### **TOWN COUNCIL**

### **STAFF REPORT**

### **Projects and Watershed Resilience Department**



MEETING DATE:	February 13, 2024				
SUBJECT: Projects and Watershed Resilience Department Monthly Repo					
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 and drainage is complete.
  - Next Steps
    - o Complete Phase 6B SCDOT closeout.
    - Construction of the street lighting is proposed to be completed in FY 2024 by Dominion.

#### 2. New River Linear Trail

- Submitted plans to Santee Cooper for review and cost share for bridge replacements. They stated they will not participate in a cost share; thus, staff is reviewing the easement agreement terms with legal for next steps.
- Received \$26,000 PARD grant award and \$2 million in 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.

### Next Steps

- o Continue engineering design and permitting for Phases 1 and 2.
- o Bathroom installation is proposed to be installed this Spring.
- Bid responses due date for the restroom installation was extended due to no submissions. At second bid opening, two submissions were received, and a contract is being negotiated.

### **SEWER & STORMWATER**

- 1. Buck Island-Simmonsville Sewer (Phases 5A-D)
  - Permits/Contracts are complete, the project is under construction.

### Next Steps

Mainline Construction is proposed to be complete in February 2024.
 Connections will start after receiving the permit to operate.

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

- Jordan Construction of Hilton Head, Inc. continues construction.
- Main line testing is complete and waiting on approvals to operate.

### 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 acquisition of Quit Claim Deeds from all the property owners along the ghost roads or initiate legal action.

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

- Initial site investigations are complete for 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.
- Updated Policy document for Impervious Restoration Program submitted and under review.
- Geotechnical investigations for all sites have been completed.
- Initial Property Owner contacts for the selected 15 Additional Sites within municipal limits have been made.

### Next Steps

- Review results of geotechnical information. Update site concepts based on geotechnical data and begin preliminary design.
- o Based on comments received from the school district, finalize preliminary design plan for School sites.
- Comments on Updated Draft Policy Document presented to consultant and initial meeting to discuss comments and Final Draft prestation held. Follow up meeting is scheduled.

### HISTORIC DISTRICT IMPROVEMENTS

### 1. Boundary Street Lighting

 Complete contract revisions with Dominion to install street lighting on the west side of Boundary Street.

### Next Steps

Dominion to install street lighting in FY 2024.

### 2. Squire Pope Carriage House Preservation

- The contract with Huss Inc. was executed and construction began on 1/16/23.
- New sheathing / plywood and ice and water shield has been installed. All windows and doors have been refinished and reinstalled. HVAC, plumbing, electrical, fire suppression and low voltage rough ins are complete.

### Next Steps

- Complete exterior siding, interior trim/fixtures, and painting.
- Obtain FY25 budget approval for Welcome Center and office upfit.
- o Construction of the structure is planned to be complete in May.
- o Landscape is planned to be complete this Summer.

### 3. Bridge Street Streetscape

• Phase 1 lighting completed.

### Next Steps

- SCDOT approved additional storm drainage plan at Martins Place. Construction is scheduled for spring of 2024.
- o Continue phase 2 engineering design for SCDOT permitting.
- o Coordinate meeting with Hargray and Montessori regarding easements.
- o Continuing stakeholder meetings.

### 4. Boundary Street Streetscape

- Engineering Design is 70% complete and submitted to Watershed for stormwater for initial review.
- Met with Dominion Energy on 5/17/23. 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.
- Obtain easement exhibits and begin appraisals in FY 2024.
- Construction to begin in FY 2025, subject to acquisition of all required easements.

### 5. Calhoun Street Streetscape

- Preliminary engineering design is 40% complete.
- Met with Dominion Energy on 5/17/23. Awaiting underground conversion plans from Dominion Energy.

### Next Steps

- Begin negotiations with May River Road property owners for main transmission line easements.
- Once the main transmission line easements have been completed, then continue with engineering design into FY 2024.
- Prepare easement acquisition plats for Phase 1 in FY 2024 and begin easement acquisition.

o Phased construction is planned to begin in FY 2026 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 70% design plans.

### 7. Comprehensive Drainage Plan Improvements

- Asset inventory and condition assessment complete for Heyward Cove.
- 2D H/H model development complete.
- Tidal Gauge information gathering at Calhoun St Dock has been completed.
- Review of 2D H/H model development results and areas of inundation/choke points complete.
- FY24 scope of work finalized. Consultant proposal received and being updated per review comments.

### Next Steps

o Review consultant proposal, negotiate cost and scope items, determine award.

### 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 October 17, 2023. Attended School
District Operations Committee meeting on November 14, 2023 to provide project
design status/update and receive feedback. Comments received to be utilized in
90% Design development. Initial discussion with Beaufort County regarding pool
operations/impacts held and to be continued. Updated 90% design submittal
received and under review.

### Next Steps

- Coordinate approval for proposed improvements with Beaufort County School District and Beaufort County on Pool operation impacts.
- Complete 90% design submission review, perform permitting submissions and bid document formulation.
- o Identification of easement and street lighting needs.

### **PARK DEVELOPMENT**

### 1. Oyster Factory Park

- Civil construction and landscape of parking area are substantially complete. Parking lighting to be complete in January.
- Design of the event area and reconfigured boat trailer parking is underway.
- Executed contract for construction of the event area site development in December.

