



Beaufort County Stormwater Utility
120 Shanklin Road
Beaufort, South Carolina 29906
Voice (843) 255-2805

November 14, 2023

Stormwater Utility Board Packet

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October 2023

Utility Update

1. Regionalization (SoLoCo)
 - a) Staff continues to support coordination on permitting standards.
 1. Amendments to the SoLoCo manual for adoption were approved at the 1/23/23 County Council meeting.
 - b) Staff continues to support other municipalities in their efforts to move forward with adoption.
 1. Town of Hilton Head is considering adopting SoLoCo.
2. Special presentation suggestions
 - a. Winter meeting location suggestions
3. Reminder: Annual Financial report from the Municipalities are due – Per the Intergovernmental Agreements for the Utility, each year on September 30th, the City and Towns are required to submit a summary of revenue and expenditures for the previous fiscal year.
 - a. Beaufort County – Not Received.
 - b. Town of Hilton Head Island – Received.
 - c. Town of Bluffton – Not Received.
 - d. Town of Port Royal – Not Received.
 - e. City of Beaufort – Not Received.

Monitoring Update

1. Scheduling an on-site meeting with Dr. Pettay to see implementation of new personnel. Physical lab will be moving back to the north campus over next several months.
2. New monitoring requirements listed in the airport's SWPPP will be incorporated into contract
3. There will be regional cooperation between Beaufort County, USCB, Port Royal Sound Foundation and DNR on the placement of future continuous monitoring stations.

Stormwater Implementation Committee (SWIC) Report

1. SWIC met on October 18th to discuss Clemson Extension, USCB Lab, future of Stormwater Utility Fees, CWI fees and the board consolidation. Next meeting date is in December.

Regional Coordination

1. Old Woodlands
 - a. Staff working with Town of Hilton Head to convey drainage easement for 55 Gardner Drive.

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2. Alljoy
 - a. Met with Ms. Laura on-site Oct 31 to discuss drainage and ditch issues. Ditches are in cue to be cut. Public Works is awaiting federal funding to address infrastructure issues.

Municipal Reports

1. Town of Hilton Head Island (From Jeff Netzing, Stormwater Manager and Jacob Terry, 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.](#)
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.

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.
2. Complaints – Staff continually works numerous drainage related complaints each month.
 - a) Shell Point Community – work has begun by the contractor in the designated project areas.
3. Factory Creek Watershed Regional Detention Basin “Phase II” – Mediation scheduled for November 8th, outcome pending.
4. On Call Stormwater infrastructure services – J.H. Hiers
 - a) Huspah Court N – Contractor installed BMP’s and arranging picking up infrastructure pieces from Public Works.
 - b) Bessies Lane – Working with contractor to schedule start date.
 - c) Church of God – Project completed, however an erosion concern was found at an outfall resulting in \$80k worth of repairs needed.
5. Arthur Horne Park- No update since last report.

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) Brewer Memorial – Closeout pending SCDOT approval.
2. Stormwater engineering consulting services – Woolpert


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- a) Scope #8 – St. Helena Drainage Study. Final report draft received 6/30. Allocated funds – \$129,525.00. Staff initiating work on half of the proposed improvements from the study.
- b) Scope #11 – Northern Lady’s Island Drainage Study Phase II – Draft report is completed. Staff reviewing. Allocated funds – \$213,650.00
- c) Scope #12 – Staff working with Woolpert on website for public. Allocated funds - \$58,804.15
- d) Scope #13 – NPDES SMS4 general permit assistance 2023. Allocated funds - \$40,000.00.
- e) Scope #14 – Rivers End Water Quality Improvements – Data compilation, stormwater inventory and survey, potential BMP identification, Model development, alternatives analysis, and drainage report. Allocated funds - \$174,465.00. Approved February 16, 2023. Survey complete and hydraulic modeling is complete, project is being QA/QC’d. Goal is to have project ready to go before the end of 2023.
- f) Scope #15 – Plan Reviewing for MS4 Compliance – Allocated funds - \$40,000.00.
- g) Scope # 16 – Tax Run – Woolpert has completed tax run for 2023. Allocated funds - \$52,320.00.
- h) Scope #20 – Instructional video to walk developers & citizens through the Compliance Calculator.
- i) Scope #21 – New continuous monitoring station install and O&M. Allocated funds - \$94,589.73

Scopes on County and Woolpert Radar:

- 1. SWMP Update – staff to update stormwater management plan for DHEC.
- 2. 5 year Stormwater Utility Fee Assessment – Budget deep dive to look at next FY SWU fees.

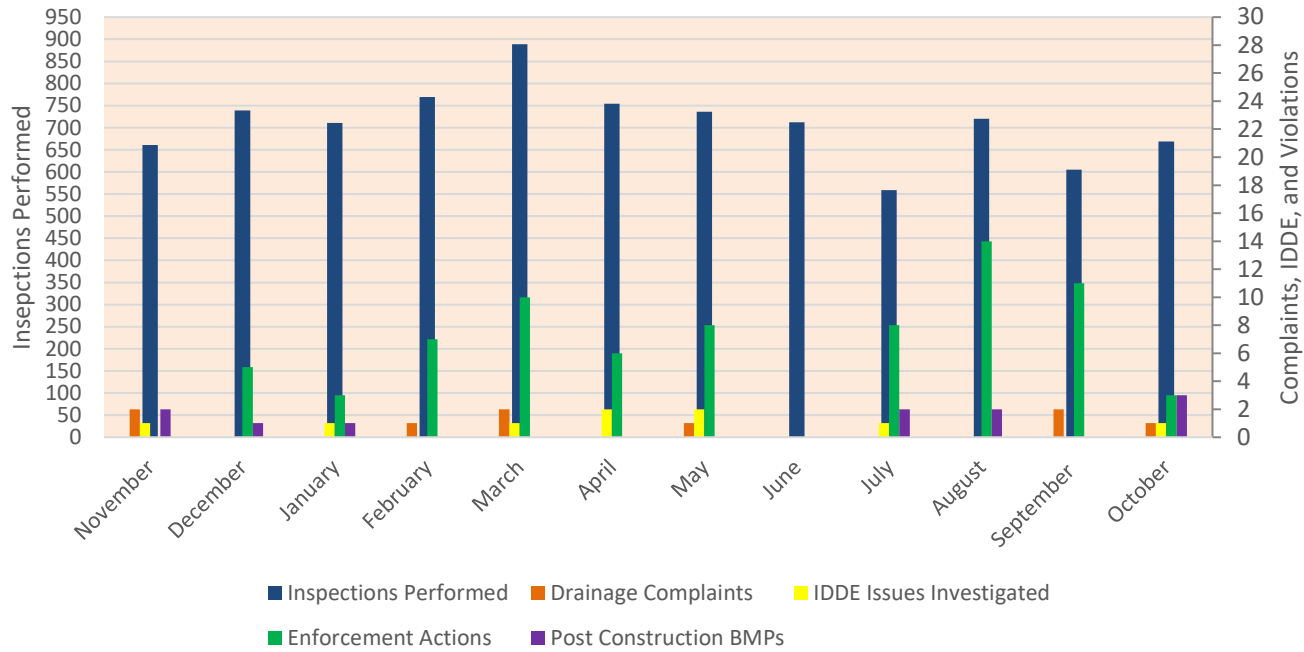
MS4 Report

- 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. Public Education – [See attached report.](#) 
- 5. MS4 Statewide General permit – EPA has provided comments to SCDOT’s MS4 permit.

Staff Update

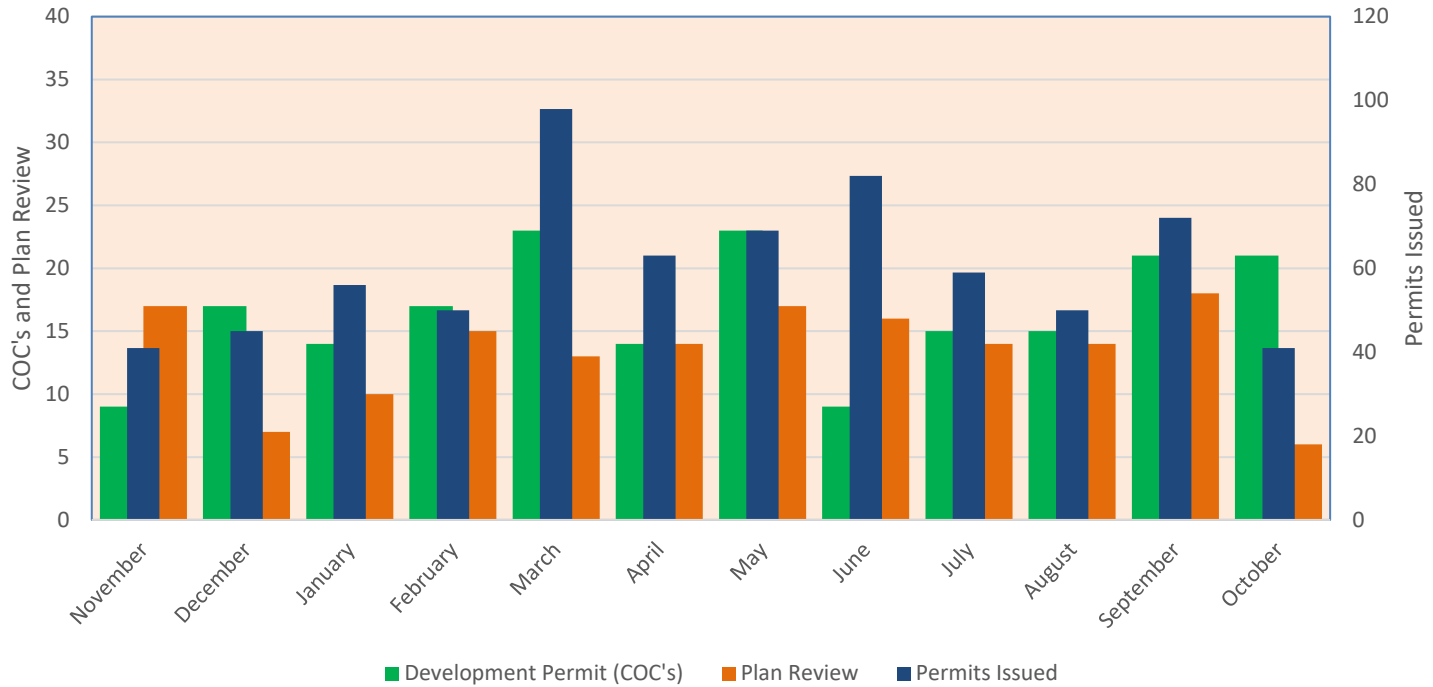
- 1. Staff working to fill all vacant positions.

MS4 Minimum Control Measure #4 Sediment & Erosion Control Inspections



TYPE	November	December	January	February	March	April	May	June	July	August	September	October	Last 12 Months
Inspections Performed	661	739	711	769	889	754	736	712	559	720	605	669	8524
Drainage Complaints	2	0	0	1	2	0	1	0	0	0	2	1	9
IDDE Issues Investigated	1	0	1	0	1	2	2	0	1	0	0	1	9
Enforcement Actions	0	5	3	7	10	6	8	0	8	14	11	3	75
Post Construction BMPs	2	1	1	0	0	0	0	0	2	2	0	3	11

MS4 Minimum Control Measure #5 Stormwater Plan Review



TYPE	November	December	January	February	March	April	May	June	July	August	September	October	Last 12 Months
Development Permit (COC's)	9	17	14	17	23	14	23	9	15	15	21	21	198
Plan Review	17	7	10	15	13	14	17	16	14	14	18	6	161
Permits Issued	41	45	56	50	98	63	69	82	59	50	72	41	726

LOWCOUNTRY STORMWATER PARTNERS MONTHLY REPORT

Project (Year 2022)	Project Type	POC	Direct/Indirect	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Small Grants Program	Programs	Bacteria, Freshwater	Direct												
Pet Waste Station Map	Programs	Bacteria	Indirect												
Pet Waste Displays at Local Orgs	Other	Bacteria	Indirect												
Septic Workshop	Programs	Bacteria	Direct												
Bilingual Septic Rack Cards	Publication	Bacteria	Indirect												
Septic "Welcome to the Neighborhood" Packets	Publication	Bacteria	Indirect												
Boater Informational Packet	Publication	Bacteria	Indirect												
Boater online resources	Publication	Bacteria	Indirect												
Boater Waste Signage	Media	Bacteria	Indirect												
Boater Waste Buckets/Bags	Purchases	Bacteria	Indirect												
Adopt-A-Landing/Clean Marina Program	Programs	Bacteria	Direct												
2023 Beaufort Stormwater Pond Conference	Programs	Nutrients	Direct												
Healthy Pond Series: North	Programs	Nutrients	Direct												
Healthy Pond Series: South	Programs	Nutrients	Direct												
Healthy Pond Series: Central	Programs	Nutrients	Direct												
Soil sample placards at retailers	Media	Nutrients	Indirect												
Native Plant Signage	Media	Nutrients	Indirect												
Native Seed Promo Packet	Purchases	Nutrients	Indirect												
Soil Sample Bags at Local Retailers	Other	Nutrients	Indirect												
Buffer Workshop	Programs	Nutrients	Direct												
LID Lunch-and-Learn	Programs	Freshwater	Direct												
BMP Park Field Day	Programs	General Stormwater, Bacteria, Nutrients, Freshwater	Direct												
LID Map/Website Updates	Programs	Freshwater	Indirect												
BMP info packet	Publication	Freshwater	Indirect												
BMP Social Media Campaign	Publication	Freshwater	Indirect												
2024 Strategic Plan Update	Publication	Consortium Management	Indirect												
Being a Neighbor for Clean Water (Fall)	Programs	General Stormwater, Bacteria, Nutrients, Freshwater	Direct												
Rain Barrel Sale	Programs	Freshwater	Direct												
Adopt-A-Stream (Spring)	Programs	General Stormwater, Bacteria, Nutrients, Freshwater	Direct												
Adopt-A-Stream (Fall)	Programs	General Stormwater, Bacteria, Nutrients, Freshwater	Direct												
4-H2O (July)	Programs	General Stormwater, Bacteria, Nutrients, Freshwater	Direct												
Kids in Kayaks	Programs	General Stormwater, Bacteria, Nutrients, Freshwater	Direct												
LSP consortium meeting (March)	Programs	Consortium Management	Direct												
LSP consortium meeting (June)	Programs	Consortium Management	Direct												
LSP consortium meeting (Sept)	Programs	Consortium Management	Direct												
LSP consortium meeting (Dec)	Programs	Consortium Management	Direct												
Water Festival	Programs	General Stormwater, Bacteria, Nutrients, Freshwater	Indirect												
May River Sweep	Programs	General Stormwater, Bacteria, Nutrients, Freshwater	Indirect												
Keep Broad Creek Clean Festival	Programs	General Stormwater, Bacteria, Nutrients, Freshwater	Indirect												
Beach/River Sweep	Programs	General Stormwater, Bacteria, Nutrients, Freshwater	Indirect												
Soft Shell Crab Festival	Programs	General Stormwater, Bacteria, Nutrients, Freshwater	Indirect												
Paris Island Earth Day	Programs	General Stormwater, Bacteria, Nutrients, Freshwater	Indirect												
Shrimp Fest	Programs	General Stormwater, Bacteria, Nutrients, Freshwater	Indirect												
Changing Tides (monthly)	Publication	General Stormwater, Bacteria, Nutrients, Freshwater	Indirect												
News Article 1	Publication	General Stormwater, Bacteria, Nutrients, Freshwater	Indirect												
News Article 2	Publication	General Stormwater, Bacteria, Nutrients, Freshwater	Indirect												
News Article 3	Publication	General Stormwater, Bacteria, Nutrients, Freshwater	Indirect												
FB posts (one a week)	Media	General Stormwater, Bacteria, Nutrients, Freshwater	Indirect												
SWUB Report (monthly)	Reporting	Consortium Management	Indirect												
LSP Annual Report	Reporting	Consortium Management	Indirect												
Rack Cards	Purchases	General Stormwater, Bacteria, Nutrients, Freshwater	Indirect												
Mailers	Purchases	Bacteria, Nutrients	Indirect												
LSP Promo Materials	Purchases	Consortium Management	Indirect												
Direct Contacts	Other	General Stormwater, Bacteria, Nutrients, Freshwater	Direct												
Rain Garden Workshop	Programs	Freshwater	Direct												

KEY	
	Not Started
	In Progress
	Completed
	Cancelled

TOWN COUNCIL



STAFF REPORT

Projects and Watershed Resilience Department

MEETING DATE:	November 14, 2023
SUBJECT:	Projects and Watershed Resilience Department Monthly Report
PROJECT MANAGER:	Kimberly Washok-Jones, Director of Projects and Watershed Resilience

CAPITAL IMPROVEMENTS PROGRAM (CIP) UPDATE

PATHWAYS

- 1. Buck Island-Simmons ville Neighborhood Sidewalks and Lighting**
 - Construction of the Phase 6B sidewalks and drainage is complete.
 - **Next Steps**
 - Complete Phase 6B SCDOT closeout.
 - Construction of the street lighting is to be completed in FY 2024 by Dominion.

- 2. New River Linear Trail**
 - Conceptual Master Plan is complete.
 - Submitted plans to Santee Cooper for review and cost share for bridge replacements. They stated they will not participate in a cost share; thus, staff is reviewing the easement agreement terms with legal for next steps.
 - Received \$26,000 PARD grant award and \$2 million in appropriations.
 - Easement donation from New Riverside Community Association, Inc. approved at 3/14/23 Town Council.
 - Restroom purchase agreement approved at 7/11/23 Town Council.
 - Well contract finalized.
 - Dominion utility easement approved at 10/10/23 Town Council.
 - **Next Steps**
 - Continue engineering design and permitting for Phase 1 pathway (New River to Hwy 46).
 - Well and bathroom installation schedule being revisited due to Dominion Energy staffing issues and inability to install power poles as scheduled.
 - LED light fixtures switch from Bridge Street to New River Linear Trail.

SEWER & STORMWATER

- 1. Buck Island-Simmons ville Sewer (Phases 5A-D)**
 - Permits/Contracts are complete, the project is under construction.
 - **Next Steps**
 - Construction to be complete in January 2024.

2. Historic District Sewer Extension Phases 2 & 3 - Bridge & Colcock Streets

- Jordan Construction of Hilton Head, Inc. continues construction.
- Main line testing and approvals to operate have been issued by BJWSA.
- **Next Steps**
 - Continue house connections.

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

- Design for Phases 4, 5, & 6 were submitted to BJWSA for initial review.
- **Next Step**
 - Incorporate any Phases 4, 5, & 6 design changes to drawings per BJWSA review.
 - Obtain Quit Claim Deeds from all the property owners along the ghost roads or initiate legal action.

4. May River Watershed Action Plan Impervious Restoration Water Quality Projects

- Initial site investigations are complete for 9 of the 11 participating project sites.
- Palmetto Pointe Towns, Lowcountry Community Church and Apartment One declined to participate in the Program at this time. Updated Policy document for Impervious Restoration Program submitted and under review.
- Geotechnical investigations at 6 school sites complete and field results under analysis for use in development of Preliminary Design. Meeting held with School District on September 28, 2023 to discuss initial Preliminary Design Plan. Geotechnical investigations for remaining sites are being scheduled.
- Initial Property Owner contacts for the selected 15 Additional Sites within Municipal Limits have been made.
- **Next Steps**
 - Geotechnical evaluations at the 3 remaining site locations being coordinated with property owners.
 - Based on comments received from the School District, finalize Preliminary Design plan for School sites.
 - Once Geotechnical information is obtained, begin preliminary site design of the 3 remaining 3 sites.
 - Comments on Updated Draft Policy Document presented to consultant and meeting being scheduled to discuss comments and Final Draft prestatation.

5. Buck Island Drainage Improvements

- Drainage project was closed out.
- **Next Steps**
 - Executed contract with Greenway Bridge to construct the Buck Island Road boardwalk handrails.

HISTORIC DISTRICT IMPROVEMENTS

1. Boundary Street Lighting

- Complete contract revisions with Dominion to install street lighting on the west side of Boundary Street.
- **Next Steps**
 - Dominion to install street lighting in FY 2024.

2. Squire Pope Carriage House Preservation

- The contract with Huss Inc. was executed and construction began on 1/16/23 with a groundbreaking ceremony held on 2/4/23.
- The structure was lifted. Excavation, footers, slab, blockwork, brick piers, block walls were sealed and insulated, perimeter sill beams and interior beams were installed, flooring at crawl space has been insulated and structure has been lowered. Both masonry fireplaces have been reinstalled. Old roofing has been removed. New sheathing / plywood and ice and water shield has been installed. All windows and doors have been refinished and reinstalled. HVAC, plumbing, electrical, fire suppression and low voltage rough ins are complete. Pending inspections.
- **Next Steps**
 - Insulate all walls. Install exterior wall sheathing / plywood. Waterproof exterior sheathing. Start exterior siding installation. Start painting preparation.
 - SCADpro students are developing conceptual ideas for the Welcome Center for possible construction in FY 2025.

3. Bridge Street Streetscape

- Issued Notice to Proceed for Phase 1 construction to start 12/5/22.
- Obtained survey proposal for Phase II streetscape project.
- Engaged Barrier Island for Phase II design.
- Obtained easement from Cunningham LLC for parking sign installation.
- Installed 3-hour limited parking signs.
- Updated SCDOT encroachment permit for No Parking signs.
- **Next Steps**
 - Phase 1 lighting installation delayed due to Dominion Energy schedule.
 - Replying to SCDOT comments for additional storm drainage plan at Martins Place.
 - Continue phase 2 conceptual plan for SCDOT permitting.

4. Boundary Street Streetscape

- Engineering Design is 70% complete and submitted to Watershed for stormwater for initial review.
- Met with Dominion Energy on 5/17/23. Underground conversion plans from Dominion Energy is subject to the Town obtaining easements for May River Transmission line and switch gear locations.
- **Next Steps**
 - Continuing with Engineering Design, Underground Power Coordination, and Permitting.
 - Obtain easement exhibits and begin appraisals in FY 2024.

- Construction in FY 2025, subject to acquisition of all required easements.

5. Calhoun Street Streetscape

- Preliminary engineering design is 40% complete.
- Met with Dominion Energy on 5/17/23. Awaiting underground conversion plans from Dominion Energy.
- **Next Steps**
 - Begin negotiations with May River Road property owners for main transmission line easements.
 - Once the main transmission line easements have been completed, then continue with engineering design into FY 2024.
 - Prepare easement acquisition plats for Phase 1 in CY 2024 and begin easement acquisition.
 - Phased construction is planned to begin in FY 2025 pending budget approval and acquisition of required easements.

6. Pathway Pedestrian Safety Improvements

- Completed Historic District crosswalk study identifying and prioritizing future intersection/crosswalk improvements to meet ADA compliance.
- Phase 1 ADA sidewalk improvements along Goethe Road were completed in 1/2023.
- Contract with ICE approved at 9/12/23 Town Council meeting.
- **Next Steps**
 - Engineer designs under way.

