than or equal to one acre, including projects less than one acre that are part of a large common plan of development or sale, that discharge into your small MS4? If yes, note page number and paragraph number.

Yes ☒

No ☐

2-1

Page Number

Sec.: 2.1.1

Paragraph Number

4. Does the ordinance or regulatory mechanism contain or reference technical standards for water quality controls (e.g., design of detention basins)? If yes, note page number and paragraph number.

Yes ☒

No ☐

2-5

Page Number

Sec.: 2.1.4

Paragraph Number

5. Does the ordinance or regulatory mechanism clearly define the criteria for submittal -who must submit - of permanent stormwater management design information or plans? If yes, note page number and paragraph number.

Yes ☒

No ☐

2-11

Page Number

Sec.: 2.3.2

Paragraph Number

6. Does the ordinance or regulatory mechanism require approval prior to construction of permanent stormwater management controls? If yes, note page number and paragraph number.

Yes ☒ No ☐ 2-20 Page Number Sec. 2.8.1.21 Paragraph Number

7. Does the ordinance or regulatory mechanism require re-submittal of permanent stormwater management design information or plans if site plans change after the initial design has been approved? If yes, please note page number and paragraph number.

Yes ☒ No ☐ D-1 Page Number Appendix D Paragraph Number

8. Does the ordinance or regulatory mechanism give the MS4 owner/operator the authority to penalize the owner of permanent stormwater management controls for violations? If yes, note page number and paragraph number.

Yes ☒ No ☐ G-33 Page Number 99-504 Paragraph Number

9. Does the ordinance or regulatory mechanism allow the MS4 right-of-entry on property where permanent stormwater management controls are installed for inspections? If yes, please note page number and paragraph number.

Yes ☒ No ☐ G-6 Page Number 99-104 Paragraph Number

10. Does the ordinance or regulatory mechanism require that permanent stormwater management controls have adequate and long-term operation and maintenance? If yes, please note page number and paragraph number. If no, how does the MS4 owner/operator maintain permanent stormwater management controls?

Yes ☒
No ☐

Appendix G 99-103 Page G-5 and G-6

11. Does the ordinance or regulatory mechanism require establishment and maintenance of water quality buffers in areas of new development and redevelopment?

Yes ☒ **Appendix G Sec.: 99-300 Page G-25** No ☐ If no, explain

PERMANENT STORMWATER MANAGEMENT PLANS REVIEW

1. Does the MS4 presently have in place a technical review process (i.e. engineering department, planning department, zoning board) that evaluates new development and redevelopment with regard to the impact that permanent stormwater runoff will have on receiving streams? Plan review must specifically address site performance standards and ensure long term maintenance.

Yes ☒ No ☐

If Yes, provide a brief narrative or a flow chart of the review process, describing the process steps, responsible personnel (by department, title and contact person), and criteria used for evaluation of information or plans that are submitted.

The review process starts with the Community Development Department with Hillary Austin, Zoning Administrator. Ms. Austin distributes engineering related items such as stormwater construction plans and calculations to the Stormwater Department with Eric Larson, Stormwater Manager, who coordinates with the professional engineer of record for questions and comments on the submitted design.

2. Does the MS4 presently have in place a requirement for submittal of 'as-built' certifications at project completion to ensure that site performance standards and long term maintenance requirements are met?.

Yes ☒ No ☐ If no, explain

3. Does the MS4 presently include measures for effective water quality protection in its watersheds?

Yes ☒ No ☐ If no, explain

4. Does the MS4 track Post-Construction Stormwater Control measures?.

Yes ☒ No ☐ If no, explain

5. Does the MS4 conduct inspection of permanent storm water controls and document all findings and enforcement actions?

Yes ☒ No ☐ If no, explain

Complete Tables 1, 2, and 3 (BMP Measurable Goals and Milestones) in the addendum of this NOI. Identify and outline measurable goals and milestones. Attach completed Section 1 tables to this NOI.

ADDENDUM

TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI) BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES

These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION FIVE

TABLE 1: BMP MEASURABLE GOALS AND IMPLEMENTATION MILESTONES

	Name	DESCRIPTION
A.	Adequate legal authorities	<p>Maintain through an ordinance, or other regulatory mechanism, adequate legal authorities to meet the objectives of the Post-Construction Site Runoff Controls program.</p> <p>Establish the authority to review designs and proposals for new development and redevelopment to determine whether adequate stormwater control measures will be installed, implemented, and maintained.</p> <p>Establish the authority to request information such as stormwater plans, inspection reports, monitoring results, and other information deemed necessary to evaluate compliance with the Post-Construction Stormwater Management Program.</p> <p>Establish the authority to enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to stormwater discharges to determine whether there is compliance the Post-Construction Stormwater Management Program.</p>
B.	Determine BMPs	Review and revise (as necessary) the current Beaufort County Stormwater Manual to include the latest BMPs (non-structural, structural, infiltration, and vegetation).
C.	Plan reviews	Conduct site plan reviews of all new development and redeveloped sites that disturb greater than or equal to one acre (including sites that disturb less than one acre that are part of a larger common plan of development or sale). The site plan review shall address how the project applicant meets the performance standards and how the project will ensure long-term maintenance.
D.	Provide a mechanism to require long-term operation and maintenance of structural BMPs	Implement or require an operation and maintenance plan for the long-term operation of the structural BMPs required by the program. The operation and maintenance plan shall require the owner of each structural BMP to perform and maintain a record of annual inspections of each structural BMP. Annual inspection of permitted structural BMPs shall be performed by a qualified professional.
E.	Inspections of Structural Stormwater Control Measures	<p>To ensure that all stormwater control measures meet the County's performance standards and are being maintained pursuant to the maintenance agreement, the County shall develop and implement a written inspection program for structural stormwater controls installed pursuant to the County's post-construction program for all public and privately owned stormwater control measures with the County.</p> <p>Document and maintain records of inspections, findings and enforcement actions and make them available for review by the permitting authority. Maintain a GIS based inventory of all Post-Construction Stormwater Control Measures.</p>
F.	Enforcement	Track the issuance of notices of violation and enforcement actions. This mechanism shall include the ability to identify chronic violators for initiation of actions to reduce noncompliance.

TABLE 2: ADMINISTRATIVE INFORMATION

PRIMARY CONTACT	POSITION OR TITLE
Dan Rybak Neil Desai, PE	Stormwater Manager
OTHER DEPARTMENT	ROLE
Community Development Department	Ordinance assistance
Legal	Ordinance assistance

Building and Code Enforcement	Ordinance assistance and enforcement
BEST MANAGEMENT PRACTICES (BMPs) MEASURABLE GOALS AND IMPLEMENTATION MILESTONES (Continued)	
GOVERNMENT ENTITY	ROLE
Beaufort County SW Utility	Primary responsible party
OTHER INSTITUTION	ROLE
Carolina Clear/Clemson University	Training assistance
EQUIPMENT NEEDS (IF APPLICABLE)	
N/A	
GROUP	TARGET DESCRIPTION
N/A	N/A

<p align="center">ADDENDUM TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI) BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES <u><i>These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)</i></u></p>	
<p align="center">SECTION FIVE</p>	
<p align="center">TABLE 3: BEST MANAGEMENT PRACTICES</p>	
<p>The purpose of this addendum is to record the measurable goals for each BMP, and the dates (month and year) by which interim actions are to be accomplished. Space is given for four BMPs for each of the six minimum measures.</p> <p>Measurable goals are BMP design objectives, or goals that will quantify the progress of implementing the actions or performance of a BMP. They are ways to measure activities or effects of a BMP. For each of the six minimum measures and for each BMP, define the measurable goal you will use to monitor effectiveness of this BMP.</p> <p>For each BMP, establish milestones for implementation. These tables are set up for once/year milestones. You may change the milestone dates to time frames less than one year. Also, certain BMPs - e.g., an ordinance - should be put in place within one year.</p>	
BMP A	MEASURABLE GOALS AND MILESTONES
Goals	<p>Maintain through an ordinance, or other regulatory mechanism, adequate legal authorities to meet the objectives of the Post-Construction Site Runoff Controls program.</p> <p>The County shall have the authority to review designs and proposals for new development and redevelopment to determine whether adequate stormwater control measures will be installed, implemented, and maintained.</p> <p>The County shall have the authority to request information such as stormwater plans, inspection reports, monitoring results, and other information deemed necessary to evaluate compliance with the Post-Construction Stormwater Management Program.</p> <p>The County shall have the authority to enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to stormwater discharges to determine whether there is compliance the Post-Construction Stormwater Management Program.</p>
Milestone Year 1	Developed ordinance setting forth design criteria, requiring implementation and continued maintenance of post-construction BMPs. The ordinance will include all necessary authorities for design review and approval, inspection, and monitoring.

Milestone Year 2	Implemented ordinance setting forth design criteria, requiring implementation and continued maintenance of post-construction BMPs.
Milestone Year 3	Continued implementation of ordinance setting forth design criteria, requiring implementation and continued maintenance of post-construction BMPs.
Milestone Year 4	Continued implementation of ordinance setting forth design criteria, requiring implementation and continued maintenance of post-construction BMPs.
Milestone Year 5	Reviewed and reassessed ordinance setting forth design criteria, requiring implementation and continued maintenance of post-construction BMPs. Continued implementation of ordinance setting forth design criteria, requiring implementation and continued maintenance of post-construction BMP's.
BMP B	MEASURABLE GOALS AND MILESTONES
Goals	Review and revise (as necessary) the current Beaufort County Stormwater BMP Manual to include the latest BMPs (non-structural, structural, infiltration, and vegetation).
Milestone Year 1	Completed review and updates of the Beaufort County Stormwater BMP Manual as necessary to implement desired BMPs. Beaufort County Stormwater BMP Manual.
Milestone Year 2	Implemented the Beaufort County Stormwater BMP Manual. Began additional maintenance revisions to the BMP manual as needs were identified through implementation.
Milestone Year 3	Continued to implement the Beaufort County Stormwater BMP Manual.
Milestone Year 4	Continued to implement the Beaufort County Stormwater BMP Manual.
Milestone Year 5	Reviewed and reassessed the Beaufort County Stormwater BMP Manual. The County will adopt new Stormwater Design Standards in early 2021. Continued to implement the Beaufort County Stormwater BMP Manual.
BMP C	MEASURABLE GOALS AND MILESTONES
Goals	The County shall conduct site plan reviews of all new development and redeveloped sites that disturb greater than or equal to one acre (including sites that disturb less than one acre that are part of a larger common plan of development). The site plan review shall address how the project applicant meets the performance standards and how the project will ensure long-term maintenance.
Milestone Year 1	Complete plans review process and procedures in conjunction with developing the stormwater ordinance. Redefined the plans-review process and procedures in conjunction with developing the stormwater ordinance, including review and clearly stating criteria for stormwater treatment and design standards.
Milestone Year 2	Implemented plans review process and procedures. Reviewed 113 plans and worked with designers and engineers of record to meet requirements.
Milestone Year 3	Continued implementation of plans review process and procedures. Reviewed 124 plans and worked with designers and engineers of record to meet requirements.
Milestone Year 4	Continued to implement the plans review process and procedures.
Milestone Year 5	Reviewed and reassessed the plans review process and procedures. The plan review process will change slightly with the adoption of the County's new design standards manual. Continued to implement the plan review process and procedures.
BMP D	MEASURABLE GOALS AND MILESTONES
Goals	The County shall implement or require an operation and maintenance plan for the long-term operation of the structural BMPs required by the program. The operation and maintenance plan shall require the owner of each structural BMP to perform and maintain a record of annual inspections of each structural BMP. Annual inspection of permitted structural BMPs shall be performed by a qualified professional.
Milestone Year 1	Developed procedures to require an operation and maintenance plan for the long-term operation of the structural BMPs required by the program. Completed procedures to require an operation and maintenance plan for the long-term operation of the structural BMPs required by the program. Made available stormwater control measure (SCM) maintenance plan templates.
Milestone Year 2	Educated SCM operators of maintenance plan requirements. Recorded maintenance agreements and issued a County Stormwater permit in order to schedule annual inspections. The County requires a maintenance plan for each SCM and enters the appropriate data into SCM database.

Milestone Year 3	Continue to implement maintenance plan for each SCM and enter appropriate data into SCM database. Educated SCM operators of maintenance plan requirements. Recorded maintenance agreements and issued a County Stormwater permit in order to schedule annual inspections. The County requires a maintenance plan for each SCM and enters the appropriate data into SCM database.
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Milestone Year 4	Continued to implement maintenance plan for each SCM and enter appropriate data into SCM database.
Milestone Year 5	Complete Continued to implement maintenance plan procedures for all current SCMs and enter appropriate data into SCM database.
BMP E	MEASURABLE GOALS AND MILESTONES
Goals	To ensure that all stormwater control measures meet the County's performance standards and are being maintained pursuant to the maintenance agreement, the County shall develop and implement a written inspection program for structural stormwater controls installed pursuant to the County's post-construction program. The County shall document and maintain records of inspections, findings and enforcement actions and make them available for review by the permitting authority.
Milestone Year 1	Created a written inspection program and start to develop stormwater ordinance that references the written inspection program. Begin to setup database for tracking and inspecting post-construction stormwater control measures.
Milestone Year 2	Completed the written inspection program and stormwater ordinance that references the written inspection program. Completed the setup of a database for tracking and inspecting post-construction stormwater control measures.
Milestone Year 3	Implemented routine inspections.
Milestone Year 4	Continued to implement routine inspections.
Milestone Year 5	Completed inspection of every post-construction SCM and documented inspections, findings and enforcement actions in the database.
BMP F	MEASURABLE GOALS AND MILESTONES
Goals	Track the issuance of notices of violation and enforcement actions. This mechanism shall include the ability to identify chronic violators for initiation of actions to reduce noncompliance.
Milestone Year 1	Developed procedures and database for tracking post-construction stormwater control measures violations.
Milestone Year 2	Identified and input SCMs violations in database. Completed procedures and database for tracking post-construction stormwater control measures violations.
Milestone Year 3	Continued to identify and input SCMs violations in database.
Milestone Year 4	Continued to identify and input SCMs violations in database.
Milestone Year 5	Continued to identify and input SCMs violations in database. Complete inventory of county-wide inspections of current SCMs and corresponding violation(s). Improved tracking of new SCM's, and with new permitting software coming available in early 2021, the process will be more streamlined.

SECTION 6
POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

MUNICIPAL FACILITIES AND STORMWATER CONTROL INVENTORY

1. Has the MS4 owner/operator obtained a SC Industrial Stormwater General Permit coverage or a no-exposure waiver for all qualifying municipal industrial activities? If yes, please give permit numbers or copy of the No-Exposure Certification form. .

Yes ☒ No ☐

Mosq. Control SCG160002	Hilton Head Airport SCR002271	Lady's Island Airport SCR001962
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2. List municipally-owned or operated facilities that have a notable potential for contaminating runoff: for example - vehicle maintenance garages; waste transfer operations; golf courses; salt or other materials storage; landfill. If more than one facility for a given type of operation; give the number of such facilities. Indicate if any of these are covered by an NPDES permit. Is there a documented pollution prevention plan in place for these facilities?

Notable Potential for Pollution (Y/N)	Priority (H/M/L)	FACILITY OR TYPE OF OPERATION	POLLUTANT OF CONCERN	STREET ADDRESS	TYPE_USE	AUDITED IN PERMIT YR (Y/N)	Activity Covered by NPDES Permit? (Y/N)	Is a Pollution Prevention Plan in Effect? (Y/N)
Y	L	HILTON HEAD AIRPORT TERMINAL	Fuel	120 BEACH CITY RD	Airport	Y	Y	Y
Y	L	LI AIRPORT TERMINAL	Fuel	237 SEA ISLAND PKWY	Airport	Y	Y	Y
Y	L	LI AIRPORT HANGARS	Fuel, Chemicals	237 SEA ISLAND PKWY	Airport	Y	Y	Y
Y	L	LI AIRPORT T-HANGER	Fuels, Chemicals	237 SEA ISLAND PKWY	Airport	Y	Y	Y
N	L	ARTHUR HORNE BUILDING	Generator Fuel	104 RIBAUT RD	County Administration	N	N	N
Y	L	BIV BLDG 3	Generator	102 INDUSTRIAL VILLAGE RD	County Administration	N	N	N
Y	L	CORONER	Generator	1804 OLD SHELL RD	County Administration	N	N	N
Y	L	DSN OFFICE	Generator	1 WASTEWATER WAY	County Administration	N	N	N
Y	L	COUNTY DETENTION CENTER	Generator	106 RIBAUT RD	Detention Center	N	N	N
Y	H	BIG ESTATE DOC BLDG	Solid Waste	63 BIG ESTATE RD	Drop Off Center	Y	N	N
Y	H	BLUFFTON DOC BLDG	Solid Waste	104 SIMMONSVILLE RD	Drop Off Center	Y	N	N
Y	H	COFFIN PT DOC BLDG	Solid Waste	20 CEE CEE RD	Drop Off Center	Y	N	N
Y	H	CUFFY DOC BLDG	Solid Waste	138 CUFFY RD	Drop Off Center	Y	N	N
N	H	DAUFUSKIE ISLAND DOC	Solid Waste	186 HAIG POINT RD	Drop Off Center	N	N	N
Y	H	HILTON HEAD DOC	Solid Waste	26 Summit Drive	Drop Off Center	Y	N	N
Y	H	GATES DOC BLDG	Solid Waste	316 CASTLE ROCK RD	Drop Off Center	Y	N	N
Y	H	LOBECO DOC BLDG	Solid Waste	6 KEANS NECK RD	Drop Off Center	Y	N	N
Y	H	PRITCHARDVILLE DOC BLDG	Solid Waste	54 GIBBET RD	Drop Off Center	Y	N	N
Y	H	SHANKLIN RD DOC BLDG	Solid Waste	94 SHANKLIN RD	Drop Off Center	Y	N	N
Y	H	SHELDON DOC BLDG	Solid Waste	208 PAIGE POINT RD	Drop Off Center	Y	N	N
Y	H	STHEL DOC ATTENDANT BLDG	Solid Waste	639 SEA ISLAND PKY	Drop Off Center	Y	N	N
Y	H	STHEL DOC STORAGE SHLTR	Solid Waste	639 SEA ISLAND PKY	Drop Off Center	Y	N	N
Y	H	STHEL DOC TIRE/OIL SHLTR	Solid Waste	639 SEA ISLAND PKY	Drop Off Center	Y	N	N
Y	L	EMS-1 (EMS HEADQUARTERS)	Generator	2727 DEPOT RD	EMS	N	N	N
Y	M	LI FIRE DISTRICT 1 (SHERIFF HELICOPTER)		146 LADYS ISLAND DR	Fire Department	N	N	N
Y	L	ST HELENA LIBRARY	Generator	6355 JONATHAN FRANCIS SR DR	Library	N	N	N
Y	H	PUBLIC WORKS FUEL STATION	Fuel	94 SHANKLIN RD	Miscellaneous	Y	N	N
Y	L	BASIL GREEN COMPLEX – Maintenance Shed	Herbicide, Fuel	1500 RODGERS ST	PALS	N	N	N
Y	L	BATTERY CREEK INDOOR POOL	Chemicals	1 BLUE DOLPHIN DR	PALS	N	N	N
Y	L	BEAUFORT INDOOR POOL	Chemicals	84A SEA ISLAND PKWY	PALS	N	N	N
Y	L	BLUFFTON POOL	Chemicals	200 BURNT CHURCH RD	PALS	N	N	N
Y	L	BURTON WELLS REC CENTER	Generator	1 MIDDLETON RECREATION DR	PALS	N	N	N
Y	L	CHARLES "LIND" BROWN POOL	Chemicals	1710 GREENE ST	PALS	N	N	N
Y	M	CROSSINGS PARK	Maintenance Shed, Fuel	6 HAIG POINT CIR	PALS	N	N	N
Y	M	LADYS ISLAND PARK - BALL FIELDS	Fuel	20 SPRINGFIELD RD	PALS	N	N	N
Y	L	BCSO	Generator	2001 DUKE ST	Police	N	N	N
N	M	ANIMAL SHELTER CLINIC	Animal Waste, Cleaners	23 SHELTER CHURCH RD	Public Place	N	N	N
Y	M	ANIMAL SHELTER OFFICE BLDG	Animal Waste, Cleaners	23 SHELTER CHURCH RD	Public Place	N	N	N
N	M	CAT SHELTER BLDG	Animal Waste, Chemicals	23 SHELTER CHURCH	Public Place	N	N	N
N	H	LRTA	Fuel	25 BENTON FIELD RD	Public Service	N	N	N

Y	L	MOSQUITO CONTROL OFFICE	Chemicals	84 SHANKLIN RD	Public Service	Y	N	N
Y	H	PUBLIC WORKS MAINTENANCE BLDG	Fuel, Oil	120 SHANKLIN RD	Public Service	Y	N	N
Y	H	PUBLIC WORKS SOUTH	Fuel, Oil	9 BENTON FIELD RD	Public Service	Y	N	N

In addition to considering industrial-type operations, you must also consider municipal infrastructure, and related maintenance activities, maintenance schedules and long-term inspection procedures for structural controls and the proper disposal of waste from storm sewers/catch basins, etc. Also included in this program area is discharge of pollutants from roads and parking lots. See Part 4.2.6.1

MUNICIPAL OPERATIONS POLLUTION PREVENTION

1. Does the MS4's operations and maintenance program have policies and procedures in place that address pollution prevention? If yes, please describe procedures. Consider the following in your response: Municipally owned or operated facility assessment (4.2.6.2), Facility specific stormwater management SOP and facility stormwater controls (4.2.6.3), Storm sewer system maintenance activities-MS4 Maintenance (4.2.6.4), Flood management projects, (4.2.6.5), Pesticide, herbicide and fertilizer application and management in landscape maintenance (4.2.6.6). You may want to incorporate maintenance activities, maintenance schedules; long term inspection procedures for structural and non-structural stormwater controls to reduce floatables and other pollutants; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways; controls for reducing or eliminating pollutants from municipal parking lots, maintenance and storage yards, fleet or maintenance areas with outdoor storage areas, salt/sand storage areas, snow disposal areas, waste transfer stations; disposal of waste removed from storm sewers and the areas listed above; and assessment of impacts on water quality from all of the above.

Yes ☒
No ☐

If no, explain

STAFF EDUCATION AND TRAINING

1. Does the MS4's current operation and maintenance program provide annual training for staff on preventing and reducing stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance?

Yes ☒

No ☐ If no, explain

2. Are training activities documented? If yes, please describe training and method of record-keeping.

Yes ☒
No ☐

If yes, explain

All records of training are documented as part of our Public education report.

REQUIREMENTS FOR CONTRACTORS OVERSIGHT

1. Are contractors hired by the permittee to perform municipal maintenance activities required to comply with all municipal operations control measures?

Yes ☒

No ☐ If no, explain

2. Are oversight procedures documented? If yes, please describe SOP.

Yes ☒
No ☐

While all contractors working for the County are required to comply with the County's BMP Manual, the emphasis has been placed on construction oversight to date. Activities in the next years will focus on maintenance activity oversight in addition to construction oversight.

Complete Tables 1, 2, and 3 (BMP Measurable Goals and Milestones) in the addendum of this NOI. Identify and outline measurable goals and milestones. Attach completed Section 1 tables to this NOI.

ADDENDUM

**TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)
BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES**

These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION SIX**TABLE 1: BMP MEASURABLE GOALS AND IMPLEMENTATION MILESTONES**

	Name	DESCRIPTION
A.	Facilities SWPPP Development	Identify priority facilities and develop SWPPPs, SOPs and training where needed.
B.	Training programs	Provide training program for grounds maintenance, landscaping crews, and roadway and drainage staff.
C.	Parking Lot and Street Cleaning	Prioritize and improve street and parking lot cleaning practices.

TABLE 2: ADMINISTRATIVE INFORMATION

PRIMARY CONTACT	POSITION OR TITLE
Dan Rybak Neil Desai, PE	Stormwater Manager
OTHER DEPARTMENT	ROLE
Public Works (includes solid waste)	SWPPP implementation
Mosquito Control	SWPPP implementation
Airports	SWPPP implementation
GOVERNMENT ENTITY	ROLE
Beaufort County SW Utility	Primary responsible party
Sheriff	SWPPP Detention Facility implementation
OTHER INSTITUTION	ROLE
N/A	N/A
EQUIPMENT NEEDS (IF APPLICABLE)	
SWPP Plans	
GROUP	TARGET DESCRIPTION
County facility staff	Staff at County facilities subject to stormwater good housekeeping measures.

ADDENDUM
TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)
BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES

[These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent \(NOI\)](#)

SECTION SIX**TABLE 3: BEST MANAGEMENT PRACTICES**

The purpose of this addendum is to record the measurable goals for each BMP, and the dates (month and year) by which interim actions are to be accomplished. Space is given for four BMPs for each of the six minimum measures.

Measurable goals are BMP design objectives, or goals that will quantify the progress of implementing the actions or performance of

a BMP. They are ways to measure activities or effects of a BMP. For each of the six minimum measures and for each BMP, define the measurable goal you will use to monitor effectiveness of this BMP.

For each BMP, establish milestones for implementation. These tables are set up for once/year milestones. You may change the milestone dates to time frames less than one year. Also, certain BMPs - e.g., an ordinance - should be put in place within one year.

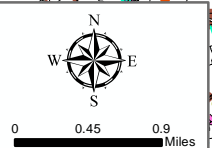
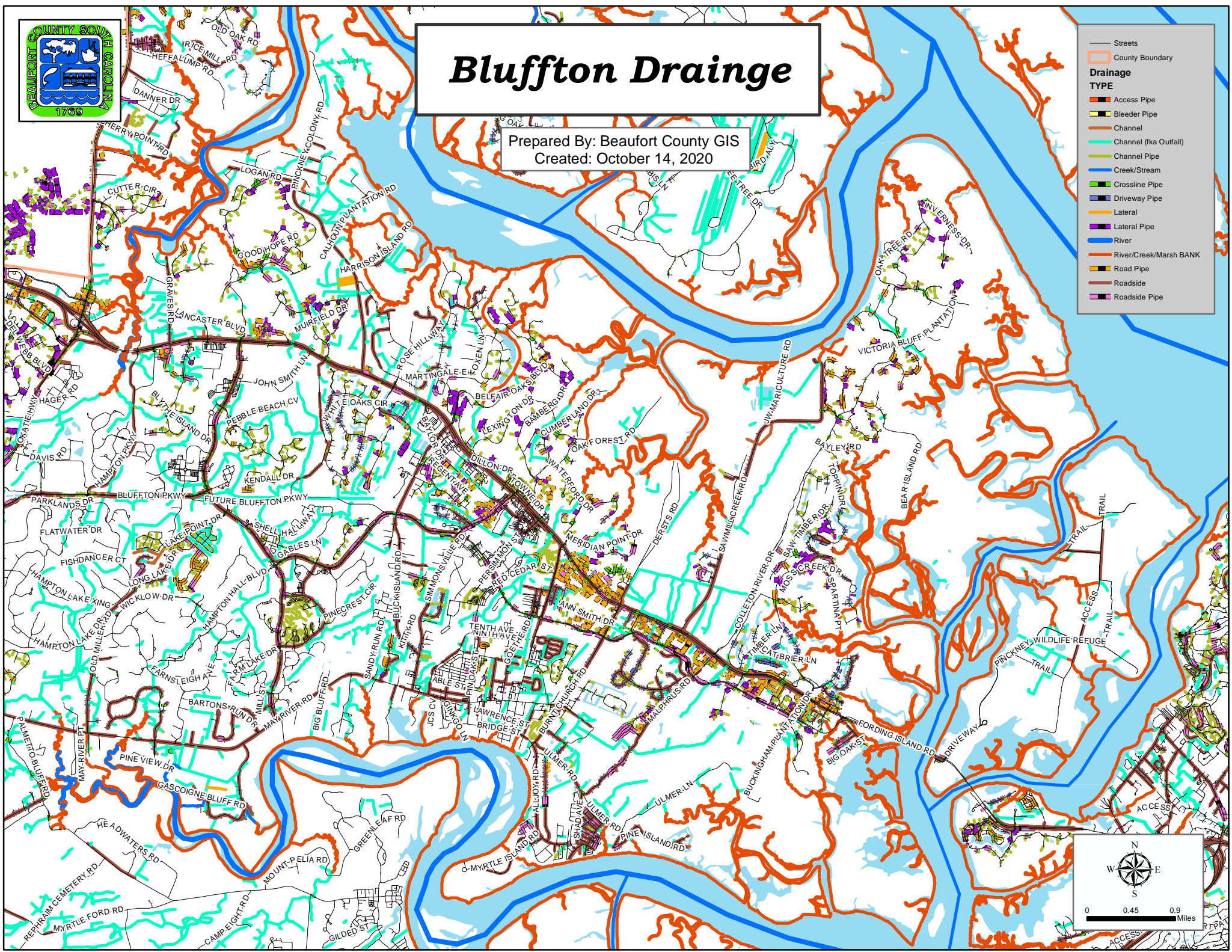
BMP A		MEASURABLE GOALS AND MILESTONES
Goals		Facilities SWPPP development.
Milestone Year 1		Developed procedures for asset management of facilities and high priority areas. Facilities Management has prepared a list of facilities to determine high priority based on chemicals stored on site and potential hazardous materials.
Milestone Year 2		Reviewed facilities list and determined high priority sites. Conducted inspections of priority facilities and began identifying SWPPP needs. Issued County SW permit to aid facility tracking.
Milestone Year 3		Develop SWPPP's for priority facilities. Conduct annual inspection. Continued issuing County SW permits to aid facility tracking. Conducted annual inspections of priority facilities and continued identifying SWPPP needs.
Milestone Year 4		Conducted annual inspection. Developed SWPPPs for priority facilities.
Milestone Year 5		Conduct annual inspection. Begin implementation of facility SWPPP's.
BMP B		MEASURABLE GOALS AND MILESTONES
Goals		Provide training program for grounds maintenance, landscaping crews, and roadway and drainage staff.
Milestone Year 1		
Milestone Year 2		Developed procedures for training program for grounds maintenance, landscaping crews, and roadway and drainage staff.
Milestone Year 3		Continued to develop a pollution prevention workshop for all municipal employees responsible for grounds maintenance, landscaping crews, convenience centers, and roadway and drainage staff.
Milestone Year 4		Develop and conduct a pollution prevention workshop for all municipal employees responsible for grounds maintenance, landscaping crews, convenience centers, and roadway and drainage staff.
Milestone Year 5		Develop and conduct a pollution prevention workshop for all municipal employees responsible for grounds maintenance, landscaping crews, convenience centers, and roadway and drainage staff. Conduct an annual workshop for new employees and crew managers. Review and reassess procedures and training. Staff working at Drop Off Centers were given training on new SWPPP's implemented. Develop and conduct a pollution prevention workshop for all municipal employees responsible for grounds maintenance, landscaping crews, convenience centers, and roadway and drainage staff in early 2021 with the assistance of a consultant.
BMP C		MEASURABLE GOALS AND MILESTONES
Goals		Parking Lot and Street Cleaning
Milestone Year 1		Due to the increase in development in certain areas of the County the road inventory prioritization has not changed and the County will continue to maintain on an as needed basis. The County utilizes a contract sweeper for select routes that are swept on a quarterly basis.
Milestone Year 2		The County continued to use the contract sweeper.
Milestone Year 3		Conducted routine parking lot and street sweeping in priority areas. The County purchased a vacuum truck and street sweeper as well as hired an operator.
Milestone Year 4		Continued to conduct street and parking lot sweeping in priority areas. Quantify debris collected from street sweeping. *need to get numbers from Matt*
Milestone Year 5		Continued to conduct street and parking lot sweeping in priority areas. Assess sweeping program and priority areas. No changes to be made until the implementation of new MS4 permit.



Bluffton Drainage

Prepared By: Beaufort County GIS
Created: October 14, 2020

—	Streets
—	County Boundary
Drainage TYPE	
—	Access Pipe
—	Bleeder Pipe
—	Channel
—	Channel (Ika Outfall)
—	Channel Pipe
—	Creek/Stream
—	Crossline Pipe
—	Driveway Pipe
—	Lateral
—	Lateral Pipe
—	River
—	River/Creek/Marsh BANK
—	Road Pipe
—	Roadside
—	Roadside Pipe

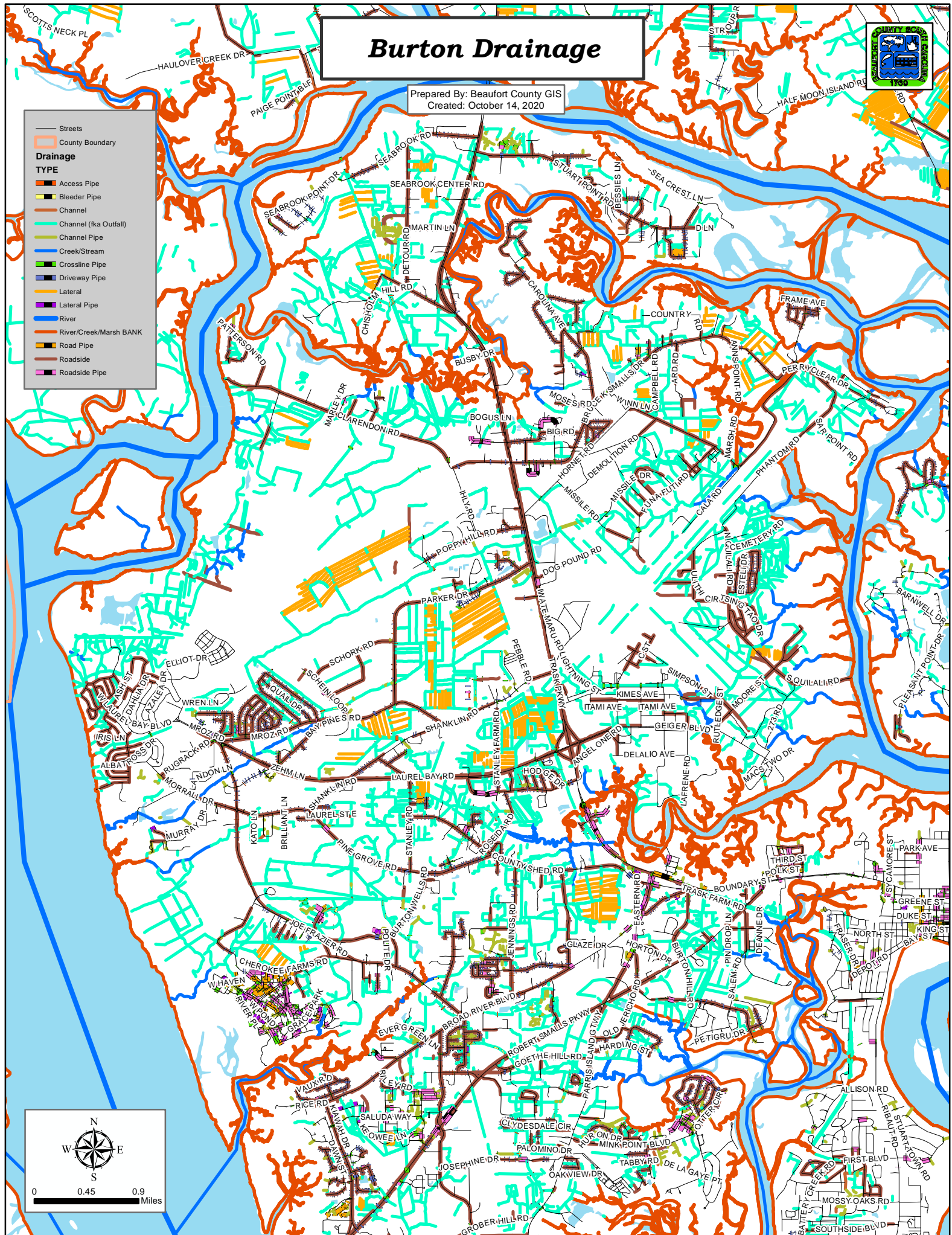
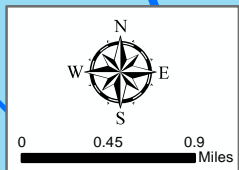


Burton Drainage

Prepared By: Beaufort County GIS
Created: October 14, 2020



- Streets
- County Boundary
- Drainage TYPE**
- Access Pipe
- Bleeder Pipe
- Channel
- Channel (aka Outfall)
- Channel Pipe
- Creek/Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- River/Creek/Marsh BANK
- Road Pipe
- Roadside
- Roadside Pipe



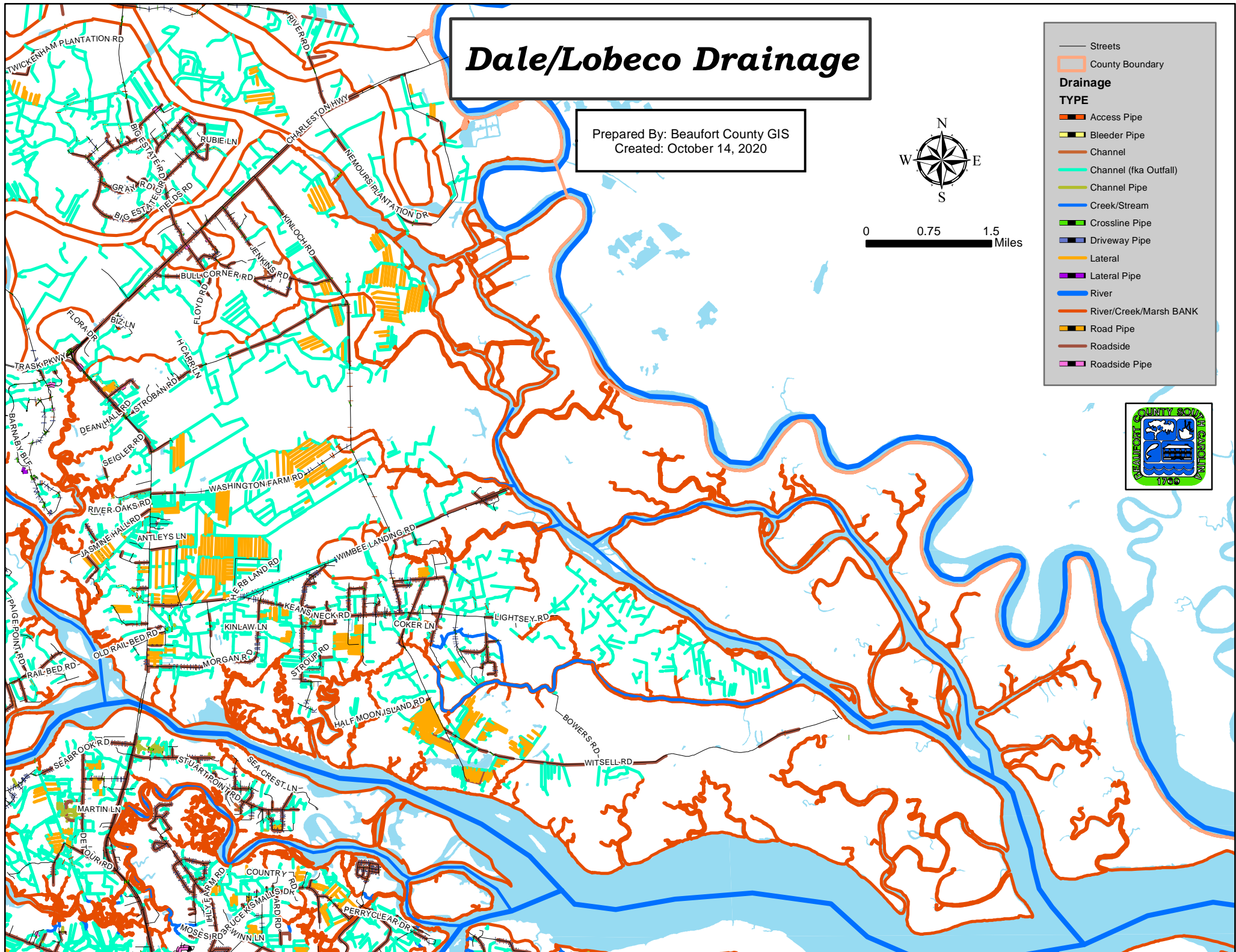
Dale/Lobeco Drainage

Prepared By: Beaufort County GIS
Created: October 14, 2020



0 0.75 1.5
Miles

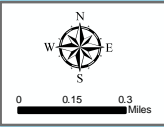
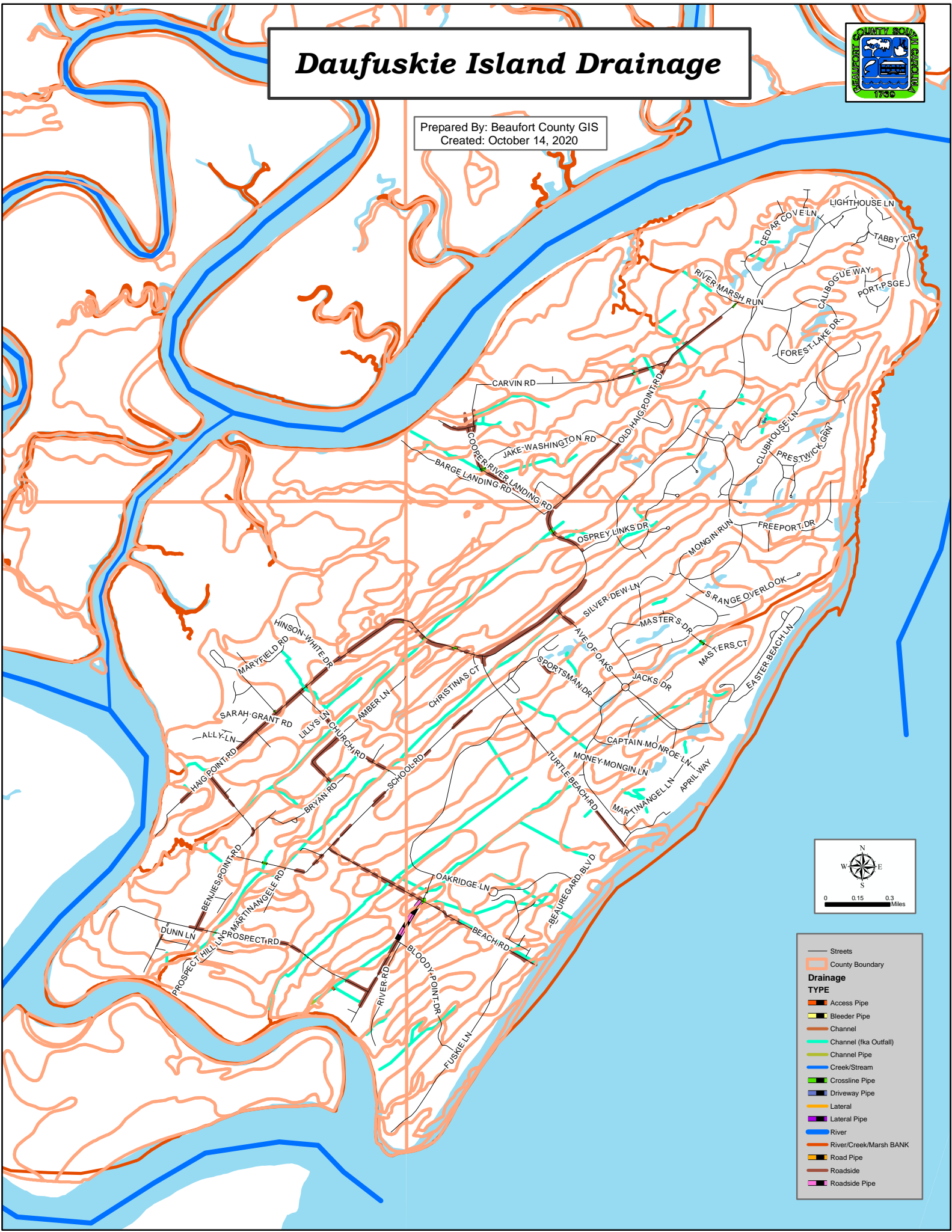
	Streets
	County Boundary
Drainage	
TYPE	
	Access Pipe
	Bleeder Pipe
	Channel
	Channel (fka Outfall)
	Channel Pipe
	Creek/Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	River/Creek/Marsh BANK
	Road Pipe
	Roadside
	Roadside Pipe



Daufuskie Island Drainage



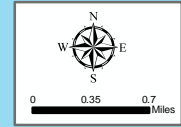
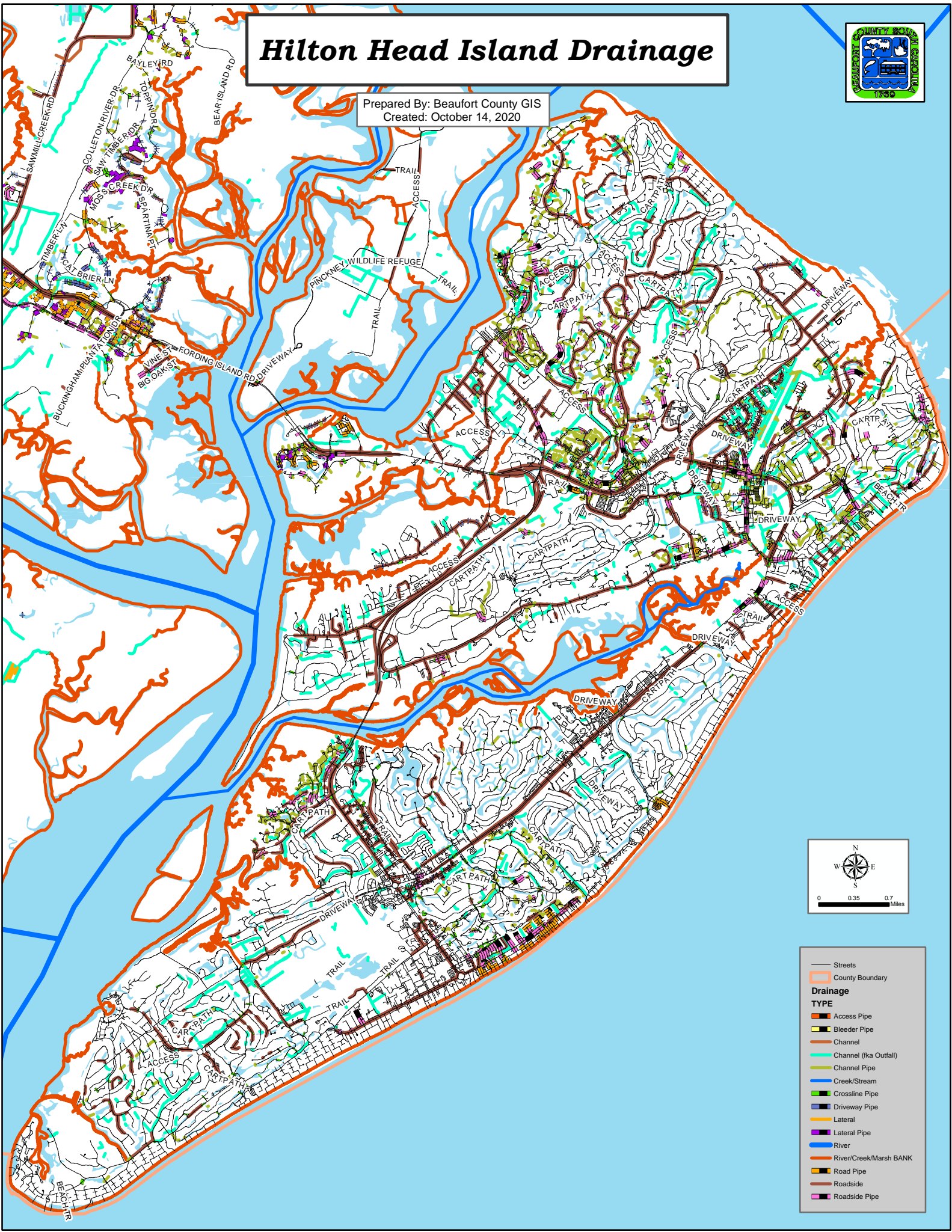
Prepared By: Beaufort County GIS
Created: October 14, 2020



- Streets
- County Boundary
- Drainage**
- TYPE**
- Access Pipe
- Bleeder Pipe
- Channel
- Channel (fka Outfall)
- Channel Pipe
- Creek/Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- River/Creek/Marsh BANK
- Road Pipe
- Roadside
- Roadside Pipe

Hilton Head Island Drainage

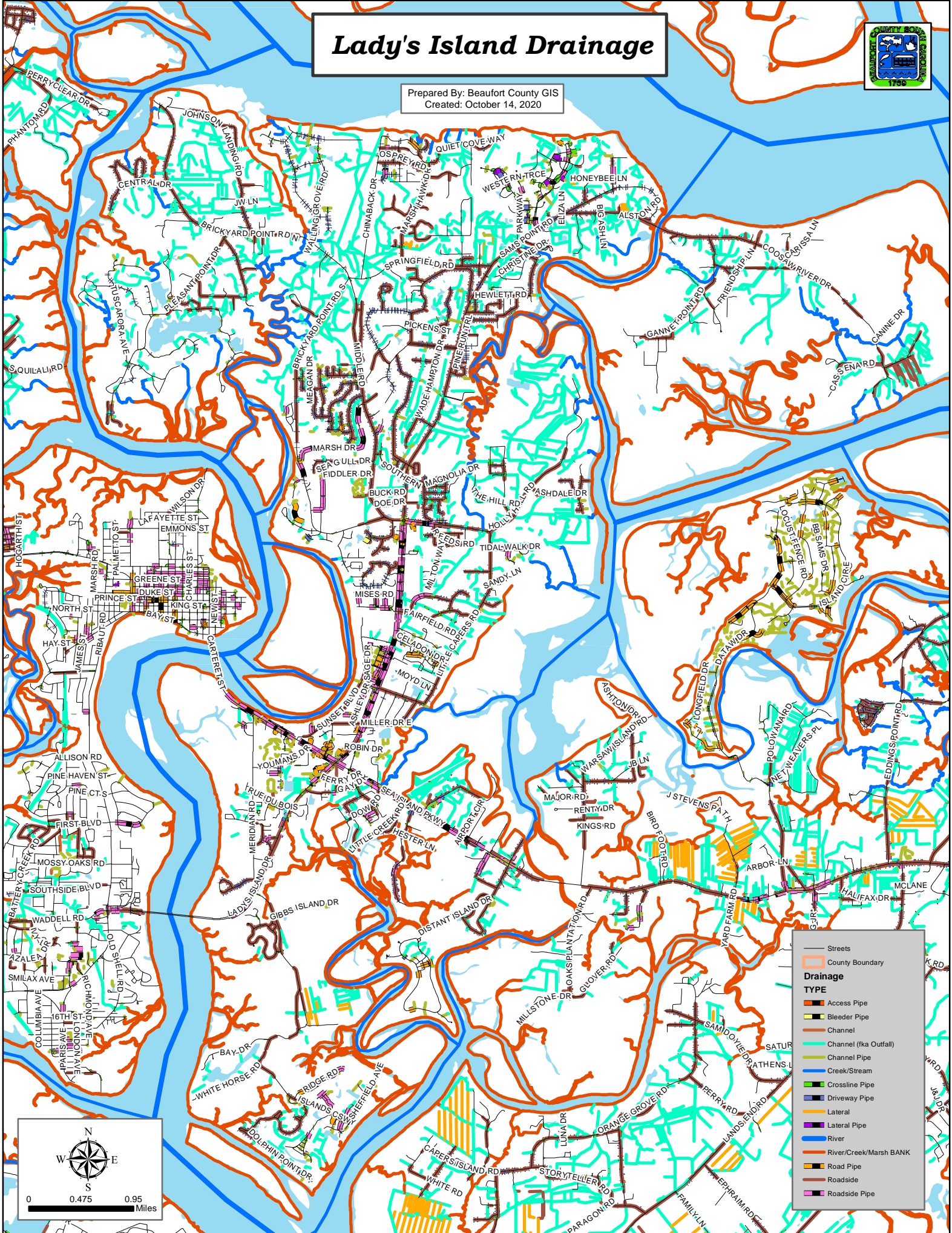
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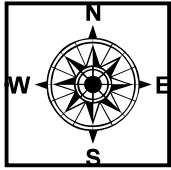
- Streets
- County Boundary
- Drainage TYPE**
- Access Pipe
- Bleeder Pipe
- Channel
- Channel (aka Outfall)
- Channel Pipe
- Creek/Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- River/Creek/Marsh BANK
- Road Pipe
- Roadside
- Roadside Pipe

