



BEAUFORT COUNTY  
STORMWATER MANAGEMENT UTILITY BOARD AGENDA  
Wednesday, December 15th 2021  
2:00 p.m.  
Executive Conference Room, Administration Building  
Beaufort County Government Robert Smalls Complex  
100 Ribaut Road, Beaufort, South Carolina  
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 13th, 2021 ([backup](#))
2. INTRODUCTIONS
3. PUBLIC COMMENT
4. REPORTS
  - A. Utility Update – Katie Herrera ([backup](#))
  - B. Monitoring Update – Katie Herrera ([backup](#))
  - C. Stormwater Implementation Committee Report – Katie Herrera ([backup](#))
  - D. Stormwater Related Projects – Julianna Corbin ([backup](#))
  - E. Upcoming Professional Contracts Report – Julianna Corbin ([backup](#))
  - F. Regional Coordination – Katie Herrera ([backup](#))
  - G. Municipal Reports – Katie Herrera ([backup](#))
  - H. MS4 Update – Katie Herrera ([backup](#))
  - I. Staff Update – Katie Herrera ([backup](#))
  - J. Maintenance Projects Report – Matthew Rausch ([backup](#))
  - K. Liaison Report - Ms. Alice Howard
5. UNFINISHED BUSINESS
6. NEW BUSINESS
  - A. Draft 2022 Stormwater Utility Board Schedule ([backup](#))
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
  - A. Wednesday, January 19<sup>th</sup>, 2022 ([backup](#))
9. ADJOURNMENT



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

October 13th, 2021 at 2:00 p.m.

Beaufort County Council Chambers, Administration Building, Beaufort County Government  
Robert Smalls Complex, 100 Ribaut Road, Beaufort, South Carolina and via Webex

### Board Members

#### Present

James Clark  
Marc Feinberg  
Patrick Mitchell  
Brian Watkins

#### Absent

Allyn Schneider  
Steven Andrews

### Ex-Officio Members

#### Present

#### Absent

Kim Jones  
Nate Farrow  
Van Willis

### Beaufort County Staff

Katie Herrera  
Johanna Zoran  
Neil Desai

### Visitors

Jeff Netzinger, Town of Hilton Head  
Alice Howard, County Council

### 1. Meeting called to order – Marc Feinberg at 2:00 pm

A. Agenda – Approved

B. Approval of Minutes – Approved. Mr. Feinberg requested an amendment to the Minutes. Alice Howard is to be listed as absent on the Minutes from August 11<sup>th</sup>, 2021.

### 2. Introductions – Completed.

### 3. Public Comment(s) – None.

### 4. Reports

*Reports attached in agenda*

#### **Highlights:**

#### A. Utility Update – Katie Herrera

- ✓ Southern Lowcountry Regional Board (SoLoCo)
  - SoLoCo standards are continuously being implemented across all municipalities who are participating. A meeting is being scheduled with the City of Beaufort board members to include them in the implementation of these standards.

- ✓ Special Presentation
  - Dr. Montie has committed to participating in the November 10<sup>th</sup> meeting so Katie asked if the next Stormwater Utility Board meeting can be moved to December 15<sup>th</sup>. Mr. Feinberg would like to address this under New Business.
  - Cypress Wetlands – Looking into rescheduling from the summer to early winter of 2022.
  - Woolpert – Special presentations from our consultants for Jan/Feb 2022. Results from our MS4 program audit, Capital Improvement Plan and Stormwater Utility will be presented. Mr. Feinberg suggested that it be done as early in the year as possible.
- ✓ The county continues to work on delinquent accounts for the military installations. Will be keeping the PO for Gentry Locke Attorneys open and legal will present to the Utility Board at a future date.

**B. Monitoring Update – Katie Herrera**

***Highlights:***

- ✓ Still working closely with the laboratory on completing all Monitoring Plan components

**C. Stormwater Implementation Committee (SWIC) Report – Katie Herrera**

***Highlights:***

- ✓ All municipalities were provided with FY21 CWI reports on September 1<sup>st</sup>. CWI reports for FY18 to FY20 were presented to committee members on October 5<sup>th</sup>, 2021.

**D. Stormwater Related Projects – Katie Herrera**

***Highlights:***

- ✓ County staff continues to work on getting easements and meets monthly to review.
- ✓ Construction has been completed for the flyover bridge repair project. Now waiting for final invoice and close out from contractor.
- ✓ Shell Point Community –Katie and Julianna are working on funding. SCEMD has advised staff about applying for BRIC, HMGP and ARPA grants in hopes that one will fund construction for this project. Next task force meeting is scheduled for week of October 25<sup>th</sup>. Mr. Feinberg asked who the task force members are. Katie listed them as follows: Katie Herrera, Julianna Corbin, James Clark, Van Willis, Noah Krepps, Alice Howard, Shannon Erikson, Elizabeth Sanders (DOT) and 2 residents of the Shell Point community.
- ✓ Factory Creek Watershed Regional Detention Basin “Phase I” & Academy Park Subdivision – Beaufort County legal is still handling obtaining easement.
- ✓ Factory Creek Watershed Regional Detention Basin “Phase II – Beaufort County legal is still handling obtaining easement to the pond that was built.

- ✓ Graves Property – Staff continue to work with engineers and legal to have comprehensive construction plans. Roads and Infrastructure have been approved as well as the town homes. Property owners continue construction on the pond located on the northwestern corner of property. Outfall structures are being retrofitted to function properly.
- ✓ Whitehall property – No updates currently. Construction has begun on City Property.
- ✓ Lady’s Island Plan, Sea Level Rise, and “no-fill” ordinance – After receiving feedback from an external organization it is now back on the table with Community development team

## **E. Professional Contracts Report – Katie Herrera**

### ***Highlights:***

- ✓ Salt Creek and Shanklin Road – Appraisals have been completed. Guidance from County leadership has been requested to proceed with negotiations on prices for the property owners wish to participate.
- ✓ Brewer Memorial – Waiting to issue the Notice to Proceed. Construction would take place shortly after.
- ✓ Evergreen Regional Pond 319 – Contract extended until early 2022 due to some reasons experience by the contractor. Also applied for an extension with DHEC in September. There is a two month turn around for approval.
- ✓ Stormwater engineering consulting services –
  - Scope #1 – General Services. \$15,000 was allocated. Community development team questioned what the County considered as impervious and an analysis was completed under this scope. Mr. Feinberg asked if the purpose was to set a standard for a single-family home and Katie clarified that a standard is already in place and an analysis was completed to confirm that what the County considers impervious is in line with most of the State.
  - Scope #2 – \$30,000 allocated. Training of internal staff and developers in the community on the updates and major changes of the SoLoCo Design manual was completed in early spring.
  - Scope #3 – Woolpert conducting an audit to ensure compliance with all aspects of MS4 program, CIP plan and Stormwater Utility. \$105,000 allocated.
  - Scope #4 - \$29,900.00 allocated for the Tax Run and Utility assistance. Tax Run was completed on time by Carolyn Wallace with minimal amendments. Woolpert was used to assist when needed. They will also be used in early winter of next year to QA/QC data from previous years since 2015.

Mr. Watkins asked if funds for Scope #3 are paid yearly or every five years and it is required to be done. Katie clarified that it is a one-time payment and that it is not required but more for the department to be prepared for State and Federal audits. A finalized report will be provided in December. Mr. Watkins asked if there was any other county participating in this kind of audit. Katie stated that there are other counties participating. Mr. Netzinger stated that the Town of Hilton Head is considering having an audit done as well. Mr. Watkins was concerned of the amount



allocated and asked if we put a bid out for a cheaper rate. Katie stated that Woolpert is our on-call consultant and is budgeted to do services for us every year.

- Scope #5 – Drainage study for Buckwalter and Bluffton parkways. After conversing with Town of Bluffton and internal staff, this scope was determined unnecessary.
- Scope #6 – \$10,000.00 was allocated to a drainage study off of Middle Rd where flooding occurs. County considered purchasing a property to put a BMP to help with flooding however it was determined that it would only be of benefit at a 100-year storm level. Mr. Feinberg asked if this is similar to Alljoy. Katie stated it was not a title issue like that of Alljoy. Katie stated that this would fit into a bigger drainage study described in Scope #7.
- Scope #7 – Still reviewing their proposal for Northern Ladys Island Drainage study. Projected cost is between \$150,000.00 - \$300,000.00. The higher the cost the better the model will be. Mr. Feinberg asked if this amount is earmarked in the budget and Katie confirmed it is.
- Other scopes on County radar.
  - We are looking to apply for a 319 Grant in early February for Arthur Home Park to alleviate flooding.
  - Seeking a recommendation on how to proceed with Battery Creek Pond.
  - St Helena Drainage study
  - Annual report to DHEC presentation changed to April 2022.
- Mr. Feinberg inquired about Alljoy. He wanted to know if we were going to address it in the future or will it need to be given to a different department in the County. Mr. Watkins stated that he drove out there and witnessed SCDOT digging out ditches and their work butted up to County ditches where there needs to be some clearing also. Katie stated that there are monthly meetings held with SCDOT and in coordination with them if they inform us they will be at Alljoy then we can take care of our portions. SCEMD has encouraged us to apply for Hazard Mitigation Grant to do a study done to assess the area and then get engineering, design and construction done if possible.

#### **F. Regional Coordination – Katie Herrera**

##### ***Highlights:***

- ✓ Mossy Oaks monitoring continues in the area in coordination with USCB.
- ✓ May River Watershed Modeling – No updates currently
- ✓ County has signed IGA's with Town of Yemassee and City of Beaufort for professional services.

#### **G. Municipal Reports – Katie Herrera**

*Reports attached in agenda*

##### ***Highlights:***

*Reports information.*

Town of Hilton Head Island (From Jeff Netzing, Stormwater Manager)

- Short staffed and changes in administration taking place
- Improve resiliency to pump stations and adding backflow devices and getting more robust debris screens to protect the pumps.

- Happy to hear that Annual reports moved to April 2022 giving them more time
- ✓ Town of Bluffton (From Kim Jones, Watershed Management Division Director)
  - Reports Received – attached to the minutes
- ✓ City of Beaufort (From Nate Farrow, Public Works Director)
  - No information was available at the time of this report.
- ✓ Town of Port Royal (From Van Willis, Town Manager)
  - No information was available at the time of this report.

## **H. MS4 Update – Katie Herrera**

### ***Highlights:***

- ✓ Plan Review
- ✓ Stormwater Permits - Applications for single family and commercial projects continue and 50 new permits were issued last month.
- ✓ Monthly Inspection summary
- ✓ Weather Station Data – Report unavailable
- ✓ Education Report – Ellen Stirup Comeau, Clemson Extension not present (report attached)
  - We participated in the Frogmore 5K as an educational event at the Executive Airport on Ladys Island.
  - Pond Conference on October 26<sup>th</sup> and 27<sup>th</sup>
    - Role and responsibility presentation as well as presentation on Evergreen 319 pond.
- ✓ MS4 Statewide General permit – No further update at this time.
- ✓ Katie introduced staff updates to the meeting. Johanna Zoran started on September 20<sup>th</sup> as the new Stormwater Infrastructure Senior Administrative Specialist. Still advertising for Stormwater Administrative Assistant and at this time no successful candidate yet.

## **I. Maintenance Projects Report – Katie Herrera**

### ***Highlights:***

- ✓ Major projects:
  - None
- ✓ Three minor or routine projects:
  - Graves Road – Bluffton (SWUD 4) – Roadside clearing. Cost \$12,650.51.
  - George Williams Lane Channel #2 – Sheldon (SWUD 5) Cost \$1,319.01.
  - Telfair Subdivision – Purrysburgh Drive – Ladys Island (SWUD 7) Cost \$3,756.57.

## **J. Liaison Report – Beaufort County Council - Alice Howard**

### ***Highlights:***

- ✓ Shell Point Task Force and public meetings are going well.
- ✓ Ms. Howard has not heard anything on the status of the Military Stormwater at the County level
  
- ✓ Mr. Feinberg posed a question regarding attorney fees. Mr. Desai stated that we are not charged for the use of internal legal staff, however we have contracted with Gentry Locke, an outside legal firm in case the need arises. As of today, there have no services rendered except for a small amount of legal and document review and a few meetings that were set up. No retainer fee, as hour basis only. Mr. Desai stated that current ordinance requires the pursuit of delinquent fees. Looking into the need to modify or amend the current ordinance so that we are not in violation with our own ordinance. A legal review and then a meeting with County Administrators and upper management may determine a change to the ordinance and then it will be presented to Beaufort County Council for adoption. Mr. Desai stated that two municipalities are requesting to not pursue it, however we have to make sure we are not in violation.

### **5. Unfinished Business –**

- ✓ Infrastructure Maintenance timeline – Katie stated that internal staff are looking at prioritizing projects so that we can be more proactive rather than reactive to problems that occur. Woolpert is helping with the prioritization so that we can be most effective with the staff we have available. Discussions about possibly trying to contract out the more emergent situations rather than handle routine, preventative, and emergency maintenance all in house. Working on funding for FY23 to implement it and improve our turnaround for routine maintenance.

### **6. New Business – Katie Herrera**

- ✓ SoLoCo Design Manual Updates – Katie Herrera presented to the Utility Board the proposed updates to the the SoLoCo Manual for approval. Mr. Clark had some questions regarding some of the updates and Katie addressed them. Motion to approve was made by Brian Watkins and seconded by Patrick Mitchell and unanimously adopted.
- ✓ Academy Park BMP Acceptance – Katie is seeking the approval to move forward with a purchase agreement with the developer and the County. Motion to accept the development plan for Academy Park BMP was made by Brian Watkins and seconded by Patrick Mitchell and it was unanimously adopted.
- ✓ Battery Creek 319 Pond – Mr. Andrews could not be present however he wanted the Board to be aware of the issues with the forebay and outfall structure at this location, therefore Katie presented some photos and a description of problems this pond is having. We are working with Woolpert to get a recommendation on how to retrofit the system so that it functions correctly. Mr. Feinberg stated that Mr. Andrews sent him some comments to be put on record. Mr. Andrews questioned if there was a way to capture trash and debris from washing into the BMP's altogether and if it is possible to track where the trash is coming from. Katie stated that the debris is coming from the developed area by Walmart. Educational efforts have been made regarding where debris ultimately ends up. Woolpert's recommendation should determine if it was built as designed or will upgrades need to be made. Mr. Feinberg stressed the importance of educating students about the effects of littering.
- ✓ IDDE update – HWY 278 – Katie was updating the board on an illicit discharge of the sewer

system off of HWY 278. The issue has been resolved.

- ✓ Mr. Feinberg inquired if the calendar for 2022 had to be voted on in November or can it be pushed back to early December. Mr. Clark stated that holiday schedules may be an issue. He also stated that if there will be a meeting in January than meeting in November is critical. Katie stated that they usually never meet in January and typically the first meeting of the year is in February. Therefore, December was determined to be the most beneficial. Katie confirmed that the vote on our meeting schedule does not have to be in November. Mr. Feinberg made a motion to approve moving the next Utility Board meeting to December and hold a meeting every other month starting in February 2022. Patrick Mitchell and James Clark seconded the motion, and it was unanimously adopted. The next Utility Board meeting will be December 15<sup>th</sup>.

7. No Public Comment.

**8.Meeting Adjourned**

DRAFT



**BEAUFORT COUNTY  
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October 2021

**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) Implementation of new standards began on February 1<sup>st</sup>, 2021. At this time Staff have been working with several contractors on new requirements. Staff continues to coordinate implementation efforts internally.
  - d) Staff continues to support other municipalities in their efforts to move forward with adoption.
  - e) Amendments to manual and ordinance will be on the Natural Resources Committee November 1<sup>st</sup>, 2021.
3. Special presentation suggestions –
  - Suggestions for Future Meetings
    - Research performed by Dr. Montie – Spring 2022
    - Cypress Wetlands Project – Spring 2022
    - Woolpert – Feb 2022
    - Beaufort County Legal - TBD
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.
  - No update at this time.

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6. Reminder: Annual Financial report from the Municipalities are due – Per the Intergovernmental Agreements for the Utility, each year on September 30<sup>th</sup>, the City and Towns are required to submit a summary of revenue and expenditures for the previous fiscal year.
  - a) Beaufort County – Received.
  - b) Town of Hilton Head Island – 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. [See attached report.](#)

### **Stormwater Implementation Committee (SWIC) Report**

1. SWIC committee met November 9<sup>th</sup> to discuss Carolina Clear contract. The contract is up for renewal, committee discussed updates they would like to see contained within any new contract. SWIC committee met again December 2<sup>nd</sup> on terms of Carolina Clear contract.

### **Stormwater Related Projects**

1. Easements – Staff is working on easement requests and meets monthly to review status of each as well as any new easements coming in. Edits to the Extent of Service and Level of Service documents pending Council guidance prior to finalization
2. Complaints – Staff continually works numerous drainage related complaints each month.
  - a) Flyover bridge preventative maintenance and deferred maintenance repairs – construction complete and pending close out.
  - b) Shell Point Community – Staff actively pursuing funding for the design and construction of this project. Task Force met November 30<sup>th</sup> to update on grant application progress and cost estimation. BRIC grant is complete other than the benefit cost analysis and the Environmental and Historic Preservation Review requirements. The HMGP Grant application will be started following the submittal of the BRIC application and is due February 2022. Beaufort County is earmarking funds in the Fiscal Year 2023, 2024, and 2025 budgets for these efforts.
3. Factory Creek Watershed Regional Detention Basin “Phase I” & Academy Park Subdivision (Design Cost \$49,873, Tree Mitigation Cost \$18,200 & \$18,200,

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Construction Cost by the Developer) – Beaufort County Legal handling obtaining easement.

4. Factory Creek Watershed Regional Detention Basin “Phase II” (Design Cost = \$63,390, Tree Mitigation Cost is pending, Construction Cost by the Developer) – Beaufort County Legal handling obtaining easement.
5. Graves Property / Pepper Hall Public / private partnership – Roads and Infrastructure plan amendment was approved in SRT in early November. Conceptual Plans for the single family home complex on site are being reviewed in Staff Review Team this month.
6. Whitehall property purchase – Construction continues on City property.
7. Lady’s Island Plan, Sea Level Rise, and “no-fill” ordinance – No update at this time.
8. Tuxedo Park Pond Dredging- Engineering firm on the county vendor registry are preparing quotes for the completion of the construction drawings necessary for this project at present time. Following that, the job will go out to bid.
9. Huspah Court North- topographic survey complete and is being translated to a CAD file. In house design work to align the drainage ditch with the property line will follow complete receipt of the survey.

**Professional Contracts Report**

1. CIP FY 18 Grouping Stormwater Projects – (Design - Ward Edwards \$202,000, Andrews Engineering \$560,490, Const. est. \$5,512,900)
  - a) Salt Creek - Beaufort County MS4, OCRM, and SCDOT received. Appraisal complete. Waiting for go ahead from County leadership to proceed with presenting to property owner.
  - b) Shanklin – Waiting for go ahead from County leadership to proceed with presenting to property owner.
  - c) Brewer Memorial – Notice to Proceed to contractor was issued on November 22
2. Evergreen Regional Pond 319 grant project – (Design=\$89,286, Construction=\$590,000. Grant=\$229,124) – Contractor to continues to work on the pond and coordinates with engineer and county staff; on track to finish by end of contract in January 2022. The largest remaining task is connecting pipe from the catch basin along Hwy 170 to the pond.
3. Stormwater engineering consulting services – Woolpert
  - a) Scope #1 – General Services – Anything relating to Stormwater as a catch all

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- scope. Allocated Funds – \$15,000.00.
- b) Scope #2 – Southern Lowcountry Design Manual Training – This was completed prior to June of this year. Training set up for in house staff as well as developers in the County. Allocated funds - \$30,000.00.
  - c) Scope #3 – Comprehensive program audit. Reviewing all components of the MS4 program, CIP list, Utility, asset management, etc. Allocated funds - \$105,000.00
  - d) Scope #4 – Tax Run and Utility assistance. In the event the County needed assistance with assessing SW Fees, we have them available on call. We will also look to have them QA/QC data from previous years. Allocated funds - \$29,900.00.
  - e) Scope #5 – Drainage study for Buckwalter and Bluffton Parkways. Based on collaborative conversations with the Town of Bluffton, project not needed. Abandoned Scope 5.
  - f) Scope #6 – Turtle lane drainage study. Continuously flooded property, Stormwater staff wanted to determine if it would be useful to purchase and put BMP in place. Determination was no BMP yet, but could fit into larger study of Northern Ladys Island. Allocated funds - \$10,000.00.
  - g) Scope #7 – Northern Lady’s Island Drainage Study – final proposal review. Woolpert estimated \$374,381 for this study.

Scopes on County Radar:

- a) Arthur Horne Park – 319 Grant
- b) Battery Creek 319 Pond – Scope being written
- c) St. Helena Drainage Study
- d) Annual Report to DHEC
- e) Gray Pond – Battery Creek Burton Hill M2 Retrofit

### **Regional Coordination**

- 2. Mossy Oaks Task Force – County working with USCB on water quality monitoring efforts.
- 3. May River Watershed Modeling – No updates at this time.

### **Municipal Reports**

- 1. Town of Hilton Head Island (From Jeff Netzing, Stormwater Manager and Brian Eber, MS4 Coordinator)
  - i. No information was available at time of report.
- 2. Town of Bluffton (From Kim Jones, Watershed Management Division Director)
  - i. [See attached report.](#)



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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 – Report unavailable.
5. Public Education – [See attached report](#).
6. Energov permitting software – Implementation of Energov software went live on October 25th.
7. MS4 Statewide General permit – No further update at this time.

**Staff Update**

1. The Department continues to conduct interviews for all vacant positions, and at the time of the report will be making an offer to a candidate for the Stormwater Administrative Assistant position. Two staff members have taken the Certified Stormwater Plan Reviewer course through Clemson Extension. Currently awaiting test results.
2. The Department would like to recognize members of the Shell Point Drainage Study Task force as we continue to work through the grant approval process.

USCB Water Quality Lab Update

**ACTIVE PROJECTS**

**Beaufort County**

**BC Monitoring Plan 2021:**

- **Description:** Monitoring plan for 2021 continue from last year to include sampling sites covering all 5 categorical types:  
Category 1: TMDL monitoring  
Category 2: IDDE screening and monitoring  
Category 3: Water quality monitoring (baseline, based upon 303d list)  
Category 4: MOA points  
Category 5: Special project monitoring
- **Status:** Fourth quarter has begun. Dry sample collection is complete.