7. Comprehensive Drainage Plan Improvements

- Asset inventory and condition assessment complete for Heyward Cove.
- 2D H/H model development complete.
- Initial Tidal Gauge information gathering at Calhoun St Dock has been completed.
- Review of 2D H/H model development results and areas of inundation/choke points complete.
- FY24 Scope of Work being developed and evaluating inclusion of Sea Grant work elements.
- **Next Steps**
 - Final Project Report review complete and final review comments provided to consultant. Updates to Final Report in progress.
 - Establish maintenance and CIP project needs list and Master Planning report to reduce risk of flooding.

8. Pritchard Street Drainage Improvements

- Project scope has increased to include streetscape elements, pedestrian connectivity, street lighting and traffic calming evaluation. Updated 70% design submission review meeting held. Growth Management and Stormwater Pre-Application meeting held October 17, 2023, and comments to be utilized in 90% Design development.

- **Next Steps**
 - Coordinate approval for proposed improvements with Beaufort County School District and Beaufort County on Pool operation impacts.
 - Complete 100% design submission, permitting submissions and bid document formulation.
 - 90% design submission and identification of easement and street lighting needs.

PARK DEVELOPMENT

1. Oyster Factory Park

- Civil Construction and Landscape of parking area substantially complete.
- Design of the event area and reconfigured boat trailer parking is underway.
- **Next Steps**
 - Prepare event area plans for bid in November.
 - Construction of the event area is planned for this winter.

2. Oscar Frazier Park

- Started construction of Rotary Center Improvements in June. Construction to be phased and coordinated with events planned for the Rotary Center.
- Council directed staff to not proceed with sports court design at this time.
- Executed contracts for design/build of the splash pad.
- **Next Steps**
 - Complete Rotary Hardscape construction in December.
 - Begin construction of Splash Pad in the Spring of 2024.

3. New Riverside Barn/Park

- Architectural design services for the Barn additions are complete.
- Design of the playground area is complete.
- JS Construction started phase 1 site construction on 1/27/2023.
- The contract has been executed with Nix Construction for Construction Manager at Risk Services with a GMP for Phases 2 (barn, restroom, playground and common areas).
- **Next Steps**
 - Complete construction of Phase 1 Site Development Infrastructure in January 2024.
 - Nix construction to obtain for all building permits necessary for Phase 2 construction.
 - Procure all playground equipment.
 - Nix construction to mobilize with a 12/4/2023 start date.

4. Miscellaneous Park Improvements

- Construction of the DuBois playground addition is underway.
- Design of Buckwalter Place (Evicore) Park is underway.
- **Next Steps**
 - Palmetto Recreation Equipment, LLC to complete installation of the DuBois playground equipment by the end of the calendar year.
 - Complete design of all FY 2024 park improvements (Evicore and Shade Sails).

TOWN FACILITIES AND MISCELLANEOUS PLANNING

1. Town of Bluffton Housing Projects

- **Next Steps**

- Provide financial assistance to joint venture partner for planning, design and permitting of Affordable/Workforce Housing at 1095 May River Road.

2. Law Enforcement Center Facility Improvements

- Clearing sodding, columns and fence construction for the challenge course is complete.
- **Next Steps**
 - FY 2024 begin design for FY 2025 construction of an impound lot, and possible storage of Public Service maintenance equipment.

3. Sarah Riley Hooks Cottage

- Completed conceptual master plan concepts and building assessment. Presented plans to Town Council at the April Workshop for review and direction.
- Executed design contracts with Meadors Inc., JK Tiller and Shearlock Engineering for design services of the cottage and site planning in FY 2024.
- **Next Steps**
 - Complete design of Cottage and grounds.
 - Begin restoration construction of cottage in FY 2025.

4. Ghost Roads

- Surveying and easement exhibits are complete.
- Bridge Street Quit Claim Deeds are complete. Pritchard and Colcock Streets Quit Claim Deeds are 99% complete. Staff is currently working with Lawrence, Lawton, Green, Pope, Allen and Water Street property owners to obtain Quit Claim Deeds.
- Staff continue to meet with property owners to raise awareness of the acquisition efforts and communicate next steps and requested Council assistance.
- **Next Steps**
 - Obtain remaining Quit Claim Deeds for Historic District Sewer Phases 4-6 or initiate quiet title proceedings.

5. Document Management

- RFP contract was awarded in March 2022.
- Electronic Document Management system is live.
- Documents for 6 departments have been transitioned to DMS.
- **Next Steps:**
 - Historical documents for the remaining 4 departments will transition through FY 2026.

6. Network Infrastructure

- Replaced core switches at Town Hall and the Law Enforcement Center.
- Replaced two VMWare hosts for a more stable server environment.
- Migration of Munis and Energov systems to a hosted environment completed.

- Replaced phone system to a more modern system.
- **Next Steps:**
 - Replacing two more VMWare hosts.
 - Implementation of Executime to replace Intime.

WATERSHED MANAGEMENT UPDATE

- 1. Stoney Creek/Palmetto Bluff Sewer Partnership**
 - 2022 updated cost-estimate for the project from BJWSA is \$7.2 million + contingencies. BJWSA has agreed to be the Project Manager.
 - Awarded the RIA SCIPP grant in support of Stoney Creek/Palmetto Bluff Sewer Extension with BJWSA and Beaufort County.
 - Met with partners to address BJWSA IGA concerns on 3/2/23. A draft 3-party Intergovernmental Agreement was discussed at a follow up meeting on 5/30/23.
 - Finalized IGA with Town, County, and grant splitting sewer extension costs and BJWSA funding water extension costs.
 - **Next Steps**
 - IGA with Town, County, and grant splitting sewer extension costs and BJWSA routed for signatures.
- 2. 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**
- 3. May River Watershed Action Plan Implementation Summary - Attachment 2**
 - Staff continue to work with Water Environmental Consultants (WEC) to review continuous flow data from the Stoney Creek, Rose Dhu Creek, and Palmetto Bluff subwatersheds. WEC is reviewing continuous and intermittent flow data in real time. WEC provided recommendations on the Town's water quality grab sampling program to ensure sufficient data for model calibration. Staff began implementing these recommendations on 7/31/23 and current data review indicates staff and instrumentation are collecting quality flow monitoring data.
 - The Town's Calhoun Street Dock tidal elevation gauge was repaired and is recording tidal elevation data. Water Environmental Consultants (WEC) and established two (2) additional tide gauges near the Stoney Creek and Rose Dhu Creek model boundaries as part of a 4-week headwaters tidal gauge study. The Calhoun Street dock and headwaters tidal elevation data will be used to establish a relationship between tidal amplitude and timing in the headwaters of the May River.
 - Staff met with SC Sea Grant on 8/01/23 to discuss components of a Resiliency Assessment as recommended in the Comp Plan and funded in the FY24 budget. Emergency Management, Growth Management, and Watershed presented their needs. Needs for the Buck Island/Simmons ville area for flooding were included. Staff compiled comments on the proposed scope of work and provided them to SC Sea Grant. SC Sea Grant is working to revise the initial scope based on staff feedback.
 - Two (2) automatic samplers were deployed in the Bridge Street Streetscape water quality project outfalls following completion of the Streetscape project. The goal was to collect water quality samples for post-construction monitoring. The Town of Bluffton's Watershed Management Division Office weather station recorded 3.82 inches of rainfall on 9/10/23. One (1) automatic sampler was activated due to discharge at the outfall. Fecal indicator bacteria, nutrient, and total suspended solids (TSS) samples were collected from the automatic sampler and submitted to USCB's

Water Quality Laboratory for analysis. Results have been received and staff has included them in the 319-Grant final reports.

4. Municipal Separate Storm Sewer System (MS4) Program Update

5. MS4 Minimum Control Measure (MCM) - #1 Public Education and Outreach, and MS4 MCM - #2 Public Participation and Involvement

- The May River Watershed Action Plan Advisory Committee (WAPAC) was canceled on 10/26/23. The next meeting is scheduled for 11/30/23. - **Attachment 3**
- Staff partnered with Kids with Kayaks on October 9th, 10th, 13th, 16th, and 19th to teach over 200 students from Bluffton Middle School and River Ridge Academy about common types of stormwater pollutants and what they can do to prevent them.

6. MS4 MCM – #3 Illicit Discharge Detection and Elimination

- Stormwater Infrastructure Inventory Map - **Attachment 4a**
- *E. coli* Concentrations Trend Map - **Attachment 4b**
- Monthly, Microbial Source Tracking (MST) Maps - **Attachments 4c and 4d**
 - SC Department of Health and Environmental Control (SCDHEC) collects MST samples for the Town concurrently with their routine shellfish harvesting water quality sampling at stations 19-19, 19-19A, 19-19B, 19-19C, and 19-24. SCDHEC conducted sampling 10/02/23. The human genetic marker was not detected in any of the samples collected.
- Illicit Discharge Investigations – **Attachment 4e**
 - Staff issued a citation to a business for improper disposal of fats, oils, and grease (FOGs).

7. MS4 MCM – #4 Construction Site Stormwater Runoff Control – Attachment 5

8. MS4 MCM – #5 Stormwater Plan Review and Related Activity – Attachment 6

9. MS4 MCM – #6 Good Housekeeping (Staff Training/Education)

- Staff conducted internal training on water quality sampling on 9/19/23.
- Staff attended the Southeast Stormwater Association (SESWA) Conference 10/4/23-10/6/23.
- Joe Sease completed a training course on the implementation and upkeep of rain gardens.
- Staff conducted facility inspections of the Public Services Yard, Wright Family Park, Dr. Mellichamp Drive, Veterans Memorial Park, and Buckwalter Place Park and discussed findings and next steps with Public Services.

10. MS4 MCM – #6 Good Housekeeping (Ditch, Drainage and Roadside Maintenance)

- Public Services performed weekly street sweeping on Calhoun Street, Highway 46, Bruin Road, May River Road, Pin Oak Street, and curbs and medians on Simmonsville and Buck Island Roads.

- Performed ditch inspections.
 - Arrow ditch (2,569 LF)
 - Red Cedar ditch (966 LF)
 - Buck Island roadside ditch (15,926 LF)
 - 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. Quarterly Update – May River Watershed Action Plan Implementation Summary*
3. MS4 Minimum Control Measures #1 and #2 – WAPAC Public 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 Master Project Schedules

* Attachment noted above includes the latest updates in green.

	19-19				19-19A				19-19B				19-19C				19-24				19-16			
	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
	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	17.0	79.0	33.0		22.0	49.0	49.0		17.0	4.5	17.0		4.5	17.0	49.0		4.0	6.8	6.8		11.0	7.8	13.0	
November	70.0	33.0	33.0		31.0	33.0	13.0		17.0	7.8	7.8		13.0	4.0	4.5		13.0	4.5	6.1		4.5	2.0	13.0	
October	49.0	49.0	23.0	33.0	79.0	26.0	46.0	23.0	31.0	13.0	13.0	17.0	21.0	23.0	23.0	33.0	33.0	23.0	11.0	2.0	79.0	17.0	14.0	6.8
September	110.0	33.0	540.0	23.0	49.0	11.0	350.0	13.0	49.0	17.0	350.0	13.0	33.0	13.0	170.0	7.8	33.0	2.0	79.0	17.0	33.0	11.0	33.0	13.0
August	49.0	49.0	23.0	23.0	49.0	49.0	23.0	49.0	23.0	23.0	11.0	6.8	23.0	49.0	13.0	13.0	17.0	14.0	17.0	23.0	22.0	14.0	11.0	2.0
July	33.0	350.0	920.0	350.0	13.0	64.0	49.0	920.0	23.0	79.0	95.0	70.0	7.8	33.0	130.0	49.0	7.8	33.0	23.0	33.0	17.0	13.0	46.0	17.0
June	NS	49.0	13.0	14.0	NS	79.0	4.5	7.8	NS	13.0	11.0	23.0	NS	17.0	2.0	13.0	NS	22.0	1.8	33.0	NS	2.0	9.3	13.0
May	70.0	2.0	4.5	23.0	49.0	49.0	4.5	33.0	23.0	23.0	4.0	17.0	22.0	23.0	1.8	13.0	6.8	23.0	1.8	33.0	4.5	7.8	2.0	21.0
April	33.0	33.0	4.5	170.0	33.0	23.0	4.5	130.0	13.0	22.0	1.8	110.0	6.8	17.0	2.0	70.0	13.0	7.8	1.8	NS	13.0	2.0	1.8	7.8
March	170.0	33.0	33.0	23.0	49.0	11.0	23.0	49.0	130.0	17.0	2.0	17.0	49.0	13.0	4.5	17.0	70.0	2.0	2.0	17.0	33.0	2.0	2.0	17.0
February	17.0	79.0	23.0	540.0	7.8	70.0	31.0	350.0	21.0	79.0	17.0	240.0	4.5	23.0	22.0	240.0	4.5	7.8	2.0	33.0	6.8	6.8	11.0	33.0
January	95.0	17.0	49.0	33.0	33.0	17.0	22.0	33.0	33.0	13.0	33.0	13.0	17.0	23.0	7.8	33.0	17.0	17.0	7.8	7.8	17.0	7.8	7.8	4.5
** Truncated GeoMetric Mean	34.0	36.0	40.0	40.0	21.0	26.0	28.0	33.0	16.0	18.0	18.0	18.0	12.0	15.0	14.0	17.0	10.0	10.0	9.0	10.0	9.0	8.0	9.0	8.0
** Truncated 90th Percentile	106.0	139.0	192.0	226.0	59.0	69.0	91.0	152.0	50.0	58.0	72.0	83.0	37.0	39.0	54.0	81.0	31.0	35.0	41.0	47.0	35.0	33.0	32.0	26.0

NS = No Sample

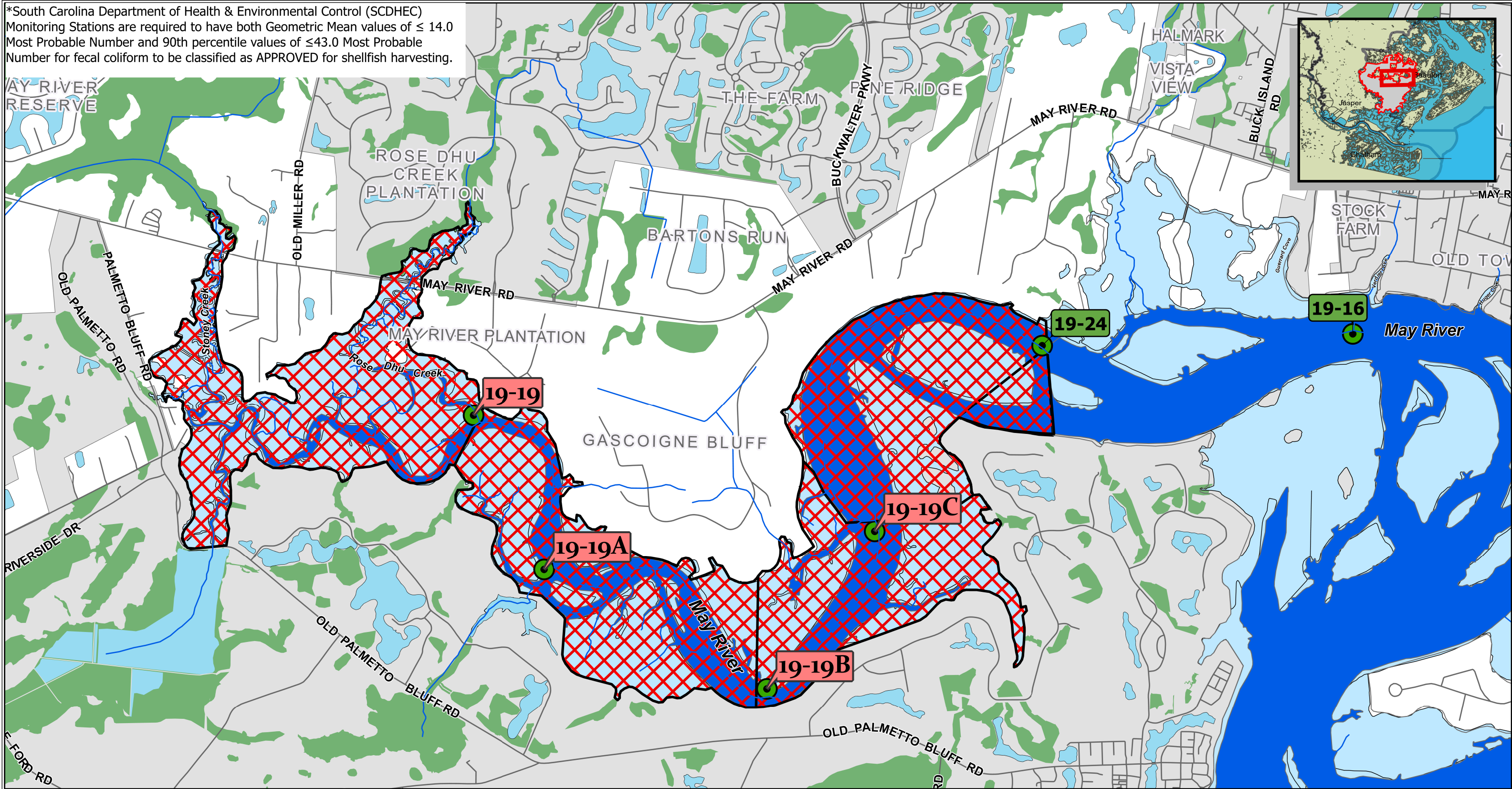
SCDHEC Regulatory Requirements:

Geometric Mean ≤ 14

90th Percentile ≤ 43

** Town staff calculations utilizing SCDHEC statistics

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



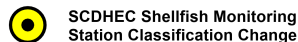
SCDHEC Shellfish Monitoring Stations









Restricted
2022/2023 Shellfish
Season



Open SCDHEC Shellfish
Monitoring Stations



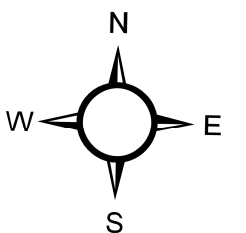
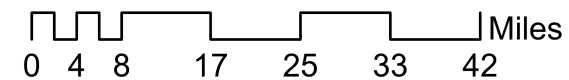
SCDHEC Shellfish Monitoring
Station Classification Change

-  Streets
-  Drainage
-  Town Jurisdiction
-  County Jurisdiction
-  Water
-  Wetlands

Town of Bluffton

Beaufort County, SC

SCDHEC SHELLFISH HARVESTING STATUS



Date: 10/18/2022

WAPAC Meeting Presentation
May River Watershed Action Plan Update & Modeling Report
Overview and Status
August 25, 2022

Updated July 27, 2023

Overview

- May River Watershed Action Plan Update & Modeling Report completed November 2020.
- Town Council Adoption of May River Watershed Action Plan Update as a Supporting Document to the Comprehensive Plan completed February 2021.
- May River Watershed Action Plan Update & Modeling Report Summary:
 - **Executive Summary** provides an overview of the project background, findings and interpretation, current state of knowledge concerning fecal coliform fate and transport, and an overview of proposed recommendations for the Town.
 - **1.0 Introduction** includes more detailed project background including the purpose of the document and the Project Team's tasks to 1) develop water quality models to compare current conditions (2018) to pre-shellfish impairment conditions (2002) to develop pollutant load reduction estimates, and 2) evaluate 2011 Action Plan BMPs for appropriateness under current conditions and provide up to eleven (11) alternative projects and preliminary cost estimates.
 - **2.0 Model Setup; 3.0 Model Calibration, and 4.0 Water Quality Model Results** details the methodology used by the Project Team to establish and calibrate the models and the model outputs. This highly technical information is necessary for future Water Quality (WQ) Model calibration and use for consistency.
 - **5.0 Recommendations** includes strategies to improve the Town's monitoring efforts to calibrate the WQ Model further (§5.1), strategies and BMPs for bacteria reduction (§5.2), an evaluation of 2011 Action Plan BMP projects (§5.3), and methodology used to develop 2020 Action Plan Update recommended projects (four septic to sewer conversion projects and eleven stormwater BMP retrofit projects) with cost-estimates and ranking/prioritization (§5.4).
 - **6.0 Conclusions** offers a summary of the WQ Model results in context of current state of knowledge.
 - **7.0 References** documents the prior research findings used to inform recommendations.
 - **Appendices** reference supporting materials:
 - Montie et al. (2019) "Technical Report: Historical Analysis of Water quality, Climate Change Endpoints, and Monitoring in Natural Resources in the May River,"
 - Technical Memo from Dr. Rachel Noble,
 - Watershed Treatment Model Spreadsheets, and
 - Detailed Project Cost Estimate Spreadsheets.

MRWAP 2020 Update Septic to Sewer Project Recommendations/Evaluations:

- Four (4) septic to sewer conversion projects were evaluated in the Rose Dhu Creek and Stoney Creek subwatersheds:
 - Cahill
 - Gascoigne
 - Stoney Creek
 - Pritchardville
 - These projects overlap with 42 subcatchments in the Stoney Creek watershed and 11 in Rose Dhu Creek. Based on WQ Model outputs, these projects alone may potentially reduce FC loading by 3.46×10^{13} FC per year.
- The estimated septic to sewer conversion costs of these projects also requires water capacity upgrades. Previous cost estimates are not accurate and will be updated by BJWSA as each project is considered.

Work Performed and Current Status as of August 25, 2022 Meeting

Discussions with the Town, Beaufort County and BJWSA have been held about future Septic to Sewer Program projects identified above. Stoney Creek Septic to Sewer Project has been identified as the next priority project to pursue under the Septic to Sewer Program.

- The Town and Beaufort County are finalizing Funding and Cost share elements relative to the project. The Stoney Creek sewer and water project cost estimate is nearly \$14 million which is offset by a \$5,925,000 grant.

Update for WAPAC July 27, 2023 Meeting:

Stoney Creek/Palmetto Bluff Sewer: Three-party agreement is being finalized by BJWSA legal team now. BJWSA's RFP for water and sewer design services was supposed to close 6/30/23. Due to RIA protocol, they must review and approve an RFP prior to posting, thus the RFP was canceled. BJWSA received RIA approval and reposted the RFP on 7/17/23 with a closing of 8/1/23.

MRWAP Update Eleven Impervious Restoration (stormwater retrofit) Project Recommendations/Evaluations:

- Eleven (11) project sites (incorporating various individual BMPs) were selected in consultation with the Town (prioritizing subcatchments with FC bacteria hotspot and/or large impervious areas). These sites were evaluated in terms of the potential benefits gained by retrofitting to meet the 95th percentile storm retention, to the maximum extent possible, under the proposed Impervious Area Restoration/Stormwater Retrofit Program.

