



## BEAUFORT COUNTY STORMWATER MANAGEMENT UTILITY BOARD AGENDA

Wednesday, June 19th, 2:00 p.m. County Council Chambers Beaufort, South Carolina 843.255.2805

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

- 1. CALL TO ORDER 2:00p.m.
  - A. Approval of Agenda
  - B. Approval of Minutes April 16th, 2024 (backup)
- 2. INTRODUCTIONS
- 3. PUBLIC COMMENT
- 4. SPECIAL PRESENTATION Crystal Muller
- 5. REPORTS
  - A. Utility Update Katie Herrera (backup)
  - B. Monitoring Update Katie Herrera (backup)
  - C. Stormwater Implementation Committee Report Katie Herrera(backup)
  - D. Regional Coordination Katie Herrera (backup)
  - E. Municipal Reports Taylor Brewer (backup)
  - F. Stormwater Related Projects Taylor Brewer (backup)
  - G. Professional Contracts Report 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
- 6. UNFINISHED BUSINESS
- 7. NEW BUSINESS
- 8. PUBLIC COMMENT
- 9. NEXT MEETING AGENDA

A.Wednesday, August 21st (backup)

10. ADJOURNMENT





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

April 16, 2024, at 2:00 p.m. County Council Chambers, 100 Ribaut Rd, Beaufort, SC

#### **Board Members**

### **Ex-Officio Members**

Present	Absent	Present	Absent
Marc Feinberg	Steve Andrews	Jeff Netzinger	Nate Farrow
James Clark	Patrick Mitchell		Van Willis
Ron Buchanan			Bill Baugher
Dennis Ross			

### **Beaufort County Staff**

Ed Warner

Dafiney Butler Taylor Brewer Tammy Doe Bradley Harriott Katie Herrara Brianna Klinkenberg Stephen Carter

### **Visitors**

Jacob Terry- ToHHI Norris B. City of Beaufort

- 1. Meeting called to order Marc Feinberg at 2:03 pm
  - A. Agenda Approved
  - **B.** Approval of Minutes Approved
- 2. Introductions Completed.
- **3. Public Comment(s)** Resident Mr. Bob and Martha Williams of Alljoy. Laura Wilson representing the Alljoy community regarding drainage issues. Jennifer Taylor of Taylor Rental Homes mobile home park and Forest Field community regarding cleaning out ditches.
- 4. Reports

Reports attached in agenda

Highlights:

- A. Utility Update Katie Herrera
  - ✓ Waiting for the municipal members to provide their financial records for the previous fiscal year.
  - ✓ Working with the on call consult in Woolpert to update the Stormwater Utility fee for tax

- year 2025. Communicating back and forth with the Municipal Partners regarding the utility rate structure which will be implemented this upcoming September.
- ✓ Re-evaluating of assessment fees
- ✓ Having several special presentations with the consultant to walk through the process and wanting to vote on this before next budget cycle.
- ✓ We will have a special presentation from Ms. Courtney Kimmel, she's the research director for Port Royal Sound Foundation. (great research regarding symposium)

## **B.** Monitoring Update – Daniel Pettay

- ✓ Finished the first quarter with water quality sampling. Looking forward to beginning the second quarter soon.
- ✓ Still looking for a Lab Manager.
- ✓ Continuous monitor of the station placed out on Hwy 278. This part of the coordination efforts with the Port Royal Sound Foundation and research of Symposium.
- ✓ Hoping to have a trip to fan sensor which is an indicator for bacteria. SC will be the first state to have implement a trip to fan sensor in a saltwater environment.

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

- ✓ Discussion on the FY2025 planning
- ✓ Discussion on the draft proposals for CWI fees
- ✓ Solo Co Manuel.
- ✓ Town of Bluffton will provided their draft proposal.
- ✓ Southern Lowcountry Design will have a 60 day public notice for open comment to consider feedback.

## **D.** Regional Coordination – Taylor Brewer

- ✓ Legal is coordinating with the town of Hilton Head to get drainage easement incorporated.
- ✓ Old Woodlands, the drainage issue between Indian Trail and Marble Head.
- ✓ Ditch maintenance are being cleared and unclogged.
- ✓ Photos were provided for the application for the South Carolina Rural Infrastructure. Turn around time will be 6-8 weeks.

## E. Stormwater Related Projects – Taylor Brewer

## Highlights:

- ✓ Continue to meet to discuss the drainage easement on a monthly basis.
- ✓ Respond to numerous stage complaints.
- ✓ Working on Shellpoint Community project.
- ✓ Surveying has been completed on three of eight project sections.
- ✓ Consultants have pre-draft all bid documentation. As soon as the report is provided, they can finalize the mapping.
- ✓ A public meeting will be scheduled once the proposals have been provided to contractor.
- ✓ Mid-June an informative meeting will be held to provide the community with updates on projects.
- ✓ No movement on the FEMA funded grant request.
- ✓ No update yet on the Factory Creek Watershed Detention Basin Phase 2
- ✓ Huspah Court North project is still on going.
- ✓ Sea Island Parkway project to the pipe drainage is completed, installed a valve.
- ✓ Tuxedo Park project is still on going.
- ✓ Rivers End Water quality improvements has provided their report and will be analyzed.

# F. Professional Contracts Report – Taylor Brewer *Highlights*:

- ✓ Brewer Memorial Hoping to have a open house in the fall to showcase BMPs.
- ✓ Stormwater engineering consulting services Woolpert
  - 1) Scope #11 Northern Lady's Island Drainage project, an executive summary of the improvements has been requested.
  - 2) Scope #12 Monitoring Station (continuous monitoring)
  - 3) Scope #13 General permit assistance.
  - 4) Scope #14 Rivers End Water Quality improvements report is being analyzed.
  - 5) Scope # 21- Working with DNR the Port Royal Sound to install the next

monitoring station.

- ✓ Scopes on County and Woolpert Radar
  - 1) SWMP Updates- Staff to update stormwater management plan per DHEC.
  - 2) 5 Year Stormwater Utility Fee Assessment-Budget deep dive to look at next TY SWU fees.

# G. Municipal Reports *Highlights:*

✓ Town of Hilton Head

- Wrapping up preliminary budget for fiscal year 2025
- o Hired Mr. Jacob Terry as the Administrator
- o Completing about 150 inspections weekly. Looking to complete about 8,000 inspections this year.
- o Doing a better job managing the erosion and settlement control sites.
- Getting ready for hurricane season

#### ✓ Town of Bluffton

- o MOA with College of Charleston to do a resiliency analysis.
- Comp drainage study for Crooked Cove and Gerard Cove, working in the final stages to get the contract signed with J Brag.
- o Began the Comp drainage study in May River.
- ✓ City of Beaufort
  - No update

## H. MS4 Update – Taylor Brewer

## Highlights:

- ✓ Plan Review steady influx.
- ✓ Stormwater Permits
- ✓ Inspectors monitoring every open construction site in the unincorporated Beaufort County areas.
- ✓ Education Report- Ellen Sturup Comeau
  - o Annual Report due to DHEC.

# I. Maintenance Projects Report – Stephen Carter. *Highlights:*

- ✓ Major projects:
  - Parris Island (Reimbursement)- Port Royal Island
  - McNeal Circle and Crystal Street- Port Royal Island
- ✓ Minor or routine projects:
  - Harrison Island Road-Bluffton
  - Swan Lake Drive-Bluffton
- J. Liaison Report Alice Howard- Unable to attend meeting.
  - ✓ County Council Member Ms. Paula Brown, District #8 was in attendance.

## 5. Unfinished Business –

✓ No updates as of now.

#### 6. New Business-

- ✓ Staff updates- Welcome Mr. Mark Johnson as the new Project Manager for Public Works
- ✓ Proposal of new schedule for SWUB meeting are as follows:
  - June 19, 2024
  - August 21, 2024
  - October 16, 2024

• December 11, 2024

## 7. Public Comment.

- ✓ Residents of Alljoy expressed their cares and concerns regarding ditch and drainage issues.
- ✓ Photos have been provided of different areas that need assistance with drainage and water flow issues.

## 8. Meeting Adjourned

✓ Meeting adjourned at 3:32pm





## BEAUFORT COUNTY STORMWATER UTILITY

## 120 Shanklin Road Beaufort, South Carolina 29906 Voice (843) 255-2805 Facsimile (843) 255-9436



May 2024

## **Utility Update**

- 1. Reminder: Annual Financial report from the Municipalities are due Per the Intergovernmental Agreements for the Utility, each year on September 30<sup>th</sup>, the City and Towns are required to submit a summary of revenue and expenditures for the previous fiscal year.
  - a. Beaufort County 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.
- 2. Staff is working with Woolpert on a scope to review and provide recommendations for an updated Stormwater Utility Fee for TY2025. The 5-year rate structure was adopted for an additional year for TY2024.
- 3. Special Presentations
  - a. June Meeting Woolpert, Tax Run update
  - b. October Meeting Courtney Kimmel, Port Royal Sound Foundation
- 4. Budget concurrence letters have all been received for FY25.

## **Monitoring Update**

1. See attached report.

## Stormwater Implementation Committee (SWIC) Report

1. Staff provided an updated FY25 SWIC memo on 4/23/24. A presentation by Woolpert on the proposed tax run changes was held for all municipal partners on 5/7/24.

## **Regional Coordination**

- 1. Old Woodlands
  - a. Beaufort County legal is following up with Hilton Head staff. The survey has been provided by Davis and Floyd to new Project Manager Mark Johnson for project implementation in FY25.
- 2. Alljoy
  - a. Waiting for County Council representative to confirm a meeting date. County staff coordinating effort to have one contact person for all related Alljoy Projects. Beaufort County was awarded \$187,500 for a drainage study, with a \$62,500 match from Stormwater funds. On the 6/24 agenda for Public Facilities for the Interim County Administrator to be able to sign.

#### **Municipal Reports**

- 1. Town of Hilton Head Island (From Jeff Netzinger, 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)

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- 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 easement acquisitions.
- 2. Complaints Staff continually works numerous drainage related complaints each month.
  - a. Shell Point Community
    - 1. Surveying has been completed on 3 of the 8 (1,3,8) project sections to begin the next round of work within Beaufort County drainage easements. The delineation work should be completed and submitted back to our consultant by April 12. Our consultant is also pre-drafting all bid documentation so as soon as the report is provided, they can finalize the mapping and bid documents. Those documents should be out to bid with Purchasing no later than Friday, May 3<sup>rd</sup>.
      - i. Once the proposals have been provided and a contractor(s) has been selected, we will schedule another public meeting. Tentatively this will be mid-June.
    - 2. As of 4/1/24, the FY25 Appropriations Request form through Senator Lindsey Graham's office is not yet open.
    - 3. As of 4/1/24, there is no movement on the FEMA funded grant request.
- 3. Factory Creek Watershed Regional Detention Basin "Phase II" Staff still working with Attorney on Mediation terms.
- 4. On Call Stormwater infrastructure services J.H. Hiers
  - a) Huspah Court N COMPLETE!
  - b) Bessies Lane Staff attorney hired for this project is still coordinating with the Family attorney.
  - c) Sea Island Parkway Project to pipe drainage ditch completed. WaPro WaStop valve was installed mid-April to prevent tidal backflow.
  - d) Tuxedo Park Meeting with the HOA and County staff was held on 4/15/2024. Pond has been drained and is drying out before dredging begins.
- 5. Arthur Horne Park- "PIFR sent to Watershed Branch for review. Once they review and approve, it will be sent for funding for the Planning phase. Typically it takes 6-12 weeks to hear back on the review, but it may be sooner." -Rachel Whilden, NRCS

#### **Professional Contracts Report**

- 1. CIP FY 18 Grouping Stormwater Projects (Design Ward Edwards \$202,000, Andrews Engineering \$560,490, Construction estimate: \$5,512,900)
  - a) Brewer Memorial Open House planning in the works, will showcase BMPs, Valentina to plan

## BEAUFORT COUNTY STORMWATER UTILITY

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- 2. Stormwater engineering consulting services Woolpert
  - a) TO #17 Plan Review Allocated funds thru FY24 \$11,457.50
  - b) TO #21 New continuous monitoring station install and O&M. Beaufort County will be collaborating with DNR, Port Royal Sound Foundation and other local MS4s to analyze the best location for the next continuous monitoring station installation. Allocated funds \$94,589.73

## Scopes on County and Woolpert Radar:

1. SWMP Update – staff to update stormwater management plan for DHEC.

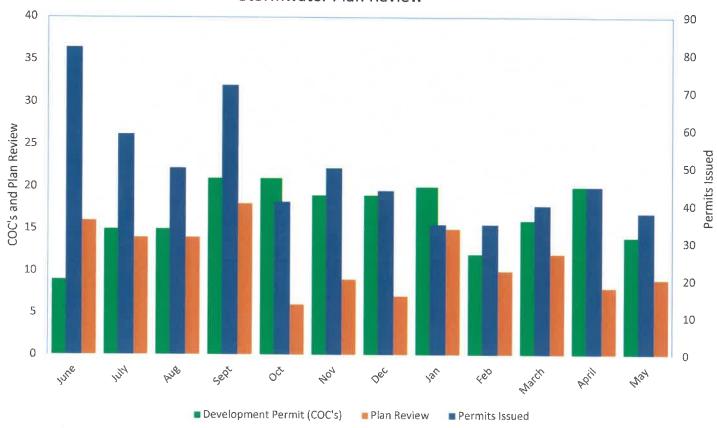
## MS4 Report

- 1. Plan Review <u>See the attached chart</u> for Beaufort County Stormwater staff plan review workload for the past 12 months.
- 2. Stormwater Permits <u>See the attached chart</u> for Beaufort County Stormwater permits issued for the past 12 months.
- 3. Monthly Inspection summary <u>See the attached chart</u> for Beaufort County Stormwater staff inspection, complaint, IDDE, and violations summary for the past 12 months.
- 4. Public Education <u>See attached report.</u>
- 5. MS4 Statewide General permit EPA has provided comments to SCDOT's MS4 permit.