**Memorandum of Understanding:**

- Instead of a MOU, a sole source contract agreement has been approved and fully executed.

**Mossy Oaks Drainage Study:**

- **Description:** Mossy Oaks drainage area plan consists of a bi-monthly collection of four sampling sites; two outfall basins and two upstream basins.
- **Status:** Bi-monthly sampling has begun in June 2021.

**Pepper Hall Drainage Study:**

- **Description:** Pepper Hall property monitoring plan consists of a bi-monthly collection of six sampling sites; 3 inlets and 3 outlets to determine baseline data prior to construction. Sampling will continue during and after construction to measure the effectiveness of BMP's required on-site.
- **Status:** Bi-monthly sampling has begun in January 2021.

**Port Royal Redevelopment:**

- **Description:** The Town of Port Royal continues with WQ monitoring for the four sites in the proposed redevelopment area. The sampling schedule is quarterly wet events and is included in Beaufort County's Monitoring Plan.
- **Status:** Fourth quarter collection has started.

### Town of Bluffton

- **Description:** Monitoring for 2021 continues and includes monitoring for the categories; water quality, 319, MS4, MST, TMDL, and shared locations. A request from Town of Bluffton was made for data analysis of sampling sites dating from 2009 to present.
- **Status:** Monitoring for 2021 continues. USCB is putting together a plan and awaiting data from the Town for the requested data analysis.
- **Memorandum of Understanding:** An amendment to the current MOU is generated for the purposes of additional sampling efforts by the Town of Bluffton and has been fully executed.

### USCB Laboratory

#### **Additional Projects:**

- Palmetto Bluff: Continued sampling efforts of 12x/year for 6 wet/6 dry events. Sampling sites have been revised to include additional sites to monitor the New River. So far this year, 2 wet/ 2 dry events have been collected along with additional parameters requested by Town of Bluffton at specific sampling sites.

#### **Lab Projects:**

##### **Port Royal Cypress Wetland**

- **Description:** The Town of Port Royal wanted to continue with WQ monitoring at the Cypress as the Town is working on a plan to renovate the wetlands to eliminate invasive as much as possible, re-dredge the open water areas and eliminate as many Tallow trees as possible. Having a current base line of WQ information before any work is performed is critical to assessing the "before and after" conditions in Cypress.
- **Status:** Re-dredging is complete. Cypress wetland project sampling effort was on September 16, 2021 for a wet event and September 29, 2021 for a dry event.
- 2021 Proficiency testing for the Water Pollution and Water Supply study is complete and passed. This consisted of 10 different analyses requiring the analysis of an unknown sample, which is then reported to the PT provider and the State. The passing of all analyses in the study is a requirement to keep laboratory state certification.
- On February 21, 2020, an investigation of an oyster aquaculture operation on St. Helena Island was performed at the request of the owner. The aquaculture pond's water is largely supplied by Wallace Creek, which is frequently closed to shellfish harvesting.
- Dr. Warren supplied USCB's mathematicians/computational science faculty with SCDHEC water quality data at every shellfish station in Areas 14-20. This is similar to what Dr. Warren did a few years ago, and what Dr. Montie did more recently with examining long-term trends and exceedances of fecal coliform based on harvesting standards.
- New equipment arrived to include Rhodamine sensor for various studies, including pond retention times.

## COMPLETED PROJECTS

### Beaufort County

#### Crystal Lake:

- **Description:** Crystal Lake bi-monthly sampling and analysis began in August at three locations; boardwalk, nature trail and drainage into lake.
- **Status:** Project ended at the end of September 2020.

#### Okatie West Pond:

- **Description:** The University of South Carolina Beaufort's Water Quality Lab collected data on a variety of water quality parameters, including fecal coliform and *E. coli* bacteria, prior to and after detention pond construction. Sampling points allowed for the determination of the pond's bacterial removal efficiency, as well as the extent to which pond effluent was reloaded with bacteria as it was conveyed by ditch to the Okatie River's headwaters. Sampling took place in February 2018, prior to pond construction, and again in February 2019 when pond construction was complete.
- **Status:** Project was completed in February 2019.

#### Okatie West Pond: Bold and Gold

- **Description:** Environmental Conservation Solutions, LLC, in conjunction with Beaufort County, installed an innovative bacteria and nutrient removing side-bank filter to a section of a newly constructed wet detention pond for the Okatie West Regional Stormwater Project. The purpose of the joint effort is to evaluate the efficiency of the Bold & Gold Side-Bank filter for the possible application in the county to achieve target stormwater treatment in existing and new stormwater BMPs. The pilot project is a 60-foot side bank filter with a 2-foot layer of Bold & Gold® CTS Filtration media as the treatment mechanism, overlaid by a 6-inch well-draining soil that is connected to an underdrain pipe. The filter is located on the south side of the wet detention pond.
- **Status:** Last efforts were completed in March 2020.

### USCB Laboratory

- **USCB'S** Water Quality Laboratory will be vacating the North campus Marine Science Building location and will solely be located on South campus at the request of the University.
- **Hilton Head:** GEL Engineering: Discontinued receiving samples for Hilton Head collected by GEL Engineering 4x/ quarter due to using another laboratory .

# TOWN COUNCIL

## STAFF REPORT

### Engineering Department



|                         |  |
|-------------------------|--|
| <b>MEETING DATE:</b>    | December 14, 2021                          |
| <b>SUBJECT:</b>         | Engineering Department Monthly Report      |
| <b>PROJECT MANAGER:</b> | Kim Jones, Interim Director of Engineering |

### **CAPITAL IMPROVEMENTS PROGRAM (CIP) AND SPECIAL PROJECTS UPDATE**

#### **PATHWAYS**

##### **1. Goethe-Shults Sidewalks Phase 2**

- Notice to Proceed with construction was issued 7/1/2021.
- Materials have been delivered and construction is underway.
- Stormwater pipe installation is slow due to utility conflicts.
- **Next Steps**
  - Complete construction in January 2022.

##### **2. Buck Island-Simmons ville Neighborhood Sidewalks and Lighting**

- Phase 5 street lighting easement acquisition process is underway. Awaiting easement documents from legal.
- Phase 6A along Simmons ville Road from Grayco northward to Sugaree Drive: construction began in September.
- Phase 6B along Simmons ville Road from Sugaree Drive northward to the existing New Mustang Road: Engineering design for this final sidewalk phase is underway.
- **Next Steps**
  - Prepare and obtain streetlight easements and install lighting for Phase 5.
  - Complete construction of Phase 6A sidewalks in December 2021.
  - Complete Phase 6B design and permitting.
  - Construction of the remaining Simmons ville Road sidewalks to be completed in FY 2023.

##### **3. Bridge Street Streetscape**

- Phase 1 construction documents are 95% complete and under permitting review.
- SCDHEC 319 grant application was awarded for \$179,700 for drainage and water quality improvements.
- Easement exhibits, appraisals and just compensation are complete. Easement acquisition is underway.

- **Next Steps**
  - Complete engineering design and permitting in December 2021.
  - Issue Invitation for Bid in January 2022.
  - Construction is anticipated to start in the last quarter of FY 2022.
  
- 4. Boundary Street Streetscape**
  - Surveying is complete and engineering design is underway.
  - **Next Steps**
    - Complete draft preliminary engineering design in December 2021.
  
- 5. New River Linear Trail**
  - Surveying is complete.
  - Master Planning Services Agreement has been executed.
  - **Next Steps**
    - Begin Master Plan.
    - Obtain quote for Phase 1 engineering design for Phase 1 Site Development.
    - Research grant opportunities to fund planning and construction of future trail improvements.

## **SEWER & WATER**

- 1. Buck Island-Simmons ville Sewer (Phases 5A-5D)**
  - Construction has been halted on Phases 5A-D by BJWSA due to the contractor under-performing their job duties. Engineer has started closeout phase for what has been installed to date.
  - Working with the Engineer on new construction documentation to complete the project.
  - **Next Steps**
    - Readvertise for bids to 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**
  - Main line construction, gravity connections, and paving are complete.
  - **Next Steps**
    - Finalize grinder pump house connections.
  
- 3. Historic District Sewer Extension Phase 2 - Bridge Street**
  - Received SCDHEC permit to construct.
  - Received Quit Claim Deeds from all the property owners along the ghost road.
  - **Next Steps**
    - Obtain road ownership from SCDOT.
    - Readvertise for bid due to prior bid not receiving submissions.

#### 4. **Historic District Sewer Extension Phases 3 through 6 – Colcock, Lawrence, Green and Water Streets**

- Received initial design.
- **Next Steps**
  - Review design drawings.

### **HISTORIC DISTRICT IMPROVEMENTS**

#### 1. **Boundary Street Lighting**

- Phase 2 photometric plans, encroachment permits and lighting agreements are complete and approved.
- SCDOT and Dominion indicated poles must be installed on private property due to conflicts with sewer force main and communication utilities within the ROW. Easements must now be obtained to install Phase 2 lighting.
- **Next Steps**
  - Coordinate light installation in conjunction with streetscape design.
  - Obtain easements as needed for Phase 2 street lighting.
  - Begin installation of street lighting in January 2022.

#### 2. **Historic District Streetscape and Drainage Improvements**

- Engineering design, landscape design, permitting and bidding have been completed for the drainage improvements at the AME Church. No contractors bid the project. Must be re-packaged and re-bid.
- Completed Historic District crosswalk study identifying and prioritizing future intersection/crosswalk improvements to meet ADA compliance.
- Completed Traffic Calming Study and obtained approval for a Traffic Calming Policy from Town Council.
- **Next Steps**
  - AME Church rain garden will be re-advertised.
  - Prepare new solicitation and execute contracts for rain garden construction at the AME Church.
  - Obtain proposal for engineering design services for the first phase of intersection/crosswalk improvements.

#### 3. **Calhoun Street Streetscape**

- Surveying is complete and engineering design underway.
- **Next Steps**
  - Continue with engineering design. Obtain preliminary plan in December and continue planning into 2022.
  - Easement acquisition is planned to begin in FY 2023.
  - Phased construction is planned to begin in late FY 2023 pending budget approval.

#### 4. **Squire Pope Carriage House Preservation**

- Construction documents are complete and submitted to SHPO for a courtesy review.



- Stabilization documents are complete.
- **Next Steps**
  - Prepare stabilization bid solicitation package in December 2021.
  - Begin stabilization construction in February 2022.

## **PARK DEVELOPMENT**

### **1. Oyster Factory Park**

- Witmer, Jones and Keefer completed design development drawings in May 2021.
- Engineering Design of eastern parking area is underway.
- Obtained dock permit from USACOE and SCDHEC/OCRM.
- **Next Steps**
  - Complete engineering design for the next phase of master planned improvements in FY 2022.
  - Begin construction of parking area in March 2022.

### **2. Wright Family Park**

- Completed HVAC installation for restrooms in September 2021.
- **Next Steps**
  - Develop palmetto tree reuse design and signage.
  - Installation in Spring of 2022.

### **3. Oscar Frazier Park**

- Installed additional synthetic turf and power pedestals.
- Prepared concept designs and estimating for Splash Pad.
- **Next Step**
  - Complete plans to regrade and resod the Field of Dreams. Bid in December 2022.
  - Continue planning of future improvements in FY 2023 and beyond.

### **4. New Riverside Barn/Park**

- Obtained notification that \$500,000.00 grant was approved for partial funding of the initial phase of the project.
- Engineering design of Phase 1 site development is underway.
- Hart Howerton completed schematic design of the restroom and barn additions.
- Construction documents for the restroom building are underway.
- Executed contract with Wood and Partners for preliminary design of playground area and landscape design of Phase 1 development.
- **Next Steps**
  - Complete final architectural plans for Phase 1 restroom building.
  - Complete construction drawings, cost estimating and permitting of Phase 1 site development in the third quarter of FY 2022.
  - Bidding and construction of Phase 1 site development is anticipated to begin in the fourth quarter of FY 2022.

**5. May River Road Pocket Park**

- Presented conceptual plans at 7/20/21 Town Council Workshop.
- Coordinated with Mayberry Holdings for final design plan.
- Obtained bids to raise stormceptor.
- Requested updated boundary, tree, topo and as-builts.
- **Next Steps**
  - Obtain new survey in January 2022.
  - Finalize plan and coordinate with Mayberry Holdings.
  - Prepare construction documents.
  - Submit Public Project application.
  - Bid construction landscape improvements in May 2022.

**TOWN FACILITIES AND MISCELLANEOUS PLANNING****1. Buckwalter Place Park Restroom**

- Design for the Buckwalter Park restroom is complete. Awaiting permits from agencies.
- **Next Steps**
  - Obtain permits for the utility extensions for the proposed Buckwalter Park Restroom.
  - Restroom building is planned to be constructed in FY 2023 pending budget approval.

**2. Town of Bluffton Housing Projects**

- **Next Steps**
  - Planning and design to begin upon completion of Joint Venture Agreement.
  - Assist with the preparation of comprehensive cost estimates for planning, design and construction for the various housing projects.

**3. Law Enforcement Center Facility Improvements**

- Site work substantially complete.
- Additional Services for covered parking and reflection plaza is underway.
- **Next Steps**
  - Punch list and closeout documents nearing completion.
  - Solicit RFP for covered parking to project per police department request.
  - Information Technology department coordinating upgrades to building security systems.
  - Complete plans for Reflection Plaza and obtain a change order for the Greenery to construct in March 2022.

**4. Ghost Roads**

- Surveying and easement exhibits are complete.
- Bridge Quit Claim Deeds are complete. Pritchard and Colcock Street Quit Claim Deeds are 95% complete.
- 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**

- Fourteen older cameras in the network have been replaced.

- **Next Steps**

- Continue with camera replacements and upgrades as necessary.
- Install cameras to new LEC service yard area.

## 6. **Public Works Facility Improvements**

- Prepare site plans for expanding of Public Works yard.
- Install new plumbing and electric for the washer and dryer.

- **Next Steps**

- Begin design and permitting for the expansion of the yard.
- Obtain quotes for the installation of the plumbing and electric.

## 7. **Rotary Community Center Facility Improvements**

- Replace the hardwood floor in the main area.

- **Next Steps**

- Request quotes for the replacement of the new floor.

## 8. **Watershed Management Facility Improvements**

- Add flooring in additional offices.

- **Next Steps**

- Request quotes on completing the new flooring in remaining offices.

### **DIVISION/STAFF UPDATES**

#### **Project Management**

Thirty-eight (38) CIP projects were approved with the FY 2022 budget. Don Ryan Center, Veteran Memorial, Buckwalter Park, BIS Phase 5 sidewalks, BIS Sewer Phase 5E, Wright Family Park, Calhoun Street Dock, Oscar Frazier Sidewalks and numerous building facility improvements were completed in FY 2021. CIP projects including HD Sewer Phase 1 (Pritchard Street), Phase 6A Sidewalks, Goethe Shults Phase 2 Sidewalks and the LEC Expansion area are currently under construction and scheduled to be complete by December 2021. Boundary Street Lighting, and HD Sewer Phase 2, Bridge Street Streetscape, New Riverside Barn Park, May River Pocket Park and Oyster Factory Parking lot are expected to start construction this summer. The remaining CIP projects are still in the design phase and are planned to start construction in FY 2023.

## Watershed Management

### 1. **Sea Level Rise Task Force**

- Following Beaufort County's presentation and request for regional participation at the 10/22/19 SoLoCo meeting, staff attended the Sea Level Rise Task Force meetings to discuss a possible No Fill Ordinance, a Coastal Resilience Overlay District, and county-wide sea level rise adaptation strategies.
- Task Force met 12/15/20 and 12/18/20 to prioritize recommendations for final document with strategies for local governments to implement policies, ordinances and projects to mitigate the potential impacts of sea level rise.
- Task Force met on 6/23/21 to review current versions of both the No Fill Ordinance and the Coastal Resilience Overlay District. Town planning staff provided feedback on the proposed Overlay District.
- Information provided to Town Comprehensive Plan Update consultant team for resiliency component requirement.
- **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.
- The Town submitted a response on 12/18/21 to BJWSA's "call for projects" request that prioritizes May River Watershed sewer projects.
- Staff drafted a letter for the Town Manager's review requesting Beaufort County commitment to cost-share Stoney Creek/Palmetto Bluff Rd. sewer project in the May River watershed.
- Staff presented an update on current status at 4/20/21 Town Council Workshop.

- Town Council sent a letter on 4/26/21 requesting Beaufort County Council consider funding in FY 2022 for sewer extension projects in the May River watershed in the County's jurisdiction.
  - **Next Steps**
    - Town Council and BJWSA sent a letter requesting Beaufort County Council partnership in sewer extension projects within the County's jurisdiction of the May River Watershed.
- 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. Municipal Separate Storm Sewer System (MS4) Program Update**
- Staff is currently updating the Town's MS4 Stormwater Management Plan and supporting documentation. SCDHEC is currently in the process of developing a revised National Pollutant Discharge and Elimination (NPDES) Permit for Small MS4s and will re-issue to permittees, including the Town, in the future.
  - Staff has requested, along with Beaufort County Government and the Town of Hilton Head, that SCDHEC adjust the MS4 annual report timeline to align with the calendar year.
- 6. MS4 Minimum Control Measure (MCM) - #1 Public Education and Outreach, and MS4 MCM - #2 Public Participation and Involvement**
- Staff, as a courtesy, provided the Town's POA Residential and Commercial email distribution contacts with information on the Lowcountry Stormwater Partners (LSP) free educational lunch and learn event about protecting tidal creeks with planted buffers.
  - Lowcountry Stormwater Partners Consortium meeting was held 11/30/21.
  - The May River Watershed Action Plan Advisory Committee is scheduled for 12/02/21. **Attachment 3**
  - Staff developed a video on proper inlet protection practices for the Town's Sediment and Erosion Control Program and it is now posted on the Watershed Management Division's portion of the Town website.
  - Staff continues to work with the Town Digital Communication Manager to promote a series of MS4 stormwater educational tips and reminders for the Bluffton community via the Town's Facebook page.
- 7. 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, and 19-24. SCDHEC will conduct sampling on 11/29/21 and any pertinent results from this sampling event will be communicated with Council, WAPAC, and Senior Staff via email.

- Illicit Discharge Investigations – **Attachment 4e**
8. **MS4 MCM – #4 Construction Site Stormwater Runoff Control – Attachment 5**
  9. **MS4 MCM – #5 Stormwater Plan Review and Related Activity – Attachment 6**
  10. **MS4 MCM – #6 Good Housekeeping (Staff Training/Education)**
    - Staff attended the webinar Showcasing Leading Practices in Climate Adaptation - Session 1: Leading Practices in Climate Adaptation on 11/4/21.
  - 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 Simonsville and Buck Island Roads.
    - Performed ditch inspections
      - Arrow ditch (2,569 LF)
      - Red Cedar ditch (966 LF)
      - Buck Island roadside ditch (15,926 LF)
      - Simonsville roadside ditch (13,792 LF)
    - Ongoing roadside mowing, litter clean-up and maintenance of Masters' Way, McCracken Circle, Hampton Parkway, Buck Island and Simonsville Roads, Goethe Road, Shults Road, Jason and Able Streets, Whispering Pine Road, May River Road and Eagles Field.
  11. **Citizen Drainage, Maintenance, and Inspections Concerns Map – Attachment 7**
  12. **Citizen Request for Watershed Management Services & Activities – Attachment 8**

### **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. CIP Project Schedules

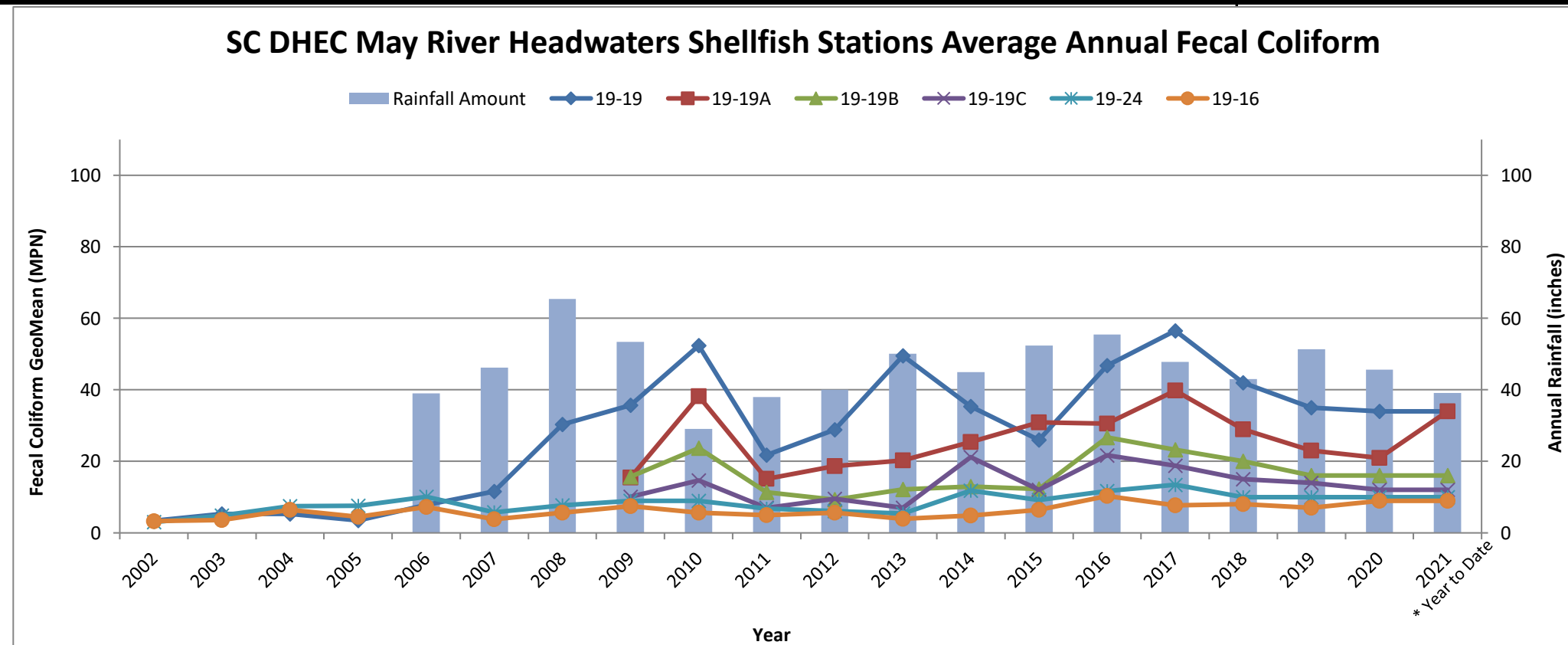
\* Attachment noted above includes the latest updates in **bold** and *italic* font.