Lady's Island Drainage

Prepared By: Beaufort County GIS
Created: October 14, 2020



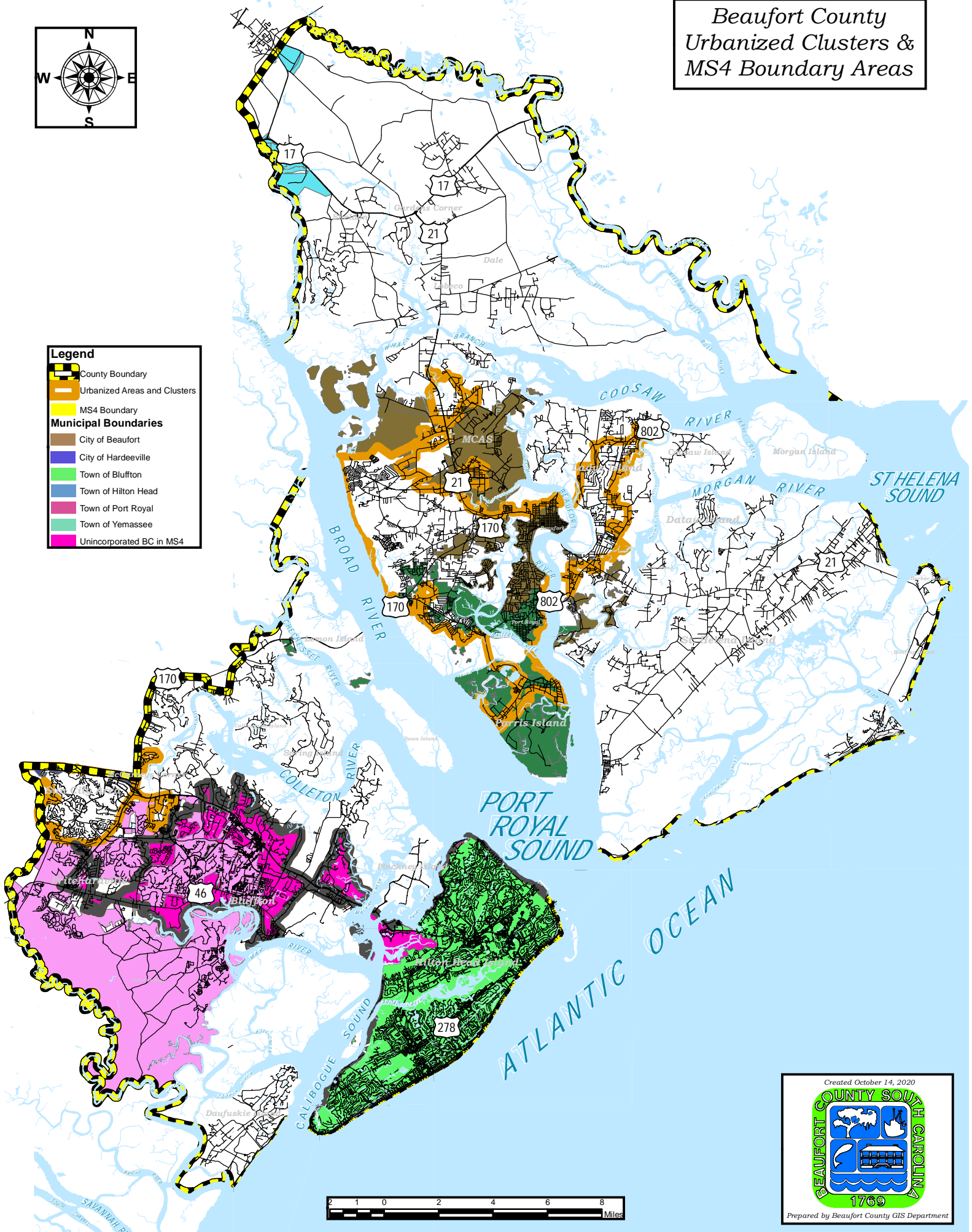
- Streets
- County Boundary
- Drainage TYPE**
- Access Pipe
- Bleeder Pipe
- Channel
- Channel (aka Outfall)
- Channel Pipe
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- River/Creek/Marsh BANK
- Road Pipe
- Roadside
- Roadside Pipe



Beaufort County
Urbanized Clusters &
MS4 Boundary Areas

Legend

- County Boundary
- Urbanized Areas and Clusters
- MS4 Boundary
- Municipal Boundaries**
- City of Beaufort
- City of Hardeeville
- Town of Bluffton
- Town of Hilton Head
- Town of Port Royal
- Town of Yemassee
- Unincorporated BC in MS4



Created October 14, 2020

Prepared by Beaufort County GIS Department

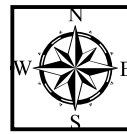


Exhibit A

- Legend**
- NewMonitoringPts_6-3
 - County Boundary
 - County Watersheds**
 - WATER BODY**
 - Beaufort River
 - Broad River
 - Calibogue Sound
 - Chesapeake River
 - Coastal
 - Colleton River
 - Combahee River
 - Coosaw River
 - May River
 - Morgan River
 - New River
 - Whale Branch West

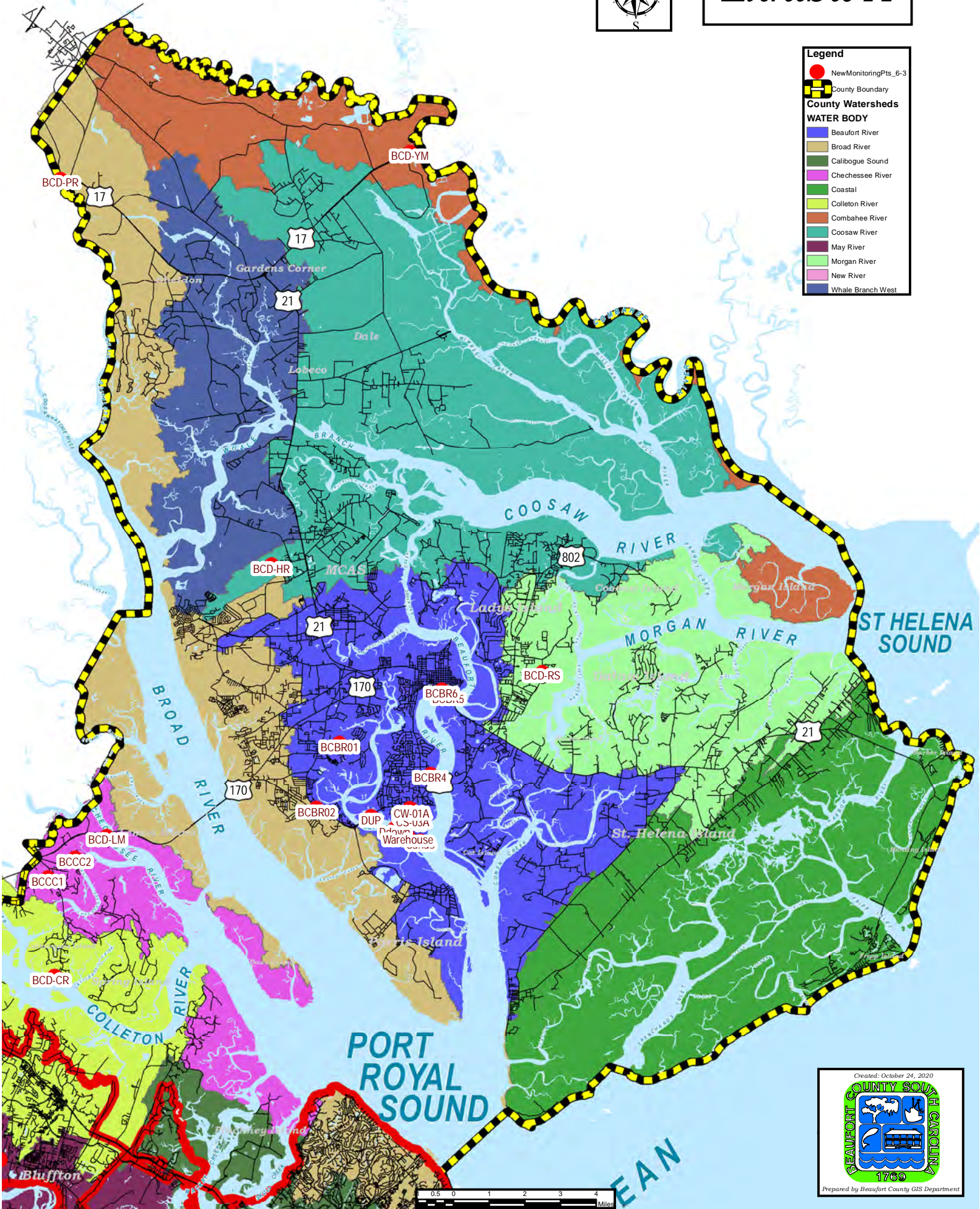
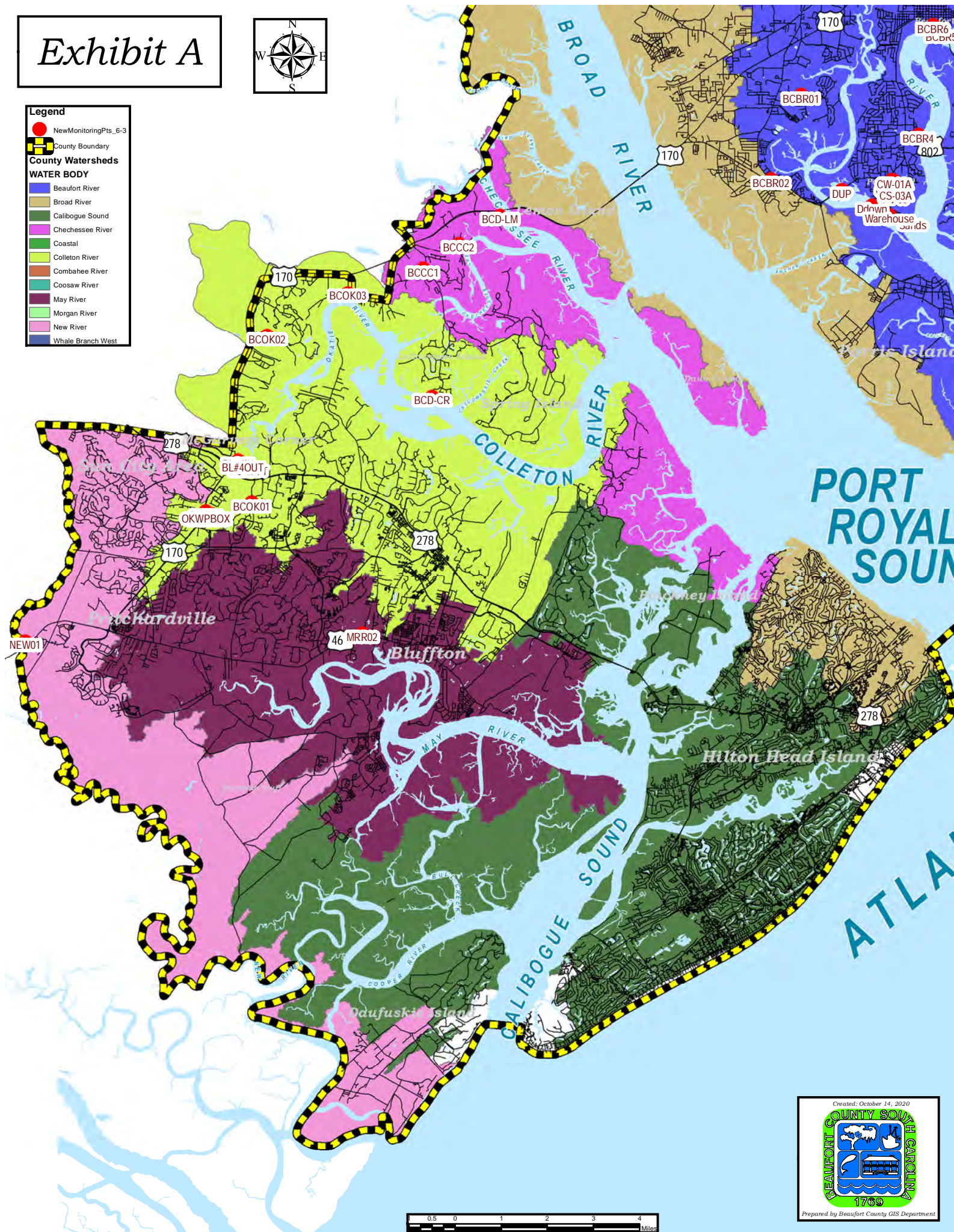
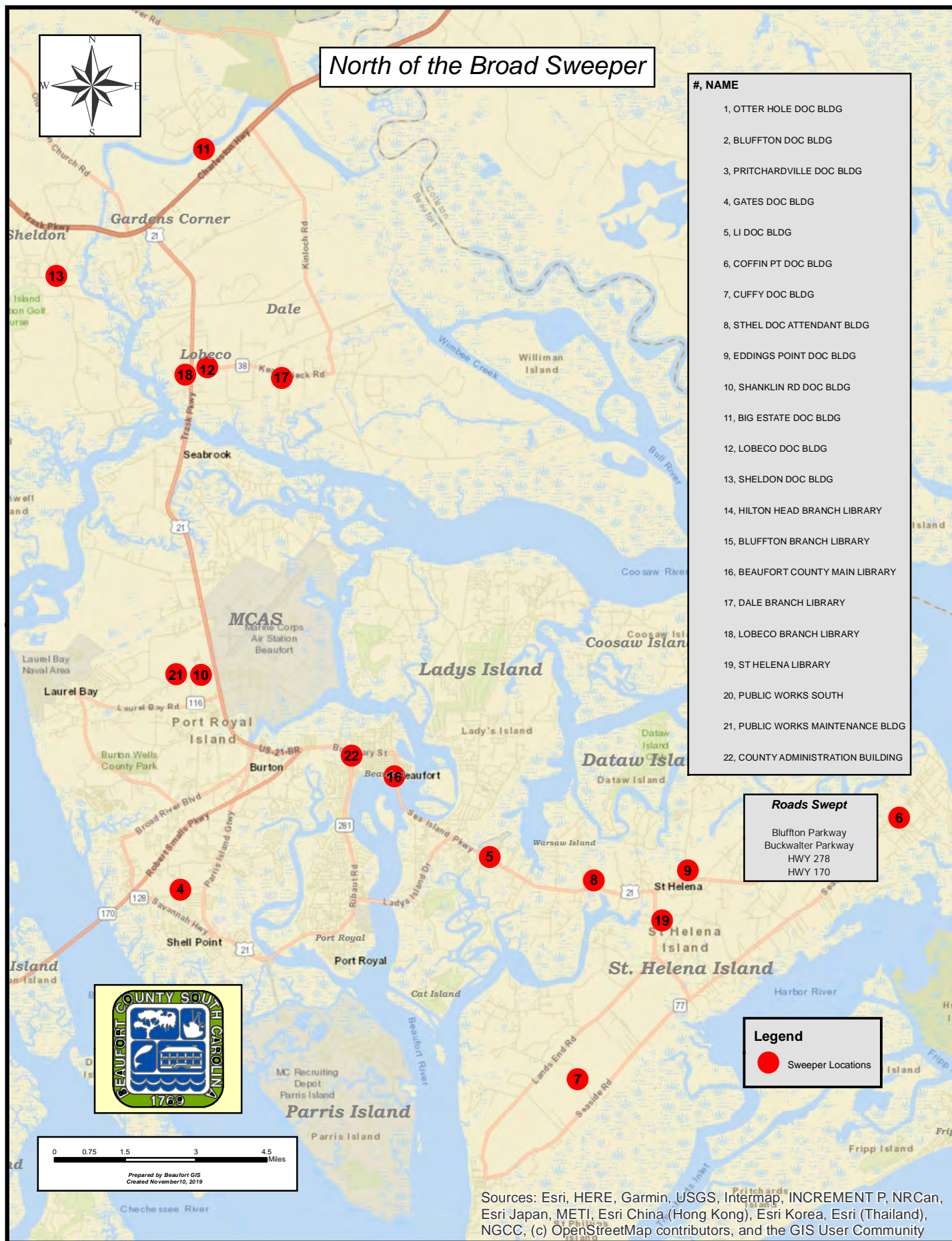


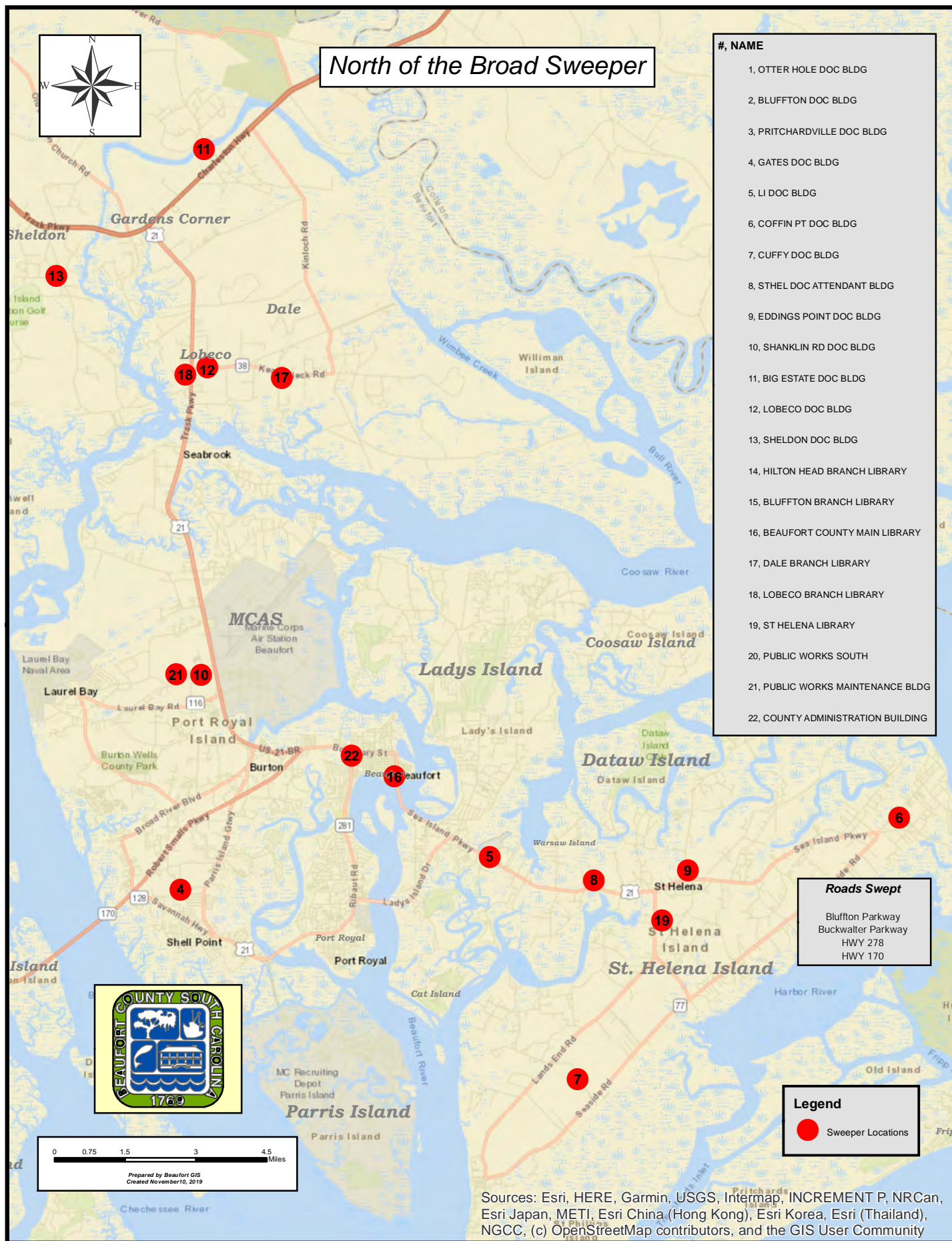
Exhibit A



- Legend**
- NewMonitoringPts_6-3
 - County Boundary
 - County Watersheds**
 - WATER BODY**
 - Beaufort River
 - Broad River
 - Calibogue Sound
 - Chechessee River
 - Coastal
 - Colleton River
 - Combahee River
 - Coosaw River
 - May River
 - Morgan River
 - New River
 - Whale Branch West









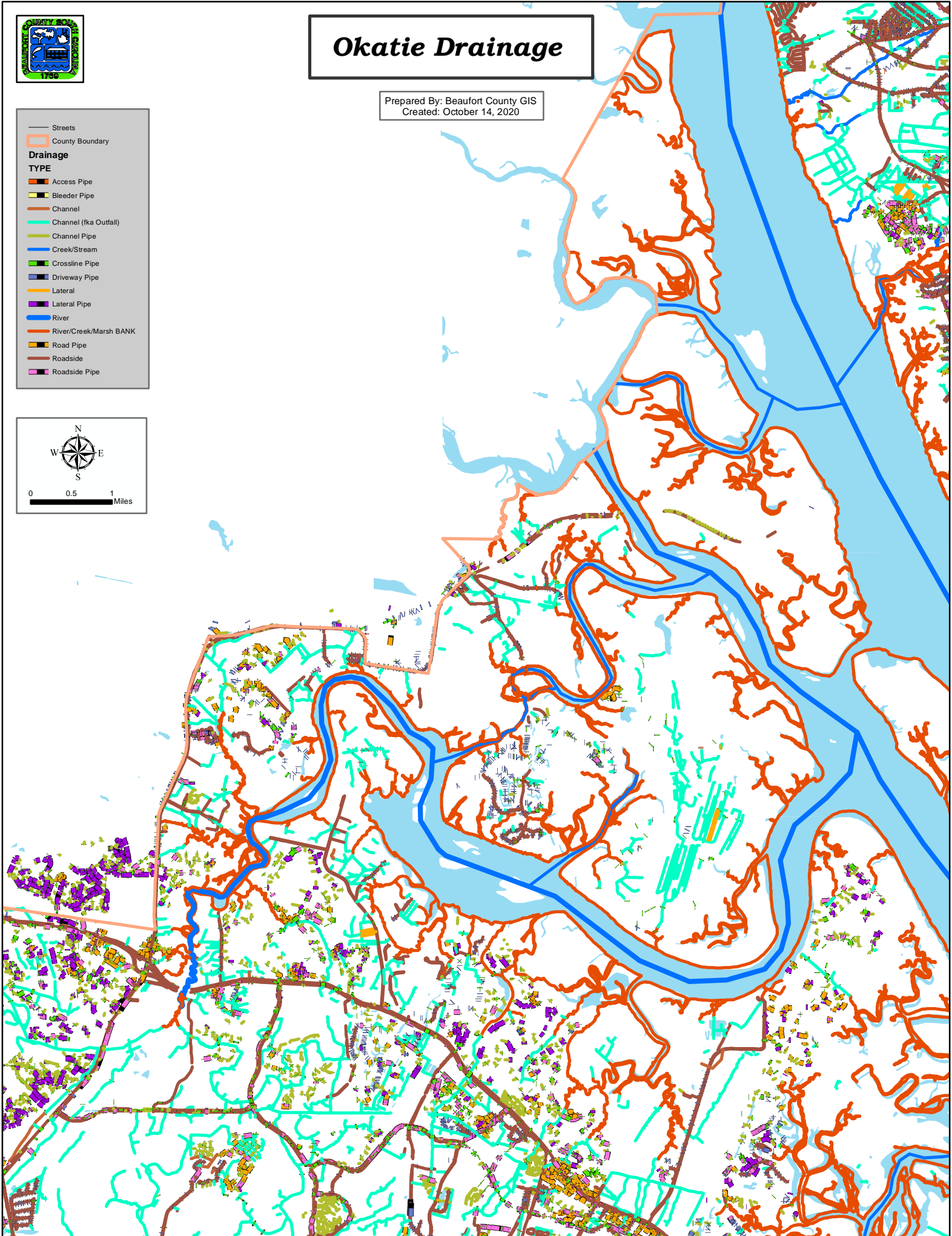
Okatie Drainage

Prepared By: Beaufort County GIS
Created: October 14, 2020

- Streets
County Boundary
- Drainage TYPE**
- Access Pipe
 - Bleeder Pipe
 - Channel
 - Channel (fka Outfall)
 - Channel Pipe
 - Creek/Stream
 - Crossline Pipe
 - Driveway Pipe
 - Lateral
 - Lateral Pipe
 - River
 - River/Creek/Marsh BANK
 - Road Pipe
 - Roadside
 - Roadside Pipe

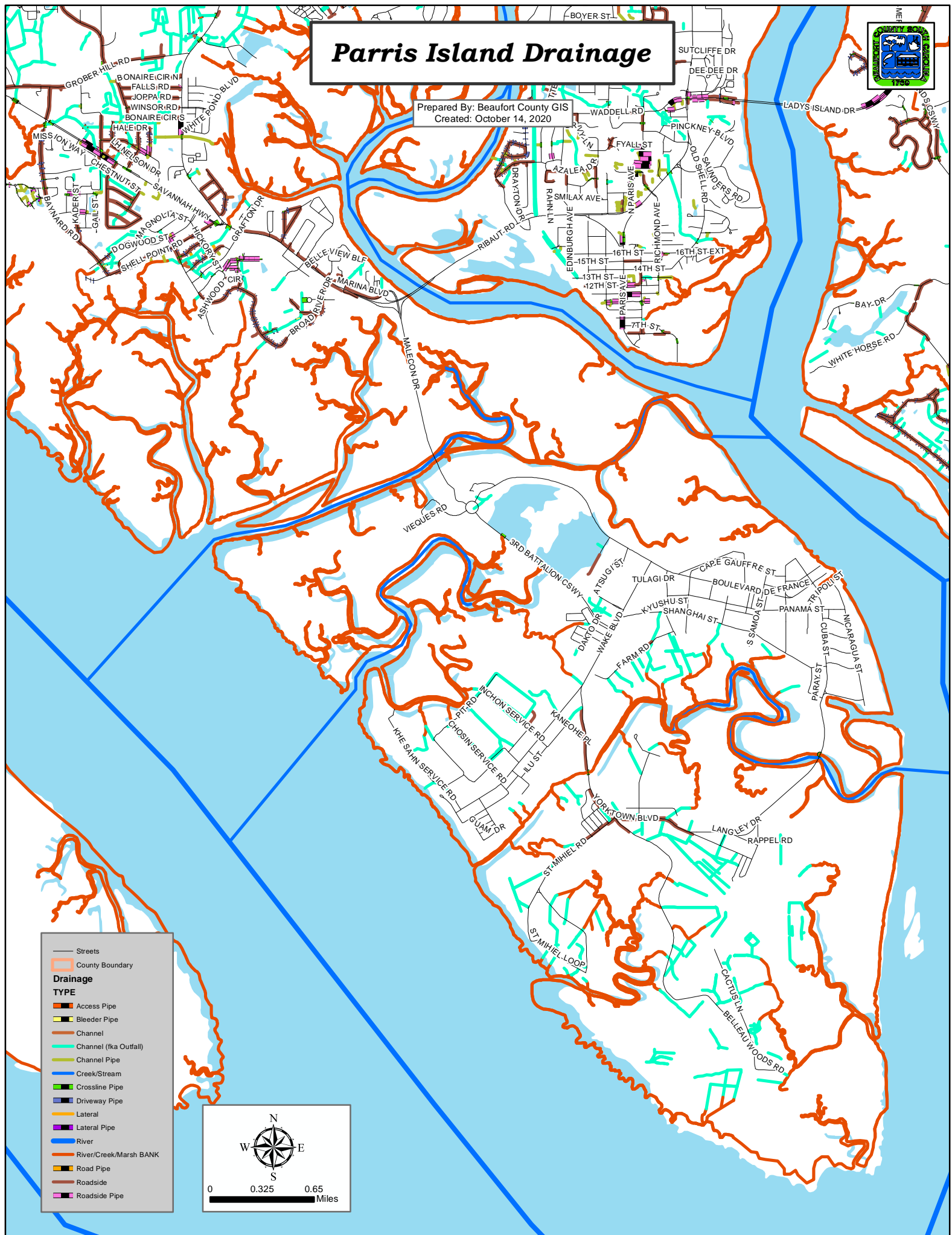


0 0.5 1 Miles

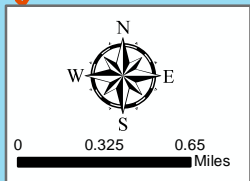


Parris Island Drainage

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Created: October 14, 2020

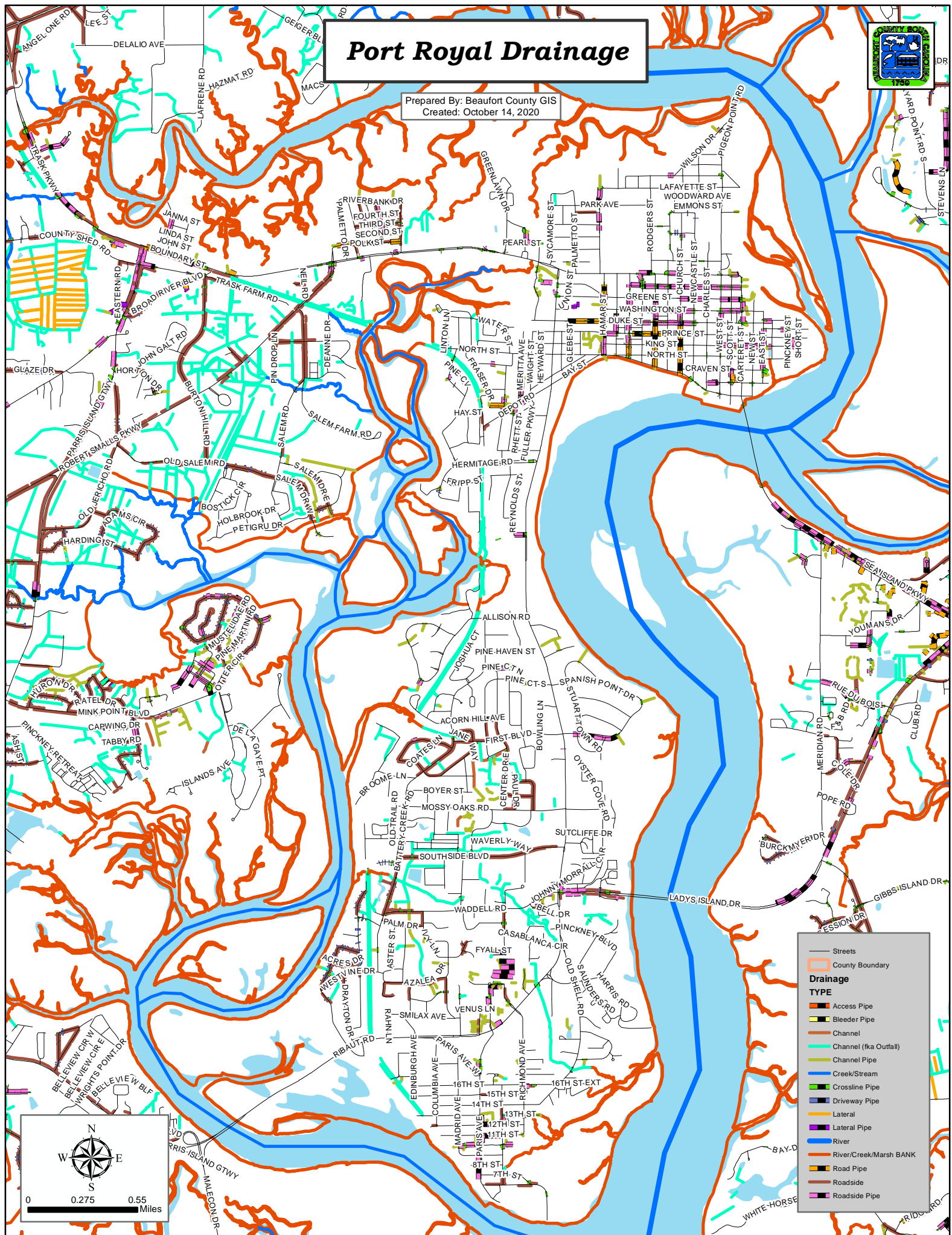


- Streets
- County Boundary
- Drainage TYPE**
- Access Pipe
- Bleeder Pipe
- Channel
- Channel (fka Outfall)
- Channel Pipe
- Creek/Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- River/Creek/Marsh BANK
- Road Pipe
- Roadside
- Roadside Pipe



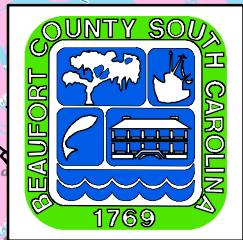
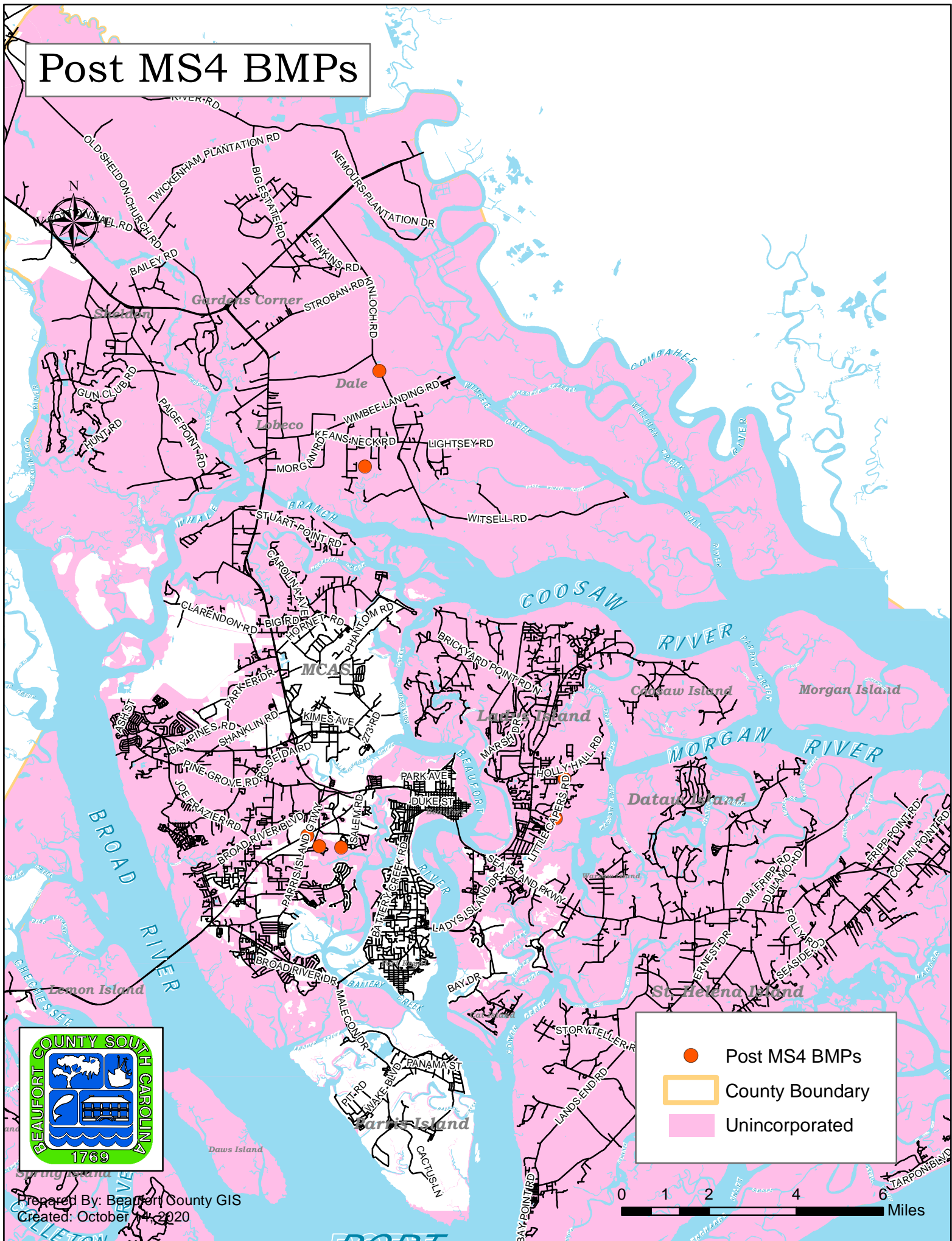
Port Royal Drainage

Prepared By: Beaufort County GIS
Created: October 14, 2020



—	Streets
—	County Boundary
Drainage	
TYPE	
—	Access Pipe
—	Bleeder Pipe
—	Channel
—	Channel (aka Outfall)
—	Channel Pipe
—	Creek/Stream
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—	Lateral
—	Lateral Pipe
—	River
—	River/Creek/Marsh BANK
—	Road Pipe
—	Roadside
—	Roadside Pipe

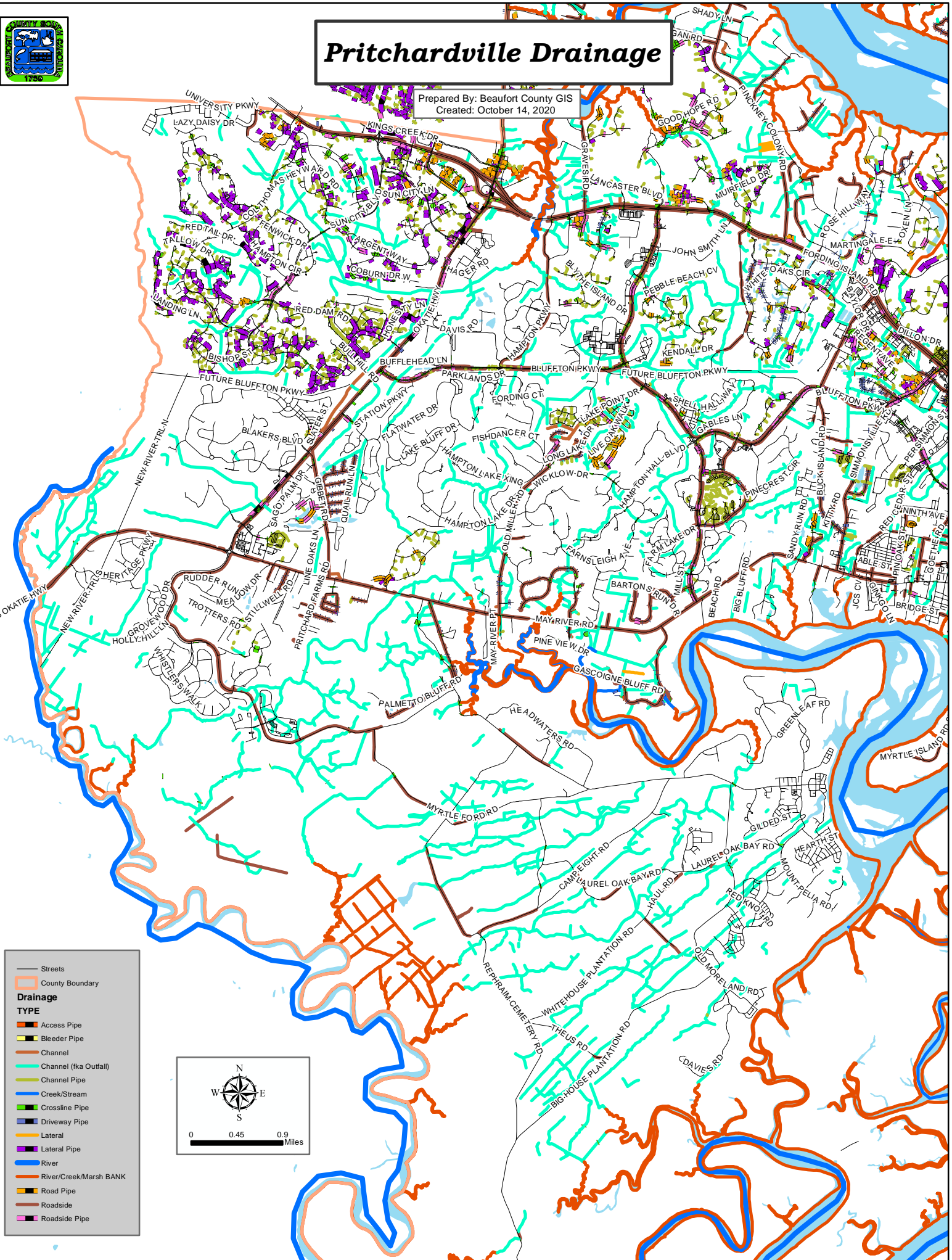
Post MS4 BMPs





Pritchardville Drainage

Prepared By: Beaufort County GIS
Created: October 14, 2020



Sheldon Drainage

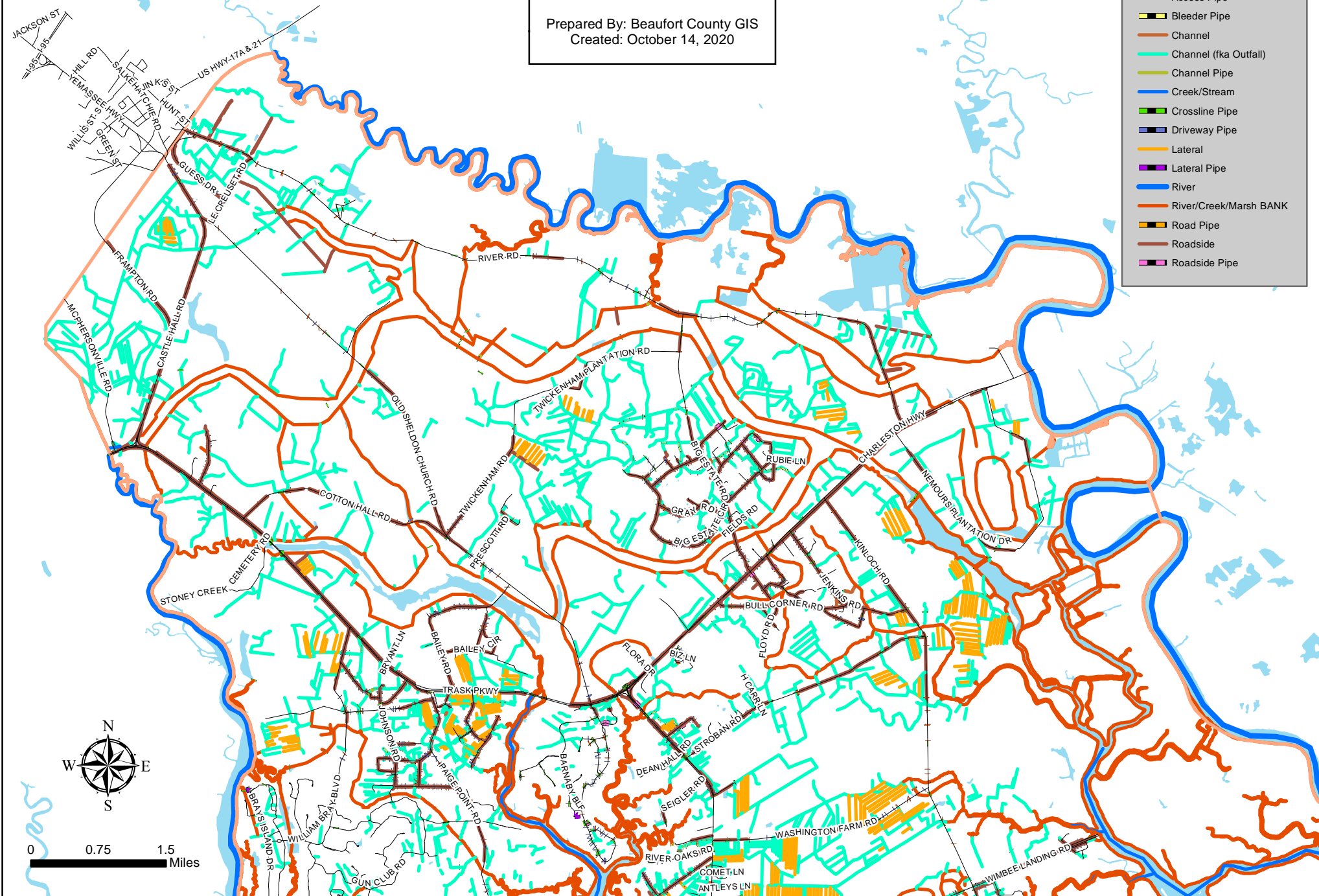
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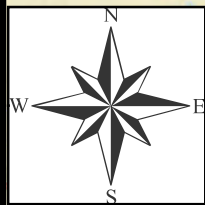


- Streets
- County Boundary
- Drainage TYPE**
 - Access Pipe
 - Bleeder Pipe
 - Channel
 - Channel (fka Outfall)
 - Channel Pipe
 - Creek/Stream
 - Crossline Pipe
 - Driveway Pipe
 - Lateral
 - Lateral Pipe
 - River
 - River/Creek/Marsh BANK
 - Road Pipe
 - Roadside
 - Roadside Pipe



0 0.75 1.5 Miles

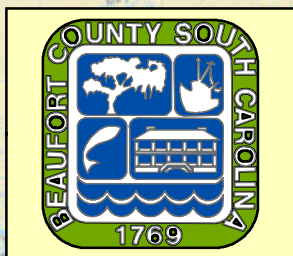




South of the Broad Sweeper

#, NAME

- 1, OTTER HOLE DOC BLDG
- 2, BLUFFTON DOC BLDG
- 3, PRITCHARDVILLE DOC BLDG
- 4, GATES DOC BLDG
- 5, LI DOC BLDG
- 6, COFFIN PT DOC BLDG
- 7, CUFFY DOC BLDG
- 8, STHEL DOC ATTENDANT BLDG
- 9, EDDINGS POINT DOC BLDG
- 10, SHANKLIN RD DOC BLDG
- 11, BIG ESTATE DOC BLDG
- 12, LOBECO DOC BLDG
- 13, SHELDON DOC BLDG
- 14, HILTON HEAD BRANCH LIBRARY
- 15, BLUFFTON BRANCH LIBRARY
- 16, BEAUFORT COUNTY MAIN LIBRARY
- 17, DALE BRANCH LIBRARY
- 18, LOBECO BRANCH LIBRARY
- 19, ST HELENA LIBRARY
- 20, PUBLIC WORKS SOUTH
- 21, PUBLIC WORKS MAINTENANCE BLDG
- 22, COUNTY ADMINISTRATION BUILDING




0 0.5 1 2 3 Miles

Prepared by Beaufort GIS
Created November 10, 2019

Roads Swept

Bluffton Parkway
Buckwalter Parkway
HWY 278
HWY 170

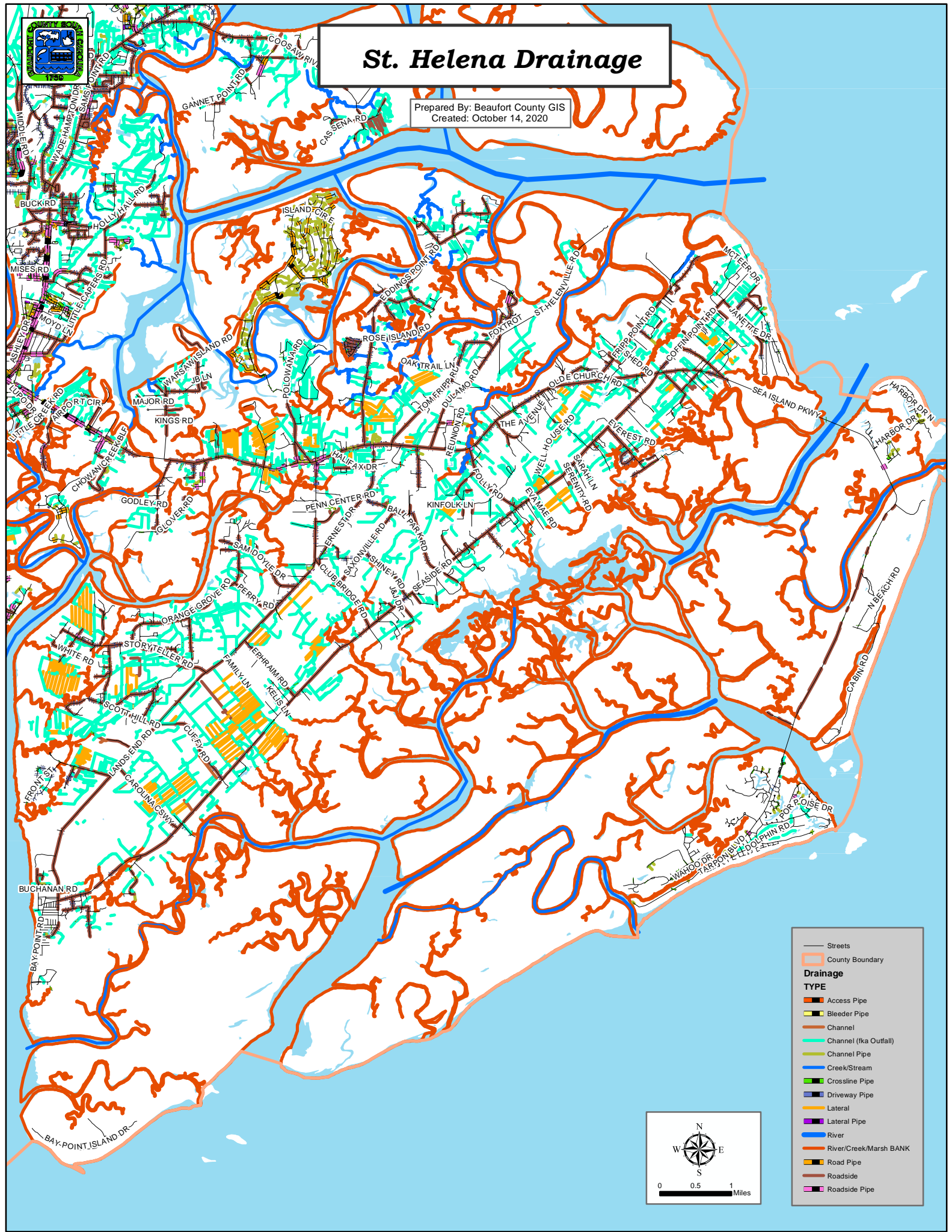
Legend

 Sweeper Locations

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

St. Helena Drainage

Prepared By: Beaufort County GIS
Created: October 14, 2020



— Streets

County Boundary

Drainage

TYPE

Access Pipe

Bleeder Pipe

Channel

Channel (fka Outfall)

Channel Pipe

Creek/Stream

Crossline Pipe

Driveway Pipe

Lateral

Lateral Pipe

River

River/Creek/Marsh BANK

Road Pipe

Roadside

Roadside Pipe

id	dateTime	status	deptName	formName	locationAddress
1707	3/4/2020 8:26	Closed	Stormwater	Drainage Ditch Clogged	95 Rose Island Rd
1777	3/30/2020 14:05	Closed	Stormwater	Drainage Ditch Clogged	179 Sea Pines Dr
1672	2/19/2020 7:54	Closed	Stormwater	Drainage Ditch Clogged	32 Bay Pines Dr
1608	1/13/2020 6:15	Closed	Stormwater	Drainage Ditch Clogged	31 Old Dawson Acres
1826	4/27/2020 11:27	Closed	Stormwater	Drainage Ditch Clogged	15 Roseida Rd Ext
1741	3/9/2020 16:18	Closed	Stormwater	Drainage Ditch Clogged	44 Southern Magnolia Dr
1975	8/3/2020 10:18	Closed	Stormwater	Drainage Ditch Clogged	15 Combahee Way
1776	3/26/2020 15:00	Open	Stormwater	Drainage Ditch Clogged	14 Baywood Dr
1825	4/27/2020 10:36	Closed	Stormwater	Drainage Ditch Clogged	38 Sheridan Park Cir Unit-f
1740	3/9/2020 15:16	Closed	Stormwater	Drainage Ditch Clogged	11 Sandy Beach Tr
1739	3/9/2020 13:36	Closed	Stormwater	Drainage Ditch Clogged	17 Hammy Path
2008	9/7/2020 10:34	Open	Stormwater	Drainage Ditch Clogged	108 Fox Island Rd
1640	1/28/2020 10:15	Closed	Stormwater	Drainage Ditch Clogged	12 New Orleans Rd
1860	5/11/2020 8:59	Closed	Stormwater	Drainage Ditch Clogged	145 Bay Point Rd
1773	3/24/2020 11:11	Closed	Stormwater	Drainage Ditch Clogged	3502 Morgan River Dr S
2007	9/4/2020 10:34	Open	Stormwater	Drainage Ditch Clogged	90 Lost Island Rd
1702	3/2/2020 8:26	Closed	Stormwater	Drainage Ditch Clogged	14 Christine Dr
1703	3/2/2020 11:28	Closed	Stormwater	Drainage Ditch Clogged	1 Klebold Rd
1639	1/28/2020 10:04	Closed	Stormwater	Drainage Ditch Clogged	55 New Orleans Rd
1822	4/27/2020 8:20	Closed	Stormwater	Drainage Ditch Clogged	49 Hewlett Rd
1971	7/29/2020 21:52	Closed	Stormwater	Drainage Ditch Clogged	209 Mcteer Dr
1858	5/8/2020 9:51	Closed	Stormwater	Drainage Ditch Clogged	23 Allendale St
2006	9/3/2020 15:21	Open	Stormwater	Drainage Ditch Clogged	57 Wade Hampton Dr
1737	3/9/2020 10:22	Closed	Stormwater	Drainage Ditch Clogged	56 Toomer Rd
1735	3/9/2020 9:53	Closed	Stormwater	Drainage Ditch Clogged	40 Le Moyne Dr
1736	3/9/2020 10:20	Closed	Stormwater	Drainage Ditch Clogged	129 Toomer Rd
1770	3/22/2020 9:43	Closed	Stormwater	Drainage Ditch Clogged	33 Mint Farm Dr
1699	2/27/2020 14:29	Closed	Stormwater	Drainage Ditch Clogged	24 Ben White Dr
1734	3/9/2020 9:45	Closed	Stormwater	Drainage Ditch Clogged	52 Mary Jenkins Cir
1968	7/23/2020 11:39	Open	Stormwater	Drainage Ditch Clogged	25 Josephine Dr

description

The ditches are clogged with debris and overgrown with vegetation.

Ditch needs maintenance, not draining properly causing standing water.

Inlets clogged and storm water ponds in the yard and street.

The ditch is overgrown with vegetation.

Overgrown with vegetation.

Ditch clogged with debris and overgrown with vegetation.

The ditch is clogged with debris and overgrown with vegetation.