#### **Staff Update**

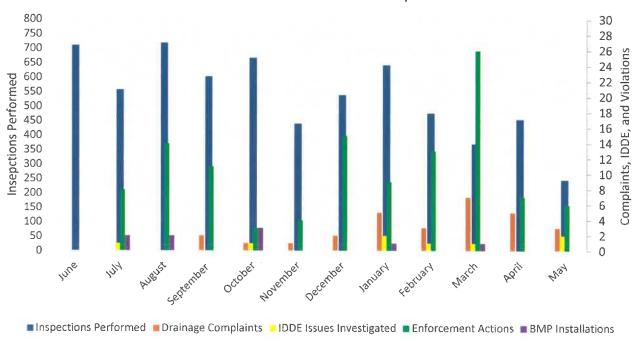
1. Environmental Education Coordinator, Valentina Palacio, started on 6/3/24. She will be learning both the Stormwater and Solid Waste programs to begin implementing additional educational opportunities for the Public Works Department.

MS4 Minimum Control Measure #5 Stormwater Plan Review



TYPE	fune	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	Last 12 Months
Development Permit (COC's)	9	15	15	21	21	19	19	20	12	16	20	14	201
Plan Review	16	14	14	18	6	9	7	15	10	12	8	9	138
Permits Issued	82	59	50	72	41	50	44	35	35	40	45	38	591

## MS4 Minimum Control Measure #4 Sediment & Erosion Control Inspections



TYPE	June	July	August	September	October	November	December	January	February	March	April	May	Last 12 Months
Inspections Performed	712	559	720	605	669	442	541	645	478	372	457	248	6448
Drainage Complaints	0	0	0	2	1	1	2	5	3	7	5	3	29
IDDE Issues Investigated	0	1	0	0	1	0	0	2	1	1	0	2	8
Enforcement Actions	0	8	14	11	3	4	15	9	13	26	7	6	116
BMP Installations	0	2	2	0	3	0	0	٠ 1	0	1	0	0	9

## **Lowcountry Stormwater Partners Monthly Report**

## January 2024

Program	Program Year	Progress	Date Completed	Impact
Promote the dog poop pledge during at least three (3) festivals.	2024	Complete	4/20/24 4/24/24 4/28/24 5/4/24	100
Ensure there are a minimum of three (3) dog poop pledge sign-up areas outside of festivals, such as environmental education offices, public parks, animal shelters, and/or vet offices.	2024	In progress One in the Beaufort Clemson Extension Office One in Soil and Water Conservation District		50
Distribute the dog poop infographic and dog poop bags to partners and private citizens upon request and at applicable events with the understanding that attendees will receive these items after signing the dog poop pledge.	2024	Ongoing		20
Print a minimum of one dog poop or dog poop pledge sign and distribute to partners who wish to receive them annually. Print additional dog poop or dog poop pledge signage for partner use upon request.	2024	In progress Awaiting delivery		
Should timing and multiple schedules allow, film and broadcast a dog poop pledge promo video for the County Channel and/or Gas Station TV.	2024			
Assess the possibility of local digital billboards with messaging stressing the connection between dog poop and bacterial pollution.	2024	In progress		
Provide a minimum of three (3) Enviroscape demonstrations.	2024	Complete	3/25/24 4/25/24 4/28/24 4/30/24 5/29/24	102
Provide the "Be Septic Safe: A User's Guide to Taking Care of Business," the Be Septic Safe factsheets, and the Be Septic Safe website sticker/magnet (which includes automatic septic maintenance reminder emails) upon request and at all Be Septic Safe workshops.	2024	Complete		
Distribute Be Septic Safe materials at one (1) festival.	2024	In progress Will be present at Shrimp Fest, Keep Broad Creek Beautiful Festival, and OktoPRFest		
Participate in US EPA's Be Septic Smart Week annually through actions such as social media campaigns, newspaper articles, Be Septic Safe material giveaways, and/or webinars/workshops.	2024	In progress Occurs in September		
Host a Be Septic Safe workshop or webinar.	2024	In progress Scheduling webinar for June		

Cuesto e De Coutie Cafa made and District to the	2024			
Create a Be Septic Safe rack card. Distribute it at subsequent Be Septic Safe workshops and upon request.	2024			
Create a Be Septic Safe door hanger. Distribute it at subsequent Be Septic Safe workshops to County/Municipal Inspectors who will give them to the target audience, to willing septic system contractors who will give them to the target audience, and upon request.	2024			
Continue to provide and promote Clemson's CEPSCI, CSPR, and Post-Construction BMP Inspector courses.	2024	Complete		
Create an LSP-specific version of the Clemson Extension Lot Erosion rack card and SC DOT booklet and distribute them at subsequent Silt Fence and Beyond workshops, at applicable events, to Municipal/County stormwater inspectors who will give them to the target audience, and upon request.	2024	In progress		
Provide the LSP River Buffer resource packet, Clemson HGIC shoreline factsheets, Life Along the Water's Edge book, and aquatic plant lists to the target audience during site visits, at applicable events and workshops, and upon request.	2024	Ongoing		
Create native plant seed mix packets and a Vegetated Buffer rack card for distribution to the target audience and partners upon request and at appropriate events.	2024	In progress Evaluating available native seed mixes		
Continue to provide and promote Clemson Extension's Master Pond Manager Course, Salt Marsh Short Course, Living Shorelines Program, and the Carolina Yards program.	2024	Complete	5/31/24	
Print a minimum of one vegetated buffer sign and distribute it to partners who wish to receive it annually. Print additional vegetative buffer signs for partner use upon request.	2024	In progress Awaiting delivery		
Provide the BMP rack cards, BMP factsheets, Homeowners Guide to Rainwater Harvesting, the Guide to Rain Garden, and plant lists at applicable events such as the SCASM showcase and Hilton Head Homebuilder's Show and to professional organizations such as the Chamber of Commerce, Hilton Head Homebuilders Association, Southern Homebuilders, the Economic Development Board to distribute to the target audience. Also, provide these materials upon partners' and target audience's request.	2024			

Continue to provide and promote Clemson Extension's Master Pond Manager, Master Rain Gardener, Post-Construction BMP Inspector, Living Shoreline, and Salt Marsh Short Course.	2024	Complete Present in the February Changing Tides Newsletter		
Print a minimum of one LID sign and distribute it to partners who wish to receive it annually. Print additional LID signs for partner use upon request.	2024	In progress Awaiting delivery		
Provide the BMP rack cards, BMP factsheets, Homeowners Guide to Rainwater Harvesting, the Guide to Rain Garden, and plant lists to the target audience during site visits, at applicable events and workshops, and upon request.	2024	Ongoing		
Host a local Cultivating a Carolina Yards Workshop.	2024	In progress Scheduled for 6/27/24	5/22/24	25
Host a Rain Barrel Sale.	2024	In progress Scheduled for 6/12/24-7/13/24		
Host quarterly LSP Consortium meetings.	2024	In progress Scheduled for 9/17/24, 11/19/24	2/3/24 5/14/24	11
Publish the Changing Tides.	2024	In progress Scheduled for 6/11/24	2/8/24 3/15/24 5/16/24	165
Publish in The Island Packet.	2024	In progress Scheduled for 6/9/24	2/11/24 4/7/24	
Publish the LSP Annual Report.	2024	Complete	3/15/24	
Host four Adopt-A-Stream training workshops.	n/a	In-progress	2/10/24	9
Host a pond workshop.	n/a	Complete	1/29/24	200
Host a buffer workshop.	2025	Complete		65
Host a rain garden maintenance workshop.	2025	Complete	1/23/24	9



Date: June 1, 2024

To: Stormwater Management Utility Board

From: Stephen Carter, Stormwater Infrastructure Superintendent

Re: Maintenance Project Report

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

## **Major Projects:**

- Bradley Circle Bluffton (4): This project improved 919 linear feet of drainage system. The scope of work included cleaning out 738 linear feet of roadside ditch, installing 85 linear feet of roadside pipe and (2) catch basins. Jetting (1) crossline pipe, (4) driveway pipes and 96 linear feet of lateral pipe. Installed sod and hydroseeded for erosion control. The total cost was \$43,791.32.
- Luther Warren Drive St. Helena Island (8): This project improved 370 linear feet of drainage system. The scope of work included cleaning out 350 linear feet of channel, replacing 20 linear feet of channel pipe and (1) flap gate, and installing (1) bleeder pipe. The total cost was \$15,726.19.
- View Point Circle St. Helena Island (8): This project improved 6,085 linear feet of drainage system. The scope of work included cleaning out 142 linear feet of channel, 1,301 linear feet of roadside ditch and 4,632 of valley drain. Also included are jetting (12) driveway pipes, (1) access pipe, (1) crossline pipe and 10 linear feet of channel pipe. The total cost was \$17,149.77.
- **792 Sea Island Parkway St. Helena Island (8):** This project improved 368 linear feet of drainage system. The scope of work included installing 368 linear feet of channel pipe and (1) flap gate and installing rip rap for erosion control. The total cost was **\$227,959.73.**

## **Minor or Routine Projects:**

- Halifax Drive Channel—St. Helena Island (8): This project improved 3,396 linear feet of drainage system. The scope of work included cleaning out 3,396 linear feet of channel. The total cost was \$11,875.04.
- Roseida Road Channel Port Royal Island (6): This project improved 579 linear feet of drainage system. The scope of work included cleaning out 579 of channel and removing a fallen tree from roadside ditch. The total cost was \$4,259.63.



## Beaufort County Public Works Stormwater Infrastructure

**Project Summary** 

Project Summary: Bradley Circle

Activity: Routine/Preventive Maintenance

**Duration:** 01/19/2024 - 05/13/2024

## **Narrative Description of Project:**

Project improved 919 L.F. of drainage system. Cleaned out 738 L.F. of roadside ditch. Installed 85 L.F. of roadside pipe and (2) catch basins. Jetted (1) crossline pipe, (4) driveway pipes and 96 L.F. of lateral pipe. Installed sod and hydroseeded for erosion control.

2024-540 / Bradley Circle	Labor	Overtime	Labor	<b>Equipment</b>	Material	Contractor	Total
	Hours	Hours	Cost	Cost	Cost	Cost	Cost
AUDIT / Audit Project	5.00	0.00	\$110.95	\$0.00	\$0.00	\$0.00	\$110.95
CBINS / Catch basin - installed	24.00	3.45	\$714.99	\$293.44	\$341.67	\$0.00	\$1,350.11
CLJS / Cleaned up jobsite	32.00	0.00	\$805.68	\$584.82	\$20.91	\$0.00	\$1,411.41
CLPJT / Crossline Pipe - Jetted	8.00	0.00	\$199.12	\$622.32	\$15.00	\$0.00	\$836.44
DPJT / Driveway Pipe - Jetted	8.00	0.00	\$199.12	\$622.32	\$6.00	\$0.00	\$827.44
HAUL / Hauling	236.00	0.00	\$5,025.84	\$13,701.54	\$1,724.25	\$0.00	\$20,451.63
HYDR / Hydroseeding	24.00	0.00	\$395.36	\$264.87	\$176.46	\$0.00	\$836.69
ONJV / Onsite Job Visit	124.00	0.00	\$4,540.20	\$980.56	\$0.00	\$0.00	\$5,520.76
PP / Project Preparation	16.00	0.00	\$370.64	\$158.57	\$0.00	\$0.00	\$529.21
PRRECON / Project Reconnaissance	8.00	0.00	\$352.40	\$158.96	\$0.00	\$0.00	\$511.36
PUS / Picking Up Supplies	32.00	0.00	\$570.56	\$102.16	\$0.00	\$0.00	\$672.72

Continued on the next page

2024-540 / Bradley Circle cont'd	Labor	Overtime	Labor	<b>Equipment</b>	Material	Contractor	Total
	Hours	Hours	Cost	Cost	Cost	Cost	Cost
RSDCL / Roadside Ditch - Cleanout	48.00	0.00	\$1,707.52	\$550.34	\$0.00	\$0.00	\$2,257.86
RSPI / Roadside Pipe - Installed	64.00	0.00	\$1,431.36	\$1,033.66	\$1,461.62	\$0.00	\$3,926.64
SD / Soft Digging	8.00	0.00	\$199.12	\$622.32	\$0.00	\$0.00	\$821.44
SI / Sod - Installation	104.00	0.00	\$1,919.04	\$759.76	\$979.88	\$0.00	\$3,658.68
UTLOC / Utility locates	2.00	0.00	\$67.99	\$0.00	\$0.00	\$0.00	\$67.99
Grand Total	743.00	3.45	\$18,609.89	\$20,455.64	\$4,725.79	\$0.00	\$43,791.32

(Before)