|                              | 19-19                |                      |                      |                      | 19-19A               |                      |                      |                      | 19-19B               |                      |                      |                      | 19-19C               |                      |                      |                      | 19-24                |                      |                      |                      | 19-16                |                      |                      |                      |
|------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|                              | 2018                 | 2019                 | 2020                 | 2021                 | 2018                 | 2019                 | 2020                 | 2021                 | 2018                 | 2019                 | 2020                 | 2021                 | 2018                 | 2019                 | 2020                 | 2021                 | 2018                 | 2019                 | 2020                 | 2021                 | 2018                 | 2019                 | 2020                 | 2021                 |
|                              | 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                     | 79.0                 | 170.0                | 17.0                 |                      | 49.0                 | 33.0                 | 22.0                 |                      | 33.0                 | 140.0                | 17.0                 |                      | 46.0                 | 33.0                 | 4.5                  |                      | 23.0                 | 13.0                 | 4.0                  |                      | 21.0                 | 110.0                | 11.0                 |                      |
| November                     | 49.0                 | 17.0                 | 70.0                 |                      | 13.0                 | 6.8                  | 31.0                 |                      | 23.0                 | 7.8                  | 17.0                 |                      | 17.0                 | 11.0                 | 13.0                 |                      | 17.0                 | 4.5                  | 13.0                 |                      | 7.8                  | 2.0                  | 4.5                  |                      |
| October                      | 79.0                 | 7.8                  | 49.0                 | 49.0                 | 23.0                 | 4.5                  | 79.0                 | 26.0                 | 7.8                  | 2.0                  | 31.0                 | 13.0                 | 7.8                  | 4.5                  | 21.0                 | 23.0                 | 7.8                  | 1.8                  | 33.0                 | 23.0                 | 2.0                  | 2.0                  | 79.0                 | 17.0                 |
| September                    | 49.0                 | 79.0                 | 110.0                | 33.0                 | 23.0                 | 33.0                 | 49.0                 | 11.0                 | 13.0                 | 6.8                  | 49.0                 | 17.0                 | 17.0                 | 17.0                 | 33.0                 | 13.0                 | 17.0                 | 4.5                  | 33.0                 | 2.0                  | 17.0                 | 1.8                  | 33.0                 | 11.0                 |
| August                       | 70.0                 | 70.0                 | 49.0                 | 49.0                 | 23.0                 | 49.0                 | 49.0                 | 49.0                 | 13.0                 | 33.0                 | 23.0                 | 23.0                 | 4.5                  | 22.0                 | 23.0                 | 49.0                 | 7.8                  | 7.8                  | 17.0                 | 14.0                 | 17.0                 | 17.0                 | 22.0                 | 14.0                 |
| July                         | 23.0                 | 4.5                  | 33.0                 | 350.0                | 33.0                 | 13.0                 | 13.0                 | 64.0                 | 11.0                 | 7.8                  | 23.0                 | 79.0                 | 7.8                  | 17.0                 | 7.8                  | 33.0                 | 13.0                 | 22.0                 | 7.8                  | 33.0                 | 4.5                  | 13.0                 | 17.0                 | 13.0                 |
| June                         | 11.0                 | 33.0                 | NS                   | 49.0                 | 23.0                 | 49.0                 | NS                   | 79.0                 | 23.0                 | 49.0                 | NS                   | 13.0                 | 7.8                  | 46.0                 | NS                   | 17.0                 | 4.5                  | 13.0                 | NS                   | 22.0                 | 1.8                  | 4.5                  | NS                   | 2.0                  |
| May                          | 17.0                 | 7.8                  | 70.0                 | 2.0                  | 33.0                 | 9.2                  | 49.0                 | 49.0                 | 17.0                 | 7.8                  | 23.0                 | 23.0                 | 13.0                 | 2.0                  | 22.0                 | 23.0                 | 23.0                 | 6.8                  | 6.8                  | 23.0                 | 13.0                 | 4.5                  | 4.5                  | 7.8                  |
| April                        | 33.0                 | 23.0                 | 33.0                 | 33.0                 | 13.0                 | 13.0                 | 33.0                 | 23.0                 | 17.0                 | 7.8                  | 13.0                 | 22.0                 | 17.0                 | 6.8                  | 6.8                  | 17.0                 | 49.0                 | 23.0                 | 13.0                 | 7.8                  | 17.0                 | 6.8                  | 13.0                 | 2.0                  |
| March                        | 22.0                 | 23.0                 | 170.0                | 33.0                 | 21.0                 | 23.0                 | 49.0                 | 11.0                 | 4.5                  | 6.8                  | 130.0                | 17.0                 | 11.0                 | 13.0                 | 49.0                 | 13.0                 | 7.8                  | 7.8                  | 70.0                 | 2.0                  | 9.3                  | 4.5                  | 33.0                 | 2.0                  |
| February                     | 17.0                 | 64.0                 | 17.0                 | 79.0                 | 7.8                  | 33.0                 | 7.8                  | 70.0                 | 17.0                 | 23.0                 | 21.0                 | 79.0                 | 17.0                 | 31.0                 | 4.5                  | 23.0                 | 2.0                  | 6.8                  | 4.5                  | 7.8                  | 7.8                  | 13.0                 | 6.8                  | 6.8                  |
| January                      | 13.0                 | 23.0                 | 95.0                 | 17.0                 | 2.0                  | 23.0                 | 33.0                 | 17.0                 | 4.5                  | 13.0                 | 33.0                 | 13.0                 | 2.0                  | 33.0                 | 17.0                 | 23.0                 | 1.8                  | 7.8                  | 17.0                 | 17.0                 | 4.5                  | 23.0                 | 17.0                 | 13.0                 |
| Additional Samples           |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
| Average Annual GeoMean       | 30.8                 | 26.4                 | 51.4                 | 36.3                 | 17.5                 | 19.0                 | 31.9                 | 31.8                 | 13.1                 | 13.0                 | 27.3                 | 23.2                 | 10.7                 | 14.5                 | 14.0                 | 21.6                 | 9.8                  | 8.0                  | 13.8                 | 10.8                 | 7.9                  | 7.5                  | 15.3                 | 6.7                  |
| ** Truncated GeoMetric Mean  | 42.0                 | 35.0                 | 34.0                 | 36.0                 | 29.0                 | 23.0                 | 21.0                 | 26.0                 | 20.0                 | 16.0                 | 16.0                 | 19.0                 | 15.0                 | 14.0                 | 12.0                 | 15.0                 | 10.0                 | 10.0                 | 10.0                 | 11.0                 | 8.0                  | 7.0                  | 9.0                  | 9.0                  |
| ** Truncated 90th Percentile | 176.0                | 168.0                | 106.0                | 140.0                | 115.0                | 89.0                 | 59.0                 | 68.0                 | 71.0                 | 63.0                 | 50.0                 | 61.0                 | 56.0                 | 52.0                 | 37.0                 | 40.0                 | 44.0                 | 38.0                 | 31.0                 | 37.0                 | 30.0                 | 32.0                 | 35.0                 | 35.0                 |

NS = No Sample

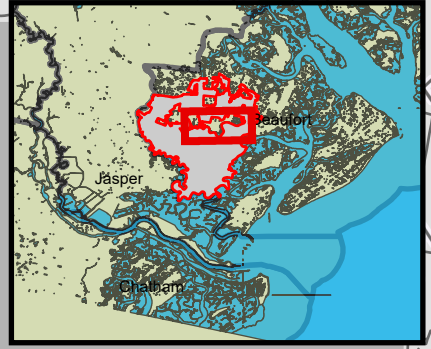
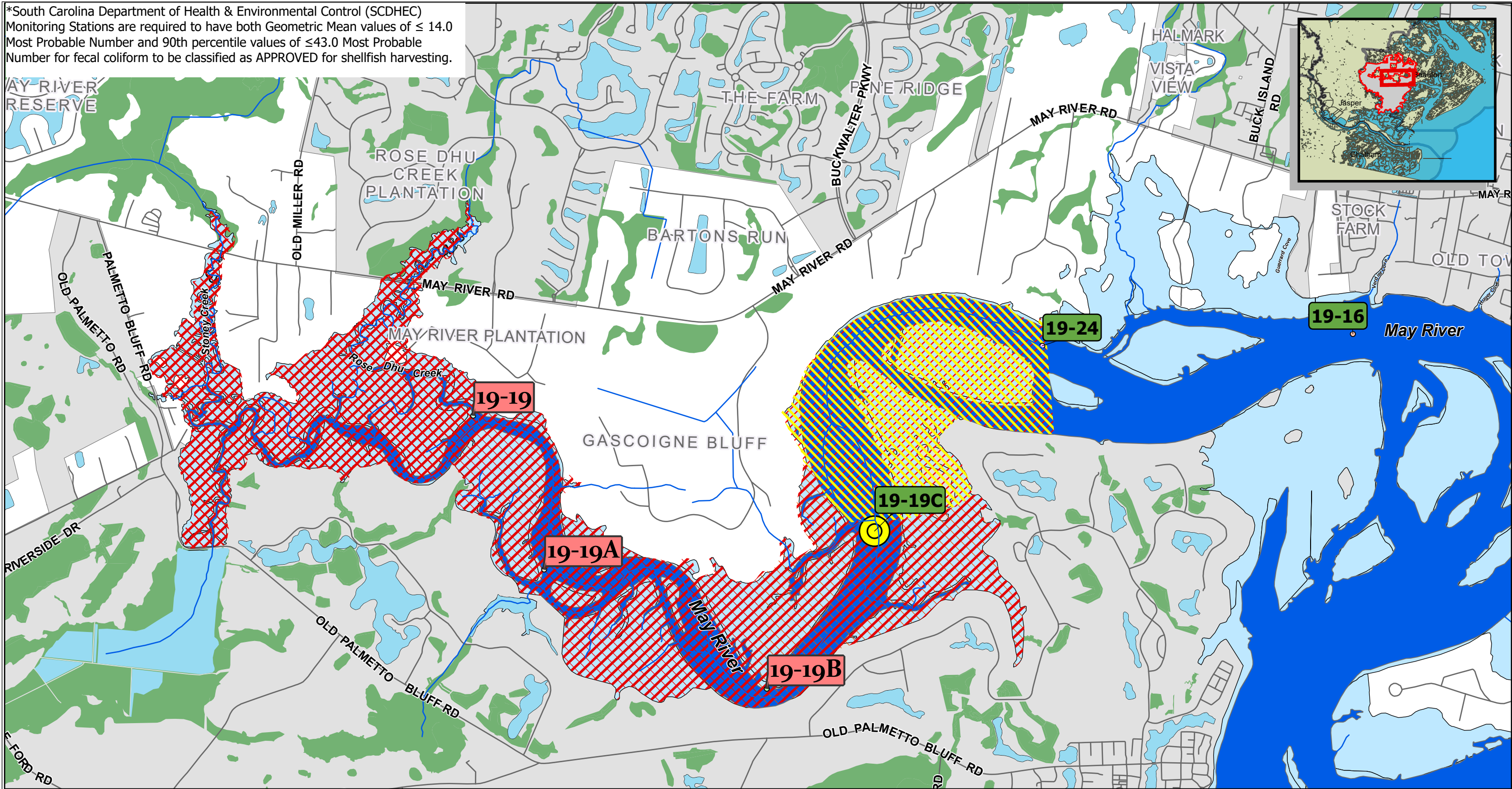
AS = Additional Samples

\*\* Town staff calculations utilizing DHEC statistics





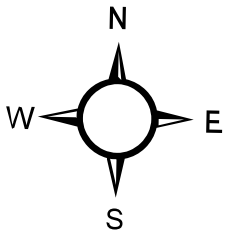
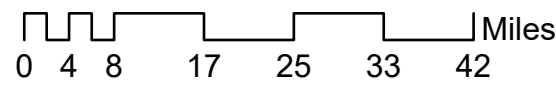
\*South Carolina Department of Health & Environmental Control (SCDHEC) Monitoring Stations are required to have both Geometric Mean values of  $\leq 14.0$  Most Probable Number and 90th percentile values of  $\leq 43.0$  Most Probable Number for fecal coliform to be classified as APPROVED for shellfish harvesting.



- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li> Closed SCDHEC Shellfish Monitoring Stations</li> <li> Open SCDHEC Shellfish Monitoring Stations</li> <li> SCDHEC Shellfish Monitoring Station Classification Change</li> <li> Restricted 2021/2022 Shellfish Season</li> </ul> | <ul style="list-style-type: none"> <li> Streets</li> <li> Drainage</li> <li> Town Jurisdiction</li> <li> County Jurisdiction</li> <li> Water</li> <li> Wetlands</li> <li> Re-Opened 2021/2022 Shellfish Season</li> </ul> |
|--|---|

**Town of Bluffton**  
Beaufort County, SC

# SCDHEC SHELLFISH HARVESTING STATUS



| ACTIVITY - FINANCIAL   | STATUS   |
|--|--|
| Funding Opportunities  | Council unanimously adopted \$115 SWU Fee and NPDES-related Fees on 6/9/20.  |
| 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                            | <b><i>Current project updates are included in Engineering Consent Agenda under "Southern Lowcountry Regional Board (SoLoCo)."</i></b>  |
| ACTIVITY - PROJECTS  | STATUS   |
| Sanitary Sewer Extension   | Completed Buck Island/Simmonsville Road (BIS) Phases I, II, III, IV; Toy Fields; Jason/Able; and Poseys Court. Six project phases of Historic District sewer extension are proposed in the 5-year Capital Improvement Program. <b><i>Current project updates are included in Engineering Consent Agenda under "Sewer &amp; Water."</i></b>                             |
| 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. <b><i>Current project updates are included in Engineering Consent Agenda under "Sewer &amp; Water."</i></b>  |
| May River 319 Grant Phase 5 - Bridge Street Streetscape (Grant award of \$179,900 in 2020)     | Supports enhanced drainage and water quality improvements as part of the Bridge Street Streetscape project. <b><i>Current project updates are included in Engineering Consent Agenda under "Pathways."</i></b>   |
| Stoney Creek Wetlands Restoration: Preliminary Design Phase                                    | Project on hold following Council direction on 5/31/17.  |
| May River Watershed Action Plan Update & Modeling Report                                       | <i>Completed 2021. Town Council adopted the document as a supporting document to the Comprehensive Plan on 2/9/21.</i>   |
| 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. <b><i>Current updates are included in Engineering Consent Agenda and Attachment 3.</i></b> |
| 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. <b><i>Current updates are included in Engineering Consent Agenda Attachment 4a.</i></b>   |

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





# May River Watershed Action Plan Advisory Committee Meeting

Thursday, December 02, 2021 at 9:00 AM

Orlando Conference Room

## AGENDA

- I. **CALL TO ORDER**
  - II. **ROLL CALL AND CONFIRMATION OF QUORUM**
  - III. **ADOPTION OF THE AGENDA**
  - IV. **ADOPTION OF MINUTES**
    - 1. Adoption of October 28, Minutes
  - V. **PUBLIC COMMENTS**
  - VI. **OLD BUSINESS**
    - 1. Water Quality Monitoring Program (Standing Item) - Kim Jones, Interim Director of Engineering
      - a. Monthly Sampling Update
      - b. Microbial Source Tracking (MST) Update
      - c. SCDHEC Shellfish Data Update
  - VII. **NEW BUSINESS**
    - 1. Adoption of 2022 Meeting Dates and Times - Kim Jones, Interim Director of Engineering
    - 2. Recommendation to Town Council to Expand the Geographic Purview of the Committee - Kim Jones, Interim Director of Engineering
  - VIII. **DISCUSSION**
  - IX. **ADJOURNMENT**
- NEXT MEETING DATE: TBD**

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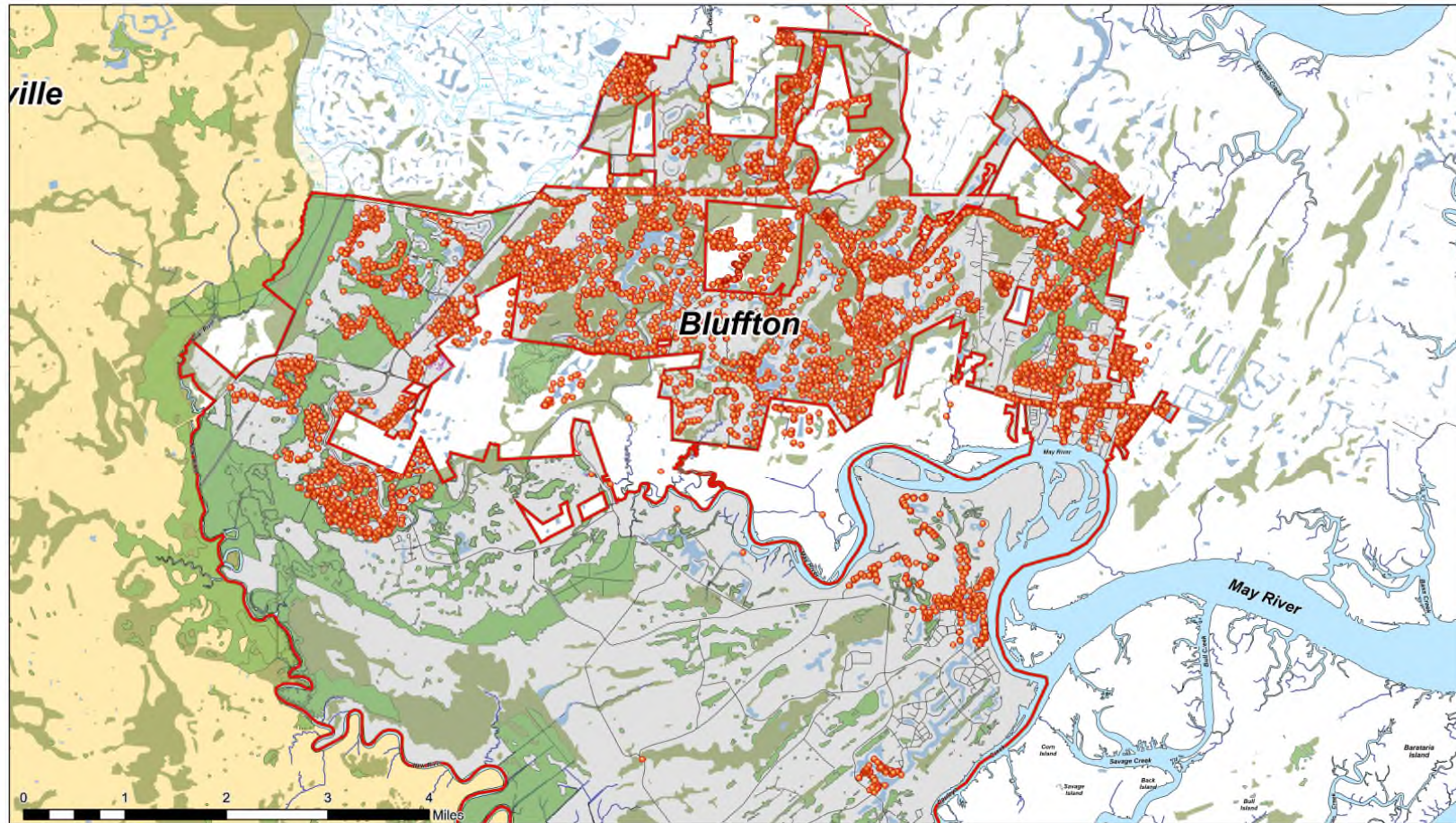
*“FOIA Compliance – Public notification of this meeting has been published and posted in compliance with the Freedom of Information Act and the Town of Bluffton policies.”*

*In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 ("ADA"), the Town of Bluffton will not discriminate against qualified individuals with disabilities on the basis of*

*disability in its services, programs, or activities. The Town of Bluffton Council Chambers are ADA compatible. Any person requiring further accommodation should contact the Town of Bluffton ADA Coordinator at 843.706.4500 or [adacoordinator@townofbluffton.com](mailto:adacoordinator@townofbluffton.com) as soon as possible but no later than 48 hours before the scheduled event.*

*\*Please note that each member of the public may speak at one public comment session and a form must be filled out and given to the Town Clerk. Public comment must not exceed three (3) minutes.*