Eleven (11) proposed project sites Rose Dhu Creek (6 projects) and Stoney Creek (5 projects):

- Bluffton Early Learning Center (BELC)
- Boys and Girls Club of Bluffton (BGC)
- Benton House (BH)
- Bluffton High School (BHS)
- Buckwalter Recreation Center (BRC)

- Lowcountry Community Church (LCC)
- McCracken Middle School/Bluffton Elementary School (MMSBES)
- May River High School
- One Hampton Lake Apartments (OHLA)
- Pritchardville Elementary School (PES)
- Palmetto Pointe Townes (PPT)
- Based on WQ Model outputs, these projects alone may potentially reduce FC loading by
 - 2.99×10^{14} FC reduction for the Full SWRv (entire sub-basin drainage area catchment).
 - 2.53×10^{14} FC reduction for the Reduced SWRv projects (impervious area drainage area of sub-basin catchment).
- The estimated of Full SWRv projects costs is \$32.7 million and the estimated cost of Reduced SWRv projects is \$22.6 million.
- Currently the Towns' Impervious Restoration Program is targeting Reduced SWRv for future projects.

Example of Impervious Restoration Project evaluation from May River Watershed Action Plan Update & Modeling Report:



Figure 52. McCracken Middle School/Bluffton Elementary School Proposed Stormwater BMP Retrofits

Work Performed and Current Status as of August 25, 2022 Meeting
Update for WAPAC July 27, 2023 Meeting:

Work performed for this project is being performed by MSA Consultant Engineering Firm:

- Drafted a detailed scope of work for Engineering Consultant Firm review and cost proposal (Expression of Interest) regarding performance of the work elements presented herein and related to MRWAP Update recommendations for implementation.
- The Expression of Interest was submitted to 3 consultant firms under existing Master Service Agreements with the Town for review and a request for response.
- All 3 Firms responded and their respective responses were evaluated, scored and discussed internally.
- A recommendation for Award was made to Goodwyn, Mills and Cawood selected.
 - Phase I of this work performed under existing FY 22 funding from Watershed Management Division.
 - Phase II of this work was approved for FY23 funding.

Task 1 : MRWAP Update 11 site locations

Update for WAPAC July 27, 2023

Meeting: Eleven (11) proposed project sites Rose Dhu Creek (6 projects) and Stoney Creek (5 projects): Yellow highlight indicates geotechnical evaluations complete.

1. **Bluffton Early Learning Center (BELC). Participating in preliminary design development phase.**
 2. Boys and Girls Club of Bluffton (BGC). **Participating in preliminary design development phase.**
 3. Benton House (BH). **Participating in preliminary design development phase.**
 4. **Bluffton High School (BHS). Participating in preliminary design development phase.**
 5. Buckwalter Recreation Center (BRC). **Participating in preliminary design development phase.**
 6. Lowcountry Community Church (LCC). **Declined to Participate.**
 7. **McCracken Middle School/Bluffton Elementary School (MMSBES). Participating in preliminary design development phase.**
 8. **May River High School. Participating in preliminary design development phase.**
 9. One Hampton Lake Apartments (OHLA). **Declined to Participate.**
 10. **Pritchardville Elementary School (PES). Participating in preliminary design development phase.**
 11. Palmetto Pointe Townes (PPT). **Declined to Participate.**
- Evaluate 11 sites and proposed BMPs. **Complete.**
 - Update concept plans for 11 sites based on site evaluations, recommendations and discussions. **Complete.**
 - Perform geotechnical evaluations at each site at locations related to BMP locations of updated concept plans. **Completed for the 5 school sites.** Geotechnical evaluations for the remaining 3 participating partner sites are being schedule based on recent property owner participation status being known/confirmed.

Coordinating geotechnical work approval with property owners and schedule for Benton House (BH), Buckwalter Recreation Center (BRC) and Boys and Girls Club of Bluffton

- ~~(BGC)~~ updated concepts and use for presentations to Property Owner to discuss Impervious Restoration Program goals, objectives and gain support for Program and their participation. **Based on geotechnical investigation results, updated Concept plans for the 5 school sites have been refined. A meeting will be scheduled with School District to discuss the updated concept plans to get their feedback prior to beginning Preliminary Design task.**
 - Develop list of “incentives” to secure Property Owner participation (see Policy Document Formulation below).
- Based on geotechnical information and Property Owner feedback further refine concept plans to Preliminary Design :
 - Determine BMP types and location to maximize SWRv/WQ treatment in cost effective approach. **Estimated impervious area treated and SWrv capture based on refined Concept plans developed for the 5 school sites.**
 - Determine estimated pollutant load reductions.
 - Develop site specific BMP details.
 - Develop preliminary BMP maintenance schedule and cost for each site.
- Preliminary Design development plans will be presented to the Property Owner for review and discussion. Other Restoration Program details (maintenance responsibilities, easements, incentives, etc.) developed as part of the Program (see Policy Document Formulation below) will also be discussed in hopes of establishing a commitment from the Property Owner to participate in the Program. Once a “commitment” is secured from the Property Owner, the project site will be moved to Final design, permitting, and ultimately construction.

Task 2 : Identify 15 new project sites for Town of Bluffton Impervious Restoration/BMP Retrofit Projects.

- The Town wishes to identify an additional 15 project sites located within the municipal limits of Bluffton for the Impervious Restoration/BMP Retrofit Program. However, the criteria for site selection will be considered to be more “low hanging fruit” based on the following:
 - Within Town of Bluffton Municipal limits.
 - Soils – sandy soils with high infiltration rates offer the biggest bang for the buck for water quality treatment/improvement. Utilizing soil survey and other information target sites where infiltration can be maximized on-site.
 - Public or governmental agency land/property owner (not SCDOT RoW).

Update for WAPAC July 27, 2023 Meeting:

Finalized the list of 15 additional sites (and 5 alternates) to be considered/ evaluated within the municipal limits of Bluffton for Impervious Restoration feasibility and concept plan development. Site evaluations will be performed as property owner approvals for access to property to perform site assessment is obtained.

Town of Bluffton Impervious Restoration/BMP Retrofit Policy Documents.

Task 3 : Section 5.4.4. Stormwater BMP Retrofit Projects of the May River Watershed Action Plan Update and Model Report identifies potential Impervious Restoration/BMP Retrofit projects located on Public and Private Land. As mentioned earlier, one of the primary site selection criteria, at time of report development, was to identify sites with large impervious areas so that pollutant load reductions could be estimated and the benefits of such projects on stormwater quality quantified/estimated, if implemented into construction. Generally, Public Funds are not expended to improve private property nor is Town of Bluffton funding generally expended on Public Land owned by another government entity. In order for such projects identified in Section 5.4.4. to move forward in the interest of improved water quality and for the overall benefit and welfare of the constituents of the Town of Bluffton, Policy Documents need to be formulated that establishes the parameters of such a Program to be initiated and implemented.

Policy Document Formulation has been initiated and includes research of similar programs nationwide.

Update for WAPAC July 27, 2023 Meeting:

- **Updated Draft Policy Document was completed and submitted in June for staff review and comments are being finalized.**
- **Upon Policy Document Final Draft development, the Policy Document will be presented to WAPAC with a request for recommendation to Town Council for adoption.**

Other, Related MRWAP Update Recommendations

- Adopt proposed regional Southern Lowcountry Post Construction Stormwater Ordinance and Design Manual - **complete** September 2021.
- The Town should incorporate volume reduction BMPs (those that encourage infiltration) within existing and future CIP projects to the maximum extent practical, especially for project locations with well-drained soils (HSG A or B) – **in progress**, see below.

Work Performed and Current Status as of August 25, 2022 Meeting

- Bridge Street Streetscape Project
 - Project design/permitting is complete, and Construction Contract has been awarded.
 - Incorporated Infiltration BMPs within the project to capture and treat 1.95” of rainfall over impervious surfaces within the project area, prior to discharge into the May River.
 - Received Section 319 Grant from DHEC to cost-share cost of construction of proposed BMPs.
 - Construction was initiated by JS Construction in early December 2022. Construction considered 65% complete.

Update for WAPAC July 27, 2023 Meeting:

- **Project work is Substantially Complete.**
- **Partial reimbursement from DHEC for construction cost supported by 319 Grant requested and received.**
- Pritchard Street Drainage Improvement Project

- Project in Design Phase and considered 30% complete.
- Incorporated Infiltration BMPs within the project to capture and treat 1.95" of rainfall over impervious surfaces within the project area, prior to discharge into Heyward Cove.
- 70% design plan submitted, reviewed and comments presented to consultant.
- 319 Grant was awarded by DHEC to the Town.
- **Update for WAPAC July 27, 2023 Meeting:**
 - **Project Scope of Work and budget increase approved for FY24 to include streetscape elements of lighting, sidewalk, traffic calming and ADA compliance.**
 - **Updated survey received.**
 - **Updated 70% design drawings received in July and under review.**
- In-House Microbial Source Tracking – **in progress**, see below
 - The Town entered a Memorandum of Understanding (MOU) with the University of South Carolina Beaufort (USCB) in July 2021 to establish and fund a regional Microbial Source Tracking (MST) laboratory capable of accepting environmental water quality samples.
 - Analytical services are provided by the USCB-MST laboratory for all environmental samples collected by the Town.
 - Staff has collected additional fecal samples needed for dog, bird, and deer. The USCB-MST Laboratory is conducting the assessment on additional fecal samples and Dr. Pettay will provide a final report to the Town once all fecal markers in regional watersheds have been analyzed.
 - **Update for WAPAC July 27, 2023 Meeting: Additional genetic fecal markers continue to be analyzed by Dr. Pettay and the MST Laboratory.**
- Future (new) Bacteria Monitoring Locations - **in progress**, see below
 - Staff increased sampling frequency and implemented additional monitoring sites and parameters in the May River headwaters based upon recommendations in the 2020 May River Watershed Action Plan Update and Model Report.
 - Staff is collecting intermittent flow data at SonTek IQ sites in conjunction with grab FIB samples.
 - **Update for WAPAC July 27, 2023 Meeting** Staff is working with the consultant to identify recommended strategies for intermittent flow data collection and a review of the Town's FIB grab sample schedule.
- Future (new) Water Flow Monitoring Locations.
 - **Work Performed and Current Status as of August 25, 2022 Meeting**
 - The MRWAP Update included recommendations for the Town to perform certain rainfall and flow data measurements in May River Headwater Watersheds in order to "calibrate" and make more accurate Model predictions. These recommendations were evaluated and a game plan to address recommendations to calibrate model developed.

- Utilizing existing flow and rainfall data collected over past years with rain gauges, IQ Plus and Sontek measuring instruments in Stoney Creek, Rose Dhu Creek, Palmetto Bluff, Duck Pond and Heyward Cove, the Town hired a consultant to review the data and determine:
 - Useful data obtained to gain the required information to calibrate model.
 - The data obtained from Stoney Creek and Heyward Cove was deemed sufficient for Model calibration and Final report for this work is in process.
 - Duck Pond was deemed inconsequential, not needed due to drainage area size and proximity/outfall to tidal waters.
 - Consultant Final Report delivered, and Model Calibration Data for Stoney Creek and Heyward Cove identified.
 - If data review resulted in insufficient data, develop a monitoring program that would produce the data needed.
 - Rose Dhu Creek and Palmetto Bluff flow data review resulted in data that was insufficient to calibrate Model.
 - Potential purchase of telemetry stations to equip continuous flow monitoring stations with real-time data access.
 - Final Report delivered. Based on recommendations of data and process needed, staff has procured needed telemetry station equipment and has hired a consultant to assist in getting the intermittent and continuous flow data and producing a Final Report. The field work installation of equipment is being scheduled. Once installed and operational, data collection will last 6 months.

Update for WAPAC July 27, 2023 Meeting

- **The Town of Bluffton procured and installed two (2) SonTek Turnkey Systems that enable real-time continuous flow data review to a cloud-based service. These systems are deployed in the Rose Dhu Creek and Palmetto Bluff subwatersheds.**
- **A SonTek IQ remains deployed in the Stoney Creek subwatershed. The consultant's first data review determined there was sufficient flow data for model calibration in the Stoney Creek subwatershed. However, staff determined it would continue to collect continuous flow data at this location so that continuous flow, intermittent flow, bacteria samples, and rainfall data were**

collected for three (3) of the four (4)
Modeling Report subwatersheds

- ~~Consultation~~ Simultaneous reviewing data and identifying power, beam, or possible maintenance issues weekly.
- Intermittent flow measurements, utilizing the FlowTracker2, will be conducted at the time of grab sampling at the three (3) SonTek IQ flow stations beginning 7/31/23.



PUBLIC NOTICE

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

Thursday, October 26, 2023

has been

CANCELLED

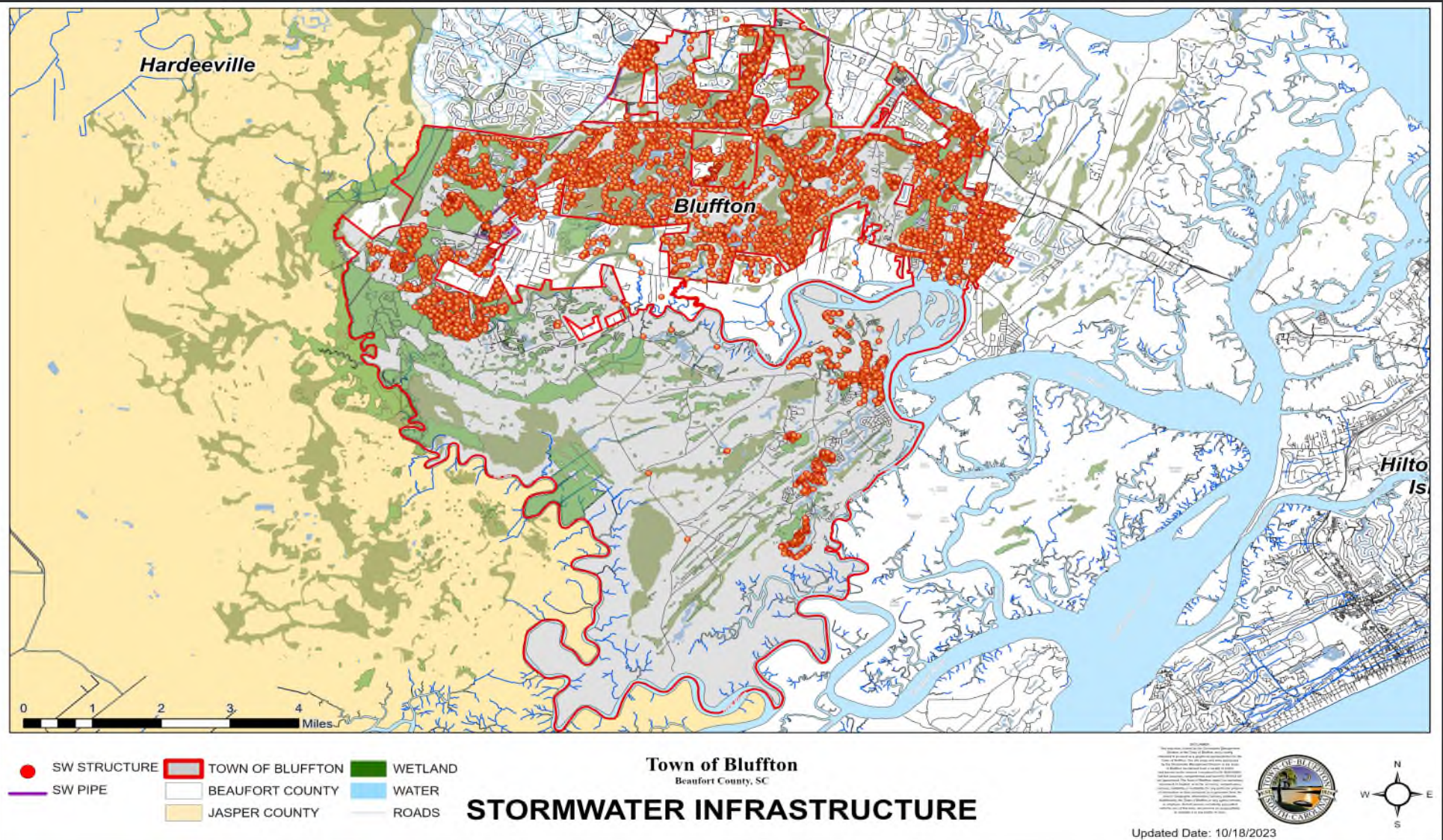
due to lack of quorum.

The next meeting is scheduled for

Thursday, November 30, 2023

If you have questions, please contact
the Watershed Management Division
at: 843-706-4559

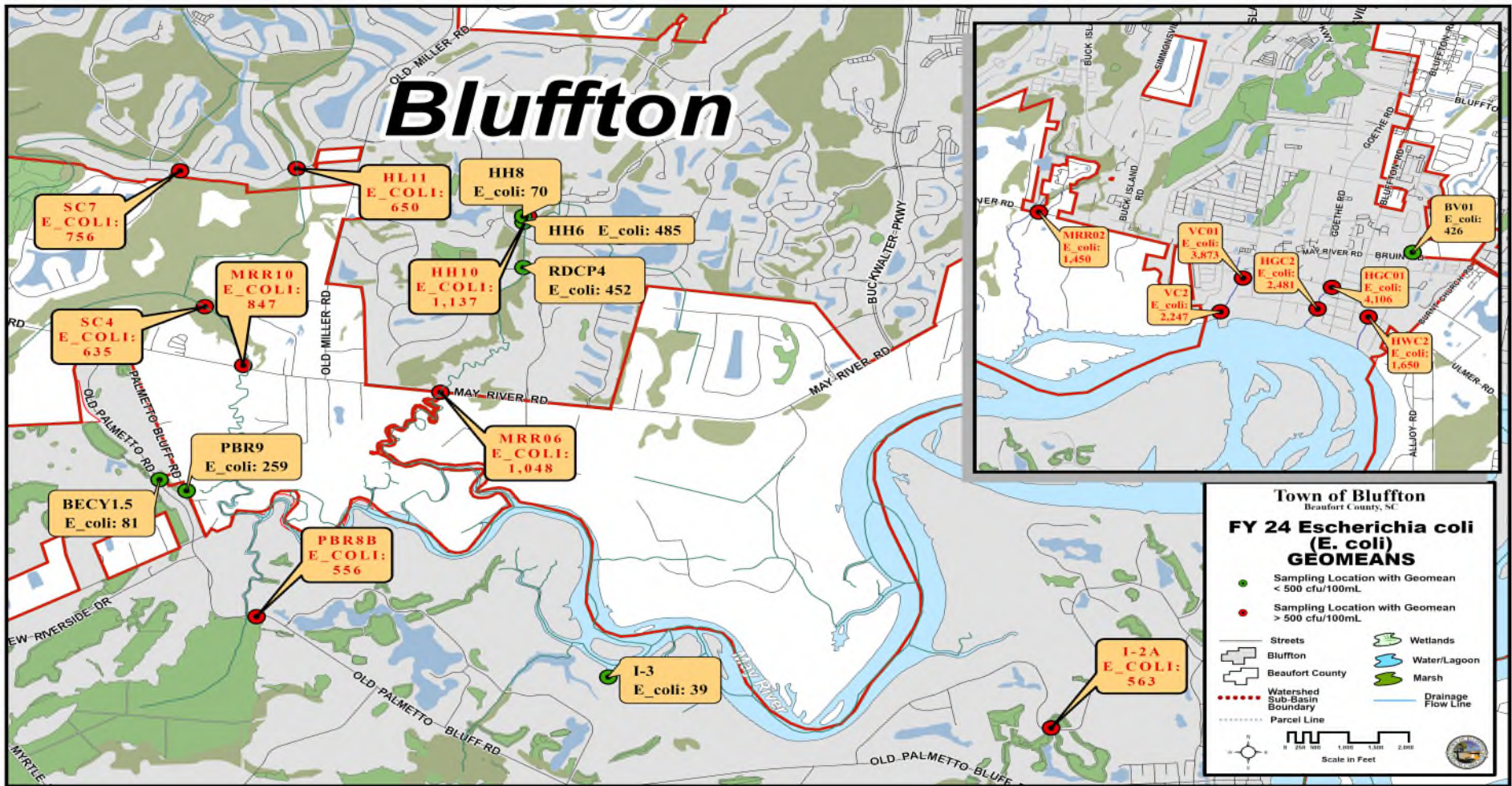
MS4 Minimum Control Measure #3 – IDDE (Illicit Discharge Detection & Elimination): Stormwater Infrastructure Inventory



Stormwater Infrastructure Inventory Collection Status

Collection Totals	16,676
FY 2024 YTD	19

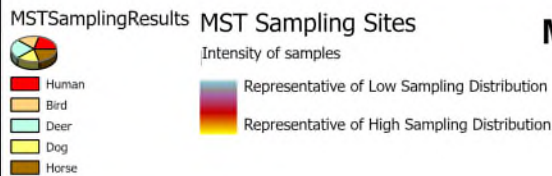
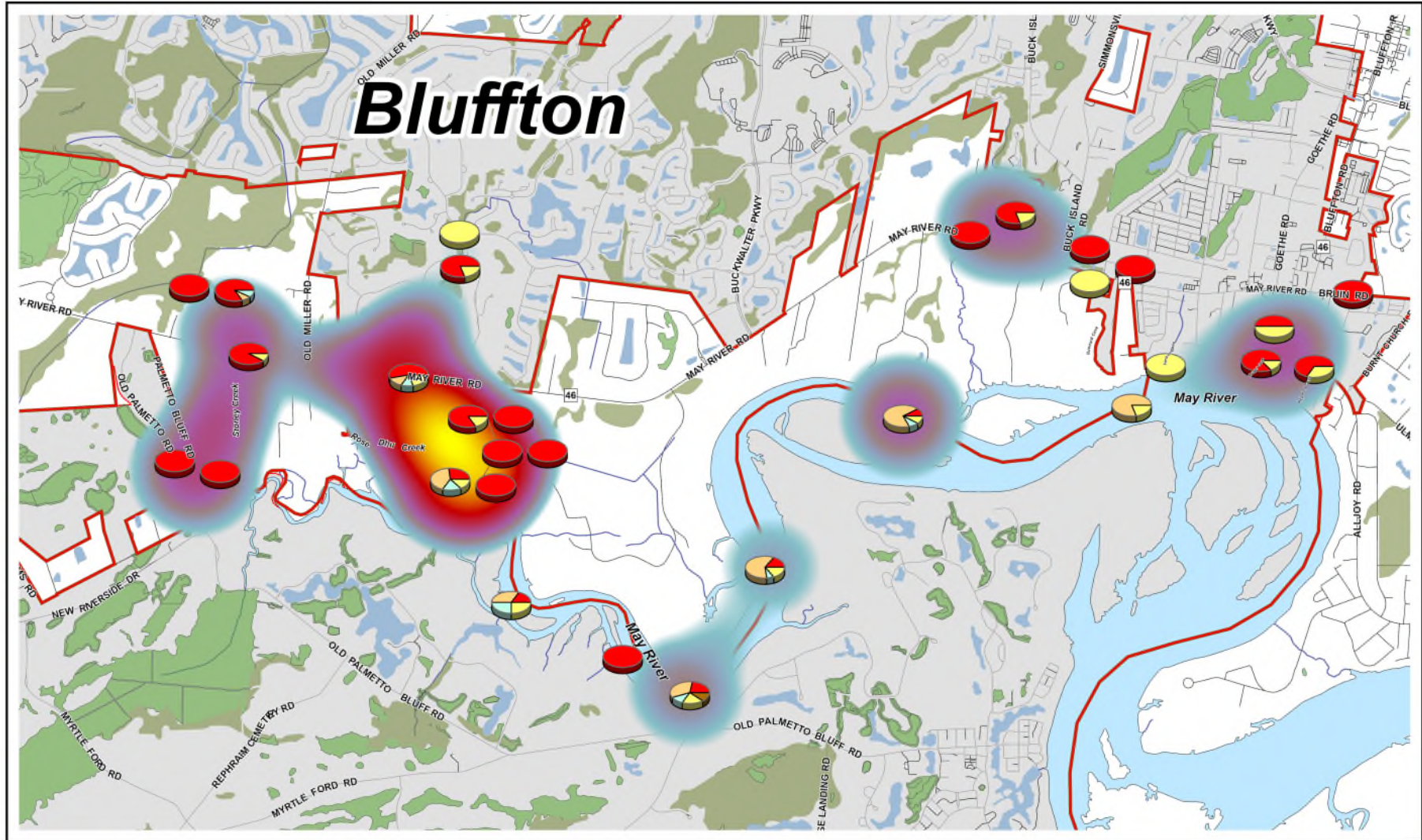
MS4 Minimum Control Measure #3 – IDDE: *E. coli* Concentrations Trend Map



	USCB Water Quality Samples	Microbial Source Tracking Samples	MS4 Quarterly Samples Collected
FY 2024 YTD Totals	169	14	81
FY 2023 Totals	584	108	108
FY 2022 Totals	447	78	119

Totals include only samples submitted for laboratory analysis, and not *in situ* parameters.