#### Next Steps

- Construction of the event area is planned to begin in January and be complete by May.
- Verify scope of boat parking expansion for Public Services installation this winter.
- o Prepare alternate kayak launch plan for the east side of the park.

### 2. Oscar Frazier Park

- Started construction of Rotary Center improvements in June. Construction to be phased and coordinated with events planned for the Rotary Center.
- Council directed staff to not proceed with sports court design at this time.
- Executed contracts for design/build of the splash pad.

### Next Steps

- Complete Rotary Hardscape construction in January.
- o Begin construction of Splash Pad in March 2024.

### 3. New Riverside Barn/Park

- Phase 2 Design is complete.
- JS Construction started phase 1 site construction on 1/27/2023.
- The contract has been executed with Nix Construction for Construction Manager at Risk Services with a GMP for Phase 2 (barn, restroom, playground, and common areas).

### Next Steps

- Complete construction of Phase 1 Site Development Infrastructure in January 2024.
- Nix construction to obtain for all building permits necessary for Phase 2 construction.
- Procure all playground equipment.
- Nix construction to mobilize for Phase 2 construction in January 2023.

### 4. New Riverside Village

### • Next Steps

- Site furnishings, lighting, signage, crosswalk, and additional hardscape path under design.
- o Order site furnishings and signage in FY 24.

### 5. Miscellaneous Park Improvements

- Construction of the DuBois playground addition is substantially complete.
- Design of Buckwalter Place (Evicore) Park is underway. Plans presented to Town Council on 1/16/2024.
- o Palmetto Recreation Equipment, LLC completed punch list items for the DuBois playground equipment in January.

### Next Steps

- Obtained quotes for shade sails at Buckwalter Place playground shade sails.
- Complete design of all FY 2024 park improvements (Evicore, Buckwalter Place Park, and Pritchard Street Pocket Park).
- o Begin landscape and hardscape enhancements in 2024.

### **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

Construction of the challenge course and impound lot is complete.

### Next Steps

 Begin design for FY 2025 construction of a possible storage of Public Service maintenance equipment.

### 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.
- Begin restoration construction of cottage in FY 2025.
- o Begin landscape development construction in FY 2026.

### 4. Ghost Roads

- Surveying and easement exhibits are complete.
- Bridge Street Quit Claim Deeds are complete. Pritchard and Colcock Streets Quit Claim Deeds are 99% complete. Staff is currently working with Lawrence, Lawton, Green, Pope, Allen, and Water Street property owners to obtain Quit Claim Deeds.
- Staff continue to meet with property owners to raise awareness of the acquisition efforts and communicate next steps and requested Council assistance.

### Next Steps

 Obtain remaining Quit Claim Deeds for Historic District Sewer Phases 4-6 or initiate quiet title proceedings.

### 5. Document Management

- RFP contract was awarded in March 2022.
- Electronic Document Management system is live.
- Documents for 6 departments have been transitioned to DMS.

### Next Steps:

 Historical documents for the remaining 4 departments will transition through FY 2026.

### 6. Network Infrastructure

- Replaced core switches at Town Hall and the Law Enforcement Center.
- Replaced two VMWare hosts for a more stable server environment.
- Migration of Munis and Energov systems to a hosted environment completed.
- Replaced phone system to a more modern system.
- 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 has agreed to be the Project Manager.
- Awarded the RIA SCIPP grant in support of Stoney Creek/Palmetto Bluff Sewer Extension with BJWSA and Beaufort County.
- Met with partners to address BJWSA IGA concerns on 3/2/23. A draft 3-party Intergovernmental Agreement was discussed at a follow up meeting on 5/30/23.
- Finalized IGA with Town, County, and grant splitting sewer extension costs and BJWSA funding water extension costs.

### Next Steps

- IGA with Town, County, and grant splitting sewer extension costs and BJWSA routed for signatures.
- 2. SC Department of Health and Environmental Control May River Shellfish Harvesting Monitoring Data Year-to-Date and May River Shellfish Harvesting Status Exhibit Attachments 1 and 1a

### 3. May River Watershed Action Plan Implementation Summary - Attachment 2

- Staff continue to work with Water Environmental Consultants (WEC) to review
  continuous flow data from the Stoney Creek, Rose Dhu Creek, and Palmetto Bluff
  subwatersheds. WEC is reviewing continuous and intermittent flow data in real time.
  WEC provided recommendations on the Town's water quality grab sampling
  program to ensure sufficient data for model calibration. Staff began implementing
  these recommendations on 7/31/23 and current data review continues to indicate
  staff and instrumentation are collecting quality flow monitoring data.
- The Town's Calhoun Street Dock tidal elevation gauge was repaired and is recording tidal elevation data. Water Environmental Consultants (WEC) and established two (2) additional tide gauges near the Stoney Creek and Rose Dhu Creek model boundaries as part of a 4-week headwaters tidal gauge study. The Calhoun Street dock and headwaters tidal elevation data will be used to establish a relationship between tidal amplitude and timing in the headwaters of the May River. A final report on the 4-week tidal gauge study is pending.
- Staff met with SC Sea Grant on 8/01/23 to discuss components of a Resiliency
  Assessment as recommended in the Comp Plan and funded in the FY24 budget.
  Emergency Management, Growth Management, and Watershed presented their
  needs. Needs for the Buck Island/Simmonsville area for flooding were included. Staff
  compiled comments on the proposed scope of work and provided them to SC Sea
  Grant. SC Sea Grant has provided a revised scope of work and staff is working with
  the Finance Department to execute a contract.