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



- SW STRUCTURE
- ▭ TOWN OF BLUFFTON
- ▭ WETLAND
- SW PIPE
- ▭ BEAUFORT COUNTY
- ▭ WATER
- ▭ JASPER COUNTY
- ▭ ROADS

**Town of Bluffton**  
Beaufort County, SC

## STORMWATER INFRASTRUCTURE

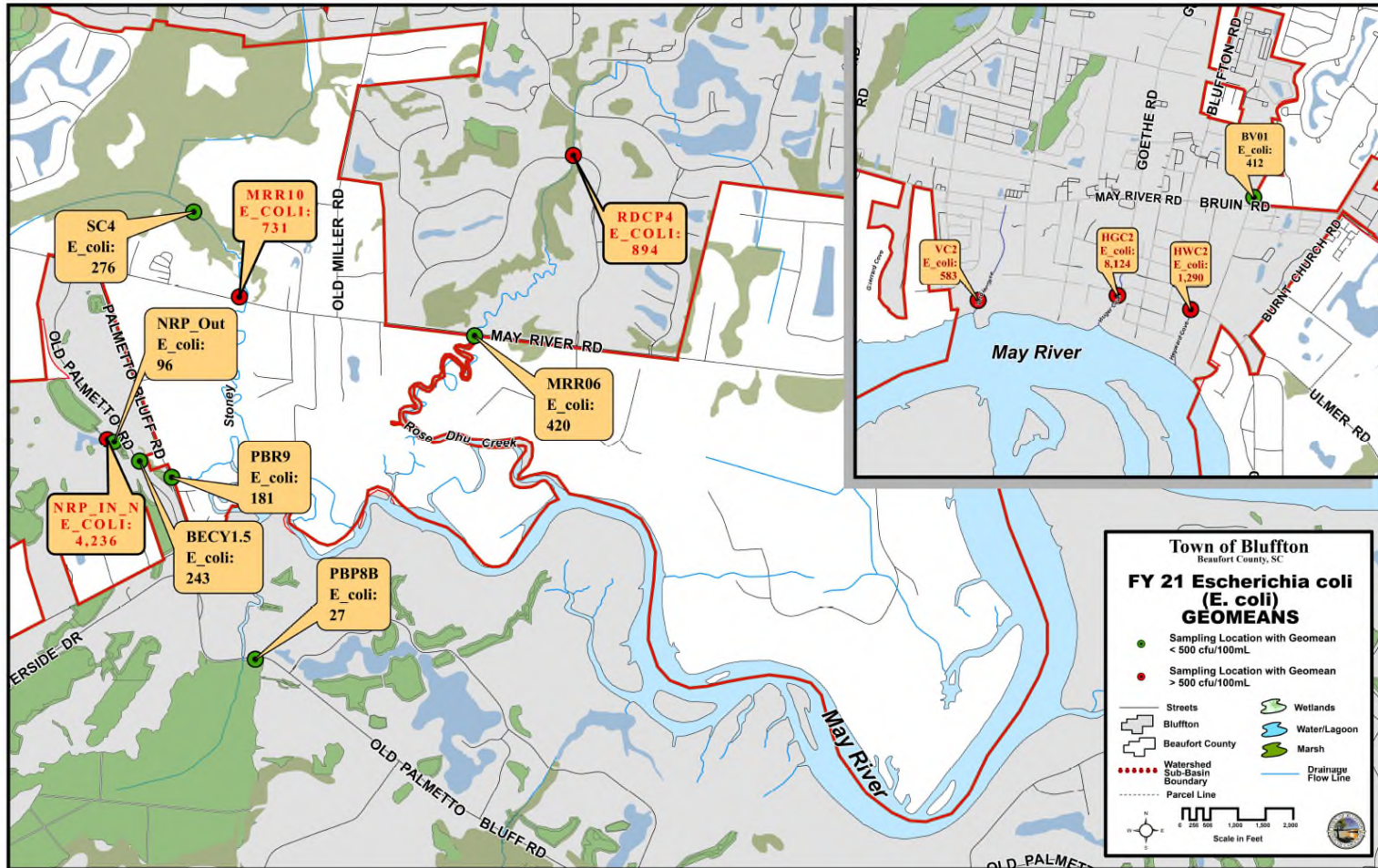


Updated Date: 11/23/2021

| Stormwater Infrastructure Inventory Collection Status |       |
|---|-------|
| FY 2022 YTD Collection Totals                         | 812   |
| FY 2021 Collection Totals                             | 2,222 |
| FY 2020 Collection Totals                             | 4,878 |
| FY 2019 Collection Totals                             | 2,925 |



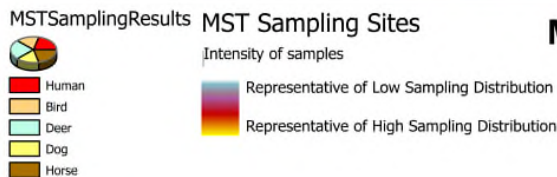
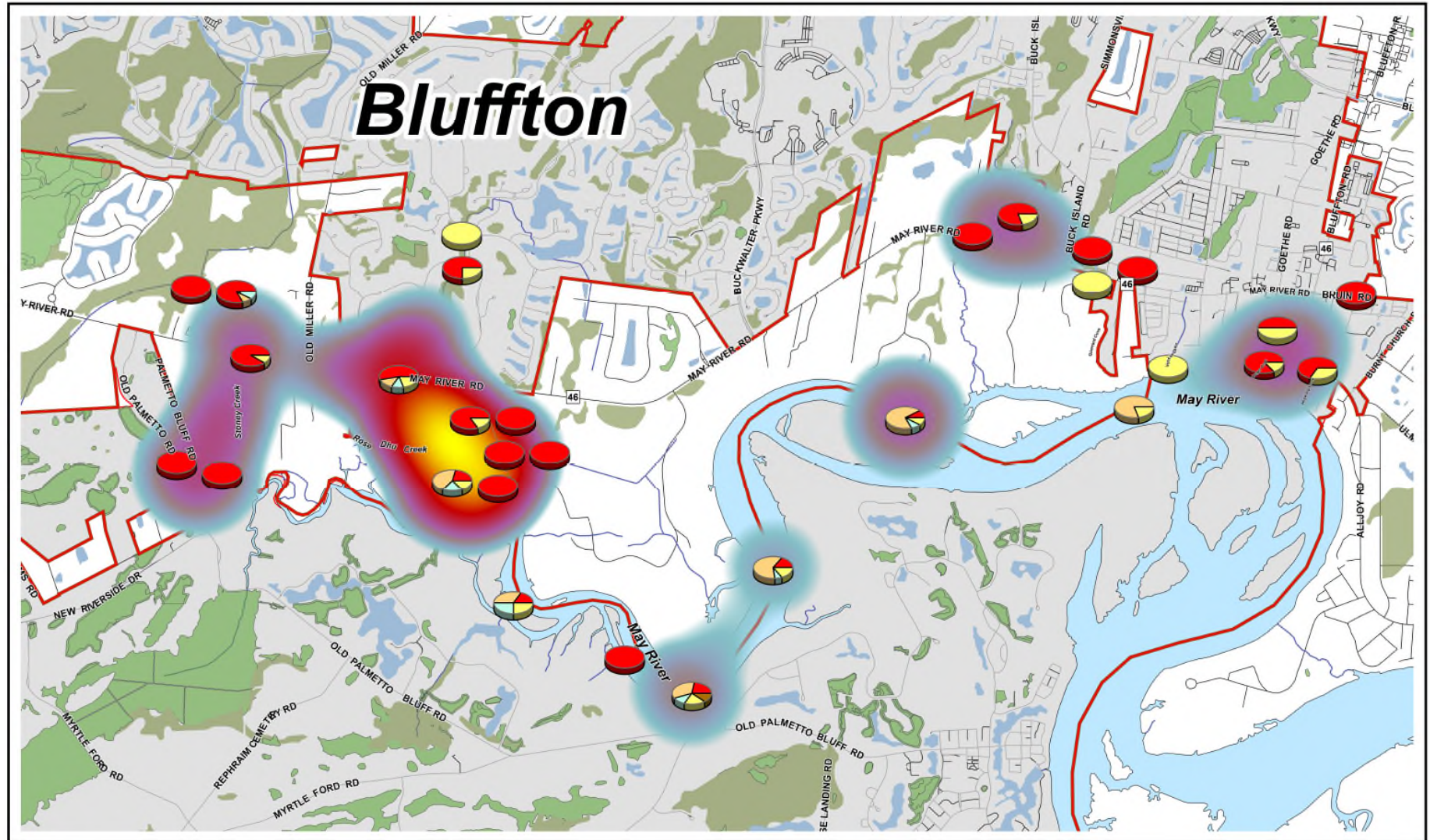
# MS4 Minimum Control Measure #3 – IDDE: E. coli Concentrations Trend Map



|                    | USCB Water Quality Samples | Microbial Source Tracking Samples | MS4 Quarterly Samples Collected |
|--------------------|----------------------------|-----------------------------------|---------------------------------|
| FY 2022 YTD Totals | 108                        | 20                                | 74                              |
| FY 2021 Totals     | 380                        | 115                               | 179                             |
| FY 2020 Totals     | 223                        | 115                               | 123                             |
| FY 2019 Totals     | 280                        | 193                               | 264                             |



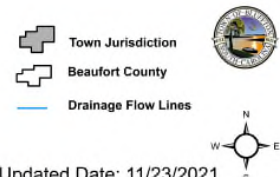
# MS4 Minimum Control Measure #3 – IDDE: Microbial Source Tracking (MST) Trend Map – Human Source



## MICROBIAL SOURCE TRACKING (MST) LOCATIONS

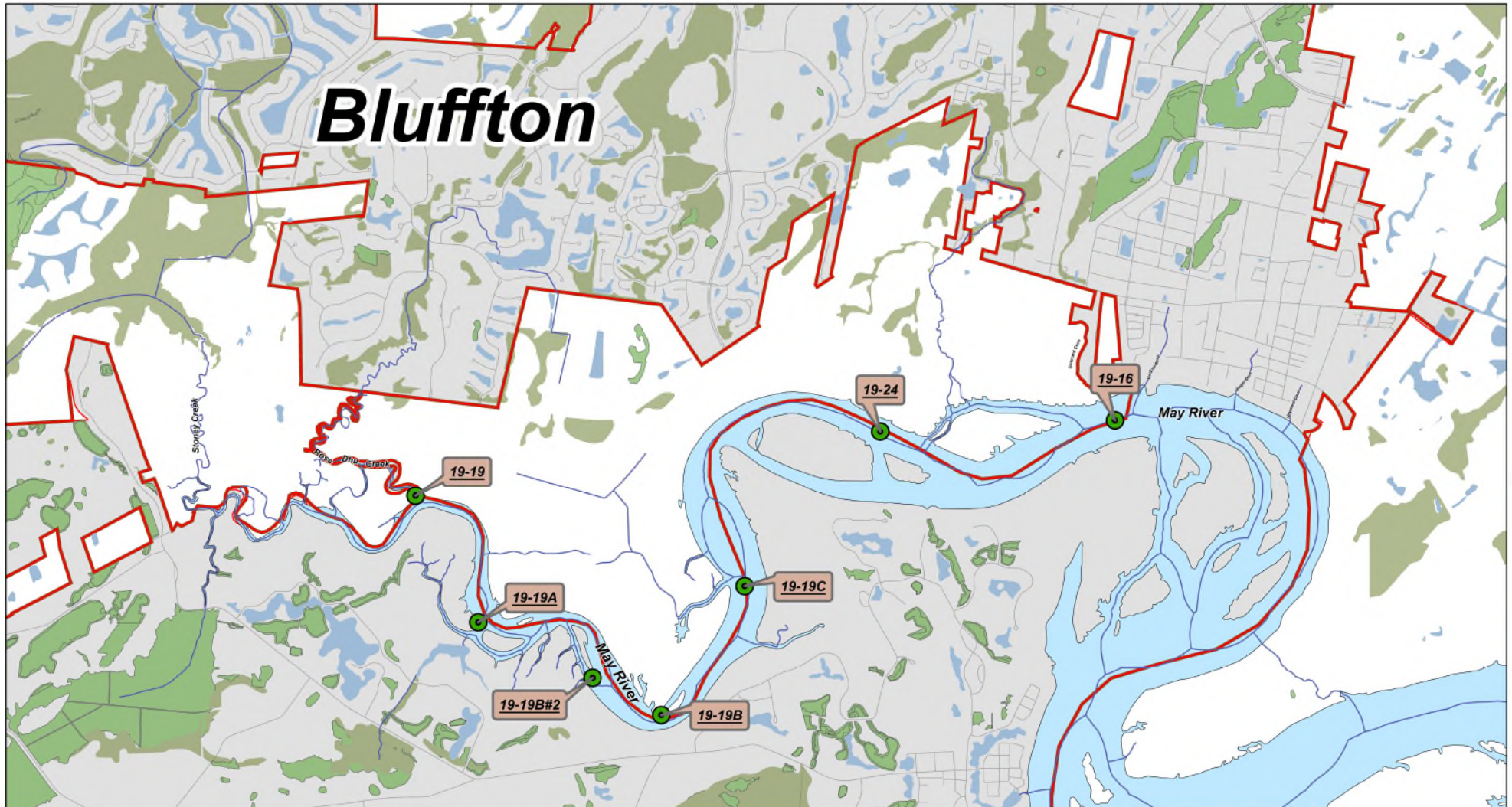
Samples at Sites With Positive Detection  
and the Intensity of Positive Hits

Town of Bluffton  
Beaufort County, SC





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

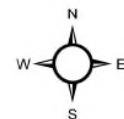


- MST Sampling Location Without Detection
- MST Sampling Location With Detection
- Flowline
- Street
- ☐ Town Jurisdiction
- ☐ County Jurisdiction

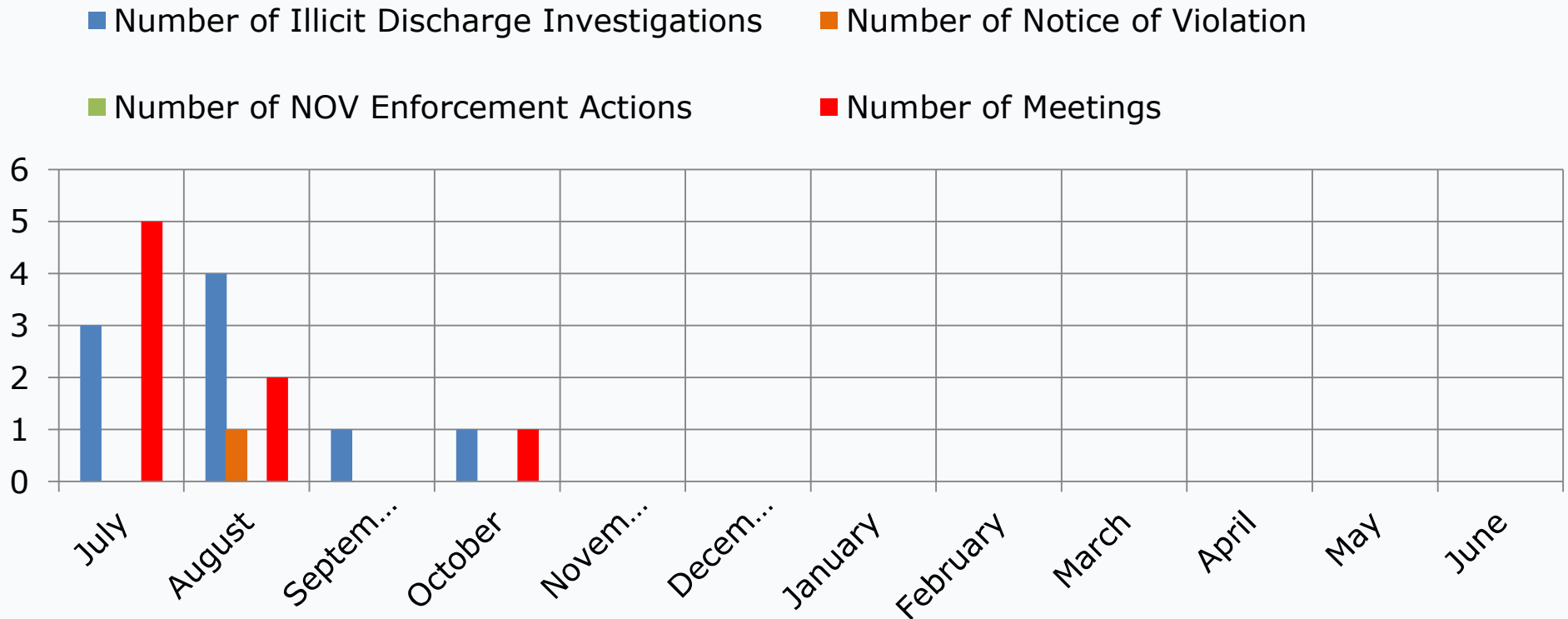
## MICROBIAL SOURCE TRACKING LOCATIONS

Sampling Results October 2021

Town of Bluffton  
Beaufort County, SC

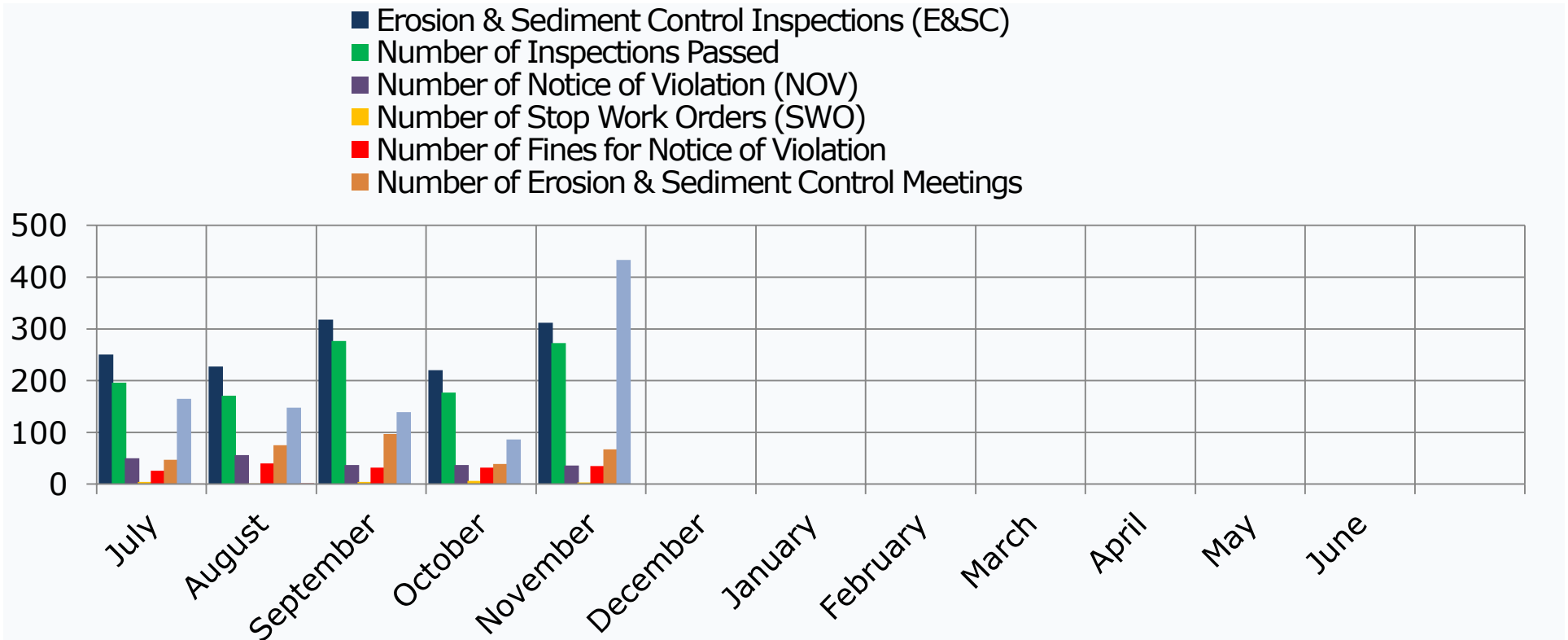


## MS4 Minimum Control Measure #3 – IDDE: Illicit Discharge Investigations



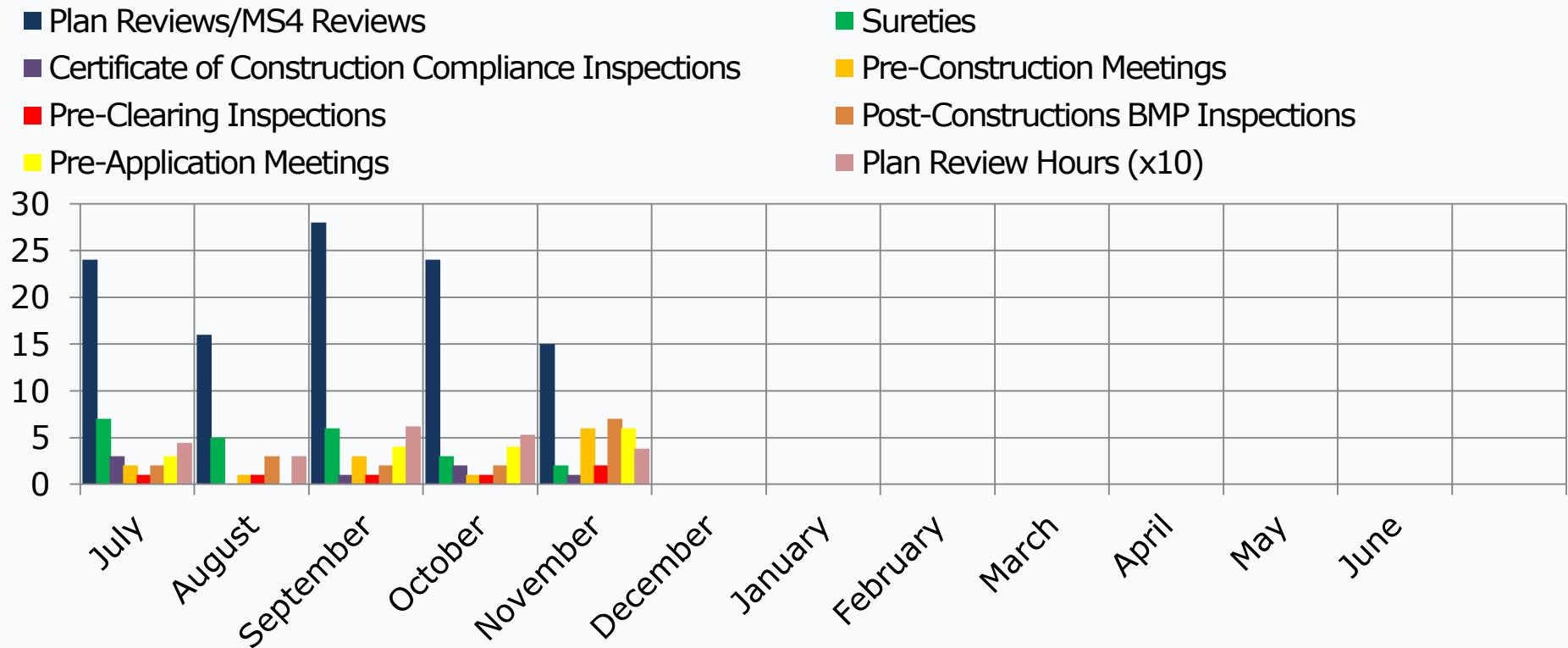
|                    | Number of Illicit Discharge Investigations | Number of Notices of Violation Issued | Number of NOV Enforcement Actions | Number of Meetings |
|--------------------|--|---------------------------------------|-----------------------------------|--------------------|
| FY 2022 YTD Totals | 9  | 1                                     | 0                                 | 8                  |
| FY 2021 Totals     | 36   | 11                                    | 1                                 | 29                 |
| FY 2020 Totals     | 45   | 8                                     | 6                                 | 49                 |
| FY 2019 Totals     | 38   | 3                                     | 1                                 | 61                 |