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



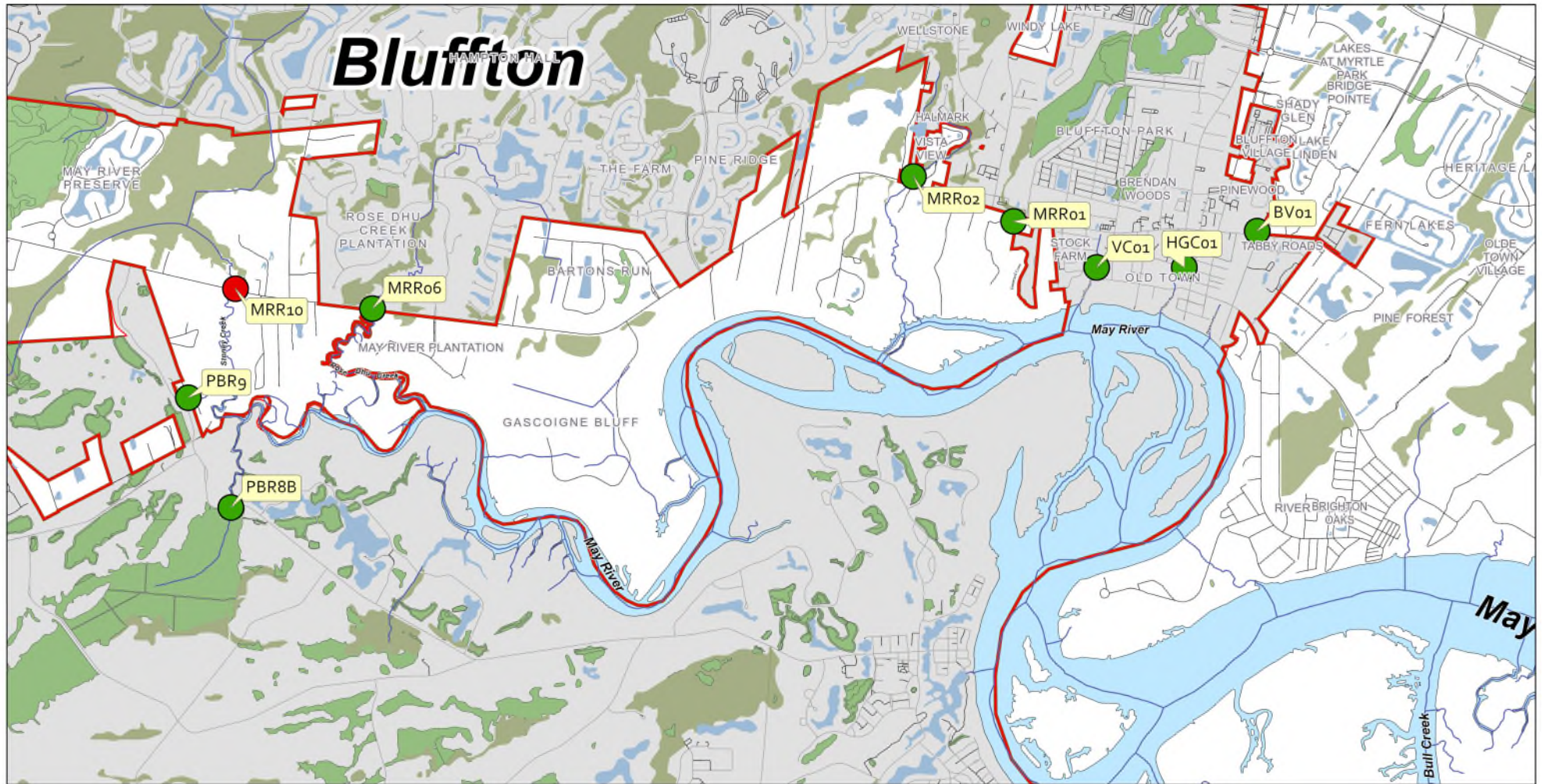
MICROBIAL SOURCE TRACKING (MST) LOCATIONS

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

Town of Bluffton
Beaufort County, SC



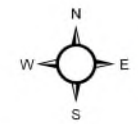
MS4 Minimum Control Measure #3 – IDDE: Microbial Source Tracking (MST) Map – Human Sources



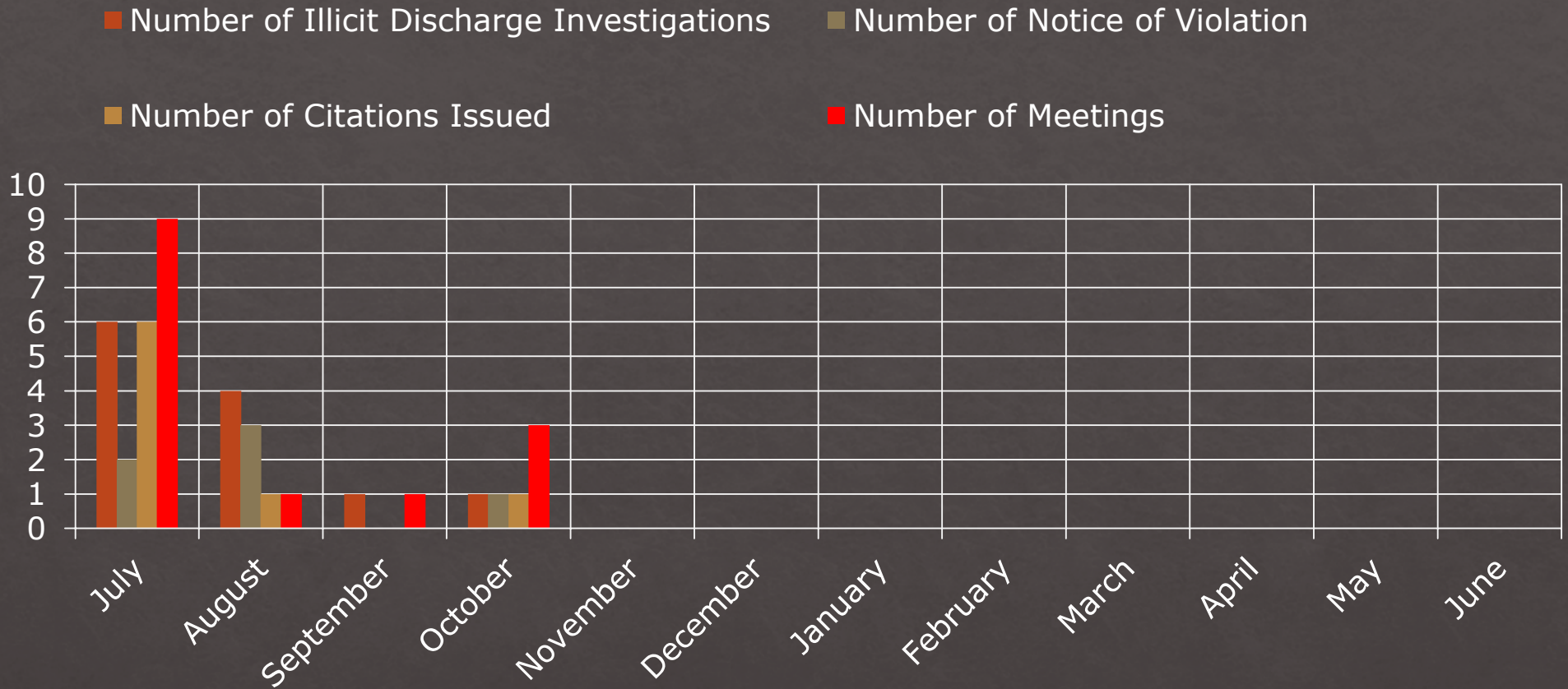
- MST Sampling Location Without Human Genetic Marker Detection
- MST Sampling Location With Human Genetic Marker Detection
- Flowline
- Street
- ☐ Town Jurisdiction
- ☐ County Jurisdiction

MICROBIAL SOURCE TRACKING LOCATIONS Sampling Results October 2023 SCDHEC Sampling

Town of Bluffton
Beaufort County, SC

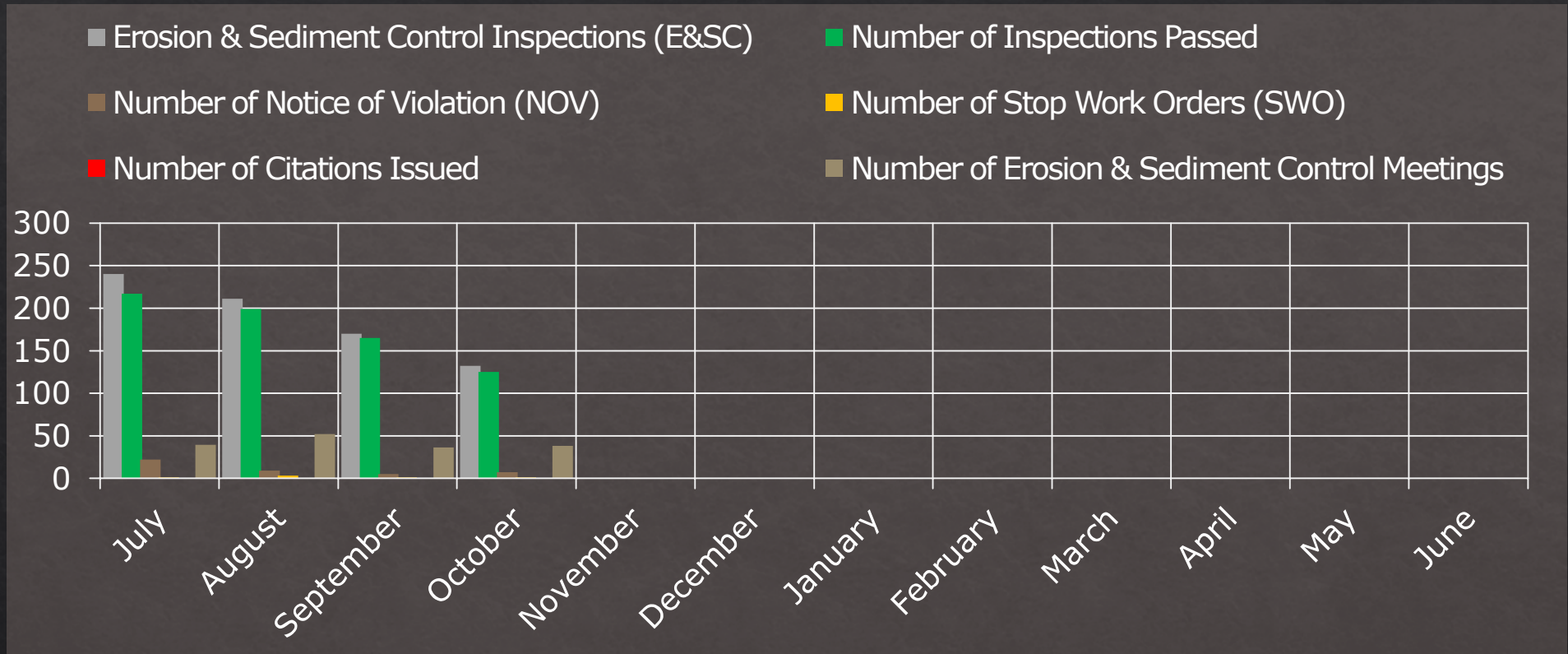


MS4 Minimum Control Measure #3 – IDDE: Illicit Discharge Investigations



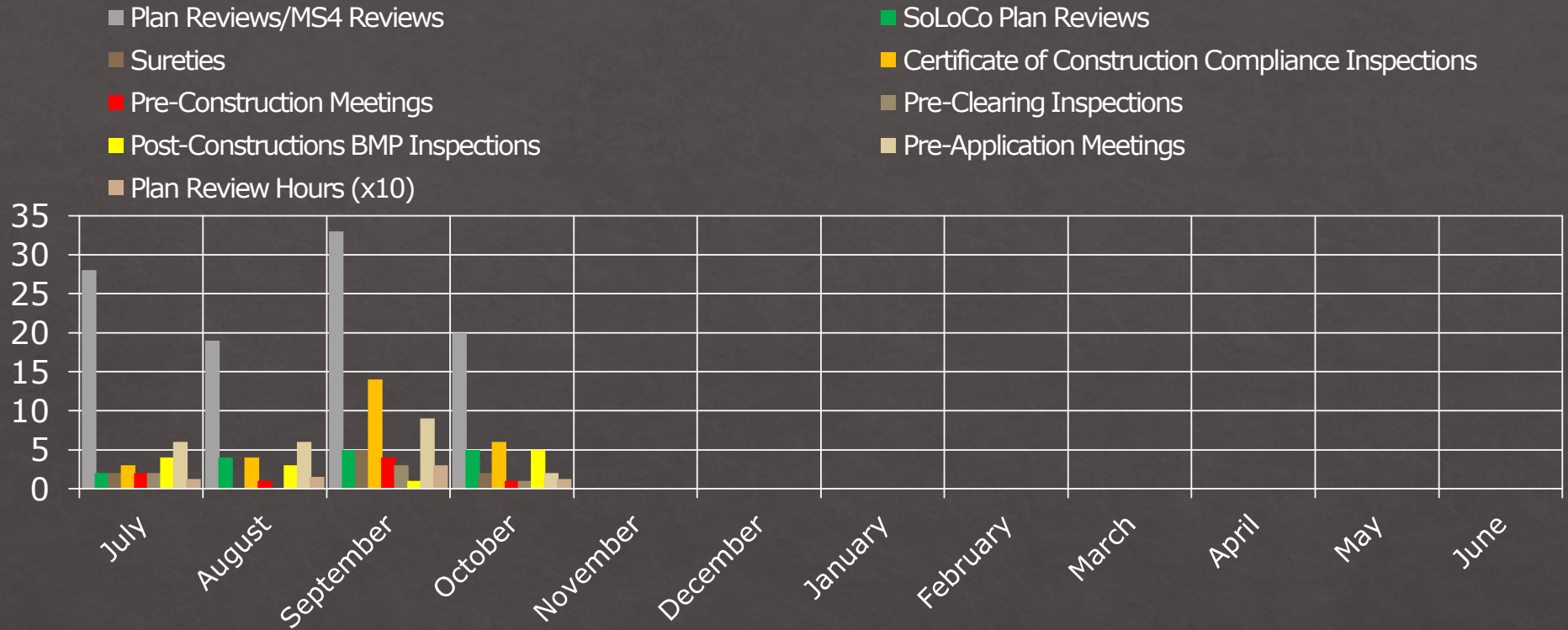
	Number of Illicit Discharge Investigations	Number of Notices of Violation Issued	Number of Citations Issued	Number of Meetings
FY 2024 YTD Totals	12	6	8	14
FY 2023 Totals	27	89	1	20
FY 2022 Totals	30	5	3	17

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



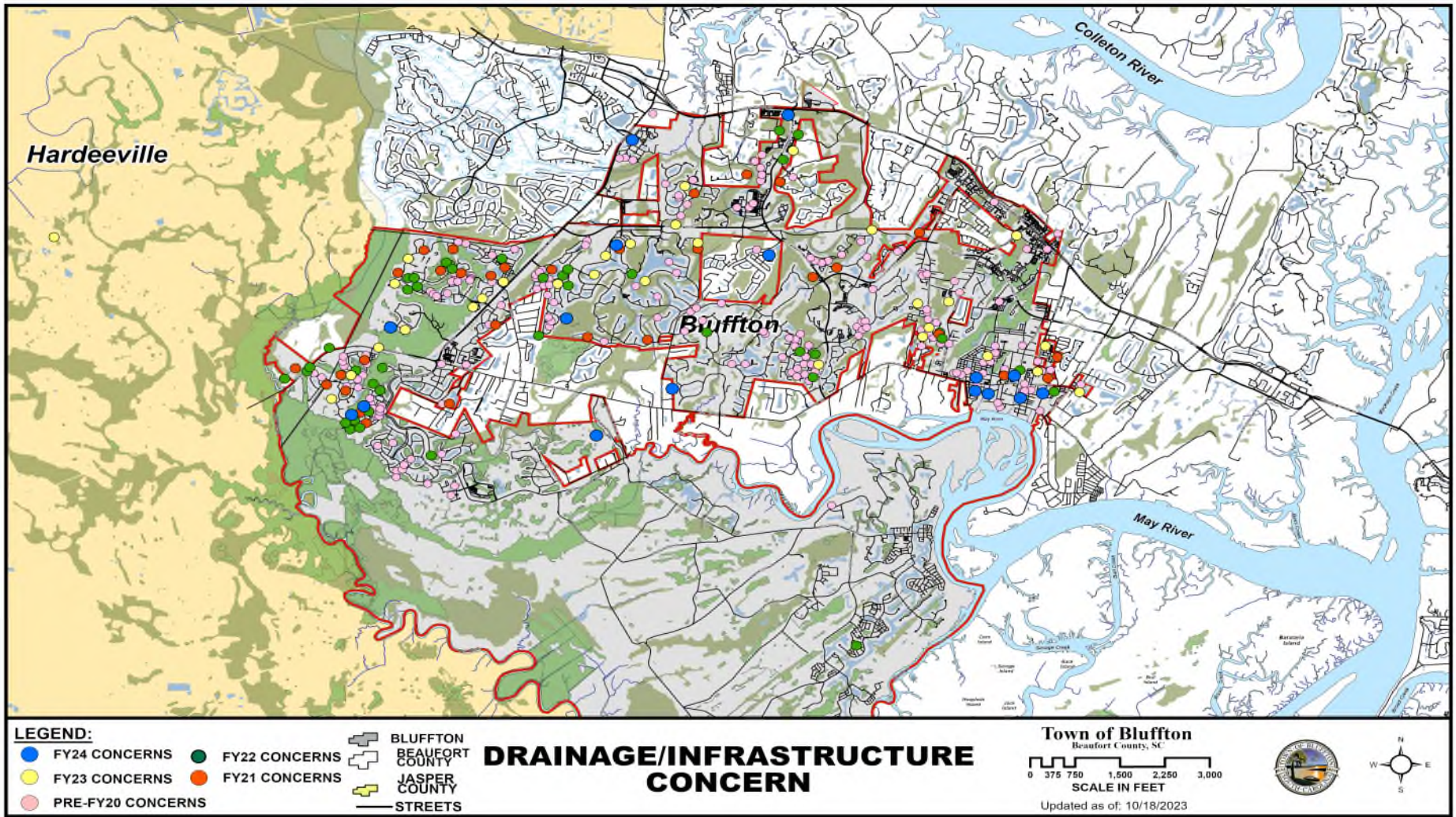
	Number of Sediment & Erosion Control Inspections	Number of Inspections Passed	Number of NOVs Issued	Number of SWO Issued	Number of Citations Issued	Number of E&SC Meetings
FY 2024 YTD Totals	753	706	43	6	0	165
FY 2023 Totals	2,321	2,030	266	26	0	577
FY 2022 Totals	3,127	2,701	392	49	0	673

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



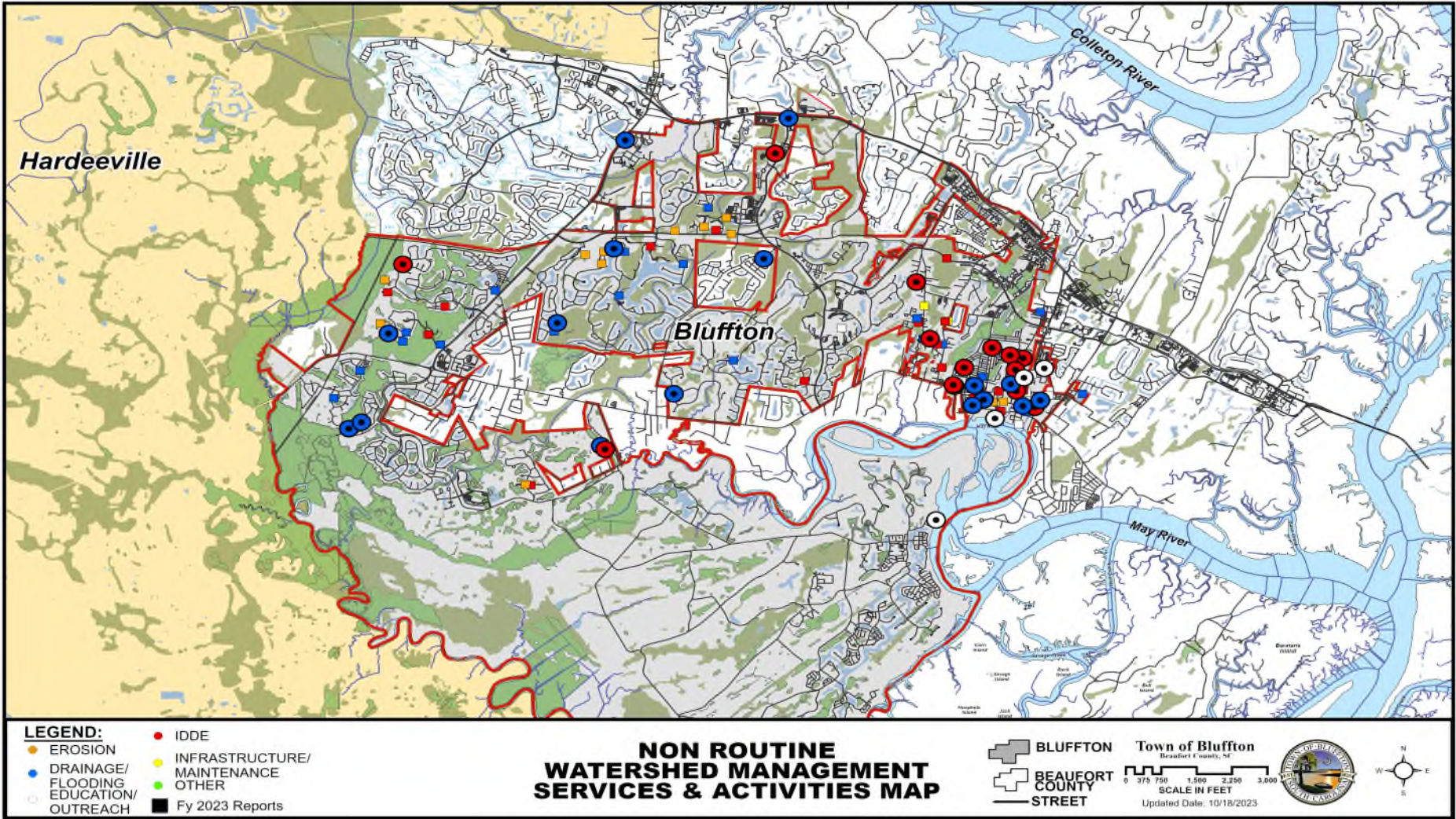
	Plan Reviews MS4 Reviews	SoLoCo Plan Reviews	Sureties	CCC Inspections	Pre-Construction Meetings	Pre-Clearing Inspections	Post Construction BMP Inspections	Pre-Application Meetings	Total Plan Review Hours
FY 2024 YTD	100	16	9	27	8	6	13	23	70 Hrs.
FY 2023 Totals	297	67	42	40	15	13	45	50	386 Hrs.
FY 2022 Totals	231	13	42	26	30	23	44	26	454 Hrs.