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

• Staff are currently editing the 2022-2023 MS4 Annual Report in preparation for the April 1, 2024, deadline for submittal to SCDHEC.

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

• The next May River Watershed Action Plan Advisory Committee (WAPAC) is scheduled for 01/25/24. - **Attachment 3** 

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

- Stormwater Infrastructure Inventory Map Attachment 4a
- E. coli Concentrations Trend Map Attachment 4b
- Monthly, Microbial Source Tracking (MST) Maps Attachments 4c and 4d
  - 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 01/23/24. Results are pending.
- 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)
  - Andrea Moreno participated in an online leadership course hosted by Indiana University.

### 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)
  - 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 01/25/24
- 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 blue.

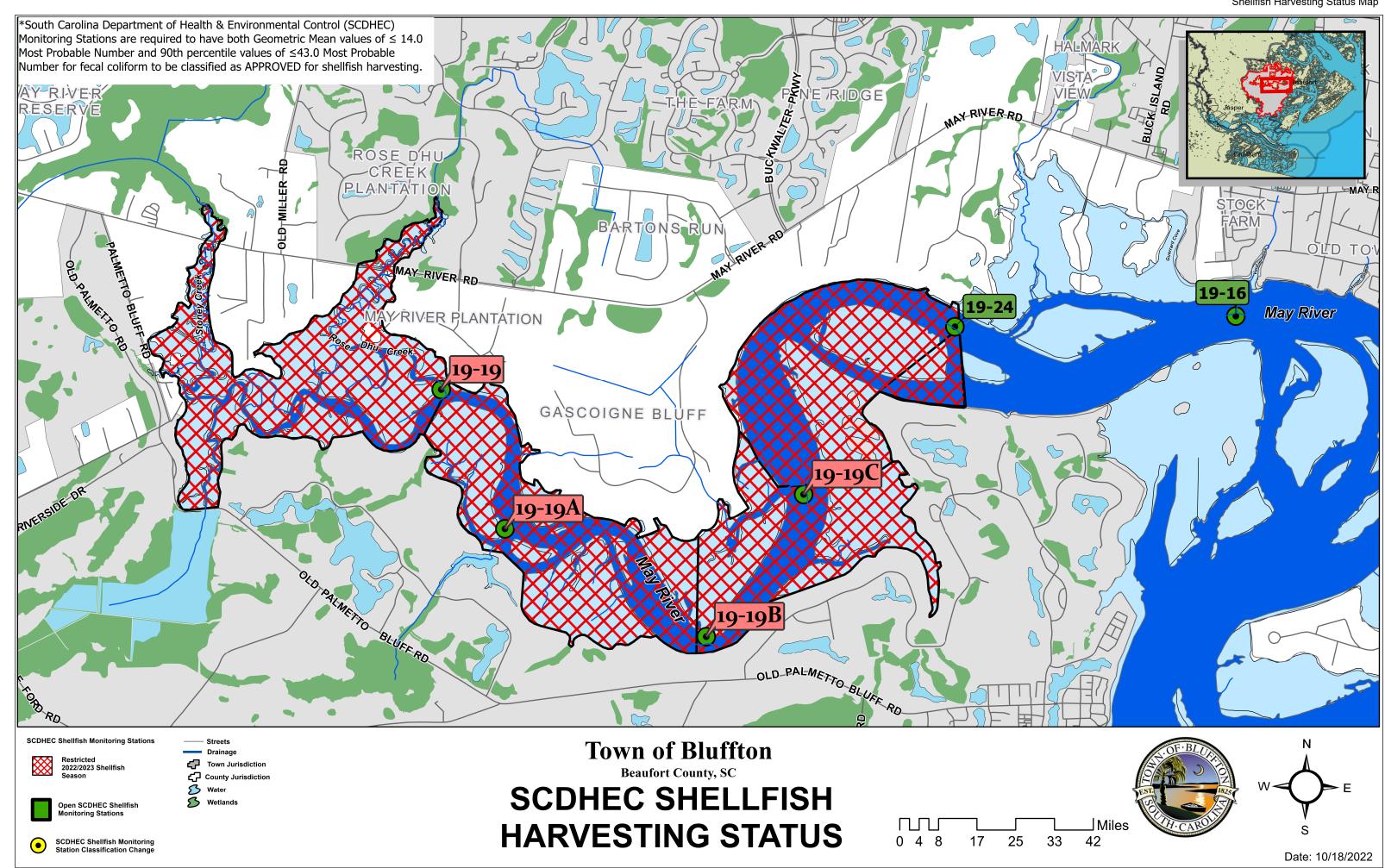
		19	-19			19-	19A			19-	19B			19-	19C			19	-24			19	-16	
	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
	Fecal Coliform (MPN)																							
December	17.0	79.0	33.0	33.0	22.0	49.0	49.0	33.0	17.0	4.5	17.0	7.8	4.5	17.0	49.0	13.0	4.0	6.8	6.8	7.8	11.0	7.8	13.0	17.0
November	70.0	33.0	33.0	13.0	31.0	33.0	13.0	2.0	17.0	7.8	7.8	4.5	13.0	4.0	4.5	4.5	13.0	4.5	6.1	2.0	4.5	2.0	13.0	4.5
October	49.0	49.0	23.0	33.0	79.0	26.0	46.0	23.0	31.0	13.0	13.0	17.0	21.0	23.0	23.0	33.0	33.0	23.0	11.0	2.0	79.0	17.0	14.0	6.8
September	110.0	33.0	540.0	23.0	49.0	11.0	350.0	13.0	49.0	17.0	350.0	13.0	33.0	13.0	170.0	7.8	33.0	2.0	79.0	17.0	33.0	11.0	33.0	13.0
August	49.0	49.0	23.0	23.0	49.0	49.0	23.0	49.0	23.0	23.0	11.0	6.8	23.0	49.0	13.0	13.0	17.0	14.0	17.0	23.0	22.0	14.0	11.0	2.0
July	33.0	350.0	920.0	350.0	13.0	64.0	49.0	920.0	23.0	79.0	95.0	70.0	7.8	33.0	130.0	49.0	7.8	33.0	23.0	33.0	17.0	13.0	46.0	17.0
June	NS	49.0	13.0	14.0	NS	79.0	4.5	7.8	NS	13.0	11.0	23.0	NS	17.0	2.0	13.0	NS	22.0	1.8	33.0	NS	2.0	9.3	13.0
May	70.0	2.0	4.5	23.0	49.0	49.0	4.5	33.0	23.0	23.0	4.0	17.0	22.0	23.0	1.8	13.0	6.8	23.0	1.8	33.0	4.5	7.8	2.0	21.0
April	33.0	33.0	4.5	170.0	33.0	23.0	4.5	130.0	13.0	22.0	1.8	110.0	6.8	17.0	2.0	70.0	13.0	7.8	1.8	NS	13.0	2.0	1.8	7.8
March	170.0	33.0	33.0	23.0	49.0	11.0	23.0	49.0	130.0	17.0	2.0	17.0	49.0	13.0	4.5	17.0	70.0	2.0	2.0	17.0	33.0	2.0	2.0	17.0
February	17.0	79.0	23.0	540.0	7.8	70.0	31.0	350.0	21.0	79.0	17.0	240.0	4.5	23.0	22.0	240.0	4.5	7.8	2.0	33.0	6.8	6.8	11.0	33.0
January	95.0	17.0	49.0	33.0	33.0	17.0	22.0	33.0	33.0	13.0	33.0	13.0	17.0	23.0	7.8	33.0	17.0	17.0	7.8	7.8	17.0	7.8	7.8	4.5
** Truncated GeoMetric Mean	34.0	36.0	40.0	38.0	21.0	26.0	28.0	30.0	16.0	18.0	18.0	17.0	12.0	15.0	14.0	16.0	10.0	10.0	9.0	9.0	9.0	8.0	9.0	8.0
** Truncated 90th Percentile	106.0	139.0	192.0	211.0	59.0	69.0	91.0	152.0	50.0	58.0	72.0	77.0	37.0	39.0	54.0	71.0	31.0	35.0	41.0	44.0	35.0	33.0	32.0	26.0