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



|                    | Number of Sediment & Erosion Control Inspections | Number of Inspections Passed | Number of NOVs Issued | Number of SWO Issued | Number of NOV Enforcement Actions | Number of E&SC Meetings |
|--------------------|--|------------------------------|-----------------------|----------------------|-----------------------------------|-------------------------|
| FY 2022 YTD Totals | 1,327  | 1,094                        | 216                   | 18                   | 21                                | 325                     |
| FY 2021 Totals     | 1,805  | 1,527                        | 267                   | 32                   | 36                                | 413                     |
| FY 2020 Totals     | 1,517  | 1,187                        | 185                   | 16                   | 9                                 | 496                     |

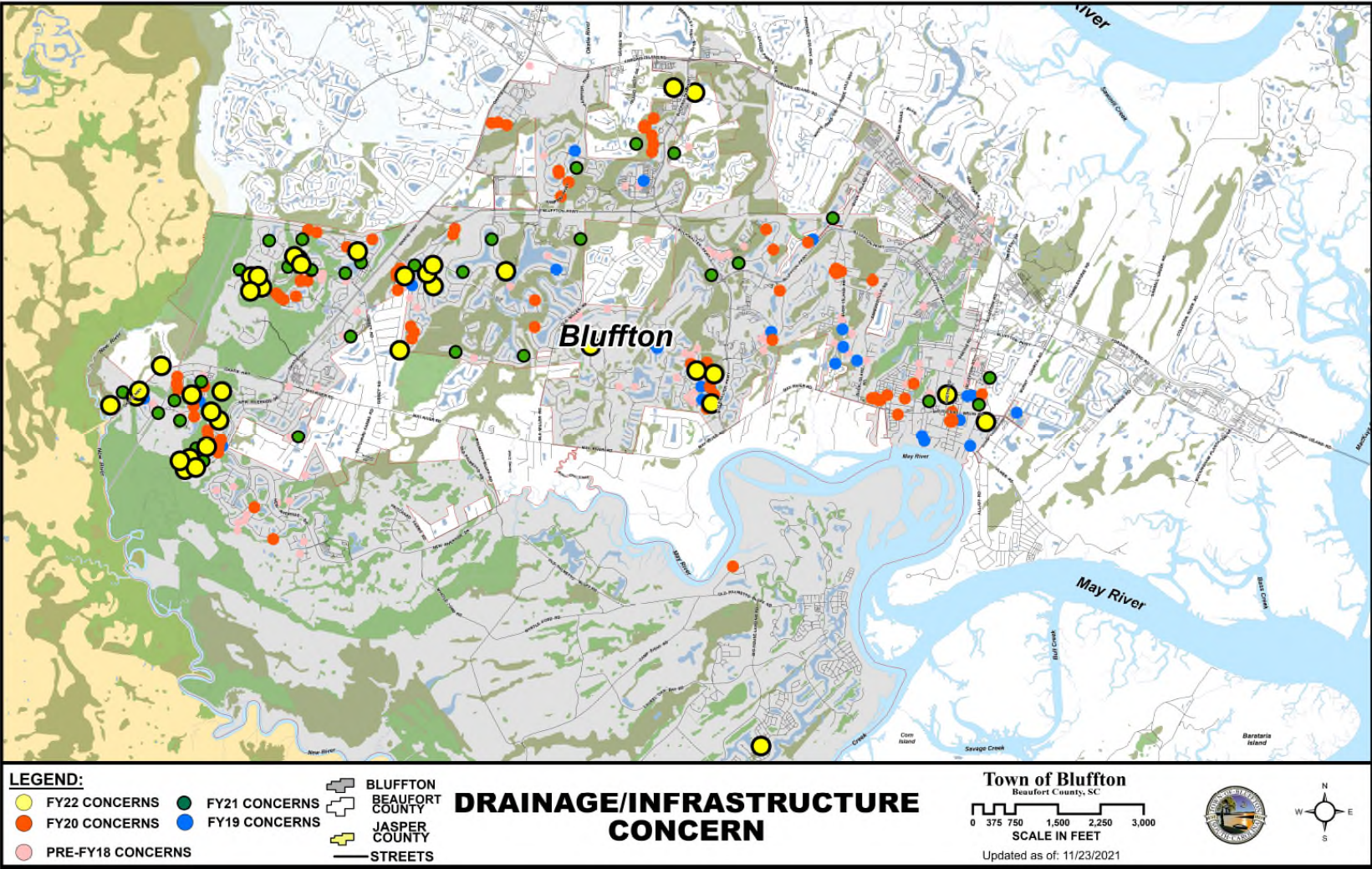
## MS4 Minimum Control Measure #5 Stormwater Plan Review & Related Activity



|                       | Plan Reviews<br>MS4 Reviews | Sureties | Certificate of<br>Construction<br>Compliance<br>Inspections | Pre-<br>Construction<br>Meetings | Pre-Clearing<br>Inspections | Post<br>Construction<br>BMP<br>Inspections | Pre-Application<br>Meetings | Total Plan<br>Review Hours |
|-----------------------|-----------------------------|----------|---|----------------------------------|-----------------------------|--|-----------------------------|----------------------------|
| FY 2022 YTD<br>Totals | 107                         | 23       | 7   | 13                               | 6                           | 16   | 17                          | 227 Hrs.                   |
| FY 2021<br>Totals     | 186                         | 61       | 55  | 24                               | 24                          | 22   | 41                          | 789 Hrs.                   |
| FY 2020<br>Totals     | 176                         | 53       | 46  | 36                               | 17                          | 8  | 36                          | 1,040 Hrs.                 |



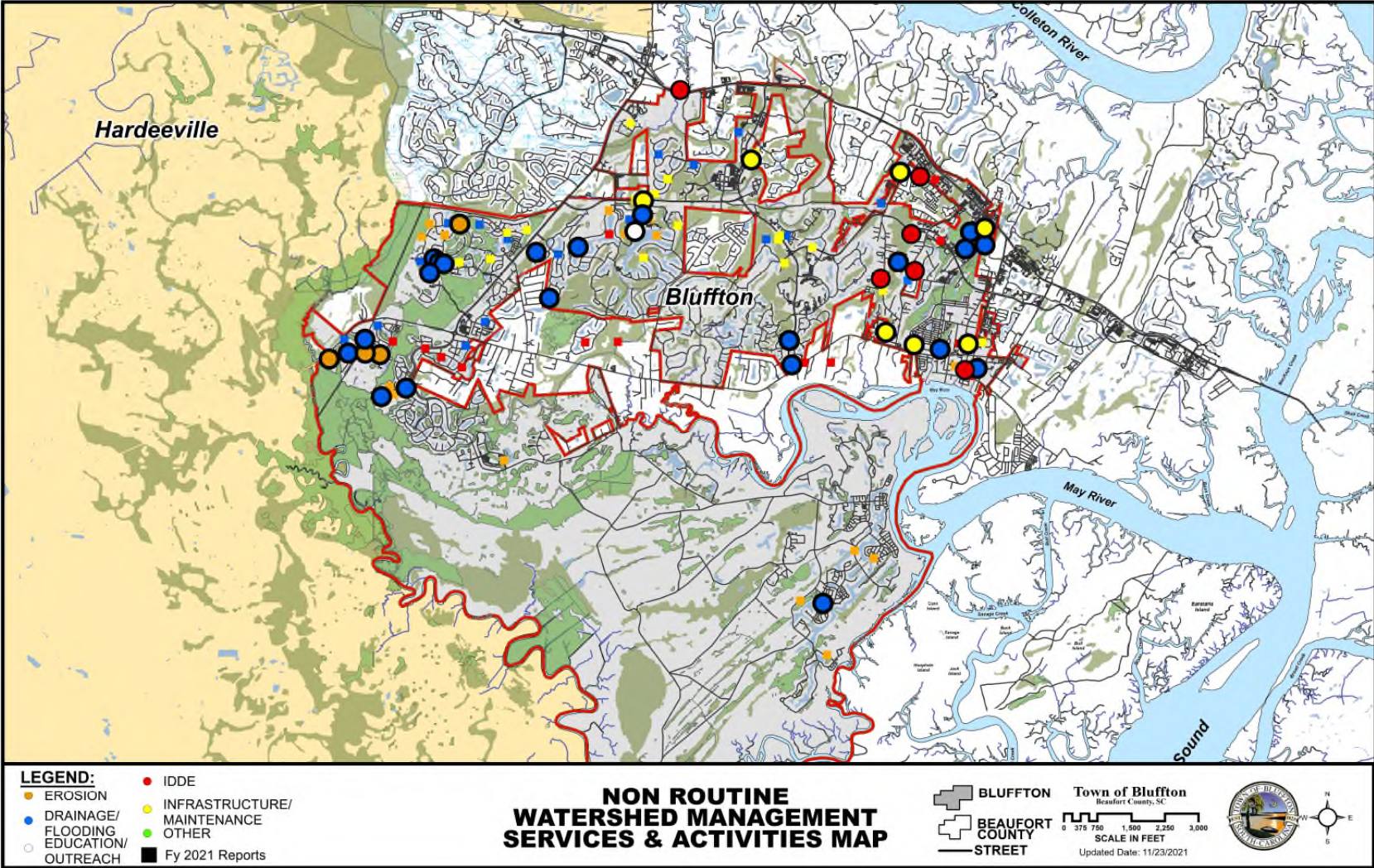
# Citizen Drainage, Maintenance and Inspections Concerns Map



|                    | Number of Drainage Concerns Investigated | Number of Meetings |
|--------------------|--|--------------------|
| FY 2022 YTD Totals | 20                                       | 20                 |
| FY 2021 Totals     | 45                                       | 39                 |
| FY 2020 Totals     | 68                                       | 76                 |



Citizen Request for Watershed Mngt. Services & Activities Map



|                    | Number of Citizen Requests Investigated | Number of Meetings |
|--------------------|---|--------------------|
| FY 2022 YTD Totals | 18                                      | 18                 |
| FY 2021 Totals     | 46                                      | 36                 |
| FY 2020 Totals     | 99                                      | 102                |

**BUCKWALTER PLACE PARKING IMPROVEMENTS  
PROPOSED SCHEDULE**

| ID | Task Name  | Duration        | Start             | Finish            | July 6/27 | 8/8 | October 9/19 | 10/31 | January 12/12 | 1/23 | 3/6 | April 4/17 | 5/29 | July |
|----|--|-----------------|-------------------|-------------------|-----------|-----|--------------|-------|---------------|------|-----|------------|------|------|
| 0  | <b>00098 Buckwalter Place Parking Improvements</b> | <b>224 days</b> | <b>Sun 8/1/21</b> | <b>Thu 6/9/22</b> |           |     |              |       |               |      |     |            |      |      |
| 1  | Planning & Conceptual Design                       | 81 days         | Sun 8/1/21        | Mon 11/22/21      |           |     |              |       |               |      |     |            |      |      |
| 5  | Final Design & Construction Documents              | 45 days         | Tue 10/5/21       | Mon 12/6/21       |           |     |              |       |               |      |     |            |      |      |
| 8  | Permitting   | 75 days         | Tue 10/5/21       | Mon 1/17/22       |           |     |              |       |               |      |     |            |      |      |
| 11 | Easements & Land Acquisition                       | 21 days         | Tue 10/5/21       | Tue 11/2/21       |           |     |              |       |               |      |     |            |      |      |
| 13 | Bidding & Contracts                                | 32 days         | Tue 1/18/22       | Wed 3/2/22        |           |     |              |       |               |      |     |            |      |      |
| 18 | Construction                                       | 71 days         | Thu 3/3/22        | Thu 6/9/22        |           |     |              |       |               |      |     |            |      |      |

Project: 00098  
Date: Thu 10/21/21

Milestone  
Critical Task  
Task



Project Duration  
Planning and Conceptual Design  
Final Design and Construction Documents



Permitting  
Easements and Land Acquisition  
Bidding and Contracts



Construction









BUCK ISLAND-SIMMONSVILLE SANITARY SEWER PHASE 5 A-D  
PROPOSED SCHEDULE

| ID | Task Name                      | Duration   | Start       | Finish       | Predecessors | Timeline           |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |
|----|--------------------------------|------------|-------------|--------------|--------------|--------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
|    |                                |            |             |              |              | 4, 2016<br>Nov Dec | Qtr 1, 2017<br>Jan Feb Mar | Qtr 2, 2017<br>Apr May Jun | Qtr 3, 2017<br>Jul Aug Sep | Qtr 4, 2017<br>Oct Nov Dec | Qtr 1, 2018<br>Jan Feb Mar | Qtr 2, 2018<br>Apr May Jun | Qtr 3, 2018<br>Jul Aug Sep | Qtr 4, 2018<br>Oct Nov Dec | Qtr 1, 2019<br>Jan Feb Mar | Qtr 2, 2019<br>Apr May Jun | Qtr 3, 2019<br>Jul Aug Sep | Qtr 4, 2019<br>Oct Nov Dec | Qtr 1, 2020<br>Jan Feb Mar | Qtr 2, 2020<br>Apr May Jun | Qtr 3, 2020<br>Jul Aug Sep | Qtr 4, 2020<br>Oct Nov Dec | Qtr 1, 2021<br>Jan Feb Mar | Qtr 2, 2021<br>Apr May Jun | Qtr 3, 2021<br>Jul Aug Sep | Qtr 4, 2021<br>Oct Nov Dec | Qtr 1, 2022<br>Jan Feb Mar | Qtr 2, 2022<br>Apr May Jun | Qtr 3, 2022<br>Jul Aug Sep |
| 1  | PHASE 5 A-D                    | 1560 days? | Thu 12/1/16 | Wed 11/23/22 |              | ◆                  |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |
| 2  | Planning and Conceptual Design | 6 days     | Thu 12/1/16 | Thu 12/8/16  |              | ◆                  |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |
| 4  | Permitting                     | 474 days   | Fri 12/9/16 | Wed 10/3/18  |              | ◆                  |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |
| 11 | Easements and Land Acquisition | 642 days   | Mon 4/3/17  | Tue 9/17/19  |              | ◆                  |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |
| 16 | Bidding and Contracts          | 50 days    | Wed 1/1/20  | Tue 3/10/20  |              | ◆                  |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |
| 21 | Construction                   | 568 days   | Mon 9/21/20 | Wed 11/23/22 |              | ◆                  |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |
| 41 |                                |            |             |              |              |                    |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |
| 42 |                                |            |             |              |              |                    |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |                            |

Project: 00044  
Date: Wed 11/24/21

|               |   |                  |   |   |   |                      |   |                                 |   |              |
|---------------|---|------------------|---|---|---|----------------------|---|---------------------------------|---|--------------|
| Milestone     | ◆ | Task             | █ | Planning and Conceptual Design          | ◆ | Permitting           | █ | Easements and Land Acquisitions | ◆ | Construction |
| Critical Task | ★ | Project Duration | ◆ | Final Design and Construction Documents | ◆ | Bidding and Contract | █ | Construction                    | ◆ |              |

Historic District Streetscape and Drainage  
Proposed Schedule

| ID | Task Name  | Duration | Start        | Finish       | June 1  | July 1 | August 1 | September 1 | October 1 | November 1 | December 1 | January 1 | February 1 | March 1 | April 1 | May 1 | June 1 | July 1 | August 1 | September 1 | October 1 | November 1 | December 1 | January 1 | February 1 | March 1 | April 1 |  |  |  |  |  |
|----|--|----------|--------------|--------------|---|--------|----------|-------------|-----------|------------|------------|-----------|------------|---------|---------|-------|--------|--------|----------|-------------|-----------|------------|------------|-----------|------------|---------|---------|--|--|--|--|--|
| 1  | Traffic Calming Study and AME Church Rain Garden | 443 days | Wed 7/1/20   | Fri 3/11/22  | [Gantt bar: Solid black line with diamond markers at start and end] |        |          |             |           |            |            |           |            |         |         |       |        |        |          |             |           |            |            |           |            |         |         |  |  |  |  |  |
| 2  | Traffic Calming Planning and Conceptual Design   | 163 days | Mon 11/16/20 | Wed 6/30/21  | [Gantt bar: Blue hatched bar with diamond markers]                  |        |          |             |           |            |            |           |            |         |         |       |        |        |          |             |           |            |            |           |            |         |         |  |  |  |  |  |
| 7  | AME Final Design and Construction Documents      | 209 days | Wed 10/28/20 | Mon 8/16/21  | [Gantt bar: Yellow hatched bar with diamond markers]                |        |          |             |           |            |            |           |            |         |         |       |        |        |          |             |           |            |            |           |            |         |         |  |  |  |  |  |
| 10 | AME Bidding and Contracts                        | 90 days  | Mon 8/16/21  | Fri 12/17/21 | [Gantt bar: Cyan hatched bar with diamond markers]                  |        |          |             |           |            |            |           |            |         |         |       |        |        |          |             |           |            |            |           |            |         |         |  |  |  |  |  |
| 16 | AME Construction                                 | 60 days  | Mon 12/20/21 | Fri 3/11/22  | [Gantt bar: Red hatched bar with diamond markers]                   |        |          |             |           |            |            |           |            |         |         |       |        |        |          |             |           |            |            |           |            |         |         |  |  |  |  |  |

Project: 00050 HD Streetscape  
Date: Wed 10/20/21

|           |  |                    |  |                       |  |                    |  |                 |  |
|-----------|--|--------------------|--|-----------------------|--|--------------------|--|-----------------|--|
| Task      |  | Project Summary    |  | Manual Task           |  | Start-only         |  | Deadline        |  |
| Split     |  | Inactive Task      |  | Duration-only         |  | Finish-only        |  | Progress        |  |
| Milestone |  | Inactive Milestone |  | Manual Summary Rollup |  | External Tasks     |  | Manual Progress |  |
| Summary   |  | Inactive Summary   |  | Manual Summary        |  | External Milestone |  |                 |  |



**GOETHE-SHULTS NEIGHBORHOOD IMPROVEMENTS PHASE 2  
PROPOSED SCHEDULE**

| ID | Task Name  | Duration        | Start              | Finish              | 2018 |     | Half 2, 2018 |     |     | Half 1, 2019 |     |     | Half 2, 2019 |     |     | Half 1, 2020 |     |     | Half 2, 2020 |     |     | Half 1, 2021 |     |     | Half 2, 2021 |     |     | Half 1, |  |  |  |  |
|----|--|-----------------|--------------------|---------------------|------|-----|--------------|-----|-----|--------------|-----|-----|--------------|-----|-----|--------------|-----|-----|--------------|-----|-----|--------------|-----|-----|--------------|-----|-----|---------|--|--|--|--|
|    |  |                 |                    |                     | Mar  | May | Jul          | Sep | Nov | Jan          | Mar | May | Jul          | Sep | Nov | Jan          | Mar | May | Jul          | Sep | Nov | Jan          | Mar | May | Jul          | Sep | Nov | Jan     |  |  |  |  |
| 1  | <b>GOETHE/SHULTS NEIGHBORHOOD IMPROVEMENTS PHASE 2</b> | <b>970 days</b> | <b>Mon 4/30/18</b> | <b>Fri 1/14/22</b>  |      |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |         |  |  |  |  |
| 2  | <b>PLANNING AND CONCEPTUAL DESIGN</b>                  | <b>326 days</b> | <b>Mon 4/30/18</b> | <b>Mon 7/29/19</b>  |      |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |         |  |  |  |  |
| 12 | <b>FINAL DESIGN AND CONSTRUCTION DOCUMENTS</b>         | <b>209 days</b> | <b>Tue 7/30/19</b> | <b>Fri 5/15/20</b>  |      |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |         |  |  |  |  |
| 21 | <b>PERMITTING</b>                                      | <b>128 days</b> | <b>Mon 5/18/20</b> | <b>Wed 11/11/20</b> |      |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |         |  |  |  |  |
| 25 | <b>EASEMENTS AND LAND ACQUISITION</b>                  | <b>187 days</b> | <b>Mon 4/6/20</b>  | <b>Tue 12/22/20</b> |      |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |         |  |  |  |  |
| 32 | <b>BIDDING AND CONTRACTS</b>                           | <b>101 days</b> | <b>Tue 12/1/20</b> | <b>Tue 4/20/21</b>  |      |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |         |  |  |  |  |
| 37 | <b>CONSTRUCTION</b>                                    | <b>193 days</b> | <b>Wed 4/21/21</b> | <b>Fri 1/14/22</b>  |      |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |              |     |     |         |  |  |  |  |

Project: 00055  
Date: Fri 10/22/21

|               |   |   |        |                                |  |              |  |
|---------------|---|---|--------|--------------------------------|--|--------------|--|
| Milestone     | ◆ | Project Duration                        | ◆————◆ | Permitting                     |  | Construction |  |
| Critical Task | ★ | Planning and Conceptual Design          |        | Easements and Land Acquisition |  |              |  |
| Task          |   | Final Design and Construction Documents |        | Bidding and Contracts          |  |              |  |



OSCAR FRAZIER PARK  
PROPOSED SCHEDULE

| ID | Task Name  | Duration | Start        | Finish       | Timeline |           |         |          |          |         |          |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----|--|----------|--------------|--------------|----------|-----------|---------|----------|----------|---------|----------|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|    |  |          |              |              | August   | September | October | November | December | January | February | March |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1  | <b>PARK IMPROVEMENTS FY 22</b>                   | 165 days | Mon 7/26/21  | Fri 3/11/22  | ◆        |           |         |          |          |         |          |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2  | <b>Final Planning and Construction Documents</b> | 55 days  | Mon 7/26/21  | Fri 10/8/21  | ◆        |           |         |          |          |         |          |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8  | <b>Bidding and Contracts</b>                     | 55 days  | Mon 10/11/21 | Fri 12/24/21 | ◆        |           |         |          |          |         |          |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 | <b>Construction</b>                              | 35 days  | Mon 1/24/22  | Fri 3/11/22  | ◆        |           |         |          |          |         |          |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

|                              |               |   |   |   |                                |   |              |   |
|------------------------------|---------------|---|---|---|--------------------------------|---|--------------|---|
| Project 00066<br>Tue 10/5/21 | Milestone     | ◆ | Project Duration                        | ◆ | Permitting                     | ◆ | Construction | ◆ |
|                              | Critical Task | ★ | Planning and Conceptual Design          | ◆ | Easements and Land Acquisition | ◆ |              |   |
|                              | Task          | ■ | Final Design and Construction Documents | ◆ | Bidding and Contracts          | ◆ |              |   |