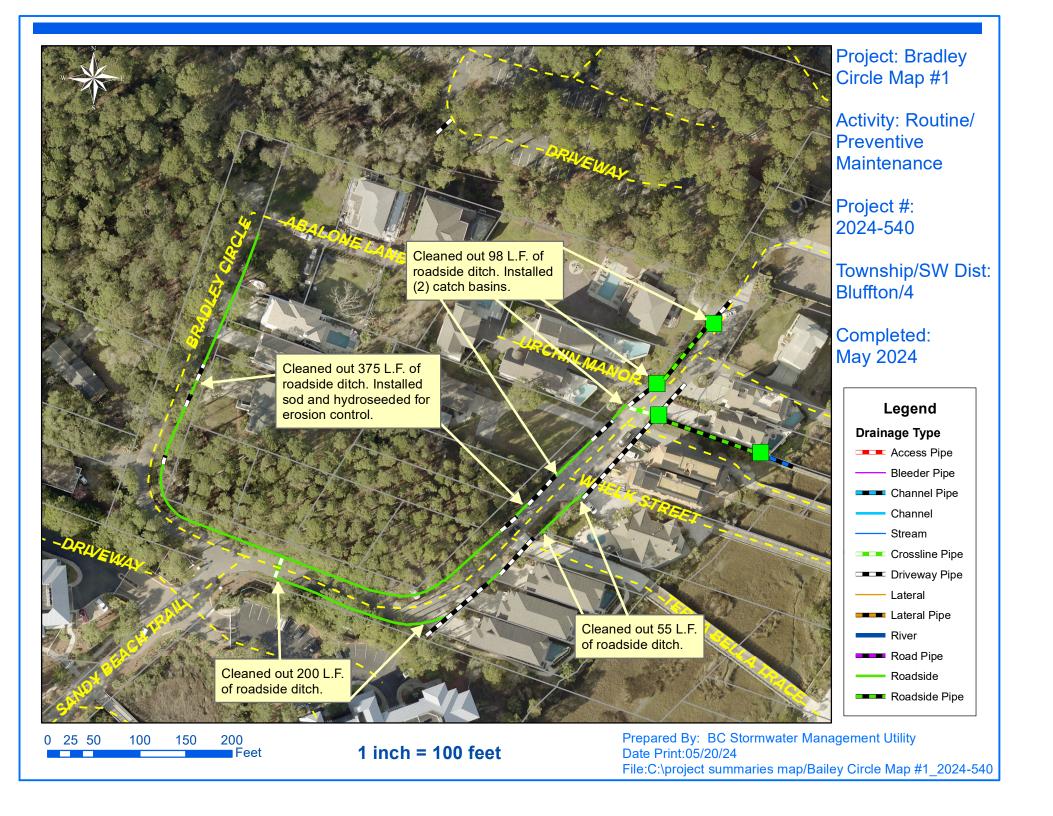
(During)

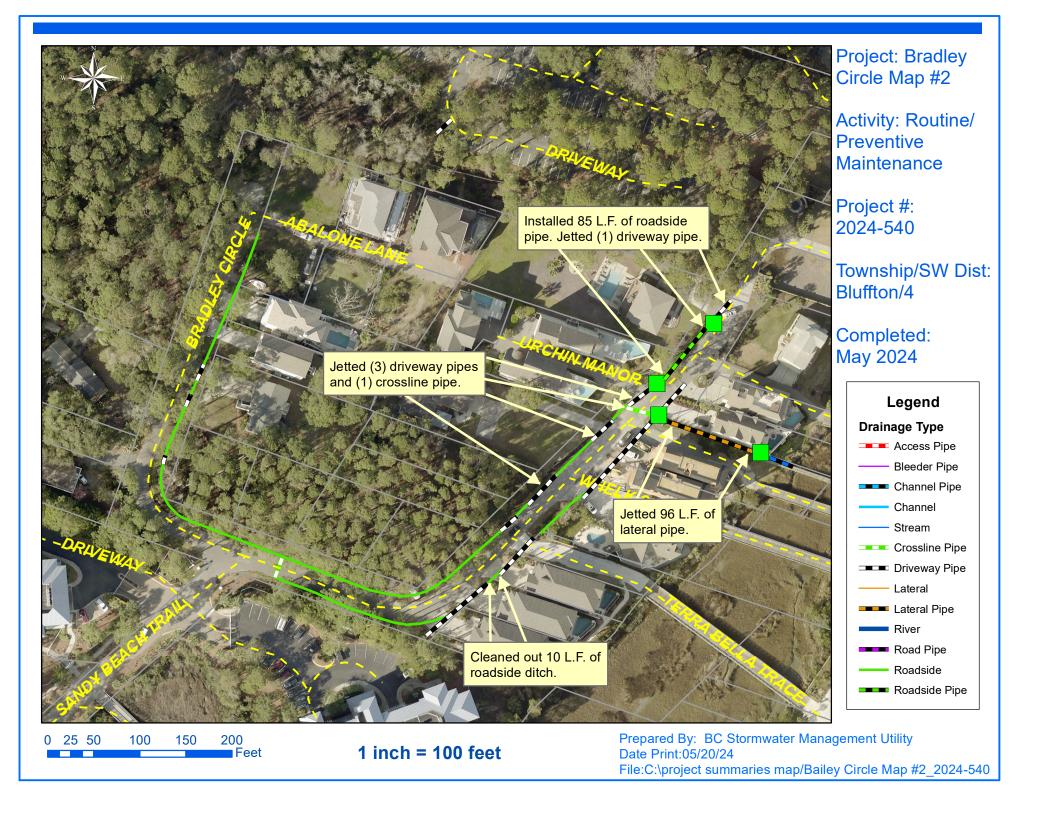
(After)













**Project Summary:** Luther Warren Drive **Activity:** Routine/Preventive Maintenance

**Duration:** 04/01/2024 - 05/09/2024

## **Narrative Description of Project:**

Project improved 370 L.F. of drainage system. Cleaned out 350 L.F of channel. Replaced 20 L.F. of channel pipe and (1) flap gate. Installed (1) bleeder pipe.

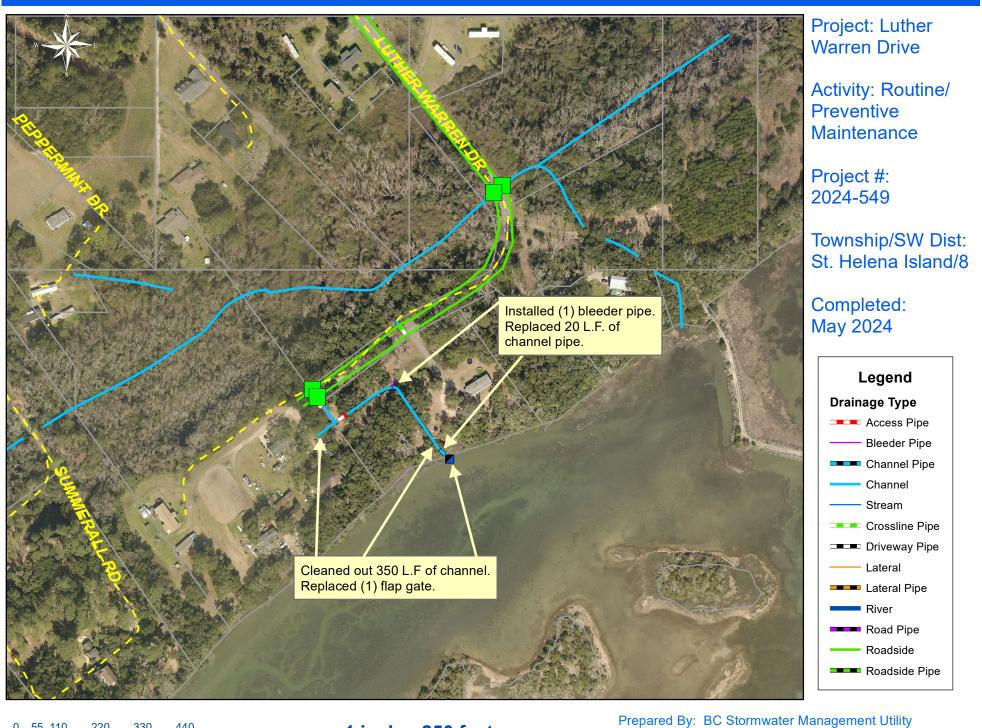
2024-549 / Luther Warren Drive	Labor	Labor	<b>Equipment</b>	Material	Contractor	Total
	Hours	Cost	Cost	Cost	Cost	Cost
AUDIT / Audit Project	3.00	\$66.57	\$0.00	\$0.00	\$0.00	\$66.57
BPINST / Bleeder pipe - Installed	24.00	\$490.40	\$175.55	\$287.20	\$0.00	\$953.15
CCO / Channel - cleaned out	32.00	\$629.72	\$284.51	\$0.00	\$0.00	\$914.23
FLAPGATR / Flap Gate - Replaced	64.00	\$1,332.64	\$546.43	\$4,925.41	\$0.00	\$6,804.48
HAUL / Hauling	56.00	\$1,234.72	\$4,401.04	\$0.00	\$0.00	\$5,635.76
ONJV / Onsite Job Visit	32.00	\$1,005.04	\$346.96	\$0.00	\$0.00	\$1,352.00
Grand Total	211.00	\$4,759.09	\$5,754.49	\$5,212.61	\$0.00	\$15,726.19

(Before) (During) (After)









1 inch = 250 feet

Prepared By: BC Stormwater Management Utility

Date Print:05/29/24

File:C:\project summaries map/Luther Warren Drive 2024-549

**Project Summary:** View Point Circle

Activity: Routine/Preventive Maintenance

**Duration:** 02/09/2024 - 05/02/2024

## **Narrative Description of Project:**

Project improved 6,085 L.F. of drainage system. Cleaned out 142 L.F of channel, 1,301 L.F. of roadside ditch and 4,632 of valley drain. Jetted (12) driveway pipes, (1) access pipe, (1) crossline pipe and 10 L.F. of channel pipe.

2024-542 / View Point Circle	Labor	Labor	Equipment	Material	Contractor	Total
	Hours	Cost	Cost	Cost	Cost	Cost
APJT / Access pipe - jetted	8.00	\$199.12	\$622.32	\$3.00	\$0.00	\$824.44
AUDIT / Audit Project	3.00	\$66.57	\$0.00	\$0.00	\$0.00	\$66.57
CCO / Channel - cleaned out	16.00	\$370.64	\$319.58	\$0.00	\$0.00	\$690.22
COVD / Cleaned Out Valley Drains	8.00	\$199.12	\$294.08	\$0.00	\$0.00	\$493.20
CPJ / Channel Pipe - Jetted	8.00	\$199.12	\$622.32	\$10.00	\$0.00	\$831.44
DPJT / Driveway Pipe - Jetted	16.00	\$321.12	\$622.32	\$15.00	\$0.00	\$958.44
HAUL / Hauling	52.00	\$1,634.96	\$4,086.68	\$0.00	\$0.00	\$5,721.64
HEQ / Haul equipment	8.00	\$148.00	\$628.72	\$0.00	\$0.00	\$776.72
ONJV / Onsite Job Visit	12.00	\$551.20	\$141.00	\$0.00	\$0.00	\$692.20
RSDCL / Roadside Ditch - Cleanout	104.00	\$3,320.57	\$1,772.08	\$0.00	\$0.00	\$5,092.65
STAGING / Staging Materials/Equipment	24.00	\$706.72	\$204.24	\$0.00	\$0.00	\$910.96
UTLOC / Utility locates	3.00	\$91.29	\$0.00	\$0.00	\$0.00	\$91.29
Grand Total	262.00	\$7,808.43	\$9,313.34	\$28.00	\$0.00	\$17,149.77

(Before) (During) (After)



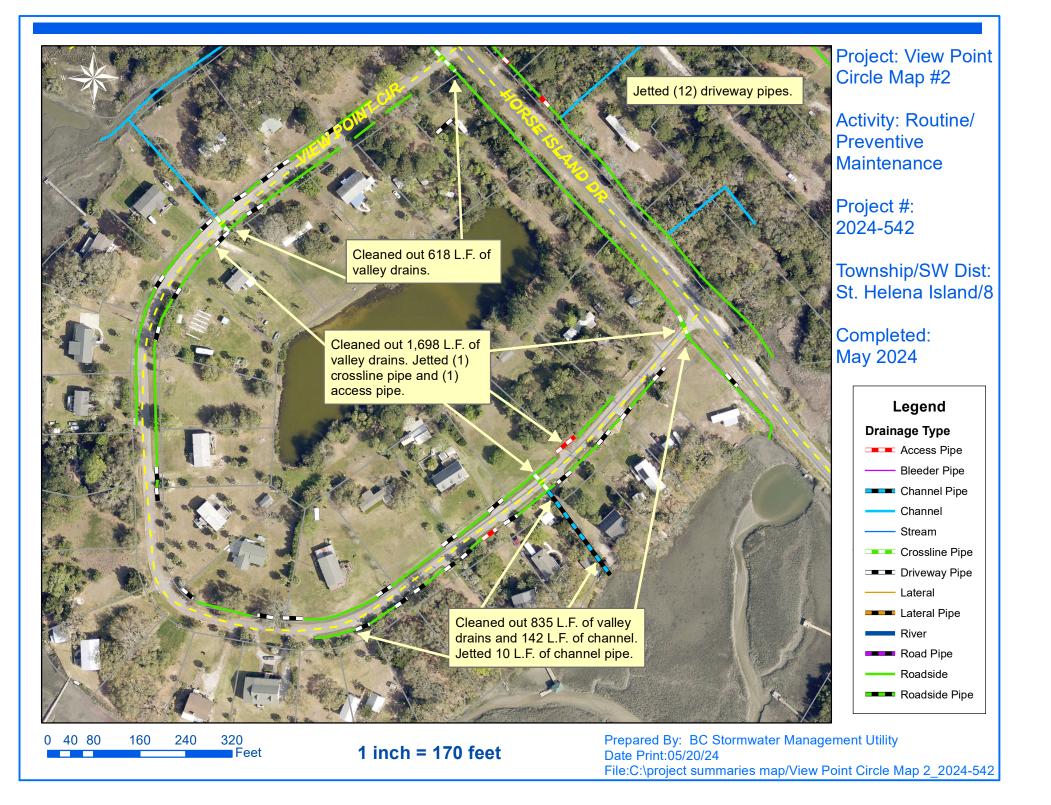






1 inch = 210 feet

Date Print:05/20/24 File:C:\project summaries map/View Point Circle\_2024-542



**Project Summary:** 792 Sea Island Parkway

**Activity:** Routine/Preventive Maintenance

**Duration:** 03/04/2024 - 05/06/2024

## **Narrative Description of Project:**

Project improved 368 L.F. of drainage system. Installed 368 L.F. of channel pipe and (1) flap gate. Installed rip rap for erosion control.