Ditch is clogged with debris and overgrown with vegetation.

Ditch is clogged with debris.

Ditch clogged with debris and overgrown with vegetation.

Entire county ditch is clogged causing my pond to overflow

Ditches on each side of Fox Island Rd and several leading to the marsh need to be cleared out please. And the culverts also have growth. Thank you!

The drainage channel is overgrown and full of sediment and organics. Channel needs to be excavated and vegetation removed from WHP to property bou

Debris in the ditch that may stop water from flowing.

Ditched and culverts need cleaned

Ditch is clogged with debris and overgrown with vegetation.

Ditch is clogged with debris and overgrown with vegetation.

The ditch is clogged with debris and overgrown with vegetation.

Drainage ditch needs to be excavated, 30" pipe is partially clogged and several trees are downed along fence boundary with Shipyard Plantation.

The ditches are not draining.

Ditch located on corner lot of sea pines and mcteer

Ditches need maintenance and sink hole near 18 Allendale.

I'm requesting to reopen my request due to the tractor coming out and cutting Thomas Sumter side of the ditch and not Wade Hampton side of the ditch

Ditch clogged with debris and overgrown with vegetation.

Ditched clogged with debris causing stagnant water.

Stagnant water present.

Stagnate water, overgrown weeds. Water has been in the ditch for months.

Ditch running along property has sections overgrown with trees, clogged with sediment/organics and blocked with discarded furniture. Issue starts at 24 a

Ditched clogged with debris causing flooding.

Irrigation ditch alongside my home is overgrown with vegetation to the point it looks like trees are sprouting up. I have request for it be cut at least twice

1856	5/6/2020 15:51	Closed	Stormwater	Drainage Ditch Clogged	31 Chesterfield Lake Dr
1634	1/23/2020 12:46	Closed	Stormwater	Drainage Ditch Clogged	17 Gamecock Way
1501	10/8/2019 11:55	Closed	Stormwater	Drainage Ditch Clogged	35 Southern Magnolia Dr
1564	12/23/2019 14:49	Closed	Stormwater	Drainage Ditch Clogged	20 Bay Pines Dr
1502	10/8/2019 11:56	Open	Stormwater	Drainage Ditch Clogged	6 Big Leaf Bnd
1855	5/6/2020 11:32	Closed	Stormwater	Drainage Ditch Clogged	138 Wade Hampton Dr
1732	3/9/2020 9:24	Closed	Stormwater	Drainage Ditch Clogged	35 Jenkins Port Rd
1563	12/23/2019 13:50	Closed	Stormwater	Drainage Ditch Clogged	17 Bay Pines Dr
1854	5/6/2020 11:27	Closed	Stormwater	Drainage Ditch Clogged	112 Wade Hampton Dr
1669	2/18/2020 15:18	Closed	Stormwater	Drainage Ditch Clogged	18 New Orleans Rd
1562	12/23/2019 13:47	Closed	Stormwater	Drainage Ditch Clogged	17 Bay Pines Dr
1534	11/13/2019 9:08	Closed	Stormwater	Drainage Ditch Clogged	71 Luther Warren Dr
2000	8/28/2020 6:51	Closed	Stormwater	Drainage Ditch Clogged	57 Wade Hampton Dr
1498	10/1/2019 10:25	Closed	Stormwater	Drainage Ditch Clogged	4 Woodbine Dr
1999	8/27/2020 14:12	Open	Stormwater	Drainage Ditch Clogged	2 Lilac Ln
1800	4/21/2020 6:52	Closed	Stormwater	Drainage Ditch Clogged	24 Thomas Sumter St
2034	9/25/2020 13:18	Open	Stormwater	Drainage Ditch Clogged	108 Fox Island Rd
1667	2/18/2020 9:30	Open	Stormwater	Drainage Ditch Clogged	8 Ned Ct
1851	5/4/2020 13:04	Closed	Stormwater	Drainage Ditch Clogged	42 Folly Rd
1532	11/6/2019 15:25	Closed	Stormwater	Drainage Ditch Clogged	3038 Huron Dr
2033	9/24/2020 15:06	Closed	Stormwater	Drainage Ditch Clogged	180 Browns Island Rd
1850	5/4/2020 10:27	Closed	Stormwater	Drainage Ditch Clogged	115 Union Cemetery Rd
1997	8/27/2020 7:24	Closed	Stormwater	Drainage Ditch Clogged	51 He Mccracken Cir
2032	9/24/2020 10:18	Closed	Stormwater	Drainage Ditch Clogged	203 Warsaw Island Rd
1996	8/26/2020 10:00	Closed	Stormwater	Drainage Ditch Clogged	57 Wade Hampton Dr
1692	2/25/2020 14:10	Closed	Stormwater	Drainage Ditch Clogged	13 Old Miller Rd
2031	9/23/2020 13:49	Closed	Stormwater	Drainage Ditch Clogged	13 River Rd
1961	7/16/2020 15:27	Closed	Stormwater	Drainage Ditch Clogged	30 Pelican Cir
1761	3/18/2020 9:35	Closed	Stormwater	Drainage Ditch Clogged	1513 Pony Ave
1995	8/25/2020 13:30	Open	Stormwater	Drainage Ditch Clogged	4 Indigo Loop
2030	9/23/2020 13:42	Closed	Stormwater	Drainage Ditch Clogged	105 Le Creuset Rd

Ditch is overgrown with vegetation causing the water not to flow from the pond.

Ditches clogged with debris causing stagnant water.

Ditch is overgrown with vegetation.

The drainage in Bay Pines has gotten even worse since Mathew.

Ditch is overgrown with vegetation.

The ditch from 140 Wade Hampton Dr. down to 130 for Wade Hampton Drive needs to be cleaned of vegetation but does not need to be dug any deeper.

Ditched clogged with debris and overgrown with vegetation causing flooding.

Storm water ditch does not flow.

This is an image showing the culvert at 1:12 Wade Hampton Drive. It has plenty of water to drain out but the culvert is too high and is the last one right be
Drainage ditch between 18, 14, 21 and 17 Orleans Road is overgrown with vegetation and full of organics/sediment. Pipe under New Orleans Road is also

Culverts are clogged and ditches are too small to handle even a casual rain

The ditch is overgrown with vegetation.

Submitted requested by phone

The ditch is clogged with debris and overgrown with vegetation.

Ditch is overgrown with vegetation.

This happens when there is heavier rains.

Hi! Can you please send the tractor with the bush hog on the arm and cut away the growth in the ditches so the water doesn't flow into the road on Fox I

Ditch has severe sediment build-up and the rip rap is stacked up and blocking flow in front of the end of pipe at the junction of Ned Ct and Gum Tree Rd

The ditch is clogged.

Ditch is clogged with debris and overgrown with vegetation.

The ditches are overgrown with vegetation and makes visibility difficult on the entire road.

15" RCP at end of ditch is partially clogged causing stormwater to flood bike path during recent rain events in March and April 2020.

Forwarded from Bluffton SeeClickFix. Citizen states the ditches and bike paths along McCracken circle are all overgrown

The ditches are clogged and overgrown on the entire road.

Ditch is overgrown with vegetation.

The ditch is clogged and water is not flowing properly.

Entire ditch from guess drive to le creuset has overgrown needs cutting

Ditch is overgrown with vegetation.

Ditches are overgrown with vegetation causing water not to flow. Stagnant water present. Culverts need to be replace also.

Clogged with debris and overgrown with vegetation.

Le creuset road all ditches overgrown haven't been mowed

1627	1/21/2020 9:30	Closed	Stormwater	Drainage Ditch Clogged	27 No Man Land Rd
1959	7/15/2020 11:45	Closed	Stormwater	Drainage Ditch Clogged	36 Avenue Of Oaks
1919	6/17/2020 13:42	Closed	Stormwater	Drainage Ditch Clogged	108 Dolphin Point Dr
1663	2/13/2020 15:08	Open	Stormwater	Drainage Ditch Clogged	10 Marblehead Rd
1760	3/17/2020 13:54	Open	Stormwater	Drainage Ditch Clogged	1 Murray Ave
1795	4/20/2020 8:07	Closed	Stormwater	Drainage Ditch Clogged	29 Johnson Landing Rd
2029	9/23/2020 13:40	Closed	Stormwater	Drainage Ditch Clogged	1 Guess Dr
1724	3/6/2020 14:14	Closed	Stormwater	Drainage Ditch Clogged	1551 Sea Island Pkwy
1808	4/24/2020 9:05	Open	Stormwater	Drainage Ditch Clogged	19 Benjamin Dr
1846	5/2/2020 14:16	Open	Stormwater	Drainage Ditch Clogged	25 Josephine Dr
2028	9/22/2020 12:21	Open	Stormwater	Drainage Ditch Clogged	88 Fairfield Rd
1723	3/6/2020 12:04	Open	Stormwater	Drainage Ditch Clogged	35 Elizabeth Rd
1957	7/14/2020 10:29	Closed	Stormwater	Drainage Ditch Clogged	18 Godwin Rd
1992	8/18/2020 14:20	Open	Stormwater	Drainage Ditch Clogged	18 Purrysburg Dr
1589	1/7/2020 9:26	Closed	Stormwater	Drainage Ditch Clogged	5 Sandy Beach Tr
1759	3/17/2020 11:00	Closed	Stormwater	Drainage Ditch Clogged	17 Bay Pines Dr
1660	2/12/2020 10:05	Open	Stormwater	Drainage Ditch Clogged	7 Cardinal Rd
1991	8/18/2020 10:12	Open	Stormwater	Drainage Ditch Clogged	10 Bryant Rd
1588	1/6/2020 10:33	Closed	Stormwater	Drainage Ditch Clogged	38 Dolphin Point Dr
1792	4/18/2020 23:48	Closed	Stormwater	Drainage Ditch Clogged	114 Holly Hall Rd
1914	6/15/2020 9:10	Open	Stormwater	Drainage Ditch Clogged	274 Haig Point Rd
1721	3/6/2020 7:55	Closed	Stormwater	Drainage Ditch Clogged	43 Christine Dr
1805	4/23/2020 15:28	Open	Stormwater	Drainage Ditch Clogged	1 Muddy Creek Rd
1841	4/29/2020 18:58	Closed	Stormwater	Drainage Ditch Clogged	32 James F Byrnes St
1912	6/14/2020 12:17	Closed	Stormwater	Drainage Ditch Clogged	35 Elizabeth Rd
1803	4/22/2020 13:57	Closed	Stormwater	Drainage Ditch Clogged	34 Fripp Point Rd
1840	4/29/2020 14:35	Closed	Stormwater	Drainage Ditch Clogged	2 Bennett Point Dr
1522	10/28/2019 10:28	Closed	Stormwater	Drainage Ditch Clogged	47 Varsity St
1789	4/15/2020 10:25	Closed	Stormwater	Drainage Ditch Clogged	31 Okatie Bluff Rd
1684	2/20/2020 11:14	Closed	Stormwater	Drainage Ditch Clogged	182 Booker T Washington Cir
2023	9/21/2020 15:16	Open	Stormwater	Drainage Ditch Clogged	546 Sea Island Pkwy

Water not flowing in ditch.

Drainage ditches are full of debris, standing water full of mosquitoes

There is debris in the swale preventing the water to flow it is also overgrown with vegetation.

Roadside ditch has approximately 2-4" of standing water. Water has not receded for approximately 30 days.

Ditches have stagnant water and is overgrown with vegetation.

Ditch isn't flowing properly, backing up on property.

The entire right of way from Old Sheldon Church Road to Guess drive is overgrown with vegetation. Doesn't look like it's been done all year.

Standing water flooding property.

Prescriptive Easement needs routine maintenance as was done in the past.

Irrigation ditch is eroding on the right side of my drive way

Ditch is clogged with debris and overgrown with vegetation.

Road and yard flooding due to overgrown vegetation and debris along edge of road.

Ditch clogged with debris and overgrown with vegetation.

Ditch is overgrown with vegetation and clogged with debris.

Standing water in roadway for multiple days after every rain fall. Request on behalf of Mrs. Joe Keskin 843 290 0222

You recently closed my previous request. Yet the ditch in front of my property was not completed. Please finish the job to allow storm water to move away into private property at 15 Cardinal Road causing minor yard flooding.

Ditch is overgrown with vegetation and clogged with debris. Culvert pipe needs repair.

Water is stagnant in ditch.

Utility company filled ditch with logs so they could drive over the ditch.

Both sides of the road have shallow ditches or clogged culverts. Causes all water to go to Sizemore property and distillery driveway

Clogged drainage easement at 43, 45, 47 Christine Drive- 29907

Ditches clogged with debris and overgrown with vegetation.

Since I moved in 3 years ago the side of the ditch toward the house has eroded and now water is pushing toward the house. The rain we had last week was

Shoulders overgrown with trees and vegetation

Outfall ditch needs to be cleaned out. Causing water to flood roadway

The ditch is overgrown and clogged with debris.

I have video and many pictures showing the flow of water down Varsity Street that drains directly into my property and causes flooding and standing water

The ditch is clogged with debris.

Water not flowing. Stagnant water present.

Clogged with debris and overgrown with vegetation.

1911	6/13/2020 14:44	Open	Stormwater	Drainage Ditch Clogged	25 Josephine Dr
1952	7/10/2020 16:26	Closed	Stormwater	Drainage Ditch Clogged	25 Josephine Dr
1753	3/11/2020 13:56	Closed	Stormwater	Drainage Ditch Clogged	13 Chesterfield Lake Dr
1584	1/3/2020 11:59	Closed	Stormwater	Drainage Ditch Clogged	10 Quail Ridge Cir S
1876	5/18/2020 14:57	Open	Stormwater	Drainage Ditch Clogged	1 Murray Ave
1683	2/19/2020 8:38	Open	Stormwater	Drainage Ditch Clogged	15 Cardinal Ln
1910	6/12/2020 16:12	Closed	Stormwater	Drainage Ditch Clogged	9 View Point Cir
1717	3/5/2020 14:53	Closed	Stormwater	Drainage Ditch Clogged	81 Sea Pines Dr
1836	4/28/2020 14:24	Closed	Stormwater	Drainage Ditch Clogged	9 View Point Cir
1582	1/3/2020 8:54	Closed	Stormwater	Drainage Ditch Clogged	11 Deacon Heyward Rd
1716	3/5/2020 14:04	Closed	Stormwater	Drainage Ditch Clogged	29 Thomas Sumter St
1545	11/19/2019 21:21	Closed	Stormwater	Drainage Ditch Clogged	4 Green Family Dr
1873	5/18/2020 7:32	Open	Stormwater	Drainage Ditch Clogged	21 Riley Rd
1715	3/5/2020 13:46	Closed	Stormwater	Drainage Ditch Clogged	5 Milkweed Ln
1983	8/13/2020 9:18	Open	Stormwater	Drainage Ditch Clogged	10 Fairfax St
1678	2/19/2020 8:15	Closed	Stormwater	Drainage Ditch Clogged	7 Sandy Beach Tr
2018	9/18/2020 10:03	Open	Stormwater	Drainage Ditch Clogged	3315 Powell Dr
1614	1/16/2020 10:13	Closed	Stormwater	Drainage Ditch Clogged	799 Sams Point Rd
1906	6/8/2020 13:59	Closed	Stormwater	Drainage Ditch Clogged	33 Huspah Creek Dr
1649	2/6/2020 14:22	Closed	Stormwater	Drainage Ditch Clogged	19 Marblehead Rd
1981	8/12/2020 10:50	Open	Stormwater	Drainage Ditch Clogged	8 Bryant Rd
1676	2/19/2020 8:05	Open	Stormwater	Drainage Ditch Clogged	5 Park Rd
1782	4/4/2020 14:24	Closed	Stormwater	Drainage Ditch Clogged	571 Keans Neck Rd
1674	2/19/2020 8:02	Closed	Stormwater	Drainage Ditch Clogged	36 Ben White Dr
1708	3/4/2020 10:49	Closed	Stormwater	Drainage Ditch Clogged	39 River Oaks Rd
1977	8/4/2020 8:12	Open	Stormwater	Drainage Ditch Clogged	8 Fairfax St
1673	2/19/2020 7:59	Closed	Stormwater	Drainage Ditch Clogged	49 Ceasar Pl
1774	3/25/2020 13:48	Closed	Stormwater	Illicit Discharge	83 Trotters Loop
1843	4/30/2020 10:46	Closed	Stormwater	Illicit Discharge	85 Marsh Dr
1758	3/17/2020 10:38	Closed	Stormwater	Illicit Discharge	1 Oyster Factory Rd
1587	1/4/2020 15:38	Closed	Stormwater	Illicit Discharge	6 Tomahawk Trl

I submitted a request over a month ago about the drainage ditch by my house as well as the one in front of my house. It is severely overgrown. If it allowe
The ditch in front of my my yard is severely overgrown as well as the irrigation ditch right next my house. Both are severely overgrown. I even saw a snake
Stagnant water present.

Ditch has debris and needs to be cleaned out. Overgrown with a little vegetation.

Ditch is full of water and overgrown with vegetation.

Ditch clogged with debris and overgrown with vegetation which causes slow and poor drainage.

Flooded again. 1,5,9,4 6 Veiw Point Cir. 10 inches of standing water. Both sides of the street.

Water not flowing in ditch causing the yard to flood.

12 inches of standing water after the last storm. 1, 5, 9, 4 View Point Cir. Second request. Speed sign that was just installed is falling over also

Ditch clogged

Water not flowing in ditch causing stagnant water.

Ditchches and culverts under drive way not maintanced.

Ditch is full of water and not flowing properly.

The yard is flooding.

Cleaning out the pipes will not help the water run and not sit in the ditch when the ditch needs to be cleaned out!

Ditch clogged with debris and overgrown with vegetation which causes flooding.

The ditches around the residence are clogged with debris and overgrown with vegetation.

Clogged culverts and over grown ditches

The ditches are overgrown and clogged with debris. There are also several pipes that are completely covered by dirt.

Ditches clogged with debris causing stagnant water.

All ditches are overgrown with vegetation and clogged with debris.

There is slow and poor drainage which causes flooding.

Standing water in Dutch. Water is not flowing out.

There is slow and poor drainage.

The ditches are clogged with debris and overgrown with vegetation.

Ditch will no longer drain

Ditches are clogged with debris and overgrown with vegetation.

John Hughes - 850-529-3268. Complaining of sewage smell coming from storm drains. Neighbors accusing his drain field of being the problem, however dr
Fuel spill at gas station. See note.

Green liquid from Waste Management truck. Liquid may be antifreeze, typically ethylene glycol.

1621	1/17/2020 10:47	Closed	Stormwater	Illicit Discharge	46 Clifton Dr
1804	4/23/2020 8:10	Closed	Stormwater	Illicit Discharge	79 Cleveland Dr
1546	11/20/2019 13:30	Closed	Stormwater	Illicit Discharge	1208 Fording Island Rd
1613	1/15/2020 14:42	Closed	Stormwater	Illicit Discharge	791 Sams Point Rd
1746	3/10/2020 9:36	Closed	Stormwater	Illicit Discharge	200 Belfair Oaks Blvd
1511	10/16/2019 14:41	Closed	Stormwater	Illicit Discharge	17 Fisherman Ln
1643	1/31/2020 14:52	Closed	Public Works	Litter / Illegal Dumping	160 Castle Hall Rd
1536	11/14/2019 16:29	Closed	Public Works	Litter / Illegal Dumping	14 Country Rd
1605	1/11/2020 9:27	Closed	Public Works	Litter / Illegal Dumping	450 Sea Island Pkwy
1637	1/26/2020 18:21	Closed	Public Works	Litter / Illegal Dumping	33 Sea Island Pkwy
1635	1/23/2020 14:06	Closed	Public Works	Litter / Illegal Dumping	876 Sams Point Rd
1599	1/8/2020 14:11	Closed	Public Works	Litter / Illegal Dumping	172 Sams Point Rd
1499	10/2/2019 15:23	Closed	Public Works	Litter / Illegal Dumping	1 Youmans Dr
1533	11/11/2019 15:01	Closed	Public Works	Litter / Illegal Dumping	168 Alston Rd
1531	11/6/2019 7:47	Closed	Public Works	Litter / Illegal Dumping	8 Southwood Park Dr
1693	2/25/2020 15:46	Closed	Public Works	Litter / Illegal Dumping	14 Country Rd
1629	1/22/2020 20:07	Closed	Public Works	Litter / Illegal Dumping	2 Bobwhite Ln
1662	2/13/2020 12:34	Closed	Public Works	Litter / Illegal Dumping	24 Warsaw Island Rd
1625	1/20/2020 13:30	Closed	Public Works	Litter / Illegal Dumping	555 Broad River Blvd
1757	3/15/2020 13:37	Closed	Public Works	Litter / Illegal Dumping	42 Crosstree Dr
1552	12/3/2019 9:35	Closed	Public Works	Litter / Illegal Dumping	638 Sams Point Rd
1551	12/1/2019 21:41	Closed	Public Works	Litter / Illegal Dumping	114 Holly Hall Rd
1656	2/9/2020 14:02	Closed	Public Works	Litter / Illegal Dumping	15 Russ Point Boat Lndg
1521	10/28/2019 8:23	Closed	Public Works	Litter / Illegal Dumping	501 Ladys Island Dr
1837	4/28/2020 20:34	Closed	Public Works	Litter / Illegal Dumping	114 Holly Hall Rd
1645	2/2/2020 10:47	Closed	Public Works	Litter / Illegal Dumping	1009 Sams Point Rd
1743	3/9/2020 18:40	Closed	Public Works	Litter / Illegal Dumping	91 Carvin Rd
1510	10/16/2019 14:06	Open	Public Works	Other Issue/Request	34 Brickyard Hills Ct
1899	6/5/2020 8:09	Closed	Public Works	Other Issue/Request	149 Pin Oak St
1932	6/24/2020 12:21	Open	Stormwater	Other Issue/Request	25 Parrot Creek Dr
1931	6/24/2020 9:38	Closed	Stormwater	Other Issue/Request	20 Davidson Rd

Chlorine smell coming catch basin in front of house. Noticed a steady stream of discharge coming from 6 inch Hope pipe in catch basin.

Grey water draining to ditch

Got information from DHEC regarding a car wash business being operated in or near the Green building marked by the cursor. They are unsure if drainage

Draining pond into roadside ditch

Dumpster rusted at the base is allowing liquids to seep into storm drain, milky water in storm drain and trash smell

I located an old septic cover on the right side of the property. Concrete pad was intact, but had a small stain and some overgrowth. The wind carried a fair

At intersection Of Castle Hall Road and Frampton Road in the Town of Yemassee, there is a bunch of litter including tires, large broken pieces of concrete (

Illegal trash dumping all along Bruce K Smalls Dr in Burton

Litter/Debris covers the Chowan Creek Bridge. Trash at base of bridge on both sides. Please get cleaned it.

Whitehall Boat Landing Adopt a Landing Trash pickup. 3 bags and large debris.

Pond behind house has litter being thrown in pond. Not sure if it's more than household waste.

There's one bag of household trash (black trash bag) on the roadside and further down closer to Parker's is a large beer box (like a case of beer). Thank yo

Dumping. It's across from BHS baseball home base mound.

Illegal household dumping. Food waste appears to be enclosed.

Trash along all of Southwood Park Drive which is a County road. Ongoing problem. Please clean regularly.

Litter on side of road.

Bass Creek/Gatherings at the Hilton Head Gateway Flyover... someone is throwing bags filled with used cat litter into the marsh... I removed about 20 bag

Excessive litter along roadside going on to Warsaw Island

Litter from Riley Ed to Donald camp rd

HH Trash Hero's we're out picking up creek side trash this morning when we noticed this enourmous hole under the road just under the bridge coming on

Adopt a highway trash bags left across from Royal Pines main entrance on Sam's Point Rd.

The bags have been there for over two weeks

Adopt a Landing patrol complete. 2 blue bags of trash placed in receptacle.

Please address the litter on the McTeer Bridge. Branches, buckets, boxes

Bag trash

Superbowl Landing cleanup. Please pick up Monday with landing trash. Thank you. Adopt a landing leader.

Roads are impassable. Litter everywhere

Our driveway culvert was logged. I called this in about 6 weeks ago. In the meantime the county was out addressing our neighbors clogged pipe issue and

Forwarded from Bluffton SeeClickFix app. Public comment was "Mowing along Pin Oak and Ninth ave never done looks awful"

Sinkhole forming at the end of the driveway.

Sinkhole on the side of the residence over the culvert pipe is becoming wider and deeper.

1970	7/25/2020 16:36	Open	Public Works	Other Issue/Request	50 Sands Beach Rd
2005	9/3/2020 9:55	Closed	Stormwater	Other Issue/Request	68 Lake Linden Dr
2040	9/28/2020 10:48	Closed	Public Works	Other Issue/Request	140 Coffin Point Rd
1820	4/27/2020 7:58	Closed	Stormwater	Other Issue/Request	5 Luray St
1600	1/8/2020 19:55	Closed	Public Works	Other Issue/Request	8 Southwood Park Dr
2039	9/28/2020 9:17	Open	Public Works	Other Issue/Request	639 Sea Island Pkwy
1503	10/8/2019 12:42	Closed	Public Works	Other Issue/Request	2721 North St
1926	6/22/2020 14:10	Open	Stormwater	Other Issue/Request	6 Otter Creek Dr
1697	2/26/2020 13:38	Closed	Public Works	Other Issue/Request	15 Polite Dr
2001	8/29/2020 13:37	Closed	Public Works	Other Issue/Request	212 Savannah Hwy
1964	7/18/2020 15:07	Open	Public Works	Other Issue/Request	154 Lake Linden Dr
1631	1/23/2020 8:49	Closed	Public Works	Other Issue/Request	1295 Ribaut Rd
1963	7/18/2020 13:36	Open	Public Works	Other Issue/Request	265 Alljoy Rd
1764	3/18/2020 13:05	Closed	Public Works	Other Issue/Request	10 Butchs Rd
1694	2/26/2020 7:57	Open	Stormwater	Other Issue/Request	31 Bradley Cir
1962	7/17/2020 8:57	Open	Public Works	Other Issue/Request	1 Pine Ridge Dr
1666	2/17/2020 16:31	Closed	Stormwater	Other Issue/Request	82 Parkside Dr
1763	3/18/2020 12:59	Closed	Public Works	Other Issue/Request	15 Russ Point Boat Lndg
1849	5/4/2020 9:49	Closed	Stormwater	Other Issue/Request	9 View Point Cir
1885	5/26/2020 10:08	Received	Public Works	Other Issue/Request	33 Sea Island Pkwy
1994	8/24/2020 8:15	Open	Stormwater	Other Issue/Request	37 Westminster Pl
1626	1/20/2020 16:49	Closed	Public Works	Other Issue/Request	24 Carolyn Dr
1958	7/14/2020 13:35	Open	Public Works	Other Issue/Request	23 New Orleans Rd
1688	2/22/2020 12:30	Closed	Public Works	Other Issue/Request	4 Needlerush Ct
1661	2/13/2020 10:20	Closed	Stormwater	Other Issue/Request	20 Ardmore Ave
1527	11/1/2019 7:53	Closed	Public Works	Other Issue/Request	2002 Berkley Cir
2027	9/22/2020 7:40	Received	Public Works	Other Issue/Request	158 Lake Linden Dr
1916	6/15/2020 13:00	Closed	Public Works	Other Issue/Request	2110 Sunfish Ct
1955	7/13/2020 23:38	Closed	Public Works	Other Issue/Request	41 Lucy Creek Dr
1755	3/11/2020 20:39	Closed	Public Works	Other Issue/Request	1 Belfair Oaks Blvd
1685	2/20/2020 17:49	Closed	Public Works	Other Issue/Request	2200 Ribaut Rd

Section of floating dock found in the river and left for pick up.

All storm drains are clogged with debris.

Dead animal, very strong odor

Sinkhole forming near storm drain.

Trash is up & down Southwood Park Drive. It was getting picked up, but hasn't been for weeks now. A big eye soar!

Tattered flag. Flown at half mast

Children's park needs a gate installed. It's very close to the road and would only take a split second for a child to run into the road. I'm really surprised the

Sinkhole at the end of the driveway.

Entire roadside is littered with trash.

Deer carcass on side of road.

sidewalk lifted up creating a trip hazard.

sign blocking view to turn right

Dock bumper needs repaired

Team leader for Russ Point Landing reporting litter pick up for the boat landing that I Foster.(Butches Landing).. picked up litter from the highway to the w

Pavement has eroded causing flooding and mud issues.

Nails sticking out of handrails on wooden bridge of sidewalk along Buckwalter just after the entrance to Pineridge

Erosion at catch basin

Adopt a landing team leader patrolled from highway 21 to the boat landing collected three blue bags of trash and left them in the trash receptacle

I received 2 updates this morning. The last one says closed? It shows still open on connect. Is anything going to be done about the drainage issue? It wasn't

people are putting in or out for the day. Yesterday it was very windy and only 2 additional boats could fit on the outside. This should not be a boat

Erosion occurring around driveway pipe.

Why have the two retention ponds on the Beaufort High side been stripped of all vegetation.

Waterline blowout

Sinkhole present near storm drain.

Debris scattered all over the base of the Bell bridge all the way to the bridge looks like from an unsecured load please attend to before it gets in our beaut

side walk uneven

No blue reflector marking hydrant

Overgrown Tree at entrance of Christine Drive 29907. Tall trucks have difficulty entering neighborhood. Please trim back large limbs.

There was a cement spill at the intersection of Buck Island Rd and Belfair Oaks Blvd that has hardened

The painted lines on the bridge are nearly invisible and it's very dangerous when driving in the dark or the rain. The reflectors are of little help. So can we

1754	3/11/2020 15:43	Closed	Public Works	Other Issue/Request	40 Church Rd
1549	11/26/2019 13:33	Closed	Public Works	Other Issue/Request	511 Eddings Point Rd
1951	7/10/2020 13:18	Open	Public Works	Other Issue/Request	2232 Salem Rd
1547	11/25/2019 8:02	Closed	Public Works	Other Issue/Request	33 Sea Island Pkwy
1838	4/28/2020 20:38	Closed	Stormwater	Other Issue/Request	92 Holly Hall Rd
1751	3/11/2020 10:45	Closed	Stormwater	Other Issue/Request	2 Murray Ave
1681	2/19/2020 8:32	Open	Stormwater	Other Issue/Request	4 Cardinal Ln
2020	9/18/2020 12:57	Received	Public Works	Other Issue/Request	301 Shell Park Cir
2019	9/18/2020 12:30	Received	Public Works	Other Issue/Request	301 Shell Park Cir
1784	4/11/2020 16:36	Closed	Public Works	Other Issue/Request	5001 Dogwood St
1946	7/7/2020 14:15	Open	Public Works	Other Issue/Request	4441 Bluffton Pkwy
1907	6/8/2020 15:41	Closed	Public Works	Other Issue/Request	5 Lilac Ln
1543	11/19/2019 8:21	Closed	Public Works	Other Issue/Request	3 Riverwind Dr
1748	3/10/2020 12:49	Closed	Stormwater	Other Issue/Request	44 Quiet Cove Way
2015	9/15/2020 15:23	Closed	Stormwater	Other Issue/Request	1638 Dawson Landing Dr
1541	11/18/2019 12:14	Closed	Public Works	Other Issue/Request	50 Fording Island Rd
1781	4/3/2020 10:38	Closed	Stormwater	Other Issue/Request	136 Wade Hampton Dr
1710	3/4/2020 15:43	Received	Public Works	Other Issue/Request	136 Ninth Ave
1540	11/18/2019 11:47	Closed	Public Works	Other Issue/Request	3788 Okatie Hwy
2014	9/15/2020 15:22	Closed	Stormwater	Other Issue/Request	1638 Dawson Landing Dr
1829	4/27/2020 15:01	Closed	Stormwater	Other Issue/Request	12 Nanny Cove Rd
1978	8/4/2020 12:26	Closed	Public Works	Other Issue/Request	3 Calico Ct
1866	5/14/2020 9:13	Closed	Public Works	Other Issue/Request	57w Eighth Ave
2012	9/13/2020 13:42	Received	Public Works	Other Issue/Request	104 Laurel St E
1935	6/25/2020 13:18	Closed	Stormwater	Pipe/Culvert Clogged	1125 Bluffton Pkwy
1827	4/27/2020 11:55	Open	Stormwater	Pipe/Culvert Clogged	10 Brickyard Hills Dr
1573	12/30/2019 9:32	Closed	Stormwater	Pipe/Culvert Clogged	36 Wade Hampton Dr
1509	10/15/2019 15:32	Closed	Stormwater	Pipe/Culvert Clogged	1277 Ribaut Rd
1572	12/30/2019 9:02	Closed	Stormwater	Pipe/Culvert Clogged	1 Battery Point Ln
1864	5/12/2020 13:04	Closed	Stormwater	Pipe/Culvert Clogged	11 Wintergreen Dr
1939	6/29/2020 8:00	Open	Stormwater	Pipe/Culvert Clogged	39 River Oaks Rd

Motor Grater and Back Hoe on Daufuskie not working. Dirt roads in bad shape

Large pot hole on the boat landing at Eddings Creek.

trees falling on them. They say it is the County's property. We need to resolve this before a hurricane hits or major storms. Thank you. Deborah Barrett

Sail boat at Ladys Island/Whitehall boat landing anchored too close to ramp. The boat was literally across the ramp this morning blocking 2 lanes.

Large sink hole

Murray Avenue road shoulders rutted at intersection with Squire Pope Road. Resident at 1 Murray Ave (Henrietta Simmons (843-681-2696) wants the cor

Three sinkholes present at these locations on Cardinal; corner of Cardinal and Hunter, between entrance and exit signs and the driveway entrance

We have the remnants of two large trees blown over during hurricane Matthew in our circle. One has a trench around the trunk that is over 2 feet deep al

This dead tree is located in the grassy area our road Shell Park Circle goes around. The grassy area is used by the families on the circle especially the childr

Two dead trees in empty lot behind address. Unknown on who to contact to have removed. Don't want another tree hitting the house come hurricane se;

Forwarded from the Bluffton SeeClickFix app- citizen says "bluffton parkway medians and sides of roads look unmaintained. The weeds are very tall and lo

Mowing parking strip and islands on Simmonsville Road. This street has not been mowed or maintained for several months.

Mattress on the side of the road at the foot of the bridge, box spring on top of the bridge going on to Lady's Island.

Water ran over the road during the heavy rainfall. The culvert is almost exposed in one spot.

Open hatch, missing cover of stormwater drain. Dangerous for children, adults and pets.

Couch dumped past the Barrell Landing Preserve sign.

Overwhelming Smell of sewage from neighbors system. Please come ASAP. This has been going on for some time without resolution.

Citizen complaint of dead tree leaning heavily over county owned right away and road.

Graffiti under bridge

Open hatch, missing cover of stormwater drain. Dangerous for children, adults and pets.

Storm drain cover missing

very low hanging tree across rd unable to get around with trailer without damage

Citizen complained about the grass not being mowed along Eighth Ave. This used to be done by a private landscaping company but we were informed tha

Abandoned Basketball Portable. Sitting there 5 + years in the ROW.

The Town received a maintenance request for several clogged storm drains causing flooding on Bluffton Parkway in the south side between River Ridge ar

Culvert pipe clogged with debris.

Culvert clogged with debris causing water not to flow.

I have reported this ongoing problem several times to no avail. This retention pond causes flooding to several properties is anything going to be done to a

Culvert clogged with debris causing water not to flow.

Storm drain clogged with debris and has vegetation growing.

Pipes clogged causing water not to flow.

1824	4/27/2020 9:08	Closed	Stormwater	Pipe/Culvert Clogged	40 St Pauls Church Rd
1571	12/28/2019 11:26	Closed	Stormwater	Pipe/Culvert Clogged	135 Community Center Rd
1670	2/19/2020 7:44	Closed	Stormwater	Pipe/Culvert Clogged	19 Burkes Beach Rd
1641	1/28/2020 23:20	Closed	Stormwater	Pipe/Culvert Clogged	84 Beach Rd
1823	4/27/2020 8:42	Closed	Stormwater	Pipe/Culvert Clogged	27 Edding White Rd
1771	3/22/2020 10:45	Closed	Stormwater	Pipe/Culvert Clogged	40 Le Moyne Dr
1969	7/24/2020 11:40	Closed	Stormwater	Pipe/Culvert Clogged	3 Lotus Ct
1566	12/24/2019 10:10	Closed	Stormwater	Pipe/Culvert Clogged	16 Mystic Dr
1927	6/23/2020 9:51	Closed	Stormwater	Pipe/Culvert Clogged	7036 Roseida Rd
2002	8/31/2020 10:46	Closed	Stormwater	Pipe/Culvert Clogged	30 Burlington Cir
1633	1/23/2020 11:41	Closed	Stormwater	Pipe/Culvert Clogged	60 Player Rd
1813	4/24/2020 17:47	Closed	Stormwater	Pipe/Culvert Clogged	2 Royal Pines Blvd
1922	6/20/2020 8:02	Open	Stormwater	Pipe/Culvert Clogged	9 View Point Cir
1998	8/27/2020 13:14	Closed	Stormwater	Pipe/Culvert Clogged	6811 Oakmont Dr
1812	4/24/2020 17:43	Closed	Stormwater	Pipe/Culvert Clogged	651 Sams Point Rd
1727	3/8/2020 12:29	Closed	Stormwater	Pipe/Culvert Clogged	30 Fiddler Dr
1918	6/16/2020 12:08	Open	Stormwater	Pipe/Culvert Clogged	68 View Point Cir
1993	8/18/2020 15:54	Closed	Stormwater	Pipe/Culvert Clogged	8 W Morningsdie Dr
1844	4/30/2020 11:34	Closed	Stormwater	Pipe/Culvert Clogged	22 Fiddler Dr
1793	4/19/2020 21:00	Closed	Stormwater	Pipe/Culvert Clogged	19 Katelyns Way
1722	3/6/2020 9:50	Closed	Stormwater	Pipe/Culvert Clogged	1 Turtle Ln
1553	12/3/2019 23:20	Closed	Stormwater	Pipe/Culvert Clogged	86 Tuscarora Ave
1586	1/4/2020 11:08	Closed	Stormwater	Pipe/Culvert Clogged	86 Twickenham Rd
1524	10/30/2019 12:12	Closed	Stormwater	Pipe/Culvert Clogged	5 John Davis Ct
1718	3/5/2020 16:37	Open	Stormwater	Pipe/Culvert Clogged	5 Lilac Ln
1654	2/7/2020 15:50	Closed	Stormwater	Pipe/Culvert Clogged	5 Sandy Beach Tr
1839	4/29/2020 13:08	Closed	Stormwater	Pipe/Culvert Clogged	21 Ashepoo Dr
1583	1/3/2020 8:58	Closed	Stormwater	Pipe/Culvert Clogged	18 Bay Pines Dr
1617	1/16/2020 13:18	Closed	Stormwater	Pipe/Culvert Clogged	21 River Rd
1679	2/19/2020 8:20	Closed	Stormwater	Pipe/Culvert Clogged	5 Bradley Cir
1651	2/6/2020 15:58	Closed	Stormwater	Pipe/Culvert Clogged	10 Barrier Beach Cv

Ditch clogged with debris causing water not to flow.

Garbage and trash walking ditch and culvert

Driveway culvert clogged. Sediment present.

This is a washout at the south end (outfall) of a culvert crossing Beach Rd

Ditch clogged causing yard to flood.

The ditch was dug out last year, before which time it moved water along. Now the water is staying for weeks, the water here now is from 2 weeks ago. I o
Pipe clogged

Outfall overgrown with vegetation and clogged with debris.

I don't have a problem. I want to say thank you to Mr Harold Green, storm water department supervisor, and his crew leader Rhonda. I appreciate the help.
Water not flowing. Pipe is broken.

Water has backed up extremely bad on Sam's Point Road right around 6:51 there is a clogged culvert. But it is also not draining down into the ditch into road.
Flooded again. 1,5,9 and 4

Culvert is clogged and draining slow.

Culvert is buried on the right hand side of the driveway and is not flowing. There are several along this section that are blocked up with leaves and dirt.

Culverts are clogged again, this is the 3-4th time this has happened and has been fixed. It is never done properly so it continues to happen, the ditch erodes.

The pipe is clogged with debris.

Clogged drain suspected at above ref address. Image from recent rain.

Water not flowing in ditch.

Culvert is not draining between 15,17,19 and 21 Katelyn's Way

Culvert is clogged and not allowing water to drain therefore flooding residents yards

Culvert is full of dirt and debris. It no longer functions as designed or intended.

Culvert at intersection of Old Sheldon Church road and Twickenham Rd is collapsed and not working. Please replace and build up with stone as this creates a hazard.

Culvert is clogged with debris preventing the water from flowing.

Drainage culvert clogged

Pipe and culverts need to be cleaned all along this roadway (both sides) not only at #5, most pipes are 50% full of sediment.

Pipe clogged with debris.

Culverts need cleaned

The drainage ditch is overgrown and full of overgrowth, dead vegetation and litter. On both sides of River rd near intersection of Guess Drive

There is slow and poor drainage causing standing water.

Ditch not draining properly. Pipe clogged with debris.

1714	3/5/2020 13:29	Closed	Stormwater	Pipe/Culvert Clogged	22 Riley Rd
1648	2/5/2020 13:00	Closed	Stormwater	Pipe/Culvert Clogged	130 Shell Point Recreation Park
1611	1/14/2020 13:17	Closed	Stormwater	Pipe/Culvert Clogged	31 Bradley Cir
1943	7/1/2020 11:19	Open	Stormwater	Pipe/Culvert Clogged	20 Harbor Oaks Ln
1576	12/31/2019 9:48	Open	Stormwater	Pipe/Culvert Clogged	546 Sea Island Pkwy
1780	3/31/2020 13:55	Closed	Stormwater	Pipe/Culvert Clogged	23 Wentworth Dr
1941	6/30/2020 9:49	Closed	Stormwater	Pipe/Culvert Clogged	11 Jasper Ln
1538	11/15/2019 11:43	Closed	Stormwater	Pipe/Culvert Clogged	814 Broad River Blvd
1828	4/27/2020 13:53	Closed	Stormwater	Pipe/Culvert Clogged	21 Purrysburg Dr
1976	8/3/2020 10:59	Closed	Stormwater	Yard/Street Flooded	1105 Bluffton Pkwy
1865	5/13/2020 16:19	Closed	Stormwater	Yard/Street Flooded	25 Sparkleberry Dr
1934	6/25/2020 8:46	Closed	Stormwater	Yard/Street Flooded	55 Sandy Pointe Dr
1671	2/19/2020 7:51	Open	Stormwater	Yard/Street Flooded	93 Thomas Cohen Dr
2009	9/9/2020 12:43	Closed	Stormwater	Yard/Street Flooded	25 Old Distant Island Rd
1896	6/4/2020 15:24	Closed	Stormwater	Yard/Street Flooded	51 Middlefield Cir
1568	12/26/2019 13:41	Closed	Stormwater	Yard/Street Flooded	163 Keans Neck Rd
1821	4/27/2020 8:08	Closed	Stormwater	Yard/Street Flooded	5 Milkweed Ln
1601	1/9/2020 12:09	Closed	Stormwater	Yard/Street Flooded	20 Gator Ln
1700	2/27/2020 14:33	Closed	Stormwater	Yard/Street Flooded	15 Ben White Dr
1565	12/24/2019 10:07	Closed	Stormwater	Yard/Street Flooded	18 Mystic Dr
1733	3/9/2020 9:36	Closed	Stormwater	Yard/Street Flooded	8 Wallace Rd
1731	3/9/2020 9:09	Closed	Stormwater	Yard/Street Flooded	167 Stanley Rd
1816	4/25/2020 14:12	Closed	Stormwater	Yard/Street Flooded	19 St James Cir
1766	3/19/2020 21:41	Closed	Stormwater	Yard/Street Flooded	29 Milton Way
1801	4/21/2020 8:17	Closed	Stormwater	Yard/Street Flooded	18 Freeport Rd
1815	4/24/2020 22:59	Closed	Stormwater	Yard/Street Flooded	1551 Sea Island Pkwy
1729	3/9/2020 9:00	Closed	Stormwater	Yard/Street Flooded	14 Huspah Ct S
1814	4/24/2020 18:27	Closed	Stormwater	Yard/Street Flooded	760 Ribaut Rd
1887	5/27/2020 11:45	Closed	Stormwater	Yard/Street Flooded	48 Oakview Rd
1630	1/23/2020 8:35	Closed	Stormwater	Yard/Street Flooded	19 Windwood Ln
1593	1/7/2020 11:36	Closed	Stormwater	Yard/Street Flooded	100 Prescott Rd

Storm drains clogged causing flooding.

Ditches clogged by overgrowth and culvert pipe clogged.

Culvert clogged with debris. Water not flowing.

Culverts are partially or fully collapsed and are not functioning as designed causing stagnant water.

Ditch along side of property is in need of maintenance, causing property to flood.

Storm drain repair needed.

Culvert under cart path allowing drainage to ponds is too small and continually clogs with debris. Then the ditch on my eastern property boundary gets pe
Upon rain events the storm drain backup with water and the ponds at the apartments back almost to overflowing. This causes water to flow into the Oakr

Culvert pipe clogged. Water not able to flow.

Roadway has standing water catch basin block.

Yard has stagnant water because there is no outlet.

Two storm drains are clogged with debris and needs to be cleaned.

Ditch overgrown and culvert clogged causing the road to flood.

Yard floods every time it rains. When they paved the road the drainage was rerouted to come through the property but it stays on site, the property does

Ditch is clogged causing water to flood yard.

Property is flooding due to blocked off drainage ditches from the Adger/Seabrook solar project

Yard Flooding

Yard flooded. Water not flowing.

18" CMP running under road is crushed and blocked with sediment, organics and debris causing significant yard flooding on property. Standing water is ap
This flooding is due to clogged drainage between 20 and 16 Mystic Drive. There are soft dirt access points between each driveway.

Yard flooded.

Water has not outlet flooding the yard

The road is completely flooded

Beaufort county owns an easement to cut a ditch that isn't there which is causing my road to flood

This road is washing out on heavy rain in an area that used to drain well. Something has made it back up in the last couple months.

Drainage ditch along Sea Island Parkway clogged, which impedes water flow and causes flooding of street, yard and parking lot. The water has nowhere to

Water not flowing in ditches causing flooding in the driveway.

There is no drainage solution on Fuller Parkway. My yard floods every bad rain as well as several neighbors as well as road washout.

After road resurfaced the water accumulates in the yard.

Water is flooding the yard.

Stagnant water present.

1797	4/20/2020 12:09	Closed	Stormwater	Yard/Street Flooded	40 Sea Pines Dr
1811	4/24/2020 16:04	Open	Stormwater	Yard/Street Flooded	3 Shiney Leaf Ct
1796	4/20/2020 10:42	Closed	Stormwater	Yard/Street Flooded	1964 Seaside Rd
1810	4/24/2020 14:48	Closed	Stormwater	Yard/Street Flooded	21 St James Cir
1807	4/24/2020 7:41	Closed	Stormwater	Yard/Street Flooded	31 Alston Rd
1915	6/15/2020 9:26	Open	Stormwater	Yard/Street Flooded	274 Haig Point Rd
1806	4/23/2020 19:39	Closed	Stormwater	Yard/Street Flooded	140 Middle Rd
1842	4/30/2020 7:46	Closed	Stormwater	Yard/Street Flooded	20 Ashepoo Dr
1658	2/11/2020 7:08	Closed	Stormwater	Yard/Street Flooded	1 Sea Front Ln
1719	3/5/2020 23:18	Closed	Stormwater	Yard/Street Flooded	4 Needlerush Ct
1802	4/22/2020 12:08	Closed	Stormwater	Yard/Street Flooded	89 Sea Pines Dr
1682	2/19/2020 8:35	Closed	Stormwater	Yard/Street Flooded	36 Indian Trl
1680	2/19/2020 8:23	Open	Stormwater	Yard/Street Flooded	12 Muddy Creek Rd
1786	4/13/2020 7:43	Closed	Stormwater	Yard/Street Flooded	7 Old Dawson Acres
1615	1/16/2020 12:55	Closed	Stormwater	Yard/Street Flooded	6 Mockingbird Dr
1713	3/5/2020 10:47	Closed	Stormwater	Yard/Street Flooded	1 Rivers Hill Rd
1833	4/27/2020 18:33	Closed	Stormwater	Yard/Street Flooded	13 Sea Gull Dr
1677	2/19/2020 8:12	Closed	Stormwater	Yard/Street Flooded	12 Wexford Dr
1542	11/18/2019 13:19	Closed	Stormwater	Yard/Street Flooded	40 Brickyard Hills Ct
1747	3/10/2020 10:26	Closed	Stormwater	Yard/Street Flooded	49 Browns Island Rd
1830	4/27/2020 15:55	Closed	Stormwater	Yard/Street Flooded	3 Milkweed Ln
1709	3/4/2020 13:17	Closed	Stormwater	Yard/Street Flooded	32 Mint Farm Dr
1937	6/26/2020 14:31	Closed	Stormwater	Yard/Street Flooded	6558 Thomas Lawton Dr
2047	9/29/2020 17:54	Open	Stormwater	Yard/Street Flooded	30 Burlington Cir
1936	6/25/2020 15:12	Closed	Stormwater	Yard/Street Flooded	6558 Thomas Lawton Dr
1609	1/13/2020 11:22	Closed	Stormwater	Yard/Street Flooded	76 First Coleman Rd

Property is flooded.

The back yard gets flooded everytime it rains, the photo provided is a very mild flooding compared to the usual issue.

Flooding in yard.

Street is flooded and not receding.

Flooding around Token Ln and Alston Rd

Clogged culverts (2) and severely clogged/overgrown ditches causing all water on Haig Pt rd to hit blocked culvert and back up into our yard and flood run
Easement along 140 Middle road does not adequately contain storm water run off. Water overflows floods front yard and runs along side yard flooding ba
Experiencing flooding and erosion.

Ponding water in area.

Yard flooded due to clogged culvert on Turtle lane not draining water from lot 138 middle road. Water from lot flooding yard.

Property flooded.

Slow and poor drainage along ditches and culverts causing flooding.

Water not flowing causing yard to flood.

Water accumulates on the property.

Street intersection with Laughing Gull Drive is flooded.

The yard is flooding.

Front, side, and back yards flooded. Back yard up against golf course which is also flooded.

Inundated during heavy downpours. Curb inlet at pathway partially clogged.

Would like to report that every time it rains the front of my driveway floods and stays that way until the sun shine evaporates the water. About 12 years a

The water is not flowing causing the yard to flood.

Backyard is flooded.

Yard flooding, drainage beside the property needs maintenance.

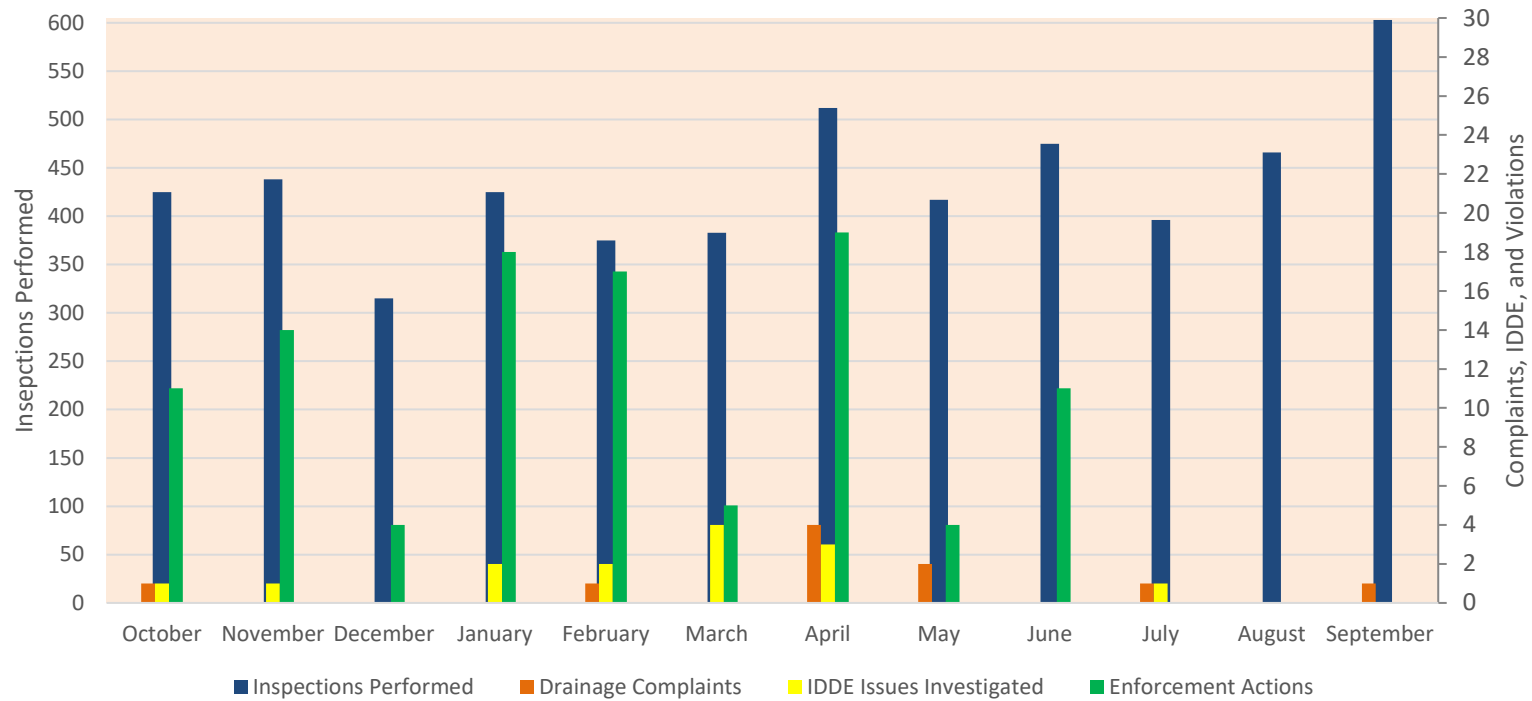
Both street corners @ Thomas Lawton/Fairfax and Thomas Lawton/Brunson are still flooded from Tuesday's rain. This happens every time there is even th

Severe erosion around new pipes. Water standing.