Citizen Drainage, Maintenance and Inspections Concerns Map



	Number of Drainage Concerns Investigated	Number of Meetings
FY 2024 YTD Totals	17	2
FY 2023 Totals	61	52
FY 2022 Totals	38	34

Citizen Request for Watershed Mngt. Services & Activities Map



	Number of Citizen Requests Investigated	Number of Meetings
FY 2024 YTD Totals	36	17
FY 2023 Totals	46	23
FY 2022 Totals	33	21

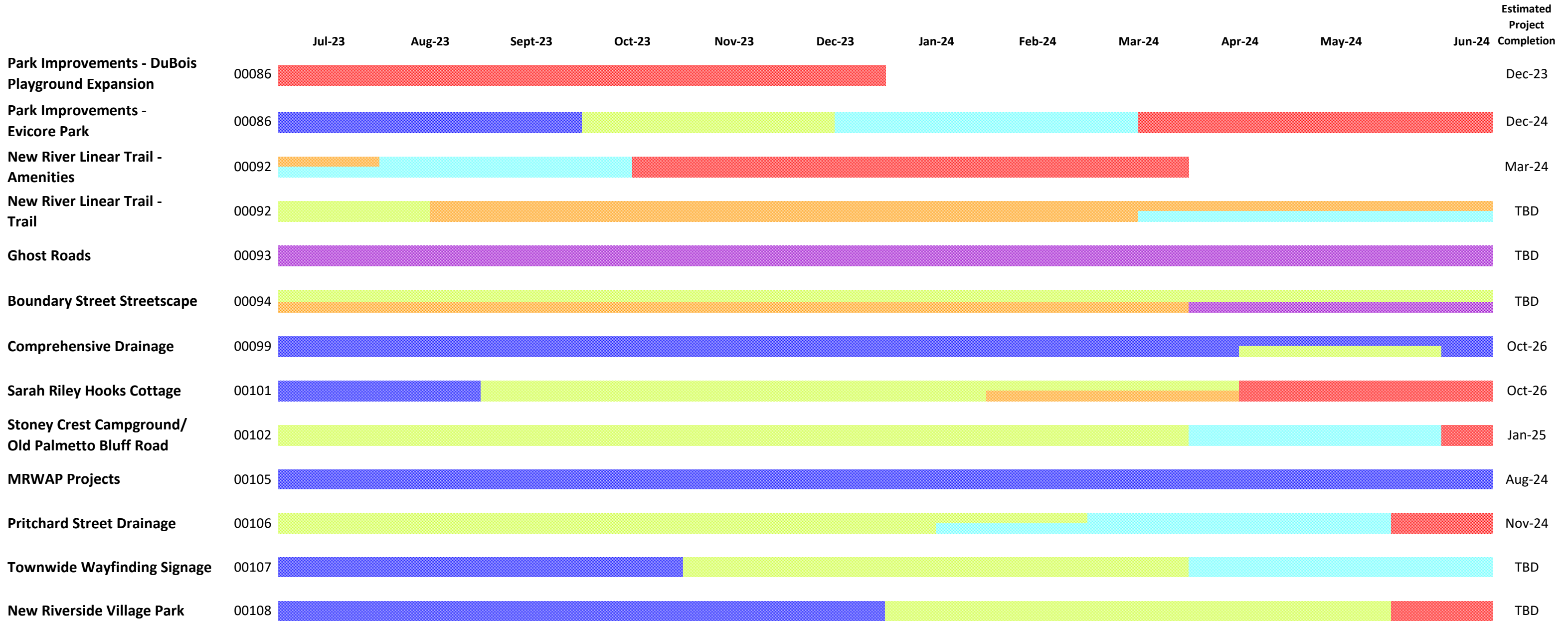
FY24 CIP Master Project Schedule



■ Planning & Conceptual Design
 ■ Final Design & Construction Documents
 ■ Permitting
 ■ Easement & Land Acquisition
 ■ Bidding & Contracts
 ■ Construction

SUBJECT TO CHANGE

FY24 CIP Master Project Schedule



■ Planning & Conceptual Design
 ■ Final Design & Construction Documents
 ■ Permitting
 ■ Easement & Land Acquisition
 ■ Bidding & Contracts
 ■ Construction

SUBJECT TO CHANGE



MEMORANDUM

Date: November 1, 2023

To: Stormwater Management Utility Board

From: Stephen Carter, Stormwater Infrastructure Superintendent

Re: **Maintenance Project Report**

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

Major Projects:

- **Beaufort Church of God – Port Royal Island (6):** This project improved 536 linear feet of drainage system. The scope of work included replacing 536 linear feet of channel pipe and hydroseeding for erosion control. The total cost was **\$303,508.12**.
- **McTeer Drive and Sea Pines Drive – St. Helena Island (8):** This project improved 686 linear feet of drainage system. The scope of work included grubbing and clearing 185 linear feet of workshelf and 262 linear feet of roadside ditch, constructing 185 linear feet of channel and 262 linear feet of roadside ditch and installing 54 linear feet of channel pipe, (1) access pipe and (2) access gates. Installed rip rap basins and hydroseeded for erosion control. The total cost was **\$101,231.92**.
- **Swan Lake Drive – Bluffton (4):** This project improved 551 linear feet of drainage system. The scope of work included cleaning out 292 linear feet of roadside ditch and 259 linear feet of channel, removing trees from flowline and workshelf, leveling workshelf, installing straw mat and hydroseeding for erosion control. The total cost was **\$74,624.29**.
- **Pritchard Farms Court – Bluffton (4):** This project improved 1,987 linear feet of drainage system. The scope of work included cleaning out 1,987 linear feet of roadside ditch and jetting (1) driveway pipe. The total cost was **\$23,023.28**.

Minor or Routine Projects:

- **St. Helena Island Tree Removal – St. Helena Island (8):** The scope of work included removing a fallen tree from the channel. The total cost was **\$951.71**.
- **Jefferson Drive and Grant Street – Port Royal Island (6,9):** This project improved 90 linear feet of drainage system. The scope of work included cleaning out 90 linear feet of roadside ditch and jetting (3) driveway pipes and (1) access pipe. The total cost was **\$2,427.95**.
- **ToHHI Namon Road – Hilton Head Island (3):** This project improved 107 linear feet of drainage system. The scope of work included jetting (3) crossline pipes and 107 linear feet of roadside pipe. The total cost was **\$2,217.79**.

- **ToHHI New Orleans Road – Hilton Head Island (3):** This project improved 228 linear feet of drainage system. The scope of work included cleaning out (3) catch basins, jetting 228 linear feet of roadside pipe and repairing (1) sinkhole. The total cost was **\$8,028.09.**
- **Lady’s Island Tree Removal – Lady’s Island (7):** The scope of work included removing fallen trees from the roadside and channel. The total cost was **\$3,587.82.**
- **Bluffton Washout/Sinkhole Repair – Bluffton (4):** The scope of work included repairing sinkholes and a washout. The total cost was **\$15,123.99.**
- **Pond Maintenance – Port Royal Island (6) and Lady’s Island (7):** The scope of work included dewatering a pond and removing debris from pond and trash rack. The total cost was **\$4,159.03.**
- **Keans Neck Road Channel – Sheldon (5):** This project improved 500 linear feet of drainage system. The scope of work included cleaning out 500 linear feet of channel. The total cost was **\$1,516.28.**
- **St. Helena Island Washout Repair – St. Helena Island (8):** The scope of work included repairing a washout. The total cost was **\$895.93.**
- **Port Royal Island Washout/Sinkhole Repair – Port Royal Island (6,9):** The scope of work included repairing sinkholes and washouts. The total cost was **\$11,804.72.**
- **Lady’s Island Valley Drain – Lady’s Island (7):** This project improved 18,289 linear feet of drainage system. The scope of work included cleaning out 18,289 linear feet of valley drains. The total cost was **\$12,336.27.**
- **Sheldon Tree Removal – Sheldon (5):** The scope of work included removing trees from a roadside and channel. The total cost was **\$2,825.50.**



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Beaufort Church of God

Activity: Routine/Preventive Maintenance

Duration: 05/09/2023 - 09/07/2023

Narrative Description of Project:

Project improved 536 L.F. of drainage system. Replaced 536 L.F. of channel pipe an hydroseeded for erosion control.

2023-598 / Beaufort Church of God	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Cost	Total Cost
AUDIT / Audit Project	7.00	0.00	\$0.00	\$0.00	\$0.00	\$145.74	\$437.08
CLJS / Cleaned up jobsite	48.00	0.00	\$201.73	\$138.02	\$0.00	\$1,027.52	\$3,031.85
CPRP / Channel Pipe - Replaced	0.00	0.00	\$0.00	\$0.00	\$81,864.25	\$0.00	\$81,864.25
DEBREM / Debris Removal - Jobsite	16.00	0.00	\$67.24	\$31.03	\$0.00	\$347.60	\$1,008.98
HAUL / Hauling	144.00	0.00	\$6,078.32	\$1,054.56	\$0.00	\$2,911.60	\$14,761.54
HYDR / Hydroseeding	42.00	0.00	\$657.49	\$1,604.46	\$0.00	\$720.45	\$4,396.57
NONPRO / Non-Professional Services	0.00	0.00	\$0.00	\$0.00	\$190,605.55	\$0.00	\$190,605.55

Continued on the next page

2023-598 / Beaufort Church of God cont'd

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
ONJV / Onsite Job Visit	64.00	0.00	\$456.00	\$36.14	\$0.00	\$1,987.20	\$5,698.56
PP / Project Preparation	24.00	0.00	\$34.80	\$148.62	\$0.00	\$384.48	\$1,190.76
SG / Shoot Grade	8.00	0.00	\$17.40	\$13.90	\$0.00	\$173.80	\$486.66
UTLOC / Utility locates	0.50	0.00	\$0.00	\$0.00	\$0.00	\$10.05	\$26.32
Grand Total	353.50	0.00	\$7,512.98	\$3,026.73	\$272,469.80	\$7,708.44	\$303,508.12

Before



During



After



Project: Beaufort Church Of God

Activity: Routine/
Preventive
Maintenance

Project #:
2023-598

Township/SW Dist:
Port Royal Island/6














Completed:
September 2023



Replaced 536 L.F. of channel pipe. Hydroseeded for erosion control.

Legend

Drainage Type

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

0 50 100 200 300 400
Feet

1 inch = 250 feet

Prepared By: BC Stormwater Management Utility

Date Print: 10/10/23

File: C:\project summaries map\Beaufort Church Of God_2023-598



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: McTeer/Sea Pines Drive

Activity: Routine/Preventive Maintenance

Duration: 11/30/2022 - 09/08/2023

Narrative Description of Project:

Project improved 686 L.F. of drainage system. Grubbed and cleared 185 L.F. of workshelf and 262 L.F. of roadside ditch. Constructed 185 L.F. of channel and 262 L.F. of roadside ditch. Installed 54 L.F. of channel pipe, (1) access pipe and (2) access gates. Installed rip rap basins and hydroseeded for erosion control.

2023-543 / Mcteer/Sea Pines Drive

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Cost	Total Cost
ADS / Administrative Support	2.50	\$134.90	\$10.88	\$0.00	\$0.00	\$83.28	\$229.05
AGI / Access Gate - Installed	32.00	\$1,053.23	\$1,225.82	\$674.37	\$0.00	\$650.12	\$3,603.54
APINS / Access pipe - installed	16.00	\$563.11	\$799.22	\$399.39	\$0.00	\$347.60	\$2,109.32
AUDIT / Audit Project	10.00	\$416.20	\$0.00	\$0.00	\$0.00	\$208.20	\$624.40
BKFILL / Back Fill	32.00	\$1,126.22	\$457.20	\$0.00	\$0.00	\$695.20	\$2,278.62
CCON / Channel - constructed	16.00	\$563.11	\$1,299.02	\$0.00	\$0.00	\$347.60	\$2,209.73
CGRB / Channel - grubbed	40.00	\$978.51	\$34.80	\$26.30	\$0.00	\$540.72	\$1,580.33
CPI / Channel Pipe - Installation	32.00	\$1,007.03	\$924.76	\$364.67	\$0.00	\$621.60	\$2,918.06
EQRENT / Equipment Rental	0.00	\$0.00	\$0.00	\$0.00	\$407.02	\$0.00	\$407.02
GACA / Grubbed and Cleared	80.00	\$2,753.97	\$952.01	\$219.72	\$0.00	\$1,699.96	\$5,625.66
GDT / Grind and dispose of trees	24.00	\$771.67	\$533.94	\$0.00	\$0.00	\$476.32	\$1,781.93
HAUL / Hauling	304.00	\$10,227.17	\$14,631.03	\$9,658.53	\$0.00	\$6,317.29	\$40,834.02
HYDR / Hydroseeding	12.00	\$385.84	\$173.41	\$792.77	\$0.00	\$238.16	\$1,590.18
LM / Loading Materials	112.00	\$3,641.28	\$1,271.34	\$288.32	\$0.00	\$2,247.64	\$7,448.58
LR / Level Road	16.00	\$563.11	\$212.44	\$0.00	\$0.00	\$347.60	\$1,123.15

Continued on the next page

2023-543 / Mcteer/Sea Pines Drive cont'd

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
ONJV / Onsite Job Visit	136.00	\$6,326.26	\$1,653.92	\$79.34	\$0.00	\$3,282.84	\$11,342.36
PL / Project Layout	16.00	\$563.11	\$720.52	\$5.28	\$0.00	\$347.60	\$1,636.51
PP / Project Preparation	8.00	\$281.56	\$17.40	\$44.56	\$0.00	\$173.80	\$517.32
RDCON / Roadside ditch - constructed	48.00	\$1,652.27	\$1,327.94	\$0.00	\$0.00	\$1,019.92	\$4,000.13
RMTRD / Remove trees - Ditch	24.00	\$701.69	\$69.60	\$160.89	\$0.00	\$433.12	\$1,365.30
RRI / Rip Rap - Installed	40.50	\$1,417.59	\$865.60	\$0.00	\$0.00	\$875.06	\$3,158.24
STAGING / Staging Materials/Equipment	48.00	\$1,510.10	\$630.12	\$13.90	\$0.00	\$932.12	\$3,086.24
UC / Utility Coordination	2.50	\$81.38	\$8.70	\$8.10	\$0.00	\$50.23	\$148.40
UTLOC / Utility locates	6.50	\$266.60	\$26.10	\$15.49	\$0.00	\$10.05	\$318.23
WSGRB / Workshelf - Grubbed	8.00	\$333.76	\$889.36	\$72.47	\$0.00	\$0.00	\$1,295.59
Grand Total	1,066.00	\$37,319.66	\$28,735.13	\$12,824.10	\$407.02	\$21,946.01	\$101,231.92

Before



During



After



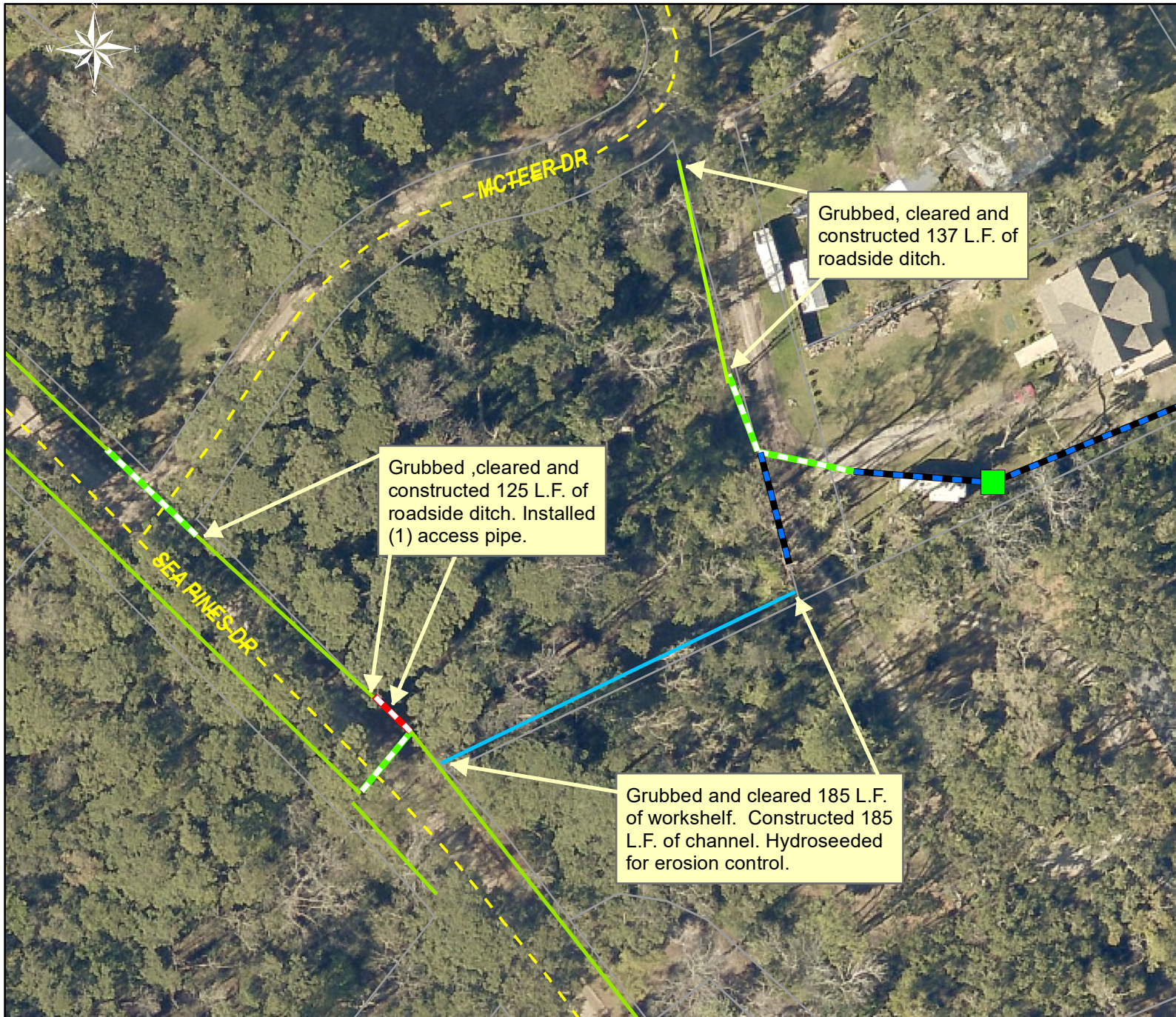
Project: Mcteer Drive and Sea Pines Drive
Map#1

Activity: Routine/
Preventive
Maintenance

Project #:
2023-543

Township/SW Dist:
St. Helena Island/8

Completed:
September 2023



Legend	
	Access Pipe
	Bleeder Pipe
	Channel
	Channel Pipe
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	Road Pipe
	Roadside
	Roadside Pipe



1 inch = 67 feet

Prepared By: BC Stormwater Management Utility
Date Print: 10/19/23

File: C:\project summaries map\Mcteer Drive and Sea Pines Map #1_2023-543

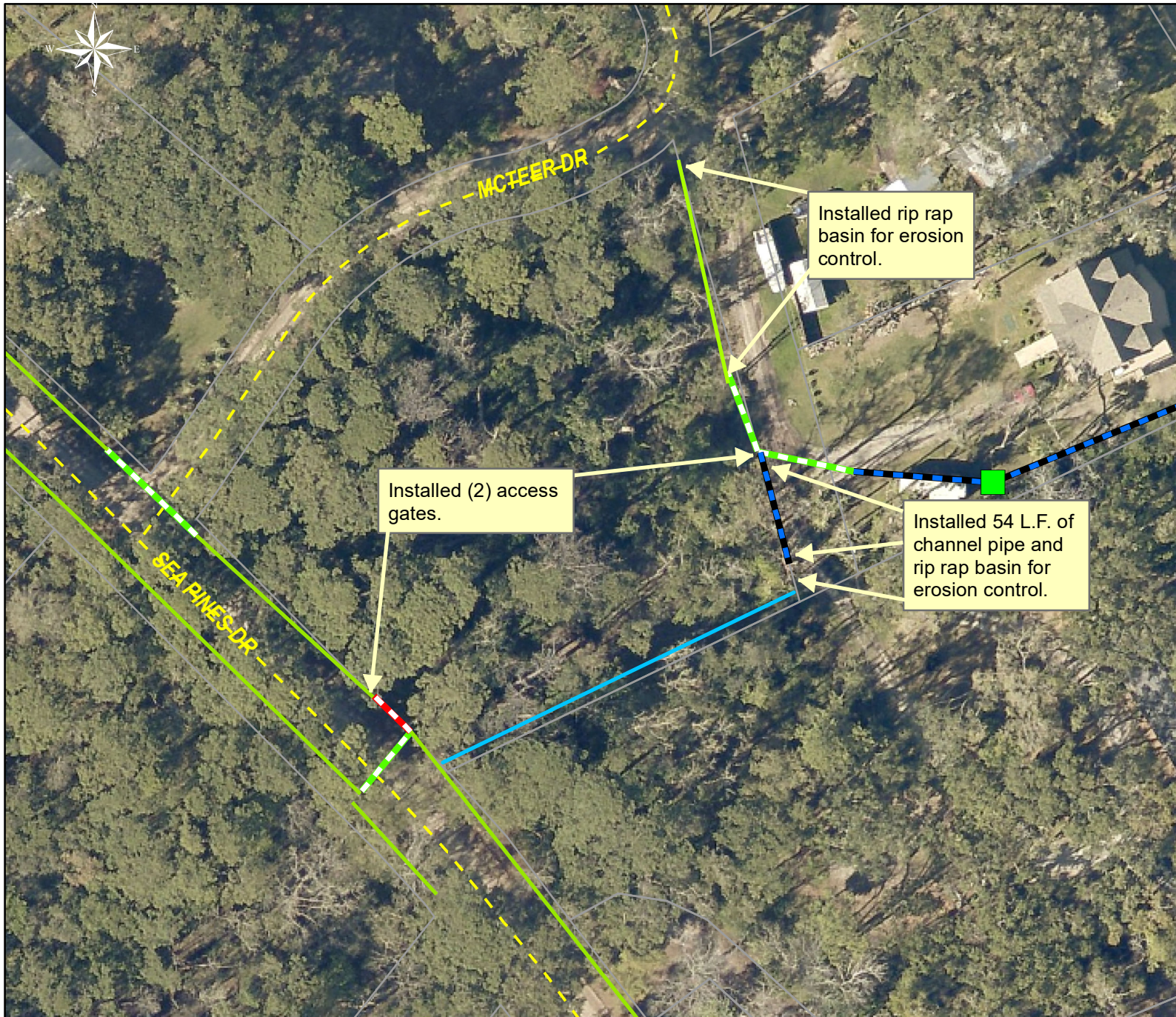
Project: Mcteer Drive and Sea Pines Drive Map#2

Activity: Routine/ Preventive Maintenance

Project #: 2023-543

Township/SW Dist: St. Helena Island/8

Completed: September 2023



Legend	
	Access Pipe
	Bleeder Pipe
	Channel
	Channel Pipe
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	Road Pipe
	Roadside
	Roadside Pipe



1 inch = 67 feet

Prepared By: BC Stormwater Management Utility
Date Print: 10/19/23

File: C:\project summaries map\Mcteer Drive and Sea Pines Map #2_2023-543



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Swan Lake Drive

Activity: Routine/Preventive Maintenance

Duration: 06/15/2023 - 07/20/2023

Narrative Description of Project:

Project improved 551 L.F. of drainage system. Cleaned out 292 L.F. of roadside ditch and 259 L.F. of channel. Removed trees from flowline and workshelf. Leveled workshelf, installed straw mat and hydroseeded for erosion control.