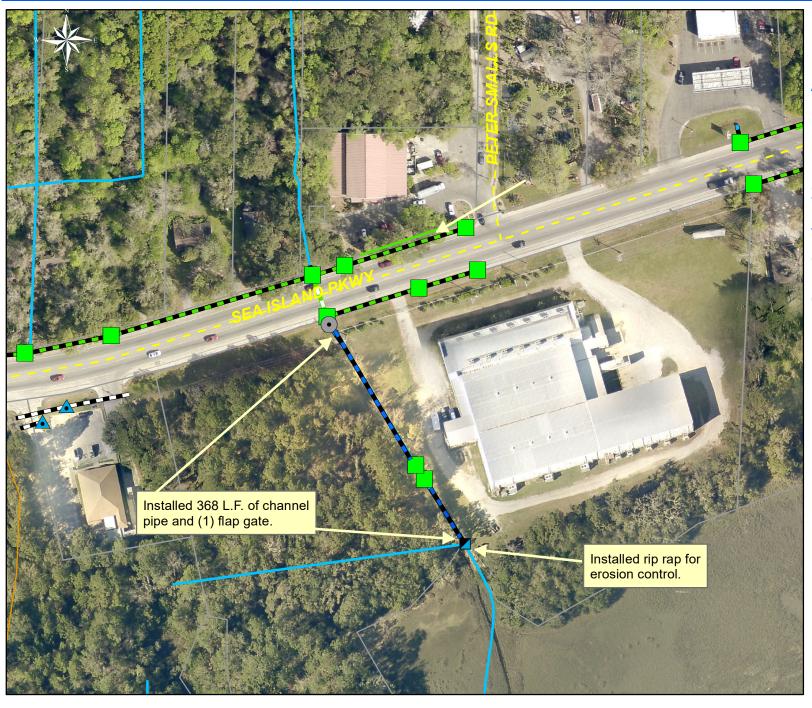
2024-003 / 792 Sea Island Parkway	Labor	Labor	Equipment	Material	Contractor	Total
	Hours	Cost	Cost	Cost	Cost	Cost
AUDIT / Audit Project	5.00	\$110.95	\$0.00	\$0.00	\$0.00	\$110.95
CLJS / Cleaned up jobsite	8.00	\$217.52	\$2,439.60	\$0.00	\$0.00	\$2,657.12
FLAPGATE / Flapgate - Installed	24.00	\$485.28	\$639.32	\$23,046.53	\$0.00	\$24,171.13
HAUL / Hauling	75.00	\$1,650.45	\$5,815.66	\$4,055.93	\$0.00	\$11,522.04
NONPRO / Non-Professional Services	0.00	\$0.00	\$0.00	\$0.00	\$147,595.00	\$147,595.00
ONJV / Onsite Job Visit	20.00	\$650.00	\$235.00	\$0.00	\$0.00	\$885.00
PURCH / Purchase supplies	0.00	\$0.00	\$0.00	\$0.00	\$37,908.71	\$37,908.71
RRI / Rip Rap - Installed	9.00	\$197.79	\$50.43	\$0.00	\$0.00	\$248.22
SPD / Spreading Dirt	7.00	\$190.33	\$810.23	\$0.00	\$0.00	\$1,000.56
STAGING / Staging Materials/Equipment	16.00	\$350.16	\$167.52	\$0.00	\$0.00	\$517.68
STBY / Stand By	16.00	\$333.00	\$1,010.32	\$0.00	\$0.00	\$1,343.32
Grand Total	180.00	\$4,185.48	\$11,168.08	\$27,102.46	\$185,503.71	\$227,959.73

(Before) (During) (After)

(No Picture Available)







1 inch = 130 feet

100

150

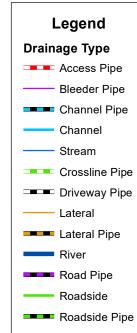
Project: 792 Sea Island Parkway

Activity: Routine/ Preventive Maintenance

Project #: 2024-003

Township/SW Dist: St. Helena Island/8

Completed: May 2024





Project Summary: Halifax Drive Channel Activity: Routine/Preventive Maintenance

**Duration:** 04/01/2024 - 05/03/2024

## **Narrative Description of Project:**

Project improved 3,396 L.F. of drainage system. Cleaned out 3,396 L.F of channel.

2024-564 / Halifax Drive Channel	Labor	Labor	<b>Equipment</b>	Material	Contractor	Total
	Hours	Cost	Cost	Cost	Cost	Cost
AUDIT / Audit Project	2.00	\$44.38	\$0.00	\$0.00	\$0.00	\$44.38
CCO / Channel - cleaned out	95.00	\$2,097.29	\$5,462.61	\$0.00	\$0.00	\$7,559.90
HAUL / Hauling	36.00	\$733.52	\$2,829.24	\$0.00	\$0.00	\$3,562.76
ONJV / Onsite Job Visit	16.00	\$520.00	\$188.00	\$0.00	\$0.00	\$708.00
Grand Total	149.00	\$3,395.19	\$8,479.85	\$0.00	\$0.00	\$11,875.04

(Before) (During) (After)









Feet

Prepared By: BC Stormwater Management Utility Date Print:05/17/24

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Legend

**Drainage Type** 

Access Pipe

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



Project Summary: Roseida Road Channel Activity: Routine/Preventive Maintenance

**Duration:** 01/24/2024 - 02/22/2024

## **Narrative Description of Project:**

Project improved 579 L.F. of drainage system. Cleaned out 579 L.F of channel and removed a fallen tree from roadside ditch.

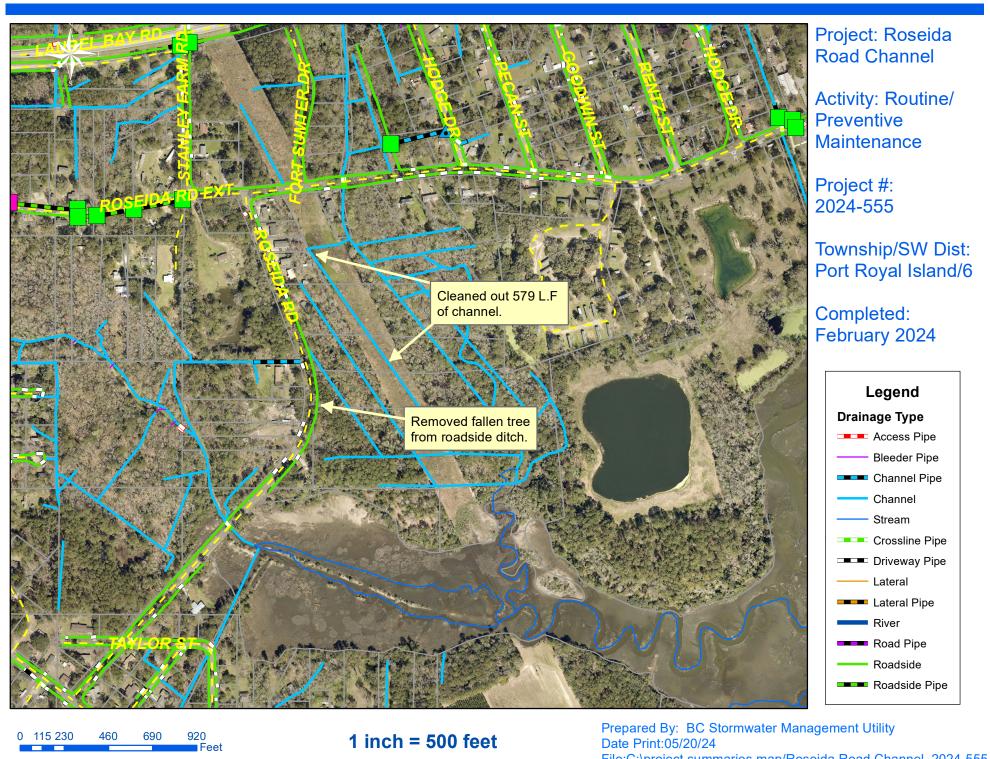
2024-555 / Roseida Road Channel	Labor	Labor	Equipment	Material	Contractor	Total
	Hours	Cost	Cost	Cost	Cost	Cost
AUDIT / Audit Project	1.50	\$33.29	\$0.00	\$0.00	\$0.00	\$33.29
CCO / Channel - cleaned out	32.00	\$892.24	\$448.18	\$0.00	\$0.00	\$1,340.42
HAUL / Hauling	12.00	\$323.32	\$943.08	\$0.00	\$0.00	\$1,266.40
ONJV / Onsite Job Visit	8.00	\$352.40	\$34.80	\$0.00	\$0.00	\$387.20
RMTRD / Remove trees - Ditch	12.00	\$424.72	\$685.60	\$0.00	\$0.00	\$1,110.32
TRAIN / Training	8.00	\$122.00	\$0.00	\$0.00	\$0.00	\$122.00
Grand Total	73.50	\$2,147.97	\$2,111.66	\$0.00	\$0.00	\$4,259.63

(Before) (During) (After)









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#### **TOWN COUNCIL**

#### **STAFF REPORT**

## **Projects and Watershed Resilience Department**



	MEETING DATE:	June 11, 2024
	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-Simmonsville Neighborhood Sidewalks and Lighting
  - Construction of the Phase 6B sidewalks, drainage and lighting is complete.
  - Next Steps
    - Complete final As- built survey and closeout with SCDOT.

#### 2. New River Linear Trail

- Received \$26,000 PARD grant award and \$2 million in SC 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 installed and tested.
- Dominion utility easement approved at 10/10/23 Town Council.
- Bathroom 100% plans approved. Bathroom fabrication in progress.
- Groundbreaking completed 5/30/24.

#### Next Steps

- o Continue engineering design and permitting for Phases 1 and 2.
- Negotiations are ongoing with Central Electric and Santee Cooper for cost sharing terms for trail bridges maintenance.
- o Install bathroom, entry gate and security cameras this Spring.
- o Continue coordination of boardwalk connection for Four Seasons

## **SEWER & STORMWATER**

- Buck Island-Simmonsville Sewer (Phases 5A-D)
  - Mainlines have been installed and laterals construction underway.
  - Next Steps
    - Inspection, punch list and approval by BJWSA.

June 11, 2024 Page 2

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

- Jordan Construction of Hilton Head, Inc. continues construction.
- Permit to operate issued from BJWSA.
- Road crossing repaving is complete.

### • Next Steps

Finalize installation of grinder pumps and 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

- o Incorporate BJWSA comments into final construction documents.
- Construction implementation is pending permit and easement approvals.

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

- Initial site investigations are complete for 8 of the 11 participating project sites.
- Palmetto Pointe Towns, Lowcountry Community Church and Apartment One declined to participate in the Program at this time.
- Geotechnical investigations and reports for each of the remaining 8 original have been completed. Began work to finalize Draft on Section 1 of 3, Fee-in-Lieu and Enterprise Fund establishment/administration. Initial Property Owner contacts for the selected 15 Additional Sites within municipal limits have been made.

### • Next Steps

 Preliminary Design of each of the 8 original sites based on geotechnical data and field walks has been initiated.

#### 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 FY24.

## 2. Squire Pope Carriage House Preservation

- The contract with Huss Inc. was executed and construction began on 1/16/23.
- All exterior siding, windows and doors have been refinished and reinstalled. New roofing has been installed. Exterior painting is ongoing. Handicap ramp and handrails are installed. Exterior shutters are complete. Interior trim has been reinstalled. Floor refinishing has begun. Casework is installed. Interior painting is ongoing.

#### Next Steps

- Obtain FY25 budget approval for Welcome Center and office upfit.
- Landscape design is complete and planned to be installed summer 2024.

June 11, 2024 Page 3

#### 3. Bridge Street Streetscape

- Phase 1 completed.
- Initial Stakeholder meeting with Montessori and Hargray completed.

#### Next Steps

- o Continue Phase 2 engineering design for SCDOT permitting.
- o Continue Phase 2 stakeholder meetings.
- Close out Phase 1 with SCDOT.
- Continue Phase 2 planning and design for underground power.

### 4. Boundary Street Streetscape

- Engineering Design is 70% complete and submitted to Watershed for stormwater initial review.
- Met with Dominion Energy on 5/17/23. Completion of underground conversion plans from Dominion Energy is subject to the Town obtaining easements for May River Transmission line and proposed switch gear locations.

## • Next Steps

- Continue with engineering design, underground power coordination, and permitting.
- Prepare easement exhibits and begin appraisals in FY25.
- o Construction is to begin in 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

- Continue 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 FY25.
- Prepare easement acquisition plats for Phase 1 in FY25 and begin easement acquisition.
- Phased construction is planned to begin in FY26 pending budget approval and acquisition of all 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 on 1/2023.
- Contract with ICE approved at 9/12/23 Town Council meeting.

#### Next Steps

- o Review Phase 2 final design plans.
- o Follow up with property owners for easement acquisitions.
- Finalize Phase 3 analysis locations list.

June 11, 2024 Page 4

#### 7. Comprehensive Drainage Plan Improvements

• Heyward Cove Work Completed. MSA Task Authorization for individual Asset Owner reports identifying work, results and needed work finalized and pending approval.

- Consultant proposal for work on Crooked and Guerrard Coves finalized and MSA Task Authorization approved at the 4/9/2024 Town Council meeting.
- Public Notice concerning proposed consultant field work to identify and assess condition of stormwater assets in Crooked Cove and Guerrard Cove issued April 26, 2024.
- Consultant field work to identify and assess condition of stormwater assets in Crooked Cove and Guerrard Cove completed May 12, 2024.

#### Next Steps

- o Compile field data from stormwater inventory and condition assessment.
- o Begin development of 2D Hydrologic/Hydraulic model.