The ditch, my yard and the street are flooded. There is also a storm drain located in the yard behind me that never gets cleaned out. I have asked some co

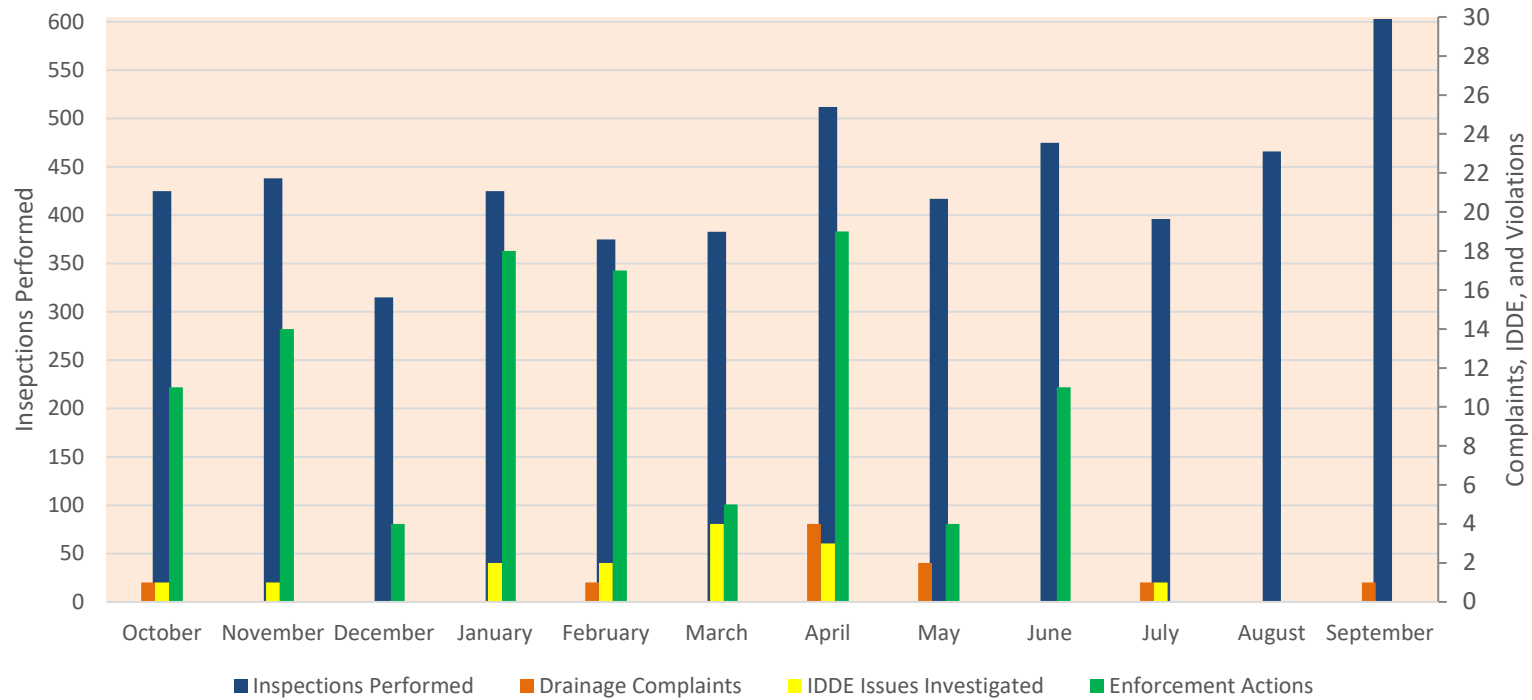
Yard flooded. Water not flowing.

MS4 Minimum Control Measure #4 Erosion Sediment Control Inspections



TYPE	October	November	December	January	February	March	April	May	June	July	August	September	Last 12 Months
Inspections Performed	425	438	315	425	375	383	512	417	475	396	466	603	5230
Drainage Complaints	1	0	0	0	1	0	4	2	0	1	0	1	10
IDDE Issues Investigated	1	1	0	2	2	4	3	0	0	1	0	0	13
Enforcement Actions	11	14	4	18	17	5	19	4	11	0	0	0	103

MS4 Minimum Control Measure #4 Erosion Sediment Control Inspections



TYPE	October	November	December	January	February	March	April	May	June	July	August	September	Last 12 Months
Inspections Performed	425	438	315	425	375	383	512	417	475	396	466	603	5230
Drainage Complaints	1	0	0	0	1	0	4	2	0	1	0	1	10
IDDE Issues Investigated	1	1	0	2	2	4	3	0	0	1	0	0	13
Enforcement Actions	11	14	4	18	17	5	19	4	11	0	0	0	103

South Carolina NPDES Permit # SCR030000
Small Municipal Separate Storm Sewer System (SMS4)
Annual Report Template

III. Minimum Control Measures (MCM)

B. Minimum Control Measure 1: Public Education and Outreach on Storm Water Impacts (4.2.1, 5.3)

Use the table below to summarize outreach strategies, goals, and progress for the current reporting year. In the “activities conducted and planned” section, focus on activities that were conducted in the last reporting year and those that are planned for the upcoming reporting year, providing implementation dates. Add rows where needed and attach additional sheets if necessary.

Please see the attached “2019-2023 Lowcountry Stormwater Partners Strategic Stormwater Outreach Plan” for a complete list of all activities planned for the upcoming year. Below are last year’s accomplishments as well as the activities that are furthest along in their planning stages.									
Outreach Type	Activity Type	Target Pollutant	Target Audience	Activity Description	Notes	Service Provider	Start Date	End Date	Impacts
Direct	Presentation	Bacteria, Freshwater, General Stormwater, Litter, Nutrients, Pesticides, Toxic contaminants / heavy metals	K-12 students / youth	Port Royal Sound Foundation Maritime Center's Story Time Program. This program gives special time and water-quality related activities for preschoolers and toddlers at 10 a.m. every Wednesday. This program was held in-person pre-COVID-19 and virtually post-COVID-19. Impact is determined by attendance.	During this reporting period, there were XX story time events.	Port Royal Sound Foundation	10/1/2019	9/30/2020	4123
Direct	Presentation	Bacteria, Freshwater, General Stormwater, Litter, Nutrients, Pesticides	Boat owners / operators / marinas, Elected & appointed officials and high-level staff, Higher education students, K-12 students / youth, Residential, Teachers	Port Royal Sound Foundation Maritime Center's Education Events. These special events regularly take place at the Center with water-quality and related themes. Examples of these programs include Tuesday Talks, Sound Vision Virtual Webinars, eco-boat tours, etc. Impact is determined by attendance.	During this reporting period, there were XX education events.	Port Royal Sound Foundation	10/1/2019	9/30/2020	457

Direct	Training	Freshwater, General Stormwater, Litter, Nutrients, Pesticides	Elected & appointed officials and high-level staff, Higher education students, Supervisory staff / administrators / stormwater managers, Teachers	Master Naturalist Advanced Trainings. These trainings cover a variety of environmental topics. The goal of these programs is to keep alumni engaged and learning the most updated information. Impact is determined by the number of participants.	Eight advanced trainings took place during this timeframe. Topics ranged from the ecosystem services of plant species, to the historic use of water, and to current water research being conducted in the county. These trainings were held on 10/18/19, 11/2/19, 11/18/19, 12 /3/19, 2/12/20, 2/28/20, 3/10/20, 6/9/20, and 9/10/20.	Clemson Extension, Lowcountry Master Naturalists, Spring Island Trust	10/1/2019	9/30/2020	228
Direct	Council / Committee / Meeting	Freshwater, General Stormwater, Litter, Nutrients, Pesticides	Elected & appointed officials and high-level staff, Higher education students, Residential, Teachers	Master Naturalist Quarterly Meetings. At these meetings, Master Naturalists meet to discuss upcoming training opportunities, volunteer opportunities, and current environmental events in terms of research, local politics, etc. Impact is determined by attendance.	There were three meetings during this reporting period. They took place on 10/16/19, 1/20/20, and 5/20/20.	Clemson Extension, Lowcountry Master Naturalists, Spring Island Trust	10/1/2019	9/30/2020	180
Direct	Brochure / outreach material, Meeting	Bacteria	Septic System Owners, Residential	Surface Effluent Septic Tank Inspections. During inspections Town staff distributes educational flyers in English and Spanish to individual residents and have one-on-one conversations with them on the importance of septic system maintenance. This information is also sent via email to appropriate HOAs. Impact is determined by the number of inspections performed.	Town staff routinely conducted these inspections following water quality results indicating the presence of human genetic material. They performed 95 inspections.	Town of Bluffton	10/1/2019	9/30/2020	95

Direct	Council / Committee / Meeting	General Stormwater, Freshwater	Elected & appointed officials and high-level staff, Supervisory staff / administrators / stormwater managers, Businesses	Sea Level Rise Task Force Meetings. This group meets to review Beaufort's and Port Royal's vulnerability to sea level rise and develops strategies to improve resilience in the face of an inevitable environmental change. The group is working from the Sea Level Rise Adaptation Report for Beaufort County that was developed as part of a collaborative effort by Beaufort County stakeholders and sponsored by S.C. Sea Grant Consortium. Impact is determined by meeting attendance.	Four meetings were held during this reporting periods. The meetings took place on 11/21/19, 12/17/19, 1/14/20, and 3/1/20. 12 people attended each meeting.	Beaufort County, City of Beaufort, Coastal Conservation League, Town of Port Royal, Town of Bluffton	10/1/2019	9/30/2020	48
Direct	Council / Committee / Meeting	Bacteria, General Stormwater, Nutrients, Sediment, FOG, Litter	Elected Officials, Residential, Technical Staff, Field Staff, Supervisory staff	Quarterly Coastal MS4 Meetings. Participants at these meetings discuss challenges associated with stormwater management, MS4 permit compliance, lessons learned, and share stormwater management resources. Impact is measured through attendance.		Beaufort County, Town of Bluffton, Town of Hilton Head Island, Coastal MS4s	10/1/2019	9/30/2020	25
Direct	Training	Bacteria, General Stormwater, Nutrients, Pesticides, Sediment	Grounds crew / maintenance / facilities staff, Residential, Stormwater managers / stormwater staff	"Healthy Ponds, Healthy Communities" Workshop. This workshop's goal is to explain how stormwater ponds function, how to maintain them, and common issues they experience. Effectiveness is determined by attendance and an evaluation.	This workshop was given to the Indigo Run Plantation community on Hilton Head Island.	Clemson Extension	10/1/2019	10/1/2019	15

Direct	Brochure / outreach material, Council / Committee / Meeting, HOA Emails	Freshwater, General Stormwater, Litter, Post Construction Maintenance, Sediment	Residential	The Town of Bluffton's Post Construction Site Runoff Controls Program meetings. This program focuses on the maintenance of structural and nonstructural BMPs to reduce the volume and improve the quality of stormwater runoff to the Towns SMS4. Town staff meet onsite with HOA representatives and provided educational emails to residents. Impact is determined by the number of people contacted.		Town of Bluffton	10/1/2019	9/6/2020	8
Direct	Publication / Article	General Stormwater	Elected & appointed officials and high-level staff, Supervisory staff / administrators, Technical staff / engineers / developers, Contractors	Flood Vulnerability Assessment. This assessment indicates flood vulnerability and recommends certain actions for the City of Beaufort, SC.		SC SeaGrant Consortium, CoC Lowcountry Hazards CTR, CISA	10/1/2019	9/30/2020	
Direct	Presentation	Bacteria, Freshwater, General Stormwater, Nutrients, Pesticides, Sediment	Residential	Carolina Yards Overview. This workshop gives a hands-on overview of Clemson Extension's Carolina Yards program. The program seeks to work with residents in creating healthy, watershed-friendly landscapes by using effective gardening methods. Effectiveness is measured through attendance and an evaluation.	This presentation was given as part of the OLLI program at USCB-Bluffton. 100% of evaluation respondents reported knowledge gain and the workshop was a good use of their time.	Clemson Extension, USC-B	10/4/2019	10/4/2019	35

Direct	Presentation	Freshwater, General Stormwater, Litter	K-12 students / youth	AMES Presentation and Hands-On Activity. This workshop educated children on watersheds and has them use a constructed a May River Watershed Enviroscape. Impact is determined by attendance.	This presentation was given to 4th and 5th graders at Pritchardville Elementary.	Town of Bluffton	11/5/2019	9/30/2020	100
Direct	Training	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers	SoLoCo Updates Presentation. This presentation gave information on the who, what, where, when and why regarding taking a regional approach to stormwater management vs working in individual silos. Effectiveness is determined through verbal feedback after the presentation.	This presentation was given to the SC Association of Stormwater Managers Quarterly Meeting. Feedback from participants was positive. They were very interested in how the SoLoCo partners could achieve a regional approach to Stormwater instead of doing it individually.	Beaufort County, Center for Watershed Protection, McCormick Taylor, Town of Bluffton, City of Beaufort, Town of Hilton Head Island, Town of Port Royal	11/7/2019	11/7/2019	125
Direct	Meeting, Presentation	General Stormwater, Consortium management	Elected & appointed officials and high-level staff, Consortium partners, Stormwater managers / stormwater staff, Supervisory staff, administrators, stormwater managers, Technical staff / engineers / developers	Lowcountry Stormwater Partners Consortium Meeting. These meetings are for partner updates and to address consortium business such as workshops, current events, etc. Impact is determined by attendance.	This meeting revealed the 2019-2023 Lowcountry Stormwater Partners Stormwater Outreach Strategic Plan.	Beaufort County, City of Beaufort, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	11/19/2019	11/19/2019	9

Direct	Presentation	General Stormwater, Nutrients, Pesticides, Sediment	Master Gardeners, Residential	Rain Garden Presentation. This presentation covers the effects of stormwater runoff pollution on local watersheds, ways residents can reduce their stormwater footprint, and rain garden function, design, and installation practices. Effectiveness is determined through attendance.	This presentation was given to the Lowcountry Master Gardeners Association at their quarterly meeting.	Clemson Extension	11/21/2019	11/21/2019	31
Direct	Council / Committee / Meeting	General Stormwater	Supervisory staff / administrators / stormwater managers, Educators, Outreach Organizations	SCCIN Winter Meeting. The South Carolina Coastal Information Network (SCCIN) enhances the coordination of community outreach efforts in the state and fosters inter-agency communication and cooperation. This meeting serves as a way that partner organizations meet these goals. Impact is determined by attendance.		SC SeaGrant Consortium, Carolina Clear, LSP, ACE Basin NERR	12/4/2019	12/4/2019	20
Direct	Workshop	General Stormwater	Residential	Sea Grant Lunch and Healthy Pond Series Introduction to Water Quality December 5 2019		SC SeaGrant Consortium, Town of Bluffton	12/5/2019	12/5/2019	25
Direct	Presentation	Bacteria, Freshwater, General Stormwater, Nutrients, Pesticides, Sediment	Residential	Carolina Yards Overview. This workshop gives a hands-on overview of Clemson Extension's Carolina Yards program. The program seeks to work with residents in creating healthy, watershed-friendly landscapes by using effective gardening methods. Impact is determined by attendance.	This presentation was given to the Port Royal Plantation Coffee Ladies group. No evaluation was able to be distributed.	Clemson Extension	1/10/2020	1/10/2020	61
Direct	Council / Committee / Meeting	Freshwater, General Stormwater, Sediment	Supervisory staff/admins/ stormwater managers	Code Enforcement Supervisor Review Meeting January 13, 2020.		Town of Bluffton	1/13/2020	1/13/2020	12

Direct	Council / Committee / Meeting, Conference Call	Bacteria, General Stormwater	Stormwater managers / stormwater staff	Conference Call with NC Department of Environmental Quality. The Town of Bluffton discusses their MST sampling program. Impact is determined by the number of people on the call.		Town of Bluffton	1/13/2020	1/13/2020	5
Direct	Meeting, Presentation	General Stormwater, Consortium management	Elected & appointed officials and high-level staff, Consortium partners, Stormwater managers/storm water staff, Supervisory staff, administrators, stormwater managers, Technical staff/engineers/ developers	Lowcountry Stormwater Partners Consortium Meeting. These meetings are for partner updates and to address consortium business such as workshops, current events, etc.	This meeting planned our Earth Month outreach strategy.	Beaufort County, City of Beaufort, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	1/21/2020	1/21/2020	18
Direct	Presentation	Freshwater	Commercial landscapers / landscape designers / nurseries, Elected & appointed officials and high-level staff, K-12 students / youth, Residential, Teachers	Why Water is Important Presentation. This presentation covers water use, stormwater runoff, and how the LSP's education and outreach efforts. Impact is determined through attendance.	This presentation was given to the Colleton County Clemson Extension Advisory Council.	Clemson Extension	2/3/2020	2/3/2020	15
Direct	Conference	Freshwater, Nutrients, Conservation easements, Sediment	Agriculture & Conservation District Professionals	SC Association of Conservation Districts Water Quality Panel Presentation. At this annual partnership meeting of SC DNR, NRCS, county Conservation Districts, and		Clemson Extension, NRCS, DNR, SC Conservation Bank &	2/18/2020	2/18/2020	150

				other guest speakers, LSP members and affiliates discussed water quality educational outreach efforts. Impact is determined by attendance.		Berkeley SWCD			
Direct	Luncheon	Post Construction Maintenance, Temperature	Stormwater pond management companies, Stormwater pond managers	Lowcountry Property Management Association Luncheon February 18, 2020.		Town of Bluffton	2/18/2020	2/18/2020	24
Direct	Presentation	Bacteria, FOG, Freshwater, General Stormwater, Litter, Nutrients, Pesticides, Petroleum products	K-12 students / youth	Youth Presentation. This presentation includes an Enviroscope demonstration by Watershed Management Division staff and a hands-on planning activity by the Growth Management Department. Impact is determined by attendance.	This presentation was given to the Boys and Girls Club.	Town of Bluffton	2/20/2020	2/20/2020	50
Direct	Presentation	Freshwater, General Stormwater, Nutrients, Pesticides, Sediment	Residential	Rain Garden Presentation. This presentation covers the effects of stormwater runoff pollution on local watersheds and ways residents can reduce their stormwater footprint. It also covers rain garden function, design, and installation practices. Effectiveness is determined through attendance.	This presentation was given to the Callawassie Island Garden Club.	Clemson Extension	2/25/2020	2/25/2020	31
Direct	Council / Committee / Meeting	Bacteria, Sediment	Stormwater managers / stormwater staff / engineers / developers	Beaufort County Comprehensive Water Quality Monitoring Plan Presentation. This presentation covers TMDL, 303D, Special Project, Municipal, and IDDE monitoring that the County		Beaufort County, City of Beaufort, Town of Bluffton, Town of Port Royal	2/25/2020	2/25/2020	20

				performs. Impact is determined by attendance.					
Direct	Presentation	General Stormwater	Higher education students	Dr. Dwayne Porters University of South Carolina ENHS 775 Class Presentation February 26, 2020.		Town of Bluffton	2/26/2020	2/26/2020	14
Direct	Training	General Stormwater, Bacteria, Nutrients, Sediment, Freshwater, FOG, Pesticides	Contractors, Field staff / maintenance / facilities, Landscapers / landscape designers / nurseries	LID Lunch and Learns. This program is designed to educate professional audiences on the use, installation, and technical aspects of LID practices such as rain gardens, pervious pavement, etc. Impact is determined by attendance and evaluations.	This program was delayed due to COVID-19. Previous iterations of this type of program and their evaluations indicated that an in-person, hands-on training is more effective for the target audience.	Clemson Extension, DNR	3/1/2020	9/30/2020	
Direct	Presentation	Bacteria	K-12 students / youth	Soil Tunnel for Hilton Head Elementary School. Students explore the tunnel learning about what's in the soil and two of the panels are a septic tank and a well. Impact is determined by participation.		Conservation District	3/4/2020	3/6/2020	204
Direct	Presentation	FOG, Freshwater, General Stormwater, Litter, Pesticides, Petroleum products, Pharmaceuticals / personal care products, Temperature	K-12 students / youth	Bluffton Middle School Career Day Presentation. This presentation includes general stormwater information, local impairments, and ways for students to help protect local water quality through action. Impact is determined by attendance.		Town of Bluffton	3/12/2020	3/12/2020	100

Direct	Meeting, Presentation	General Stormwater, Consortium management	Elected & appointed officials and high-level staff, Consortium partners, Stormwater managers / stormwater staff, Supervisory staff, administrators, stormwater managers, Technical staff / engineers / developers	Lowcountry Stormwater Partners Consortium Meeting. These meetings are for partner updates and to address consortium business such as workshops, current events, etc.	This meeting reviewed Earth Month outreach plans and COVID-19 responses.	Beaufort County, City of Beaufort, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	4/7/2020	4/7/2020	12
Direct	Conference, Presentation	General Stormwater	Technical staff / engineers / developers	Center for Watershed Protection Presentation April 14, 2020.		Beaufort County, City of Beaufort, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	4/14/2020	4/14/2020	50
Direct	Webinar	Bacteria, General Stormwater, Nutrients, Sediment	Residential	Carolina Yards: Introduction to Carolina Yards. This webinar is the first in a series of Carolina Yards Webinars. It gives an overview of the Carolina Yards program. Its effectiveness is measured through participation and an evaluation survey.	28 participants filled out the evaluation survey. 100% of respondents indicated that they gained knowledge and 93% indicated that they would implement a practice learned during the webinar.	Clemson Extension	4/15/2020	4/15/2020	103

Direct	Webinar	Bacteria, General Stormwater, Litter, Nutrients, Pesticides, Sediment	Higher education students, Residential, Teachers	Being a Neighbor for Clean Water Webinar Series: Keeping our Water Clean, Understanding Stormwater. The webinar series exposes residents to actions and practices that could reduce their stormwater footprints. This session focuses on explaining stormwater and its effects on water quality. Effectiveness is measured through a series evaluation.	Program evaluations of the webinar series were very positive. 100% of respondents indicated that they felt the series was a good use of their time and that they gained knowledge. Similarly, 81% of respondents indicated that they would implement a practice that they learned during the series.	Clemson Extension	4/20/2020	4/20/2020	50
Direct	Webinar	General Stormwater, Nutrients, Pesticides, Sediment	Higher education students, Residential, Stormwater pond management companies, Teachers	Being a Neighbor for Clean Water Webinar Series: Shoreline Management for your Pond. The webinar series exposes residents to actions and practices that could reduce their stormwater footprints. This session focuses on stabilizing pond shorelines as part of stormwater pond maintenance. Effectiveness is measured through a series evaluation.	Program evaluations of the webinar series were very positive. 100% of respondents indicated that they felt the series was a good use of their time and that they gained knowledge. Similarly, 81% of respondents indicated that they would implement a practice that they learned during the series.	Clemson Extension	4/21/2020	4/21/2020	48
Direct	Webinar	General Stormwater, Nutrients, Sediment	Residential	Carolina Yards: Right Plant, Right Place. This webinar is the second in a series of Carolina Yards Webinars. It gives an overview of how matching plant needs to landscape conditions can save residents money, reduce fertilizer use, and improve water quality. Its effectiveness is measured through participation and an evaluation survey.	28 participants filled out the evaluation survey. 100% of respondents indicated that they gained knowledge and 93% indicated that they would implement a practice learned during the webinar.	Clemson Extension	4/22/2020	4/22/2020	103

Direct	Webinar	General Stormwater, Nutrients, Sediment	Higher education students, Residential, Stormwater pond management companies, Teachers	Being a Neighbor for Clean Water Webinar Series: Floating Wetlands. The webinar series exposes residents to actions and practices that could reduce their stormwater footprints. This session focuses on how floating wetlands could reduce pollution in ponds. Effectiveness is measured through a series evaluation.	Program evaluations of the webinar series were very positive. 100% of respondents indicated that they felt the series was a good use of their time and that they gained knowledge. Similarly, 81% of respondents indicated that they would implement a practice that they learned during the series.	Clemson Extension	4/22/2020	4/22/2020	32
Direct	Webinar	Freshwater, General Stormwater, Nutrients, Sediment	Higher education students, Residential, Teachers	Being a Neighbor for Clean Water Webinar Series: Rain Gardens. The webinar series exposes residents to actions and practices that could reduce their stormwater footprints. This session focuses on designing and installing rain gardens. Effectiveness is measured through a series evaluation.	Program evaluations of the webinar series were very positive. 100% of respondents indicated that they felt the series was a good use of their time and that they gained knowledge. Similarly, 81% of respondents indicated that they would implement a practice that they learned during the series.	Clemson Extension	4/23/2020	4/23/2020	39
Direct	Webinar	Bacteria, Bacteria, General Stormwater, Nutrients, Pesticides, Sediment	Higher education students, Residential, Teachers	Being a Neighbor for Clean Water Webinar Series: Water-Wise Landscaping. The webinar series exposes residents to actions and practices that could reduce their stormwater footprints. This session focuses on sustainable landscaping for watershed health. Effectiveness is measured through a series evaluation.	Program evaluations of the webinar series were very positive. 100% of respondents indicated that they felt the series was a good use of their time and that they gained knowledge. Similarly, 81% of respondents indicated that they would implement a practice that they learned during the series.	Clemson Extension	4/24/2020	4/24/2020	38

Direct	Conference, Presentation	General Stormwater	Technical staff / engineers / developers	SESWA Spring Meeting Presentation April 24, 2020.		Town of Bluffton	4/24/2020	4/24/2020	100
Direct	Webinar	Bacteria, General Stormwater, Nutrients, Pesticides, Sediment	Residential, Stormwater managers / stormwater staff, Stormwater pond management companies	Maintaining a Healthy Pond. Clemson Extension Agents and Specialists present on proper stormwater pond maintenance and management. Its effectiveness is measured through participation and an evaluation survey.	14 participants filled out the evaluation. 100% of respondents indicated that the program was a good use of their time, that they gained knowledge, and that they would implement a practice learned during the webinar.	Clemson Extension	4/28/2020	4/28/2020	27
Direct	Webinar	General Stormwater, Nutrients, Sediment	Residential	Carolina Yards: Managing Water in Your Own Backyard. This Webinar was the last in a series of Carolina Yards Webinars. It went over ways and reasons for homeowners to be aware of stormwater and install BMPs in their yards. Its effectiveness was measured through participation and an evaluation survey.	28 participants filled out the evaluation survey. 100% of respondents indicated that they gained knowledge and 93% indicated that they would implement a practice learned during the webinar.	Clemson Extension	4/29/2020	4/29/2020	103
Direct	Webinar	General Stormwater, Nutrients, Sediment	Contractors, Stormwater managers / stormwater staff, Stormwater pond management companies, Technical staff / engineers / developers	Value of Stormwater Ponds. Clemson Extension economist, Marzieh Motabelli, presents her and her graduate students' research on how coastal residents value the different benefits of stormwater ponds and a cost-benefit analysis of the BMPs. Its effectiveness is measured through participation and an evaluation.	Evaluation data was not available at the time of writing this report.	Clemson Extension, SC SeaGrant Consortium	5/7/2020	5/7/2020	89

Direct	Training	General Stormwater	Pond managers, Property managers, Residential	Healthy Pond Series: Shoreline Management Solutions. The Healthy Pond Series is a community-based discussion series for pond owners to learn and share stormwater pond management solutions. This virtual session will discuss shoreline erosion solutions, and participants hear about multiple solutions from different industry experts, followed by time for questions.	This session was co-hosted for LSP and ACSEC area residents, so included participants from both consortium areas. 20 participants responded to the evaluation. 19 agreed or strongly agreed the training was a good use of their time. 16 reported an increase in knowledge. 13 reported that they learned something new they will apply in their work.	Clemson Extension, DNR, ACE Basin National Estuarine Research Reserve	6/11/2020	6/11/2020	44
Direct	Webinar	Bacteria, Freshwater, General Stormwater, Nutrients	Residential	Keeping Tidal Creeks Clean with Planted Buffers Webinar. This one hour, lunch-and-learn webinar focuses on the role vegetative buffers play to help keep tidal creeks clean and healthy. Topics include buffer function, design, plant selection, and maintenance. Impact is determined by attendance and an evaluation.	25 participants filled out the evaluation. 100% of respondents indicated that they gained knowledge, that the webinar was a good use of their time, and that they would recommend the webinar to others. 79% of respondents indicated that they plan to implement practices learned during the webinar.	Clemson Extension, ASEC	6/30/2020	6/30/2020	46
Direct	Presentation	General Stormwater	Technical staff / engineers / developers	Hilton Head Homeowner Builders Association Meeting July 1, 2020.		Town of Bluffton	7/1/2020	7/1/2020	100

Direct	Training	General Stormwater	Planning Staff, Planning Boards and Commissioners, Real Estate Professionals, Contractors, Developers, Consultants	Wetland Regulations: Session . Participants gain a current overview of wetland regulations, permitting, and common circumstances that result in violations. They also learn to recognize basic identifying characteristics of wetlands and how they are used in delineation. Finally, they hear from federal and state agencies about regulation development, permitting processes, roles and responsibilities. Impact is determined by attendance and an evaluation.	153 participants responded to the evaluation. 149 agreed or strongly agreed that the training was a good use of their time. The majority reported an increase in knowledge regarding wetland regulations, and over 100 respondents reported that they learned something new they intend to apply in their work.	DNR, ACE Basin National Estuarine Research Reserve, North Inlet Winyah Bay NERR, USACE and SCDHEC	7/7/2020	7/7/2020	196
Direct	Training	General Stormwater	Planning Staff, Planning Boards and Commissioners, Real Estate Professionals, Contractors, Developers, Consultants	Wetland Regulations: Session 2. Participants gain understanding of wetland ecosystem functions and services, learn the legal basis for wetland protections, and hear case studies on local-level requirements and techniques for protecting people and property. Impact is determined by attendance and an evaluation.	129 participants responded to the evaluation. 122 reported that they agreed the training was useful. The majority reported an increase in knowledge about wetland regulations, and 95 reported that they learned something new they will apply in their work.	DNR, ACE Basin National Estuarine Research Reserve, North Inlet Winyah Bay NERR, USACE and SCDHEC	7/14/2020	7/14/2020	193
Direct	Council / Committee / Meeting	General Stormwater	Supervisory staff / administrators / stormwater managers, Educators, Outreach Organizations	SCCIN Summer Meeting. The South Carolina Coastal Information Network (SCCIN) enhances the coordination of community outreach efforts in the state and fosters inter-agency communication and cooperation. This meeting serves as a way that partner organizations meet these goals. Impact is determined by attendance.		SC SeaGrant Consortium, Carolina Clear, LSP, ACE Basin NERR	7/16/2020	7/16/2020	20

Direct	Meeting, Presentation	General Stormwater, Consortium management	Elected & appointed officials and high-level staff, Consortium partners, Stormwater managers / stormwater staff, Supervisory staff, administrators, stormwater managers, Technical staff / engineers / developers	Lowcountry Stormwater Partners Consortium Meeting. These meetings are for partner updates and to address consortium business such as workshops, current events, etc.	This meeting reviewed annual reporting procedures and how to use the new LSP reporting database.	Beaufort County, City of Beaufort, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	7/21/2020	7/21/2020	20
Direct	Webinar, Presentation	Bacteria, Freshwater, General Stormwater, Nutrients, Pesticides, Sediment	Grounds crew / maintenance / facilities staff, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies, Stormwater pond managers, Technical staff / engineers / developers	Keeping Ponds Healthy with Proactive Management Webinar. This presentation is an updated version of the Healthy Ponds, Healthy Communities workshop. This presentation explains how stormwater ponds function, how to maintain them, and common issues they experience. Effectiveness is determined through attendance and an evaluation.	11 participants filled in the evaluation. 100% of the respondents indicated that they gained knowledge, found the Webinar to be a good use of their time, and would recommend the Webinar to others. 36% indicated that they would implement a practice learned in the webinar.	Clemson Extension	8/6/2020	8/6/2020	21

Direct	Training	Freshwater, General Stormwater, Nutrients, Sediment	Elected & appointed officials and high-level staff, Stormwater managers / stormwater staff, Supervisory staff / administrators	Using the SC Coastal LID Manual: Online Workshop. This 1.5-hour online workshop provides participants with an overview of the "Low Impact Development in Coastal South Carolina: A Planning and Design Guide," and familiarizes users with the manual's compliance calculator. It also includes a demonstration for manual use in site design application. Effectiveness is measured through the number of participants and an evaluation.	100 participants filled in the evaluation. 99% of respondents thought the webinar was a good use of their time, 100% reported knowledge gain, and 78% indicated that they would implement a practice learned during the webinar.	Clemson Extension, DNR, ACSEC, Center for Watershed Protection, SC DNR ACE Basin NERR Coastal Training Program, the North Inlet-Winyah Bay NERR Coastal Training Program, and the SC Sea Grant Consortium	8/19/2020	8/19/2020	155
Direct	Training	General Stormwater	Pond managers, Property managers, Residential	Beaufort Area Healthy Pond Series: Roles and Responsibilities Webinar. The Healthy Pond Series is a community-based discussion series for pond owners to learn and share stormwater pond management solutions. This virtual session discussed stormwater pond roles and responsibilities, introduces local and county stormwater officials and has time for questions. Impact is determined by attendance and an evaluation.	11 out of 25 participants filled out an evaluation. 100% agreed or strongly agreed that the training was a good use of their time. All respondents reported increasing their knowledge at least a little, with the majority reporting an increase of "a lot" or "a great deal". 73% of respondents reported that they learned something new that they will apply to their pond.	Clemson Extension, DNR, ACE Basin National Estuarine Research Reserve	8/20/2020	10/20/2020	25
Direct	Webinar, Presentation	Bacteria, Freshwater, General Stormwater,	Elected & appointed officials and high-level staff, Grounds crew /	Managing Landscapes for Pond Health. This presentation is an updated version of the Healthy Ponds, Healthy	This presentation was given the Moss Creek POA. Out of the 13 evaluations turned in, 100% of the	Clemson Extension	9/17/2020	9/17/2020	27

		Nutrients, Sediment	maintenance / facilities staff, Residential, Stormwater pond managers	Communities presentation. It covers stormwater pond design, maintenance procedures, and the importance of buffers. Effectiveness is determined through attendance and an evaluation.	respondents indicated that the webinar was useful and that they gained knowledge. 61% indicated that they would implement a practice demonstrated during the presentation.				
Direct	Presentation	Freshwater, General Stormwater, Litter, Pesticides	K-12 students / youth	Watershed Presentation. This presentation covers basic watershed concepts and examples for elementary school students. Impact is determined by attendance.	The Town of Bluffton gave this presentation to 4th and 5th grade Pritchardville Elementary School students over Zoom.	Town of Bluffton	9/22/2020	9/22/2020	100
Direct	Webinar	General Stormwater, Nutrients, Sediment	Master Gardeners	Stream Bank Repair Water Wednesdays Master Gardener Webinar. This presentation is the first in a series of educational webinars for Master Gardeners. It covers how watersheds function and identifies steps needed to stabilize and revegetate stream banks. Effectiveness is measured through participation and an evaluation.	Evaluation data was not available at the time of writing this report.	Clemson Extension	9/23/2020	9/23/2020	54
Direct	Webinar	Bacteria, General Stormwater, Pesticides, Petroleum products, Sediment	Residential	Webinar Preview for Be Well Informed Program. The webinar provides an overview of well maintenance best practices, well water quality considerations, and a question and answer session. Its effectiveness is measured through participation and an evaluation.	Five participants filled out the evaluation. 100% of respondents indicated that the webinar was a good use of their time and that they gained knowledge.	Clemson Extension	9/24/2020	9/24/2020	14

Direct	Webinar	General Stormwater, Nutrients, Sediment	Teachers	The Future of Stream Bank Repair in South Carolina Presentation. This presentation provides insight on how watersheds function and identifies steps needed to stabilize and revegetate stream banks. Effectiveness is measured by participation.	This presentation was given to the EEASC.	Clemson Extension	9/25/2020	9/25/2020	13
Indirect	Billboard	Bacteria	Pet owners, Residential	Clemson Extension's Carolina Clear Pet Waste Mass Media Campaign Billboard. "Be Prepared. Always Bring a Bag" billboards were displayed in Beaufort County. Impact is determined by weekly viewership.		Clemson Extension	10/1/2019	9/30/2020	346336
Indirect	Webpage / Social media	Bacteria, Freshwater, General Stormwater, Nutrients, Pesticides, Sediment	Stormwater managers / stormwater staff, Stormwater pond management companies, Stormwater pond managers	The SC Stormwater Pond Website. This website provides information, resources, and troubleshooting assistance. Impact is determined by the total number of site views.		Clemson Extension	10/1/2019	9/30/2020	68609
Indirect	Webpage / Social media	General Stormwater, Nutrients, Pesticides, Sediment	Residential	The Carolina Yards Program webpage. This webpage contains information on Clemson Extension's Carolina Yards program, resources, and information on sustainable, watershed-based landscaping. Impact is determined by the total number of site views.		Clemson Extension	10/1/2019	9/30/2020	31585
Indirect	Webpage / Social media	Bacteria, General Stormwater, Nutrients, Sediment	Residential	Carolina Yards Website. The website's goal is to provide information on how to use simple and effective principles and actions to		Clemson Extension	10/1/2019	9/30/2020	31585

				help guide residents towards a low maintenance and positive environmental impact yard. Impact is determined by the total number of visitors.					
Indirect	Television / Video	General Stormwater, Nutrients, Sediment	Agriculture, Commercial landscapers / landscape designers / nurseries, Grounds crew / maintenance / facilities staff, Plant Nurseries, Residential	Making It Grow! SCETV and Clemson Extension's Making It Grow TV! show shares home and garden information to South Carolina residents as well as a water quality tip during the broadcast. Impact is determined by average views.	The number reported was the average number of persons per household applied to the projected number of households that viewed Making It Grow! This number does not take into account those watching on the SC Channel or any online viewings. The LSP coordinator appeared on Making It Grow! on 10/29/19 and 11/5/19 to promote LSP events.	Clemson Extension	10/1/2019	9/30/2020	25245
Indirect	Webpage / Social media	Bacteria, FOG, General Stormwater, Litter, Nutrients, Pesticides, Petroleum products, Sediment, Toxic contaminants, heavy metals	General Public	The Clemson Extension Carolina Clear Program's webpage. This website provides a wide variety of stormwater-based information. Impact is determined by the total number of site views.	Updates, upgrades, and additions to this website began in March 2020 and are currently ongoing.	Clemson Extension	10/1/2019	9/30/2020	14118
Indirect	Webpage / Social media	Bacteria, Freshwater, General Stormwater, Litter, Nutrients, Sediment	General Public	Carolina Clear YouTube Channel. This channel provides a clearing house of stormwater information. Impact is determined by the number of video views.	During this reporting period, five new videos were uploaded, and the channel gained 30 subscribers.	Clemson Extension	10/1/2019	9/30/2020	8528
Indirect	Webpage / Social media	Freshwater, General	Commercial landscapers /	The Carolina Rain Garden Initiative web page. This		Clemson Extension	10/1/2019	9/30/2020	5781

		Stormwater, Nutrients, Pesticides, Sediment	landscape designers / nurseries, Contractors, Residential	webpage contains resources and information for both professional and residential audiences on rain gardens. Impact is determined by the total number of site views.					
Indirect	Webpage / Social media	Bacteria, General Stormwater, Nutrients, Sediment	General Public	Clemson Extension's Water Resources Team webpage. This website is a clearing house of information and links to pertinent stormwater and water-quality related information across the Clemson Extension website. Impact is determined by the total number of site views.	Updates, upgrades, and additions to this website began in March 2020 and are currently ongoing.	Clemson Extension	10/1/2019	9/30/2020	3983
Indirect	Webpage / Social media	Bacteria, General Stormwater, Nutrients, Pesticides, Sediment	Commercial landscapers / landscape designers/ nurseries, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies, Technical staff / engineers / developers	Master Pond Manager Website. This website promotes the Master Pond Manager course, houses certification lists, and provides information and resources to people about the program. Impact is determined by the total number of site views.		Clemson Extension	10/1/2019	9/30/2020	3285
Indirect	Webpage / Social media	General Stormwater	Elected & appointed officials and high-level staff, Residential, Stormwater managers / stormwater staff, Pond mgnt companies, Supervisory	SCCIN Event Calendar and Resource Portal Website. This website maximizes the efficient delivery of quality training and educational material to coastal decision-makers, community planners, local officials, and the public. It provides a directory of outreach events, as well as links to		SC SeaGrant Consortium	10/1/2019	9/30/2020	2125

			staff / administrators, Technical staff / engineers / developers	collaborating partners and to relevant resources for more detailed information. Impact is determined by total site visits.					
Indirect	Educational signage	Litter	General Public, Residential	May River Watershed Identification Signs. The signs remind visitors and residents alike to "Love Our River, Never Litter". Impact is determined by a small subset of all roadway traffic (from SCDOT data) to determine impact.	The Town of Bluffton installed 10 signs. Four signs are placed at major entryways into the May River Watershed. The remaining six signs are placed in locations within the Bluffton Historic District to identify coves draining to the May River.	Town of Bluffton	10/1/2019	9/30/2020	1500
Indirect	Webpage / Social media	Bacteria, FOG, Freshwater, General Stormwater, Litter, Nutrients, Pesticides, Sediment	General Public	The Lowcountry Stormwater Partners website. This website contains information and resources for all LSP activities, POCs, and publications. Impact is determined by the total number of site views.		Clemson Extension	10/1/2019	9/30/2020	372
Indirect	Webpage / Social media, Publication / Article	General Stormwater	Elected & appointed officials and high-level staff, Stormwater managers/storm water staff, Stormwater pond management companies, Supervisory staff/ administrators, Technical staff / engineers /developers, Field staff / maintenance /	Stormwater State of the Knowledge Report, this 8-chapter report contains up-to-date scientific findings on stormwater ponds, their effectiveness as a control measure, pollutant levels, public perception, and best management practices. Impact is determined by the number of people accessing the digital version.		SC SeaGrant Consortium, Clemson	10/1/2019	9/30/2020	334

			facilities, Landscapers / landscape designers / nurseries						
Indirect	Television / Video	Bacteria, General Stormwater, Litter, Nutrients	Residential	Televised Stormwater Public Service Announcements. These PSAs highlight bacteria from pet waste, watersheds, lawn care/fertilizer use, and litter. Impact is determined by video views.	The six PSAs developed by Town of Bluffton, the Beaufort County Channel, the Bluffton Police Department, Carolina Clear, and Keep Beaufort County Beautiful were also available for viewing by the public on the Watershed Management Division webpage. These PSAs also aired on the local access Beaufort County Channel and the County Channels YouTube page.	Beaufort County, Beaufort County Channel, Town of Bluffton	10/1/2019	9/30/2020	300
Indirect	Webpage / Social media	General Stormwater	Elected & appointed officials and high-level staff, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies, Supervisory staff / administrators, Technical staff / engineers / developers, Boat owners /	Stormwater Collaborative Webpage. The S.C. Stormwater Pond Research and Management Collaborative investigates and addresses the challenges associated with stormwater ponds in our coastal areas. This website provides information on their past and current efforts. Impact is determined by total number of website visits.		SC SeaGrant Consortium, Clemson	10/1/2019	9/30/2020	219

			operators / marinas						
Indirect	Publication / Article	Bacteria, General Stormwater	Residential, All Citizens of Town of Bluffton	"Old Town Bluffton Sewer Extension Project Underway" Article. This article gives an overview on how the Town is combating bacterial pollution from septic systems in the May River Watershed. Impact is determined by Bluffton Today's reported readership.	The Bluffton Today publication ran this article on 8 / 14 / 20.	Town of Bluffton	10/1/2019	9/30/2020	200
Indirect	Educational signage	Freshwater, General Stormwater, Litter	Residential, Stormwater managers / stormwater staff, Supervisory staff / administrators, Technical staff / engineers / developers	Pervious Pavement and Bioswales Interpretive Sign installation. These signs highlight the importance and function of these BMPs. Impact is determined by attendees at the dedication ceremony	2 signs were installed at the Bluffton Town Hall.	Town of Bluffton	10/1/2019	9/30/2020	150
Indirect	Webpage / Social media, Publication / Article	General Stormwater	Stormwater managers / stormwater staff, Stormwater pond management companies, Supervisory staff / administrators, Technical staff / engineers / developers,	Low Impact Development in Coastal South Carolina: A Planning and Design Guide. This manual increases coastal communities' knowledge and implementation of low impact development practices. Impact is determined by the total number of people accessing the digital version.		SC SeaGrant Consortium, Clemson Extension, LSP, ACE Basin & NIWB NERR	10/1/2019	9/30/2020	96

			Field staff / maintenance / facilities, Landscapers / landscape designers / nurseries						
Indirect	Brochure / outreach material, Presentation	Bacteria, Litter, Pesticides, Petroleum products, Toxic contaminants / heavy metals	Grounds crew / maintenance / facilities staff	Illicit Discharge Detection & Elimination and Pollution Prevention and Good Housekeeping for Municipal Operations Handouts. These documents and accompanying presentation teach new Town of Bluffton employees about IDDE and their responsibilities to preventing water pollution. Impact is determined through the number employees receiving handouts.	45 employees received the handouts.	Town of Bluffton	10/1/2019	9/7/2020	45
Indirect	Webpage / Social media	General Stormwater, Litter	Residential, General Public	The Town of Bluffton Watershed Management Division Website. This page is continually updated with information for citizens with the goal of educating followers about the Towns Stormwater Management Program. Impact is determined by the total number of site visits.		Town of Bluffton	10/1/2019	9/30/2020	0
Indirect	Brochure / Outreach material	General Stormwater, Bacteria, Nutrients, Sediment, Freshwater, FOG, Pesticides	General Public	Brochures / Rack Cards. These resources cover information on LID practices and stormwater-friendly behavior. Topics include rain gardens, native plants, rainwater harvesting, keeping storm drains clear,	A rack card on pond management was designed this year.	Clemson Extension	10/1/2019	9/30/2020	

				composting, and reducing litter.					
Indirect	Brochure / Outreach material	General Stormwater, Nutrients	General Public	Soil Sample Bags at Events. Soil sample encourage residents to perform soil tests prior to fertilizing their landscapes.	Soil sample bags are distributed at the Clemson Extension Office, the three farmer's markets in the county, and at community partner offices.	Clemson Extension	10/1/2019	9/30/2020	
Indirect	Educational signage	General Stormwater, Bacteria, Nutrients, Sediment, Freshwater, FOG, Pesticides	General Public	LID Signs. These signs highlight the importance and function of these LID practices in demonstration sites.	The signs are designed and will be printed on demand for donation and partner construction projects. Several have already been erected.	Clemson Extension	10/1/2019	9/30/2020	
Indirect	Educational signage	General Stormwater, Bacteria, Nutrients, Sediment, Freshwaters	Residential	Rain Garden Step-Stake signs. This sign is based off the rain garden LID sign but is printed in a reusable and easily removeable way. It is intended to be put on new construction projects to educate homeowners on the importance of their rain gardens.	The signs are designed and will be printed on demand for donation and partner construction projects.	Clemson Extension	10/1/2019	9/30/2020	
Indirect	Brochure / Outreach material	General Stormwater, Bacteria, Nutrients, Sediment, Freshwater, FOG, Pesticides	General Public	Clemson Extension HGIC LID / BMP Factsheets. These publications teach citizens how to have a positive impact on local water quality through LID practices, BMPs, and other behaviors.	There are 42 factsheets available. Six of them were written during COVID-19-19 procedures.	Clemson Extension	10/1/2019	9/30/2020	

Indirect	Brochure / Outreach material	General Stormwater, Bacteria, Nutrients, Sediment, Freshwaters	General Public	2019-2023 Lowcountry Stormwater Partner Stormwater Outreach Strategic Plan. This plan prioritizes three pollutants of concern (bacteria, nutrients, and freshwater) for the region, provides education and outreach strategies related to these pollutants, and develops timelines and evaluation mechanisms for these strategies.	This document was published in November 2019 to replace the 2016-2018 Lowcountry Stormwater Partner Stormwater Outreach Strategic Plan. This reporting year concluded Year 2 of the strategic plan.	Clemson Extension	11/1/2019	9/30/2020	
Indirect	Newsletter	General Stormwater, Nutrients	Residential	LSP Changing Tides Newsletter November 2019. This newsletter is meant to inform the public about recent, current, and upcoming public education and participation opportunities. Its effectiveness is measured through the size of the listserv and the percentage of recipients who open it.	37% of recipients opened the newsletter. It included an article on soil testing.	Clemson Extension	11/27/2019	11/27/2019	98
Indirect	Newsletter	Bacteria, Freshwater, General Stormwater, Nutrients, Pesticides	Residential	LSP Changing Tides Newsletter December 2019. This newsletter is meant to inform the public about recent, current, and upcoming public education and participation opportunities. Its effectiveness is measured through the size of the listserv and the percentage of recipients who open it.	41% of recipients opened the newsletter. It included an article on cyanobacteria.	Clemson Extension	12/20/2019	12/20/2019	94
Indirect	Newsletter	Freshwater, General Stormwater	Residential	LSP Changing Tides Newsletter January 2020. This newsletter is meant to inform the public about recent, current, and upcoming public education and participation	46% of recipients opened the newsletter. It included an article on irrigation and the effects of freshwater on the saltmarsh.	Clemson Extension	1/24/2020	1/24/2020	94

				opportunities. Its effectiveness is measured through the size of the listserv and the percentage of recipients who open it.					
Indirect	Council / Committee / Meeting	General Stormwater	Media Personnel	Island Packet Reporter Intro to Town Watershed Management Initiatives February 4 2020		Town of Bluffton	2/4/2020	2/4/2020	1
Indirect	Brochure / Outreach material	General Stormwater, Bacteria	Residential	Bilingual Septic Brochures. These brochures, in both English and Spanish, will explain the importance of septic system maintenance and refer residents to the information and resources on the septic system website. Impact will be determined by their distribution.	These resources are researched but are waiting for the septic website to be launched so that all educational material can share the same branding, resources, and link back to one another.	Clemson Extension	3/1/2020	9/30/2020	
Indirect	Website / Social media	General Stormwater, Bacteria	Residential	Septic Online Resources. These resources cover septic system maintenance, failures, types, locations, regulations, and other useful information for septic system owners. Resources include a website, factsheets, brochures, and more. Impact will be determined by total website visits.	The website content was researched, written, and reviewed by SC DHEC during this reporting period. It is in the process of being published and will be live by the end of November 2020. Additional resources are researched but are waiting for the septic website to be launched so that all educational material can share the same branding, resources, and link back to one another.	Clemson Extension	3/1/2020	9/30/2020	
Indirect	Website / Social media	General Stormwater, Bacteria	Residential	Septic E-Reminder. This program will send an email to subscribers reminding them to schedule a septic system inspection annually.	The form will be live when the septic system website goes live in November 2020.	Clemson Extension	3/1/2020	9/30/2020	

				Impact will be determined by the number of subscribers.					
Indirect	Presentation	General Stormwater	Elected & appointed officials and high-level staff, Technical staff / engineers / developers	MASC Interview Stormwater Management Article March 3, 2020.		Town of Bluffton	3/3/2020	3/3/2020	1
Indirect	Newsletter	Bacteria, General Stormwater	Pet owners, Residential	LSP Changing Tides Newsletter February 2020. This newsletter is meant to inform the public about recent, current, and upcoming public education and participation opportunities. Its effectiveness is measured through the size of the listserv and the percentage of recipients who open it.	45% of recipients opened the newsletter. It included an article on pet waste.	Clemson Extension	3/4/2020	3/4/2020	94
Indirect	Newsletter	General Stormwater	Residential	LSP Changing Tides Newsletter March 2020. This newsletter is meant to inform the public about recent, current, and upcoming public education and participation opportunities. Its effectiveness is measured through the size of the listserv and the percentage of recipients who open it.	35% of recipients opened the newsletter. It included an article on how to receive services during COVID-19-19 procedures.	Clemson Extension	3/20/2020	3/20/2020	94

Indirect	Publication / Article	Bacteria, General Stormwater, Nutrients, Sediment	Residential	Local Life Magazine: Faces of Water Interview Article. This article covers the interview of LSP coordinator. She describes her education and outreach efforts in Beaufort County. Effectiveness is determined by the magazine's distribution numbers.	The magazine was distributed digitally and in print.	Clemson Extension, Local Life Magazine	4/1/2020	4/1/2020	157661
Indirect	Newsletter	General Stormwater, Nutrients	Residential	LSP Changing Tides Newsletter April 2020. This newsletter is meant to inform the public about recent, current, and upcoming public education and participation opportunities. Its effectiveness is measured through the size of the listserv and the percentage of recipients who open it.	40% of recipients opened the newsletter. It included an article on keeping storm drains clear of yard debris.	Clemson Extension	4/16/2020	4/16/2020	100
Indirect	Webpage / Social media	Bacteria, FOG, General Stormwater, Litter, Nutrients, Pesticides, Sediment	General Public	Spring Cleaning Your Yard Video Series. This Facebook video series focuses on watershed-friendly landscaping practices. Impact is determined through post reach.	During COVID-19-19, the Clemson Water Resources Team worked on three unique video series to better engage target audiences on the Carolina Clear Facebook page. Their impact numbers are reported under the Carolina Clear Facebook Page. Spring Cleaning Your Yard reached 3050 people over six videos.	Clemson Extension	4/22/2020	5/27/2020	