2023-612 / Swan Lake Drive

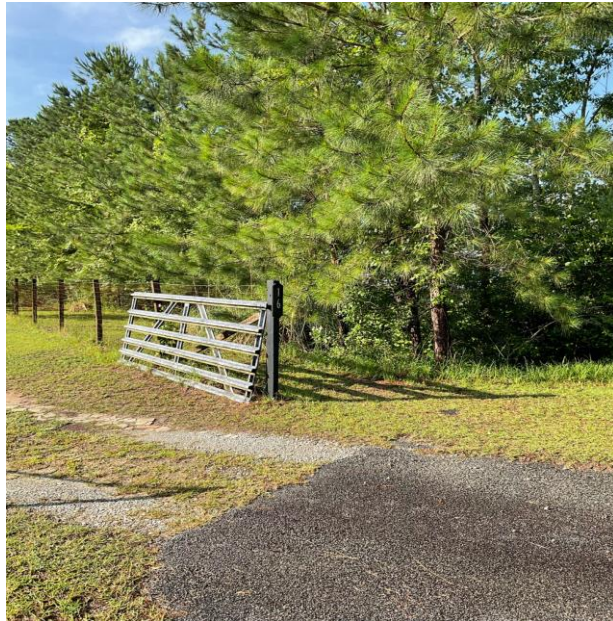
	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Cost	Total Cost
AUDIT / Audit Project	6.00	\$249.72	\$0.00	\$0.00	\$0.00	\$124.92	\$374.64
CCO / Channel - cleaned out	32.00	\$918.48	\$1,292.36	\$36.41	\$0.00	\$566.96	\$2,814.21
DEBRIS / Debris Removal	8.00	\$239.76	\$852.78	\$0.00	\$0.00	\$148.00	\$1,240.54
HAUL / Hauling	255.00	\$7,954.46	\$13,134.97	\$1,985.47	\$0.00	\$4,338.04	\$27,412.94
HYDR / Hydroseeding	32.00	\$1,205.76	\$9,615.26	\$502.94	\$0.00	\$744.32	\$12,068.28
LM / Loading Materials	16.00	\$482.39	\$94.00	\$0.00	\$0.00	\$145.28	\$721.67
LW / Level Worksite	64.00	\$1,826.89	\$2,092.92	\$0.00	\$0.00	\$822.72	\$4,742.53
ONJV / Onsite Job Visit	48.00	\$2,414.40	\$445.60	\$22.24	\$0.00	\$1,490.40	\$4,372.64
RMTRD / Remove trees - Ditch	116.00	\$3,448.81	\$289.20	\$165.19	\$0.00	\$1,976.40	\$5,879.60

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2023-612 / Swan Lake Drive cont'd

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
RMTRW / Remove trees - Workshelf	64.00	\$1,776.69	\$204.40	\$222.32	\$0.00	\$1,096.72	\$3,300.13
RSDCL / Roadside Ditch - Cleanout	104.00	\$3,271.49	\$295.72	\$186.18	\$0.00	\$2,019.44	\$5,772.83
SC / Sediment Control	47.00	\$1,372.48	\$1,340.87	\$85.02	\$0.00	\$599.41	\$3,397.78
SWP / add dirt	24.00	\$666.40	\$1,225.12	\$0.00	\$0.00	\$411.36	\$2,302.88
UTLOC / Utility locates	4.00	\$130.20	\$13.05	\$0.00	\$0.00	\$80.36	\$223.61
Grand Total	820.00	\$25,957.94	\$30,896.25	\$3,205.77	\$0.00	\$14,564.33	\$74,624.29

Before



During



After



Project: Swan Lake Drive

Activity: Routine/
Preventive
Maintenance

Project #:
2023-612














Township/SW Dist:
Bluffton/4

Completed:
July 2023



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 30 60 120 180 240
Feet

1 inch = 170 feet

Prepared By: BC Stormwater Management Utility
Date Print: 07/31/23
File: C:\project summaries map\Swan Lake Drive_2023-612



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Pritchard Farms Court

Activity: Routine/Preventive Maintenance

Duration: 07/25/2023 - 08/08/2023

Narrative Description of Project:

Project improved 1,987 L.F. of drainage system. Cleaned out 1,987 L.F. of roadside ditch and jetted (1) driveway pipe.

2024-502 / Pritchard Farms Court	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Cost	Total Cost
AUDIT / Audit Project	2.00	\$83.24	\$0.00	\$0.00	\$0.00	\$41.64	\$124.88
DPJT / Driveway Pipe - Jetted	16.00	\$455.57	\$484.80	\$10.00	\$0.00	\$128.72	\$1,079.09
HAUL / Hauling	84.00	\$2,704.28	\$6,601.56	\$0.00	\$0.00	\$1,669.20	\$10,975.04
ONJV / Onsite Job Visit	24.00	\$1,207.22	\$282.00	\$0.00	\$0.00	\$745.20	\$2,234.42
RSDCL / Roadside Ditch - Cleanout	128.00	\$3,574.46	\$3,412.61	\$0.00	\$0.00	\$1,596.48	\$8,583.54
UTLOC / Utility locates	0.50	\$16.28	\$0.00	\$0.00	\$0.00	\$10.05	\$26.32
Grand Total	254.50	\$8,041.04	\$10,780.97	\$10.00	\$0.00	\$4,191.29	\$23,023.28

Before



During



After



Project: Pritchard Farms Court

Activity: Routine/
Preventive
Maintenance

Project #:
2024-502














Township/SW Dist:
Bluffton/4

Completed:
August 2023



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 30 60 120 180 240
Feet

1 inch = 160 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/17/23

File: C:\project summaries map\Pritchard Farm Court_2024-502



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: St Helena Island Tree Removal - Lands End Road

Activity: Routine/Preventive Maintenance

Duration: 06/21/2023

Narrative Description of Project:

Removed a fallen tree from channel.

2023-416A/St Helena Island Tree Removal

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.50	\$20.81	\$0.00	\$0.00	\$0.00	\$10.41	\$31.22
HAUL / Hauling	3.00	\$106.74	\$57.18	\$163.10	\$0.00	\$65.88	\$392.90
RMTRD / Remove trees- Ditch	8.00	\$291.50	\$47.81	\$8.34	\$0.00	\$179.94	\$527.59
Grand Total	11.50	\$419.05	\$104.99	\$171.44	\$0.00	\$256.23	\$951.71

(No Pictures Available)



Project: St. Helena Island Tree Removal- Landsend Road

Activity: Routine/ Preventive Maintenance














Project #: 2023-416A

Township/SW Dist: St.Helena Island/8

Completed: June 2023

Legend

Drainage Type

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

037.575 150 225 300 Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print:08/02/23

File:C:\project summaries map\St.Helena IslandTree Removal- Landsend Road_2023-416A



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Jefferson Drive and Grant Street

Activity: Routine/Preventive Maintenance

Duration: 05/24/2023 - 06/05/2023

Narrative Description of Project:

Project improved 90 L.F. of drainage system. Cleaned out 90 L.F. of roadside ditch and jetted (3) driveway pipes and (1) access pipe.

2023-607 / Jefferson Drive and Grant Street	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Cost	Total Cost
AUDIT / Audit Project	2.00	\$83.24	\$0.00	\$0.00	\$0.00	\$41.64	\$124.88
DPJT / Driveway Pipe - Jetted	16.00	\$518.53	\$306.56	\$106.45	\$0.00	\$320.08	\$1,251.62
HAUL / Hauling	4.00	\$142.32	\$76.24	\$17.22	\$0.00	\$87.84	\$323.62
RSDCL / Roadside Ditch - Cleanout	8.00	\$281.56	\$103.28	\$142.87	\$0.00	\$173.80	\$701.51
UTLOC / Utility locates	0.50	\$16.28	\$0.00	\$0.00	\$0.00	\$10.05	\$26.32
Grand Total	30.50	\$1,041.92	\$486.08	\$266.54	\$0.00	\$633.41	\$2,427.95

Before



During



After





Project: Jefferson Drive and Grant Street

Activity: Routine/
Preventive
Maintenance

Project #:
2023-607

Township/SW Dist:
Port Royal Island/6,9

Completed:
June 2023

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 35 70 140 210 280
Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print: 10/26/23

File: C:\project summaries map\Jefferson Drive and Grant Street Map_2023-607



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: To HHI - Namon Road

Activity: Routine/Preventive Maintenance

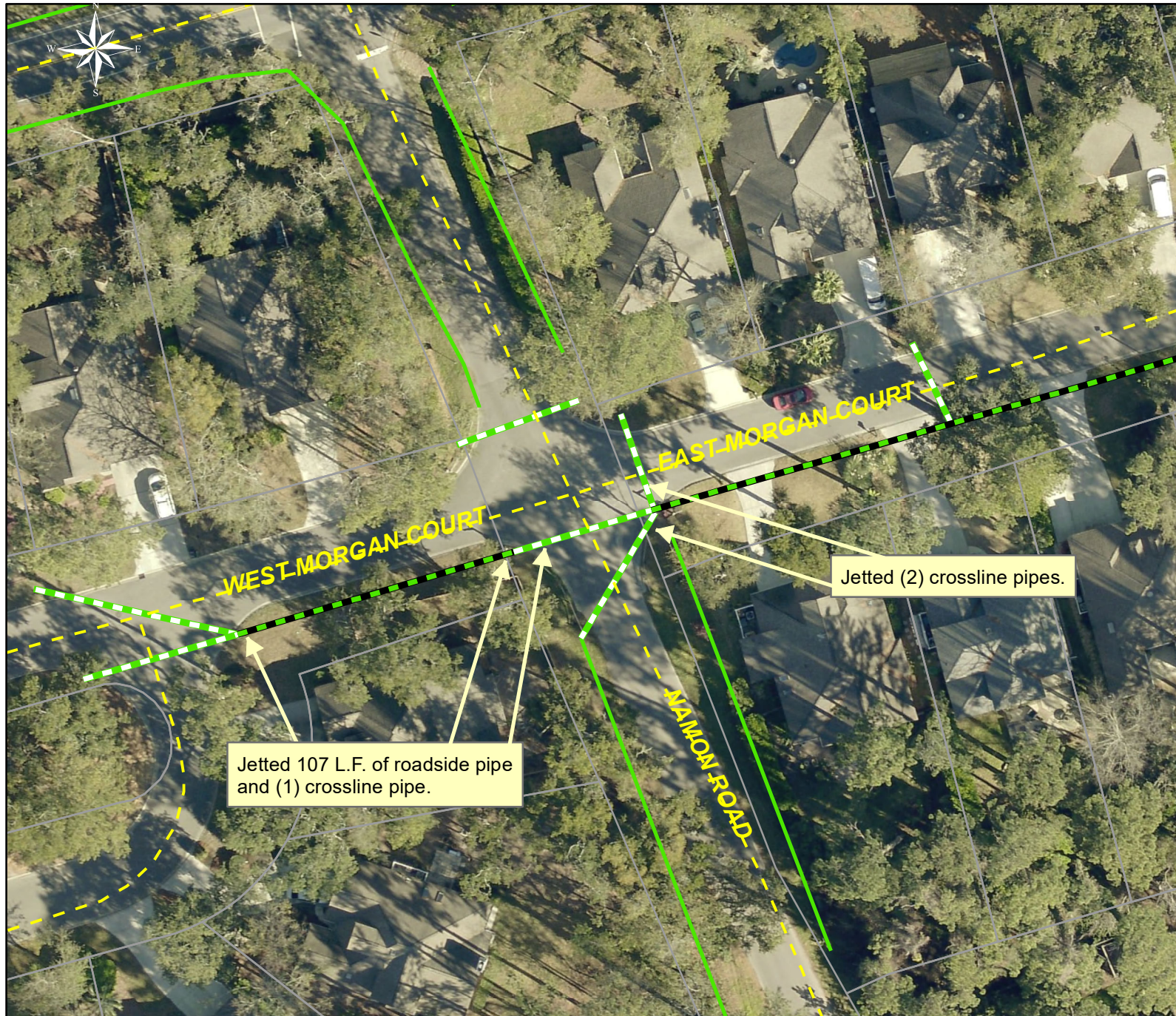
Duration: 09/28/2023

Narrative Description of Project:

Project improved 107 L.F. of drainage system. Jetted (3) crossline pipes and 107 L.F. of roadside pipe.

2024-520 / ToHHI - Namon Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Cost	Total Cost
AUDIT / Audit Project	0.50	\$20.81	\$0.00	\$0.00	\$0.00	\$10.41	\$31.22
RSPJ / Roadside Pipe - Jetted	32.00	\$969.45	\$608.72	\$10.00	\$0.00	\$598.40	\$2,186.57
Grand Total	32.50	\$990.26	\$608.72	\$10.00	\$0.00	\$608.81	\$2,217.79

(No Pictures Available)



Project: ToHHI-
Namon Road

Activity: Routine/
Preventive
Maintenance














Project #:
2024-520

Township/SW Dist:
Hilton Head Island/3

Completed:
September 2023

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 10 20 40 60 80
Feet

1 inch = 50 feet

Prepared By: BC Stormwater Management Utility
Date Print: 10/19/23
File: C:\project summaries map\ToHHI- Namon Road_2024-520



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: ToHHI - New Orleans Road

Activity: Routine/Preventive Maintenance

Duration: 08/21/2023 - 08/22/2023

Narrative Description of Project:

Project improved 228 L.F. of drainage system. Cleaned out (3) catch basins and jetted 228 L.F. of roadside pipe. Repaired (1) sinkhole.

2024-512 / ToHHI - New Orleans Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Cost	Total Cost
AUDIT / Audit Project	1.00	\$41.62	\$0.00	\$0.00	\$0.00	\$20.82	\$62.44
CBCO / Catch basin - clean out	16.00	\$247.04	\$1,244.64	\$30.00	\$0.00	\$0.00	\$1,521.68
HAUL / Hauling	24.00	\$726.54	\$1,257.44	\$0.00	\$0.00	\$448.48	\$2,432.46
SCON / Swale - Constructed	24.00	\$716.43	\$377.25	\$0.00	\$0.00	\$442.24	\$1,535.92
SR / Sinkhole repair	24.00	\$704.12	\$307.49	\$0.00	\$0.00	\$434.64	\$1,446.25
TRAFCTRL / Traffic Control	16.00	\$493.91	\$204.24	\$0.00	\$0.00	\$304.88	\$1,003.03
UTLOC / Utility locates	0.50	\$16.28	\$0.00	\$0.00	\$0.00	\$10.05	\$26.32
Grand Total	105.50	\$2,945.92	\$3,391.06	\$30.00	\$0.00	\$1,661.11	\$8,028.09

Before



During



After



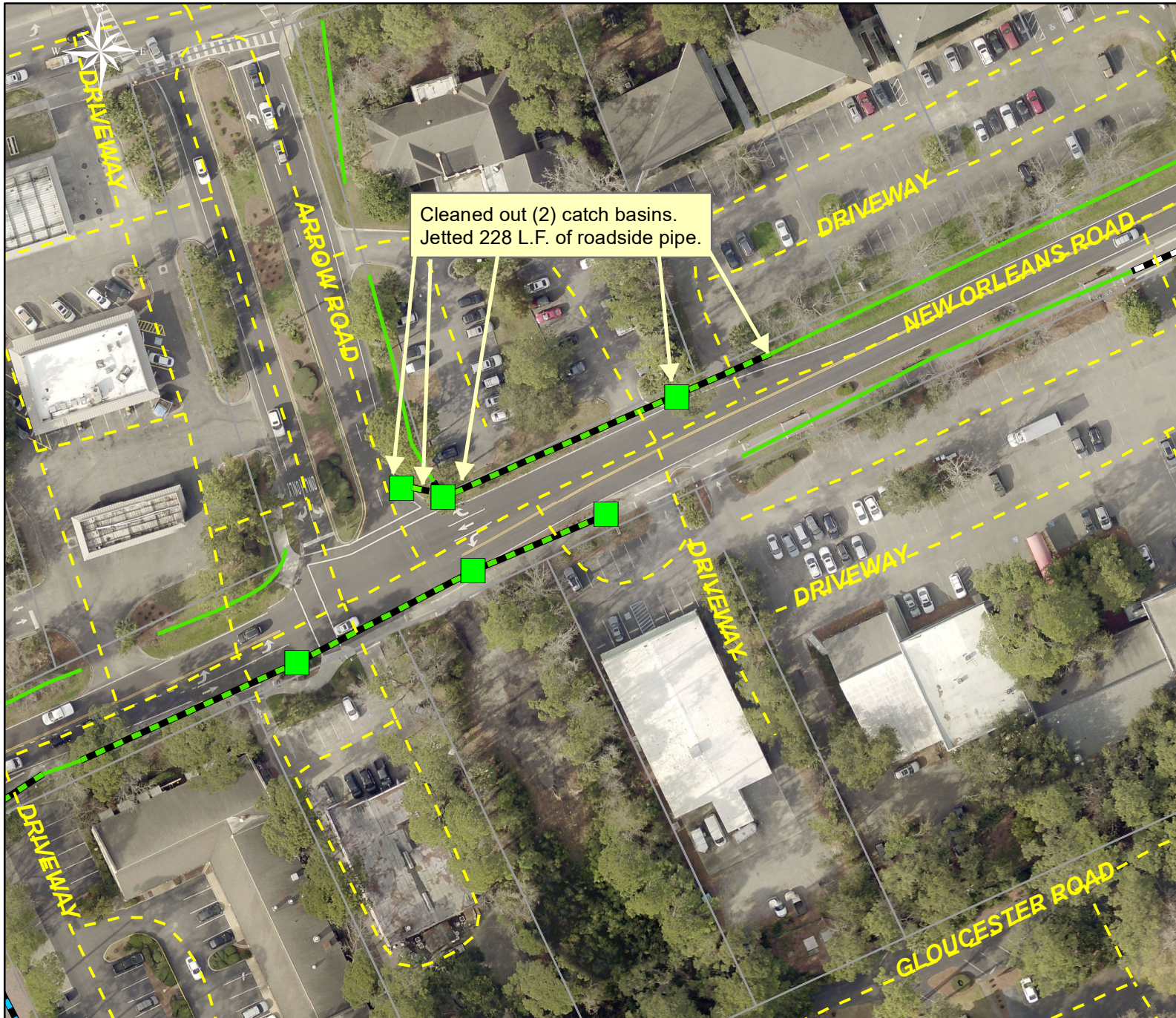
Project: ToHHI- New Orleans Road Map #1

Activity: Routine/ Preventive Maintenance

Project #: 2024-512














Township/SW Dist: Hilton Head Island/3

August 2023



Legend

Drainage Type

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

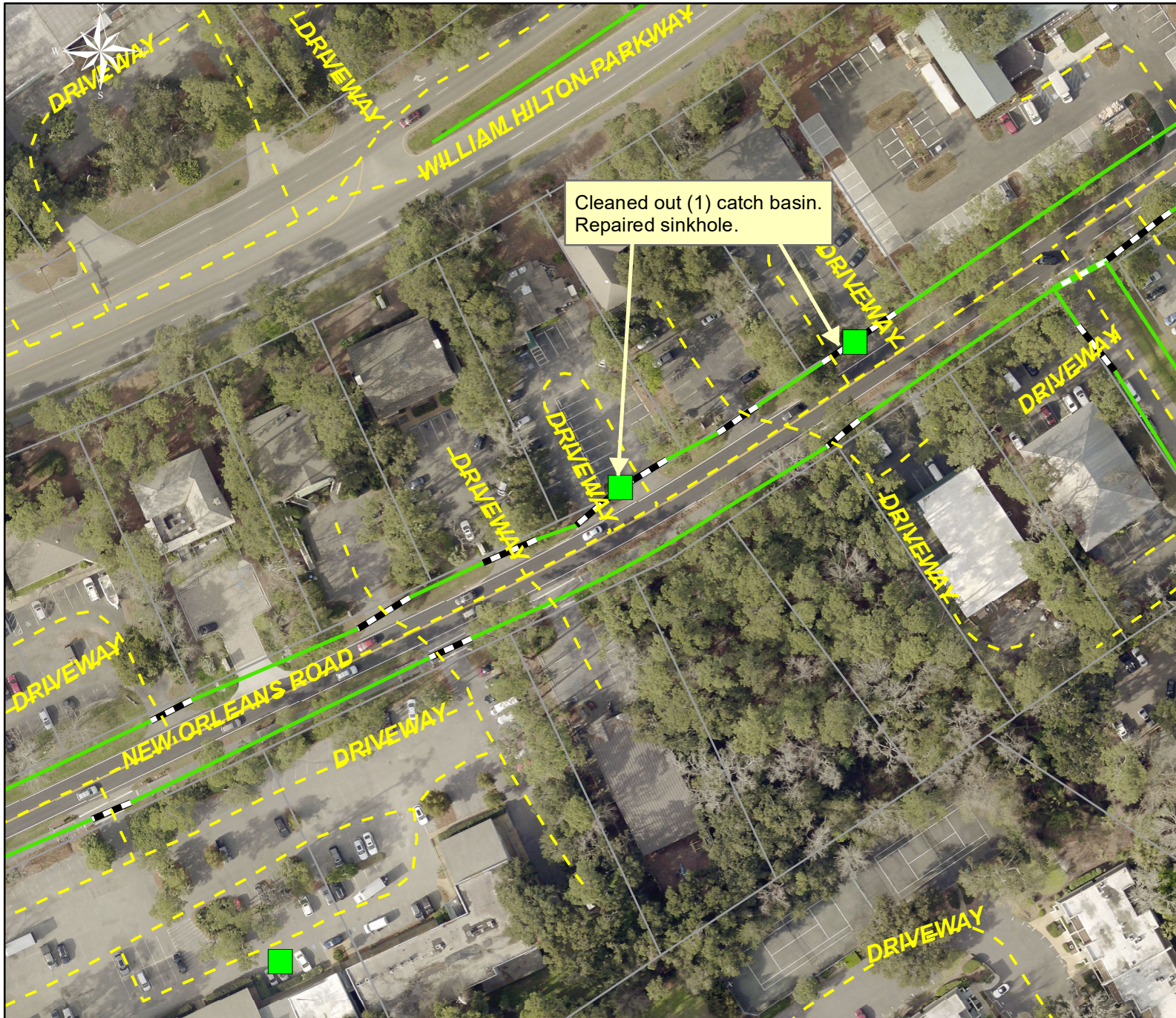


1 inch = 83 feet

Prepared By: BC Stormwater Management Utility

Date Print: 10/26/23

File:C:\project summaries map\ToHHI-New Orleans Road Map #1_2024-512



Project: ToHHI- New Orleans Road
Map #2

Activity: Routine/
Preventive
Maintenance














Project #:
2024-512

Township/SW Dist:
Hilton Head Island/3

August 2023

Legend

Drainage Type

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



1 inch = 100 feet

Prepared By: BC Stormwater Management Utility
Date Print: 10/26/23

File:C:\project summaries map\ToHHI-New Orleans Road Map #2_2024-512



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Lady's Island Tree Removal - Shallowford Downs and Royal Pines Blvd

Activity: Routine/Preventive Maintenance

Duration: 03/30/2023 - 05/16/2023

Narrative Description of Project:

Removed fallen trees from roadside and channel.