## 8. Pritchard Street Drainage Improvements

 Project scope has increased to include streetscape elements, pedestrian connectivity, street lighting and traffic calming evaluation. Growth Management and Stormwater Pre-Application meeting held 10/17/2023. Updated 95% design received from consultant, design review complete, and comments discussed with consultant. Permit applications have been submitted. DRC Public Project was held 3/28/2024.

#### Next Steps

- Coordinate approval for proposed improvements with Beaufort County School District and Beaufort County on Pool operation impacts.
- Consultant addressing design and permit review comments for 100% design submittal.
- Follow-up/complete permitting submissions and bid document formulation.
- Identification of easement and street lighting needs.

#### PARK DEVELOPMENT

#### 1. Oyster Factory Park

- Civil construction and landscape of parking area is complete.
- Construction of the event area is substantially complete. Punch list items to continue through June 2024.

#### Next Steps

 Prepare restroom expansion plans, pavilion repairs, and alternate kayak launch concept in FY24.

#### 2. Oscar Frazier Park

- Rotary Center hardscape improvements complete.
- Executed contracts for design/build of the splash pad and associated landscaping.

#### Next Steps

Begin construction of Splash Pad in Summer 2024.

#### 3. New Riverside Barn/Park

- Phase 2 Design is complete.
- JS Construction completed phase 1 site construction in November 2023.
- JS completed additional parking area phase two.
- JS installed hand holes at all future light locations for power and IT infrastructure.
- The contract has been executed with Nix Construction for Construction Manager at Risk Services with a GMP for Phase 2 (barn, restroom, playground, and common areas).
- Nix poured pavilion and future barn slabs.
- Nix has procured all future playground equipment.
- Playground drainage is almost complete.
- Sidewalks at playground area are almost complete.
- Restrooms are framed with roof sheathing installed.
- Rough-in plumbing and electrical at restrooms have started.
- Trellis structures have started at restroom areas.
- Well for future irrigation has been installed.

#### Next Steps

- o JS to continue paver turn around areas.
- o Nix to start brickwork, siding, and roofing installation at restrooms.
- Nix to start brickwork and construction at both playground pavilions.

#### 4. New Riverside Village

- Partial order of site furnishings received.
- Trellis swing construction and installation of site furniture contract awarded.
- Lighting contract approved at 4/9/24 Town Council.
- Design plan approved by POA/Developer.

#### Next Steps

- Installation of trellis swings, dog stations and trash cans by 6/30/24.
- Continue design of wayfinding signage plan.
- Review horizontal directional boring solicitation submissions in preparation for light pole installation.

#### 5. Miscellaneous Park Improvements

• Shade sail installation was completed at Buckwalter Place Park playground.

#### Next Steps

 Continue design of landscape and hardscape enhancements at various town parks in 2025.

#### 6. Buckwalter Place Park Improvements

- Plans presented to Town Council on 1/16/24.
- Conceptual landscaping plan complete.
- Sabal palm installation complete.

#### Next Steps

- Finalize hardscape plans for FY25 scope.
- Post lighting plan solicitation.
- o Continuing design, CDs of bathroom renovation.

#### **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.
- o PM staff to review progress and applications for payment.

#### 2. Law Enforcement Center Facility Improvements

- PD completed improvements to evidence room.
- PS to add AON system to HVAC.

#### • Next Steps

 Begin design for FY25 construction of a possible storage of Public Service maintenance equipment, impound lot and canine facility.

#### 3. Sarah Riley Hooks Cottage

• Executed design contracts with Meadors Inc., JK Tiller and Shearlock Engineering for design services of the cottage restoration and site development.

#### • Next Steps

- Complete design of cottage and grounds in 2024.
- o Begin restoration construction of cottage in FY25.
- Begin landscape development construction in FY26.

#### 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.

#### Next Steps

 Continue acquisition of remaining Quit Claim Deeds for Historic District Ghost Roads 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 departments will transition through FY26.

#### 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.
- Implemented Executime to replace Intime.
- Next Steps:

o Replacing two more VMWare hosts.

#### 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 is the Project Manager.
- BJWSA awarded the RIA SCIPP grant in support of Stoney Creek/Palmetto Bluff Sewer Extension with BJWSA and Beaufort County.
- Finalized IGA with Town, County, and grant splitting sewer extension costs and BJWSA funding water extension costs.

#### Next Steps

- BJWSA continues with community outreach via their consultants and continues with design of the system.
- 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. The flow data monitoring review period ended in April 2024 and final reports are expected to be completed in FY25. Staff continue to implement grab sampling water quality program recommendations.
- The Town's Calhoun Street Dock tidal elevation gauge was repaired and is recording tidal elevation data. Water Environmental Consultants (WEC) 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. A final report on the 4-week tidal gauge study is expected in FY25 with all other WEC flow monitoring final reports.
- The Town and the College of Charleston executed a Memorandum of Agreement (MOA) to conduct the Resiliency Analysis. This analysis will include modeling storms and sea level rise throughout Town watersheds, a review of the Town's UDO, Municode, SC Code of Ordinances, and Stormwater Design Manual, and stakeholder engagement through surveys and events.
- Staff met with Furman University to discuss continued resiliency-related support for the Town on 05/16/24.
- Staff has drafted a Comprehensive Water Quality Monitoring Program Plan. This document is currently under internal review prior to finalization.
- Staff provided an overview of the Town's work to improve and protect water quality to Mitchell Black, new reporter for Post & Courier on 05/02/24.

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

- Staff are currently editing the Stormwater Management Plan with an anticipated date of 6/10/2024, for submittal to SCDHEC.
- The current Town of Bluffton Southern Lowcountry Stormwater Design Manual is out for public comment until 05/31/24.

## 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) meeting e was held 05/23/24. - Attachment 3
- Staff held the 22nd Annual May River Cleanup on 05/04/2024. Approximately 375 volunteers were present.

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

- Stormwater Infrastructure Inventory Map Attachment 4a
- E. coli Concentrations Trend Map Attachment 4b
  - Staff conducted MRWAP water quality sampling on 04/22/24. Twenty-eight (28) fecal indicator bacteria samples and five (5) intermittent flow measurements were collected from the May River headwaters.
  - Staff conducted MRWAP water quality sampling on 05/15/24. A total of thirty (30) fecal indicator bacteria, fourteen (14) nutrient samples, and three (3) intermittent flow measurements were collected from the May River headwaters.
- 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 collected samples on 05/01/24. The human genetic marker was not detected in any of the samples collected.
- Illicit Discharge Investigations Attachment 4e
- 7. MS4 MCM #4 Construction Site Stormwater Runoff Control Attachment 5
- 8. MS4 MCM #5 Stormwater Plan Review and Related Activity Attachment 6

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

- Joe Sease completed his Certified Stormwater Inspector (CSI) certification through the National Pollutant Discharge and Elimination System (NPDES).
- Andrea Moreno attended the International Erosion Control Association's (IECA)
   Municipal Wet Weather Conference on 05/15/24 05/16/24.

#### 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.

- o Arrow ditch (2,569 LF)
- o Red Cedar ditch (966 LF)
- o Buck Island roadside ditch (15,926 LF)
- Simmonsville roadside ditch (13,792 LF)
- Ongoing roadside mowing, litter clean-up and maintenance of Masters' Way, McCracken Circle, Hampton Parkway, Buck Island and Simmonsville Roads, Goethe Road, Shults Road, Jason and Able Streets, Whispering Pine Road, May River Road, and Eagles Field.
- 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 Agenda 04/24/24
- 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

<sup>\*</sup> Attachment noted above includes the latest updates in red.

		19	-19			19-	19A			19-	19B			19-	19C			19	-24			19	-16	
	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024	2021	2022	2023	2024
	Fecal Coliform (MPN)																							
December	79.0	33.0	33.0		49.0	49.0	33.0		4.5	17.0	7.8		17.0	49.0	13.0		6.8	6.8	7.8		7.8	13.0	17.0	
November	33.0	33.0	13.0		33.0	13.0	2.0		7.8	7.8	4.5		4.0	4.5	4.5		4.5	6.1	2.0		2.0	13.0	4.5	
October	49.0	23.0	33.0		26.0	46.0	23.0		13.0	13.0	17.0		23.0	23.0	33.0		23.0	11.0	2.0		17.0	14.0	6.8	
September	33.0	540.0	23.0		11.0	350.0	13.0		17.0	350.0	13.0		13.0	170.0	7.8		2.0	79.0	17.0		11.0	33.0	13.0	
August	49.0	23.0	23.0		49.0	23.0	49.0		23.0	11.0	6.8		49.0	13.0	13.0		14.0	17.0	23.0		14.0	11.0	2.0	
July	350.0	920.0	350.0		64.0	49.0	920.0		79.0	95.0	70.0		33.0	130.0	49.0		33.0	23.0	33.0		13.0	46.0	17.0	
June	49.0	13.0	14.0		79.0	4.5	7.8		13.0	11.0	23.0		17.0	2.0	13.0		22.0	1.8	33.0		2.0	9.3	13.0	
May	2.0	4.5	23.0	27.0	49.0	4.5	33.0	22.0	23.0	4.0	17.0	23.0	23.0	1.8	13.0	17.0	23.0	1.8	33.0	7.8	7.8	2.0	21.0	4.0
April	33.0	4.5	170.0	49.0	23.0	4.5	130.0	17.0	22.0	1.8	110.0	17.0	17.0	2.0	70.0	4.0	7.8	1.8	NS	11.0	2.0	1.8	7.8	23.0
March	33.0	33.0	23.0	49.0	11.0	23.0	49.0	31.0	17.0	2.0	17.0	11.0	13.0	4.5	17.0	4.5	2.0	2.0	17.0	22.0	2.0	2.0	17.0	4.5
February	79.0	23.0	540.0	49.0	70.0	31.0	350.0	49.0	79.0	17.0	240.0	11.0	23.0	22.0	240.0	22.0	7.8	2.0	33.0	7.8	6.8	11.0	33.0	11.0
January	17.0	49.0	33.0	49.0	17.0	22.0	33.0	23.0	13.0	33.0	13.0	4.5	23.0	7.8	33.0	4.5	17.0	7.8	7.8	7.8	7.8	7.8	4.5	2.0
** Truncated GeoMetric Mean	36.0	40.0	38.0	39.0	26.0	28.0	30.0	29.0	18.0	18.0	17.0	15.0	15.0	14.0	16.0	14.0	10.0	9.0	9.0	9.0	8.0	9.0	8.0	8.0
** Truncated 90th Percentile	139.0	192.0	211.0	205.0	69.0	91.0	152.0	160.0	58.0	72.0	77.0	77.0	39.0	54.0	71.0	76.0	35.0	41.0	44.0	38.0	33.0	32.0	26.0	28.0

NS = No Sample

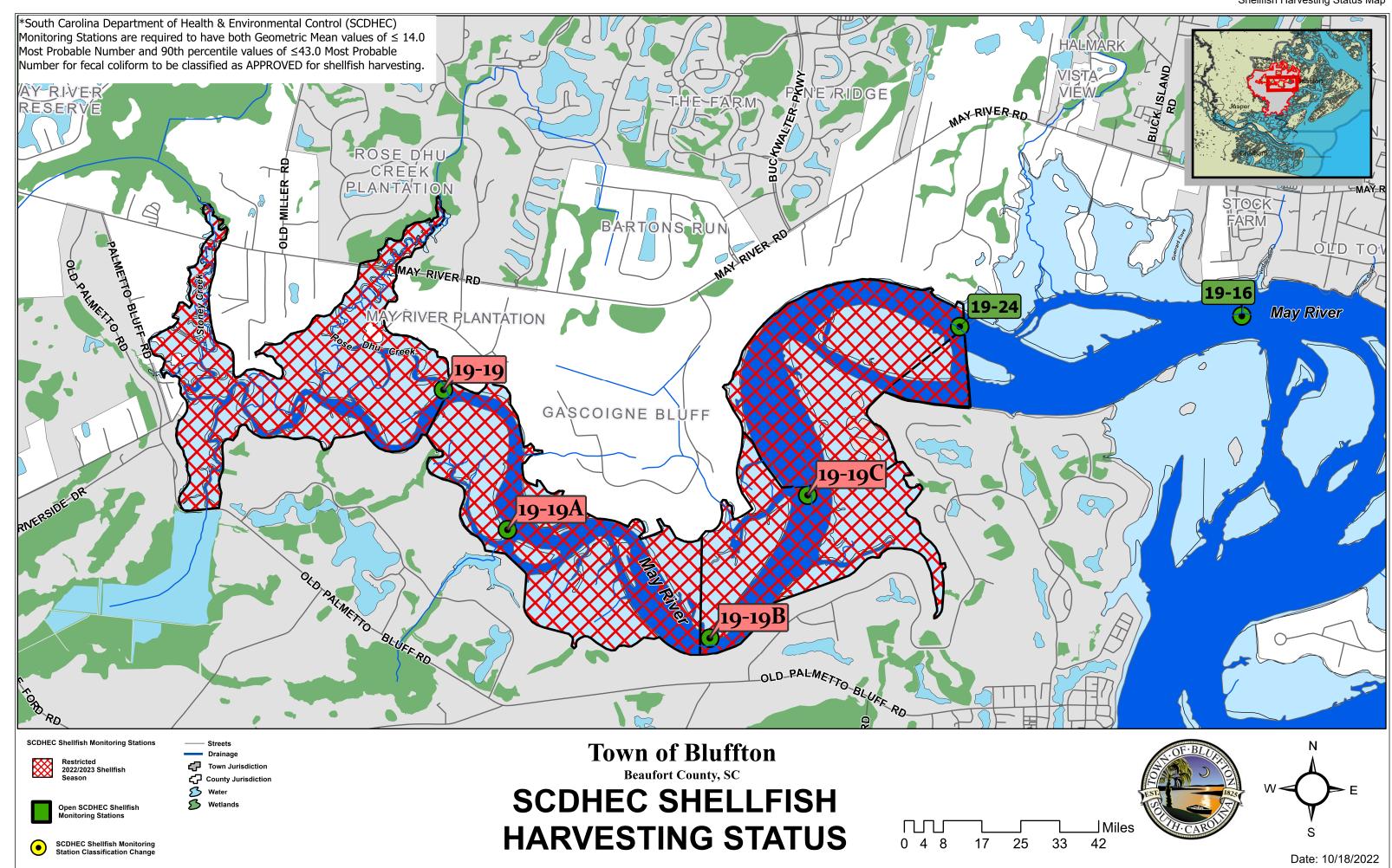
#### **SCDHEC Regulatory Requirements:**

Geometric Mean ≤ 14 90th Percentile ≤ 43

Note:

December 2024 ends the data collection period for 2025 shellfish harvesting season. 2024 fecal coliform data is part of the 2025 classification data collection period.

