

TOWN COUNCIL

STAFF REPORT

Projects and Watershed Resilience Department



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

CAPITAL IMPROVEMENTS PROGRAM (CIP) AND SPECIAL PROJECTS UPDATE

PATHWAYS

1. Goethe-Shults Sidewalks Phase 2

- Sidewalks are completed and SCDOT has closed out the project.
- **Next Steps**
 - Complete additional services to clean up ditches and outfall along Shults Road.

2. Buck Island-Simmons ville Neighborhood Sidewalks and Lighting

- Phase 6A along Simmons ville Road from Grayco northward to Sugaree Drive is complete.
- A contract for Phase 6B along Simmons ville Road from Sugaree Drive northward to the existing New Mustang Road was awarded to JS Construction Services, Inc.
- **Next Steps**
 - Prepare and obtain streetlight easements and begin condemnation process for remaining Phase 5 street lighting easements.
 - Begin Phase 6B construction.
 - Construction of the remaining Simmons ville Road sidewalks and lighting to be completed in FY 2023.

3. New River Linear Trail

- Conceptual Master Plan is complete.
- Executed PO with Barrier Island Engineering for Phase 1 Engineering Design.
- Submitted PRT application for a restroom facility, water source and lighting at the New River Trail Park. Submitted request to Bill Herbkersman to solicit support from the Beaufort County Delegation.
- Received easement donation from New Riverside Community Association, Inc.

- **Next Steps**
 - Continue engineering design for Phase 1 pathway (New River to Hwy 46).
 - Submit plans to Santee Cooper for cursory review and cost share for bridge replacements.
 - Easement Donation from New Riverside Community Association, Inc. to be presented at 3/14/23 Town Council.
 - PRT Grant to be awarded in May 2023.

SEWER & STORMWATER

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

- Construction was halted on Phases 5A-D by BJWSA due to the contractor under-performing their job duties.
- Received permits to construct from DHEC.
- Posted a solicitation to construct and only received one response. The solicitation must be reposted per Dept. of Commerce due to grant funding.
- **Next Steps**
 - Coordinate with Dept. of Commerce to re-bid the project.
 - Start construction summer 2023.

2. Historic District Sewer Extension Phase 2 - Bridge Street

- Received SCDHEC permit to construct for original scope.
- No contractors responded to the first construction solicitation.
- Received Quit Claim Deeds from all the property owners along the ghost road.
- Obtained road ownership from SCDOT.
- Readvertised for bids in conjunction with Historic District Sewer Extension Phase 3 and received one response which was much higher than anticipated.
- **Next Steps**
 - Negotiate design changes with BJWSA and adjust scope and/or price with lone bidder.
 - Contract award with Jordan Construction of Hilton Head, Inc. to be presented at 3/14/23 Town Council.

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

- Received initial design for Phases 4, 5, & 6 and reviewed with the engineer.
- **Next Step**
 - Review Phases 4, 5, & 6 design changes to drawings.
 - Obtain Quit Claim Deeds from all the property owners along the ghost roads or initiate condemnation process in April 2023.

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

- Initial site investigations are complete for 9 of the 11 participating project partners.
- Palmetto Pointe Towns and Lowcountry Community Church declined to participate in Program at this time.
- Policy document for Impervious Restoration Program under formulation.
- Geotechnical investigations at 6 school sites were completed and field results are under analysis. Geotechnical investigations for the 3 remaining sites are being coordinated.
- Geotechnical results for 6 school sites will be utilized to develop the Final Preliminary Designs at each site location and in process.
- **Next Steps**
 - Proceed with geotechnical evaluations at the 3 remaining site locations. Begin preliminary site design.
 - Policy Document DRAFT is being updated based on comments provided.

5. Buck Island Drainage Improvements

- A contract was executed on 11/18/22.
- Construction is 80% complete.
- 10" water main relocation/lowering performed on 2/15/23.
- **Next Steps**
 - Completion of road restoration grading and stabilization in process.
 - Remaining work will be performed via lane closure and is anticipated to be completed by mid-March.

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

- Phase 2 photometric plans, encroachment permits and lighting agreements are complete and approved.
- SCDOT and Dominion indicated poles must be installed on private property due to conflicts with sewer force main and communication utilities within the right of way. Easements must now be obtained to install Phase 2 lighting.
- **Next Steps**
 - Install streetlights on the west side of the street in FY 2023. Coordinate conduit and light installation for the east side of the street in conjunction with larger streetscape project.
 - Obtain easements as needed for Phase 2 street lighting.