NS = No Sample

**SCDHEC Regulatory Requirements:** 

Geometric Mean ≤ 14 90th Percentile ≤ 43

 $<sup>\</sup>hbox{\bf **} \ \hbox{\bf Town staff calculations utilizing SCDHEC statistics}$ 



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

Created: August 25, 2022 Updated: January 25, 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.

### 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:**

Stoney Creek/Palmetto Bluff Sewer: 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.

# 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: April 25, 2024



 $\overline{\text{Figure 52. McCracken Middle School/Bluffton Elementary School Proposed Stormwater BMP Retrofits}$ 

Next Update: April 25, 2024

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

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

- Drafted a detailed scope of work for Engineering Consultant Firm review and cost proposal (Expression of Interest) regarding performance of the work elements presented herein and related to MRWAP Update recommendations for implementation.
- The Expression of Interest was submitted to 3 consultant firms under existing Master Service Agreements with the Town for review and a request for response.
- All 3 Firms responded. 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.

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

Phase II work was approved by Town Council and work has been initiated and reported herein.

### Task 1: MRWAP Update 11 site locations

#### **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.

Next Update: April 25, 2024

- 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.
- 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. 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.
  - 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 the 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.

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

Next Update: April 25, 2024

- 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.
  - o Public or governmental agency land/property owner (not SCDOT RoW).

### **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 January 25, 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
- 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)

Next Update: April 25, 2024

### Town of Bluffton Impervious Restoration/BMP Retrofit Policy Documents.

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

 Policy Document Formulation has been initiated and includes research of similar Programs Nationwide.

### **Update for WAPAC 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. Additional
discussions with Consultant to be held in December 2023.

### Other, Related MRWAP Update Recommendations

- Adopt proposed regional Southern Lowcountry Post Construction Stormwater Ordinance and Design Manual - complete September 2021.
- The Town should incorporate volume reduction BMPs (those that encourage infiltration) within
  existing and future CIP projects to the maximum extent practical, especially for project locations
  with well-drained soils (HSG A or B) in progress, see below.
  - Work Performed and Current Status as of August 25, 2022 Meeting
    - Bridge Street Streetscape Project
      - Project design/permitting is complete, and Construction Contract has been awarded.