<sup>\*\*</sup> Town staff calculations utilizing SCDHEC statistics



Next Update: September 26, 2024

# WAPAC Meeting Presentation May River Watershed Action Plan Update & Modeling Report Overview and Status

Created: August 25, 2022 Updated: May 23, 2024

#### **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.
  - o 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.

Next Update: September 26, 2024

#### 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 3.46x10<sup>13</sup> FC per year.
- The estimated septic to sewer conversion costs of these projects is \$5.5 million.

#### 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 and a letter to BJWSA will be developed and sent to BJWSA regarding project funding, capital outlay and schedule for implementation.

#### **Update for WAPAC February 23, 2023 Meeting:**

The Town, Beaufort County and BJWSA continue to work on details to draft a proposed Inter-Governmental Agreement (IGA) to be presented to each respective approving authority for review, finalization, and approval. It is anticipated that this process is months away from final approval/adoption of the respective parties.

#### 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 anticipates receiving RIA approval and reposting the RFP on 7/17/23. BJWSA received RIA approval and reposted the RFP on 7/17/23 with a closing of 8/1/23.

#### **Update for WAPAC January 25, 2024 Meeting:**

<u>Stoney Creek/Palmetto Bluff Sewer</u>: All parties agreed to the IGA in October. The IGA will be presented to TC at the November TC meeting for review and approval. Beaufort County will present the IGA at their December meeting.

#### **Update for WAPAC May 23, 2024 Meeting:**

Stoney Creek/Palmetto Bluff Sewer: BJWSA is the project manager. Foresight Communications, a marketing/communications group, first community engagement for the project is 5/13/24. A new BJWSA project manager has

Next Update: September 26, 2024

been assigned, Beth Lowther. Kim, Mark and Felicia met with Charlie Stone, BJWSA Gov't liaison, and Ashley Goodrich, BJWSA planner, on 5/6/24 to discuss how they might use 319 funding to support future sewer connections. Next partner meeting is 6/13/24 at 9:30am.

## 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<sup>14</sup> FC reduction for the Full SWRv (entire sub-basin drainage area catchment).
  - 2.53×10<sup>14</sup> 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:

Next Update: September 26, 2024



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

## Work Performed and Current Status as of August 25, 2022 Meeting Update for WAPAC February 23, 2023 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 and the Consulting Firm of 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 be presented for Town Council review and approval in the August 2022 Town Council Meeting and FY23 funding.

Next Update: September 26, 2024

#### **Update for WAPAC February 23, 2023 Meeting:**

Phase II work was approved by Town Council and work has been initiated and reported herein. **This Task Completed** 

#### Task 1: MRWAP Update 11 site locations

#### **Update for WAPAC July 27, 2023 Meeting:**

#### **Update** for WAPAC January 25, 2024 Meeting:

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

- Bluffton Early Learning Center (BELC). Participating in preliminary design development phase.
- Boys and Girls Club of Bluffton (BGC). Participating in preliminary design development phase.
- Benton House (BH). Participating in preliminary design development phase.
- Bluffton High School (BHS). Participating in preliminary design development phase.
- Buckwalter Recreation Center (BRC). Participating in preliminary design development phase.
- Lowcountry Community Church (LCC). Declined to Participate.
- McCracken Middle School/Bluffton Elementary School (MMSBES). Participating in preliminary design development phase.
- May River High School. Participating in preliminary design development phase.
- One Hampton Lake Apartments (OHLA). Declined to Participate.
- Pritchardville Elementary School (PES). Participating in preliminary design development phase.
- 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). Geotechnical field work for Benton House (BH), Buckwalter Recreation Center (BRC) and Boys and Girls Club of Bluffton (BGC) completed and data being analyzed and geotechnical report in development.

#### All geotechnical work and reports completed.

• Refine updated concepts and use for presentations to Property Owner to discuss Impervious Restoration Program goals, objectives and gain support for Program and their participation.

Next Update: September 26, 2024

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. Based on geotechnical investigation results, updated Concept plans for Benton House (BH), Buckwalter Recreation Center (BRC) and Boys and Girls Club of Bluffton (BGC) sites will be 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.

Field review meetings held March 28 and April 15, 2024 at each of the 9 participating sites. Meeting outcome was to review proposed BMPs and location to assess and rank BMP feasibility and cost/benefit. Based on discussions and field review Preliminary Design has been initiated.

- 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.
  - o Determine estimated pollutant load reductions.
  - Develop site specific BMP details.
  - o 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. A meeting was held with School District on September 28. 2023 to discuss initial Preliminary Design development. Comments were noted and to be incorporated for final preliminary design plan development.

Based on field review Preliminary Design has been initiated.

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).

Next Update: September 26, 2024

#### **Update for WAPAC February 23, 2023 Meeting:**

Desktop analysis and field work performed to develop a list of 45 sites that potentially meet the criteria above. This list of potential sites is under review/evaluation.

#### **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.

#### **Update for WAPAC May 23, 2024 Meeting:**

Data search for these sites is ongoing in terms of existing plan information, current property owner and contacts.

Yellow Highlight indicate field investigations, drainage pattern evaluations and hand auger soil samples completed.

Green Highlight indicate contact made and coordination in process.

Initial concept plans are being developed for these sites for review. Other site evaluations will be performed as property owner approvals for access to property to perform site assessment is obtained.

- Dominion Energy Engineering Office
- Rose Dhu Equestrian Center
- St. Gregory Catholic Church/School
- River Ridge Academy
- MC Riley Early Childhood Center
- MC Riley Elementary School
- MC Riley Sports Complex
- Bluffton Middle School
- Red Cedar Elementary School
- Seagrass Station Road Site determined to be not feasible, low cost/benefit.
- Bluffton Pkwy West (170 to Buckwalter)
- Buckwalter Pkwy (Hampton Hall to May River Road)
- Persimmon St/Sheridan Park Cir/Pennington Dr
- Vaden Nissan Hilton Head
- NHC Healthcare/Bluffton (Healthcare, Rehab, Assisted Living) Declined to participate

#### 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

Next Update: September 26, 2024

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 February 23, 2023 Meeting:**

2 *DRAFT* Policy Documents have been submitted for review and comment. Comments are being evaluated and addressed by consultant and an update *DRAFT* Policy Document is expected by April 2023.

#### **Update for WAPAC July 27, 2023 Meeting:**

- Updated Draft Policy Document was completed and submitted in June for 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.

#### **Update for WAPAC January 25, 2024 Meeting:**

 Internal review, discussion and comments of Updated Draft Policy Document was completed and submitted to Consultant September 10,2023. Initial discussion of comments and path forward held November 3, 2023 with Consultant. Additional discussions with Consultant to be held.

#### **Update for WAPAC May 23, 2024 Meeting:**

- Based on review of content of the updated DRAFT Policy Document, The Town directed the document be organized into the following categories:
  - Enterprise Fund & Fee-in-Lieu Program work on this section has been initiated.
  - ToB CIP Project Impervious Restoration Program & incentives
  - ToB SWrv Credit Trading Program (under evaluation)

#### 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.
  - o 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.

Next Update: September 26, 2024

- 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.

#### **Update for WAPAC February 23, 2023 Meeting**

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.

#### **Update for WAPAC January 25, 2024 Meeting**

- o Project and Grant work is complete and closed out.
- Total Grant funding for this project \$228,165.15
- Water Quality Monitoring Results

<u>Water Quality Monitoring Summary</u>: Based on monitoring and rainfall data for the period of July 1-October 11, 2023, the only rainfall event that produced a stormwater outfall/discharge was an intense rain event on September 10, 2023 which produced 3.82" of rain in a 4 hour period. The next most intense storm happened on July 10, 2023 which produced 1.46" of rain in 1 hour and no stormwater outfall/discharge occurred. Based on this data, we estimate the BMP treatment train constructed with this project could accommodate a 10 year storm event (6.9" of rain in 24 hours) with little or zero runoff. Zero runoff equals zero pollutants, and zero freshwater being discharged to Huger Cove and the May River.

<u>From 319 Grant Project Final Report</u>: Pre-construction water quality monitoring was performed on October 19, 2022, which can be found in **Appendix C**. So, **prior to project construction** a simulated rain event was performed to provide an indication of the amount of rainfall prior to direct a discharge occurring into Heyward Cove and then water samples were collected and tested by USCB to determine pollutants present and their concentrations. The rainfall simulation was performed because there was no way to get a water sample once stormwater entered the BMP and was treated by BMP via infiltration into ground.

**Table 1** below is the Pre Construction Water Quality Monitoring Table of Pollutants:

Date	Time of	TKN	Nitrate/Nitrite	Total Nitrogen	Total	TSS
Date	Sample	(mg/L)	(mg/L)	(TN)	Phosphorus (TP)	(mg/L)
10/19/2022	9:41	0.85	0.290	1.10	0.68	220.00

Three underground storage/infiltration and four pervious paver parking areas with underground storage were installed. After the completion of the BMPs, water quality monitoring was conducted to determine the reduction in pollutants with the newly installed BMPs. The installation of the Auto samplers were located at the two stormwater pipe outfalls into Heyward Cove, FES-1 and FES-2. Post-construction water

Next Update: September 26, 2024

quality monitoring occurred on September 11, 2023, which can be found in **Appendix C**. Based off the post-construction pollutant values, all values analyzed were reduced greatly, including TSS.

Table 2 below is the Post Construction Water Quality Monitoring Table of Reduced Pollutants:

Date	Time of	TKN	Nitrate/Nitrite	Total Nitrogen	Total	TSS
	Sample	(mg/L)	(mg/L)	(TN)	Phosphorus (TP)	(mg/L)
9/11/2023	16:46	0.64	0.14	0.78	0.19	8.4

Rainfall monitoring took place between July 1, 2023, and October 11, 2023, at the Watershed Building Office, 1261 May River Road. There were eight rainstorm events that had over an inch of water in 24 hours. In particular, there was one rainstorm on September 10<sup>th</sup>, 2023, where there was 3.82 inches of rain over the extent of four hours. This was the only recorded rain event, during the monitoring period, which produced a discharge of stormwater runoff into outfall FES-2 at Heyward Cove.

**Table 3** below are the eight storm events over an inch.

Rainstorms over and inch							
Rainstorm Event	Rainfall (in)						
July 5th	1.46 inches over 1 hour						
July 10th	1.17 inches over 7 hours						
July 28 <sup>th</sup>	1.28 inches over the whole day						
August 28th	1.23 inches over 1 hour						
August 30 <sup>th</sup>	1.23 inches over the whole day						
September 1st	1.1 inches over 3 hours						
September 10 <sup>th</sup>	3.82 inches over 4 hours						
September 17 <sup>th</sup>	1.09 inches over 6.5 hours						

**Table 4** shows the monthly rain mounts in inches, with October only accounting for the first eleven days of the month and then monitoring stopped.

Monthly Rain Amounts						
Month	Rainfall (in)					
July	7.35					
August	5.3					
September	7.56					
October*	0.0					
TOTAL	20.21					

<sup>\*</sup>only accounted for October 1 – October 11, 2023

There are many benefits that come from the constructed/installed stormwater best management practices, that include: 1) reducing the concentrations of pollutants that are associated with stormwater runoff, 2) the amount and frequency of direct stormwater/freshwater discharges into Heyward Cove has greatly reduced. and 3) temporarily detain large portions of the runoff volume and then release it a slower rate to decrease the amount of flooding on the roads. With the BMPs that were used for Bridge Street Streetscape, the BMP benefits include the decrease in TSS and other pollutants, but also retrofitting the existing area that had no prior stormwater management in the surrounding area.

Next Update: September 26, 2024

## <u>Update for WAPAC May 23, 2024 Meeting</u> No stormwater outfall condition has been observed since the September 10, 2023 rain event.

- 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.
  - Submitted Section 319 Grant proposal to DHEC to cost-share cost of construction of proposed BMPs. Pre-proposal was accepted, and Full Proposal was requested by DHEC. Under Review.

#### **Update for WAPAC February 23, 2023 Meeting**

- 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.

#### Update for WAPAC January 25, 2024 Meeting

- Updated 70% Streetscape Design submittal made and review comments provided to Consultant for 90% Design development and permit acquisitions.
- Pre-Application meeting for Project held with Growth Management and Stormwater Management.