2. Squire Pope Carriage House Preservation

- Stabilization has been completed.
- Contract with Huss Inc. executed and construction began on 1/16/23 with a groundbreaking ceremony held on 2/4/23.
- Selective demolition and dismantling continue, removal of windows, structural framing and stabilization.
- **Next Steps**
 - Excavation for footers and foundation under raised structure.

- Pour footers and start foundation.

3. **Bridge Street Streetscape**

- Issued Notice to Proceed for Phase I construction to start 12/5/22.
- Obtained survey proposal for Phase II streetscape project.
- Engaged Barrier Island for Phase II design.
- **Next Steps**
 - Continue construction of Phase I and complete in Summer 2023.
 - Drainage 85%, parking 50%, Sidewalks 40%, IT conduit and pull boxes 50%, lighting 5%.
 - Obtain easement from Cunningham LLC for sidewalk connections.

4. **Boundary Street Streetscape**

- Engineering Design is 70% complete and submitted to Watershed for stormwater for initial review.
- Town Council approved a contract amendment on 2/14/23 to complete engineering design and permitting.
- **Next Steps**
 - Continue with Engineering Design and Permitting.
 - Obtain easement exhibits and begin appraisals in FY 2023.
 - Bid construction in FY 2024.

5. **Calhoun Street Streetscape**

- Surveying is complete and preliminary engineering design is 40% complete.
- **Next Steps**
 - Continue engineering design into FY 2023.
 - Prepare easement acquisition plats for Phase 1 in May 2023.
 - Begin easement acquisition in FY 2024.
 - Phased construction is planned to begin in FY 2025 pending budget approval.

6. **Pathway Pedestrian Safety Improvements**

- Completed Historic District crosswalk study identifying and prioritizing future intersection/crosswalk improvements to meet ADA compliance.
- Phase 1 ADA sidewalk improvements along Goethe Road were completed in January.
- **Next Steps**
 - Phase 2 design proposal under review.
 - Staff is submitting a US DOT RAISE grant for planning and design of bike and pedestrian safety improvements in the Historic District, Goethe/Shults and Buck Island/Simmons ville neighborhoods for implementation in a phased approach.

7. **Historic District Comprehensive Drainage Plan Improvements**

- Review of Phase 1 updated asset inventory and condition assessment.
- 2D H/H model development complete and under review.
- Initial Tidal Gauge information gathering at Calhoun St Dock has been completed.

- **Next Steps**
 - Review 2D H/H model development results and area of inundation/choke points and establish maintenance and project needs to reduce risk of flooding.

8. Pritchard Street Drainage Improvements

- Cranston Engineering is proceeding with 100% design development based on 70% review comments and meeting discussions.
- Barrier Island Engineering completed 3rd party evaluation of drainage claims and complaints associated with 40 Pritchard Street. Concept plan of potential on-site drainage improvements that can be performed by the homeowner to reduce the risk of flooding for his property has been delivered.
- **Next Steps**
 - Coordinate approval for proposed improvements with Beaufort County School District.
 - Complete 100% design submission. Final project scope and potential future phase Streetscape elements to be included.

PARK DEVELOPMENT

1. Oyster Factory Park

- Executed contract with JS Construction for parking expansion.
- Executed Task Authorization with Witmer, Jones, Keefer for design of the event area.
- Construction of parking area to begin in February 2023.
- Design of Phase 3 signage for Garvin/Garvey house completed.
- **Next Steps**
 - Begin construction of the parking lot.
 - Begin design of Oyster Factory Park cookout area in FY 2023.

2. Oscar Frazier Park

- Began design of FY 2023 improvements including hardscape near the Rotary Center, sport courts, and splash pad.
- Submitted conceptual plans at Quarterly Workshop and obtained Town Council input. Sent questionnaire for sport court alternatives to Bluffton Park HOA for review and selection of preferred option.
- **Next Steps**
 - Complete Rotary Center hardscape plans and bid in the Spring 2023.
 - Hardscape construction to begin in April.
 - Receive Town Council direction on sport courts at April Quarterly Workshop.
 - Complete design of splash pad and sport courts in FY 2023.