Next Update: April 25, 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**

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

Water Quality Monitoring Summary: 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:

Data	Time of	TKN	Nitrate/Nitrite	Total Nitrogen	Total	TSS
Date	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-

Next Update: April 25, 2024

construction water 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 Sample	TKN (mg/L)	Nitrate/Nitrite (mg/L)	Total Nitrogen (TN)	Total Phosphorus (TP)	TSS (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.

Rainsto	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 28 <sup>th</sup>	1.23 inches over 1 hour							
August 30 <sup>th</sup>	1.23 inches over the whole day							
September 1 <sup>st</sup>	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

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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.

- 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.
- o 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.
- 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 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.
- 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.
- Future (new) Water Flow Monitoring Locations.
  - Work Performed and Current Status as of August 25, 2022 Meeting
    - The MRWAP Update included recommendations for the Town to perform certain rainfall and flow data measurements in May River Headwater Watersheds in order to "calibrate" and make more accurate Model predictions. These recommendations were evaluated and a game plan to address recommendations to calibrate model developed.
      - Utilizing existing flow and rainfall data collected over past years with rain gauges, IQ Plus and Sontek measuring instruments in Stoney Creek, Rose Dhu Creek, Palmetto Bluff, Duck Pond and Heyward Cove, the Town hired a consultant to review the data and determine:
        - Useful data obtained to gain the required information to calibrate model.
          - The data obtained from Stoney Creek and Heyward Cove was deemed sufficient for Model calibration and Final report for this work is in process.
          - Duck Pond was deemed inconsequential, not needed due to drainage area size and proximity/outfall to tidal waters.

**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 field work installation of equipment is being scheduled. Once installed and operational, data collection will last 6 months.

### Update for WAPAC July 27, 2023 Meeting

- The Town of Bluffton procured and installed two (2) SonTek Turnkey Systems that enable real-time continuous flow data review to a cloud-based service. These systems are deployed in the Rose Dhu Creek and Palmetto Bluff subwatersheds.
- A SonTek IQ remains deployed in the Stoney Creek subwatershed. The consultant's first data review determined there was sufficient flow data for model calibration in the Stoney Creek subwatershed. However, staff determined it would continue to collect continuous flow data at this location so that continuous flow, intermittent flow, bacteria samples, and rainfall data were collected for three (3) of the four (4) Modeling Report subwatersheds 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.

### May River Watershed Action Plan Update

Updated: January 25, 2024 Next Update: April 25, 2024

### **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.



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

Thursday, January 25, 2024 at 3:00 PM

Theodore D. Washington Municipal Building, Henry "Emmett" McCracken Jr. Council Chambers, 20 Bridge Street, Bluffton, SC

### **AGENDA**

- I. CALL TO ORDER
- II. ROLL CALL
- III. ADOPTION OF THE AGENDA
- **IV. ADOPTION OF SEPTEMBER 28, 2023 MINUTES**
- V. PRESENTATIONS, CELEBRATIONS, AND RECOGNITIONS
  - 1. Presentation on Town of Bluffton Stormwater Program Beth Lewis, Water Quality Program Manager
- VI. PUBLIC COMMENT

### VII. OLD BUSINESS

- 1. May River Watershed Action Plan Project Implementation Status Report Dan Rybak, Project Manager
- 2. Progress Report on the May River Watershed Baseline Assessment Beth Lewis, Water Quality Program Manager
- 3. Development of the Strategic Plan Priority Five (5) to Establish an Agreement with Beaufort County to Implement the May River Watershed Action Plan within the County's Jurisdiction of the Watershed for Both Structural Stormwater Projects and Non-Structural Programs such as Implementing the Green Print Map within the Rural & Critical Lands Program Beth Lewis, Water Quality Program Manager

### **VIII. NEW BUSINESS**

- 1. Adoption of 2024 Meeting Dates and Times Beth Lewis, Water Quality Program Manager
- IX. DISCUSSION
- X. ADJOURNMENT

**NEXT MEETING DATE: Proposed February 22, 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.

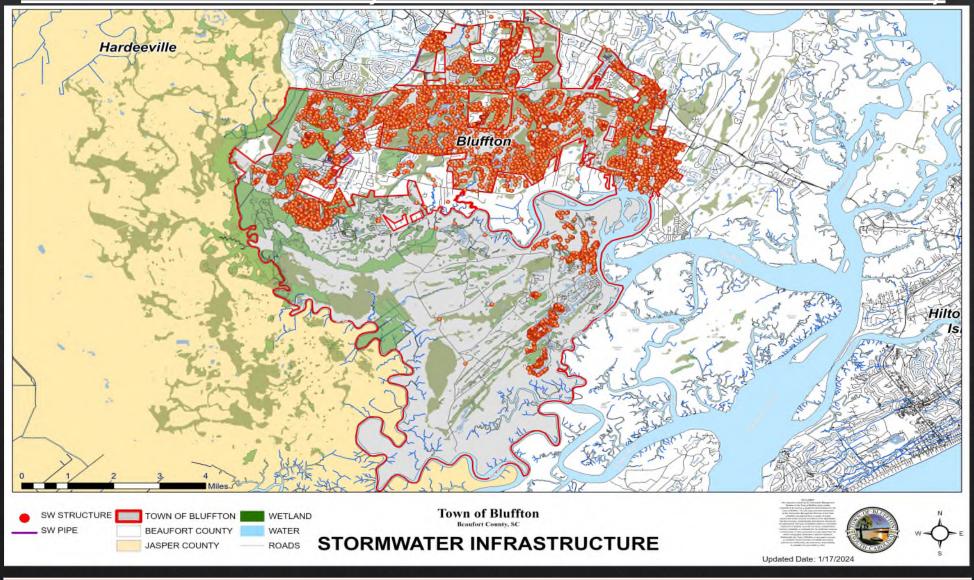
\*Please note that each member of the public may speak at one public comment session and a form must be filled out and given to the Town Clerk. To submit a public comment online, please click here:

<a href="https://www.townofblufton.sc.qov/FormCenter/Town-15/Public-Comment-60">https://www.townofblufton.sc.qov/FormCenter/Town-15/Public-Comment-60</a>

Public comment is limited to 3 minutes per speaker.

### Attachment 4a

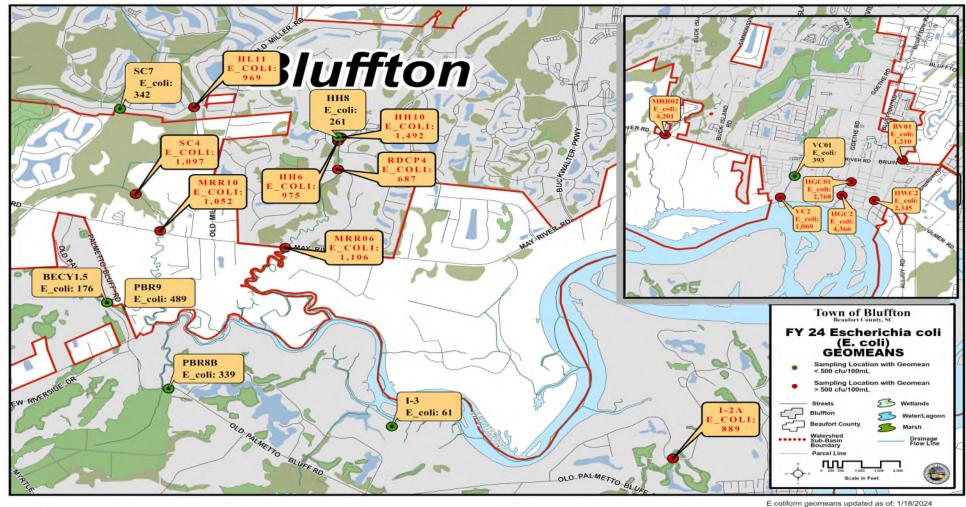
# MS4 Minimum Control Measure #3 – IDDE (Illicit Discharge Detection & Elimination): Stormwater Infrastructure Inventory



	Stormwater Infrastructur	re Inventory Collection Status	
Collection Totals			16,979
FY 2024 YTD			322

## Attachment 4b

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

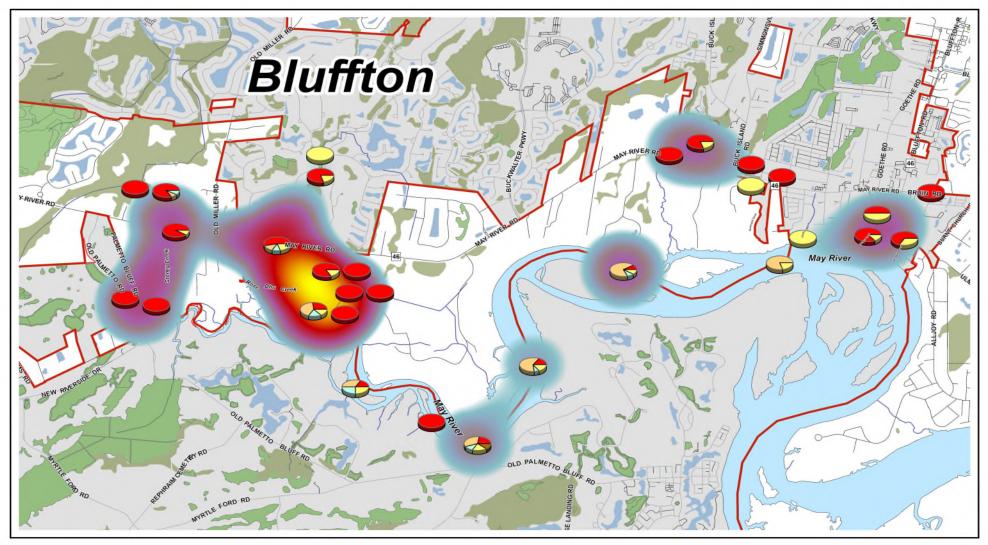


			E coliform geomeans updated as of: 1/18/2024
	USCB Water Quality Samples	Microbial Source Tracking Samples	MS4 Quarterly Samples Collected
FY 2024 YTD Totals	311	32	137
FY 2023 Totals	584	108	108
FY 2022 Totals	447	78	119