Indirect	Webpage / Social media	Bacteria, FOG, General Stormwater, Litter, Nutrients, Pesticides, Petroleum products, Pharmaceuticals / personal care products, Sediment, Toxic contaminants / heavy metals	General Public	Macroinvertebrate Mondays Video Series. This Facebook video series focuses on educating people about the different macroinvertebrate indicator species in South Carolina and how they are impacted by stormwater. Impact is determined through post reach.	During COVID-19-19, the Clemson Water Resources Team worked on three unique video series to better engage target audiences on the Carolina Clear Facebook page. Their impact numbers are reported under the Carolina Clear Facebook Page. Macroinvertebrate Mondays reached 3814 people over 13 videos.	Clemson Extension	4/27/2020	8/31/2020	
Indirect	Publication / Article	General Stormwater, Litter	Residential, All Citizens of Town of Bluffton	Mayor Sulka Mayors Memos A yearlong cleanup ran in the Bluffton Today on May 10 2020		Town of Bluffton	5/10/2020	5/10/2020	500
Indirect	Newsletter	Freshwater, General Stormwater	Residential	LSP Changing Tides Newsletter May2020. This newsletter is meant to inform the public about recent, current, and upcoming public education and participation opportunities. Its effectiveness is measured through the size of the listserv and the percentage of recipients who open it.	44% of recipients opened the newsletter. It included an article on rainwater harvesting.	Clemson Extension	5/14/2020	5/14/2020	111
Indirect	Newsletter	Bacteria, General Stormwater, Nutrients, Sediment	Grounds crew / maintenance / facilities staff, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies	Big News for Small Ponds Mailing List May 2020. This mailing list is intended for both pond managers and owners in Beaufort, Jasper, Colleton, and Hampton Counties. By signing up for the mailing list, participants receive emails or direct mailers about local, pond-related resources, trainings, events, and certification	51% of recipients opened the publication.	Clemson Extension	5/26/2020	5/26/2020	37

				opportunities. Participants have the option to receive both virtual and direct mailings about opportunities and this satisfies the direct mailing requirement of the strategic plan. Its effectiveness is determined by the number of subscribers and the percent of recipients who open the publication.					
Indirect	Publication / Article	Bacteria, Freshwater, General Stormwater, Litter, Nutrients	K-12 students / youth	4-H20@Home. This program is an adaptation of the 4-H20 summer camp curriculum which provides hands-on, watershed science experiences for youth. This 6-lesson activity guide covers the same concepts as the camp, but in a way that children can learn at home. Its effectiveness is measured through downloads and school distribution efforts.	Due to the cancellation of this summer's 4-H20 camp, 4-H and the LSP adapted the 4-H20 curriculum into a series of six, at-home lesson plans. The lesson plans were packaged into an activity book called "4-H20@Home" and distributed to 105 3rd grade students at Okatie Elementary School. This activity book was also available as a download for youth throughout the summer. There were 15 downloads.	Clemson Extension, 4-H	6/1/2020	9/30/2020	125
Indirect	Newsletter	Bacteria, General Stormwater, Nutrients, Sediment	Grounds crew / maintenance / facilities staff, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies	Big News for Small Ponds Mailing List June 2020. This mailing list is intended for both pond managers and owners in Beaufort, Jasper, Colleton, and Hampton Counties. By signing up for the mailing list, participants receive emails or direct mailers about local, pond-related resources, trainings, events, and certification	50% of recipients opened the publication.	Clemson Extension	6/10/2020	6/10/2020	40

				opportunities. Participants have the option to receive both virtual and direct mailings about opportunities and this satisfies the direct mailing requirement of the strategic plan. Its effectiveness is determined by the number of subscribers and the percent of recipients who open the publication.					
Indirect	Newsletter	Bacteria, General Stormwater	Residential	LSP Changing Tides Newsletter June 2020. This newsletter is meant to inform the public about recent, current, and upcoming public education and participation opportunities. Its effectiveness is measured through the size of the listserv and the percentage of recipients who open it.	40% of recipients opened the newsletter. It included an article on septic system maintenance.	Clemson Extension	6/12/2020	6/12/2020	122
Indirect	Brochure / Outreach material	General Stormwater, Bacteria	Pet owners, Residential	Pet Waste PSAs. Information regarding how many dogs live in Beaufort County, the amount of fecal waste they generate, and that waste's impacts on water quality will be spread through multiple media sources (infographics, pictures, videos, etc.).	An infographic and social media campaign were developed to spread this information.	Clemson Extension	7/1/2020	9/30/2020	
Indirect	Brochure / Outreach material	General Stormwater, Bacteria	Pet owners, Residential	Leash Dog Bag Holders. These bag holders are given away to promote picking up pet waste.	The holders were ordered and are waiting upon partner offices to open for distribution.	Clemson Extension	7/1/2020	9/30/2020	
Indirect	Educational signage	General Stormwater, Bacteria	Pet owners, Residential	Pet Waste Signs. These signs will encourage pet owners to pick up after their dogs and take the pet waste pledge.	The signs are designed and will be printed as part of the upcoming small grants program as well as on demand for donation and	Clemson Extension	7/1/2020	9/30/2020	

					partner construction projects.				
Indirect	Webpage / Social media	Freshwater, General Stormwater, Litter	All Citizens of May River Watershed	The Town of Bluffton's May River Story Map. This map highlights the history of the water quality efforts the Town has done to protect the May River. Impact is determined by ???	A link to this story map is located here https://storymaps.arcgis.com/stories/641539342e8f42e4a670e50943ae38a1	Town of Bluffton	7/10/2020	9/30/2020	500
Indirect	Newsletter	Bacteria, General Stormwater, Nutrients, Pesticides, Sediment	Grounds crew / maintenance / facilities staff, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies	Big News for Small Ponds Mailing List July 2020. This mailing list is intended for both pond managers and owners in Beaufort, Jasper, Colleton, and Hampton Counties. By signing up for the mailing list, participants receive emails or direct mailers about local, pond-related resources, trainings, events, and certification opportunities. Participants have the option to receive both virtual and direct mailings about opportunities and this satisfies the direct mailing requirement of the strategic plan. Its effectiveness is determined by the number of subscribers and the percent of recipients who open the publication.	54% of recipients opened the publication.	Clemson Extension	7/13/2020	7/13/2020	43
Indirect	Publication / Article	Bacteria, General Stormwater, Nutrients, Sediment	Residential	Protecting Water Quality with Vegetated Buffers HGIC Blog Post. This post covers the benefits of vegetated buffers around stormwater ponds. Its effectiveness is measured through total website visits.		Clemson Extension	7/15/2020	7/15/2020	416

Indirect	Newsletter	General Stormwater, Nutrients, Sediment	Residential	LSP Changing Tides Newsletter July 2020. This newsletter is meant to inform the public about recent, current, and upcoming public education and participation opportunities. Its effectiveness is measured through the size of the listserv and the percentage of recipients who open it.	46% of recipients opened the newsletter. It included an article on stormwater pond maintenance.	Clemson Extension	7/15/2020	7/15/2020	127
Indirect	Webpage / Social media	Pet Waste, Nutrients, General Stormwater	General public, Residential, Youth, Pet Owners	DOGust Social Media Campaign. This campaign focuses on educating people of the effect of pet waste on stormwater. It also promoted the new pet waste pledge. Impact is determined by post reach.	During this period, the LSP launched two, multimedia social media campaigns. Their impact numbers were recorded under the Lowcountry Stormwater Partners Facebook Page entry. The DOGust campaign reached 3326 people with 57 posts. The second campaign focused on soil testing. It reached 676 people with 27 posts.	Clemson Extension	8/1/2020		
Indirect	Webpage / Social media	Bacteria, FOG, General Stormwater, Litter, Nutrients, Pesticides, Sediment	General Public	Water Myth Wednesdays Video Series. This Facebook video series focuses on debunking common water quality myths. Impact is determined through post reach.	During COVID-19-19, the Clemson Water Resources Team worked on three unique video series to better engage target audiences on the Carolina Clear Facebook page. Their impact numbers are reported under the Carolina Clear Facebook Page. Water Myth Wednesdays reached 4578 people over 4 videos	Clemson Extension	8/5/2020	8/31/2020	

Indirect	Newsletter	Bacteria, General Stormwater	Pet owners, Residential	LSP Changing Tides Newsletter August 2020. This newsletter is meant to inform the public about recent, current, and upcoming public education and participation opportunities. Its effectiveness is measured through the size of the listserv and the percentage of recipients who open it.	48% of recipients opened the newsletter. It included an article on pet waste and the new pet waste pledge.	Clemson Extension	8/14/2020	8/14/2020	129
Indirect	Publication / Article	Bacteria	Residential	Be Septic Safe HGIC Blog Post. This post covers basic septic system maintenance. Its effectiveness is measured through total website visits.		Clemson Extension	8/20/2020	8/20/2020	655
Indirect	Publication / Article	General Stormwater, Toxic contaminants / heavy metals	Residential	Waterwise: Cleaning Painting Equipment After Household Use HGIC Factsheet. This factsheet covers best practices on disposing of paint waste and cleaning paint brushes. Its effectiveness is measured by website visits.	The LSP coordinator co-wrote this publication	Clemson Extension	8/26/2020	8/26/2020	274
Indirect	Newsletter	Bacteria, FOG, General Stormwater	Residential	LSP Changing Tides Newsletter September 2020. This newsletter is meant to inform the public about recent, current, and upcoming public education and participation opportunities. Its effectiveness is measured through the size of the listserv and the percentage of recipients who open it.	39% of recipients opened the newsletter. It included an article on FOG.	Clemson Extension	9/14/2020	9/14/2020	131

Indirect	Newsletter	Bacteria, General Stormwater, Nutrients, Pesticides, Sediment	Grounds crew / maintenance / facilities staff, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies	Big News for Small Ponds Mailing List September 2020. This mailing list is intended for both pond managers and owners in Beaufort, Jasper, Colleton, and Hampton Counties. By signing up for the mailing list, participants receive emails or direct mailers about local, pond-related resources, trainings, events, and certification opportunities. Participants have the option to receive both virtual and direct mailings about opportunities and this satisfies the direct mailing requirement of the strategic plan. Its effectiveness is determined by the number of subscribers and the percent of recipients who open the publication.	47% of recipients opened the publication.	Clemson Extension	9/14/2020	9/14/2020	43
Indirect	Brochure / Outreach material	General Stormwater, Bacteria, Nutrients, Sediment, Freshwater	Residential	LSP Welcome to the Neighborhood Buffer Packet. This packet teaches new residents the importance of saltmarsh buffers. It includes a welcome letter, factsheets, plant lists, an example buffer design, cost estimations, and a contact sheet for local buffer ordinances. Impact is determined by the number of people who receive it.	The first packet was released to partners for distribution in September 2020. Impact numbers will be available in the next report.	Clemson Extension	9/20/2020	9/30/2020	
	Presentation	Freshwater, General Stormwater, Climate Change and	Stormwater managers/storm water staff, Stormwater pond managers, Supervisory	City of Charleston Stormwater Standards Task Force Meeting December 5, 2019.		Coastal MS4s	12/5/2019	12/5/2019	30

		Sea Level Rise	staff/admins, Technical staff/ engineers/ developers						
Direct	Council / Committee / Meeting	General Stormwater	Residents, Citizens of the Town of Bluffton	Bluffton Town Council Meetings. The Bluffton Town Council includes the mayor and four council members who serve overlapping four-year terms. Town Council encourages public input into the Towns Stormwater Program through public comment. Public comment cards are available on the Town website. Impact is measured in views.	Since March of 2020 Town Council meetings have been held virtually and live streamed through the Town Facebook page. These meetings are also available to residents on-demand. Meetings take place the second Tuesday of each month.	Town of Bluffton	10/1/2019	9/30/2020	41446
Direct	Council / Committee / Meeting	Freshwater, General Stormwater, Pesticides, Pharmaceuticals / personal care products, Toxic contaminants / heavy metals	Contractors, Elected & appointed officials and high-level staff, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies, Supervisory staff / administrators, Technical staff / engineers / developers	May River Watershed Action Plan Implementation Committee Meetings. The seven-member committee is tasked with assisting and advising Town Council by offering guidance and recommendations to implement the opportunities and strategies outlined in the May River Watershed Action Plan. Residents can either serve on the committee or provide input into the Town's Stormwater Program through public comment opportunities at each meeting. Impact is determined through attendance.	Dr. Montie of USCB gave his "Historical Analysis of Water Quality in May River" presentation. Town staff presented on the Town monitoring program, current monitoring data, and the town Watershed Management Division work plan.	Town of Bluffton	10/24/2019	10/24/2019	3

Direct	Council / Committee / Meeting	Freshwater, General Stormwater, Pesticides, Pharmaceutic als / personal care products, Toxic contaminants / heavy metals	Contractors, Elected & appointed officials and high-level staff, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies, Supervisory staff / administrators, Technical staff / engineers / developers	May River Watershed Action Plan Implementation Committee Meetings. The seven-member committee is tasked with assisting and advising Town Council by offering guidance and recommendations to implement the opportunities and strategies outlined in the May River Watershed Action Plan. Residents can either serve on the committee or provide input into the Town's Stormwater Program through public comment opportunities at each meeting. Impact is determined through attendance.	Town staff presented on the Town monitoring program, current monitoring data, and the town Watershed Management Division work plan. Future WAPAC meeting dates were also discussed.	Town of Bluffton	12/9/2019	12/9/2019	4
Direct	Council / Committee / Meeting	Freshwater, General Stormwater, Pesticides, Pharmaceutic als / personal care products, Toxic contaminants / heavy metals	Contractors, Elected & appointed officials and high-level staff, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies, Supervisory staff / administrators, Technical staff / engineers / developers	May River Watershed Action Plan Implementation Committee Meetings. The seven-member committee is tasked with assisting and advising Town Council by offering guidance and recommendations to implement the opportunities and strategies outlined in the May River Watershed Action Plan. Residents can either serve on the committee or provide input into the Town's Stormwater Program through public comment opportunities at each meeting. Impact is determined through attendance.	Town staff presented on the Town monitoring program, current monitoring data, and the town Watershed Management Division work plan. Dr. Ritchie of USCB also gave a presentation on Biomeme qPCR application and a discussion of the Town SWU Fee Rate was held.	Town of Bluffton	1/23/2019	1/23/2019	2
Direct	Council / Committee / Meeting	Freshwater, General Stormwater, Pesticides, Pharmaceutic	Contractors, Elected & appointed officials and high-level staff,	May River Watershed Action Plan Implementation Committee Meetings. The seven-member committee is tasked with assisting and	Town staff presented on the Town monitoring program, current monitoring data, and the town	Town of Bluffton	2/27/2019	2/27/2019	2

		als / personal care products, Toxic contaminants / heavy metals	Residential, Stormwater managers / stormwater staff, Stormwater pond management companies, Supervisory staff / administrators, Technical staff / engineers / developers	advising Town Council by offering guidance and recommendations to implement the opportunities and strategies outlined in the May River Watershed Action Plan. Residents can either serve on the committee or provide input into the Town's Stormwater Program through public comment opportunities at each meeting. Impact is determined through attendance.	Watershed Management Division work plan. A discussion of the Town SWU Fee Rate was also held.				
Direct	Council / Committee / Meeting	Freshwater, General Stormwater, Pesticides, Pharmaceuticals / personal care products, Toxic contaminants / heavy metals	Contractors, Elected & appointed officials and high-level staff, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies, Supervisory staff / administrators, Technical staff / engineers / developers	May River Watershed Action Plan Implementation Committee Meetings. The seven-member committee is tasked with assisting and advising Town Council by offering guidance and recommendations to implement the opportunities and strategies outlined in the May River Watershed Action Plan. Residents can either serve on the committee or provide input into the Town's Stormwater Program through public comment opportunities at each meeting. Impact is determined through Facebook views.	Due to COVID-19 19, the Town of Bluffton began hosting WAPAC meetings via Zoom. Meetings were livestreamed on the Town of Bluffton's Facebook page. Residents have on-demand access to WAPAC meetings through the Town's Facebook page as well. Town staff presented on the Town monitoring program, current monitoring data, and the town Watershed Management Division work plan. WAPAC also welcomed new members and the May River Watershed Story Map was revealed.	Town of Bluffton	7/23/2020	7/23/2020	1300
Direct	Council / Committee / Meeting	Freshwater, General Stormwater, Pesticides, Pharmaceuticals	Contractors, Elected & appointed officials and high-level staff,	May River Watershed Action Plan Implementation Committee Meetings. The seven-member committee is tasked with assisting and	Due to COVID-19 19, the Town of Bluffton began hosting WAPAC meetings via Zoom. Town staff	Town of Bluffton	8/27/2020	8/27/2020	849

		als / personal care products, Toxic contaminants / heavy metals	Residential, Stormwater managers / stormwater staff, Stormwater pond management companies, Supervisory staff / administrators, Technical staff / engineers / developers	advising Town Council by offering guidance and recommendations to implement the opportunities and strategies outlined in the May River Watershed Action Plan. Residents can either serve on the committee or provide input into the Town's Stormwater Program through public comment opportunities at each meeting. Impact is determined through Facebook views.	presented on the Town monitoring program, current monitoring data, and the town Watershed Management Division work plan. The SoLoCo & Design Manual was also adopted and expanding WAPAC's responsibilities to include additional indicators of watershed health was considered.				
Direct	Marine Center / Museum	Bacteria, Freshwater, General Stormwater, Litter, Nutrients, Pesticides, Toxic contaminants / heavy metals	Boat owners / operators / marinas, Elected & appointed officials and high-level staff, Higher education students, K-12 students / youth, Residential, Teachers	The Port Royal Sound Foundation Maritime Center. The Center features exhibits, classrooms, hands-on learning spaces and other areas where everyone can learn and celebrate the uniqueness of the Port Royal Sound. Impact is determined by the total number of visitors.		Port Royal Sound Foundation	10/1/2019	9/30/2020	7612
Direct	Litter Sweep	Litter	Grounds crew / maintenance / facilities staff, K-12 students / youth, Residential	Beaufort County Adopt-A-Highway Program. The Adopt-A-Highway program's mission is to eradicate litter and promote beautification in South Carolina. It conducts litter pick-ups. Effectiveness was measured in the number of volunteers, number of active volunteer groups, and pounds of litter removed.	During this reporting period, 2,058 volunteers participated in 108 Adopt-A-Highway groups and picked up 62,190 pounds of litter.	Beaufort County, Conservation District, Keep Beaufort County Beautiful	10/1/2019	9/30/2020	2058

Direct	Field Trip	Bacteria, Freshwater, General Stormwater, Litter, Nutrients, Pesticides	K-12 students / youth	Port Royal Sound Foundation Maritime Center's Field Trip Program. Through hands-on experiments and discovery, students not only see the amazing life of our local environment, but also experience it firsthand. Participants include in all grades from public, private and charter schools and homes-schooling programs, as well as after-school and summer programs. Impact is determined by the total number of participating students.	During this reporting period, there were XX field trips.	Port Royal Sound Foundation	10/1/2019	9/30/2020	1286
Direct	Training	General Stormwater, Sediment	Commercial landscapers / landscape designers / nurseries, Contractors, Grounds crew / maintenance / facilities staff	Certified Erosion Prevention and Sediment Control Inspector (CEPSCI). The purpose of the CEPSCI Program is to educate field personnel on the proper installation, maintenance and inspection of erosion prevention and sediment control measures at construction sites to meet state and local regulations. Its success is measured in number of participants, certifications, and re-certifications.	Eight CEPSCI initial certification classes too place during the reporting time frame. Out of 501 out of 555 participants earned certifications. Similarly, five CEPSCI re-certification classes took place during the reporting time frame. Out of 436 out of 437 participants earned re-certifications.	Clemson Extension	10/1/2019	9/30/2020	999
Direct	Council / Committee / Meeting, Brochure / Outreach Material	General Stormwater, Sediment	Technical staff / engineers / developers, Contractors	Sediment and Erosion Control Contractor / Developer Meetings. Town staff meets on-site with contractors and developers to review and discuss Town Sediment & Erosion Control policies, MS4 requirements, and to review any identified site deficiencies, and to address		Town of Bluffton	10/1/2019	9/30/2020	945

				any necessary corrective measures. Impact is measured through attendance.					
Direct	Workshop	Bacteria, Freshwater, General Stormwater, Litter, Nutrients, Sediment	K-12 students / youth	Kids in Kayaks program. The goal of the Kids in Kayaks program is to bring local youth outside and to have them participate in experiential learning about their local ecosystems and natural resources. Effectiveness is determined by participation.	This program was offered on 15 dates to the 7th grade classes of five different schools. River Ridge Academy attended on 10/8-11/19. Riverview Charter School attended on 10/17-18/19. Polaris Tech Charter attended on 10/28-29/19. SP Montessori attended on 10/30/19. Finally, Bluffton Middle School attended on 11/1/19 and 11/4-8/19. The spring course of this program was cancelled due to COVID-19.	Clemson Extension, Conservation District, The Outside Foundation, Lowcountry Master Naturalists	10/1/2019	9/30/2020	461
Direct	Training	Freshwater, General Stormwater, Nutrients, Sediment	Stormwater managers / stormwater staff, Technical staff / engineers / developers	Post Construction Best Management Practice Inspector Course. This program provides online, and field-based training focused on inspection and maintenance of best management practices used for stormwater management. Students have the chance to discuss and view bioswales, dry detention basins, wet detention basins, and more. Its success is measured in number of participants, certifications, and re-certifications.	71 participants earned 33 certifications and 38 re-certifications.	Clemson Extension	10/1/2019	9/30/2020	71

Direct	Training	Bacteria, Freshwater, General Stormwater, Nutrients, Pesticides, Sediment	Stormwater managers / stormwater staff, Stormwater pond management companies	Master Pond Manager Course. This course is designed to teach participants a wide range of pond management knowledge and skills. As a hybrid course combining online and face-to-face learning, it will incorporate self-paced lectures, discussion, quizzes, and other web-based methods of participant-instructor interaction, along with hands-on participation activities in the field. Its success is determined through the number of participants and certifications.	This course was offered once in Fall 2019 and then again in Spring 2020. 22 participants became certified Master Pond Managers.	Clemson Extension	10/1/2019	9/30/2020	66
Direct	Training	Bacteria, General Stormwater, Nutrients, Sediment	Residential	Carolina Yards Program. This program works with residents to create healthy, watershed-friendly landscapes. The program's success is measured in newly certified yards.	65 yards became certified Carolina Yards. Six were from Beaufort County.	Clemson Extension	10/1/2019	9/30/2020	65
Direct	Training	Freshwater, General Stormwater	Stormwater managers / stormwater staff, Supervisory staff / administrators, Technical staff / engineers / developers	Certified Stormwater Plan Reviewer (CSPR). The purpose of the CSPR Program is to educate personnel on the proper design and review of stormwater and sediment control plans for development sites to meet state and local regulations. Its success is measured in number of participants and certifications.	Clemson Extension offered two CSPR online certification courses during this reporting period. 39 out of 58 participants became certified.	Clemson Extension	10/1/2019	9/30/2020	58
Direct	Presentation, Training	Bacteria, Freshwater, General Stormwater, Litter,	K-12 students / youth, Youth	The Outside Foundation Learn to Paddle Program for the Boys and Girls Club. The goal of this program is to bring local youth outside	This program was offered three times. Once on 10/10/19, another on 10/17/19, and the final on	The Outside Foundation, Town of Bluffton, Town of	10/1/2019	9/30/2020	39

		Nutrients, Sediment		and to have them participate in experiential learning about their local ecosystems and natural resources. Impact is determined by the number of participants.	10/24/19. Future sessions were cancelled due to COVID-19.	Hilton Head Island			
Direct	Training	Freshwater, General Stormwater, Nutrients, Pesticides, Sediment	Commercial landscapers / landscape designers / nurseries, Residential, Teachers, Technical staff / engineers / developers	Master Rain Gardener Course. The Master Rain Gardener program is a hybrid curriculum allowing for self-paced online learning modules, hands-on field experience, and a two-track option to meet the needs of diverse audiences. Effectiveness is measured by the number of participants and the number of certifications issued.	One course took place during the reporting period. It trained 32 participants who are awaiting the rescheduled field day to be certified.	Clemson Extension	10/1/2019	9/30/2020	32
Direct	Training	Freshwater, General Stormwater, Litter, Nutrients	Elected & appointed officials and high-level staff, Higher education students, Residential, Supervisory staff / administrators / stormwater managers	Master Naturalist Program. The SC Master Naturalist Program aims to create a statewide corps of volunteers providing education, outreach, and service dedicated to the beneficial management of natural resources, including water. Impact is measured by participants passing the final exam.	Due to COVID-19, only one class Master Naturalist course was offered this reporting period. 24 participants passed the exam.	Clemson Extension, Lowcountry Master Naturalists, Spring Island Trust	10/1/2019	9/30/2020	24
Direct	Training	Bacteria, Freshwater, General Stormwater, Litter, Nutrients, Pesticides	Residential	Cultivating a Carolina Yards Workshop Part 1. This workshop gives a hands-on overview of Clemson Extension's Carolina Yards program. This session covers healthy soils, being wise when you fertilize, and reducing runoff. Participants are taken outside to take their own soil tests. Effectiveness is measured through	This workshop was given to the Indigo Run Plantation. 100% of evaluation respondents indicated that they found the workshop to be a good use of their time and that they gained knowledge.	Clemson Extension	10/3/2019	10/3/2019	12

				attendance and an evaluation.					
Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential, Elected & appointed officials and high-level staff, General public	October Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff of the stormwater management utility on master planning efforts and cost of service / rate studies, and supports / promotes sound stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects. The Center for Watershed Protection gave a special presentation on proposed regional Stormwater standards and ordinance.	Beaufort County, City of Beaufort, Center for Watershed Protection, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	10/9/2019	10/9/2020	27
Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Effectiveness is measured through participation.	Four volunteers gathered and bagged 350lbs of oyster shell at the Town of Hilton Head Island Oyster Roast.	DNR, The Outside Foundation	10/27/2019	10/27/2019	4
Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Effectiveness	Sixteen volunteers gathered 200 bags of oyster shell at the Town of Hilton Head Island Oyster Roast.	DNR, The Outside Foundation	10/30/2019	10/30/2019	16

				is measured through participation.					
Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Effectiveness is measured through participation.	12 volunteers gathered and bagged 5.8 tons of oyster shell at the Town of Hilton Head Island Oyster Festival.	DNR, The Outside Foundation	11/8/2019	11/9/2019	12
Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential, Elected & appointed officials and high-level staff, General public	November Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff of the stormwater management utility on master planning efforts and cost of services, and supports stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects.	Beaufort County, City of Beaufort, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	11/13/2019	11/13/2019	19
Direct	Conference	Bacteria, Freshwater, General Stormwater, Nutrients, Pesticides, Sediment	Contractors, Elected & appointed officials, high-level staff, Grounds crew / maintenance / facilities staff, Residential, Pond mgnt. companies, Stormwater pond managers,	2019 Beaufort Area Stormwater Pond Conference. This one-day conference features professional and local speakers who provide hands-on, interactive information about the latest pond management issues and strategies. Effectiveness is measured through attendance and an evaluation.	The evaluations revealed that 95% of participants thought that the conference was a good use of their time, 100% indicated that they gained knowledge, and 89% said that they would implement a practice learned at the conference.	Clemson Extension, DNR, SC SeaGrant Consortium	11/14/2019	11/14/2019	75

			Supervisory staff / adminis, Technical staff / engineers / developers						
Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Effectiveness is measured through participation.	Four volunteers gathered and bagged 342lbs of oyster shell at the FISH Casual Seafood Oyster Roast Fundraiser.	DNR, The Outside Foundation	12/1/2019	12/1/2019	4
Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential, Elected & appointed officials and high-level staff, General public	December Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff of the stormwater management utility on master planning efforts and cost of service / rate studies, and supports / promotes sound stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects. SC DHEC gave a special presentation regarding a landfill fire where runoff impacted the Okatie River.	Beaufort County, City of Beaufort, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	12/11/2019	12/11/2019	23

Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential	January Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff of the stormwater management utility on master planning efforts and cost of service / rate studies, and supports / promotes sound stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects.	Beaufort County, City of Beaufort, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal, USC-B	1/8/2020	1/8/2020	18
Direct	Council / Committee / Meeting, Presentation	Freshwater, General Stormwater	Residential, Stormwater managers / stormwater staff, Technical staff / engineers / developers	SoLoCo Design Manual and Stormwater Ordinance Public Meeting. These meetings are spaces to discuss the new SoLoCo Stormwater design manual requirements as it relates to the building and design professionals of the area. It is open for public comment and for the public to provide input. Impact is determined by attendance.		Beaufort County, City of Beaufort, Jasper County, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	1/23/2020	1/23/2020	25
Direct	Meeting / Presentation	General Stormwater	Residential, Stormwater managers / stormwater staff, Technical staff / engineers / developers	SoLoCo Design Manual and Stormwater Ordinance Public Meeting. These meetings are spaces to discuss the new SoLoCo Stormwater design manual requirements as it relates to the building and design professionals of the area. It is open for public comment and for the public to provide input. Impact is determined by attendance.	Limited feedback received from the audience. All comments were addressed through the formal comment review period.	Beaufort County, City of Beaufort, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	1/28/2020	1/28/2020	17

Direct	Workshop	General Stormwater	Residential, Technical staff / engineers / developers	SC DHEC Living Shorelines Agency Coordination January 29, 2020.		Beaufort County, City of Beaufort, SC DHEC, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	1/29/2020	1/29/2020	30
Direct	Council / Committee / Meeting, Presentation	Freshwater, General Stormwater	Residential, Stormwater managers / stormwater staff, Technical staff / engineers / developers	SoLoCo Design Manual and Stormwater Ordinance Public Meeting. These meetings are spaces to discuss the new SoLoCo Stormwater design manual requirements as it relates to the building and design professionals of the area. It is open for public comment and for the public to provide input. Impact is determined by attendance.		Beaufort County, City of Beaufort, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	1/30/2020	1/30/2020	20
Direct	Training	Bacteria, Freshwater, General Stormwater, Litter, Nutrients, Pesticides, Sediment	Residential	Cultivating a Carolina Yards Workshop Part 1. This workshop gives a hands-on overview of Clemson Extension's Carolina Yards program. This session covers healthy soils, being wise when you fertilize, and reducing runoff. Participants go outside to take their own soil tests. Its effectiveness is measured through attendance and an evaluation.	This workshop was given as part of a series to the Hilton Head USCB OLLI program. 100% of evaluation respondents indicated that they gained knowledge and that the workshop was a good use of their time.	Clemson Extension, USC-B	1/30/2020	1/30/2020	20

Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Effectiveness is measured through participation.	Three volunteers gathered and bagged 133lbs of oyster shell at the Westin Hotel "Be Well" event.	DNR, The Outside Foundation	1/31/2020	1/31/2020	3
Direct	Workshop	General Stormwater, Bacteria, Nutrients, Sediment, Freshwater	K-12 Youth, Teachers	Mossy Oaks Rain Garden. This demonstration site will be part of the new sustainable landscaping courtyard at Mossy Oaks Elementary School. It will be installed with a workshop where participants will learn the function of a rain garden and then install it. Impact will be measured by the number of participants and an evaluation.	This program was initially set to take place in Fall 2020, but due to COVID-19-19 it was postponed to Spring 2021.	Clemson Extension, Lowcountry Master Naturalists, MOES Improvement Committee	2/1/2020	9/30/2020	
Direct	Training	Freshwater, General Stormwater, Nutrients, Sediment	Residential	Cultivating a Carolina Yards Workshop Part 2. This workshop gives a hands-on overview of Clemson Extension's Carolina Yards program. This session covers recycling yard waste, mulch matters, and watering wisely. Participants go outside to perform footprint and screwdriver tests. Its effectiveness is measured through attendance and an evaluation.	This workshop was given as part of a series to the Hilton Head USCB OLLI program. 100% of evaluation respondents indicated that they gained knowledge and that the workshop was a good use of their time.	Clemson Extension, USC-B	2/6/2020	2/6/2020	17

Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Effectiveness is measured through participation.	35 volunteers gathered 400 bags of oyster shell at the ORRBI.	DNR, The Outside Foundation	2/12/2020	2/12/2020	35
Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential	February Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff of the stormwater management utility on master planning efforts and cost of service/rate studies, and supports/promotes sound stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects.	Beaufort County, City of Beaufort, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal, USC-B	2/12/2020	2/12/2020	20
Direct	Training	Freshwater, General Stormwater, Litter, Nutrients, Pesticides	Residential	Cultivating a Carolina Yards Workshop Part 3. This workshop gives a hands-on overview of Clemson Extension's Carolina Yards program. This session covers managing yard pests responsibly, removing invasive, and reducing runoff. Participants go outside to determine runoff pathways. Its effectiveness is measured through attendance and an evaluation.	This workshop was given as part of a series to the Hilton Head USCB OLLI program. 100% of evaluation respondents indicated that they gained knowledge and that the workshop was a good use of their time.	Clemson Extension, USC-B	2/13/2020	2/13/2020	17

Direct	Training	General Stormwater, Nutrients, Pesticides	Residential	Cultivating a Carolina Yards Workshop Part 4. This workshop gives a hands-on overview of Clemson Extension's Carolina Yards program. This session covers right plant / right place, garden like a local, and providing for wildlife. Participants go through a landscape planning activity. Its effectiveness is measured through attendance and an evaluation.	This workshop was given as part of a series to the Hilton Head USCB OLLI program. 100% of evaluation respondents indicated that they gained knowledge and that the workshop was a good use of their time.	Clemson Extension, USC-B	2/20/2020	2/20/2020	16
Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Effectiveness is measured through participation.	Four volunteers gathered and bagged 1862lbs of oyster shell at the Waddell Pig Pickin' and Oyster Roast.	DNR, The Outside Foundation	2/28/2020	2/28/2020	4
Direct	Training	Bacteria, General Stormwater, Nutrients, Sediment	Residential	Carolina Yards Course. This online course is designed to help gardeners learn to grow and maintain a low maintenance, low impact yard Carolina Yard. Its success is determined through participation, an evaluation, and the number of participant yards certified.	The LSP coordinator was one of the moderators for this course offering. Twenty participants completed the course. Eighteen completed the yard certification process and 1 had already completed the certification process prior to taking the course. In the evaluation, 94% of respondents indicated the course inspired	Clemson Extension	3/2/2020	6/6/2020	30

					them to change the way they landscape.				
Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Effectiveness is measured through participation.	20 volunteers gathered 107 bags of oyster shell at the Palmetto Bluff Resort Inaugural Oyster Shell Bagging event.	DNR, The Outside Foundation	3/6/2020	3/6/2020	20
Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential, Elected & appointed officials and high-level staff, General public	March Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff of the stormwater management utility on master planning efforts and cost of service / rate studies, and supports stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects. There was also a discussion of FY21 budget for all stormwater program related projects.	Beaufort County, City of Beaufort, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	3/11/2020	3/11/2020	18
Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential, Elected & appointed officials and	June Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff on master planning efforts and cost studies, and	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects.	Beaufort County, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	6/10/2020	6/10/2020	18

			high-level staff, General public	supports stormwater management practices.					
Direct	Training	Bacteria, General Stormwater, Litter, Nutrients, Sediment	Higher education students, Residential, Teachers	SC Adopt-a-Stream Chemical / Physical & Bacteria Training. This training familiarizes SC Adopt-A-Stream volunteers with the science and procedures for the program. Its effectiveness is measured through participation and an exam.		Clemson Extension	6/20/2020	6/20/2020	11
Direct	Pledge	General Stormwater, Bacteria	Pet owners, Residential	Pet Waste Pledge. This pledge indicates that a person promises to pick up after their pet to reduce bacterial pollution in water. Impact is determined by the number of people who take the pledge during the reporting period.	The pledge is available at https://mailchi.mp/5585f928a783/pet-waste-pledge	Clemson Extension	7/1/2020	9/30/2020	5
Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential, Elected & appointed officials and high-level staff, General public	July Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff of the stormwater management utility on master planning efforts and cost studies, and supports stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects.	Beaufort County, City of Beaufort, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	7/8/2020	7/8/2020	18
Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton	Four volunteers gathered and bagged 500lbs of oyster shell at the ORRBI shell capture even at Crazy	DNR, The Outside Foundation	7/23/2020	7/23/2020	4

				Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Impact is measured by participation.	Crab Jarvis Creek Restaurant.				
Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Impact is measured by participation.	Seven volunteers gathered and bagged 200lbs of oyster shell at the ORRBI shell capture even at Crazy Crab Jarvis Creek Restaurant.	DNR, The Outside Foundation	7/29/2020	7/29/2020	7
Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential, Elected & appointed officials and high-level staff, General public	September Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff of the stormwater management utility on master planning efforts and cost of service / rate studies, and supports / promotes sound stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects. There was a special presentation on how Beaufort County reviews stormwater projects and a presentation on the SoLoCo Design Manual and Ordinance from the Center for Watershed Protection.	Beaufort County, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	9/9/2020	9/9/2020	16
Direct	Training	Bacteria, General Stormwater, Litter, Nutrients, Sediment, Temperature	Higher education students, Residential, Teachers	SC Adopt-a-Stream Chemical / Physical & Bacteria Training. This training familiarizes SC Adopt-A-Stream volunteers with the science and procedures for the program. Its effectiveness is		Clemson Extension	9/15/2020	9/15/2020	12

				measured through participation and an exam.					
Direct / Indirect	Event tabling, Newsletter, Presentation, Webpage / Social media	General Stormwater, Nutrients, Sediment	Higher education students, Residential, Teachers	Lowcountry Master Gardner Educational Services. The Master Gardeners in Beaufort County provide educational services such as providing one-on-one services, promoting increased environmental awareness through the prudent use of fertilizers, pesticides, etc., and providing group learning and teaching activities for non-commercial clientele. Impact is measured through the number of contacts made.	The Lowcountry Master Gardener performed 4,675 volunteer hours for this program.	Beaufort Master Gardeners, Clemson Extension	10/1/2019	9/30/2020	171533
Direct / Indirect	Brochure / outreach material, Event tabling, Presentation, Training	General Stormwater, Nutrients, Sediment	K-12 students / youth	Lowcountry Master Gardner Educational Services for Youth. The Master Gardeners in Beaufort County provide educational services such as hands-on classroom demonstrations, club activities, and events to promoting increased environmental awareness through the prudent use of fertilizers, pesticides, etc. for youth. Impact is measured through the number of contacts made.		Beaufort Master Gardeners, Clemson Extension	10/1/2019	9/30/2020	1244

Indirect	Webpage / Social media	General Stormwater	General public, Residential, Youth	LSP Partner Facebook Pages. These pages are managed by partner organizations but assist the Lowcountry Stormwater Partners in spreading information about public participation opportunities and other relevant information. Impact is determined by total number of page likes.	Facebook pages that Clemson Extension manages were originally measured using "Likes". However, "Reach" gave a more accurate number as to the people engaging with the content. This type of data was not available from all partners.	Beaufort County, City of Beaufort, Clemson Extension, DNR, Port Royal Sound Foundation, Savannah Riverkeeper, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal, All education partners	10/1/2019	9/30/2020	262993
Indirect	Webpage / Social media	Bacteria, FOG, General Stormwater, Litter, Nutrients, Pesticides, Petroleum products, Pharmaceuticals / personal care products, Sediment, Toxic contaminants / heavy metals	General Public	Carolina Clear Facebook Page. This page provides a forum for public participation, to increase awareness of storm water's effects on water quality and increase awareness of public participation opportunities. Impact is determined through post reach.	Facebook pages that Clemson Extension manages were originally measured using "Likes". However, "Reach" gave a more accurate number as to the people engaging with the content. This type of data was not available from all partners.	Clemson Extension	10/1/2019	9/30/2020	49899
Indirect	Webpage / Social media	Bacteria, FOG, Freshwater, General Stormwater, Litter, Nutrients, Pesticides, Sediment,	General public, Residential, Youth	Lowcountry Stormwater Partners Facebook Page. This page provides a forum for public participation, to increase awareness of storm water's effects on water quality and increase awareness of public participation opportunities.	The LSP Facebook page grew from 254 likes to 293 likes and posted 193 times during this reporting period. Facebook pages that Clemson Extension manages were originally	Clemson Extension	10/1/2019	9/30/2020	16895

		Toxic contaminants / heavy metals		Its effectiveness will be tracked through "Reach".	measured using "Likes". However, "Reach" gave a more accurate number as to the people engaging with the content. This type of data was not available from all partners.				
Indirect	Webpage / Social media	Bacteria, General Stormwater, Nutrients, Sediment	Residential	Carolina Yards Facebook Page. The goal of this page is to provide a forum for public participation, to increase awareness of effective actions to help guide residents towards a low maintenance and environmentally friendly yard. Impact is determined through post reach.	Facebook pages that Clemson Extension manages were originally measured using "Likes". However, "Reach" gave a more accurate number as to the people engaging with the content. This type of data was not available from all partners.	Clemson Extension	10/1/2019	9/30/2020	16525
Indirect	Webpage / Social media	General Stormwater, Litter	Residential, General Public	The Town of Bluffton Watershed Management Division Facebook posts. The Town of Bluffton Facebook page regularly posts updated information for citizens with the goal of educating followers about the Towns Stormwater Management Program. Impact is determined through post reach.	XX posts were made during this reporting period. These posts reached, on average, 1702 persons and the average reactions to these social media postings was 20 likes comments and shares.	Town of Bluffton	10/1/2019	9/30/2020	1702
Indirect	Webpage / Social media	Nutrients, General Stormwater	General public, Residential, Youth	Soil Testing Social Media Campaign. This campaign focuses on encourage people to get their soil tested before fertilizing. Impact is determined by post reach.	The impact numbers were recorded under the Lowcountry Stormwater Partners Facebook Page entry. The Soil Testing campaign reached 676 people with 27 posts.	Clemson Extension	9/14/2020	9/28/2020	

Direct	Council / Committee / Meeting	Freshwater, General Stormwater	Technical staff / engineers / developers	Southern Lowcountry Counties (SoLoCo) Regional Ordinance Update Meetings. Participants discuss the development of the Southern Lowcountry Stormwater (SoLoCo) Ordinance and Design Manual. The purpose of the ordinance and manual is to address post-construction stormwater management in the Southern Lowcountry Region. Impact is determined through meeting attendance.	These meetings took place on 10/22/19, 11/6/19, 11/18/19, 12/4/19, and 3/6/20. 12 people attended each meeting	Beaufort County, City of Beaufort, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal, Other Lowcountry Jurisdictions	10/1/2019	9/30/2020	60
TOTAL									1292932

C. Control Measure Evaluation (5.3)

1. Evaluate the success of this MCM. Refer to goals implemented and achieved, and adherence to the implementation schedule:

The Lowcountry Stormwater Partners (LSP) successfully implemented MCM#1 in the Hilton Head Urbanized Area. Qualitative and quantitative data support this statement. From 10/1/2019 to 9/30/2020, the LSP recorded 1,292,932 impacts. In the 2019 reporting year, the LSP recorded 1,201,783 impacts. Between the two years, the LSP increased its impact by 7.59%. The LSP also increased the number of programs offered by 3.93% this year. We offered 185 programs this year while we only offered 178 programs last year. Ideally, we would have had an even greater increase in impacts and numbers of programs as this was a full 12-month reporting period compared to last year's 10-month reporting period.

However, COVID-19 presented an unexpected obstacle. All of the festivals, large litter pick-up events, conferences, and other large-scale events that help us reach many people were canceled, postponed, or shifted to a virtual format that did not allow for educational efforts outside of the event's main mission. These impacts led to an unfortunate drop in the average number of programs and impacts per month. Last year, we averaged 17 programs and 120,178 impacts a month. This year we averaged 15 programs and 107,744 impacts a month. However, 62% of these programs were delivered directly to target audiences even amid a pandemic. During last year's report, the amount of direct engagement with audiences was in question. Therefore, for this year's report, we began tracking that data.

Despite these difficulties, we continued to engage with our audiences through traditional means and expanded our efforts through new avenues. This year, the members of the LSP began offering webinars, leveraged and improved their social media presence, and created multi-media content for multiple platforms. We even found more accurate ways of reporting the impacts of social media content (by using post reach instead of likes) and meetings (by recording each date separately and tracking both the virtual and in-person attendance). These efforts are a testament to the Lowcountry Stormwater Partners adaptability, resiliency, and commitment to providing stormwater education and outreach opportunities to our community. Our community's desire for LSP content is also a testament to how important this organization is to them. They attended more workshops, attended more council and board meetings, and thoroughly engaged with our social media pages, websites, and newsletters.

This success came from following the 2019-2023 Lowcountry Stormwater Partners Stormwater Outreach Strategic Plan. This document provides a blueprint for education strategies focused on target pollutants and behaviors. This strategic plan is considered a "living" document to allow for refinement, supplementation, and flexibility as regional efforts evolve over the next five years. The plan prioritizes the three issues identified as most significant to the region from July 1, 2019 to June 30, 2023, provides information on education strategies related to the priority issues, and develops timelines and identified evaluation methods to guide and measure effectiveness. The priority issues identified in the plan do not exclude other awareness and education efforts. The priority issues for the LSP are detailed in the attached strategic plan with the three main pollutants of concern being bacteria, nutrients, and freshwater.

During this reporting period, the LSP completed Year One of the plan on June 30, 2019 and entered Year Two on July 1, 2020. The LSP successfully implemented all programs laid out by Year One and had nearly completed implementing Year Two programs. This puts the consortium ahead of the planned implementation schedule. Completed Year One programs include:

South Carolina NPDES Permit # SCR030000
Small Municipal Separate Storm Sewer System (SMS4)
Annual Report Template

- Mass media campaign for pet waste
 - We displayed Clemson Extension's Carolina Clear Pet Waste Mass Media Campaign Billboard. "Be Prepared. Always Bring a Bag" billboards during this reporting period. Similarly, we shared the billboard's image and its accompanying commercial across the Carolina Clear YouTube channel and the LSP's DOGust social media campaign.
- Small pet waste PSAs
 - We created an infographic regarding the effects of pet waste on water quality, a pet waste pledge, six promotional videos for the pet waste pledge, a sign of the pet waste pledge, and several images and posts for social media as PSAs for the DOGust social media campaign.
- 2019 Beaufort Area Stormwater Pond Conference
 - This conference took place on 11/14/19. 75 people attended.
- "Healthy Ponds" workshops
 - We held this workshop, or updated versions of it, once in person and three times virtually. In total, 90 people attended.
- Master Pond Manager course
 - Clemson Extension offered this course once in Fall 2019 and then again in Spring 2020. 66 people attended.
- Mass-media campaign for stormwater pond management
 - We shared the "Healthy Ponds, Healthy Communities" billboard and commercial across social media.
- SC Stormwater Pond website
 - The website is live and had 68609 visits.
- Soil sampling trainings for homeowners
 - The Carolina Yards program, course, webinar series, and five local workshop series taught residents the importance of soil sampling and how to take a soil sample. 376 people attended these offerings.
- Soil sample bags as festivals, nurseries, farmer's markets, and Master Gardener events
 - Soil sample bags were part of every festival the LSP attended this year as well as all Master Gardener tabling events (including all three local farmer's markets).
- Buffer workshops
 - We held the Keeping Tidal Creeks Clean with Planted Buffers Webinar on 6/30/20. 46 people attended.
- LID workshops for design professionals/municipal staff
 - We helped to host the Using the SC Coastal LID Manual: Online Workshop on 8/19/20. 155 people attended.
- LID factsheets
 - There are 42 factsheets available. Six of them were written during COVID-19.
- BMP workshops for homeowners
 - We held two rain garden and rainwater harvesting presentations for residents. One took place on 11/21/19 and the other on 2/25/20. In total, 62 people attended.
- Master Rain Gardener
 - One course took place during the reporting period. It trained 32 participants who are awaiting the rescheduled field day to be certified.

Completed Year Two programs include:

- Pet waste station signs
 - These signs currently exist on all pet waste stations. The LSP also designed new signs this year with the pet waste pledge and a link to take the pledge to also be installed with future stations. The signs are ready and are printed for donations, demonstration sites, and partner construction projects.
- Pet waste pledge
 - The pet waste pledge went live on 8/30/20. Five people have taken the pledge. It is available at <https://mailchi.mp/5585f928a783/pet-waste-pledge>
- Healthy Pond Series
 - The series offered two sessions this year. One on 6/11/20 and the other on 8/20/20. In total, 69 people attended.
- Direct mailings about pond trainings
 - This program is satisfied by the Big News for Small Ponds Mailing List. 43 people signed up for the list.
- Soil Testing Social Media Campaign
 - The campaign ran from 9/14/20 to 9/28/20 and reached 676 people with 27 posts
- Welcome to the Neighborhood: Buffers packet
 - This buffer packet was completed and distributed on 9/30/20.

In progress Year Two programs include:

- Leash dog waste bag holder giveaways
 - These items are ordered and partnerships with vet offices, rescues, etc. are being formed now that COVID-19 restrictions are lessened.
- Bilingual informational brochures for septic systems
 - These resources are researched but are waiting for the septic website to be launched so that all educational

- Current buffer ordinance and local government contact information
 - This information is included in the Welcome to the Neighborhood: Buffers packet.
- Pre-made buffer designs with cost information
 - This information is included in the Welcome to the Neighborhood: Buffers packet.
- Sediment and Erosion Control training for contractors
 - The CEPSCI program satisfies this requirement. Eight CEPSCI initial certification classes took place during the reporting time frame. Out of 501 out of 555 participants earned certifications. Similarly, five CEPSCI re-certification classes took place during the reporting time frame. Out of 436 out of 437 participants earned re-certifications. However, a Beyond the Silt Fence Workshop is being planned for 2021.
- LID Signs
 - The signs are ready and are printed for donations, demonstration sites, and partner construction projects. Several have already been erected.
- Rain Garden step-stake signs
 - The signs are ready and are printed for donations, demonstration sites, and partner construction projects.

material can share the same branding, resources, and link back to one another.

- Online resources for septic systems
 - The website content was researched, written, and reviewed by SC DHEC during this reporting period. It is in the process of being published and will be live by the end of November 2020.

- Automatic e-reminder for septic system owners to schedule an inspection
 - The form will be live when the septic system website goes live in November 2020.
- Mailers to HOAs/landscaping companies with soil sampling information
 - This project is delayed due to the changes in soil testing procedures due to COVID-19.
- Informational brochure on pond management
 - The brochure is designed and will be printed for distribution before the end of 2020.
- LID Lunch and Learns
 - The implementation of this program is delayed due to COVID-19. Previous iterations of this type of program and their evaluations indicated that an in-person, hands-on training is more effective for the target audience.

These programs were more successful than this shortlist can describe, though. Being a Neighbor for Clean Water webinar series is a perfect example of this concept. This series assisted residents during the public health crisis associated with COVID-19 and their larger-than-ever need for educational content and at-home projects. This webinar series exposed residents to actions and practices that could reduce their stormwater footprints. This series was well-timed, as people were responsive to the information, action items, and best management practices (BMPs) presented. These BMPs centered around benefitting individuals, their neighbors, and their environment. The webinar series was offered during Earth Week (4/20-4/24) and presented in a lunch-and-learn style, with sessions taking place every weekday from 12:00 pm until 12:30 pm. Topics included an overview of stormwater-related issues, shoreline management for ponds, floating wetlands, rain gardens, and water-wise landscaping practices. The series had a total of 82 registrants. Program evaluations of the webinar series were very positive. 100% of respondents indicated that they felt the series was useful and that they gained knowledge. 81% of respondents also indicated that they would implement a practice that they learned during the series. However, the participants themselves better described the series impacts with comments left in the surveys and direct emails to the presenters. For example, one participant wrote, “I am amazed at what I learned within the half-hour each day. I appreciate all of the follow-up email[s] with the links to so many helpful resources. The presentation[s] were well put together and contained a wealth of information in such a short time (an indication of the keen preparation went into each session). Truly a valuable webinar! Many thanks!”. This series was so successful that we are going to repeat it as an official Clemson Extension course next year.

Similarly, the LSP continued to build successful, repeatable programs by creating their first-ever social media campaign. The campaign’s goals were to teach pet owners how improperly disposed of pet waste can cause bacterial pollution in waterways and to encourage them to act by taking a pledge to pick up after their dog. We called the campaign “DOGust” as it ran from 8/1/20 through 8/31/20. For the campaign, the LSP created a host of multi-media PSAs that included six videos, a pet waste pledge website, a pet waste pledge sign, a pet waste infographic, polls, and a wealth of images and informational messages. These PSAs were posted twice a day on the LSP’s Facebook page. This campaign turned out to be a valuable education tool. The 57 campaign posts reached 3,326 people, which was a 32% increase from the previous five month’s average. The LSP Facebook page also gained ten new likes (a 35% increase). This campaign also engaged 75% more users than in the previous five months of Facebook activity. However, the largest lesson learned was that a Facebook campaign was a great way to educate people but was less effective at getting people to take action. These lessons learned were immediately taken into account when planning an additional social media campaign.