#### Update for WAPAC May 23, 2024 Meeting

- o 95% Design Submittal received February 29, 2024.
- Public Project DRC meeting held April 3, 2024. Internal review comments completed and Design update in process.
- 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.
  - Update for WAPAC February 23, 2023 Meeting Staff has collected additional fecal samples needed for dog, bird, and deer. The USCB-MST Laboratory is conducting the

Next Update: September 26, 2024

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.
- Update for WAPAC January 25, 2024 Meeting: Dr. Pettay is now the Lead Principal Investigator (PI) for both the MST and Water Quality Laboratories. Dr. Pettay, Town staff, and County staff met to discuss regional water quality monitoring needs. The MST Laboratory is still processing scat samples, and a final report is forthcoming.
- Update for WAPAC May 23, 2024 Meeting: The MST Laboratory has finalized processing scat samples. Dr. Pettay will be providing a final report/update to the Town.
- 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.
  - Update for WAPAC February 23, 2023 Meeting: 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.
  - Update for WAPAC January 25, Meeting: Staff continues to collect MRWAP bacteria grab samples twice per month at fourteen (14) monitoring locations in the May River headwaters study area. Intermittent flow measurements are collected at six (6) of these monitoring locations at the time of grab sampling.
  - Oupdate for WAPAC May 23, Meeting: Staff continues to collect MRWAP bacteria grab samples twice per month at fourteen (14) monitoring locations in the May River headwaters study area. Intermittent flow measurements are collected at five (5) of these monitoring locations at the time of grab sampling. The goal has been to collect grab samples following wet weather conditions to the maximum extent practicable. WEC has further defined wet weather as samples collected within 24-hours of ≥0.50 inches of rainfall. All Town grab samples are analyzed by the USCB Water Quality Laboratory.
- 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:

Next Update: September 26, 2024

- 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.

#### **Update for WAPAC February 23, 2023 Meeting**

- 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.
  - Final report identifying recommended strategies to gain required data is in process.
  - Potential purchase of telemetry stations to equip continuous flow monitoring stations with real-time data access.

#### **Update for WAPAC February 23, 2023 Meeting**

 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 fieldwork installation of equipment is 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,

Next Update: September 26, 2024

bacteria samples, and rainfall data were collected for three (3) of the four (4) Modeling Report subwatersheds simultaneously.

- Consultant is 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.

#### **Update for WAPAC January 25, 2024 Meeting:**

- Staff continue to operate and maintain three (3)
   SonTek IQ continuous flow monitoring stations in the May River headwaters. Staff expect these systems to be in place for approximately one (1) full year to account for seasonality.
- The Duck Pond subwatershed has no channelized flow entering or exiting the system. The Town's consultant suggested that the Town monitor water elevation in the Duck Pond for approximately 6 months to ensure water elevations are accurately depicted by future modeling. Staff has requested permission to site a water elevation logger in the Duck Pond, near or attached to the Palmetto Bluff bridge.
- Clarification from the consultant determined that due to limited staff time, intermittent flow measurements would be most valuable at six (6) of the Town's water quality monitoring locations upstream of the SonTek IQ flow stations.
- Staff is working diligently to collect samples following wet weather conditions which have been defined as ≥ 0.50 inches of rainfall within 24 hours of sampling. The USCB Water Quality Laboratory has been assisting the Town with ensuring samples can be analyzed on short notice.

#### **Update for WAPAC May 23, 2024 Meeting:**

 Dr. Pettay continues as the Lead Principal Investigator (PI) for both the USCB-MST and Water Quality Laboratories. The MST Laboratory has finalized processing scat samples, and a final report is forthcoming.

May River Watershed Action Plan Update

Updated: May 23, 2024

Next Update: September 26, 2024

- Staff continue to operate and maintain three (3)
   SonTek IQ continuous flow monitoring stations in the May River headwaters.
  - In FY23, the Town and its consultant determined it <u>did not</u> have sufficient data for the Rose Dhu Creek and Palmetto Bluff subwatersheds for model calibration. In April 2023, the Rose Dhu Creek and Palmetto Bluff SonTek-IQ Plus instruments, were installed and/or upgraded with Turnkey/Cloud-based Systems.
  - The Stoney Creek subwatershed SonTek IQ-Plus has operated almost continuously for two (2) full years. In FY23, the Town understood it had enough quality continuous and intermittent flow data for this subwatershed, so the SonTek-IQ Plus instrument was not upgraded with Turnkey/Cloud-based Systems. However, staff continued with continuous flow data collection (downloading data manually) efforts in conjunction with the Rose Dhu Creek and Palmetto Bluff subwatersheds.
  - Water Environmental Consultants (WEC) has been conducting a weekly review of all continuous and intermittent flow data collected since The Town's Turnkey/Cloud-based Systems were implemented in April 2023. In April 2024, the one (1) full year of data collection ended. This data collection period allowed the Town to account for seasonality. WEC will provide final reports detailing these three (3) subwatersheds continuous and intermittent flow data for stormwater model calibration. These reports are expected to be received in FY25 for the Rose Dhu Creek, Stoney Creek, and Palmetto Bluff subwatersheds.
- The Duck Pond subwatershed has no channelized flow entering or exiting the system. The Town's consultant suggested that the Town monitor water elevation in the Duck Pond for approximately 6 months to ensure water elevations are accurately

May River Watershed Action Plan Update

Updated: May 23, 2024

Next Update: September 26, 2024

depicted by future modeling. Staff has requested and received permission to site a water elevation logger in the Duck Pond, near or attached to the Palmetto Bluff bridge. This work is anticipated to commence July 2024 (Start of FY25).

- Staff are working diligently to collect samples following wet weather conditions which have been WEC further defined wet weather as samples collected within 24-hours of ≥0.50 inches of rainfall. The USCB Water Quality Laboratory has been assisting the Town with ensuring samples can be analyzed on short notice.
- The Town has been operating two (2) weather stations to collect local rainfall data in the May River Watershed. One weather station is located at the Town's Watershed Management Division Office and the other is located at the Town's Police Department Building. This data has been shared with WEC for inclusion in final reports.
- The Town collects tidal elevation data utilizing a HOBO-U20 at the Calhoun Street Dock in Bluffton. WEC deployed two (2) headwater tidal elevation instruments on docks near the Rose Dhu Creek and Stoney Creek subwatershed model boundaries. This study was conducted for a period of 4-weeks to establish the relationship between the tidal amplitude and timing in the headwaters of the May River and the long-term tide gauge operated by the Town at the Calhoun Street dock. The outcomes of this study will be included in WEC's final reports.



### **May River Watershed Action Plan Advisory Committee Meeting**

Thursday, May 23, 2024 at 3:00 PM

The Rotary Community Center at Oscar Frazier Park, 11 Recreation Ct, Bluffton, SC

#### **AGENDA**

- I. CALL TO ORDER
- II. ROLL CALL
- **III. ADOPTION OF MINUTES** 
  - 1. Adoption of the March 28, 2024, Minutes
- IV. PRESENTATIONS, CELEBRATIONS, AND RECOGNITIONS
  - 1. May River Watershed Action Plan Project Implementation Status Report Dan Rybak, Project Manager
- V. PUBLIC COMMENT
- VI. OLD BUSINESS
  - 1. Progress Report on the May River Watershed Baseline Assessment Beth Lewis, Water Quality Program Manager
- VII. NEW BUSINESS

#### VIII. DISCUSSION

Development of Strategic Plan Priority Ten (10) to complete a third-party assessment in FY24
of the stormwater regulations and Design Manual in the Unified Development Ordinance,
particularly the Better Site Design element, to ensure intended outcomes are being met and
modify the regulations if necessary - Andrea Moreno, MS4 Program Manager

#### IX. ADJOURNMENT

**NEXT MEETING DATE: June 27, 2024** 

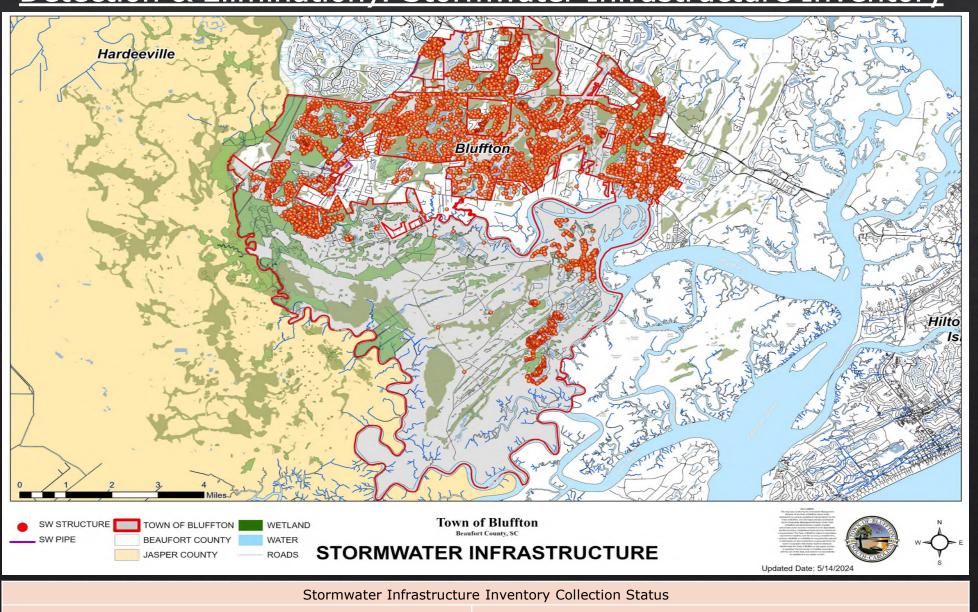
"FOIA Compliance – Public notification of this meeting has been published and posted in compliance with the Freedom of Information Act and the Town of Bluffton policies."

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 ("ADA"), the Town of Bluffton will not discriminate against qualified individuals with disabilities on the basis of disability in its services, programs, or activities. The Town of Bluffton Council Chambers are ADA compatible. Auditory accommodations are available. Any person requiring further accommodation should contact the Town of Bluffton ADA Coordinator at 843.706.4500 or adacoordinator@townofbluffton.com as soon as possible but no later than 48 hours before the scheduled event.

Executive Session – The public body may vote to go into executive session for any item identified for action on the agenda.

## Attachment 4a

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



Collection Totals

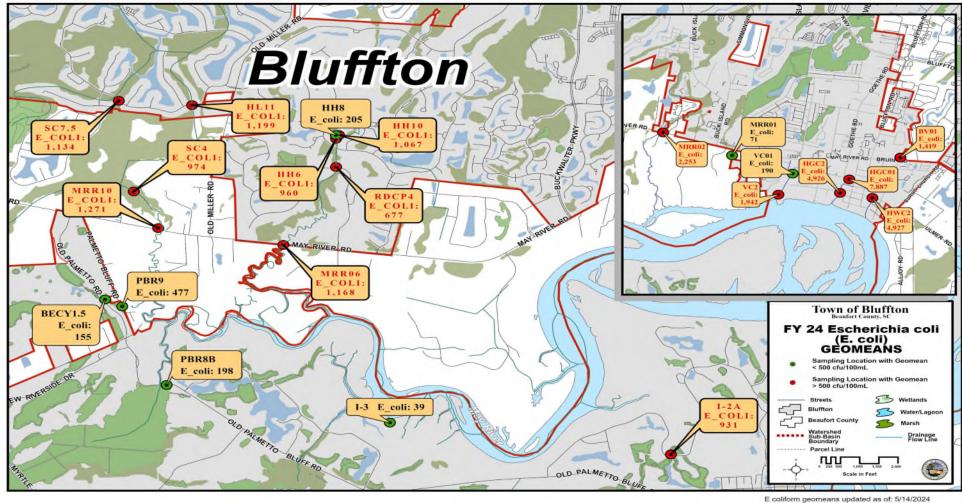
FY 2024 YTD

17,234

577

## Attachment 4b

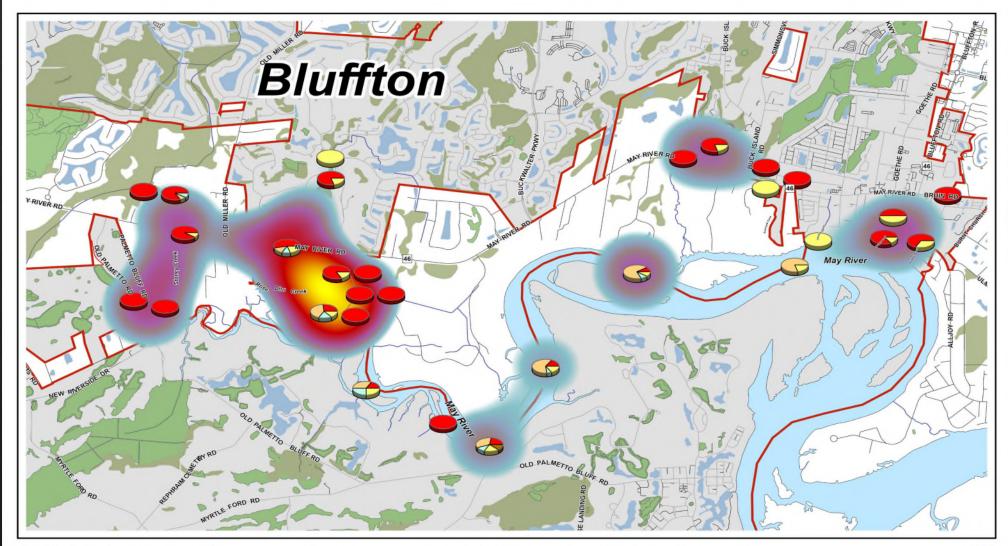
## MS4 Minimum Control Measure #3 – IDDE: E. coli Concentrations Trend Map



			E coliform geomeans updated as of: 5/14/2024
	USCB Water Quality Samples	Microbial Source Tracking Samples	MS4 Quarterly Samples Collected
FY 2024 YTD Totals	620	62	209
FY 2023 Totals	584	108	108
FY 2022 Totals	447	78	119

## Attachment 4c

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



#### MSTSamplingResults MST Sampling Sites

Intensity of samples Representative of Low Sampling Distribution Representative of High Sampling Distribution