2023-413A/Lady's Island Tree Removal

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.00	\$41.62	\$0.00	\$0.00	\$0.00	\$20.82	\$62.44
HAUL / Hauling	8.00	\$247.04	\$152.48	\$136.00	\$0.00	\$152.48	\$688.00
RMTRD / Remove trees - Ditch	32.00	\$874.93	\$365.16	\$0.00	\$0.00	\$540.08	\$1,780.17
RMTRW / Remove trees - Workshelf	16.00	\$376.20	\$34.80	\$38.60	\$0.00	\$276.72	\$726.32
TTLR / Trim tree limbs- roads	8.00	\$188.10	\$17.40	\$5.80	\$0.00	\$119.60	\$330.90
Grand Total	65.00	\$1,727.88	\$569.84	\$180.40	\$0.00	\$1,109.70	\$3,587.82

(No Pictures Available)



Project: Lady's Island
 Tree Removal-
 Shallowford Downs
 Map #1

Activity: Routine/
 Preventive
 Maintenance














Project #:
 2023-413A

Township/SW Dist:
 Lady's Island/7

Completed:
 May 2023

Legend

Drainage Type

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

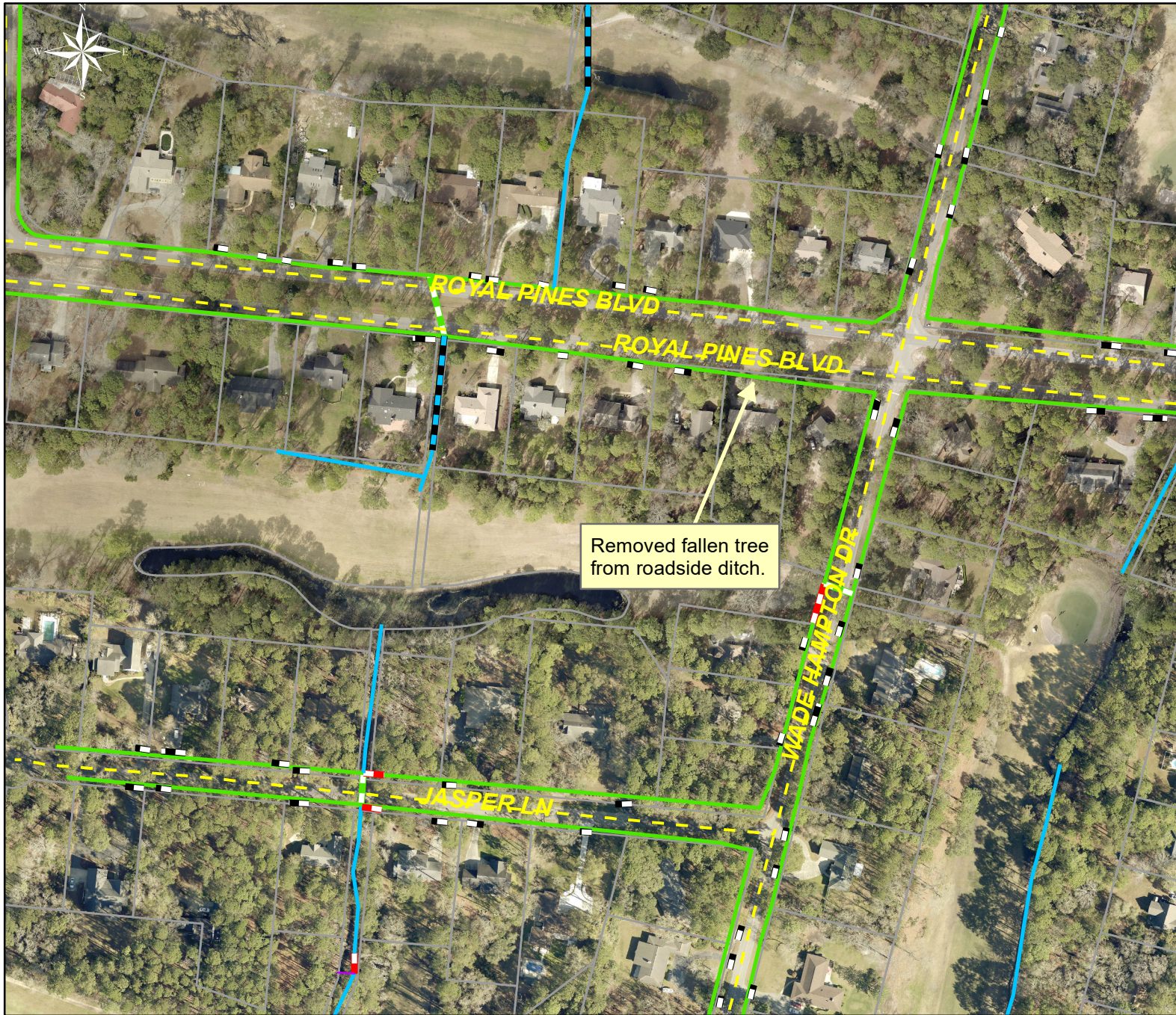


1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/02/23

File: C:\project summaries map\Lady's Island Tree Removal- Shallowford Downs Map #1_2023-413A



Project: Lady's Island
 Tree Removal-
 Royal Pines BLVD
 Map #2

Activity: Routine/
 Preventive
 Maintenance














Project #:
 2023-413A

Township/SW Dist:
 Lady's Island/7

Completed:
 May 2023

Legend

Drainage Type

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

0 40 80 160 240 320
 Feet

1 inch = 230 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/02/23

File: C:\project summaries map\Lady's Island Tree Removal- Royal Pines BLVD Map #2_2023-413A



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Bluffton Washout/Sinkhole Repair
 Oscar Frazier Park, Trout Street, Flounder Street, Lake Linden Drive, Hyde Park Circle and Thomas Lawton Drive.

Activity: Routine/Preventive Maintenance

Duration: 08/16/2022 - 01/06/2023

Narrative Description of Project:

Repaired sinkholes and a washout.

2023-424/Bluffton Washout / Sinkhole Repair

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	2.00	\$83.24	\$0.00	\$0.00	\$0.00	\$41.64	\$124.88
HAUL / Hauling	32.00	\$995.60	\$609.92	\$1,764.39	\$0.00	\$633.12	\$4,003.03
ONJV / Onsite Job Visit	9.50	\$396.34	\$47.85	\$22.15	\$0.00	\$0.00	\$466.34
RPWO / Repaired Washout	16.00	\$427.54	\$34.80	\$55.29	\$0.00	\$127.64	\$645.27
SR / Sinkhole repair	208.00	\$5,458.50	\$692.66	\$968.19	\$0.00	\$2,765.12	\$9,884.47
Grand Total	267.50	\$7,361.21	\$1,385.23	\$2,810.02	\$0.00	\$3,567.52	\$15,123.99

Before



During



After





Project: Bluffton Sinkhole/ Washout Repair- Oscar Fraizer Park Map #1

Activity: Routine Preventive/ Maintenance














Project #: 2023-424

Township/SW Dist: Bluffton/4

Completed: January 2023

Legend

Drainage Type

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

Repaired sinkhole.



Prepared By: BC Stormwater Management Utility

Date Print: 10/10/23

File: C:\project summaries map\Bluffton Sinkhole/Washout Repair- Oscar Fraizer Park Map #1_2023-424



Project: Bluffton Sinkhole/ Washout Repair- Trout Street, Flounder Street and Thomas Lawton Drive Map #2

Activity: Routine Preventive/ Maintenance

Project #: 2023-424

Township/SW Dist: Bluffton/4

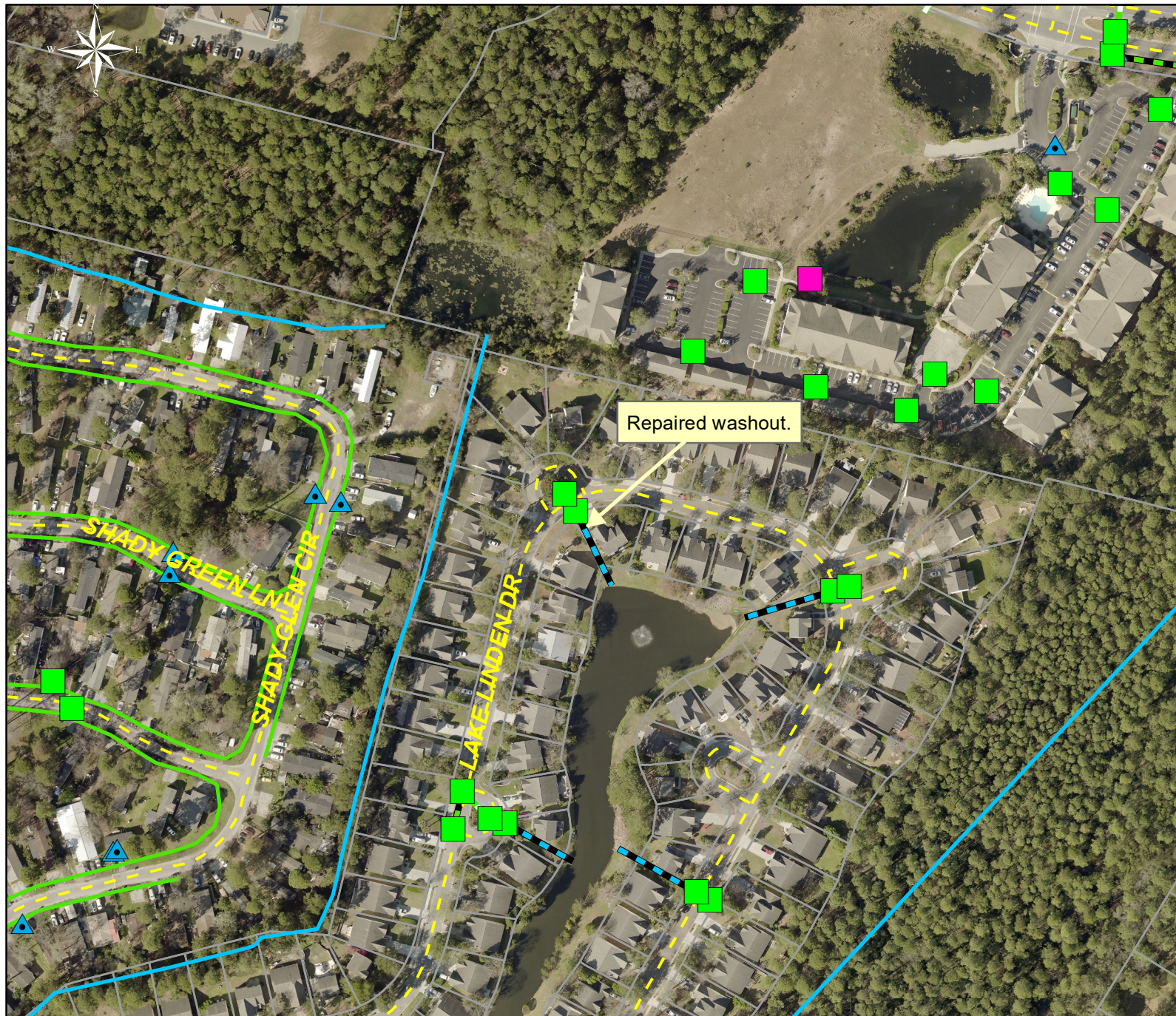
Completed: January 2023

Legend	
Drainage Type	
	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe

02040 80 120160
 Feet 1 inch = 210 feet

Prepared By: BC Stormwater Management Utility
 Date Print: 10/10/23

File: C:\project summaries map\Bluffton Sinkhole\Washout Repair- Trout St, Flounder St and Thomas Lawton Drive Map #2_2023-424



Project: Bluffton
Sinkhole/ Washout
Repair- Lake Linden
Drive
Map #3

Activity: Routine
Preventive/
Maintenance














Project #:
2023-424

Township/SW Dist:
Bluffton/4

Completed:
January 2023

Legend

Drainage Type

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

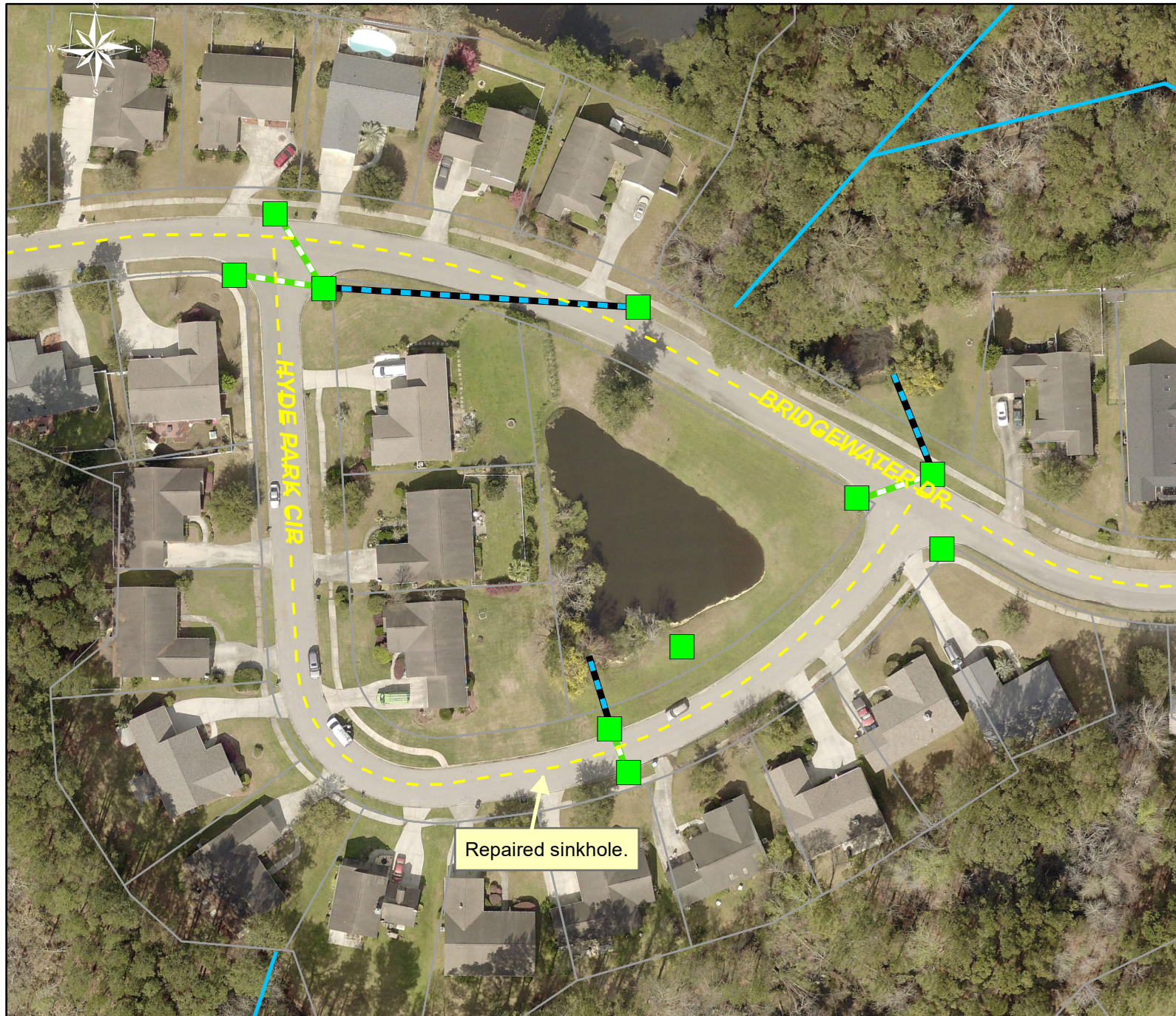
0 37.575 150 225 300
Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print: 10/10/23

File:C:\project summaries map\Bluffton Sinkhole/Washout Repair- Lake Linden Drive Map #3_2023-424



Project: Bluffton Sinkhole/ Washout Repair- Hyde Park Circle Map #4

Activity: Routine Preventive/ Maintenance

Project #: 2023-424

Township/SW Dist: Bluffton/4

Completed: January 2023

Legend

Drainage Type

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



1 inch = 83 feet

Prepared By: BC Stormwater Management Utility

Date Print: 10/10/23

File: C:\project summaries map\Bluffton Sinkhole/Washout Repair- Hyde Park Circle Map #4_2023-424



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Pond Maintenance - Grays Pond and Turtle Lane

Activity: Pond Maintenance

Duration: 08/30/2022 - 02/17/2023

Narrative Description of Project:

Dewatered a pond. Removed debris from pond and trash rack.

2023-320 / Pond Maintenance - Grays Pond and Turtle Lane

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	2.00	\$83.24	\$0.00	\$0.00	\$0.00	\$41.64	\$124.88
DWP / Dewatered Pond	6.00	\$250.32	\$73.32	\$8.10	\$0.00	\$0.00	\$331.74
ONJV / Onsite Job Visit	22.00	\$917.84	\$95.70	\$32.05	\$0.00	\$0.00	\$1,045.59
PM / Ponds - Maintenance	63.00	\$1,600.65	\$138.08	\$79.60	\$0.00	\$779.22	\$2,597.55
PRRECON / Project Reconnaissance	0.00	\$54.59	\$0.00	\$4.68	\$0.00	\$0.00	\$59.27
Grand Total	93.00	\$2,906.64	\$307.10	\$124.43	\$0.00	\$820.86	\$4,159.03

Before



During

(No Picture Available)

After



Project: Pond Maintenance-
Grays Pond
Map #1

Activity: Pond Maintenance

Project #:
2023-320

Township/SW Dist:
Port Royal Island/6

Completed:
February 2023



Legend	
Drainage Type	
	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe



1 inch = 250 feet



Project: Pond Maintenance-
Turtle Lane Pond
Map #2

Activity: Pond Maintenance

Project #:
2023-320

Township/SW Dist:
Lady's Island/7

Completed:
February 2023

Legend

Drainage Type

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



1 inch = 210 feet

Prepared By: BC Stormwater Management Utility
Date Print: 10/10/23

File: C:\project summaries map\Pond Maintenance- Turtle Lane Pond Map #2_2023-320



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Keans Neck Road Channel

Activity: Routine/Preventive Maintenance

Duration: 05/17/2023

Narrative Description of Project:

Project improved 500 L.F. of drainage system. Cleaned out 500 L.F. of channel.

2023-602 / Keans Neck Road Channel	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Cost	Total Cost
AUDIT / Audit Project	0.50	\$20.81	\$0.00	\$0.00	\$0.00	\$10.41	\$31.22
CCO / Channel - cleaned out	16.00	\$461.44	\$83.46	\$51.66	\$0.00	\$284.84	\$881.40
HAUL / Hauling	8.00	\$247.04	\$152.48	\$51.66	\$0.00	\$152.48	\$603.66
Grand Total	24.50	\$729.29	\$235.94	\$103.32	\$0.00	\$447.73	\$1,516.28

(No Pictures Available)

Project: Keans Neck Road Channel

Activity: Routine/ Preventive Maintenance

Project #: 2023-602














Township/SW Dist: Sheldon/5

Completed: May 2023



Legend

Drainage Type

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



1 inch = 420 feet



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: St. Helena Island Washout Repair - Sea Island Parkway

Activity: Routine/Preventive Maintenance

Duration: 07/26/2022

Narrative Description of Project:

Repaired a washout.