The LSP didn’t just focus on building new programs, though. Due to COVID-19, the LSP altered several already successful educational efforts to fit the current climate and to stay up to date with the latest, unbiased, researched-based information. The “Healthy Ponds, Healthy Communities”

workshop is a perfect example of this. This workshop covers stormwater pond function, design, issues, and methods to manage those common issues. When done in person, this presentation included a pond tour. This year, this workshop received several updates (and new presentation titles) to reflect the latest available research in SC SeaGrant's "Stormwater Ponds in Coastal South Carolina: State of Knowledge Report" publication and to fit into a solely virtual platform. We held this workshop once in person, three times virtually, and engaged 90 participants. The first workshop was held in person on 10/1/19 at Indigo Run Plantation. 15 people attended, but none filled out an evaluation. We provided the second workshop as a webinar entitled "Maintaining a Healthy Pond" on 4/28/20. Twenty-seven people attended. Fourteen participants filled out the evaluation. 100% of respondents indicated that the program was useful, that they gained knowledge, and that they would implement a practice learned during the webinar. The next offering was the "Keeping Ponds Healthy with Proactive Management" webinar on 8/6/20. Twenty-one people attended and 11 participants filled in the evaluation. 100% of the respondents indicated that they gained knowledge, found the webinar to be useful, and would recommend the webinar to others. 36% also indicated that they would implement a practice learned in the webinar. The final offering was the "Managing Landscapes for Pond Health" webinar given to the Moss Creek POA on 9/17/20. Twenty-seven people attended. Thirteen people turned evaluations. 100% of the respondents indicated that the webinar was useful, that they gained knowledge, and that they would recommend the program to others. 61% also indicated that they would implement a practice demonstrated during the presentation.

The LSP adapted the 4-H2O program to our new normal in a similar fashion. 4-H2O is a youth education program that has been held annually across the state for more than 12 years. It is a water-based science camp that runs in more than 15 counties across South Carolina, allowing students an opportunity to learn and experience this state's water resources first-hand. However, with COVID-19 restrictions, an in-person summer camp was not feasible. However, the LSP and Beaufort County 4-H program refused to deprive youth of a hands-on science inquiry program. Particularly one that provides youth knowledge about their local water resources and teaches them the field, analytical, and critical thinking skills they need to intelligently participate in making decisions that affect the quality of these aquatic systems. Therefore, they adapted the curriculum into the Beaufort County 4-H2O@Home Activity Guide. This guide contains six lesson plans that children and their parents can do at home with household items and explore the same content as the summer camp. The LSP and 4-H agent distributed this guide to 105 students and made it available as a download for the Beaufort County School District. Parents downloaded the guide 15 times. Despite these successes and proven adaptability, the LSP program can improve.

2. Provide an evaluation of where the program needs improvement and explain any actions that will be taken to achieve objectives:

While the LSP met the goals outlined in the 2019-2023 Lowcountry Stormwater Partner Stormwater Outreach Strategic Plan and continued to increase its number of impacts, there are two areas in which the program can improve. The first area is more accurate reporting on indirect outreach materials such as our rack cards, LID signs, and resource packets. We are currently printing or re-printing the majority of our outreach material. We will improve reporting accuracy by noting how much of these printed materials we started with at the beginning of the reporting year and counting how many are left at the end of the reporting year. Therefore, instead of solely reporting on the resource's presence, we can report on the resource's impacts. The second area of improvement is building partnerships with local businesses. The effectiveness of several programs depends upon the buy-in of local businesses in the pet, vet, septic, and landscaping fields. The LSP has yet to establish working relationships with professionals in these fields. The difficulty in creating these relationships was due in part to COVID-19 restrictions and closures. However, with these restrictions relaxed and businesses once again open, it will be possible to begin establishing rapport. The LSP will do so by first emailing and/or calling these businesses and then setting up face-to-face meetings to exchange ideas and materials.

III. Minimum Control Measures (MCM)

D. Minimum Control Measure 2: Public Involvement/Participation (4.2.2, 5.3)

Use the table below to summarize public involvement opportunities, goals, and progress for the current reporting year. In the “activities conducted and planned” section, focus on activities that were conducted in the last reporting year and those that are planned for the upcoming reporting year, providing implementation dates. Add rows where needed and attach additional sheets if necessary.

Please see the attached “2019-2023 Lowcountry Stormwater Partners Strategic Stormwater Outreach Plan” for a complete list of all activities planned for the upcoming year. Below are last year’s accomplishments as well as the activities that are furthest along in their planning stages.									
Outreach Type	Activity Type	Target Pollutant	Target Audience	Activity Description	Notes	Service Provider	Start Date	End Date	Impacts
Direct	Council / Committee / Meeting	General Stormwater	Residents, Citizens of the Town of Bluffton	Bluffton Town Council Meetings. The Bluffton Town Council includes the mayor and four council members who serve overlapping four-year terms. Town Council encourages public input into the Towns Stormwater Program through public comment. Public comment cards are available on the Town website. Impact is measured in views.	Since March of 2020 Town Council meetings have been held virtually and live streamed through the Town Facebook page. These meetings are also available to residents on-demand. Meetings take place the second Tuesday of each month and workshops occur the third Tuesday of every quarter.	Town of Bluffton	10/1/2019	9/30/2020	41446
Direct	Marine Center / Museum	Bacteria, Freshwater, General Stormwater, Litter, Nutrients, Pesticides, Toxic contaminants / heavy metals	Boat owners / operators / marinas, Elected & appointed officials and high-level staff, Higher education students, K-12 students / youth, Residential, Teachers	The Port Royal Sound Foundation Maritime Center. The Center features exhibits, classrooms, hands-on learning spaces and other areas where everyone can learn and celebrate the uniqueness of the Port Royal Sound. Impact is determined by the total number of visitors.		Port Royal Sound Foundation	10/1/2019	9/30/2020	7612

Direct	Council / Committee / Meeting	Freshwater, General Stormwater, Pesticides, Pharmaceutic als / personal care products, Toxic contaminants / heavy metals	Contractors, Elected & appointed officials and high-level staff, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies, Supervisory staff / administrators, Technical staff / engineers / developers	May River Watershed Action Plan Implementation Committee Meetings. The seven-member committee is tasked with assisting and advising Town Council by offering guidance and recommendations to implement the opportunities and strategies outlined in the May River Watershed Action Plan. Residents can either serve on the committee or provide input into the Town's Stormwater Program through public comment opportunities at each meeting. Impact is determined through attendance.	Dr. Montie of USCB gave his "Historical Analysis of Water Quality in May River" presentation. Town staff presented on the Town monitoring program, current monitoring data, and the town Watershed Management Division work plan.	Town of Bluffton	10/24/2019	10/24/2019	3
Direct	Council / Committee / Meeting	Freshwater, General Stormwater, Pesticides, Pharmaceutic als / personal care products, Toxic contaminants / heavy metals	Contractors, Elected & appointed officials and high-level staff, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies, Supervisory staff / administrators, Technical staff / engineers / developers	May River Watershed Action Plan Implementation Committee Meetings. The seven-member committee is tasked with assisting and advising Town Council by offering guidance and recommendations to implement the opportunities and strategies outlined in the May River Watershed Action Plan. Residents can either serve on the committee or provide input into the Town's Stormwater Program through public comment opportunities at each meeting. Impact is determined through attendance.	Town staff presented on the Town monitoring program, current monitoring data, and the town Watershed Management Division work plan. Future WAPAC meeting dates were also discussed.	Town of Bluffton	12/9/2019	12/9/2019	4

Direct	Council / Committee / Meeting	Freshwater, General Stormwater, Pesticides, Pharmaceutic als / personal care products, Toxic contaminants / heavy metals	Contractors, Elected & appointed officials and high-level staff, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies, Supervisory staff / administrators, Technical staff / engineers / developers	May River Watershed Action Plan Implementation Committee Meetings. The seven-member committee is tasked with assisting and advising Town Council by offering guidance and recommendations to implement the opportunities and strategies outlined in the May River Watershed Action Plan. Residents can either serve on the committee or provide input into the Town's Stormwater Program through public comment opportunities at each meeting. Impact is determined through attendance.	Town staff presented on the Town monitoring program, current monitoring data, and the town Watershed Management Division work plan. Dr. Ritchie of USCB also gave a presentation on Biomeme qPCR application and a discussion of the Town SWU Fee Rate was held.	Town of Bluffton	1/23/2019	1/23/2019	2
Direct	Council / Committee / Meeting	Freshwater, General Stormwater, Pesticides, Pharmaceutic als / personal care products, Toxic contaminants / heavy metals	Contractors, Elected & appointed officials and high-level staff, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies, Supervisory staff / administrators, Technical staff / engineers / developers	May River Watershed Action Plan Implementation Committee Meetings. The seven-member committee is tasked with assisting and advising Town Council by offering guidance and recommendations to implement the opportunities and strategies outlined in the May River Watershed Action Plan. Residents can either serve on the committee or provide input into the Town's Stormwater Program through public comment opportunities at each meeting. Impact is determined through attendance.	Town staff presented on the Town monitoring program, current monitoring data, and the town Watershed Management Division work plan. A discussion of the Town SWU Fee Rate was also held.	Town of Bluffton	2/27/2019	2/27/2019	2

Direct	Council / Committee / Meeting	Freshwater, General Stormwater, Pesticides, Pharmaceuticals / personal care products, Toxic contaminants / heavy metals	Contractors, Elected & appointed officials and high-level staff, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies, Supervisory staff / administrators, Technical staff / engineers / developers	May River Watershed Action Plan Implementation Committee Meetings. The seven-member committee is tasked with assisting and advising Town Council by offering guidance and recommendations to implement the opportunities and strategies outlined in the May River Watershed Action Plan. Residents can either serve on the committee or provide input into the Town's Stormwater Program through public comment opportunities at each meeting. Impact is determined through Facebook views.	Due to COVID-19, the Town of Bluffton began hosting WAPAC meetings via Zoom. Meetings were livestreamed on the Town of Bluffton's Facebook page. Residents have on-demand access to WAPAC meetings through the Town's Facebook page as well. Town staff presented on the Town monitoring program, current monitoring data, and the town Watershed Management Division work plan. WAPAC also welcomed new members and the May River Watershed Story Map was revealed.	Town of Bluffton	7/23/2020	7/23/2020	1300
Direct	Council / Committee / Meeting	Freshwater, General Stormwater, Pesticides, Pharmaceuticals / personal care products, Toxic contaminants / heavy metals	Contractors, Elected & appointed officials and high-level staff, Residential, Stormwater managers / stormwater staff, Stormwater pond management companies, Supervisory staff / administrators, Technical staff / engineers / developers	May River Watershed Action Plan Implementation Committee Meetings. The seven-member committee is tasked with assisting and advising Town Council by offering guidance and recommendations to implement the opportunities and strategies outlined in the May River Watershed Action Plan. Residents can either serve on the committee or provide input into the Town's Stormwater Program through public comment opportunities at each meeting. Impact is determined through Facebook views.	Due to COVID-19, the Town of Bluffton hosted WAPAC meetings via Zoom. Town staff presented on the monitoring program, current monitoring data, and the town Watershed Management Division work plan. The SoLoCo Stormwater Ordinance & Design Manual was also adopted and expanding WAPAC's responsibilities to include additional indicators of watershed health was considered.	Town of Bluffton	8/27/2020	8/27/2020	849

Direct	Litter Sweep	Litter	Grounds crew / maintenance / facilities staff, K-12 students / youth, Residential	Beaufort County Adopt-A-Highway Program. The Adopt-A-Highway program's mission is to eradicate litter and promote beautification in South Carolina. It conducts litter pick-ups. Effectiveness was measured in the number of volunteers, number of active volunteer groups, and pounds of litter removed.	During this reporting period, 2,058 volunteers participated in 108 Adopt-A-Highway groups and picked up 62,190 pounds of litter.	Beaufort County, Conservation District, Keep Beaufort County Beautiful	10/1/2019	9/30/2020	2058
Direct	Field Trip	Bacteria, Freshwater, General Stormwater, Litter, Nutrients, Pesticides	K-12 students / youth	Port Royal Sound Foundation Maritime Center's Field Trip Program. Through hands-on experiments and discovery, students not only see the amazing life of our local environment, but also experience it firsthand. Participants include in all grades from public, private and charter schools and homes-schooling programs, as well as after-school and summer programs. Impact is determined by the total number of participating students.	During this reporting period, there were XX field trips.	Port Royal Sound Foundation	10/1/2019	9/30/2020	1286
Direct	Training	General Stormwater, Sediment	Commercial landscapers / landscape designers / nurseries, Contractors, Grounds crew / maintenance / facilities staff	Certified Erosion Prevention and Sediment Control Inspector (CEPSCI). The purpose of CEPSCI is to educate field personnel on the proper installation, maintenance and inspection of erosion prevention and sediment control measures at construction sites to meet state and local regulations. Its success is measured in number of participants and certifications.	Eight CEPSCI initial certification classes took place during the reporting time frame. Out of 501 out of 555 participants earned certifications. Similarly, five CEPSCI re-certification classes took place during the reporting time frame. Out of 436 out of 437 participants earned re-certifications.	Clemson Extension	10/1/2019	9/30/2020	999

Direct	Council / Committee / Meeting, Brochure / Outreach Material	General Stormwater, Sediment	Technical staff / engineers / developers, Contractors	Sediment and Erosion Control Contractor / Developer Meetings. Town staff meets on-site with contractors and developers to review and discuss Town Sediment & Erosion Control policies, MS4 requirements, and to review any identified site deficiencies, and to address any necessary corrective measures. Impact is measured through attendance.		Town of Bluffton	10/1/2019	9/30/2020	945
Direct	Workshop	Bacteria, Freshwater, General Stormwater, Litter, Nutrients, Sediment	K-12 students / youth	Kids in Kayaks program. The goal of the Kids in Kayaks program is to bring local youth outside and to have them participate in experiential learning about their local ecosystems and natural resources. Effectiveness is determined by participation.	This program was offered on 15 dates to the 7th grade classes of five different schools. River Ridge Academy attended on 10/8/19, 10/9/19, 10/10/19, and 10/11/19. Riverview Charter School attended on 10/17/19 and 10/18/19. Polaris Tech Charter attended on 10/28/19 and 10/29/19. SP Montessori attended on 10/30/19. Finally, Bluffton Middle School attended on 11/1/19, 11 /4/19, 11/5/19, 11/6/19, 11/7/19, and 11/8/19. The spring course of this program was cancelled due to COVID-19.	Clemson Extension, Conservation District, The Outside Foundation, Lowcountry Master Naturalists	10/1/2019	9/30/2020	461

Direct	Training	Freshwater, General Stormwater, Nutrients, Sediment	Stormwater managers / stormwater staff, Technical staff / engineers / developers	Post Construction Best Management Practice Inspector Course. This program provides online, and field-based training focused on inspection and maintenance of best management practices used for stormwater management. Students have the chance to discuss and view bioswales, dry detention basins, wet detention basins, and more. Its success is measured in number of participants, certifications, and re-certifications.	71 participants earned 33 certifications and 38 re-certifications.	Clemson Extension	10/1/2019	9/30/2020	71
Direct	Training	Bacteria, Freshwater, General Stormwater, Nutrients, Pesticides, Sediment	Stormwater managers / stormwater staff, Stormwater pond management companies	Master Pond Manager Course. This course is designed to teach participants a wide range of pond management knowledge and skills. As a hybrid course combining online and face-to-face learning, it will incorporate self-paced lectures, discussion, quizzes, and other web-based methods of participant-instructor interaction, along with hands-on participation activities in the field. Its success is determined through the number of participants and certifications.	This course was offered once in Fall 2019 and then again in Spring 2020. 22 participants became certified Master Pond Managers.	Clemson Extension	10/1/2019	9/30/2020	66
Direct	Training	Bacteria, General Stormwater, Nutrients, Sediment	Residential	Carolina Yards Program. This program works with residents to create healthy, watershed-friendly landscapes. The program's success is measured in newly certified yards.	65 yards became certified Carolina Yards. Six were from Beaufort County.	Clemson Extension	10/1/2019	9/30/2020	65

Direct	Training	Freshwater, General Stormwater	Stormwater managers / stormwater staff, Supervisory staff / administrators, Technical staff / engineers / developers	Certified Stormwater Plan Reviewer (CSPR). The purpose of the CSPR Program is to educate personnel on the proper design and review of stormwater and sediment control plans for development sites to meet state and local regulations. Its success is measured in number of participants, certifications, and re-certifications.	Clemson Extension offered two CSPR online certification courses during this reporting period. 39 out of 58 participants became certified.	Clemson Extension	10/1/2019	9/30/2020	58
Direct	Presentation, Training	Bacteria, Freshwater, General Stormwater, Litter, Nutrients, Sediment	K-12 students / youth, Youth	The Outside Foundation Learn to Paddle Program for the Boys and Girls Club. The goal of this program is to bring local youth outside and to have them participate in experiential learning about their local ecosystems and natural resources. Effectiveness is determined by the number of participants.	This program was offered three times. Once on 10/10/19, another on 10/17/19, and the final on 10/24/19. Future sessions were cancelled due to COVID-19.	The Outside Foundation, Town of Bluffton, Town of Hilton Head Island	10/1/2019	9/30/2020	39
Direct	Training	Freshwater, General Stormwater, Nutrients, Pesticides, Sediment	Commercial landscapers / landscape designers / nurseries, Residential, Teachers, Technical staff / engineers / developers	Master Rain Gardener Course. The Master Rain Gardener program is a hybrid, multi-week curriculum allowing for self-paced online learning modules, hands-on field experience, and a two-track option to meet the needs of diverse audiences. Effectiveness is measured by the number of participants and the number of certifications issued.	One course took place during the reporting period. It trained 32 participants who are awaiting the rescheduled field day to be certified.	Clemson Extension	10/1/2019	9/30/2020	32

Direct	Training	Freshwater, General Stormwater, Litter, Nutrients	Elected & appointed officials and high-level staff, Higher education students, Residential, Supervisory staff / administrators / stormwater managers	Master Naturalist Program. The SC Master Naturalist Program aims to create a statewide corps of volunteers providing education, outreach, and service dedicated to the beneficial management of natural resources, including water. Impact is measured by participants passing the final exam.	Due to COVID-19, only one class Master Naturalist course was offered this reporting period. 24 participants passed the exam.	Clemson Extension, Lowcountry Master Naturalists, Spring Island Trust	10/1/2019	9/30/2020	24
Direct	Training	Bacteria, Freshwater, General Stormwater, Litter, Nutrients, Pesticides	Residential	Cultivating a Carolina Yards Workshop Part 1. This workshop gives a hands-on overview of Clemson Extension's Carolina Yards program. This session covers healthy soils, being wise when you fertilize, and reducing runoff. Participants are taken outside to take their own soil tests. Effectiveness is measured through attendance and an evaluation.	This workshop was given to the Indigo Run Plantation. 100% of evaluation respondents indicated that they found the workshop to be a good use of their time and that they gained knowledge.	Clemson Extension	10/3/2019	10/3/2019	12
Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential, Elected & appointed officials and high-level staff, General public	October Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff of the stormwater management utility on master planning efforts and cost of service / rate studies, and supports / promotes sound stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects. The Center for Watershed Protection gave a special presentation on proposed regional Stormwater standards and ordinance.	Beaufort County, City of Beaufort, Center for Watershed Protection, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	10/9/2019	10/9/2020	27

Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Effectiveness is measured through participation.	Four volunteers gathered and bagged 350lbs of oyster shell at the Town of Hilton Head Island Oyster Roast.	DNR, The Outside Foundation	10/27/2019	10/27/2019	4
Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Effectiveness is measured through participation.	Sixteen volunteers gathered 200 bags of oyster shell at the Town of Hilton Head Island Oyster Roast.	DNR, The Outside Foundation	10/30/2019	10/30/2019	16
Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Effectiveness is measured through participation.	12 volunteers gathered and bagged 5.8 tons of oyster shell at the Town of Hilton Head Island Oyster Festival.	DNR, The Outside Foundation	11/8/2019	11/9/2019	12

Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential, Elected & appointed officials and high-level staff, General public	November Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff of the stormwater management utility on master planning efforts and cost of service / rate studies, and supports / promotes sound stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects.	Beaufort County, City of Beaufort, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	11/13/2019	11/13/2019	19
Direct	Conference	Bacteria, Freshwater, General Stormwater, Nutrients, Pesticides, Sediment	Contractors, Elected/ appointed officials, high-level staff, Grounds crew / maintenance / facilities staff, Residential, Pond mgnt. companies, Stormwater pond managers, Supervisory staff / adminis, Technical staff / engineers / developers	2019 Beaufort Area Stormwater Pond Conference. This one-day conference features professional and local speakers who provide hands-on, interactive information about the latest pond management issues and strategies. Effectiveness is measured through attendance and an evaluation.	The evaluations revealed that 95% of participants thought that the conference was a good use of their time, 100% indicated that they gained knowledge, and 89% said that they would implement a practice learned at the conference.	Clemson Extension, DNR, SC SeaGrant Consortium	11/14/2019	11/14/2019	75
Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Impact is measured by participation.	Four volunteers gathered and bagged 342lbs of oyster shell at the FISH Casual Seafood Oyster Roast Fundraiser.	DNR, The Outside Foundation	12/1/2019	12/1/2019	4

Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential, Elected & appointed officials and high-level staff, General public	December Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff of the stormwater management utility on master planning efforts and cost of service / rate studies, and supports / promotes sound stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects. SC DHEC gave a special presentation regarding a landfill fire where runoff impacted the Okatie River.	Beaufort County, City of Beaufort, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	12/11/2019	12/11/2019	23
Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential	January Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff of the stormwater management utility on master planning efforts and cost of service / rate studies, and supports / promotes sound stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects.	Beaufort County, City of Beaufort, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal, USC-B	1/8/2020	1/8/2020	18
Direct	Council / Committee / Meeting, Presentation	Freshwater, General Stormwater	Residential, Stormwater managers / stormwater staff, Technical staff / engineers / developers	SoLoCo Design Manual and Stormwater Ordinance Public Meeting. These meetings are spaces to discuss the new SoLoCo Stormwater design manual requirements as it relates to the building and design professionals of the area. It is open for public comment and for the public to provide input. Impact is determined by attendance.		Beaufort County, City of Beaufort, Jasper County, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	1/23/2020	1/23/2020	25

Direct	Meeting / Presentation	General Stormwater	Residential, Stormwater managers / stormwater staff, Technical staff / engineers / developers	SoLoCo Design Manual and Stormwater Ordinance Public Meeting. These meetings are spaces to discuss the new SoLoCo Stormwater design manual requirements as it relates to the building and design professionals of the area. It is open for public comment and for the public to provide input. Impact is determined by attendance.	Limited feedback received from the audience. All comments were addressed through the formal comment review period.	Beaufort County, City of Beaufort, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	1/28/2020	1/28/2020	17
Direct	Workshop	General Stormwater	Residential, Technical staff / engineers / developers	SC DHEC Living Shorelines Agency Coordination January 29, 2020.		Beaufort County, City of Beaufort, SC DHEC, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	1/29/2020	1/29/2020	30
Direct	Council / Committee / Meeting, Presentation	Freshwater, General Stormwater	Residential, Stormwater managers / stormwater staff, Technical staff / engineers / developers	SoLoCo Design Manual and Stormwater Ordinance Public Meeting. These meetings are spaces to discuss the new SoLoCo Stormwater design manual requirements as it relates to the building and design professionals of the area. It is open for public comment and for the public to provide input. Impact is determined by attendance.		Beaufort County, City of Beaufort, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	1/30/2020	1/30/2020	20

Direct	Training	Bacteria, Freshwater, General Stormwater, Litter, Nutrients, Pesticides, Sediment	Residential	Cultivating a Carolina Yards Workshop Part 1. This workshop gives a hands-on overview of Clemson Extension's Carolina Yards program. This session covers healthy soils, being wise when you fertilize, and reducing runoff. Participants go outside to take their own soil tests. Its effectiveness is measured through attendance and an evaluation.	This workshop was given as part of a series to the Hilton Head USCB OLLI program. 100% of evaluation respondents indicated that they gained knowledge and that the workshop was a good use of their time.	Clemson Extension, USC-B	1/30/2020	1/30/2020	20
Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Effectiveness is measured through participation.	Three volunteers gathered and bagged 133lbs of oyster shell at the Westin Hotel "Be Well" event.	DNR, The Outside Foundation	1/31/2020	1/31/2020	3
Direct	Workshop	General Stormwater, Bacteria, Nutrients, Sediment, Freshwater	K-12 Youth, Teachers	Mossy Oaks Rain Garden. This demonstration site will be part of the new sustainable landscaping courtyard at Mossy Oaks Elementary School. It will be installed with a workshop were participants will learn the function of a rain garden and then install it. Impact will be measured by the number of participants and an evaluation.	This program was initially set to take place in Fall 2020, but due to COVID-19-19 it was postponed to Spring 2021.	Clemson Extension, Lowcountry Master Naturalists, MOES Improvement Committee	2/1/2020	9/30/2020	

Direct	Training	Freshwater, General Stormwater, Nutrients, Sediment	Residential	Cultivating a Carolina Yards Workshop Part 2. This workshop gives a hands-on overview of Clemson Extension's Carolina Yards program. This session covers recycling yard waste, mulch matters, and watering wisely. Participants go outside to perform footprint and screwdriver tests. Its effectiveness is measured through attendance and an evaluation.	This workshop was given as part of a series to the Hilton Head USCB OLLI program. 100% of evaluation respondents indicated that they gained knowledge and that the workshop was a good use of their time.	Clemson Extension, USC-B	2/6/2020	2/6/2020	17
Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Effectiveness is measured through participation.	35 volunteers gathered 400 bags of oyster shell at the ORRBI.	DNR, The Outside Foundation	2/12/2020	2/12/2020	35
Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential	February Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff of the stormwater management utility on master planning efforts and cost of service/rate studies, and supports/promotes sound stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects.	Beaufort County, City of Beaufort, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal, USC-B	2/12/2020	2/12/2020	20

Direct	Training	Freshwater, General Stormwater, Litter, Nutrients, Pesticides	Residential	Cultivating a Carolina Yards Workshop Part 3. This workshop gives a hands-on overview of Clemson Extension's Carolina Yards program. This session covers managing yard pests responsibly, removing invasive, and reducing runoff. Participants go outside to determine runoff pathways. Its effectiveness is measured through attendance and an evaluation.	This workshop was given as part of a series to the Hilton Head USCB OLLI program. 100% of evaluation respondents indicated that they gained knowledge and that the workshop was a good use of their time.	Clemson Extension, USC-B	2/13/2020	2/13/2020	17
Direct	Training	General Stormwater, Nutrients, Pesticides	Residential	Cultivating a Carolina Yards Workshop Part 4. This workshop gives a hands-on overview of Clemson Extension's Carolina Yards program. This session covers right plant / right place, garden like a local, and providing for wildlife. Participants go through a landscape planning activity. Its effectiveness is measured through attendance and an evaluation.	This workshop was given as part of a series to the Hilton Head USCB OLLI program. 100% of evaluation respondents indicated that they gained knowledge and that the workshop was a good use of their time.	Clemson Extension, USC-B	2/20/2020	2/20/2020	16
Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Effectiveness is measured through participation.	Four volunteers gathered and bagged 1862lbs of oyster shell at the Waddell Pig Pickin' and Oyster Roast.	DNR, The Outside Foundation	2/28/2020	2/28/2020	4

Direct	Training	Bacteria, General Stormwater, Nutrients, Sediment	Residential	Carolina Yards Course. This online course is designed to help gardeners learn to grow and maintain a low maintenance, low impact yard Carolina Yard. Its success is determined through participation, an evaluation, and the number of participant yards certified.	The LSP coordinator was one of the moderators for this course offering. Twenty participants completed the course. Eighteen completed the yard certification process and 1 had already completed the certification process prior to taking the course. In the evaluation, 94% of respondents indicated the course inspired them to change the way they manage their landscape.	Clemson Extension	3/2/2020	6/6/2020	30
Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Impact is measured by participation.	20 volunteers gathered 107 bags of oyster shell at the Palmetto Bluff Resort Inaugural Oyster Shell Bagging event.	DNR, The Outside Foundation	3/6/2020	3/6/2020	20
Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential, Elected & appointed officials and high-level staff, General public	March Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff of the stormwater management utility on master planning efforts and cost studies, and supports stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects. There was also a discussion of FY21 budget for all stormwater program related projects.	Beaufort County, City of Beaufort, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	3/11/2020	3/11/2020	18

Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential, Elected & appointed officials and high-level staff, General public	June Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff of the stormwater management utility on master planning efforts and cost studies, and supports stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects.	Beaufort County, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	6/10/2020	6/10/2020	18
Direct	Training	Bacteria, General Stormwater, Litter, Nutrients, Sediment	Higher education students, Residential, Teachers	SC Adopt-a-Stream Chemical / Physical & Bacteria Training. This training familiarizes SC Adopt-A-Stream volunteers with the science and procedures for the program. Its effectiveness is measured through participation and an exam.		Clemson Extension	6/20/2020	6/20/2020	11
Direct	Pledge	General Stormwater, Bacteria	Pet owners, Residential	Pet Waste Pledge. This pledge indicates that a person promises to pick up after their pet to reduce bacterial pollution in water. Impact is determined by the number of people who take the pledge during the reporting period.	The pledge is available at https://mailchi.mp/5585f928a783/pet-waste-pledge	Clemson Extension	7/1/2020	9/30/2020	5
Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential, Elected & appointed officials and high-level staff, General public	July Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff on master planning efforts and cost studies, and supports stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects.	Beaufort County, City of Beaufort, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	7/8/2020	7/8/2020	18

Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Impact is measured by participation.	Four volunteers gathered and bagged 500lbs of oyster shell at the ORRBI shell capture even at Crazy Crab Jarvis Creek Restaurant.	DNR, The Outside Foundation	7/23/2020	7/23/2020	4
Direct	Event tabling, Oyster bagging, Reef restoration	Bacteria, Freshwater, General Stormwater, Sediment	Higher education students, K-12 students / youth, Residential	ORRBI Oyster Shell Bagging and Reef Restoration. The goal of this program is to educate the public about the beauty, utility, and health of Hilton Head Island's saltmarsh ecosystem. It also describes how this ecosystem is reliant on oysters and good water quality. Impact is measured by participation.	Seven volunteers gathered and bagged 200lbs of oyster shell at the ORRBI shell capture even at Crazy Crab Jarvis Creek Restaurant.	DNR, The Outside Foundation	7/29/2020	7/29/2020	7
Direct	Council / Committee / Meeting	General Stormwater	Stormwater managers / stormwater staff, Technical staff / engineers / developers, Residential, Elected & appointed officials and high-level staff, General public	September Stormwater Utility Board Meeting. The Board determines appropriate levels of public stormwater management services within Beaufort County, recommends appropriate funding levels, advises the staff of the stormwater management utility on master planning efforts and cost of service / rate studies, and supports / promotes sound stormwater management practices.	Beaufort County reported updates on the utility, monitoring efforts, projects, professional contracts, regional coordination, MS4 updates, and maintenance projects. There was a special presentation on how Beaufort County reviews stormwater projects and a presentation on the SoLoCo Design Manual and Ordinance from the Center for Watershed Protection.	Beaufort County, Clemson Extension, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal	9/9/2020	9/9/2020	16

Direct	Training	Bacteria, General Stormwater, Litter, Nutrients, Sediment, Temperature	Higher education students, Residential, Teachers	SC Adopt-a-Stream Chemical / Physical & Bacteria Training. This training familiarizes SC Adopt-A-Stream volunteers with the science and procedures for the program. Its effectiveness is measured through participation and an exam.		Clemson Extension	9/15/2020	9/15/2020	12
Direct / Indirect	Event tabling, Newsletter, Presentation, Webpage / Social media	General Stormwater, Nutrients, Sediment	Higher education students, Residential, Teachers	Lowcountry Master Gardner Educational Services. The Master Gardeners in Beaufort County provide educational services such as providing one-on-one services, promoting increased environmental awareness through the prudent use of fertilizers, pesticides, etc., and providing group learning and teaching activities for non-commercial clientele. Impact is measured through the number of contacts made.	The Lowcountry Master Gardener performed 4,675 volunteer hours for this program.	Beaufort Master Gardeners, Clemson Extension	10/1/2019	9/30/2020	171533
Direct / Indirect	Brochure / outreach material, Event tabling, Presentation, Training	General Stormwater, Nutrients, Sediment	K-12 students / youth	Lowcountry Master Gardner Educational Services for Youth. The Master Gardeners in Beaufort County provide educational services such as hands-on classroom demonstrations, club activities, and events to promoting increased environmental awareness through the prudent use of fertilizers, pesticides, etc. for youth. Impact is measured through the number of contacts made.		Beaufort Master Gardeners, Clemson Extension	10/1/2019	9/30/2020	1244

Indirect	Webpage / Social media	General Stormwater	General public, Residential, Youth	LSP Partner Facebook Pages. These pages are managed by partner organizations but assist the Lowcountry Stormwater Partners in spreading information about public participation opportunities and other relevant information. Impact is determined by total number of page likes.	Facebook pages that Clemson Extension manages were originally measured using "Likes". However, "Reach" gave a more accurate number as to the people engaging with the content. This type of data was not available from all partners.	Beaufort County, City of Beaufort, Clemson Extension, DNR, Port Royal Sound Foundation, Savannah Riverkeeper, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal, All education partners	10/1/2019	9/30/2020	262993
Indirect	Webpage / Social media	Bacteria, FOG, General Stormwater, Litter, Nutrients, Pesticides, Petroleum products, Pharmaceuticals / personal care products, Sediment, Toxic contaminants / heavy metals	General Public	Carolina Clear Facebook Page. This page provides a forum for public participation, to increase awareness of storm water's effects on water quality and increase awareness of public participation opportunities. Impact is determined through post reach.	Facebook pages that Clemson Extension manages were originally measured using "Likes". However, "Reach" gave a more accurate number as to the people engaging with the content. This type of data was not available from all partners.	Clemson Extension	10/1/2019	9/30/2020	49899
Indirect	Webpage / Social media	Bacteria, FOG, Freshwater, General Stormwater, Litter, Nutrients, Pesticides, Sediment,	General public, Residential, Youth	Lowcountry Stormwater Partners Facebook Page. This page provides a forum for public participation, to increase awareness of storm water's effects on water quality and increase awareness of public participation opportunities.	The LSP Facebook page grew from 254 likes to 293 likes and posted 193 times during this reporting period. Facebook pages that Clemson Extension manages were originally	Clemson Extension	10/1/2019	9/30/2020	16895

		Toxic contaminants / heavy metals		Its effectiveness will be tracked through "Reach".	measured using "Likes". However, "Reach" gave a more accurate number as to the people engaging with the content. This type of data was not available from all partners.				
Indirect	Webpage / Social media	Bacteria, General Stormwater, Nutrients, Sediment	Residential	Carolina Yards Facebook Page. The goal of this page is to provide a forum for public participation, to increase awareness of effective actions to help guide residents towards a low maintenance and environmentally friendly yard. Impact is determined through post reach.	Facebook pages that Clemson Extension manages were originally measured using "Likes". However, "Reach" gave a more accurate number as to the people engaging with the content. This type of data was not available from all partners.	Clemson Extension	10/1/2019	9/30/2020	16525
Indirect	Webpage / Social media	General Stormwater, Litter	Residential, General Public	The Town of Bluffton Watershed Management Division Facebook posts. The Town of Bluffton Facebook page regularly posts updated information for citizens with the goal of educating followers about the Towns Stormwater Management Program. Impact is determined through post reach.	XX posts were made during this reporting period. These posts reached, on average, 1702 persons and the average reactions to these social media postings was 20 likes comments and shares.	Town of Bluffton	10/1/2019	9/30/2020	1702
Indirect	Webpage / Social media	Nutrients, General Stormwater	General public, Residential, Youth	Soil Testing Social Media Campaign. This campaign focuses on encourage people to get their soil tested before fertilizing. Impact is determined by post reach.	The impact numbers were recorded under the Lowcountry Stormwater Partners Facebook Page entry. The Soil Testing campaign focused reached 676 people with 27 posts.	Clemson Extension	9/14/2020	9/28/2020	

Direct	Council / Committee / Meeting	Freshwater, General Stormwater	Technical staff / engineers / developers	Southern Lowcountry Counties (SoLoCo) Regional Ordinance Update Meetings. Participants discuss the development of the Southern Lowcountry Stormwater (SoLoCo) Ordinance and Design Manual. The purpose of the ordinance and manual is to address post-construction stormwater management in the Southern Lowcountry Region. Impact is determined through meeting attendance.	These meetings took place on 10/22/19, 11/6/19, 11/18/19, 12/4/19, and 3/6/20. 12 people attended each meeting	Beaufort County, City of Beaufort, Town of Bluffton, Town of Hilton Head Island, Town of Port Royal, Other Lowcountry Jurisdictions	10/1/2019	9/30/2020	60	
Direct	Litter Sweep	Litter	Higher education students, K-12 students / youth, Residential, Teachers	The Outside Foundation Litter Pick-Up Events. The goal of these events is to engage and involve citizens in removing litter from their environment. Its effectiveness is determined through number of volunteers and pounds of litter removed.	The Outside Foundation hosted 11 events this reporting period which attracted 202 volunteers and removed 3437 pounds of litter from local waterways. These events took place on 12/1/19, 1/20/20, 2/9/20, 2/16/20, 2/16/20, 3/9/20, 3/15/20, 5/23/20, 7/6/20, 8/8/20, and 9/9/20.	The Outside Foundation, Boys Scouts Troop 222, Lowcountry Trash Heroes, Medieval Times Dinner Group Theater Group, University of Virginia, Hilton Head Trash Heroes, and Palmetto Running Co., Town of Bluffton, Town of Hilton Head Island	10/1/2019	9/30/2020	202	
TOTAL										578968

C. Control Measure Evaluation (5.3)

1. Evaluate the success of this MCM. Refer to goals implemented and achieved, and adherence to the implementation schedule:

The Lowcountry Stormwater Partners (LSP) successfully implemented MCM#2 in the Hilton Head Urbanized Area. Qualitative and quantitative data support this statement. From 10/1/2019 to 9/30/2020, the LSP recorded 578,968 impacts. In the 2019 reporting year, the LSP recorded 552,589 impacts. Between the two years, the LSP increased its impact by 4.77%. The LSP also increased the number of programs offered by 10.34% this year. We offered 64 programs this year while we only offered 58 programs last year. Ideally, we would have had an even greater increase in impacts and numbers of programs as this was a full 12-month reporting period compared to last year's 10-month reporting period.

However, COVID-19 presented an unexpected obstacle. All of the festivals, large litter pick-up events, summer camps, and other large-scale events that help us involve many people were canceled, postponed, or shifted to a virtual format that did not allow for educational efforts outside of the event's main mission. These impacts led to an unfortunate drop in the average number of programs and impacts per month. Last year, we averaged 6 programs and 55,258 impacts a month. This year we averaged 5 programs and 48,247 impacts a month. However, 90% of these programs were delivered directly to target audiences even amid a pandemic. During last year's report, the amount of direct engagement with audiences was in question. Therefore, for this year's report, we began tracking that data.

Despite these difficulties, we continued to engage our audiences through traditional means and expanded our efforts through new avenues. This year, the members of the LSP began offering smaller-scale litter pick-ups, leveraged and improved their social media presence, and created interactive content for engagement across distances. These efforts are a testament to the Lowcountry Stormwater Partners adaptability, resiliency, and commitment to providing stormwater education and outreach opportunities to our community. Our community's desire for LSP content is also a testament to how important this organization is to them. They attended more workshops, attended more council and board meetings, and thoroughly engaged with our social media pages, websites, and newsletters.

This success came from following the 2019-2023 Lowcountry Stormwater Partners Stormwater Outreach Strategic Plan. This document provides a blueprint for education strategies focused on target pollutants and behaviors. This strategic plan is considered a "living" document to allow for refinement, supplementation, and flexibility as regional efforts evolve over the next five years. The plan prioritizes the three issues identified as most significant to the region from July 1, 2019 to June 30, 2023, provides information on education strategies related to the priority issues, and develops timelines and identified evaluation methods to guide and measure effectiveness. The priority issues identified in the plan do not exclude other awareness and education efforts. The priority issues for the LSP are detailed in the attached strategic plan with the three main pollutants of concern being bacteria, nutrients, and freshwater.

During this reporting period, the LSP completed Year One of the plan on June 30, 2019 and entered Year Two on July 1, 2020. The LSP successfully implemented all programs laid out by Year One and had nearly completed implementing Year Two programs. This puts the consortium ahead of the planned implementation schedule.

Completed Year One programs include:

- 2019 Beaufort Area Stormwater Pond Conference
 - This conference took place on 11/14/19. 75 people attended.
- “Healthy Ponds” workshops
 - We held this workshop, or updated versions of it, once in person and three times virtually. In total, 90 people attended.
- Master Pond Manager course
 - Clemson Extension offered this course once in Fall 2019 and then again in Spring 2020. 66 people attended.
- Soil sampling trainings for homeowners
 - The Carolina Yards program, course, webinar series, and five local workshop series taught residents the importance of soil sampling and how to take a soil sample. 376 people attended these offerings.

- Buffer workshops
 - We held the Keeping Tidal Creeks Clean with Planted Buffers Webinar on 6/30/20. 46 people attended.
- LID workshops for design professionals/municipal staff
 - We helped to host the Using the SC Coastal LID Manual: Online Workshop on 8/19/20. 155 people attended.
- BMP workshops for homeowners
 - We held two rain garden and rainwater harvesting presentations for residents. One took place on 11/21/19 and the other on 2/25/20. In total, 62 people attended.
- Master Rain Gardener
 - One course took place during the reporting period. It trained 32 participants who are awaiting the rescheduled field day to be certified.

Completed Year Two programs include:

- Pet waste pledge
 - The pet waste pledge went live on 8/30/20. Five people have taken the pledge. It is available at <https://mailchi.mp/5585f928a783/pet-waste-pledge>
- Healthy Pond Series
 - The series offered two sessions this year. One on 6/11/20 and the other on 8/20/20. In total, 69 people attended.

- Sediment and Erosion Control training for contractors
 - Eight CEPSCI certification classes took place and 501 of 555 participants earned certifications. Similarly, five CEPSCI re-certification classes took place and 436 of 437 participants earned re-certifications. However, a Beyond the Silt Fence Workshop is being planned for 2021.

In progress Year Two programs include:

- Automatic e-reminder for septic system owners to schedule an inspection
 - The form will be live when the septic system website goes live in November 2020.

- LID Lunch and Learns
 - The implementation of this program is delayed due to COVID-19. Previous iterations of this type of program and their evaluations indicated that an in-person, hands-on training is more effective for the target audience.

South Carolina NPDES Permit # SCR030000

Small Municipal Separate Storm Sewer System (SMS4)

Annual Report Template

These programs were more successful than this shortlist can describe, though. The 2019 Beaufort Area Stormwater Pond Conference is a perfect example of this concept. The Lowcountry Stormwater Partners addressed the need for training both homeowners and pond management companies on effective stormwater pond management strategies by leveraging its partnerships. We worked with Clemson Extension, the South Carolina SeaGrant Consortium, the South Carolina Department of Natural Resources, and the Ace Basin National Estuarine Research Reserve to conduct the 2019 Beaufort Area Stormwater Pond Conference. This one-day conference featured professional and local speakers who provided hands-on, interactive information about the latest pond management issues and strategies. Seventy-five people attended. The evaluations revealed that 95% of participants thought that the conference was useful, 100% indicated that they gained knowledge, and 89% said that they would implement a practice learned at the event.

Another successful Lowcountry Stormwater Partners program is the Cultivating a Carolina Yard workshop. This program gives a basic overview of the Clemson Extension Carolina Yards program, which teaches homeowners how using simple and effective gardening methods can create a low maintenance yard that works with nature rather than against it. This workshop uses a combination of PowerPoint, lecture, conversation, and hands-on field activities to convey this information and to encourage participants to enroll in the Clemson Extension Carolina Yards course. To produce this workshop, the Lowcountry Stormwater Partners work with local communities and organizations that provide the space and course materials. This year, the Lowcountry Stormwater Partners partnered with the Coffee Ladies group in Port Royal Plantation, the USCB OLLI program in Bluffton, and the USCB OLLI program on Hilton Head Island. The Coffee Ladies group and the USCB OLLI program in Bluffton asked for and received condensed versions of the workshop. Instead of a four-part course, they received a 90-minute training that covered the topics of healthy soils, being wise when you fertilize, right plant/right place, watering wisely, and reducing runoff. The LSP presented to the Bluffton USCB OLLI program on 10/4/19. Thirty-five people attended and filled in an evaluation. 100% of respondents indicated that they found the presentation useful and that they gained knowledge. The LSP then presented to 61 members of the Coffee Ladies group on 1/10/20. No one returned an evaluation. The USCB OLLI program on Hilton Head Island requested the full, four-part course. The workshops took place on 1/30/20, 2/6/20, 2/13/20, and 2/20/20. Twenty people attended the first, 17 people attended the second and third, and 16 people came to the last. We evaluated the course as a whole. 100% of respondents indicated that they found the training useful and that they gained knowledge.

The Lowcountry Stormwater Partners did not rely solely on our standard programs to succeed at providing outreach and involvement opportunities. COVID-19 encouraged us to explore new avenues to get people involved while maintaining social distancing. Once a successful way to involve our audience was growing our social media and online presence. This strategy encouraged citizens to interact with us and begin their projects at home. The LSP Facebook page grew from 254 likes to 293 likes and posted a record 193 times during this reporting period. The growth in our social media presence led to a reach of 16,895. This record level reach spurred our Changing Tides Newsletter listserv to grow from 98 subscribers to 131 subscribers as well. We took advantage of this growth with a targeted video series to involve our audience and encourage them to take action. The Spring Cleaning Your Yard video series is an example of this type of program. The Spring Cleaning your Yard series was a 6-part series of short video clips made in response to the COVID-19 pandemic. The series gave people a task to focus on while spring cleaning and stuck at home. We posted the clips each Wednesday at 1 pm; the agent in charge of the video for the week would be online and be active in the comments in case there were any questions regarding that week's video. The video was posted on the statewide Carolina Clear page and shared from the other consortium pages. The

topics included: gutter maintenance, keeping yard drains clear, healthy septic systems, car maintenance, maintaining pond shorelines, and recycling yard waste. These six videos reached 3,050 people and helped them with their projects. Despite these successes and proven adaptability, the LSP program can improve.

2. Provide an evaluation of where the program needs improvement and explain any actions that will be taken to achieve objectives:

COVID-19 significantly impacted our ability to provide outreach and involvement opportunities in the Hilton Head Urbanized Area. The virus prevented in-person events, large scale events, and closed many businesses and offices in our area. We felt these impacts the most strongly beginning in March and they only lessened during August. However, even after August, many of our partners could only operate in a limited capacity. This meant that we experienced “normal” operations for five-months out of a twelve-month reporting period. Three of those “normal months” (November, December, and January) are holiday months that typically see the lowest program engagement numbers of the year. However, the LSP preserved and met the goals outlined in the 2019-2023 Lowcountry Stormwater Partner Stormwater Outreach Strategic Plan as well as continued to increase its number of impacts.

That being said, there are two areas in which the LSP can improve. One is youth outreach and the other is professional outreach. Youth outreach numbers plummeted this year due to COVID-19. This demographic is an incredibly important part of our outreach strategy, as encouraging water-positive behaviors in youth can encourage water-positive behaviors in adults. It also affords us greater visibility in the community and helps us make stronger connections with an adult audience. To improve outreach numbers, the LSP is partnering with Beaufort County 4-H to create a 4-H20 Ambassador program in which youth perform service projects based upon the 4-H20 curriculum. Similarly, our other partners are creating virtual lessons, at home activities, and kid-friendly webinars to engage this audience.

Similarly, our ability to engage professional audience with LID workshops was limited due to COVID-19 restrictions. The LID lunch and learn program was meant to fill this role, but the implementation of this program was delayed due to COVID-19. Previous iterations of this type of program and their evaluations indicated that an in-person, hands-on training is more effective for the target audience. With restrictions on in-person events and an overwhelming amount of LID and BMP webinars being created by manufacturers throughout the summer, this program was tabled until 2021. Similarly, future field days for professional LID courses like Master Rain Gardener and Master Pond Manager are postponed until 2021. Once in-person trainings become feasible, these programs will come online and resolve this issue. In the meantime, the LSP is planning to launch its LID lunch and learns in a webinar format in 2021 with virtual field components to serve this need.



MEMORANDUM

Date: November 10, 2020

To: Stormwater Management Utility Board

From: Matthew Rausch, Stormwater Infrastructure Superintendent

Re: **Maintenance Project Report**

This report will cover four major and seven minor projects. The Project Summary Reports are attached.

Major Project:

- **Hawkes Road Channel – Bluffton (SWUD 4):** This project improved 1,111 feet of drainage system. The scope of work included removing trees from workshelf, grubbing and clearing 1,111 of workshelf, installing five bleeder pipes and hydroseeding for erosion control. The total cost was **\$102,484.12**.
- **Pine Grove Road Channel – Port Royal Island (SWUD 6):** This project improved 2,785 feet of drainage system. The scope of work included grubbing and clearing 2,785 feet of workshelf, cleaning out 1,650 feet of channel, installing two bleeder pipes, one access pipe and one access gate. The total cost was **\$84,523.38**.
- **Bluffton Administration Pond – Bluffton (SWUD 4):** The scope of work included clearing the perimeter of the pond and hydroseeding for erosion control. The total cost was **\$35,955.62**.
- **Sea Pines Drive – St. Helena Island (SWUD 8):** This project improved 3,277 feet of drainage system. The scope of work included cleaning out 3,277 feet of roadside ditch, installing one driveway pipe and hydroseeding for erosion control. The total cost was **\$15,278.38**.

Minor or Routine Projects:

- **St. Helena Island Bush Hog – St. Helena Island (SWUD 8):** This project improved 93,678 feet of drainage system. The scope of work bush hogging 88,890 feet of channel and 4,788 feet of roadside ditch. The total cost was **\$67,514.55**.
- **Bluffton Parkway – Bluffton (SWUD 4):** The scope of work included dewatering road, cleaning out 2 catch basins and jetting 1 crossline pipe. The total cost was **\$5,178.20**.
- **Baynard Road and Dogwood Street – Port Royal Island (SWUD 9):** This project improved 992 feet of drainage system. The scope of work included cleaning out 992 feet of roadside ditch, jetting 2 crossline pipes and 5 driveway pipes. The total cost was **\$4,966.56**.

- **Bluffton Sinkhole Repair – Bluffton (SWUD 4):** The scope of work included repairing 2 sinkhole. The total cost was **\$3,986.51**.
- **Sheldon Valley Drains – Sheldon (SWUD 5):** This project improved 3,689 feet of drainage system. The scope of work included cleaning 3,689 feet of valley drains. The total cost was **\$1,439.88**.



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Hawkes Road Channel

Activity: Drainage Improvement

Duration: 01/29/20-03/16/20

Narrative Description of Project:

Project improved 1,111 L.F. of drainage system. Removed trees from workshelf. Grubbed and cleared 1,111 of workshelf. Installed (5) bleeder pipes. Hydroseeded for erosion control.

2020-027 / Hawkes Road Channel	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	3.0	\$65.37	\$0.00	\$0.00	\$0.00	\$0.00	\$65.37
BPINST / Bleeder pipe - Installed	167.0	\$3,435.75	\$1,110.14	\$773.27	\$0.00	\$1,872.42	\$7,191.58
DEBREM / Debris Removal - Jobsite	130.0	\$2,701.90	\$1,393.73	\$153.13	\$0.00	\$1,314.50	\$5,563.26
HAUL / Hauling	514.0	\$12,085.39	\$7,470.26	\$10,520.08	\$0.00	\$2,206.26	\$32,281.99
HYDR / Hydroseeding	50.0	\$1,020.15	\$138.07	\$912.15	\$0.00	\$447.75	\$2,518.12
NONPRO / Non-Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$42,500.00	\$0.00	\$42,500.00
RMTRW / Remove trees - Workshelf	134.0	\$2,794.68	\$1,003.95	\$206.14	\$0.00	\$1,445.04	\$5,449.81
TC / Traffic Control - Jobsite	20.0	\$415.20	\$19.45	\$85.71	\$0.00	\$259.50	\$779.86
WSDR / Workshelf - Dressed	40.0	\$820.50	\$317.34	\$118.70	\$0.00	\$386.70	\$1,643.24
WSGRB / Workshelf - Grubbed	90.0	\$1,859.40	\$1,248.31	\$223.08	\$0.00	\$1,160.10	\$4,490.89
2020-027 / Hawkes Road Channel Sub Total	1,148.0	\$25,198.34	\$12,701.25	\$12,992.26	\$42,500.00	\$9,092.27	\$102,484.12
Grand Total	1,148.0	\$25,198.34	\$12,701.25	\$12,992.26	\$42,500.00	\$9,092.27	\$102,484.12

Before

(No Picture Available)

During

(No Picture Available)

Ending





Project: Hawkes
Road Channel

Activity: Drainage
Improvement

Project #:
2020-027

Township/SW Dist:
Bluffton/4

Completed:
March 2020

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 80 160 320 480 640
Feet

1 inch = 330 feet

Prepared By: BC Stormwater Management Utility

Date Print: 10/10/20

File: C:\project summaries map\Hawkes Road Channel_2020-027



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Pine Grove Road Channel

Activity: Drainage Improvement

Duration: 01/29/20-05/19/20

Narrative Description of Project:

Project improved 2,785 L.F. of drainage system. Grubbed and cleared 2,785 L.F. of workshelf. Cleaned out 1,650 L.F. of channel. Installed (2) bleeder pipes, (1) access pipe and (1) access gate.