#### MICROBIAL SOURCE TRACKING (MST) LOCATIONS

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

**Town of Bluffton** 



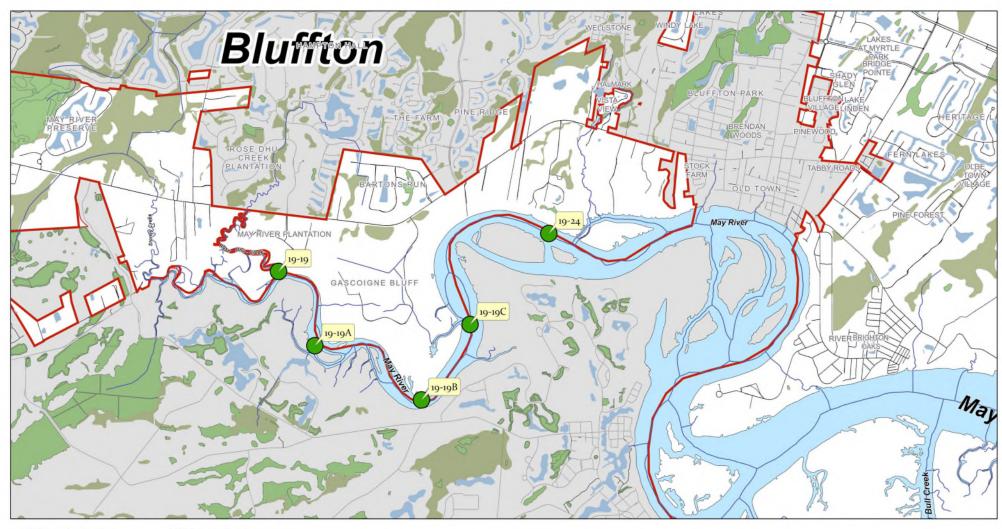
Beaufort County





### Attachment 4d

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



MST Sampling Location
Without Human Genetic Marker
Detection

MST Sampling Location With Human Genetic Marker Detection

- Flowline

Street

Town Jurisdiction



#### MICROBIAL SOURCE TRACKING LOCATIONS

Sampling Results May 1, 2024 DHEC Sampling

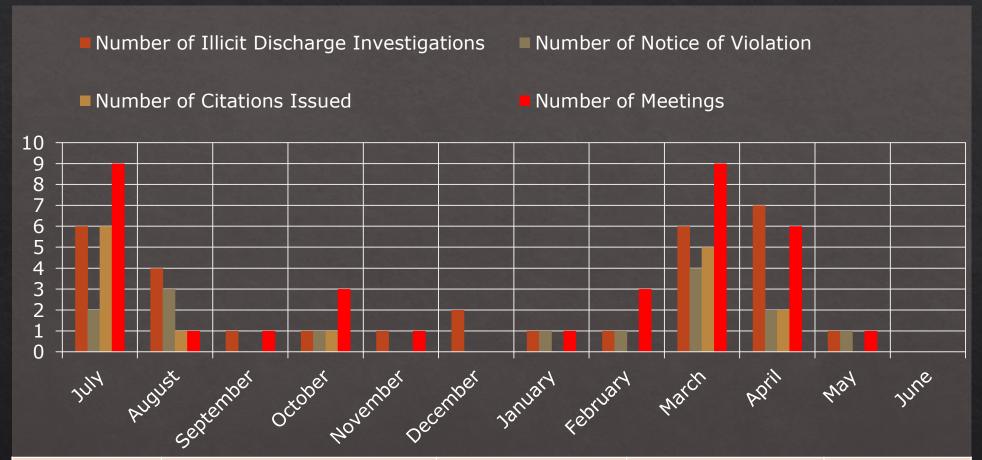
Town of Bluffton





### Attachment 4e

## <u>MS4 Minimum Control Measure #3 – IDDE:</u> <u>Illicit Discharge Investigations</u>



	Number of Illicit Discharge Investigations	Number of Notices of Violation Issued	Number of Citations Issued	Number of Meetings
FY 2024 YTD Totals	31	15	15	35
FY 2023 Totals	27	8	1	20
FY 2022 Totals	30	5	3	17

### Attachment 5

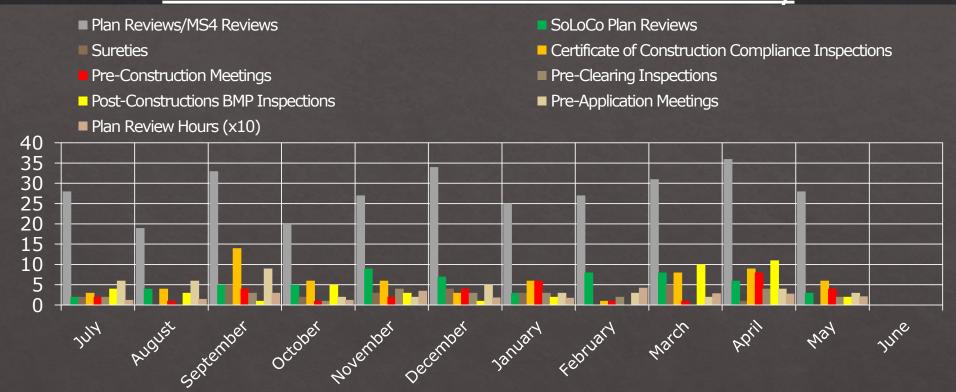
# MS4 Minimum Control Measure #4 - Construction Site Stormwater Runoff Control



	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	1,772	1,667	100	10	0	473
FY 2023 Totals	2,321	2,030	266	26	0	577
FY 2022 Totals	3,127	2,701	392	49	0	673

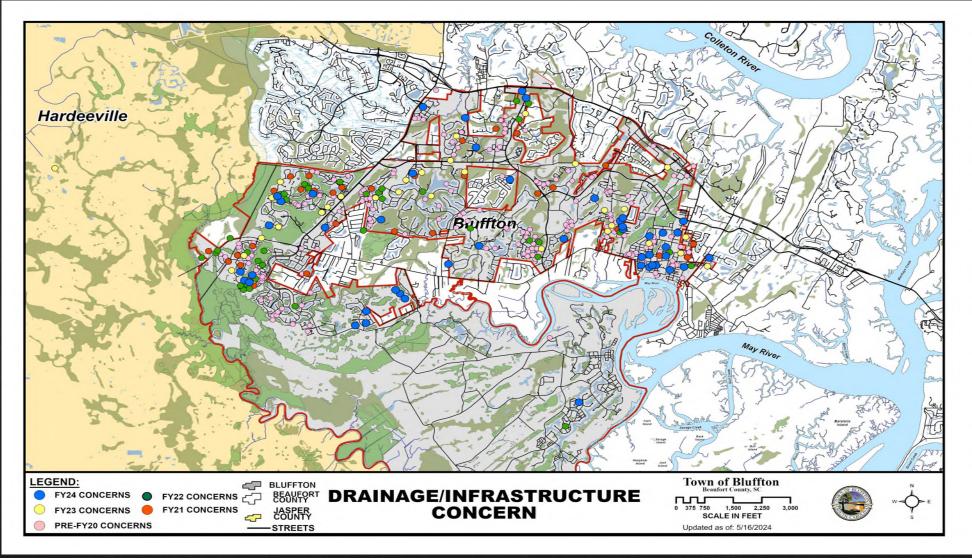
### Attachment 6

# 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	308	60	25	66	34	24	42	45	261 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.

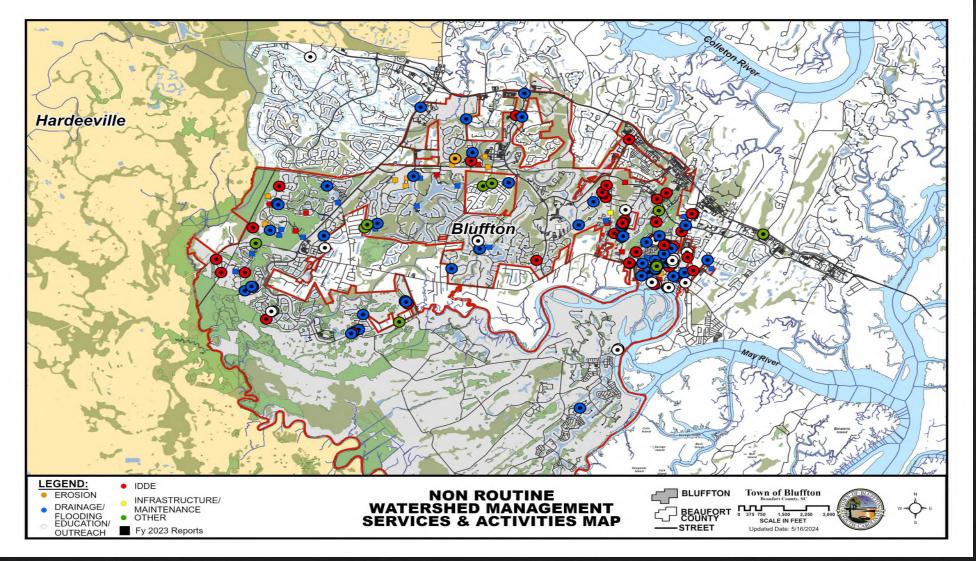
# Attachment 7 <u>Citizen Drainage, Maintenance and Inspections Concerns Map</u>



	Number of Drainage Concerns Investigated	Number of Meetings
FY 2024 YTD Totals	43	13
FY 2023 Totals	61	52
FY 2022 Totals	38	34

## Attachment 8

## Citizen Request for Watershed Mngt. Services & Activities Map

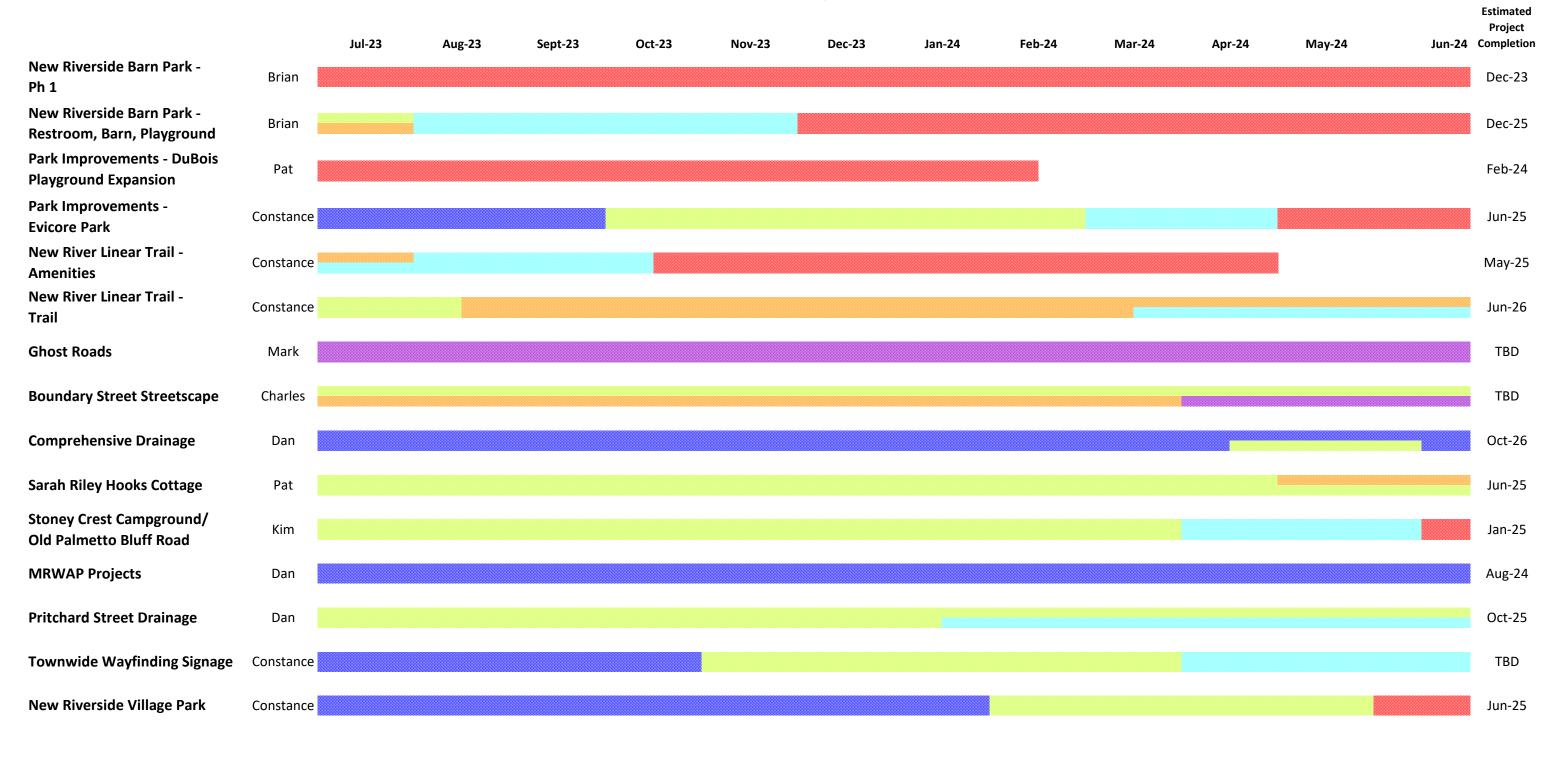


	Number of Citizen Requests Investigated	Number of Meetings
FY 2024 YTD Totals	129	37
FY 2023 Totals	46	23
FY 2022 Totals	33	21

## **FY24 CIP Master Project Schedule**



## **FY24 CIP Master Project Schedule**







#### BEAUFORT COUNTY STORMWATER MANAGEMENT UTILITY BOARD AGENDA

Wednesday, August 21st, 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 June 19, 2024 (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. Regional Coordination Katie Herrera (backup)
  - E. Municipal Reports Taylor Brewer (backup)
  - F. Stormwater Related Projects Taylor Brewer (backup)
  - G. Professional Contracts Report 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 (backup)
- 6. NEW BUSINESS
- 7. PUBLIC COMMENT
- 8. NEXT MEETING AGENDA
  - A. Wednesday, October 16th (backup)
- 9. ADJOURNMENT