SQUIRE POPE CARRIAGE HOSUE  
PROPOSED SCHEDULE

| ID | Task Name                                      | Duration        | Start               | Finish              | Jun | Jul | Aug | Sep | Oct | Nov | Dec | 2022 Jan | Feb | Mar |  |  |  |  |  |
|----|--|-----------------|---------------------|---------------------|-----|-----|-----|-----|-----|-----|-----|----------|-----|-----|--|--|--|--|--|
| 1  | <b>Stabilization Phase</b>                     | <b>175 days</b> | <b>Thu 7/8/21</b>   | <b>Wed 3/9/22</b>   |     |     |     |     |     |     |     |          |     |     |  |  |  |  |  |
| 2  | <b>Planning and Conceptual Design</b>          | <b>15 days</b>  | <b>Thu 7/8/21</b>   | <b>Wed 7/28/21</b>  |     |     |     |     |     |     |     |          |     |     |  |  |  |  |  |
| 5  | <b>Final Design and Construction Documents</b> | <b>80 days</b>  | <b>Thu 7/29/21</b>  | <b>Wed 11/17/21</b> |     |     |     |     |     |     |     |          |     |     |  |  |  |  |  |
| 10 | <b>Permitting</b>                              | <b>30 days</b>  | <b>Thu 11/18/21</b> | <b>Wed 12/29/21</b> |     |     |     |     |     |     |     |          |     |     |  |  |  |  |  |
| 12 | <b>Bidding and Contracts</b>                   | <b>50 days</b>  | <b>Thu 12/30/21</b> | <b>Wed 3/9/22</b>   |     |     |     |     |     |     |     |          |     |     |  |  |  |  |  |

|                                      |               |   |   |        |                                 |  |              |  |
|--------------------------------------|---------------|---|---|--------|---------------------------------|--|--------------|--|
| Project: 00067<br>Date: Fri 10/29/21 | Milestone     | ◆ | Project Duration                        | ◆————◆ | Permitting                      |  | Construction |  |
|                                      | Critical Task | ★ | Planing and Conceptual Design           |        | Easements and Land Acquisitions |  |              |  |
|                                      | Task          |   | Final Design and Construction Documents |        | Bidding and Contracts           |  |              |  |



WHARF STREET LIGHTING  
PROPOSED SCHEDULE

| ID | Task Name                             | Duration        | Start               | Predecessor | 2022 |     |     |     |     |     |     |     |     |     |     |     | 2023 |     |     |     |     |     |     |     |     |     |     |  |
|----|---------------------------------------|-----------------|---------------------|-------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|
|    |                                       |                 |                     |             | Jun  | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun  | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr |  |
| 1  | <b>WARF STREET LIGHTING</b>           | <b>453 days</b> | <b>Mon 7/5/21</b>   |             | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |  |
| 2  | <b>Planning and Conceptual Design</b> | <b>360 days</b> | <b>Mon 7/5/21</b>   |             | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |  |
| 12 | <b>Permitting</b>                     | <b>90 days</b>  | <b>Mon 11/22/21</b> |             | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |  |
| 14 | <b>Easements and Land Acquisition</b> | <b>160 days</b> | <b>Fri 7/1/22</b>   |             | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |  |
| 17 | <b>Construction</b>                   | <b>192 days</b> | <b>Tue 7/5/22</b>   |             | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |  |

|                   |                 |   |                                  |                |
|-------------------|-----------------|---|----------------------------------|----------------|
| Project: 00068    | Milestone ◆     | Project Duration ◆                        | Permitting ◆                     | Construction ◆ |
| Date: Mon 9/27/21 | Critical Task ★ | Planning and Conceptual Design ◆          | Easements and Land Acquisition ◆ |                |
|                   | Task ■          | Final Design and Construction Documents ◆ | Bidding and Contract ◆           |                |

**BOUNDARY STREET LIGHTING  
PROPOSED SCHEDULE**

| ID | Task Name                               | Duration        | Start              | Finish             | 2020 |     |     |     |     |     |     |     |     |     |     |     | 2021 |     |     |     |     |     |     |     |     |     |  |  | 2022 |  |  |  |  |  |  |  |  |
|----|---|-----------------|--------------------|--------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|------|--|--|--|--|--|--|--|--|
|    |   |                 |                    |                    | Jun  | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun  | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar |  |  |      |  |  |  |  |  |  |  |  |
| 1  | <b>BOUNDARY STREET LIGHTING PHASE 2</b> | <b>683 days</b> | <b>Mon 7/8/19</b>  | <b>Wed 2/16/22</b> | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |  |  |      |  |  |  |  |  |  |  |  |
| 2  | <b>Planning and Conceptual Design</b>   | <b>661 days</b> | <b>Mon 7/8/19</b>  | <b>Mon 1/17/22</b> | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |  |  |      |  |  |  |  |  |  |  |  |
| 13 | <b>Permitting</b>                       | <b>90 days</b>  | <b>Mon 1/20/20</b> | <b>Fri 5/22/20</b> | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |  |  |      |  |  |  |  |  |  |  |  |
| 15 | <b>Easements and Land Acquisition</b>   | <b>164 days</b> | <b>Tue 6/1/21</b>  | <b>Fri 1/14/22</b> | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |  |  |      |  |  |  |  |  |  |  |  |
| 18 | <b>Construction</b>                     | <b>118 days</b> | <b>Mon 9/6/21</b>  | <b>Wed 2/16/22</b> | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |  |  |      |  |  |  |  |  |  |  |  |

|                                      |               |   |   |   |                                |   |              |   |
|--------------------------------------|---------------|---|---|---|--------------------------------|---|--------------|---|
| Project: 00069<br>Date: Wed 11/24/21 | Milestone     | ◆ | Project Duration                        | ◆ | Permitting                     | ◆ | Construction | ◆ |
|                                      | Critical Task | ★ | Planning and Conceptual Design          | ◆ | Easements and Land Acquisition | ◆ |              |   |
|                                      | Task          | ■ | Final Design and Construction Documents | ◆ | Bidding and Contract           | ◆ |              |   |

HISTORIC DISTRICT SANITARY SEWER EXTENSION PHASE 2  
PROPOSED SCHEDULE

| ID | Task Name                                      | Duration         | Start              | Finish             | Predecessors | Timeline     |              |              |              |              |              |              |              |              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----|--|------------------|--------------------|--------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|    |  |                  |                    |                    |              | Half 2, 2018 | Half 1, 2019 | Half 2, 2019 | Half 1, 2020 | Half 2, 2020 | Half 1, 2021 | Half 2, 2021 | Half 1, 2022 | Half 2, 2022 |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|    |  |                  |                    |                    |              | J            | J            | A            | S            | O            | N            | D            | J            | F            | M | A | M | J | J | J | A | S | O | N | D | J | F | M | A | M | J | J | J | A | S | O | N | D | J | F | M | A | M | J | J | J | A | S | O | N | D | J | F | M | A | M | J | J | J | A | S | O | N | D | J | F | M | A | M | J |
| 1  | <b>PHASE 2</b>                                 | <b>1024 days</b> | <b>Mon 7/2/18</b>  | <b>Thu 6/2/22</b>  |              | ◆            |              |              |              |              |              |              |              |              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 2  | <b>Planning and Conceptual Design</b>          | <b>185 days</b>  | <b>Mon 7/2/18</b>  | <b>Fri 3/15/19</b> |              | ◆            |              |              |              |              |              |              |              |              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 10 | <b>Final Design and Construction Documents</b> | <b>20 days</b>   | <b>Mon 3/18/19</b> | <b>Fri 4/12/19</b> |              | ◆            |              |              |              |              |              |              |              |              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 12 | <b>Permitting</b>                              | <b>55 days</b>   | <b>Mon 4/15/19</b> | <b>Fri 6/28/19</b> |              | ◆            |              |              |              |              |              |              |              |              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 15 | <b>Easements and Land Acquisition</b>          | <b>550 days</b>  | <b>Mon 7/1/19</b>  | <b>Fri 8/6/21</b>  |              | ◆            |              |              |              |              |              |              |              |              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 17 | <b>Bidding and Contracts</b>                   | <b>137 days</b>  | <b>Mon 8/9/21</b>  | <b>Tue 2/15/22</b> |              | ◆            |              |              |              |              |              |              |              |              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
| 22 | <b>Construction</b>                            | <b>77 days</b>   | <b>Wed 2/16/22</b> | <b>Thu 6/2/22</b>  |              | ◆            |              |              |              |              |              |              |              |              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |

|                                      |               |   |   |   |                                 |   |              |   |
|--------------------------------------|---------------|---|---|---|---------------------------------|---|--------------|---|
| Project: 00071<br>Date: Wed 11/24/21 | Milestone     | ◆ | Project Duration                        | ◆ | Permitting                      | ◆ | Construction | ◆ |
|                                      | Critical Task | ★ | Planing and Conceptual Design           | ◆ | Easements and Land Acquisitions | ◆ |              |   |
|                                      | Task          | ■ | Final Design and Construction Documents | ◆ | Bidding and Contracts           | ◆ |              |   |

HISTORIC DISTRICT SANITARY SEWER EXTENSION PHASE 3  
PROPOSED SCHEDULE

| ID | Task Name                                      | Duration        | Start              | Finish              | 2021 |     |     |     |     |     |     |     |     |     |     |     | 2022 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |
|----|--|-----------------|--------------------|---------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|--|
|    |  |                 |                    |                     | Oct  | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct  | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |  |  |  |
| 1  | <b>PHASE 3</b>                                 | <b>534 days</b> | <b>Mon 11/2/20</b> | <b>Thu 11/17/22</b> | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |
| 2  | <b>Planning and Conceptual Design</b>          | <b>236 days</b> | <b>Mon 11/2/20</b> | <b>Mon 9/27/21</b>  | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |
| 9  | <b>Final Design and Construction Documents</b> | <b>120 days</b> | <b>Tue 9/28/21</b> | <b>Mon 3/14/22</b>  | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |
| 11 | <b>Permitting</b>                              | <b>40 days</b>  | <b>Tue 3/15/22</b> | <b>Mon 5/9/22</b>   | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |
| 14 | <b>Easements and Land Acquisition</b>          | <b>105 days</b> | <b>Tue 9/21/21</b> | <b>Mon 2/14/22</b>  | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |
| 17 | <b>Bidding and Contracts</b>                   | <b>46 days</b>  | <b>Tue 5/10/22</b> | <b>Tue 7/12/22</b>  | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |
| 22 | <b>Construction</b>                            | <b>92 days</b>  | <b>Wed 7/13/22</b> | <b>Thu 11/17/22</b> | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |  |

Project: 00072  
Date: Wed 11/24/21

|               |   |   |   |                                 |   |              |   |
|---------------|---|---|---|---------------------------------|---|--------------|---|
| Milestone     | ◆ | Project Duration                        | ◆ | Permitting                      | ◆ | Construction | ◆ |
| Critical Task | ★ | Planing and Conceptual Design           | ◆ | Easements and Land Acquisitions | ◆ |              |   |
| Task          | ■ | Final Design and Construction Documents | ◆ | Bidding and Contracts           | ◆ |              |   |

HISTORIC DISTRICT SANITARY SEWER EXTENSION PHASE 4  
PROPOSED SCHEDULE

| ID | Task Name                                      | Duration        | Start              | Finish              | Predecessors | 2021 |     |     |     |     |     |     |     |     |     |     |     | 2022 |     |     |     |     |     |     |     |     |     |     |     |
|----|--|-----------------|--------------------|---------------------|--------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|    |  |                 |                    |                     |              | Oct  | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct  | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| 1  | <b>PHASE 4</b>                                 | <b>534 days</b> | <b>Mon 11/2/20</b> | <b>Thu 11/17/22</b> |              | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 2  | <b>Planning and Conceptual Design</b>          | <b>236 days</b> | <b>Mon 11/2/20</b> | <b>Mon 9/27/21</b>  |              | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 9  | <b>Final Design and Construction Documents</b> | <b>120 days</b> | <b>Tue 9/28/21</b> | <b>Mon 3/14/22</b>  |              | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 11 | <b>Permitting</b>                              | <b>40 days</b>  | <b>Tue 3/15/22</b> | <b>Mon 5/9/22</b>   |              | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 14 | <b>Easements and Land Acquisition</b>          | <b>105 days</b> | <b>Tue 9/21/21</b> | <b>Mon 2/14/22</b>  |              | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 17 | <b>Bidding and Contracts</b>                   | <b>46 days</b>  | <b>Tue 5/10/22</b> | <b>Tue 7/12/22</b>  |              | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |
| 22 | <b>Construction</b>                            | <b>92 days</b>  | <b>Wed 7/13/22</b> | <b>Thu 11/17/22</b> |              | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |

|                    |                 |   |                                   |                |
|--------------------|-----------------|---|-----------------------------------|----------------|
| Project: 00073     | Milestone ◆     | Project Duration ◆                        | Permitting ◆                      | Construction ◆ |
| Date: Wed 11/24/21 | Critical Task ★ | Planing and Conceptual Design ◆           | Easements and Land Acquisitions ◆ |                |
|                    | Task ■          | Final Design and Construction Documents ◆ | Bidding and Contracts ◆           |                |

HISTORIC DISTRICT SANITARY SEWER EXTENSION PHASE 5  
PROPOSED SCHEDULE

| ID | Task Name                                      | Duration        | Start              | Finish              | 2021 |     |     |     |     |     |     |     |     |     |     |     | 2022 |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|----|--|-----------------|--------------------|---------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|    |  |                 |                    |                     | Oct  | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct  | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov |  |  |
| 1  | <b>PHASE 5</b>                                 | <b>534 days</b> | <b>Mon 11/2/20</b> | <b>Thu 11/17/22</b> | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 2  | <b>Planning and Conceptual Design</b>          | <b>236 days</b> | <b>Mon 11/2/20</b> | <b>Mon 9/27/21</b>  | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 9  | <b>Final Design and Construction Documents</b> | <b>120 days</b> | <b>Tue 9/28/21</b> | <b>Mon 3/14/22</b>  | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 11 | <b>Permitting</b>                              | <b>40 days</b>  | <b>Tue 3/15/22</b> | <b>Mon 5/9/22</b>   | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 14 | <b>Easements and Land Acquisition</b>          | <b>150 days</b> | <b>Tue 9/21/21</b> | <b>Mon 4/18/22</b>  | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 17 | <b>Bidding and Contracts</b>                   | <b>46 days</b>  | <b>Tue 5/10/22</b> | <b>Tue 7/12/22</b>  | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 22 | <b>Construction</b>                            | <b>92 days</b>  | <b>Wed 7/13/22</b> | <b>Thu 11/17/22</b> | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |

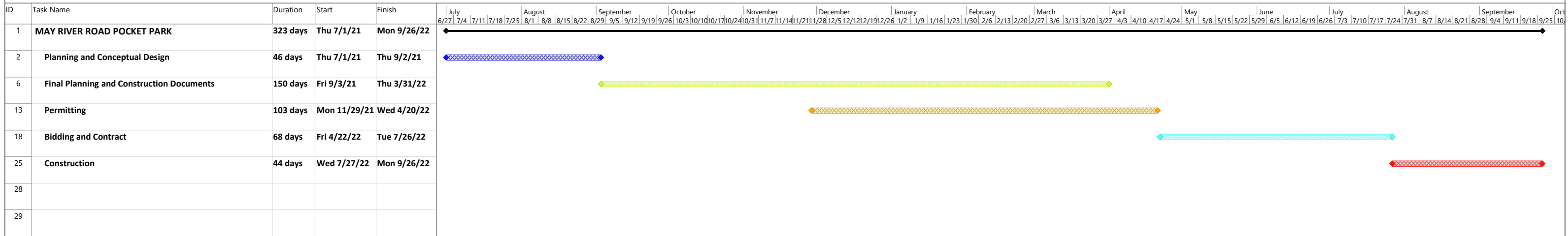
|                                      |               |   |   |   |                                 |   |              |   |
|--------------------------------------|---------------|---|---|---|---------------------------------|---|--------------|---|
| Project: 00074<br>Date: Wed 11/24/21 | Milestone     | ◆ | Project Duration                        | ◆ | Permitting                      | ◆ | Construction | ◆ |
|                                      | Critical Task | ★ | Planing and Conceptual Design           | ◆ | Easements and Land Acquisitions | ◆ |              |   |
|                                      | Task          | ■ | Final Design and Construction Documents | ◆ | Bidding and Contracts           | ◆ |              |   |

HISTORIC DISTRICT SANITARY SEWER EXTENSION PHASE 6  
PROPOSED SCHEDULE

| ID | Task Name                                      | Duration        | Start              | Finish              | 2021 |     |     |     |     |     |     |     |     |     |     |     | 2022 |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
|----|--|-----------------|--------------------|---------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
|    |  |                 |                    |                     | Oct  | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct  | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov |  |  |
| 1  | <b>PHASE 6</b>                                 | <b>534 days</b> | <b>Mon 11/2/20</b> | <b>Thu 11/17/22</b> | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 2  | <b>Planning and Conceptual Design</b>          | <b>236 days</b> | <b>Mon 11/2/20</b> | <b>Mon 9/27/21</b>  | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 9  | <b>Final Design and Construction Documents</b> | <b>120 days</b> | <b>Tue 9/28/21</b> | <b>Mon 3/14/22</b>  | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 11 | <b>Permitting</b>                              | <b>40 days</b>  | <b>Tue 3/15/22</b> | <b>Mon 5/9/22</b>   | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 14 | <b>Easements and Land Acquisition</b>          | <b>150 days</b> | <b>Tue 9/21/21</b> | <b>Mon 4/18/22</b>  | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 17 | <b>Bidding and Contracts</b>                   | <b>46 days</b>  | <b>Tue 5/10/22</b> | <b>Tue 7/12/22</b>  | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |
| 22 | <b>Construction</b>                            | <b>92 days</b>  | <b>Wed 7/13/22</b> | <b>Thu 11/17/22</b> | ◆    |     |     |     |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |     |     |     |     |     |     |  |  |

|                                      |               |   |   |   |                                 |   |              |   |
|--------------------------------------|---------------|---|---|---|---------------------------------|---|--------------|---|
| Project: 00075<br>Date: Wed 11/24/21 | Milestone     | ◆ | Project Duration                        | ◆ | Permitting                      | ◆ | Construction | ◆ |
|                                      | Critical Task | ★ | Planing and Conceptual Design           | ◆ | Easements and Land Acquisitions | ◆ |              |   |
|                                      | Task          | ■ | Final Design and Construction Documents | ◆ | Bidding and Contracts           | ◆ |              |   |

MAY RIVER ROAD POCKET PARK  
PROPOSED SCHEDULE



Project: 00080  
Date: Wed 11/24/21

|               |   |                  |  |   |  |                      |  |                                 |  |
|---------------|---|------------------|--|---|--|----------------------|--|---------------------------------|--|
| Milestone     | ◆ | Task             |  | Planning and Conceptual Design          |  | Permitting           |  | Easements and Land Acquisitions |  |
| Critical Task | ★ | Project Duration |  | Final Design and Construction Documents |  | Bidding and Contract |  | Construction                    |  |



BRIDGE STREET STREETScape  
PROPOSED SCHEDULE

| ID | Task Name                             | Duration        | Start              | Finish             | 2020 |   |   |   |   |   |   |   |   |   |   |   | 2021 |   |   |   |   |   |   |   |   |   |   |   | 2022 |   |   |   |   |   |   |   |   |
|----|---------------------------------------|-----------------|--------------------|--------------------|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|
|    |                                       |                 |                    |                    | A    | S | O | N | D | J | F | M | A | M | J | J | A    | S | O | N | D | J | F | M | A | M | J | J | A    | S | O | N | D | J | F | M | A |
| 1  | <b>BRIDGE STREET STREETScape</b>      | <b>681 days</b> | <b>Mon 9/2/19</b>  | <b>Mon 4/11/22</b> | ◆    |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |
| 2  | <b>Planning and Conceptual Design</b> | <b>233 days</b> | <b>Mon 9/2/19</b>  | <b>Wed 7/22/20</b> | ◆    |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |
| 17 | <b>Final Design</b>                   | <b>338 days</b> | <b>Wed 7/22/20</b> | <b>Fri 11/5/21</b> | ◆    |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |
| 23 | <b>Permitting</b>                     | <b>155 days</b> | <b>Mon 5/3/21</b>  | <b>Fri 12/3/21</b> | ◆    |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |
| 28 | <b>Easements and Land Acquisition</b> | <b>200 days</b> | <b>Mon 4/19/21</b> | <b>Fri 1/21/22</b> | ◆    |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |
| 35 | <b>Bidding</b>                        | <b>71 days</b>  | <b>Mon 1/3/22</b>  | <b>Mon 4/11/22</b> | ◆    |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |

|                                      |               |   |   |   |                                |   |              |   |
|--------------------------------------|---------------|---|---|---|--------------------------------|---|--------------|---|
| Project: 00082<br>Date: Fri 10/22/21 | Milestone     | ◆ | Project Duration                        | ◆ | Permitting                     | ◆ | Construction | ◆ |
|                                      | Critical Task | ★ | Planning and Conceptual Design          | ◆ | Easements and Land Acquisition | ◆ |              |   |
|                                      | Task          | ■ | Final Design and Construction Documents | ◆ | Bidding and Contracts          | ◆ |              |   |