2020-023 / Pine Grove Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AGI / Access Gate - Installed	45.0	\$920.95	\$142.17	\$583.60	\$0.00	\$387.55	\$2,034.27
APINS / Access pipe - installed	40.0	\$848.55	\$157.59	\$783.23	\$0.00	\$386.70	\$2,176.07
AUDIT / Audit Project	3.0	\$65.37	\$0.00	\$0.00	\$0.00	\$0.00	\$65.37
BPINST / Bleeder pipe - Installed	12.0	\$247.92	\$205.24	\$306.60	\$0.00	\$154.68	\$914.44
CCO / Channel - cleaned out	90.0	\$1,859.40	\$854.18	\$108.92	\$0.00	\$1,160.10	\$3,982.60
DEBREM / Debris Removal - Jobsite	409.0	\$8,921.63	\$6,208.14	\$676.55	\$0.00	\$4,847.10	\$20,653.42
HAUL / Hauling	563.0	\$12,770.19	\$8,500.00	\$12,097.41	\$0.00	\$3,477.20	\$36,844.79
LM / Loading Materials	6.0	\$122.76	\$53.74	\$0.00	\$0.00	\$76.32	\$252.82
STAGING / Staging Materials/Equipment	7.0	\$148.41	\$58.04	\$7.00	\$0.00	\$48.84	\$262.29
WSGRB / Workshelf - Grubbed	300.0	\$6,180.00	\$6,030.10	\$591.36	\$0.00	\$3,851.70	\$16,653.16
WSL / Workshelf - Level	20.0	\$410.25	\$61.85	\$18.70	\$0.00	\$193.35	\$684.15
2020-023 / Pine Grove Road Sub Total	1,495.0	\$32,495.43	\$22,271.05	\$15,173.37	\$0.00	\$14,583.54	\$84,523.38
Grand Total	1,495.0	\$32,495.43	\$22,271.05	\$15,173.37	\$0.00	\$14,583.54	\$84,523.38

Before

(No Picture Available)

During



Ending

(No Picture Available)



Project: Pine Grove
Road Channel
Map #1

Activity: Drainage
Improvement

Project #:
2020-023

Township/SW Dist:
Port Royal Island/6

Completed:
May 2020

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 60 120 240 360 480
Feet

1 inch = 250 feet

Prepared By: BC Stormwater Management Utility

Date Print: 10/10/20

File: C:\project summaries map\Pine Grove Road Channel Map #1_2020-023



Project: Pine Grove
Road Channel
Map #2

Activity: Drainage
Improvement

Project #:
2020-023

Township/SW Dist:
Port Royal Island/6

Completed:
May 2020

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 60 120 240 360 480
Feet

1 inch = 250 feet

Prepared By: BC Stormwater Management Utility

Date Print: 10/10/20

File: C:\project summaries map\Pine Grove Road Channel Map #2_2020-023



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Pond Maintenance - Bluffton Administration Pond

Activity: Pond Maintenance

Duration: 01/09/20-03/17/20

Narrative Description of Project:

Grubbed and cleared perimeter of pond. Hydroseeded for erosion control.

2020-321A / Pond Maintenance	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	2.0	\$43.58	\$0.00	\$0.00	\$0.00	\$0.00	\$43.58
HAUL / Hauling	232.0	\$5,529.64	\$3,285.12	\$3,637.23	\$0.00	\$1,052.66	\$13,504.65
HYDR / Hydroseeding	50.0	\$1,069.46	\$290.64	\$2,830.27	\$0.00	\$470.64	\$4,661.01
PGC / Pond - Grubb and Clear	318.5	\$7,700.63	\$1,907.68	\$458.94	\$0.00	\$3,179.65	\$13,246.90
PM / Ponds - Maintenance	108.0	\$2,671.24	\$615.65	\$234.35	\$0.00	\$978.24	\$4,499.48
2020-321A / Pond Maintenance Sub Total	710.5	\$17,014.55	\$6,099.09	\$7,160.79	\$0.00	\$5,681.19	\$35,955.62
Grand Total	710.5	\$17,014.55	\$6,099.09	\$7,160.79	\$0.00	\$5,681.19	\$35,955.62

(No Pictures Available)



Project: Pond
Maintenance-
Bluffton Admin
Pond

Activity: Pond
Maintenance

Project #:
2020-321A

Township/SW Dist:
Bluffton/4

Completed:
March 2020

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 50 100 200 300 400
Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print:09/17/20

File:C:\project summaries map\Pond Maintenance-Bluffton Admin Pond_2020-321A



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Sea Pines Drive

Activity: Routine/Preventive Maintenance

Duration: 06/01/20-06/11/20

Narrative Description of Project:

Project improved 3,277 L.F. of drainage system. Cleaned out 3,277 L.F. of roadside ditch. Installed (1) driveway pipe. Hydroseeded for erosion control.

2020-046 / Sea Pines Drive

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$21.79	\$0.00	\$0.00	\$0.00	\$0.00	\$21.79
DPINS / Driveway Pipe - Installed	20.0	\$409.20	\$183.95	\$714.06	\$0.00	\$254.40	\$1,561.61
HAUL / Hauling	104.0	\$2,352.08	\$1,472.64	\$493.62	\$0.00	\$778.68	\$5,097.02
HYDR / Hydroseeding	40.0	\$818.40	\$118.62	\$1,622.72	\$0.00	\$508.80	\$3,068.54
RSDCL / Roadside Ditch - Cleanout	140.0	\$2,868.60	\$779.81	\$211.66	\$0.00	\$1,536.60	\$5,396.67
UC / Utility Coordination	3.5	\$86.45	\$0.00	\$0.00	\$0.00	\$46.31	\$132.76
2020-046 / Sea Pines Drive Project Sub Total	308.5	\$6,556.52	\$2,555.02	\$3,042.06	\$0.00	\$3,124.79	\$15,278.38
Grand Total	308.5	\$6,556.52	\$2,555.02	\$3,042.06	\$0.00	\$3,124.79	\$15,278.38

(No Picture Available)



Project: Sea Pines Drive

Activity: Routine/
Preventive
Maintenance

Project #:
2020-046

Township/SW Dist:
St. Helena Island/8

Completed:
June 2020

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 80 160 320 480 640
Feet

1 inch = 330 feet

Prepared By: BC Stormwater Management Utility
Date Print: 09/09/20
File: C:\project summaries map\Sea Pines Drive_2020-046



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: St. Helena Island Bush Hog

Activity: Routine/Preventive Maintenance

Duration: 12/12/19-06/25/20

Narrative Description of Project:

Second Rotation: 12/12/19-06/25/20 Project improved 93,678 L.F. of drainage system. Bush hogged 88,890 L.F. of channel and 4,788 L.F. of roadside ditch. This project consisted of the following areas: Faith Memorial Church (1,781 L.F.), Orange Grove Road (1,826 L.F.), Thompson Estate Circle (1,168 L.F.), James D Washington Road ((396 L.F.), Jack Johnson Drive (1,404 L.F.), Bridgewood Road (1,550 L.F.), Storyteller Road (1,582 L.F.), Sycamore Street (1,438 L.F.), David Green Road (936 L.F.), Capers Island Road (544 L.F.), Scott Ball Field (3,100 L.F.), Candy Johnson Drive (646 L.F.), Scott Hill Road (5,594 L.F.), Peaches Hill Circle (6,352 L.F.), Wiggfall Road (1,000 L.F.), Adam Church (300 L.F.), Cuffy Drop Off Center (700 L.F.), No Man Land Road (800 L.F.), Toomer Road (2,881 L.F.), Tombee Road (1,400 L.F.), Archer Fields Lane (1,600 L.F.), Kelis Lane (6,680 L.F.), Ephraim Road (3,062 L.F.), White Sands Circle (6,036 L.F.), Luther Warren Drive (695 L.F.), Ladson Road (1,250 L.F.), Seaside Road (200 L.F.), Folly Road (2,156 L.F.), Simmons Road (2,830 L.F.), Jehovah Church (1,012 L.F.), Nathan Pope Rope (5,104 L.F.), Langford Road (604 L.F.), Cee Cee Road (1,538 L.F.), Cee Cee Drop Off Center (430 L.F.), Shed Road (1,238 L.F.), Dulamo Road (264 L.F.), Hickory Hill Road (550 L.F.), Bible Camp Road (2,720 L.F.), Tom Fripp Road (960 L.F.), Halifax Drive (5,716 L.F.), Polowana Road (700 L.F.), Highway 21 Dropp Off Center (3,416 L.F.), Freda Lane (1,100 L.F.), James Grant Road (2,716 L.F.), Mattis Drive (1,691 L.F.), Major Road (2,480 L.F.), Warsaw Island Road (1,532 L.F.)

2020-300A / St Helena Bush hog 2020-300A

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	3.0	\$65.37	\$0.00	\$0.00	\$0.00	\$0.00	\$65.37
CBH / Channel- bushhogged	1397.0	\$31,247.52	\$12,467.97	\$1,860.23	\$0.00	\$18,344.24	\$63,919.95
HAUL / Hauling	18.0	\$417.25	\$554.24	\$86.18	\$0.00	\$32.94	\$1,090.61
RDBH / Roadside ditch - bushhogged	50.0	\$1,114.13	\$522.45	\$85.04	\$0.00	\$717.00	\$2,438.62
2020-300A / St Helena Bush Hog Project Sub Total	1,468.0	\$32,844.27	\$13,544.66	\$2,031.45	\$0.00	\$19,094.18	\$67,514.55
Grand Total	1,468.0	\$32,844.27	\$13,544.66	\$2,031.45	\$0.00	\$19,094.18	\$67,514.55

Before



During



After





Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Bluffton Parkway

Activity: Routine/Preventive Maintenance

Duration: 03/05/20-04/20/20

Narrative Description of Project:

Dewatered road. Cleaned out (2) catch basins. Jetted (1) crossline pipe.

2020-035 / Bluffton Parkway

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$21.79	\$0.00	\$0.00	\$0.00	\$0.00	\$21.79
CLPJT / Crossline Pipe - Jetted	20.0	\$441.90	\$383.20	\$95.49	\$0.00	\$164.70	\$1,085.29
DWR / Dewatered Road	105.0	\$2,285.85	\$806.60	\$175.88	\$0.00	\$802.80	\$4,071.12
2020-035 / Bluffton Parkway Sub Total	126.0	\$2,749.54	\$1,189.80	\$271.37	\$0.00	\$967.50	\$5,178.20
Grand Total	126.0	\$2,749.54	\$1,189.80	\$271.37	\$0.00	\$967.50	\$5,178.20

(No Pictures Available)



Project: Bluffton
Parkway

Activity: Routine/
Preventive
Maintenance

Project #:
2020-035

Township/SW Dist:
Bluffton/4

Completed:
April 2020

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 60 120 240 360 480
Feet

1 inch = 250 feet

Prepared By: BC Stormwater Management Utility
Date Print: 09/17/20
File: C:\project summaries map\Bluffton Parkway_2020-035



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Baynard Road and Dogwood Street

Activity: Routine/Preventive Maintenance

Duration: 02/13/20-03/02/20

Narrative Description of Project:

Project improved 992 L.F. of drainage system. Cleaned out 992 L.F. of roadside ditch. Jetted (2) crossline pipes and (5) driveway pipes.

2020-030 / Baynard Road & Dogwood Street	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$21.79	\$0.00	\$0.00	\$0.00	\$0.00	\$21.79
DPJT / Driveway Pipe - Jetted	15.0	\$320.25	\$211.05	\$41.68	\$0.00	\$143.40	\$716.38
HAUL / Hauling	14.0	\$321.86	\$198.24	\$42.20	\$0.00	\$0.00	\$562.30
RSDCL / Roadside Ditch - Cleanout	97.0	\$2,078.13	\$331.40	\$74.04	\$0.00	\$594.00	\$3,077.57
RSPJ / Roadside Pipe - Jetted	20.0	\$412.05	\$62.39	\$10.00	\$0.00	\$66.15	\$550.59
UTLOC / Utility locates	1.0	\$24.70	\$0.00	\$0.00	\$0.00	\$13.23	\$37.93
2020-030 / Baynard Road & Dogwood Street Sub Total	148.0	\$3,178.78	\$803.08	\$167.92	\$0.00	\$816.78	\$4,966.56
Grand Total	148.0	\$3,178.78	\$803.08	\$167.92	\$0.00	\$816.78	\$4,966.56

(No Picture Available)



Project: Dogwood Street and Baynard Road

Activity: Routine/ Preventive Maintenance

Project #: 2020-030

Township/SW Dist: Port Royal Island/9

Completed: March 2020

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 40 80 160 240 320
Feet

1 inch = 170 feet

Prepared By: BC Stormwater Management Utility

Date Print: 09/17/20

File: C:\project summaries map\Dogwood Street and Baynard Road_2020-030



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Bluffton Sinkhole Repair - Wentworth Drive

Activity: Routine/Preventive Maintenance

Duration: 02/04/20-06/10/20

Narrative Description of Project:

Repaired (2) sinkholes.

2020-319 / Bluffton Sinkhole Repair	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$21.79	\$0.00	\$0.00	\$0.00	\$0.00	\$21.79
CBIN / Catch basin - inspected	6.0	\$132.57	\$114.96	\$13.21	\$0.00	\$49.41	\$310.15
HAUL / Hauling	10.0	\$226.30	\$141.60	\$45.35	\$0.00	\$72.10	\$485.35
SR / Sinkhole repair	87.0	\$1,818.43	\$472.67	\$220.89	\$0.00	\$657.24	\$3,169.22
2020-319 / Bluffton Sinkhole Repair Sub Total	104.0	\$2,199.09	\$729.23	\$279.44	\$0.00	\$778.75	\$3,986.51
Grand Total	104.0	\$2,199.09	\$729.23	\$279.44	\$0.00	\$778.75	\$3,986.51

(No Picture Available)



Project: Bluffton
Washout Repair-
Wentworth Drive

Activity: Routine/
Routine Preventive/
Maintenance














Project #:
2020-319

Township/SW Dist:
Bluffton/4

Completed:
June 2020

Legend

Drainage Type

-  Access Pipe
-  Bleeder Pipe
-  Channel Pipe
-  Channel
-  Stream
-  Crossline Pipe
-  Driveway Pipe
-  Lateral
-  Lateral Pipe
-  River
-  Road Pipe
-  Roadside
-  Roadside Pipe

0 20 40 80 120 160
Feet

1 inch = 83 feet

Prepared By: BC Stormwater Management Utility

Date Print: 09/17/20

File: C:\project summaries map\Bluffton Washout Repair- Wentworth Drive_2020-038



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Sheldon Valley Drains - River Oaks Road

Activity: Routine/Preventive Maintenance

Duration: 04/21/20

Narrative Description of Project:

Project improved 3,689 L.F. of drainage system. Cleaned 3,689 L.F. of valley drains. This project consisted of the following area: River Oaks Road (3,689 L.F.)

2020-315 / Sheldon Valley Drains

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
HAUL / Hauling	10.0	\$229.90	\$141.60	\$33.00	\$0.00	\$0.00	\$404.50
COVD / Cleaned Out Valley Drains	20.0	\$421.20	\$256.80	\$81.88	\$0.00	\$264.60	\$1,024.48
2020-315 / Sheldon Valley Drains Sub Total	30.5	\$662.00	\$398.40	\$114.88	\$0.00	\$264.60	\$1,439.88
Grand Total	30.5	\$662.00	\$398.40	\$114.88	\$0.00	\$264.60	\$1,439.88

Before



During



Ending





Project: Sheldon
Valley Drains - River
Oaks Road

Activity: Routine/
Preventive
Maintenance

Project #:
2020-315

Township/SW Dist:
Sheldon/5

Completed:
April 2020

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 120 240 480 720 960
Feet

1 inch = 500 feet

Prepared By: BC Stormwater Management Utility

Date Print: 09/21/20

File: C:\project summaries map\Sheldon Valley Drains - River Oaks Road_2020-315



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: St. Helena Island Washout/Sinkhole Repair - Tombee Road and Folly Road

Activity: Routine/Preventive Maintenance

Duration: 06/03/20-06/24/20

Narrative Description of Project:

Repaired (1) sinkhole and (1) washout.

2020-316A / St. Helena Island Washout /Sinkhole Repair	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$21.79	\$0.00	\$0.00	\$0.00	\$0.00	\$21.79
HAUL / Hauling	3.0	\$66.81	\$42.48	\$27.29	\$0.00	\$43.26	\$179.84
RPWO / Repaired Washout	6.0	\$122.76	\$31.30	\$10.88	\$0.00	\$76.32	\$241.26
SD / Soft Digging	8.0	\$184.48	\$34.72	\$22.90	\$0.00	\$48.84	\$290.94
SR / Sinkhole repair	12.0	\$243.96	\$29.96	\$194.83	\$0.00	\$101.76	\$570.51
2020-316A / St. Helena Island Washout /Sinkhole Repair Sub Total	30.0	\$639.80	\$138.46	\$255.90	\$0.00	\$270.18	\$1,304.34
Grand Total	30.0	\$639.80	\$138.46	\$255.90	\$0.00	\$270.18	\$1,304.34

(No Picture Available)



Project: St. Helena
Island Washout /
Sinkhole Repair-
Tombee Road
Map #1

Activity: Routine/
Preventive
Maintenance

Project #:
2020-316A

Township/SW Dist:
St. Helena Island/8

Completed:
June 2020

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 120 240 480 720 960
Feet

1 inch = 500 feet

Prepared By: BC Stormwater Management Utility

Date Print: 09/09/20

File: C:\project summaries map\SHI Washout/Sinkhole Repair- Tombee Road Map #1_2020-316A



Project: St. Helena
Island Washout/
Sinkhole Repair-
Folly Road
Map #2

Activity: Routine/
Preventive
Maintenance














Project #:
2020-316A

Township/SW Dist:
St. Helena Island/8

Completed:
June 2020

Legend

Drainage Type

-  Access Pipe
-  Bleeder Pipe
-  Channel Pipe
-  Channel
-  Stream
-  Crossline Pipe
-  Driveway Pipe
-  Lateral
-  Lateral Pipe
-  River
-  Road Pipe
-  Roadside
-  Roadside Pipe

0 20 40 80 120 160
Feet

1 inch = 83 feet

Prepared By: BC Stormwater Management Utility

Date Print:09/09/20

File:C:\project summaries map/SHI Washout/Sinkhole Repair- Folly Road_2020-316A



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Powell Drive

Activity: Routine/Preventive Maintenance

Duration: 07/16/20-07/17/20

Narrative Description of Project:

Project improved 500 L.F. of drainage system. Cleaned out 500 L.F. of channel.

2021-504 / Powell Dirve	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$21.79	\$0.00	\$0.00	\$0.00	\$0.00	\$21.79
CCO / Channel - cleaned out	25.0	\$611.58	\$140.34	\$26.51	\$0.00	\$336.00	\$1,114.43
2021-504 / Powell Dirve Project Sub Total	26.0	\$633.37	\$140.34	\$26.51	\$0.00	\$336.00	\$1,136.22
Grand Total	26.0	\$633.37	\$140.34	\$26.51	\$0.00	\$336.00	\$1,136.22

(No Picture Available)



Project: Powell Drive

Activity: Routine/
Preventive
Maintenance

Project #:
2021-504

Township/SW Dist:
Port Royal Island/6

Completed:
July 2020

Legend

Drainage Type

- Access Pipe
- Bleeder Pipe
- Channel Pipe
- Channel
- Stream
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- River
- Road Pipe
- Roadside
- Roadside Pipe

0 40 80 160 240 320
Feet

1 inch = 170 feet

Prepared By: BC Stormwater Management Utility
Date Print: 10/6/20
File: C:\project summaries map\Powell Drive_2021-504



MALIND BLUFF DEVELOPMENT

Beaufort County



Plan Review

- Broken into two phases, Conceptual and Final
- Applicant must address construction (sediment and erosion control) and permanent BMP's
- This includes a Comprehensive Stormwater Pollution Prevention Plan with hydrology reports and contaminant worksheets, Soil Types, Flood Plains, and much more
- Beaufort County Staff provide feedback at all stages of the review process to ensure compliance with regulations

Conceptual Review

- Reviewed for the following BMP's and Features
 - *Silt Fencing*
 - *Concrete Washout Areas*
 - *Inlet protection*
 - *Dust Control/Sweeping*
 - *Permanent/Temporary Seeding for bank stabilization*
 - *Construction Entrance*
 - *Reasonable layout of permanent BMP's and conveyance systems*
 - *BMP Maintenance Agreement*
- If all items submitted meet Beaufort County standards, Beaufort County will issue a conceptual MS4 approval
 - *This allows applicant to begin applying for any State and Federal permits required for the project*
 - *This does NOT allow for site work to begin*

The goal at this stage is to insure construction will not cause sedimentation, erosion or pollution issues to receiving waterbodies

Final Review

- Anywhere from a few weeks to 6+ months between reviews
 - *Looking to ensure all previous comments were addressed*
- Plans and Information are reviewed for the following
 - *Properly Designed Permanent BMP's to address the County's water quantity and quality requirements*
 - *A C-SWPPP with a detailed scope of stormwater management and sediment control, possible sources of pollution and how to address them, inspection and maintenance requirements, drainage maps, engineering reports with rainfall run-off calculations for the 2yr, 10 yr, 25 yr, 50, 100yr, and 95th percentile storms, to name a few things*
 - *Demonstration that the post-development property will discharge less than or equal to the same amount of water as the pre-development property did as well as meeting our nutrient pollutant load requirements.*

Example of a Plan Submission



- Here is an example of a standard final application packet for a residential subdivision.
- This contains over 300 pages of drawings, vicinity maps, permits, floods maps, surveys and a drainage report

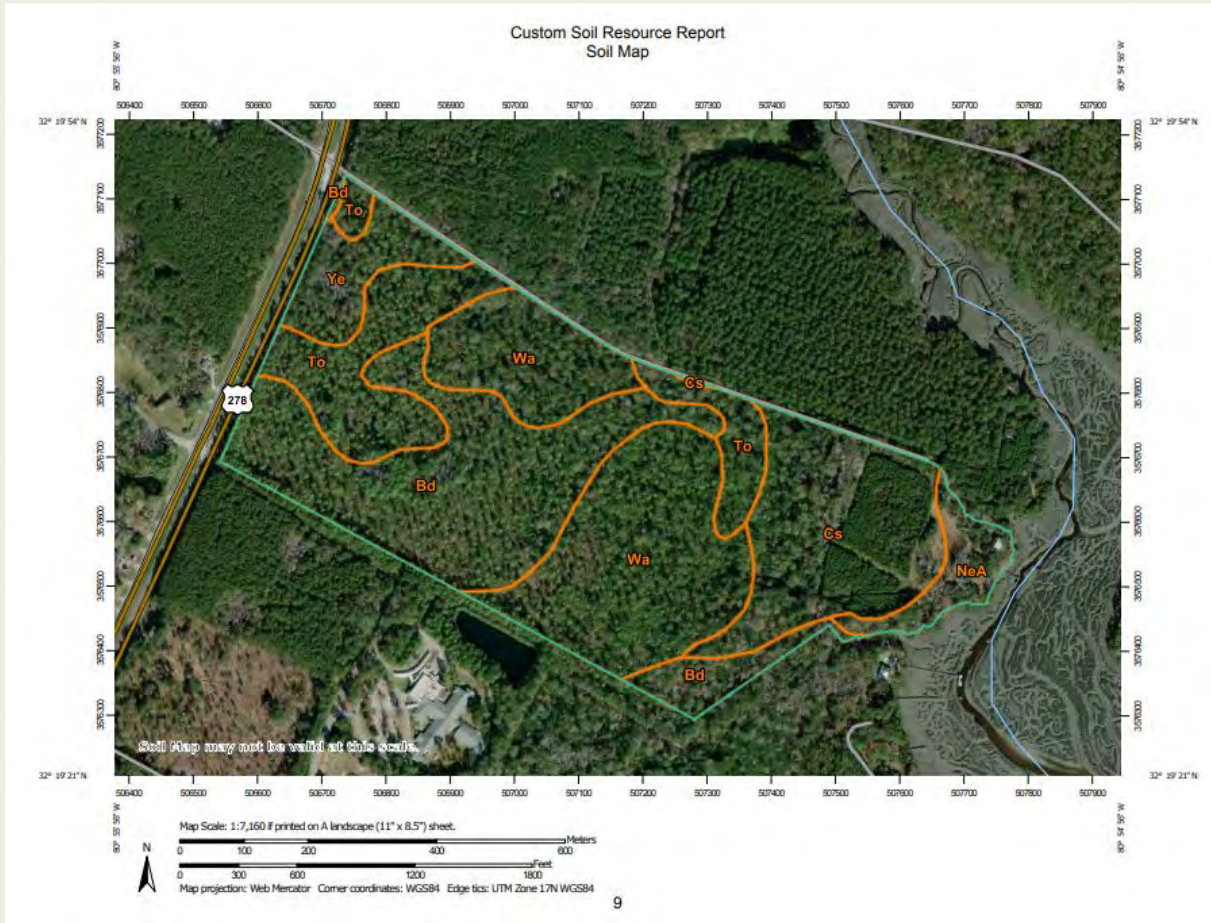
Drainage Report Information

ICPR - Hydraulics

Name	Group	Simulation	Max Time Stage hrs	Max Stage ft	Warning Stage ft	Max Delta Stage ft	Max Surf Area ft2	Max Time Inflow hrs	Max Inflow cfs	Max Time Outflow hrs	Max Outflow cfs
JB-COM	BASE	002	12.80	13.84	16.00	0.0023	248	12.50	19.77	12.50	19.68
JB-ENTRNC	BASE	002	12.34	13.77	16.00	0.0020	167	12.25	7.88	12.25	7.76
JB2	BASE	002	12.53	13.45	16.00	-0.0066	192	12.36	18.64	12.44	18.71
JB3	BASE	002	12.39	13.52	16.00	-0.0029	204	12.25	11.95	12.25	11.83
JB4	BASE	002	12.45	13.44	16.00	0.0015	186	12.26	8.66	12.26	8.57
PND-1	BASE	002	12.85	13.80	16.00	0.0021	83727	12.33	71.08	12.50	26.69
PND-2	BASE	002	13.05	13.50	16.00	0.0016	164374	12.32	74.29	13.15	32.30
PND-3	BASE	002	12.48	13.49	16.00	0.0016	22505	12.25	24.46	12.42	14.83
PND-4	BASE	002	12.54	13.37	15.00	0.0013	68284	12.33	54.64	12.54	40.36
PND-5	BASE	002	12.95	13.33	16.00	0.0014	62452	12.33	39.87	12.95	32.90
PRE-BNDY-1	BASE	002	0.00	12.00	13.00	0.0000	0	12.75	109.20	0.00	0.00
PST-BNDY-1	BASE	002	0.00	12.00	13.00	0.0000	0	12.62	77.45	0.00	0.00
JB-COM	BASE	010	12.74	15.45	16.00	0.0032	248	12.50	37.78	12.50	37.62
JB-ENTRNC	BASE	010	12.27	15.37	16.00	-0.0034	167	12.25	13.27	12.26	13.10
JB2	BASE	010	12.54	14.24	16.00	-0.0066	192	12.42	40.41	12.42	40.39
JB3	BASE	010	12.34	14.56	16.00	-0.0029	204	12.25	20.15	12.25	20.01
JB4	BASE	010	12.34	14.21	16.00	-0.0020	186	12.26	15.28	12.26	15.19
PND-1	BASE	010	12.84	15.31	16.00	0.0027	88567	12.33	124.21	12.97	48.10
PND-2	BASE	010	12.99	14.30	16.00	0.0015	168163	12.32	120.66	13.16	61.43
PND-3	BASE	010	12.44	14.40	16.00	-0.0023	24357	12.25	40.75	12.46	26.49
PND-4	BASE	010	12.45	13.86	15.00	0.0012	69682	12.33	111.60	12.45	99.07
PND-5	BASE	010	12.50	13.74	16.00	0.0011	63646	12.33	84.40	12.50	73.68
PRE-BNDY-1	BASE	010	0.00	12.00	13.00	0.0000	0	12.75	210.24	0.00	0.00
PST-BNDY-1	BASE	010	0.00	12.00	13.00	0.0000	0	12.46	187.93	0.00	0.00
JB-COM	BASE	025	12.73	16.49	16.00	0.0029	248	12.50	49.33	12.50	49.13
JB-ENTRNC	BASE	025	12.27	16.57	16.00	-0.0048	167	12.25	16.61	12.26	16.39
JB2	BASE	025	12.42	14.69	16.00	-0.0069	192	12.42	51.62	12.42	51.61
JB3	BASE	025	12.33	15.24	16.00	-0.0029	204	12.25	25.20	12.26	25.03
JB4	BASE	025	12.34	14.68	16.00	-0.0021	186	12.26	19.16	12.27	19.08
PND-1	BASE	025	12.86	16.24	16.00	0.0027	91578	12.33	157.57	13.04	58.80
PND-2	BASE	025	13.02	14.74	16.00	0.0013	170248	12.33	147.95	13.19	74.60
PND-3	BASE	025	12.44	14.95	16.00	-0.0030	25468	12.25	51.04	12.48	33.88
PND-4	BASE	025	12.43	14.07	15.00	-0.0010	70279	12.33	143.54	12.43	129.99
PND-5	BASE	025	12.45	13.82	16.00	0.0009	64162	12.33	108.22	12.45	99.02
PRE-BNDY-1	BASE	025	0.00	12.00	13.00	0.0000	0	12.75	275.22	0.00	0.00
PST-BNDY-1	BASE	025	0.00	12.00	13.00	0.0000	0	12.43	249.87	0.00	0.00
JB-COM	BASE	050	12.71	17.17	16.00	0.0049	248	12.50	59.39	12.50	59.16
JB-ENTRNC	BASE	050	12.27	17.68	16.00	0.0050	167	12.25	19.49	12.26	19.22
JB2	BASE	050	12.42	15.00	16.00	0.0061	178	12.35	56.39	12.35	56.32
JB3	BASE	050	12.33	15.82	16.00	-0.0034	204	12.25	29.57	12.26	29.35
JB4	BASE	050	12.34	15.07	16.00	0.0021	186	12.26	22.42	12.26	22.31
PND-1	BASE	050	12.90	16.85	16.00	0.0025	93490	12.33	186.45	13.03	65.07
PND-2	BASE	050	12.69	14.55	16.00	0.0010	169392	12.33	139.71	13.02	102.32
PND-3	BASE	050	12.44	15.36	16.00	-0.0031	26306	12.25	59.96	12.50	40.51
PND-4	BASE	050	14.31	15.00	15.00	-0.0012	70973	12.33	172.83	12.48	149.29
PND-5	BASE	050	12.42	14.00	16.00	0.0007	64378	12.33	119.42	12.42	109.22
PRE-BNDY-1	BASE	050	0.00	12.00	13.00	0.0000	0	12.75	332.00	0.00	0.00
PST-BNDY-1	BASE	050	0.00	12.00	13.00	0.0000	0	12.43	282.82	0.00	0.00
JB-COM	BASE	100	12.71	18.28	16.00	0.0034	248	12.50	69.45	12.50	69.17
JB-ENTRNC	BASE	100	12.27	19.00	16.00	0.0050	167	12.25	22.36	12.26	22.03
JB2	BASE	100	12.43	15.50	16.00	0.0076	192	12.40	65.64	12.40	65.60
JB3	BASE	100	12.30	16.54	16.00	-0.0028	204	12.25	33.90	12.26	33.64
JB4	BASE	100	12.34	15.56	16.00	-0.0035	186	12.26	25.56	12.26	25.44
PND-1	BASE	100	12.92	17.84	16.00	0.0024	96720	12.33	215.21	13.17	74.43
PND-2	BASE	100	12.09	15.45	16.00	0.0011	173645	12.33	197.86	12.55	97.75
PND-3	BASE	100	12.45	15.92	16.00	-0.0031	27443	12.25	68.95	12.50	43.39
PND-4	BASE	100	12.45	14.51	15.00	-0.0013	71536	12.31	190.00	12.45	162.73
PND-5	BASE	100	12.43	14.19	16.00	0.0005	64926	12.33	145.68	12.43	133.87
PRE-BNDY-1	BASE	100	0.00	12.00	13.00	0.0000	0	12.75	388.79	0.00	0.00
PST-BNDY-1	BASE	100	0.00	12.00	13.00	0.0000	0	12.42	325.87	0.00	0.00

170252 - Malind Bluff Full Build Out

Soils information

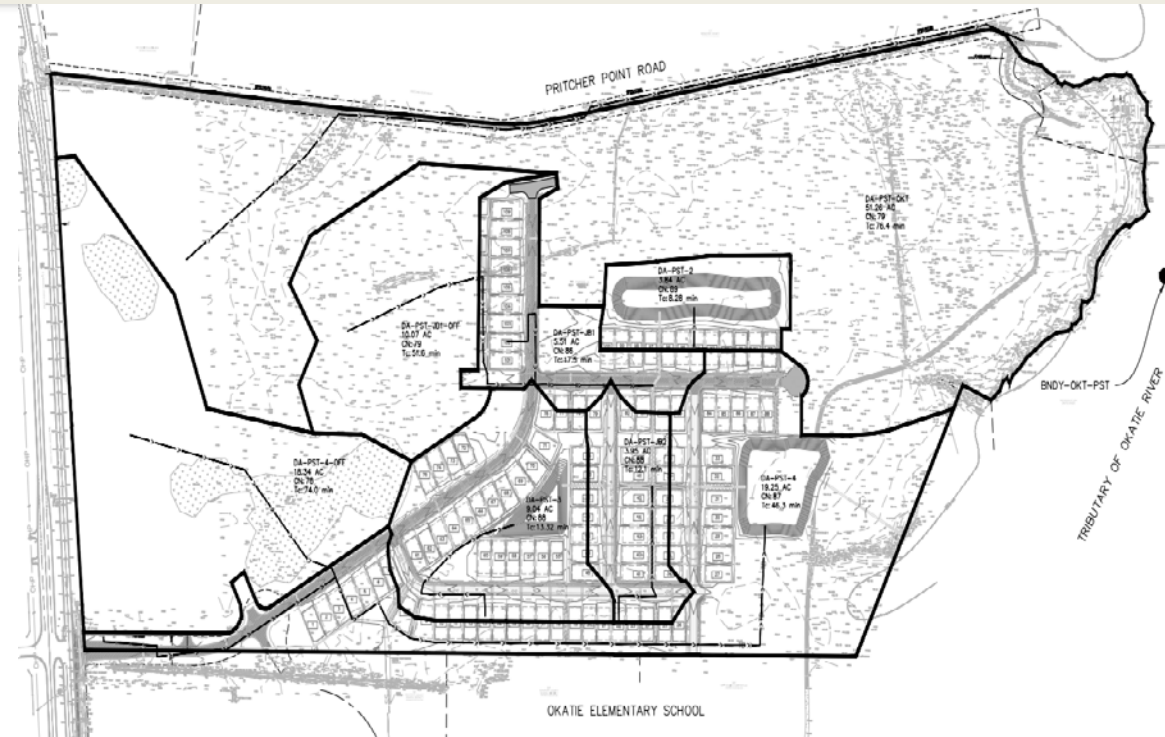
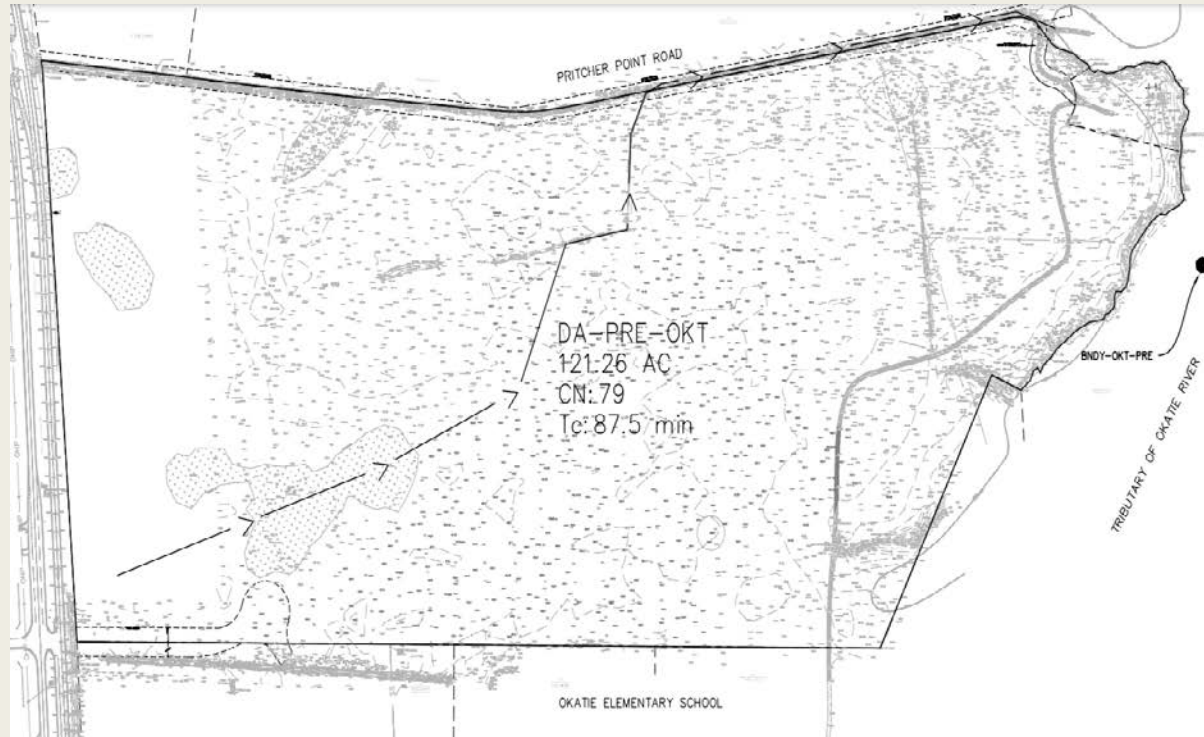


Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Bd	Bladen fine sandy loam	35.0	28.9%
Cs	Coosaw loamy fine sand	21.4	17.7%
NeA	Nemours fine sandy loam, 0 to 2 percent slopes	5.0	4.1%
To	Tomotley loamy fine sand	17.9	14.8%
Wa	Wahee fine sandy loam	35.0	28.9%
Ye	Yemassee loamy fine sand	6.9	5.7%
Totals for Area of Interest		121.2	100.0%

-The soils information is important as it lets us know how well the site will infiltrate stormwater and if certain proposed BMP's will be appropriate for a given development.

Pre vs Post Development Drainage Basins



- These are just 5 of the 30 pages of drainage modelling that were completed for the first phase of Malind Bluff.

Drainage Report Continued

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#2	1	9.038	0.222	0.000	0.000	94.000	TR55	24.03	4.488
	2	3.840	0.138	0.000	0.000	94.000	TR55	10.78	2.011
	3	13.815	0.772	0.000	0.000	94.000	TR55	36.56	7.076
	4	10.070	0.860	0.000	0.000	94.000	TR55	25.89	5.155
	5	18.345	1.233	0.000	0.000	94.000	TR55	41.04	9.387
	6	5.505	0.291	0.000	0.000	94.000	TR55	15.07	2.817
	7	3.951	0.202	0.000	0.000	94.000	TR55	10.94	2.042
	Σ	64.564						156.85	32.976
#1	Σ	64.564						120.77	32.976

Subwatershed Sedimentology Detail:

Stru #	SWS #	Soil K	L (ft)	S (%)	C	P	PS #	Sediment (tons)	Peak Sediment Conc. (mg/l)	Peak Settleable Conc. (ml/l)	24VW (ml/l)
#2	1	0.370	1.00	1.00	1.0000	1.0000	2	17.3	4,716	2.82	1.70
	2	0.280	1.00	1.00	1.0000	1.0000	1	5.2	3,143	1.93	1.16
	3	0.280	1.00	1.00	1.0000	1.0000	1	21.0	3,738	2.27	1.33
	4	0.280	1.00	1.00	1.0000	1.0000	1	14.5	3,521	2.13	1.25
	5	0.280	1.00	1.00	1.0000	1.0000	1	26.3	3,378	1.99	1.21
	6	0.280	1.00	1.00	1.0000	1.0000	1	7.7	3,341	2.04	1.22
	7	0.280	1.00	1.00	1.0000	1.0000	1	5.3	3,180	1.94	1.17
	Σ							97.4	3,582	2.15	1.30
#1	Σ							15.7	533	0.05	0.05

Drainage Report Continued

FIGURE 3-8

WORKSHEET TO EVALUATE PROPOSED BMP PLAN: ANTIDEGRADATION WATER QUALITY GOAL

PAGE 1: SITE CHARACTERIZATION - TOTAL PHOSPHORUS

Total Site Area (acres) 64.44 A_{site}

Impervious Developed Area (acres) * 11.28 A_{devimp}
includes all surfaces that significantly impede or prevents natural infiltration of water into the soil. Examples include roofs, buildings, streets, parking areas, and any concrete, asphalt, or compacted gravel surface

Pervious Developed Area (acres) 44.58 $A_{devpers}$
includes improved areas such as lawns that do not impede natural infiltration of water into the soil, but may cause stormwater pollution loads due to fertilization or application of pesticides; also includes porous pavement

Dedicated Open Space (acres) 8.58 A_{dedop}
includes undisturbed common space, flood plain easement areas, conservation easement areas, vegetated stream buffers, and stormwater management facilities (e.g., ponds, swales)

NOTE: The total site area A_{site} should be equal to the sum of $A_{devimp} + A_{devpers} + A_{dedop}$ 64.44 A_{site} check

Imperviousness of Developed Area (%) 20.20 I_{dev}
 $I_{dev} = A_{devimp} / (A_{devimp} + A_{devpers}) * 100$

¹ Because fertilized sections of golf courses exhibit total P loads characteristics of medium density residential development, these areas should be treated as 25% impervious in the BMP worksheet calculations, even though they are actually 0% impervious. Unfertilized golf course areas can be treated as 0% impervious.

² Area of structures with "green roofs" can be considered 50% impervious developed area and 50% pervious developed area

³ For impervious areas directing runoff to sheet flow over pervious area, Figure 3-6 should be used to determine the relative percentages of impervious developed and pervious developed area.

⁴ For impervious areas directing runoff to lot swales, sunken islands or disconnected drainage, Figure 3-7 should be used to determine the relative percentages of impervious developed and pervious developed area.

FIGURE 3-8

WORKSHEET TO EVALUATE PROPOSED BMP PLAN: ANTIDEGRADATION WATER QUALITY GOAL

PAGE 2: PHOSPHORUS REMOVAL REQUIREMENTS AND BMP PLAN EFFECTIVENESS

Base Required Pollutant Removal (%) for Developed Area 27.53 R_{base}
(Using Total Phosphorus as Target Pollutant)
Based on total-P data in Figure 3-5:
$$R_{base} = \begin{cases} (I_{dev} * 2.7) + 27 & \text{if } I_{dev} \text{ is 11-25\% impervious} \\ (I_{dev} * 0.4) + 30 & \text{if } I_{dev} \text{ is 26-50\% impervious} \\ (I_{dev} * 0.2) + 40 & \text{if } I_{dev} \text{ is 51-70\% impervious} \\ (I_{dev} * 0.48) + 20 & \text{if } I_{dev} \text{ is 71-100\% impervious} \end{cases}$$

Required Total Phosphorus Removal (%) 16.40 R_{req}
for Developed Area, Adjusted for Dedicated Open Space Maintained On Site
$$R_{req} = 100 - (100 - R_{base}) / ((A_{devimp} + A_{devpers}) / A_{site})$$

(If $R_{req} < 0$, then enter 0)

Primary BMP Type Wet Detention

Assumed Primary BMP Total Phosphorus Removal (%) 60.00 E_{pri}

Wet Detention	60%
Extended Dry Detention	30%
Mod. Ext. Dry Detention	60%
Grass Swale w/Check Dams	25%
Biofiltration Swale	15%
Infiltration	55%
Bioretention:	55%
Innovative - Swirl Concentrator	30%
Innovative - Settling/Filtration	60%
Innovative - Settling/Wetland	60%

Percent of Developed Area that is Served by Primary BMP 100% S_{pri}

Calculated Primary BMP Removal (%) 60.00 R_{pri}
 $R_{pri} = E_{pri} * S_{pri} / 100$

If primary BMP removal does not satisfy the pollutant removal requirement (i.e., if $R_{pri} < R_{req}$), then complete calculations on page 3.

Does primary BMP satisfy the pollutant removal requirement ($R_{pri} > R_{req}$)? YES

FIGURE 3-8

WORKSHEET TO EVALUATE PROPOSED BMP PLAN: ANTIDEGRADATION WATER QUALITY GOAL

PAGE 3: EVALUATION OF SUPPLEMENTAL BMPs FOR PHOSPHORUS CONTROL

Supplemental Pre-Treatment BMP Type Wet Detention

Percent of Developed Area that is Served by Supplemental Pre-Treatment BMPs 0.00 S_{sup}

Assumed Supplemental BMP Total Phosphorus Removal (%) 60 E_{sup}
(see total-P removal efficiencies listed above for primary BMPs)

Calculated Removal by Primary and Pre-Treatment BMPs 60.00 $R_{pri+sup}$
$$R_{pri+sup} = 100 * (1 - ((1 - S_{sup} / 100 * E_{sup} / 100) * (1 - R_{pri} / 100)))$$

Do primary and pre-treatment BMPs satisfy the pollutant removal requirement ($R_{pri+sup} > R_{req}$)? YES

If primary BMP plus pre-treatment BMP removal does not satisfy the pollutant removal requirement (i.e., if $R_{pri+sup} < R_{req}$), then one or more of the following revisions is required:

1. Reduce the amount of impervious area (A_{devimp}), and increase the pervious area ($A_{devpers}$) and/or dedicated open space area (A_{dedop}) accordingly.
2. Choose more effective primary and/or pre-treatment BMPs.
3. Increase the percentage of developed area that is treated by the BMPs (S_{pri} , S_{sup}).
4. Increase the amount of dedicated open space (A_{dedop}), and reduce the amount of developed pervious area ($A_{devpers}$) accordingly. This is most effective if the additional dedicated open space is located on the part of the site that does not drain to the primary BMP; this effectively increases the percentage of developed area that drains to the BMP.

Drainage Report Continued

FIGURE 3-8

WORKSHEET TO EVALUATE PROPOSED BMP PLAN: ANTIDEGRADATION WATER QUALITY GOAL

PAGE 1: SITE CHARACTERIZATION - FECAL COLIFORM BACTERIA

Total Site Area (acres)

64.44 A_{site}

Impervious Developed Area (acres) *

11.28 A_{devimp}

Includes all surfaces that significantly impede or prevent natural infiltration of water into the soil. Examples include roofs, buildings, streets, parking areas, and any concrete, asphalt, or compacted gravel surface.

Pervious Developed Area (acres)

44.58 $A_{devperv}$

Includes improved areas such as lawns that do not impede natural infiltration of water into the soil, but may cause stormwater pollution loads due to fertilization or application of pesticides; also includes porous pavement.

Dedicated Open Space (acres)

8.58 A_{dosdp}

Includes undisturbed common space, flood plain easement areas, conservation easement areas, vegetated stream buffers, and stormwater management facilities (e.g., ponds, swales).

NOTE: The total site area A_{site} should be equal to the sum of

$A_{devimp} + A_{devperv} + A_{dosdp}$

64.44 A_{site} check

Imperviousness of Developed Area (%)

20.20 I_{dev}

$I_{dev} = A_{devimp} / (A_{devimp} + A_{devperv}) * 100$

¹ For bacteria evaluation, treat golfcourses like any other land use (i.e., do not treat previous golf courses as 25% impervious).

² Area of structures with "green roofs" can be considered 50% impervious developed area and 50% pervious developed area.

³ For impervious areas directing runoff to sheet flow over pervious area, Figure 3-8 should be used to determine the relative percentages of impervious developed and pervious developed area.

⁴ For impervious areas directing runoff to lot swales, sunken islands or disconnected drainage, Figure 3-7 should be used to determine the relative percentages of impervious developed and pervious developed area.

FIGURE 3-8

WORKSHEET TO EVALUATE PROPOSED BMP PLAN: ANTIDEGRADATION WATER QUALITY GOAL

PAGE 2: BACTERIA REMOVAL REQUIREMENTS AND BMP PLAN EFFECTIVENESS

Base Required Pollutant Removal (%) for Developed Area

59.30 R_{base}

(Using Fecal Coliform Bacteria as Target Pollutant)

Based on bacteria data in Figure 3-5:

$$R_{base} = \begin{cases} (I_{dev} * 8.8) + 44 & \text{if } I_{dev} \text{ is 6-10\% impervious} \\ (I_{dev} * 1.5) + 29 & \text{if } I_{dev} \text{ is 11-25\% impervious} \\ (I_{dev} * 0.12) + 84 & \text{if } I_{dev} \text{ is 26-50\% impervious} \\ 70 & \text{if } I_{dev} \text{ is 51-100\% impervious} \end{cases}$$

Required Bacterial Removal (%)

53.04 R_{req}

For Developed Area: Adjusted for Dedicated Open Space Maintained On Site

$$R_{req} = 100 - (100 - R_{base}) / ((A_{devimp} + A_{devperv}) / A_{site})$$

(If $R_{req} < 0$, then enter 0)

Primary BMP Type

Wet Detention

Assumed Primary BMP Total Bacteria Removal (%)

80% E_{pri}

Wet Detention	80%
Extended Dry Detention	35%
Mod. Ext. Dry Detention	50%
Grass Swale w/Check Dams	30%
Biofiltration Swale	10%
Infiltration	90%
Bioretention	70%
Innovative - Swirl Concentrator	10%
Innovative - Settling/Filtration	35%
Innovative - Settling/Wetland	70%

Percent of Developed Area that is Served by Primary BMP

100% S_{pri}

Calculated Primary BMP Removal (%)

80.00 R_{pri}

$$R_{pri} = E_{pri} * S_{pri} / 100$$

If primary BMP removal does not satisfy the pollutant removal requirement (i.e., if $R_{pri} < R_{req}$), then complete calculations on page 3.

Does primary BMP satisfy the pollutant removal requirement ($R_{pri} > R_{req}$)?

YES

FIGURE 3-8

WORKSHEET TO EVALUATE PROPOSED BMP PLAN: ANTIDEGRADATION WATER QUALITY GOAL

PAGE 3: EVALUATION OF SUPPLEMENTAL BMPs FOR BACTERIA CONTROL

Supplemental Pre-Treatment BMP Type

Wet Detention

Percent of Developed Area that is Served by

Supplemental Pre-Treatment BMPs

0.00 S_{sup}

Assumed Supplemental BMP Bacteria Removal (%)

80 E_{sup}

(see bacteria removal efficiencies listed above for primary BMPs)

Calculated Removal by Primary and Pre-Treatment BMPs

80.00 $R_{pri+sup}$

$$R_{pri+sup} = 100 * (1 - ((1 - S_{sup} / 100 * E_{sup} / 100) * (1 - R_{pri} / 100)))$$

Do primary and pre-treatment BMPs satisfy the pollutant removal requirement ($R_{pri+sup} > R_{req}$)?

YES

If primary BMP plus pre-treatment BMP removal does not satisfy the pollutant removal requirement (i.e., if $R_{pri+sup} < R_{req}$), then one or more of the following revisions is required:

1. Reduce the amount of impervious area (A_{devimp}), and increase the pervious area ($A_{devperv}$) and/or dedicated open space area (A_{dosdp}) accordingly.
2. Choose more effective primary and/or pre-treatment BMPs.
3. Increase the percentage of developed area that is treated by the BMPs (S_{pri} , S_{sup}).
4. Increase the amount of dedicated open space (A_{dosdp}), and reduce the amount of developed pervious area ($A_{devperv}$) accordingly. This is most effective if the additional dedicated open space is located on the part of the site that does not drain to the primary BMP; this effectively increases the percentage of developed area that drains to the BMP.

Drainage Report Continued

FIGURE 3-10

WORKSHEET TO EVALUATE PROPOSED BMP PLAN: ANTIDEGRADATION WATER QUALITY GOAL

PAGE 1: SITE CHARACTERIZATION - TOTAL NITROGEN

Total Site Area (acres)

64.44 A_{site}

Impervious Developed Area (acres) *

11.28 A_{devimp}

includes all surfaces that significantly impede or prevents natural infiltration of water into the soil. Examples include roofs, buildings, streets, parking areas, and any concrete, asphalt, or compacted gravel surface

Pervious Developed Area (acres)

44.58 $A_{devperv}$

includes improved areas such as lawns that do not impede natural infiltration of water into the soil, but may cause stormwater pollution loads due to fertilization or application of pesticides; also includes porous pavement

Dedicated Open Space (acres)

8.58 A_{dedop}

includes undisturbed common space, flood plain easement areas, conservation easement areas, vegetated stream buffers, and stormwater management facilities (e.g., ponds, swales)

NOTE: The total site area A_{site} should be equal to the sum of

64.44 A_{site} check

$A_{devimp} + A_{devperv} + A_{dedop}$

Imperviousness of Developed Area (%)

20.20 I_{dev}

$I_{dev} = A_{devimp} / (A_{devimp} + A_{devperv}) * 100$

* Because fertilized sections of golf courses exhibit total N loads characteristics of medium density residential development, these areas should be treated as 25% impervious in the BMP worksheet calculations, even though they are actually 0% impervious. Unfertilized golf course areas can be treated as 0% impervious.