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

## 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



Town Jurisdiction



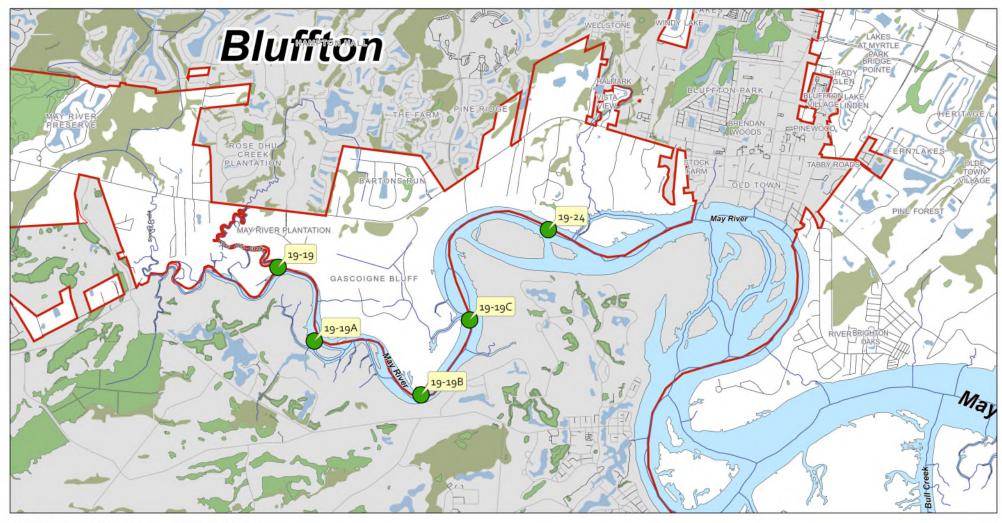
Drainage Flow Line



Updated Date: 1/17/2024

### 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

County Jurisdiction

### MICROBIAL SOURCE TRACKING LOCATIONS

Sampling Results December 2023 SCDHEC Sampling

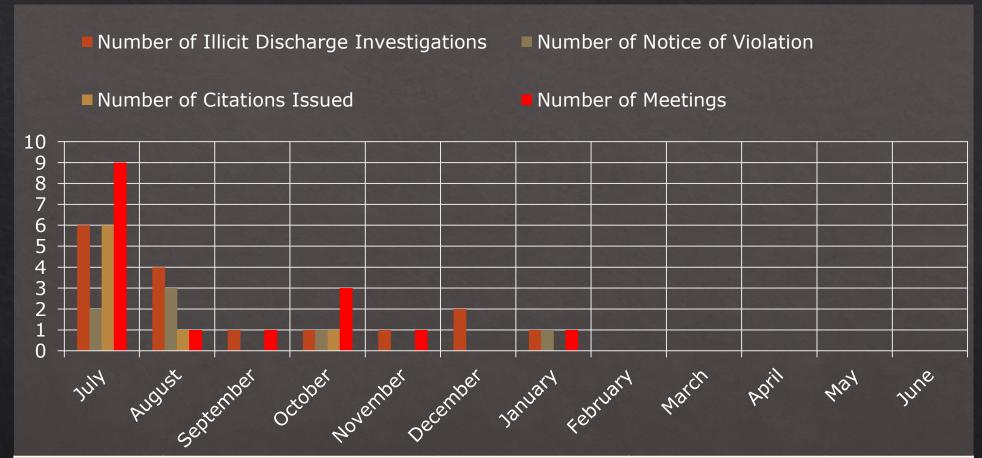
Town of Bluffton





### 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	16	7	8	16
FY 2023 Totals	27	89	1	20
FY 2022 Totals	30	5	3	17

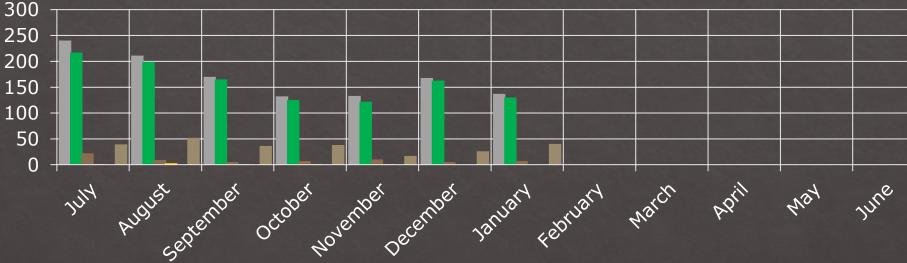
# MS4 Minimum Control Measure #4 -Construction Site Stormwater Runoff Control

- Erosion & Sediment Control Inspections (E&SC) Number of Notice of Violation (NOV)
- Number of Inspections Passed

Number of Citations Issued

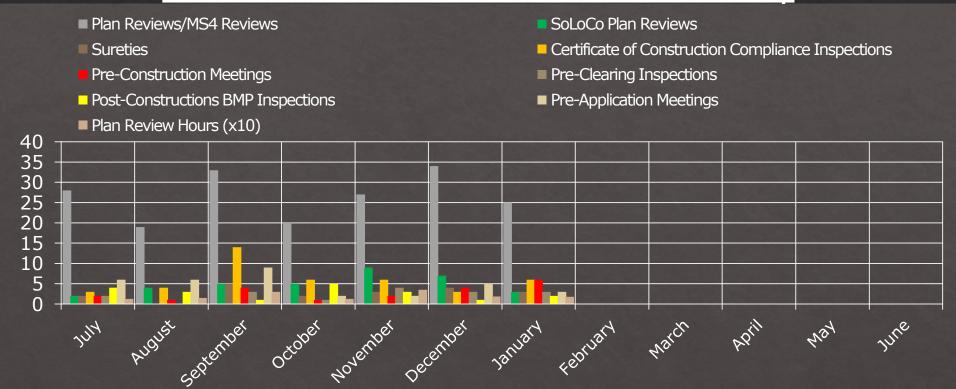
■ Number of Stop Work Orders (SWO)