NEW RIVERSIDE PARK/BARN SITE  
PROPOSED SCHEDULE

| ID | Task Name                                  | Duration        | Start               | Finish              | 2020 |   |   |   |   |   |   |   |   |   |   |   | 2021 |   |   |   |   |   |   |   |   |   |   |   | 2022 |   |   |   |   |   |   |   |   |   |   |  |
|----|--|-----------------|---------------------|---------------------|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|---|------|---|---|---|---|---|---|---|---|---|---|--|
|    |  |                 |                     |                     | J    | J | A | S | O | N | D | J | F | M | A | M | J    | J | A | S | O | N | D | J | F | M | A | M | J    | J | A | S | O | N | D | J | F | M | A |  |
| 1  | <b>NEW RIVERSIDE PARK/BARN SITE</b>        | <b>732 days</b> | <b>Mon 7/1/19</b>   | <b>Tue 4/19/22</b>  | ◆    |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |  |
| 2  | <b>Planning and Conceptual Master Plan</b> | <b>377 days</b> | <b>Mon 7/1/19</b>   | <b>Tue 12/8/20</b>  | ◆    |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |  |
| 27 | <b>Final Design (Phase 1)</b>              | <b>240 days</b> | <b>Mon 12/14/20</b> | <b>Fri 11/12/21</b> | ◆    |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |  |
| 37 | <b>Permitting (Phase 1)</b>                | <b>70 days</b>  | <b>Mon 8/23/21</b>  | <b>Fri 11/26/21</b> | ◆    |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |  |
| 41 | <b>Bidding (Phase 1)</b>                   | <b>92 days</b>  | <b>Mon 11/29/21</b> | <b>Tue 4/5/22</b>   | ◆    |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |  |
| 47 | <b>Construction Start</b>                  | <b>1 day</b>    | <b>Tue 4/19/22</b>  | <b>Tue 4/19/22</b>  | ★    |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |   |      |   |   |   |   |   |   |   |   |   |   |  |

Project: 00085  
Date: Fri 10/22/21

|               |   |   |   |                                |   |              |   |
|---------------|---|---|---|--------------------------------|---|--------------|---|
| Milestone     | ◆ | Project Duration                        | ◆ | Permitting                     | ◆ | Construction | ◆ |
| Critical Task | ★ | Planning and Conceptual Design          | ◆ | Easements and Land Acquisition | ◆ |              |   |
| Task          | ■ | Final Design and Construction Documents | ◆ | Bidding and Contracts          | ◆ |              |   |

PARK IMPROVEMENTS  
PROPOSED SCHEDULE

| ID | Task Name  | Duration | Start        | Finish       | 7/18 | 7/25 | 8/1 | 8/8 | 8/15 | 8/22 | 8/29 | 9/5 | 9/12 | 9/19 | 9/26 | 10/3 | 10/10 | 10/17 | 10/24 | 10/31 | 11/7 | 11/14 | 11/21 | 11/28 | 12/5 | 12/12 | 12/19 | 12/26 | 1/2 | 1/9 | 1/16 | 1/23 | 1/30 | 2/6 | 2/13 | 2/20 | 2/27 | 3/6 | 3/13 | 3/20 | 3/27 | 4/3 |  |  |
|----|--|----------|--------------|--------------|------|------|-----|-----|------|------|------|-----|------|------|------|------|-------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|-----|-----|------|------|------|-----|------|------|------|-----|------|------|------|-----|--|--|
| 1  | <b>PARK IMPROVEMENTS FY 22</b>                   | 165 days | Mon 7/26/21  | Fri 3/11/22  | ◆    |      |     |     |      |      |      |     |      |      |      |      |       |       |       |       |      |       |       |       |      |       |       |       |     |     |      |      |      |     |      |      |      |     |      |      |      |     |  |  |
| 2  | <b>Final Planning and Construction Documents</b> | 55 days  | Mon 7/26/21  | Fri 10/8/21  | ◆    |      |     |     |      |      |      |     |      |      |      |      |       |       |       |       |      |       |       |       |      |       |       |       |     |     |      |      |      |     |      |      |      |     |      |      |      |     |  |  |
| 8  | <b>Bidding and Contracts</b>                     | 55 days  | Mon 10/11/21 | Fri 12/24/21 | ◆    |      |     |     |      |      |      |     |      |      |      |      |       |       |       |       |      |       |       |       |      |       |       |       |     |     |      |      |      |     |      |      |      |     |      |      |      |     |  |  |
| 16 | <b>Construction</b>                              | 35 days  | Mon 1/24/22  | Fri 3/11/22  | ◆    |      |     |     |      |      |      |     |      |      |      |      |       |       |       |       |      |       |       |       |      |       |       |       |     |     |      |      |      |     |      |      |      |     |      |      |      |     |  |  |

|                               |               |   |   |   |                                |   |              |   |
|-------------------------------|---------------|---|---|---|--------------------------------|---|--------------|---|
| Project 00086<br>Wed 11/24/21 | Milestone     | ◆ | Project Duration                        | ◆ | Permitting                     | ◆ | Construction | ◆ |
|                               | Critical Task | ★ | Planning and Conceptual Design          | ◆ | Easements and Land Acquisition | ◆ |              |   |
|                               | Task          | ■ | Final Design and Construction Documents | ◆ | Bidding and Contracts          | ◆ |              |   |

NEW RIVER TRAIL  
PROPOSED SCHEDULE

| ID | Task Name  | Duration | Start       | Finish       | July | August | September | October | November | December | January | February | March | April | May | June | July | August |   |
|----|--|----------|-------------|--------------|------|--------|-----------|---------|----------|----------|---------|----------|-------|-------|-----|------|------|--------|---|
|    |  |          |             |              | B    | M      | E         | B       | M        | E        | B       | M        | E     | B     | M   | E    | B    | M      | E |
| 1  | <b>NEW RIVER TRAIL</b>                           | 287 days | Mon 7/5/21  | Tue 8/9/22   |      |        |           |         |          |          |         |          |       |       |     |      |      |        |   |
| 2  | <b>Planning</b>                                  | 121 days | Mon 7/5/21  | Mon 12/20/21 |      |        |           |         |          |          |         |          |       |       |     |      |      |        |   |
| 14 | <b>Final Planning and Construction Documents</b> | 80 days  | Mon 1/3/22  | Fri 4/22/22  |      |        |           |         |          |          |         |          |       |       |     |      |      |        |   |
| 24 | <b>Permitting</b>                                | 40 days  | Mon 3/14/22 | Fri 5/6/22   |      |        |           |         |          |          |         |          |       |       |     |      |      |        |   |
| 29 | <b>Bidding and Contracts</b>                     | 72 days  | Mon 5/2/22  | Tue 8/9/22   |      |        |           |         |          |          |         |          |       |       |     |      |      |        |   |

|                              |               |   |   |  |                                |  |              |  |
|------------------------------|---------------|---|---|--|--------------------------------|--|--------------|--|
| Project 00092<br>Tue 10/5/21 | Milestone     | ◆ | Project Duration                        |  | Permitting                     |  | Construction |  |
|                              | Critical Task | ★ | Planning and Conceptual Design          |  | Easements and Land Acquisition |  |              |  |
|                              | Task          |   | Final Design and Construction Documents |  | Bidding and Contracts          |  |              |  |

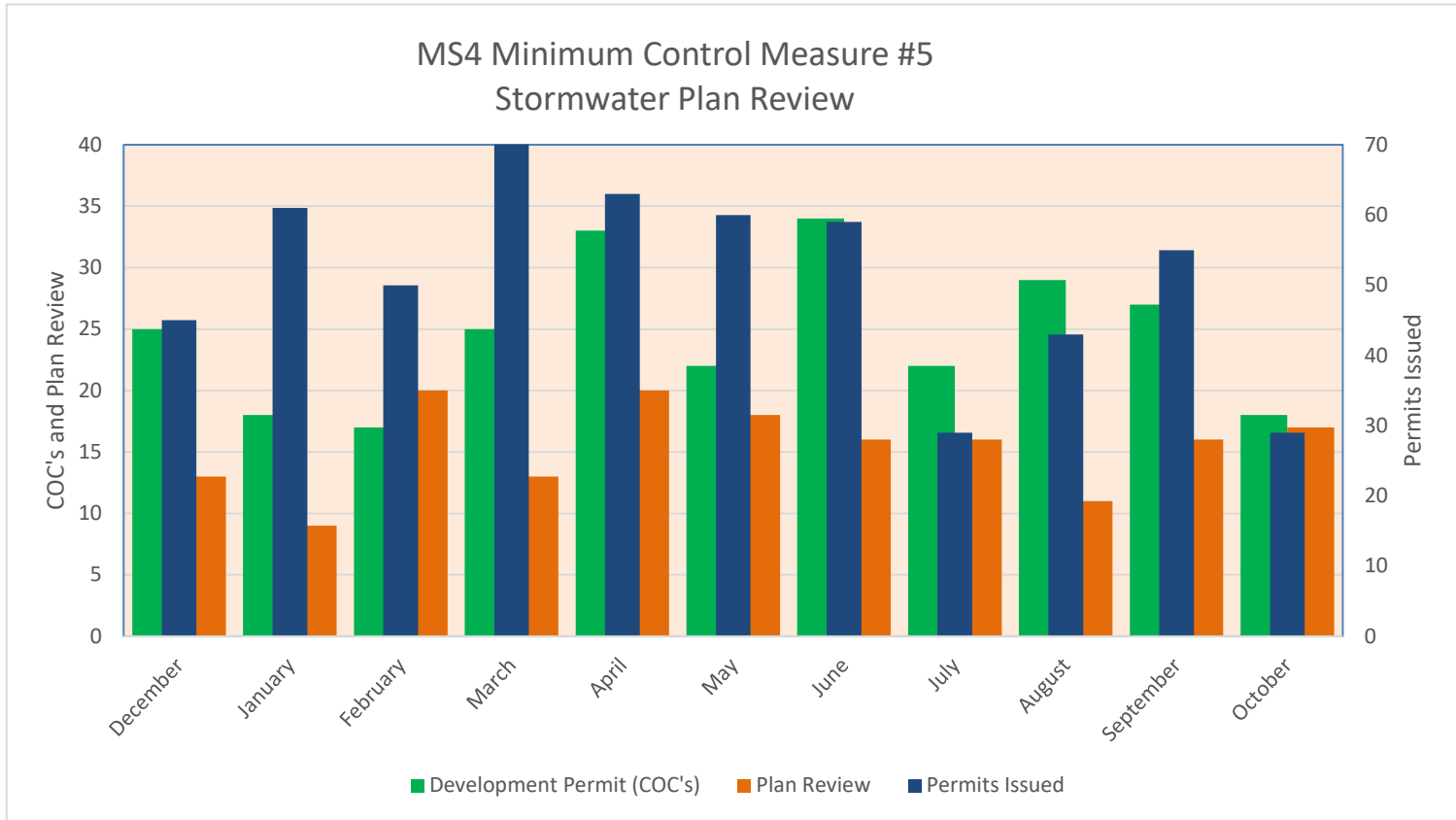
GHOST ROADS  
PROPOSED SCHEDULE

| ID | Task Name                             | Duration        | Start              | Finish             | 2020 2021 2022 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|----|---------------------------------------|-----------------|--------------------|--------------------|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|    |                                       |                 |                    |                    | Sep            | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug |
| 1  | <b>GHOST ROADS</b>                    | <b>765 days</b> | <b>Thu 9/12/19</b> | <b>Wed 8/17/22</b> |                |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 2  | <b>Planning and Conceptual Design</b> | <b>765 days</b> | <b>Thu 9/12/19</b> | <b>Wed 8/17/22</b> |                |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

|                                      |               |   |   |        |                                |        |              |        |
|--------------------------------------|---------------|---|---|--------|--------------------------------|--------|--------------|--------|
| Project: 00093<br>Date: Wed 11/24/21 | Milestone     | ◆ | Project Duration                        | ◆————◆ | Permitting                     | ◆————◆ | Construction | ◆————◆ |
|                                      | Critical Task | ★ | Planning and Conceptual Design          | ◆————◆ | Easements and Land Acquisition | ◆————◆ |              |        |
|                                      | Task          | ■ | Final Design and Construction Documents | ◆————◆ | Bidding and Contracts          | ◆————◆ |              |        |







| TYPE                       | December | January | February | March | April | May | June | July | August | September | October | November | Last 12 Months |
|----------------------------|----------|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------------|
| Development Permit (COC's) | 25       | 18      | 17       | 25    | 33    | 22  | 34   | 22   | 29     | 27        | 18      | 10       | 280            |
| Plan Review                | 13       | 9       | 20       | 13    | 20    | 18  | 16   | 16   | 11     | 16        | 17      | 18       | 187            |
| Permits Issued             | 45       | 61      | 50       | 75    | 63    | 60  | 59   | 29   | 43     | 55        | 29      | N/A      | 569            |



**Lowcountry Stormwater Partners (LSP) Monthly Report**  
**11/03/21 – 12/01/21**

**Completed Stormwater Outreach/Involvement Activities:**

- Mossy Oaks Rain Garden Workshop
  - This webinar taught participants the basics of rain garden function, siting, design, and more.
  - 11/3/21, hybrid (webinar portion), 6
- 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.
  - 11/3/21, online, 139
- Savannah Valley District Meeting Presentation
  - Presented on the importance of water quality in the region and highlighted LSP activity to Extension leadership
  - 11/4/21, 50
- Mossy Oaks Rain Garden Workshop Field Day
  - This portion of the workshop was where participants put the knowledge gained from the webinar into practice by installing a 252 sq ft rain garden
  - 11/7/21, in person, 3
- Flooding 411 video
  - We recorded the “Who’s Who in Flood Management and Recovery” presentation from last year’s Flooding 411 webinar series and posted it on YouTube
  - 11/9/21, 4 views
- Be Septic Safe Webinar
  - Webinar topics included proper septic use and maintenance, inspection and pump out process, and regulation and rules surrounding septic tanks. Participants learned maintenance tips, what to expect during the inspection process, had the opportunity to participate in a Q&A portion with SC DHEC.
  - 11/11/21, virtual, 6
- Be Septic Safe Social Media Campaign
  - This social media campaign targeted septic system owners on the LSP Facebook page and educated/encourage maintenance activities such as scheduling pump outs, protecting drain fields, reducing water use, and proper waste disposal. Posts were made twice a day, for a total of 16 posts.
  - 11/20-28/21, virtual, 1416
- Pond consult
  - 11/18/21, in person, 2
- 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.
  - 11/24/21, online, 139
- LSP Consortium Meeting
  - 11/30/21, online, 18

### **Ongoing Stormwater Outreach/Involvement Activities:**

- LSP Rain Barrel Sale
  - We are now offering the 100% Recycled Ivy Rain Barrel at \$70.00 each! Order your rain barrel today and schedule a pick-up time that works with your schedule. All pick-ups occur at the Clemson Extension Office (18 John Galt Rd. Beaufort, SC 29906)
  - Ongoing, 17 already sold, 16 left, [website](#)
- Septic System Resources
  - The four factsheets are undergoing the final peer-review process.
- LSP Facebook Page
  - The LSP Facebook serves to engage and involve citizens in water quantity and water quality information. The page also announces local, regional, and state-wide events.
  - 388 Likes (81 new likes since last report), 423 Followers, 953 reach, 26 posts

### **Planned Stormwater Outreach/Involvement Activities:**

- Gullah Co-Op Pond Consult
  - 12/7/21, in person
- Construction Site Social Media Campaign
  - January 2022
- LSP Consortium Meeting
  - 2/22/22, in person
- Healthy Pond Series (Wildlife)
  - Healthy Pond Series is an opportunity for HOA/POA representatives, pond owners, and pond managers to increase their knowledge of pond management best practices. This community-based discussion series will provide a way for pond owners to learn, connect, and share.
  - 2/24/22, virtual
- LSP Annual Report Draft
  - 3/1/22
- Flooding 411: Ask an Expert (Insurance)
  - These one hour, lunch-and-learn sessions focus on timely and specific, flooding-related topics. Experts present and then are available for questions from attendees.
  - 3/2/22, virtual
- LSP Annual Report Final
  - 3/15/22
- Healthy Pond Series (Cultivating a Carolina Yard: Landscaping for Healthy Ponds)
  - Healthy Pond Series is an opportunity for HOA/POA representatives, pond owners, and pond managers to increase their knowledge of pond management best practices. This community-based discussion series will provide a way for pond owners to learn, connect, and share.
  - 5/12/22, in person
- LSP Consortium Meeting
  - 5/17/22, TBD
- Flooding 411:
  - This series helps residents better understand the different causes of flooding, the roles different agencies play in flood response and recovery, ways to protect both personal and community property, as well as examples of successful flood management in the state. Various expert present during four, 90-minute webinars held over the course of a month.
  - 6/8-27/22, virtual

### **Planned Stormwater Outreach/Involvement Activities (cont.):**

- Healthy Pond Series (Planting Vegetated Shorelines)
  - Healthy Pond Series is an opportunity for HOA/POA representatives, pond owners, and pond managers to increase their knowledge of pond management best practices. This community-based discussion series will provide a way for pond owners to learn, connect, and share.
  - 9/8/22, in person
- Flooding 411: Ask an Expert (Meet Your Floodplain Manager)
  - These one hour, lunch-and-learn sessions focus on timely and specific, flooding-related topics. Experts present and then are available for questions from attendees.
  - 9/14/22, virtual
- LSP Consortium Meeting
  - 9/20/22, TBD
- Flooding 411: Ask an Expert (Dams)
  - These one hour, lunch-and-learn sessions focus on timely and specific, flooding-related topics. Experts present and then are available for questions from attendees.
  - 12/7/22, virtual
- Healthy Pond Series (Aeration)
  - Healthy Pond Series is an opportunity for HOA/POA representatives, pond owners, and pond managers to increase their knowledge of pond management best practices. This community-based discussion series will provide a way for pond owners to learn, connect, and share.
  - 12/8/22, virtual
- LSP Consortium Meeting
  - 12/13/22, TBD

### **Other Activities for Strategic Plan Compliance:**

- Pet Waste Station Map
- Small grants program
- Soil sample post cards and placards for retailers
- Soil sample bag distribution
- Promotional seed packet
- Native plant distributor list
- Native plant signage
- LID Lunch-and-Learns
- BMP workshop for homeowners
- BMP survey

### **Completed Strategic Plan Items:**

- Pond Workshop
- 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

**Completed Strategic Plan Items (cont.):**

- 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
- Contractor trainings





## MEMORANDUM

Date: December 7, 2021

To: Stormwater Management Utility Board

From: Matthew Rausch, Stormwater Infrastructure Superintendent

Re: **Maintenance Project Report**

This report will cover six minor projects. The Project Summary Reports are attached.

### **Minor or Routine Projects:**

- **Kitty Landing Road – Bluffton (SWUD 4):** This project improved 535 feet of drainage system. The scope of work included cleaning out 535 L.F. of roadside ditch, jetting (3) driveway pipes and hydroseeding for erosion control. The total cost was **\$4,800.58**.
- **Polite Drive – Port Royal Island (SWUD 6):** This project improved 726 feet of drainage system. The scope of work included cleaning out 702 feet of channel and (2) catch basins, jetting (3) crossline pipes, (7) driveway pipes and 24 L.F. of roadside pipe. The total cost was **\$2,728.43**.
- **Pritchard Street – Town of Bluffton (SWUD 4):** The scope of work included hydroseeding 900 LF of roadside for erosion control. The total cost was **\$1,397.76**.
- **Camp St Marys Road – Bluffton (SWUD 4):** This project improved 278 feet of drainage system. The scope of work included cleaning out 230 feet of roadside ditch, replacing (1) driveway pipe, jetting (2) driveway pipes, installing rip-rap and hydroseeding for erosion control. The total cost was **\$7,829.56**.
- **St Helena Tree Removal – St Helena Island (SWUD 8):** The scope of work included removing a falling tree from the workshelf. The total cost was **\$762.62**.
- **Sheldon Tree Removal – Sheldon (SWUD 5):** The Scope of the work included removing falling trees from the workshelves. The total cost was **\$1,887.35**.



**Beaufort County Public Works**  
**Stormwater Infrastructure**  
*Project Summary*

**Project Summary: Kitty Road**

**Activity:** Routine/Preventive Maintenance

**Duration:** 05/14/21 - 5/25/21

**Narrative Description of Project:**

Project improved 535 L.F. of drainage system. Cleaned out 535 L.F. of roadside ditch. Jetted (3) driveway pipes. Hydroseeded for erosion control.

**2021-546/Kitty Road**

|                                   | <b>Labor<br/>Hours</b> | <b>Labor<br/>Cost</b> | <b>Equipment<br/>Cost</b> | <b>Material<br/>Cost</b> | <b>Contractor<br/>Cost</b> | <b>Indirect<br/>Labor</b> | <b>Total<br/>Cost</b> |
|-----------------------------------|------------------------|-----------------------|---------------------------|--------------------------|----------------------------|---------------------------|-----------------------|
| AUDIT / Audit Project             | 2.00                   | \$48.19               | \$0.00                    | \$0.00                   | \$0.00                     | \$26.46                   | \$74.65               |
| DPJT / Driveway Pipe - Jetted     | 12.00                  | \$283.28              | \$170.68                  | \$55.22                  | \$0.00                     | \$114.72                  | \$623.90              |
| HAUL / Hauling                    | 24.00                  | \$574.96              | \$457.44                  | \$152.75                 | \$0.00                     | \$230.72                  | \$1,415.87            |
| HYDR / Hydroseeding               | 16.00                  | \$350.12              | \$55.21                   | \$229.89                 | \$0.00                     | \$105.84                  | \$741.06              |
| PP / Project Preparation          | 16.00                  | \$332.96              | \$17.40                   | \$29.16                  | \$0.00                     | \$101.76                  | \$481.28              |
| RSDCL / Roadside Ditch - Cleanout | 32.00                  | \$656.40              | \$134.01                  | \$66.59                  | \$0.00                     | \$309.36                  | \$1,166.36            |
| UTLOC / Utility locates           | 4.00                   | \$167.80              | \$50.00                   | \$19.84                  | \$0.00                     | \$59.82                   | \$297.46              |
| <b>Project Sub Totals</b>         | <b>106.00</b>          | <b>\$2,413.71</b>     | <b>\$884.74</b>           | <b>\$553.45</b>          | <b>\$0.00</b>              | <b>\$948.68</b>           | <b>\$4,800.58</b>     |

**Before**

(No picture available)

**During**

(No picture available)

**After**







Project: Kitty Road

Activity: Routine/  
Preventive  
Maintenance














Project #:  
2021-546

Township/SW Dist:  
Bluffton/4

Completed:  
May 2021

**Legend**

**Drainage Type**

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

Cleaned out 535 L.F. of roadside ditch.  
Jetted (3) driveway pipes. Hydroseeded  
for erosion control.



1 inch = 170 feet

Prepared By: BC Stormwater Management Utility  
Date Print: 06/28/21  
File: C:\project summaries map\Kitty Road\_2021-546





**Beaufort County Public Works**  
**Stormwater Infrastructure**  
*Project Summary*

**Project Summary:** Polite Drive

**Activity:** Routine/Preventive Maintenance

**Duration:** 05/25/21 - 05/26/21

**Narrative Description of Project:**

Project improved 726 L.F. of drainage system. Cleaned out 702 L.F. of roadside ditch and (2) catch basins. Jetted (3) crossline pipes, (7) driveway pipes and 24 L.F. of roadside pipe.