2 Area of structures with "green roofs" can be considered 50% impervious developed area and 50% pervious developed area

3 For pervious areas directing runoff to sheet flow over pervious area, Figure 3-6 should be used to determine the relative percentages of impervious developed and pervious developed area.

4 For pervious areas directing runoff to lot swales, sunken slants or disconnected drainage, Figure 3-7 should be used to determine the relative percentages of impervious developed and pervious developed area.

FIGURE 3-10

WORKSHEET TO EVALUATE PROPOSED BMP PLAN: ANTIDEGRADATION WATER QUALITY GOAL

PAGE 2: NITROGEN REMOVAL REQUIREMENTS AND BMP PLAN EFFECTIVENESS

Base Required Pollutant Removal (%) for Developed Area

27.53 R_{base}

(Using Total Nitrogen as Target Pollutant)

Based on total-N data in Figure 3-5.

$$R_{base} = \begin{cases} (I_{dev} * 2.7) + 27 & \text{if } I_{dev} \text{ is 11-25\% impervious} \\ (I_{dev} * 0.96) + 16 & \text{if } I_{dev} \text{ is 26-50\% impervious} \\ (I_{dev} * 0.45) + 41 & \text{if } I_{dev} \text{ is 51-70\% impervious} \\ (I_{dev} * 0.27) + 54 & \text{if } I_{dev} \text{ is 71-100\% impervious} \end{cases}$$

Required Total Nitrogen Removal (%)

16.40 R_{req}

for Developed Area, Adjusted for Dedicated

Open Space Maintained On Site

$$R_{req} = 100 - (100 - R_{base}) / ((A_{devimp} + A_{devperv}) / A_{site})$$

(if $R_{req} < 0$, then enter 0)

Primary BMP Type

Wet Detention

Assumed Primary BMP Total Nitrogen Removal (%)

35% E_{pri}

Wet Detention	35%
Extended Dry Detention	15%
Mod. Ext. Dry Detention	25%
Grass Swale w/Check Dams	20%
Biofiltration Swale	10%
Infiltration	55%
Bioretention:	45%
Innovative - Swirl Concentrator	15%
Innovative - Settling/Filtration	45%
Innovative - Settling/Wetland	45%

Percent of Developed Area that is Served by Primary BMP

100% S_{pri}

Calculated Primary BMP Removal (%)

35.00 R_{pri}

$$R_{pri} = E_{pri} * S_{pri} / 100$$

If primary BMP removal does not satisfy the pollutant removal requirement (i.e., if $R_{pri} < R_{req}$), then complete calculations on page 3.

Does primary BMP satisfy the pollutant removal requirement ($R_{pri} > R_{req}$)?

YES

FIGURE 3-10

WORKSHEET TO EVALUATE PROPOSED BMP PLAN: ANTIDEGRADATION WATER QUALITY GOAL

PAGE 3: EVALUATION OF SUPPLEMENTAL BMPs FOR NITROGEN CONTROL

Supplemental Pre-Treatment BMP Type

Wet Detention

Percent of Developed Area that is Served by Supplemental Pre-Treatment BMPs

0.00 S_{sup}

Assumed Supplemental BMP Total Nitrogen Removal (%)

35 E_{sup}

(see total-P removal efficiencies listed above for primary BMPs)

Calculated Removal by Primary and Pre-Treatment BMPs

35.00 $R_{pri+sup}$

$$R_{pri+sup} = 100 * (1 - ((1 - S_{sup} / 100 * E_{sup} / 100) * (1 - R_{pri} / 100)))$$

Do primary and pre-treatment BMPs satisfy the pollutant removal requirement ($R_{pri+sup} > R_{req}$)?

YES

If primary BMP plus pre-treatment BMP removal does not satisfy the pollutant removal requirement (i.e., if $R_{pri+sup} < R_{req}$), then one or more of the following revisions is required:

1. Reduce the amount of impervious area (A_{devimp}), and increase the pervious area ($A_{devperv}$) and/or dedicated open space area (A_{dedop}) accordingly.
2. Choose more effective primary and/or pre-treatment BMPs.
3. Increase the percentage of developed area that is treated by the BMPs (S_{pri} , S_{sup}).
4. Increase the amount of dedicated open space (A_{dedop}), and reduce the amount of developed pervious area ($A_{devperv}$) accordingly. This is most effective if the additional dedicated open space is located on the part of the site that does not drain to the primary BMP; this effectively increases the percentage of developed area that drains to the BMP.

County of South Carolina) Permanent Stormwater Facility Maintenance
) and Responsibility Agreement
City of Beaufort) Tax Map No. _____

Vicinity Map



Site Photos



Site Photos Continued



BMP's in Use for This Project

- During the active construction phase the following BMP's will be use to insure water quality:
 - *Silt Fencing*
 - *Concrete Washout Areas*
 - *Inlet protection*
 - *Sediment Tubes*
 - *Dust Control/Sweeping*
 - *Permanent/Temporary Seeding for bank stabilization*
 - *Construction Entrance*
- To permanently address the volume control and water quality of this phase of the project, three separate wet detention ponds are proposed. These ponds will treat collected stormwater for sedimentation, phosphorus, nitrogen, and fecal coliform bacteria to conform to the MS4 standards in place with Beaufort County.
- 30' vegetative perimeter buffers and a 60' river buffer will also assist in disconnecting run-off onsite

In Closing – SRT Meetings

- SRT Meetings, while currently only meeting in a electronic capacity, is an open public meeting and can be attended by any member of the public
- Public is NOT allowed to make comment during the meeting but can listen in to what is discussed
- If you would like to sit in, please contact Lisa Anderson via phone at (843)-255-2171 or via email at lisaa@bcgov.net

Questions and Concerns

Please feel free to ask any questions you may have in regards to this development and I will address them to the best of our abilities.

Thank you

Mossy Oaks Task Force -

Mossy Oaks Project Update



BACKGROUND

- In September 2017 following 3 flooding events affecting multiple jurisdictions & approximately 4500 people a Multijurisdictional Task Force was formed.
- The Multijurisdictional Task Force facilitates:
 - Engineer assessments
 - Regulatory agencies action
 - Permitting
 - Grant requests
 - Construction
 - Messaging & public outreach

MULTIJURISDICTIONAL PARTNERS

- Various State & Locally elected officials
- US Army Corps of Engineers
- SC Department of Commerce (via CDBG & RIA)
- SC Department of Transportation
- SC DHEC/OCRM
- Beaufort County
- City of Beaufort
- Town of Port Royal
- Beaufort Jasper Water & Sewer Authority
- Dominion Energy
- Coastal Conservation League
- Various neighborhood representatives
- Infrastructure Consulting & Engineering
- Andrews Engineering
- Truluck Construction
- Gulfstream Construction
- Low Country Council of Governments

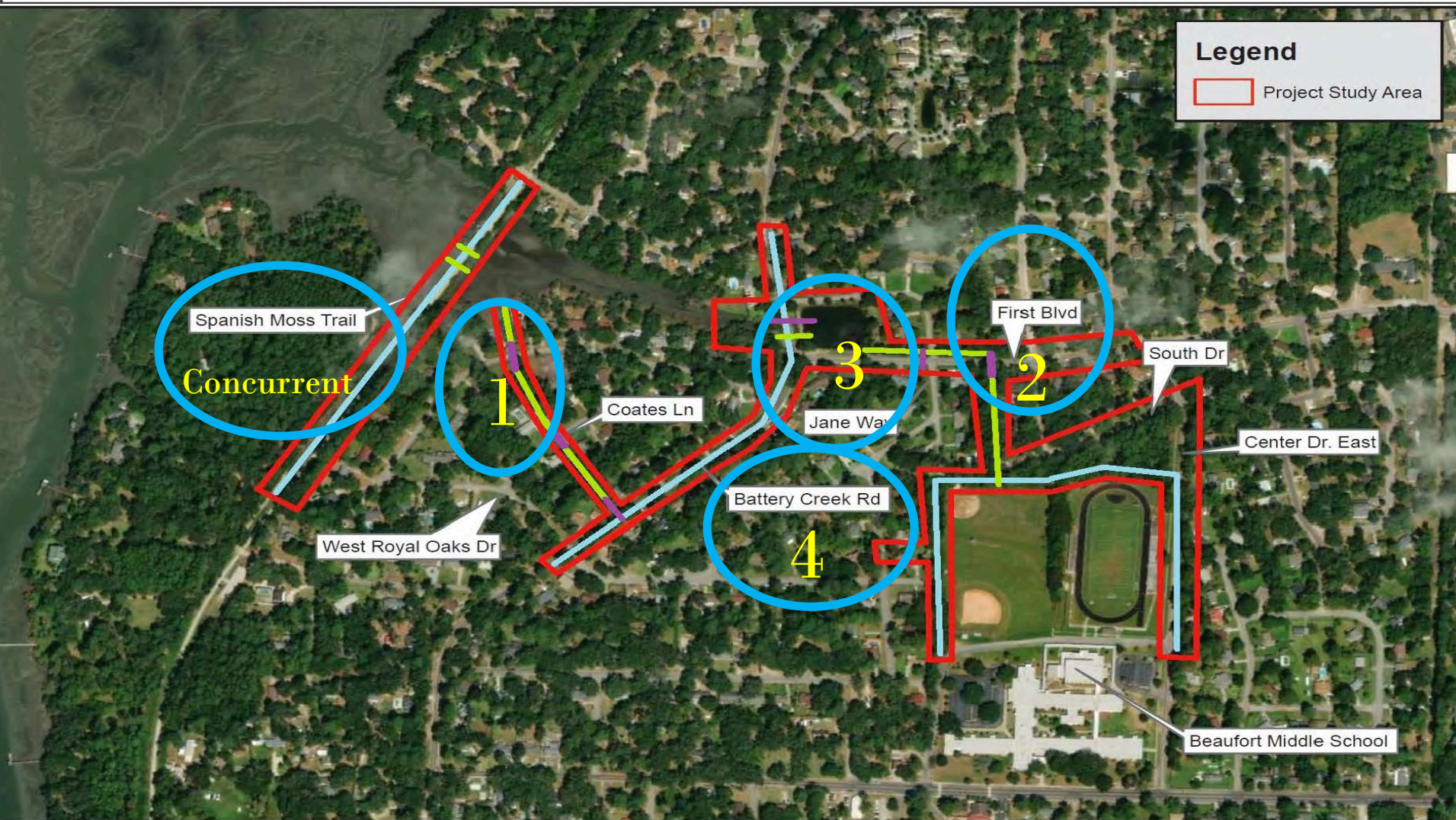
MOSSY OAKS UPDATED TIMELINE (AUG 4TH)

- **Task Force Formed** Sept 2017
- **Notice to Proceed Basin I (Duck Pond)** July 13
- **Public Notice & Resident Letters** July 13
- **West Royal Oaks Work begins** July 22
- **Coordination with SMT Friends** July 24
- **Commerce Approves Basin II (Gulfstream)** July 30
- **Flap Gates Arrive from Washington State** August 10
- **Notice to Proceed Basin II (Southside Park)** August 11
- **Spanish Moss Sheet Pile Installation (Est)** August 31
- **Construction Completed** Dec 2020
- **Project Closeout** Jan 2021

MOSSY OAKS AREA



BASIN 1 (DUCK POND) PRIORITY UNCHANGED



Date:
8.10.2018
By:

IE INFRASTRUCTURE
CONSULTING & ENGINEERING

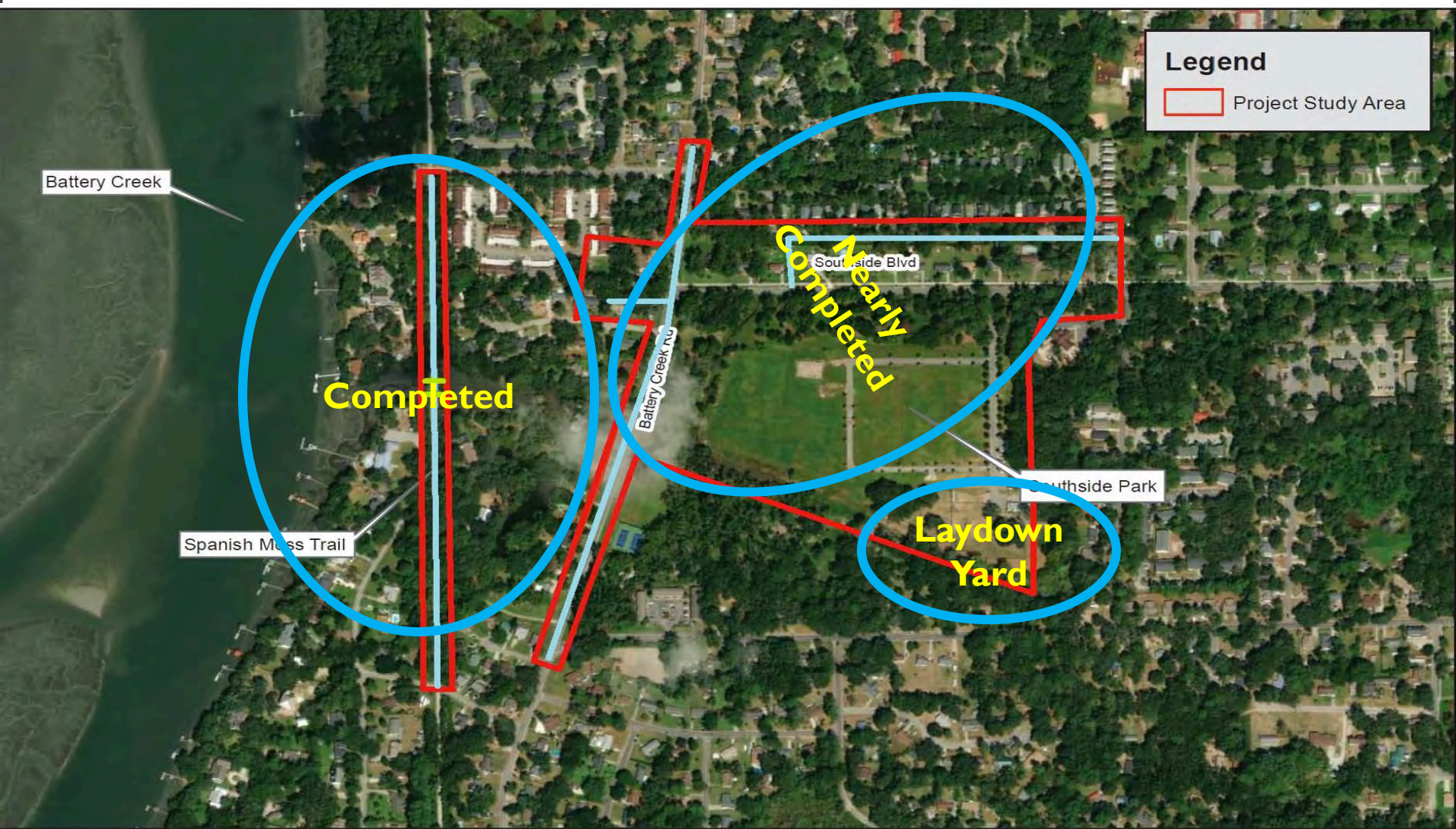
Figure 2: Aerial

**Mossy Oaks Basin 1 Drainage
Beaufort County, SC**

0 200 400 Feet



BASIN II (SOUTHSIDE PARK) PRIORITY UNCHANGED



Date:
8.28.2018
By:

Figure 2: Aerial
Mossy Oaks Basin 2 Drainage
Beaufort County, SC



CONSTRUCTION PHASE PHILOSOPHY (UNCHANGED)

- Aggressive Communication Strategy
 - Facebook, Text, Email, Neighborhood Walks, “Notify Me”
- Concurrent Construction Efforts
 - Most critical areas, ideally, first.
 - Delays & disruptions will occur
- Flexible work schedules
- Weekly updates (3 So Far Since July 13th)

OUTSTANDING ISSUES

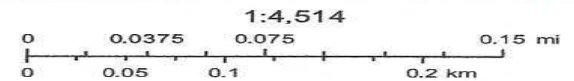
- **BJWSA Sewer Force Main Relocation (Basin I)**
- **Level of Difficulty Installing Sheet Pile Wall**
- **Interruption of the SMT**

BASIN I DETOUR PLAN

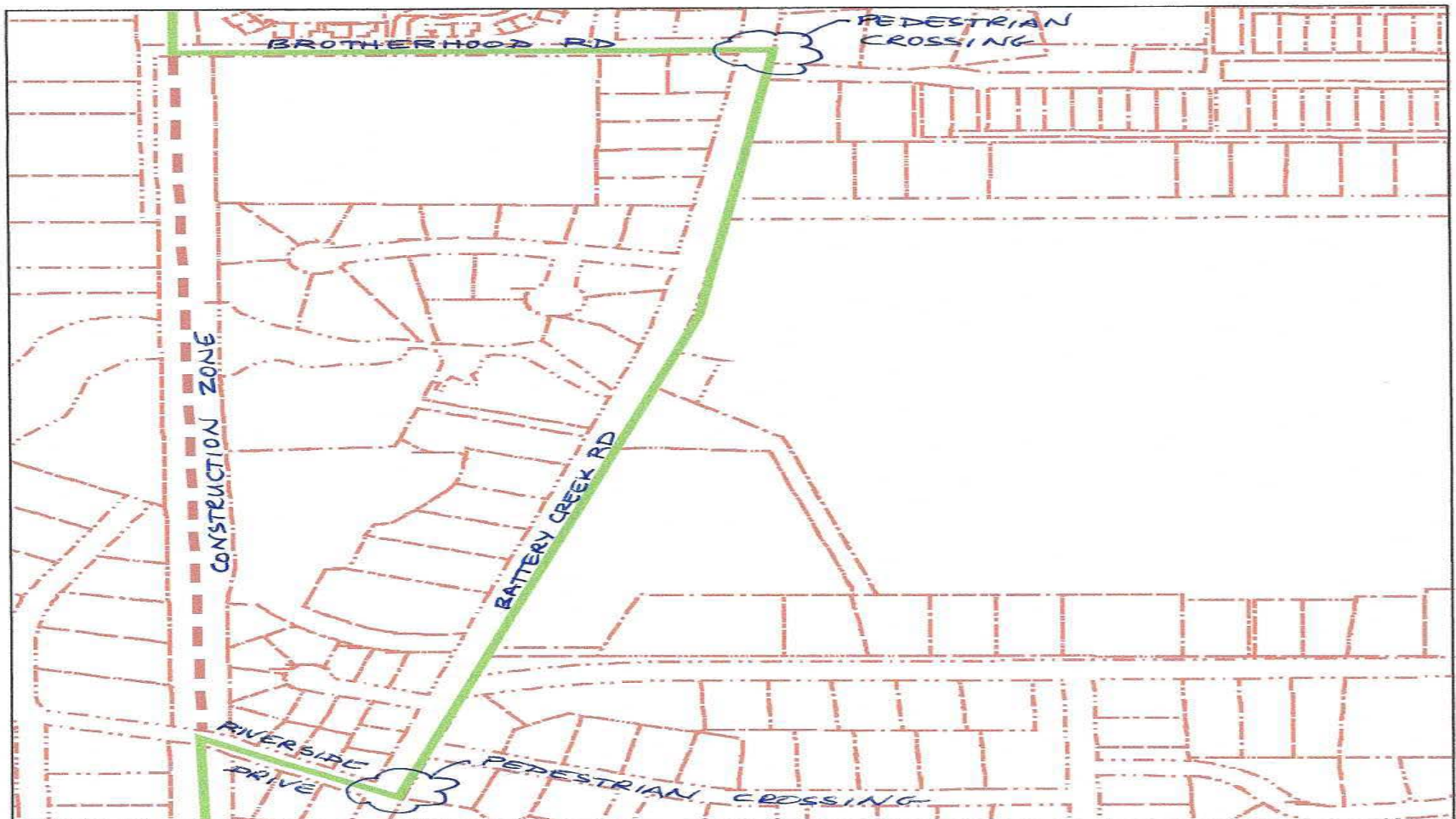


7/27/2020, 5:53:13 PM

LiveParcels

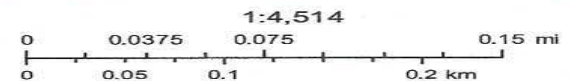


BASIN II DETOUR PLAN



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LiveParcels



SPANISH MOSS TRAIL FLAP GATES



GENERAL OBSERVATIONS

- Construction making good progress
 - Basin I (Duck Pond) more complex
 - Basin II (Southside Park) completed sooner
- Multijurisdictional Partners Engaged & Supportive
 - City of Beaufort City Council & Beaufort County
 - Shannon Erickson, Lindsey Graham,
 - Alice Howard, Tom Davis
 - Friends of the SMT Fully Engaged & Helpful
 - Resident Task Force Members Superb
 - Chris Nietert (Basin I) Eddie Hipp (Basin II)
- Residents Issues Addressed Quickly & Supportive
- On Time & On Budget Delivery Expected

RECOMMENDATIONS

- Always form a Task Force with a focused leader for complex projects & include:
 - Politicians
 - Utilities
 - Regulatory Agencies
 - Residents
 - Conservation Groups
 - Contractors
- Uniform stormwater standards for all municipalities
- Adopt an aggressive communication strategy
 - Information Push vs Pull
 - Be Proactive & Transparent

Questions

Time To

“Git R Done”





BEAUFORT COUNTY SHELLFISH UPDATES

KATIE HERRERA

BEAUFORT COUNTY STORMWATER



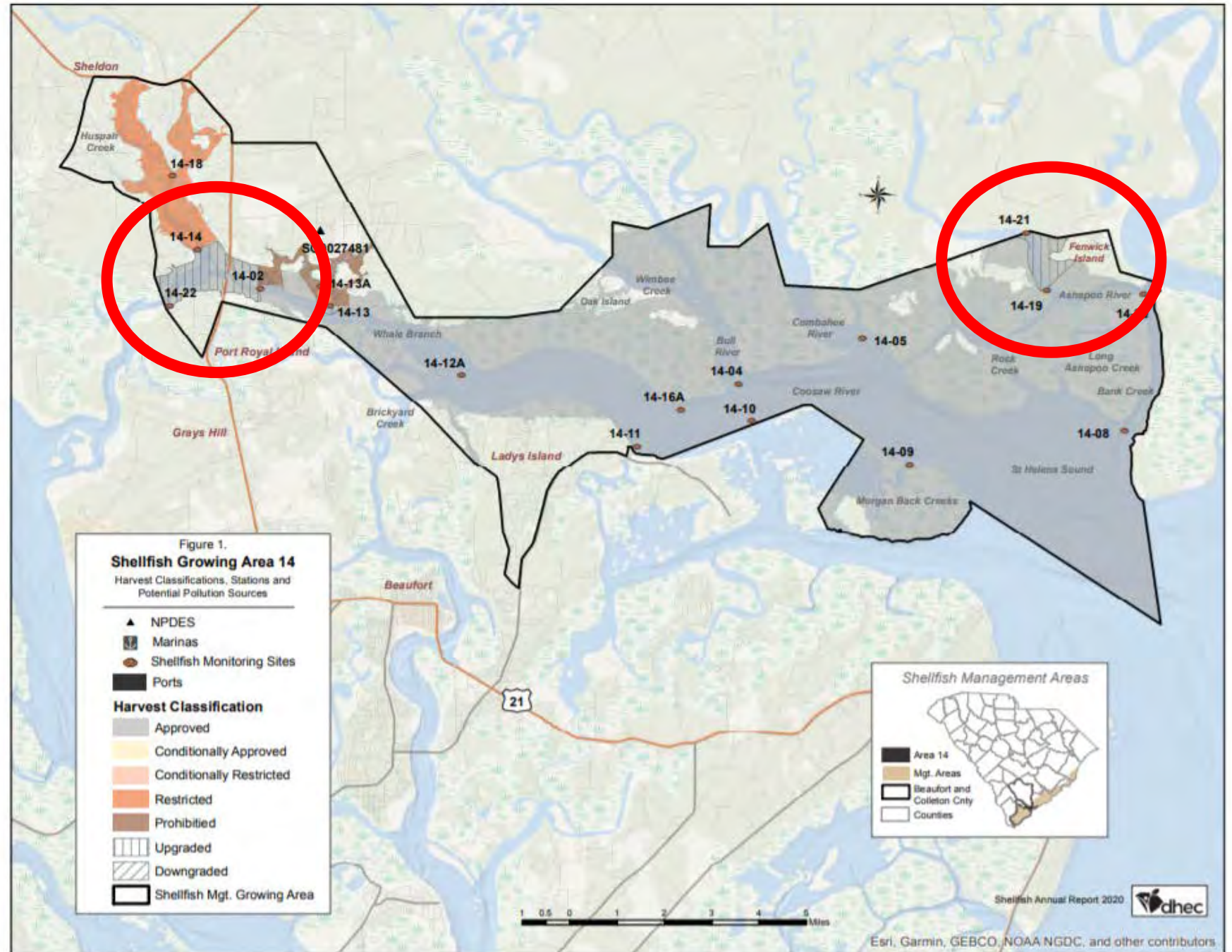
2020 UPDATES

- Water Quality upgrades and downgrades based on Shellfish Management areas
 - 2 downgraded sections
 - 9 upgraded sections

AREA 14

UPGRADES:

- Huspah Creek/Whale Branch
- Ashepoo River



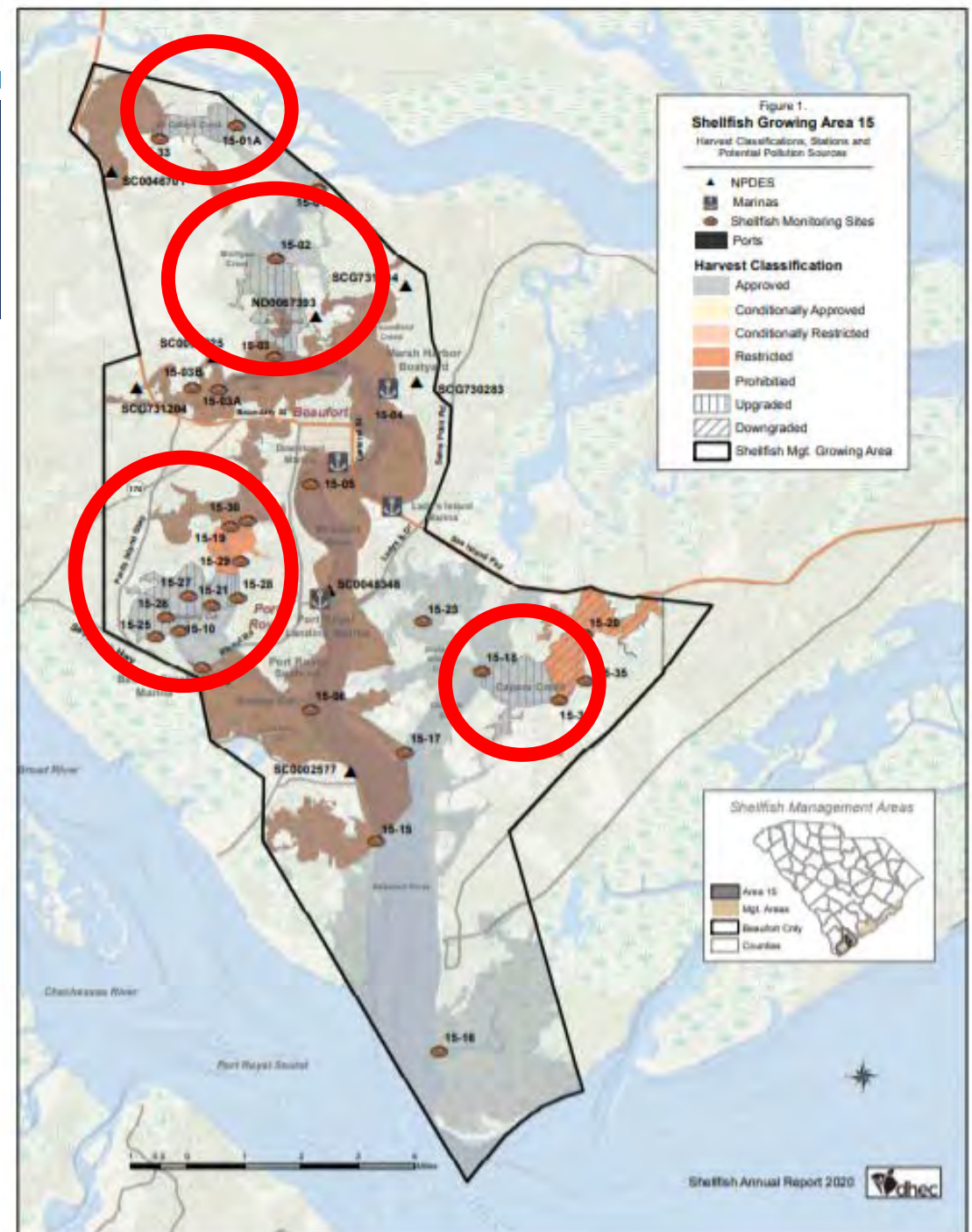
AREA 15

UPGRADES:

- McCalley Creek
- Brickyard Creek
- Battery Creek
- Capers Creek

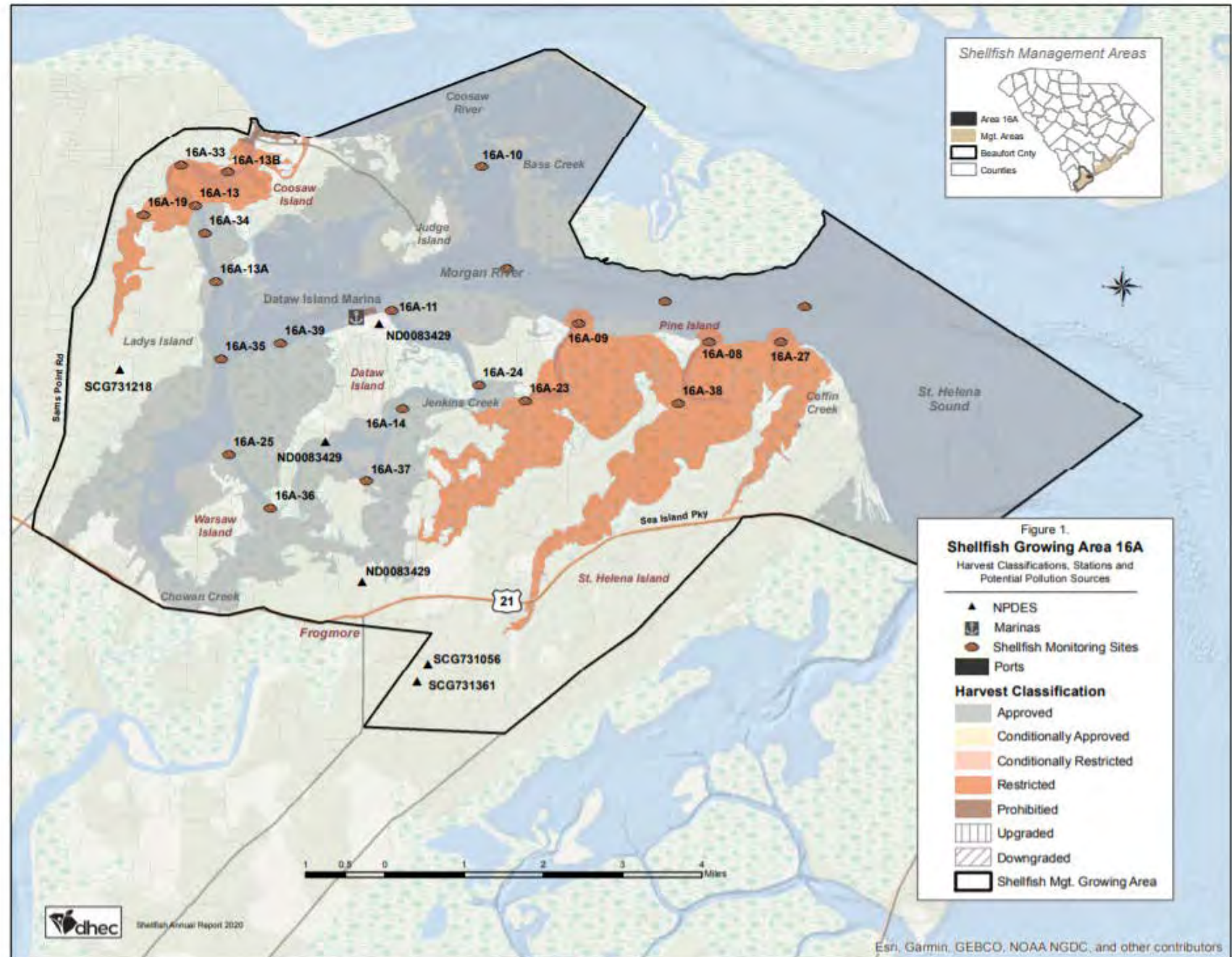
DOWNGRADE:

- Capers Creek – near headwaters



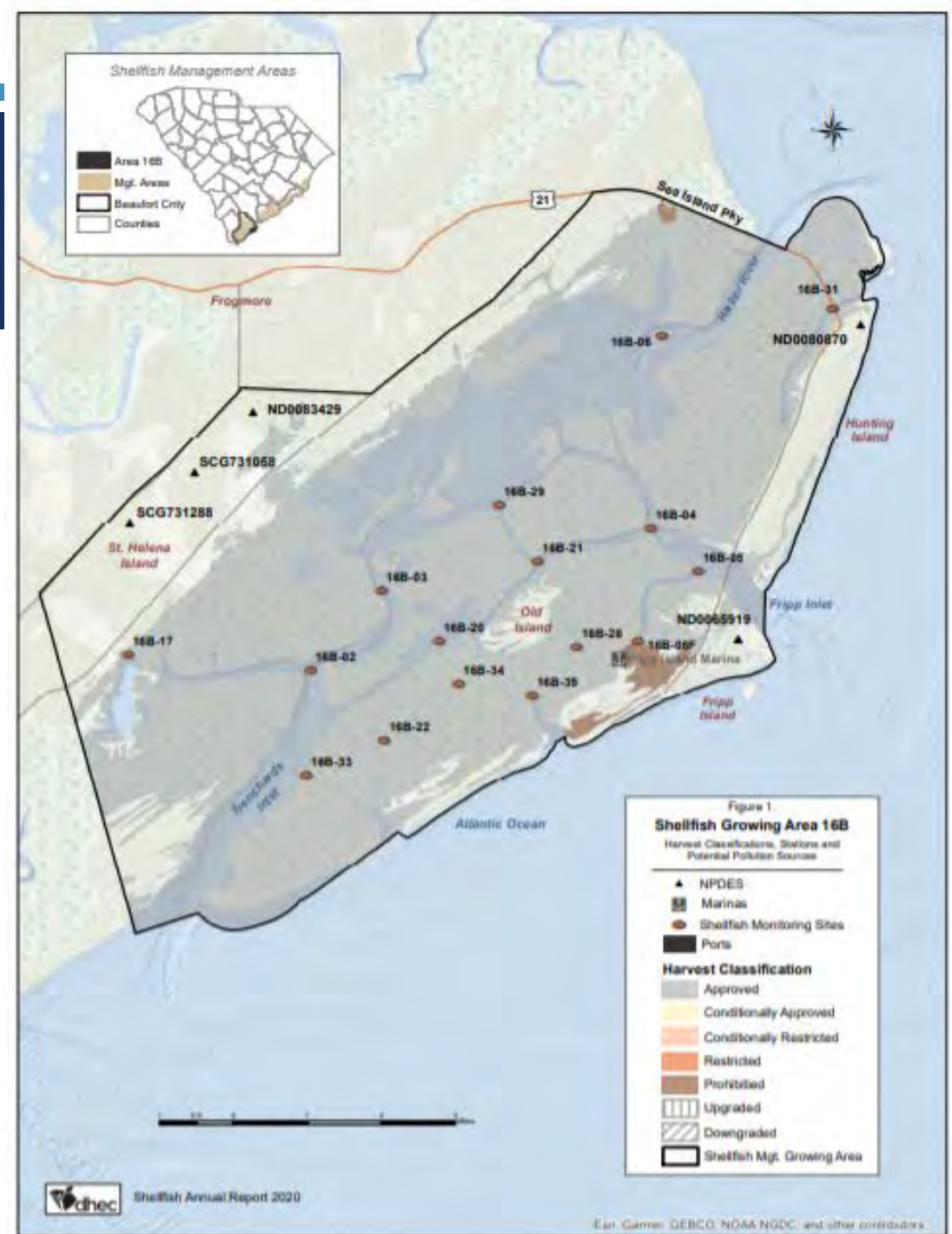
AREA 16A

NO CHANGES



AREA 16B

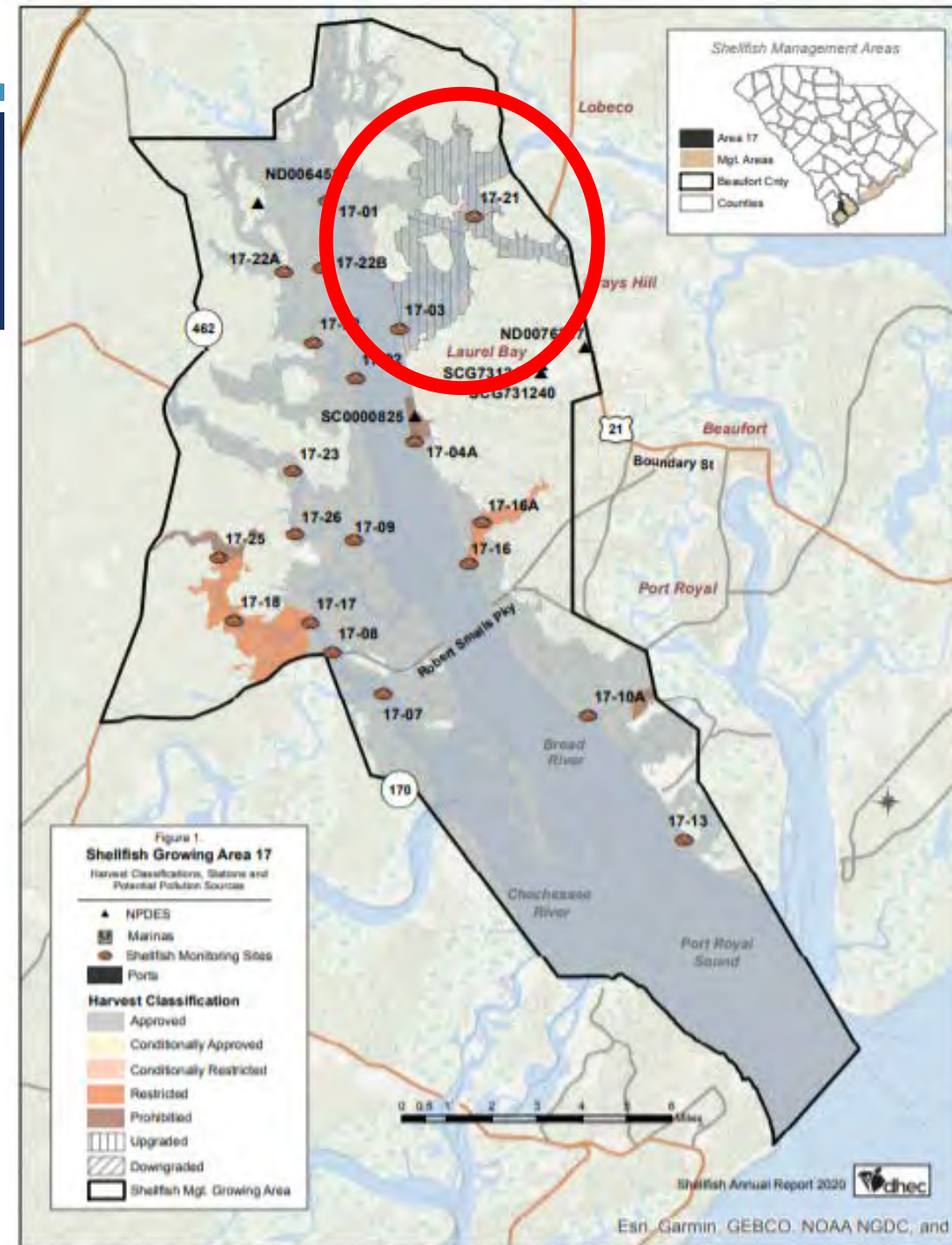
NO CHANGES



AREA 17

UPGRADES:

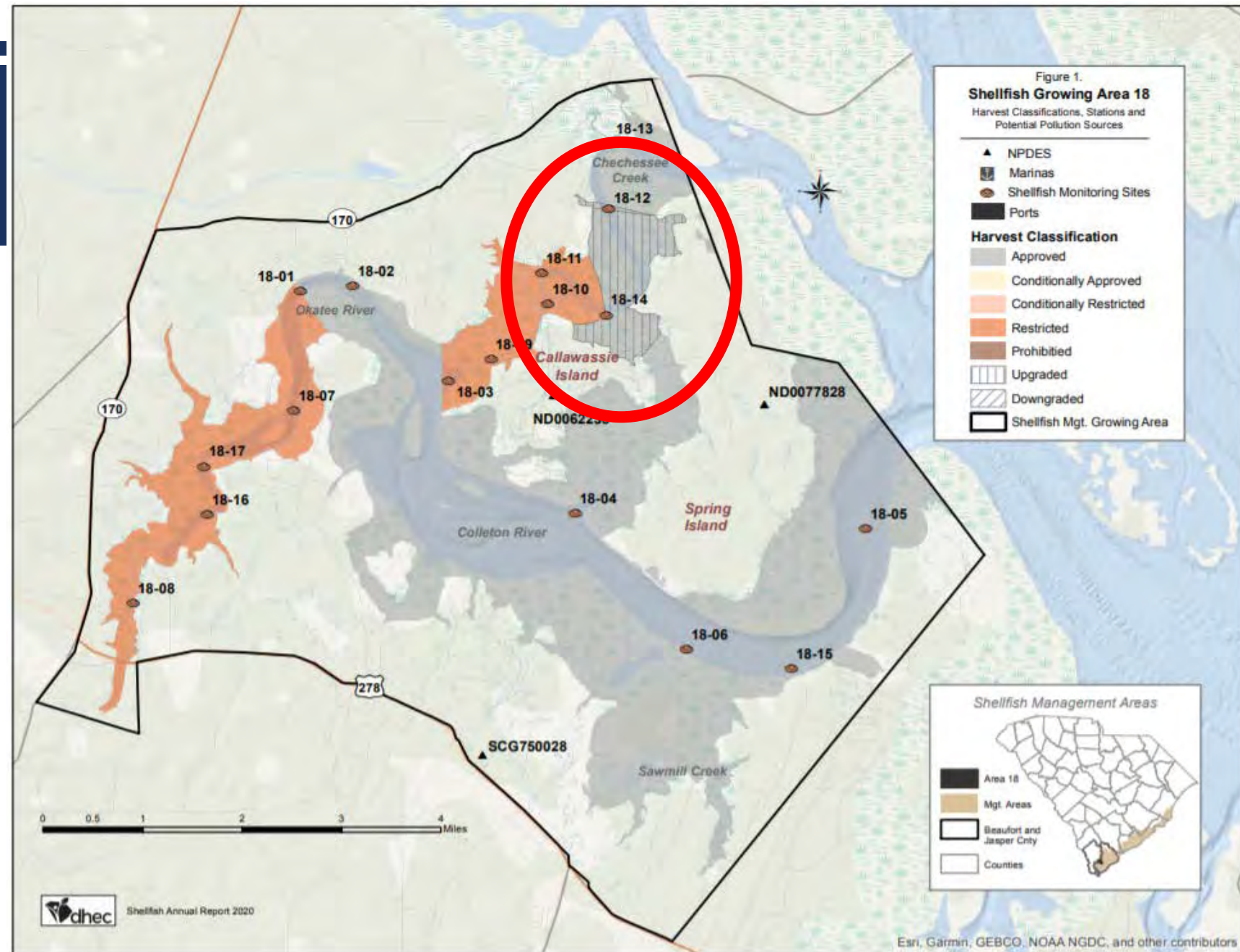
- Whale Branch



AREA 18

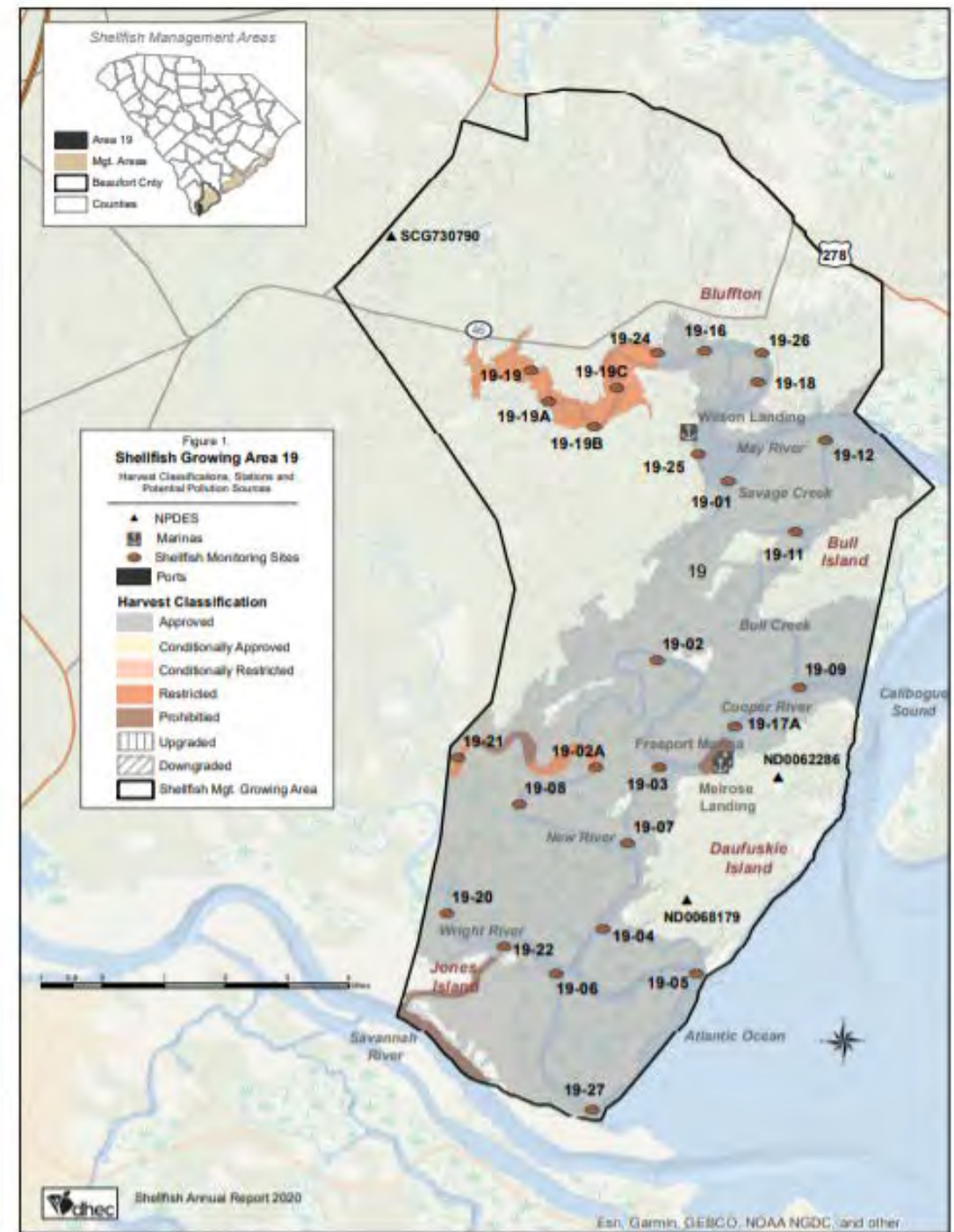
UPGRADES:

- CHECHESSE CREEK



AREA 19

NO CHANGES



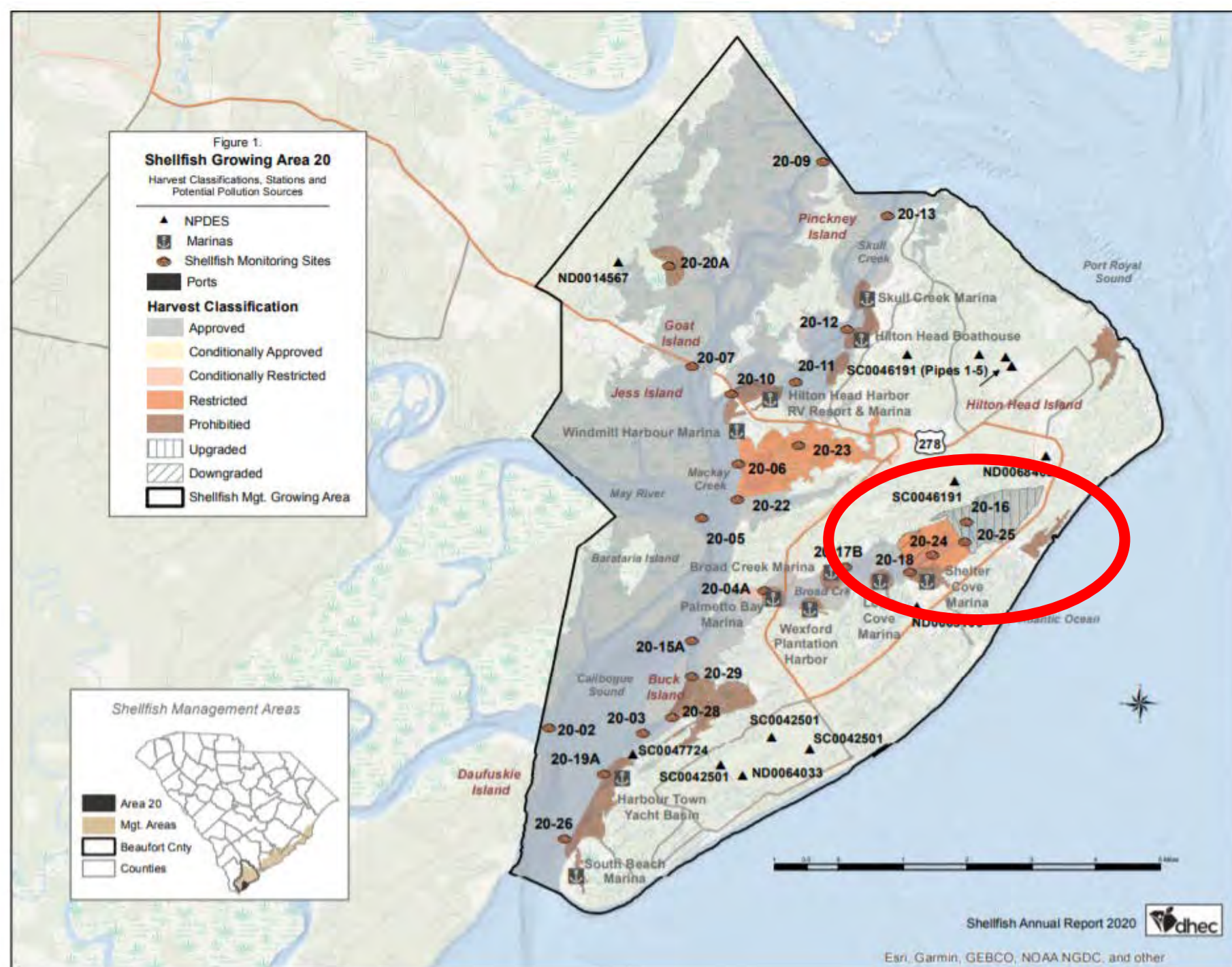
AREA 20

UPGRADES:

- Broad Creek – headwaters

DOWNGRADE:

- Broad Creek – Shelter Cove Marina





BEAUFORT COUNTY
STORMWATER MANAGEMENT UTILITY BOARD AGENDA
Wednesday, December 9, 2020
2:00 p.m.
WebEx
843.255.2805



In accordance with South Carolina Code of Laws, 1976, as amended, Section 30-4-80(d), all local media was duly notified of the time, date, place and agenda of this meeting.

1. CALL TO ORDER – 2:00 p.m.
 - A. Approval of Agenda
 - B. Approval of Minutes – November 10, 2020 ([backup](#))
2. INTRODUCTIONS
3. PUBLIC COMMENT
4. REPORTS
 - A. Utility Update – Katie Herrera ([backup](#))
 - B. Monitoring Update – Katie Herrera ([backup](#))
 - C. Stormwater Related Projects – Katie Herrera ([backup](#))
 - D. Upcoming Professional Contracts Report – Katie Herrera ([backup](#))
 - E. Regional Coordination – Katie Herrera ([backup](#))
 - F. Municipal Reports – Katie Herrera ([backup](#))
 - G. MS4 Update – Katie Herrera ([backup](#))
 - H. Maintenance Projects Report – Matthew Rausch ([backup](#))
5. UNFINISHED BUSINESS
6. NEW BUSINESS
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
 - A. February 10, 2021 ([backup](#))
9. ADJOURNMENT