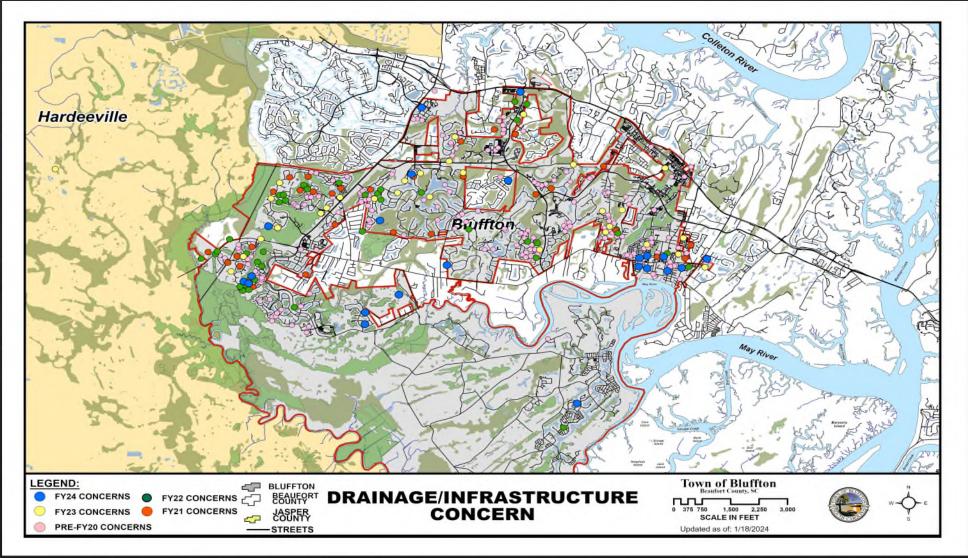
	Number of Sediment & Erosion Control Inspections	Number of Inspections Passed	Number of NOVs Issued	Number of SWO Issued	Number of Citations Issued	Number of E&SC Meetings
FY 2024 YTD Totals	1191	1121	65	7	0	248
FY 2023 Totals	2,321	2,030	266	26	0	577
FY 2022 Totals	3,127	2,701	392	49	0	673

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



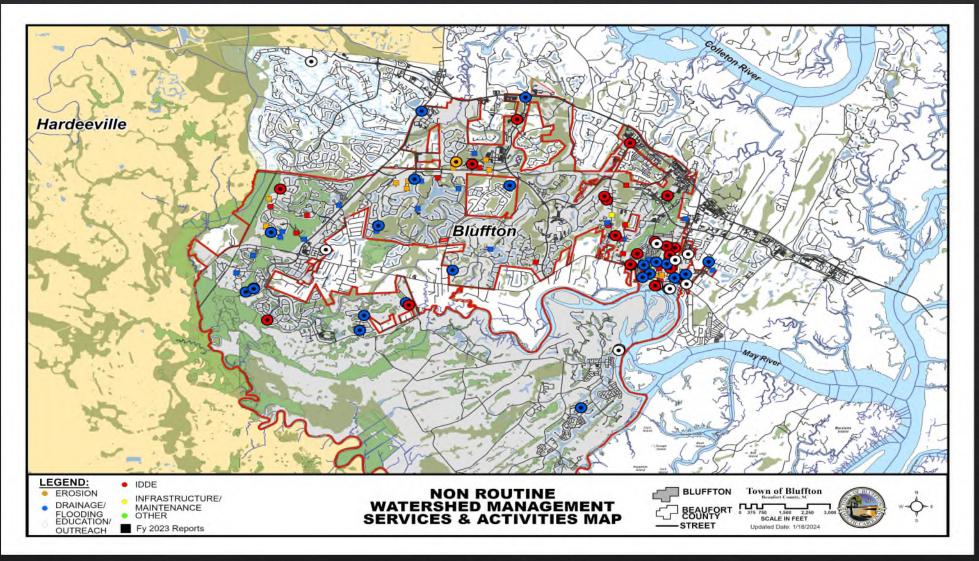
	Plan Reviews MS4 Reviews	SoLoCo Plan Reviews	Sureties	CCC Inspections	Pre- Construction Meetings	Pre-Clearing Inspections	Post Construction BMP Inspections	Pre-Application Meetings	Total Plan Review Hours
FY 2024 YTD	186	35	19	42	20	16	19	33	141 Hrs.
FY 2023 Totals	297	67	42	40	15	13	45	50	386 Hrs.
FY 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	21	2
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	56	18
FY 2023 Totals	46	23
FY 2022 Totals	33	21

## **FY24 CIP Master Project Schedule**



## **FY24 CIP Master Project Schedule**



Planning & Conceptual Design