**2021-548/Polite Drive**

|                                   | <b>Labor<br/>Hours</b> | <b>Labor<br/>Cost</b> | <b>Equipment<br/>Cost</b> | <b>Material<br/>Cost</b> | <b>Contractor<br/>Cost</b> | <b>Indirect<br/>Labor</b> | <b>Total<br/>Cost</b> |
|-----------------------------------|------------------------|-----------------------|---------------------------|--------------------------|----------------------------|---------------------------|-----------------------|
| AUDIT / Audit Project             | 1.00                   | \$23.49               | \$0.00                    | \$0.00                   | \$0.00                     | \$13.23                   | \$36.72               |
| CBCO / Catch basin - clean out    | 24.00                  | \$566.56              | \$341.36                  | \$62.22                  | \$0.00                     | \$229.44                  | \$1,199.58            |
| HAUL / Hauling                    | 8.00                   | \$218.64              | \$152.48                  | \$30.00                  | \$0.00                     | \$0.00                    | \$401.12              |
| RSDCL / Roadside Ditch - Cleanout | 32.00                  | \$706.08              | \$169.92                  | \$71.24                  | \$0.00                     | \$105.84                  | \$1,053.08            |
| UTLOC / Utility locates           | 1.00                   | \$24.70               | \$0.00                    | \$0.00                   | \$0.00                     | \$13.23                   | \$37.93               |
| <b>Grand Total</b>                | 66.00                  | \$1,539.47            | \$663.76                  | \$163.46                 | \$0.00                     | \$361.74                  | \$2,728.43            |

**Before**



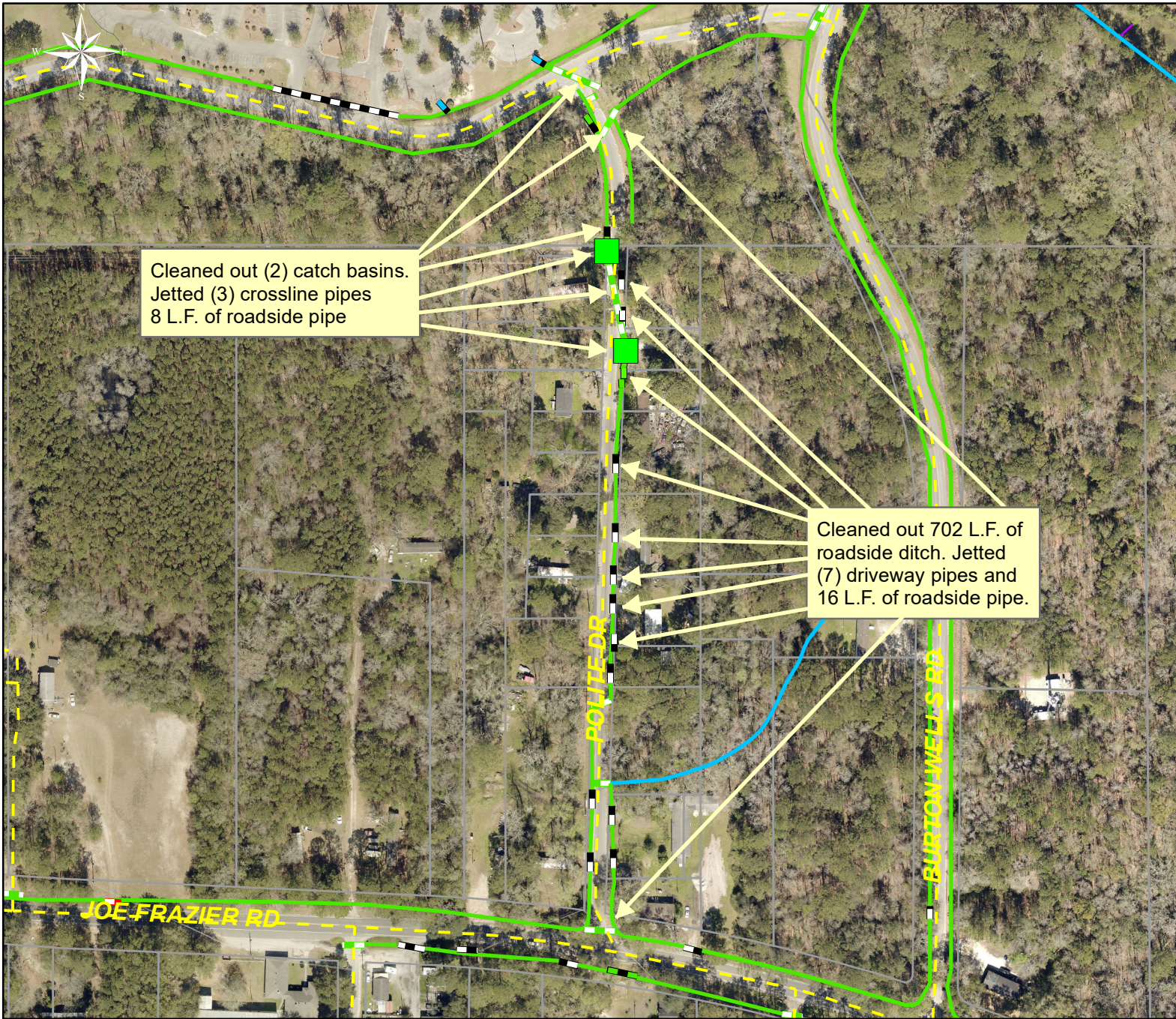
**During**



**After**







Cleaned out (2) catch basins.  
Jetted (3) crossline pipes  
8 L.F. of roadside pipe

Cleaned out 702 L.F. of roadside ditch. Jetted (7) driveway pipes and 16 L.F. of roadside pipe.

Project: Polite Drive

Activity: Routine/ Preventive Maintenance














Project #: 2021-548

Township/SW Dist: Port Royal Island/6

Completed: May 2021

**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 45 90 180 270 360 Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility  
Date Print:06/28/21  
File:C:\project summaries\Polite Drive Map #1\_2021-548





**Beaufort County Public Works**  
**Stormwater Infrastructure**  
*Project Summary*

**Project Summary:** ToB-Pritchard Street (Reimbursement)

**Activity:** Routine/Preventive Maintenance

**Duration:** 10/29/2021

**Narrative Description of Project:**

Hydroseeded 900 LF of roadside for erosion control.

**2022-001/TOB Pritchard St (Reimbursement)**

|                             | <b>Labor<br/>Hours</b> | <b>Labor<br/>Cost</b> | <b>Equipment<br/>Cost</b> | <b>Material<br/>Cost</b> | <b>Contractor<br/>Cost</b> | <b>Indirect<br/>Labor</b> | <b>Total<br/>Cost</b> |
|-----------------------------|------------------------|-----------------------|---------------------------|--------------------------|----------------------------|---------------------------|-----------------------|
| AUDIT / Audit Project       | 2.00                   | \$62.34               | \$0.00                    | \$0.00                   | \$0.00                     | \$38.48                   | \$100.82              |
| HYDR / Hydroseeding         | 24.00                  | \$624.41              | \$75.62                   | \$211.47                 | \$0.00                     | \$385.44                  | \$1,296.94            |
| <b>Project Grand Totals</b> | 26.00                  | \$686.75              | \$75.62                   | \$211.47                 | \$0.00                     | \$423.92                  | \$1,397.76            |

**Before**



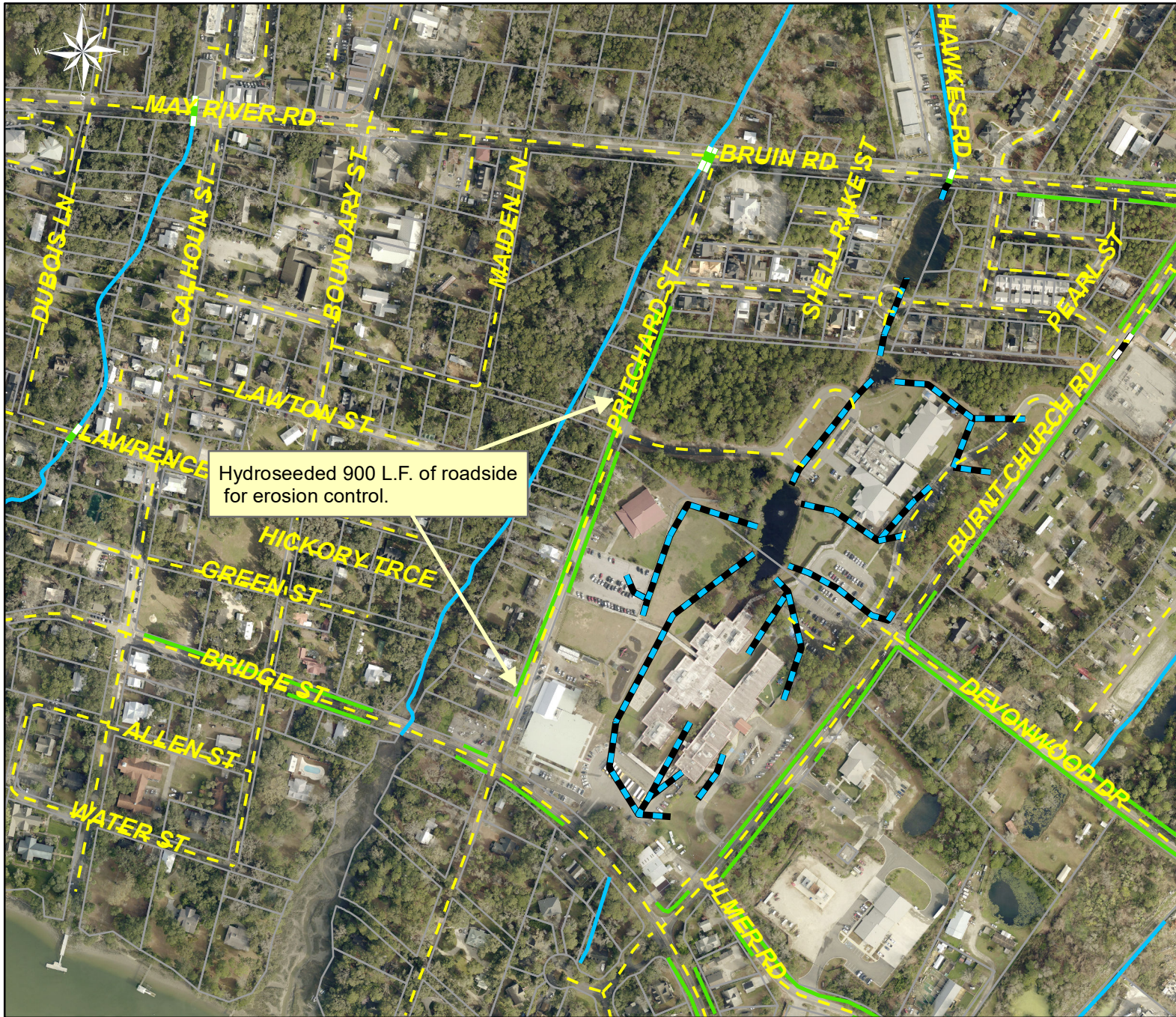
**During**



**After**







Project: Town of Bluffton- Pritchard Street

Activity: Routine/ Preventive Maintenance














Project #: 2022-001

Township/SW Dist: Bluffton/4

Completed: October 2021

**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 95 190 380 570 760 Feet

1 inch = 420 feet

Prepared By: BC Stormwater Management Utility

Date Print: 11/23/21

File: C:\project summaries map\Town of Bluffton- Pritchard Street\_2022-001





**Beaufort County Public Works**  
**Stormwater Infrastructure**  
*Project Summary*

**Project Summary:** Camp St. Marys

**Activity:** Routine/Preventive Maintenance

**Duration:** 06/04/2021 - 11/18/2021

**Narrative Description of Project:**

Project improved 278 L.F. of drainage system. Cleaned out 230 L.F. of roadside ditch. Replaced (1) driveway pipe. Jetted (2) driveway pipes. Installed rip rap and hydroseeded for erosion control.

**2021-553/Camp St. Marys**

|                                   | <b>Labor<br/>Hours</b> | <b>Labor<br/>Cost</b> | <b>Equipment<br/>Cost</b> | <b>Material<br/>Cost</b> | <b>Contractor<br/>Cost</b> | <b>Indirect<br/>Labor</b> | <b>Total<br/>Cost</b> |
|-----------------------------------|------------------------|-----------------------|---------------------------|--------------------------|----------------------------|---------------------------|-----------------------|
| AUDIT / Audit Project             | 3.00                   | \$87.04               | \$0.00                    | \$0.00                   | \$0.00                     | \$51.71                   | \$138.75              |
| DPJT / Driveway Pipe - Jetted     | 24.00                  | \$566.56              | \$341.36                  | \$87.17                  | \$0.00                     | \$229.44                  | \$1,224.53            |
| HAUL / Hauling                    | 44.00                  | \$1,016.96            | \$838.64                  | \$689.04                 | \$0.00                     | \$418.00                  | \$2,962.64            |
| HYDR / Hydroseeding               | 16.00                  | \$367.52              | \$96.03                   | \$142.96                 | \$0.00                     | \$105.84                  | \$712.35              |
| RSDCL / Roadside Ditch - Cleanout | 56.00                  | \$1,147.60            | \$307.47                  | \$401.72                 | \$0.00                     | \$618.72                  | \$2,475.51            |
| SITEINSP / Site Inspection        | 1.00                   | \$31.17               | \$4.35                    | \$10.12                  | \$0.00                     | \$19.24                   | \$64.88               |
| UTLOC / Utility locates           | 4.00                   | \$167.80              | \$8.70                    | \$14.58                  | \$0.00                     | \$59.82                   | \$250.90              |
| <b>Project Sub Totals</b>         | <b>148.00</b>          | <b>\$3,384.65</b>     | <b>\$1,596.55</b>         | <b>\$1,345.60</b>        | <b>\$0.00</b>              | <b>\$1,502.77</b>         | <b>\$7,829.56</b>     |

**Before**

(No Pictures Available)

**During**

(No Pictures available)

**After**







Project: Camp St. Marys Road

Activity: Routine/ Preventive Maintenance














Project #: 2021-553

Township/SW Dist: Bluffton/4

Completed: June 2021

**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 25 50 100 150 200 Feet

1 inch = 130 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/24/21

File: C:\project summaries map\Camp St Marys Camp Road\_2021-553





**Beaufort County Public Works**  
**Stormwater Infrastructure**  
*Project Summary*

**Project Summary:** St. Helena Island Tree Removal - Warsaw Island Rd

**Activity:** Routine/Preventive Maintenance

**Duration:** 10/19/20

**Narrative Description of Project:**

Removed fallen tree from workshelf.

**2021-416/St Helena Island Tree Removal**

|                                  | <b>Labor<br/>Hours</b> | <b>Labor<br/>Cost</b> | <b>Equipment<br/>Cost</b> | <b>Material<br/>Cost</b> | <b>Contractor<br/>Cost</b> | <b>Indirect<br/>Labor</b> | <b>Total<br/>Cost</b> |
|----------------------------------|------------------------|-----------------------|---------------------------|--------------------------|----------------------------|---------------------------|-----------------------|
| AUDIT / Audit Project            | 1.50                   | \$35.84               | \$0.00                    | \$0.00                   | \$0.00                     | \$19.85                   | \$55.69               |
| RMTRW / Remove trees - Workshelf | 16.00                  | \$333.60              | \$59.40                   | \$29.34                  | \$0.00                     | \$120.08                  | \$542.42              |
| STBY / Stand By                  | 4.00                   | \$80.28               | \$76.24                   | \$8.00                   | \$0.00                     | \$0.00                    | \$164.52              |
| <b>Grand Total</b>               | 21.50                  | \$449.72              | \$135.64                  | \$37.34                  | \$0.00                     | \$139.93                  | \$762.63              |

**Before**



**During**



**After**







Project: St. Helena  
Island Tree Removal-  
Warsaw Island Road  
Channel

Activity: Routine/  
Preventive  
Maintenance














Project #:  
2021-416

Township/SW Dist:  
St. Helena Island/8

Completed:  
October 2021

**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 15 30 60 90 120  
Feet

1 inch = 83 feet

Prepared By: BC Stormwater Management Utility

Date Print:07/12/21

File:C:\project summaries map\St.Helena Island Tree Removal- Warsaw Island Road Channel\_2021-416





**Beaufort County Public Works**  
**Stormwater Infrastructure**  
*Project Summary*

**Project Summary:** Sheldon Tree Removal - Old Dawson Acres Channel and Big Estate Rd Channel

**Activity:** Routine/Preventive Maintenance  
**Duration:** 02/22/21 - 06/15/21

**Narrative Description of Project:**

Removed fallen trees from workshelves.

**2021-415/Sheldon Tree Removal**

|                                  | <b>Labor<br/>Hours</b> | <b>Labor<br/>Cost</b> | <b>Equipment<br/>Cost</b> | <b>Material<br/>Cost</b> | <b>Contractor<br/>Cost</b> | <b>Indirect<br/>Labor</b> | <b>Total<br/>Cost</b> |
|----------------------------------|------------------------|-----------------------|---------------------------|--------------------------|----------------------------|---------------------------|-----------------------|
| AUDIT / Audit Project            | 1.50                   | \$35.84               | \$0.00                    | \$0.00                   | \$0.00                     | \$19.85                   | \$55.69               |
| HAUL / Hauling                   | 4.00                   | \$87.16               | \$76.24                   | \$21.34                  | \$0.00                     | \$0.00                    | \$184.74              |
| RMTRW / Remove trees - Workshelf | 40.00                  | \$877.32              | \$350.11                  | \$100.89                 | \$0.00                     | \$318.60                  | \$1,646.92            |
| <b>Grand Total</b>               | 45.50                  | \$1,000.32            | \$426.35                  | \$122.23                 | \$0.00                     | \$338.45                  | \$1,887.35            |

**(No Pictures Available)**





Project: Sheldon Tree Removal- Big Estate Road Channel Map #1

Activity: Routine/ Preventive Maintenance

Project #: 2021-415

Township/SW Dist: Sheldon/5

Completed: June 2021

**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 45 90 180 270 360 Feet

1 inch = 250 feet

Prepared By: BC Stormwater Management Utility

Date Print: 02/17/21

File: C:\project summaries map\Sheldon Tree Removal- Big Estate Road Channel Map#1\_2021-415





Project: SheldonTree  
Removal- Old Dawson  
Acres Channel  
Map #2

Activity: Routine/  
Preventive  
Maintenance

Project #:  
2021-415

Township/SW Dist:  
Sheldon/5

Completed:  
June 2021

| Legend               |                |
|----------------------|----------------|
| <b>Drainage Type</b> |                |
|                      | Access Pipe    |
|                      | Bleeder Pipe   |
|                      | Channel Pipe   |
|                      | Channel        |
|                      | Stream         |
|                      | Crossline Pipe |
|                      | Driveway Pipe  |
|                      | Lateral        |
|                      | Lateral Pipe   |
|                      | River          |
|                      | Road Pipe      |
|                      | Roadside       |
|                      | Roadside Pipe  |

0 2040 80 120 160  
Feet

1 inch = 120 feet

Prepared By: BC Stormwater Management Utility  
Date Print: 07/12/21

File: C:\project summaries map\Sheldon Tree Removal- Old Dawson Acres Channel Map#2\_2021-415

## DRAFT 2022 Stormwater Utility Board Schedule

| <u>Date</u>                                 | <u>Time</u> | <u>Location</u>  |
|---|-------------|--|
| Wednesday, February 9 <sup>th</sup> , 2022  | 2:00 PM     | Executive Conference Room<br>100 Ribaut Rd, Beaufort, SC |
| Wednesday, April 20 <sup>th</sup> , 2022    | 2:00 PM     | Executive Conference Room<br>100 Ribaut Rd, Beaufort SC  |
| Wednesday, June 15 <sup>th</sup> , 2022     | 2:00 PM     | Executive Conference Room<br>100 Ribaut Rd, Beaufort SC  |
| Wednesday, August 17 <sup>th</sup> , 2022   | 2:00 PM     | Executive Conference Room<br>100 Ribaut Rd, Beaufort SC  |
| Wednesday, October 19 <sup>th</sup> , 2022  | 2:00 PM     | Executive Conference Room<br>100 Ribaut Rd, Beaufort SC  |
| Wednesday, December 14 <sup>th</sup> , 2022 | 2:00 PM     | Executive Conference Room<br>100 Ribaut Rd, Beaufort SC  |

\*Special meetings may be called at any time at the request of staff and/or the chairman.





BEAUFORT COUNTY  
STORMWATER MANAGEMENT UTILITY BOARD AGENDA  
Wednesday, February 9<sup>th</sup>, 2022 2:00 p.m.  
Executive Conference Room, Administration Building  
Beaufort County Government Robert Smalls Complex  
100 Ribaut Road, Beaufort, South Carolina  
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 – 2:00p.m.
  - A. Approval of Agenda
  - B. Approval of Minutes – December 15th, 2021 ([backup](#))
2. INTRODUCTIONS
3. PUBLIC COMMENT
4. REPORTS
  - A. Utility Update – Katie Herrera ([backup](#))
  - B. Monitoring Update – Katie Herrera ([backup](#))
  - C. Stormwater Implementation Committee Report – Katie Herrera([backup](#))
  - D. Stormwater Related Projects – Julianna Corbin ([backup](#))
  - E. Upcoming Professional Contracts Report – Julianna Corbin ([backup](#))
  - F. Regional Coordination – Katie Herrera ([backup](#))
  - G. Municipal Reports – Katie Herrera ([backup](#))
  - H. MS4 Update – Katie Herrera([backup](#))
  - I. Staff Update – Katie Herrera ([backup](#))
  - J. Maintenance Projects Report – Matthew Rausch ([backup](#))
  - K. Liaison Report - Ms. Alice Howard
5. UNFINISHED BUSINESS
6. NEW BUSINESS
  - A. Stormwater Department Audit Report – Woolpert, Inc
  - B. TY2022 Management Memo – Katie Herrera
  - C. FY23 Budget – Carolyn Wallace
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
  - A. Wednesday, April 20th ([backup](#))
9. ADJOURNMENT