2023-541 / St. Helena Island Washout Repair	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Cost	Total Cost
AUDIT / Audit Project	0.50	\$20.81	\$0.00	\$0.00	\$0.00	\$10.41	\$31.22
RPWO / Repaired Washout	12.00	\$379.04	\$106.59	\$145.12	\$0.00	\$233.96	\$864.71
Grand Total	12.50	\$399.85	\$106.59	\$145.12	\$0.00	\$244.37	\$895.93

(No Pictures Available)



Project: St. Helena Island Washout / Sinkhole Repair- Sea Island Parkway

Activity: Routine/ Preventive Maintenance

Project #: 2023-423

Township/SW Dist: St. Helena Island/8

Completed: July 2022

Legend

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

0 50 100 200 300 400 Feet

1 inch = 270 feet

Prepared By: BC Stormwater Management Utility

Date Print: 07/31/23

File: C:\project summaries map\SHI Washout/Sinkhole Repair- Sea Island Parkway_2023-423



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Port Royal Island Washout/Sinkhole Repair
 Salem Drive E, Joe Allen Drive, Horace Dawson Lane, Ihly
 Farm Road, Chisholm Hill Road, St Paul's Church Road and
 Paukie Island Road.

Activity: Routine/Preventive Maintenance
Duration: 01/04/2023 - 05/09/2023

Narrative Description of Project:

Repaired sinkholes and washouts.

2023-421A/Port Royal Island Washout / Sinkhole

Repair

AUDIT / Audit Project

HAUL / Hauling

ONJV / Onsite Job Visit

RPWO / Repaired Washout

SR / Sinkhole repair

Grand Total

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	2.50	\$104.05	\$0.00	\$0.00	\$0.00	\$52.05	\$156.10
HAUL / Hauling	16.00	\$505.60	\$304.96	\$1,471.96	\$0.00	\$316.56	\$2,599.08
ONJV / Onsite Job Visit	10.00	\$417.20	\$43.50	\$11.00	\$0.00	\$0.00	\$471.70
RPWO / Repaired Washout	78.50	\$1,978.68	\$720.78	\$152.73	\$0.00	\$1,099.69	\$3,951.88
SR / Sinkhole repair	94.50	\$2,608.40	\$216.94	\$406.10	\$0.00	\$1,394.52	\$4,625.96
Grand Total	201.50	\$5,613.93	\$1,286.18	\$2,041.79	\$0.00	\$2,862.82	\$11,804.72

Before

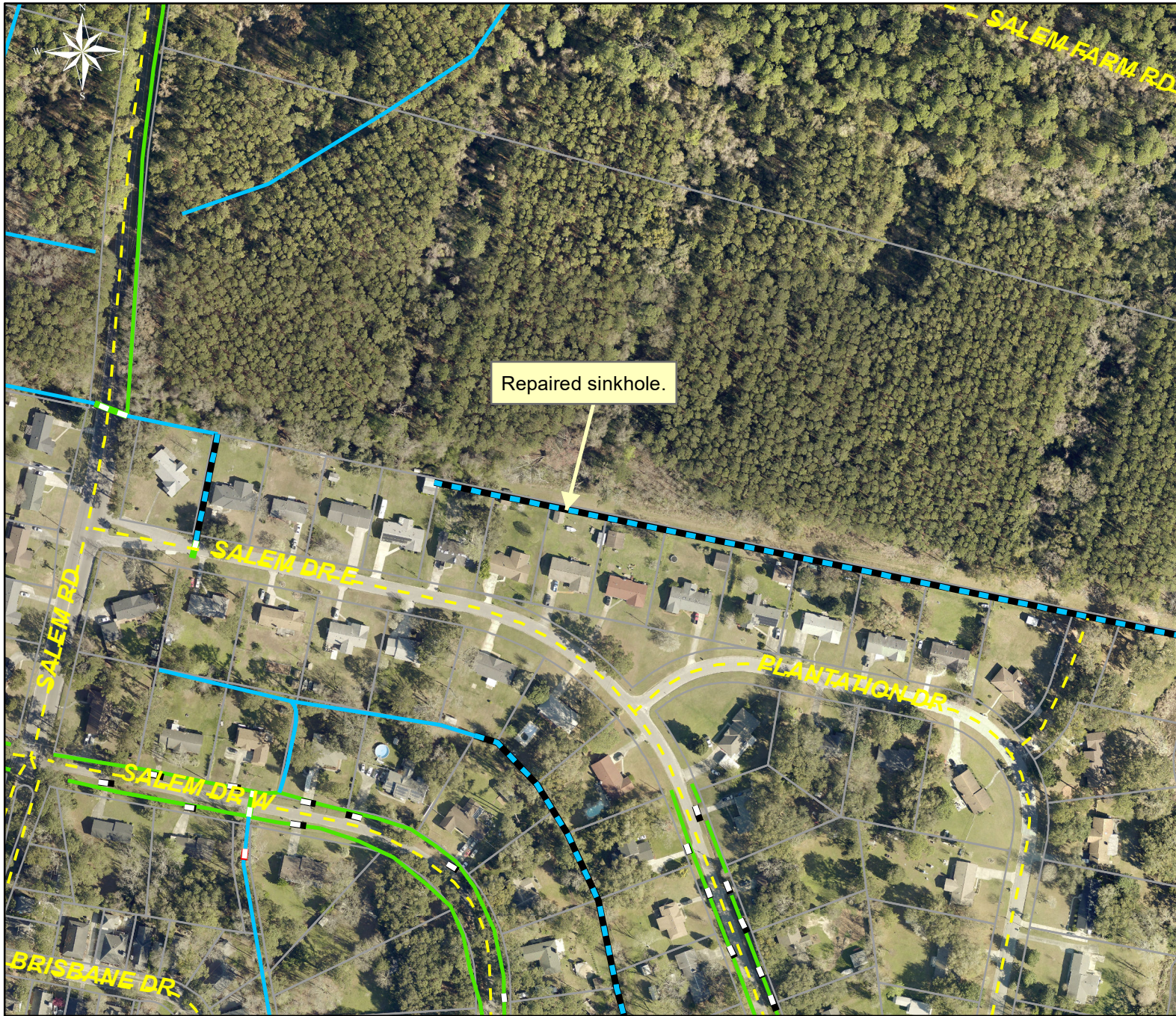


During

(No Picture Available)

After





Project: Port Royal
Island Washout/
Sinkhole Repair -
Salem Drive E
Map #1

Activity: Routine/
Preventive
Maintenance

Project #:
2023-421A

Township/SW Dist:
Port Royal Island/6,9

Completed:
May 2023

Legend

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

037.55 150 225 300
 Feet **1 inch = 250 feet**

Prepared By: BC Stormwater Management Utility

Date Print:08/21/23

File:C:\project summaries map\Port Royal Island Washout\ Sinkhole Repair- Salem Drive E Map #1_2023-421A



Project: Port Royal Island Washout/
Sinkhole Repair -
Joe Allen Drive
Map #2

Activity: Routine/
Preventive
Maintenance

Project #:
2023-421A

Township/SW Dist:
Port Royal Island/6,9

Completed:
May 2023

Legend

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

0 50 100 200 300 400
Feet **1 inch = 330 feet**

Prepared By: BC Stormwater Management Utility

Date Print: 08/21/23

File: C:\project summaries map\Port Royal Island Washout\ Sinkhole Repair- Joe Allen Drive Map #2_2023-421A



Project: Port Royal
Island Washout/
Sinkhole Repair -
Horace Dawson
Lane Map #3

Activity: Routine/
Preventive
Maintenance

Project #:
2023-421A

Township/SW Dist:
Port Royal Island/6,9

Completed:
May 2023

Legend

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

03570 140210280
 Feet

1 inch = 330 feet

Prepared By: BC Stormwater Management Utility
Date Print:08/21/23

File:C:\project summaries map\Port Royal Island Washout/ Sinkhole Repair- Horace Dawson Lane Map #3_2023-421A



Project: Port Royal
Island Washout/
Sinkhole Repair -
Ihly Farm Road
Channel Map #4

Activity: Routine/
Preventive
Maintenance














Project #:
2023-421A

Township/SW Dist:
Port Royal Island/6,9

Completed:
May 2023

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 3570 140 210 280
Feet

1 inch = 250 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/15/23

File:C:\project summaries map\Port Royal Island Wash Out/Sinkhole Repair- Ihly Farms Road Channel Map #4_2023-421A



Project: Port Royal Island Washout/
Sinkhole Repair -
Chisholm Hill Road
Map #5

Activity: Routine/
Preventive
Maintenance

Project #:
2023-421A

Township/SW Dist:
Port Royal Island/6,9

Completed:
May 2023

Legend

Drainage Type

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

0 50 100 200 300 400
Feet

1 inch = 360 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/21/23

File: C:\project summaries map\Port Royal Island Washout/ Sinkhole Repair- Chisholm Hill Road Map #5_2023-421A



Project: Port Royal Island Washout/
Sinkhole Repair -
St.Pauls Church
Road Map #6

Activity: Routine/
Preventive
Maintenance

Project #:
2023-421A

Township/SW Dist:
Port Royal Island/6,9

Completed:
May 2023

Legend

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

05110 220 330 440
 Feet

1 inch = 420 feet

Prepared By: BC Stormwater Management Utility
Date Print:08/21/23

File:C:\project summaries map\Port Royal Island Washout/ Sinkhole Repair- St. Pauls Church Road Map #6_2023-421A



Project: Port Royal Island Washout/
Sinkhole Repair -
Paukie Island Road
Map #7

Activity: Routine/
Preventive
Maintenance

Project #:
2023-421A

Township/SW Dist:
Port Royal Island/6,9

Completed:
May 2023

Legend	
Drainage Type	
	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe

0 510 20 30 40
 Feet

1 inch = 50 feet

Prepared By: BC Stormwater Management Utility

Date Print:08/21/23

File:C:\project summaries map\Port Royal Island Washout/ Sinkhole Repair- Paukie Island Road Map #7_2023-421A



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Lady's Island Valley Drains - Eustis Landing Road, Old Distant Island Road, Carolyn Drive, Sheppard Road, Rue Du Bois and Friendship Lane

Activity: Routine/Preventive Maintenance

Duration: 08/31/2022 - 03/09/2023

Narrative Description of Project:

Project improved 18,289 L.F. of drainage system. Cleaned 18,289 L.F. of valley drains. This project consisted of the following area: Eustis Landing Road (2,400 L.F.), Old Distant Island Road (4,530 L.F.), Carolyn Drive (1,960 L.F.), Sheppard Road (3,870 L.F.), Rue Du Bois (1,854 L.F.) and Friendship Lane (3,675 L.F.)

2023-313 / Lady's Island Valley Drains

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	2.50	\$104.05	\$0.00	\$0.00	\$0.00	\$52.05	\$156.10
CLJS / Cleaned up jobsite	9.00	\$284.26	\$38.13	\$23.46	\$0.00	\$175.47	\$521.32
COVD / Cleaned Out Valley Drains	136.00	\$3,274.53	\$486.08	\$478.02	\$0.00	\$2,173.28	\$6,411.91
HAUL / Hauling	51.00	\$1,542.18	\$972.06	\$431.54	\$0.00	\$978.84	\$3,924.62
ONJV / Onsite Job Visit	28.00	\$1,168.16	\$121.80	\$32.37	\$0.00	\$0.00	\$1,322.33
Grand Total	226.50	\$6,373.17	\$1,618.07	\$965.39	\$0.00	\$3,379.64	\$12,336.27

(No Pictures Available)



Project: Lady's
Island Valley
Drains - Eustis
Landing Road
Map #1

Activity: Routine/
Preventive
Maintenance














Project #:
2023-313

Township/SW Dist:
Lady's Island/7

Completed:
March 2023

Legend

Drainage Type

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

0 60 120 240 360 480
Feet

1 inch = 250 feet

Prepared By: BC Stormwater Management Utility

Date Print: 10/30/23

File: C:\project summaries map\LI Valley Drains- Eustis Landing Road Map #1_2023-313



Project: Lady's
Island Valley
Drains - Old
Distant Island
Road
Map #2

Activity: Routine/
Preventive
Maintenance

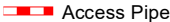



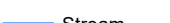


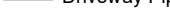
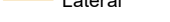
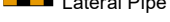



Project #:
2023-313

Township/SW Dist:
Ladys Island/7

Completed:
March 2023

Legend

Drainage Type

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



1 inch = 330 feet

Prepared By: BC Stormwater Management Utility

Date Print: 10/30/23

File: C:\project summaries map\LI Valley Drains- Old Distant Island Road Map#2_2023-313



Project: Lady's
Island Valley
Drains - Carolyn
Drive
Map #3

Activity: Routine/
Preventive
Maintenance

Project #:
2023-313

Township/SW Dist:
Lady's Island/7

Completed:
March 2023

Legend

Drainage Type

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



1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print: 10/30/23

File: C:\project summaries map\LI Valley Drains-Carolyn Drive Map#3_2023-313



Project: Lady's
Island Valley
Drains - Sheppard
Road
Map #4

Activity: Routine/
Preventive
Maintenance














Project #:
2023-313

Township/SW Dist:
Lady's Island/7

Completed:
March 2023

Legend

Drainage Type

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

0 120 240 480 720 960
Feet

1 inch = 500 feet

Prepared By: BC Stormwater Management Utility

Date Print: 10/30/23

File: C:\project summaries map\LI Valley Drains-Sheppard Road Map #4_2023-313



Project: Lady's
Island Valley
Drains - Rue Du
Bois
Map #5

Activity: Routine/
Preventive
Maintenance

Project #:
2023-313

Township/SW Dist:
Lady's Island/7

Completed:
March 2023

Legend

Drainage Type

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

0 50 100 200 300 400
Feet

1 inch = 220 feet

Prepared By: BC Stormwater Management Utility

Date Print: 10/30/23

File: C:\project summaries map\LI Valley Drains- Rue Du Bois Map #5_2023-313



Project: Lady's Island Valley Drains - Friendship Lane Map #6

Activity: Routine/ Preventive Maintenance

Project #: 2023-313

Township/SW Dist: Ladys Island/7

Completed: March 2023

Legend	
Drainage Type	
	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe



1 inch = 440 feet

Prepared By: BC Stormwater Management Utility

Date Print: 10/30/23

File: C:\project summaries map\LI Valley Drains- Friendship Lane Map #6_2023-313



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Sheldon Tree Removal - Lightsey Road and Community Center Road

Activity: Routine/Preventive Maintenance

Duration: 05/03/2023 - 06/13/2023

Narrative Description of Project:

Removed fallen trees from roadside and channel.

2023-415A/Sheldon Tree Removal

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.00	\$41.62	\$0.00	\$0.00	\$0.00	\$20.82	\$62.44
HAUL / Hauling	16.00	\$553.00	\$304.96	\$473.59	\$0.00	\$341.32	\$1,672.87
RMTR / Remove trees-roads	16.00	\$563.11	\$126.03	\$53.45	\$0.00	\$347.60	\$1,090.19
Grand Total	33.00	\$1,157.73	\$430.99	\$527.04	\$0.00	\$709.74	\$2,825.50

Before



During



After





Project: Sheldon
Tree Removal-
Lightsey Road
Map #1

Activity: Routine/
Preventive
Maintenance

Project #:
2023-415A

Township/SW Dist:
Sheldon/5

Completed:
June 2023

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 75 150 300 450 600
Feet

1 inch = 420 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/02/23

File: C:\project summaries map\Sheldon Tree Removal-Lightsey Road Map #1 2023-415A



Project: Sheldon
Tree Removal-
Community Center
Road Map #2

Activity: Routine/
Preventive
Maintenance














Project #:
2023-415A

Township/SW Dist:
Sheldon/5

Completed:
June 2023

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 2040 80 120 160
Feet

1 inch = 130 feet

Prepared By: BC Stormwater Management Utility

Date Print: 08/02/23

File: C:\project summaries map\Sheldon Tree Removal- Community Center Road Map #2_2023-415A



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

October 18th, 2023, at 2:00 p.m.

County Council Chambers, 100 Ribaut Rd, Beaufort, SC

Board Members

Present

James Clark
Marc Feinberg
Ron Buchanan
Dennis Ross
Ed Warner
Patrick Mitchell

Absent

Steve Andrews

Ex-Officio Members

Present

Absent

Nate Farrow
Jeff Netzinger

Beaufort County Staff

Katie Herrera
Dafiney Butler
Pamela Cobb
Taylor Brewer
Harold Green
Bradley Harriott

Visitors

Alice Howard, County Council
Ellen Stirup-Comeau-Clemson
Jacob Terry- ToHHI
Tye Pettay-USCB
Bryan Durrance, City of Beaufort

1. Meeting called to order – Marc Feinberg at 2:01 pm

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

2. Introductions – Completed.

3. Public Comment(s) – None.

4. Special Shout Out – Welcome Taylor Brewer aboard as the Stormwater Manager

5. Reports

Reports attached in agenda

Highlights:

A. Utility Update – Katie Herrera

- ✓ Southern Lowcountry Regional Board (SoLoCo)
 - The city of Charleston are using our manual for guidance on special development cases.

- ✓ Special Presentation
 - Chairman Feinberg had requested the Board members to discuss a potential fall meeting, location TBD. Currently no updates.
- ✓ Annual Financial Report
 - After the discussion with the Municipalities last year, unaudited information is currently due.
 - Town of Hilton Head is currently not involved with the adoption of SoLoCo.
 - Completed the 2023 tax run successfully.

B. Monitoring Update – Daniel Pettay

Highlights:

- ✓ For the MOU, an updated addendum will need to include Mr. Pettay as the new Interim Lab Manager for the Water Quality Lab as of July 1, 2023.
- ✓ USCB is still operating under the previous MOU for Beaufort County.
- ✓ Water Quality Lab is looking to fill the Lab Manger position.

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

Highlights:

- ✓ The discussion regarding the water quality lab, the education contract, and the stormwater utility fee.
- ✓ Making sure the stormwater fee is defensible. The goal is not to increase fees.
- ✓ Budget is sustainable through FY2027.
- ✓ CWI fee to be charged to manage the infrastructure within the unincorporated areas.

D. Regional Coordination – Katie Herrera

- ✓ The survey for the Old Woodlands has been completed.
- ✓ The 55 Garden property and Indian Trail drainage project, this easement has been give to the town of Hilton Head.

E. Stormwater Related Projects – Katie Herrera

Highlights:

- ✓ Continue to meet regularly about projects.
- ✓ Nov 8th is the next meeting for mediation on Factory Creek.
- ✓ Huspah Ct N – Contractors are installing sediment and erosion control BMPs.
- ✓ Bessies Lane – Scheduling a start date to begin work.
- ✓ Church of God – Project is completed with regard to a few repairs.
- ✓ No update on Arthur Horne Park.

F. Professional Contracts Report – Taylor Brewer

Highlights:

- ✓ Brewer Memorial – Closing out with engineer of record.
- ✓ Stormwater engineering consulting services – Woolpert

- b) Scope #11 – Northern Lady’s Island Drainage Study Phase II has been completed.
- c) Scope #12 – Monitoring Station and rain gauge at Okatie River headwaters almost in. Allocated funds - \$58,804.15. Working on a website to showcase water quality stations. Analyzing all the data that has been collected.
- e) Scope #14 – Rivers End Water Quality Improvements have been completed.

G. Municipal Reports

Highlights:

- ✓ Town of Hilton Head (Brian Eber)
 - 2 New Stormwater Inspectors
 - 150 Single Family Pulls
 - 25 General permits
 - Spearheaded two educational programs. Volunteers from the association collected over 425 oysters for restoration and erosion in about 1.5hrs.
- ✓ Town of Bluffton (From Nate Farrow)
 - 319 grant is still on going.
 - Town of Bluffton Heyward Cove study is completed.
 - Calhoun Restaurant area north project is still on going.
- ✓ City of Beaufort (Katie Herrera)
 - Leveraged funds from Federal Program for the Baynard St Drainage Project.

H. MS4 Update – Taylor Brewer

Highlights:

- ✓ Plan Review – steady influx.
- ✓ Stormwater Permits
- ✓ Monthly Inspection summary – staying very busy, team is excited about keeping in compliance.
- ✓ Stormwater Awareness Week was a success.
- ✓ Weather Station Data
- ✓ Education Report- Ellen Sturup Comeau
 - 200 individuals signed up for the Pet Waste Pledge.
 - Pond Conference will be held at USCB.
- ✓ MS4 Statewide General permit –

I. Maintenance Projects Report – Bradley Harriett.

Highlights:

- ✓ Major projects:
 - Lady’s Island Airport
 - Marblehead Road
 - Old Woodland Plantation
- ✓ Minor or routine projects:
 - Pleasant Point Road Channel- Lady’s Island
 - Bluffton Sinkhole Repair- Bluffton

- St. Helena Valley Drains- St. Helena Island
- Southern Magnolia Drive- Lady's Island

J. Liaison Report – Alice Howard

- ✓ New goat in the ponds that are collecting trash.
- ✓ Green Print committee has been meeting to review applications regarding the 1 cent sale tax.
- ✓ Mr. Feinberg wanted to thank Ms. Howard for being a great Liaison.

6. Unfinished Business –

- ✓ Board Consolidation
 - Stormwater Utility
 - Solid Waste and Recycle
 - Keep Beaufort County Beautiful
- ✓ The legal team decided to table the discussion for now. They felt there was no legal reason to do the consolidation. No decision has been made at this time.
- ✓ County Council will make the final decision.

7. New Business-

- ✓ Staff updates- 20 vacancies for stormwater.
- ✓ Alljoy- Marc Feinberg (Photos Presented). Mr. Feinberg went to Alljoy to meet with residents in n early October. He presented photos from his visit to discuss maintenance issues the residents are currently facing with both SCDOT, private, and County ROW.

8. No Public Comment.

- ✓ None.

9. Meeting Adjourned

- ✓ Meeting adjourned at 3:34pm



BEAUFORT COUNTY
 STORMWATER MANAGEMENT UTILITY BOARD
 AGENDA Wednesday, December 12th, 2:00 p.m.
 County Council Chambers
 Beaufort, South Carolina 843.255.2805

1. CALL TO ORDER – 2:00p.m.

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.

- A. Approval of Agenda
- B. Approval of Minutes – October 18th, 2023
([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 – Taylor Brewer ([backup](#))
 - E. Upcoming Professional Contracts Report – Taylor Brewer ([backup](#))
 - F. Regional Coordination – Katie Herrera ([backup](#))
 - G. Municipal Reports – Taylor Brewer ([backup](#))
 - H. MS4 Update – Taylor Brewer ([backup](#))
 - I. Staff Update – Taylor Brewer ([backup](#))
 - J. Maintenance Projects Report – Stephen Carter ([backup](#))
 - K. Liaison Report - Ms. Alice Howard
- 5. UNFINISHED BUSINESS
 - A. Board Consolidation Update - Katie Herrera
- 6. NEW BUSINESS
 - A. 2024 Schedule Discussion - Taylor Brewer
- 7. PUBLIC COMMENT
- 8. NEXT MEETING AGENDA
 - A. Wednesday, February 14th ([backup](#))
- 9. ADJOURNMENT