3. New Riverside Barn/Park

- A \$500,000.00 grant was approved for partial funding of the initial phase of the project.
- Engineering design, permitting and bidding of phase 1 site development is complete.
- Construction documents for the restroom building are complete.
- Executed contract for architectural design services for the Barn additions.

- Executed phase 1 Site Development contract with JS Construction.
- Executed contract with Wood & Partners for playground design services.
- Construction groundbreaking held on 1/26/2023.
- JS Construction started phase 1 site construction on 1/27/2023.
- **Next Steps**
 - Continue architectural design of barn addition.
 - Continue design of playground area in FY 2023.
 - Continue construction of Phase 1 Site Development Infrastructure in January 2023.
 - Execute a Construction Manager at Risk contract with Nix Construction.

4. Miscellaneous Park Improvements

- Presented proposed DuBois Park playground improvements at the October Workshop and TC requested staff to explore alternative playground equipment.
- **Next Steps**
 - Continue with the design of FY 2023 playground improvements and present at the April TC Workshop.

TOWN FACILITIES AND MISCELLANEOUS PLANNING

1. Rotary Community Center Facility Improvements

- Completed floor replacement in August 2022.
- **Next Steps**
 - Request funding for floor/crawl space insulation replacement and interior trim work in FY 2024 as a maintenance operating expense.

2. 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.

3. Law Enforcement Center Facility Improvements

- Initial scope of work of the parking/service yard, and covered sheds are complete.
- Clearing for the challenge course is complete.
- Reflection Plaza construction, signage and dedication ceremony are completed.
- **Next Steps**
 - Complete construction with The Greenery for the challenge course and expanded area for an impound lot and storage of Public Service maintenance equipment.

4. Sarah Riley Hooks Cottage

- Obtained conceptual master plan concepts from JK Tiller.
- Prepared questionnaire for stakeholder input and distributed at the Art and Seafood Festival. Post questionnaire on the TOB web site to obtain additional stakeholder input.
- Obtained Structural Assessment Report from Meadors Inc. to determine feasibility of the preservation of the cottage.
- Coordinate termite treatment for cottage.

- Prepared RFQu for the preservation or reconstruction of the Sarah Riley Hooks Cottage.
- **Next Steps**
 - Complete Master Plan and continue obtaining public input for potential uses for the park.
 - Execute contract with Historic Preservation consultant for building assessment, preservation or re-construction.
 - Present update at the April Town Council Workshop.

5. Ghost Roads

- Surveying and easement exhibits are complete.
- Bridge Street Quit Claim Deeds are complete. Pritchard and Colcock Streets Quit Claim Deeds are 95% complete. Staff is currently working with Lawrence, Lawton, Green, Pope, Allen and Water Street property owners to obtain Quit Claim Deeds.
- Staff continues to meet with property owners to raise awareness of the acquisition efforts and communicate next steps and requested Council assistance.
- Easement Acquisition Consultants are under contract and initial meeting held.
- **Next Steps**
 - Obtain schedule and price proposals from consultants to obtain Quit Claim Deeds in the areas of Maiden and Dubois Lanes.
 - Obtain remaining Quit Claim Deeds for Historic District Sewer Phases 4-6 or initiate condemnation proceedings.

6. Document Management

- RFP contract was awarded in March 2022.
- Electronic Document Management system is live.
- **Next Steps:**
 - Historical documents began being moved in July, 2022 and continue through FY 2026.

7. 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.
- **Next Steps:**
 - Replace phone system to a more modern system.
 - Replacing two more VMWare hosts.
 - Implementation of Executime to replace.

THIS SPACE LEFT INTENTIONALLY BLANK

WATERSHED MANAGEMENT

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.
 - Completed DRAFT RIA SCIPP application in support of Stoney Creek/Palmetto Bluff Sewer Extension with BJWSA and Beaufort County. Obtained letters from governmental agencies and stakeholders in support of the application.
 - A draft 3-party Intergovernmental Agreement was drafted by Staff.
 - **Next Steps**
 - Await notification of grant application. Anticipated in January/February of 2023.
 - Meet with partners to address BJWSA IGA concerns on 3/2/23.
 - BJWSA to procure design engineer through existing MSAs.
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 has procured SonTek IQ telemetry stations and is coordinating installation of the equipment with Xylem.
 - Staff deployed a HOBO-U20 water level logger at the Calhoun Street to collect tidal elevation data and staff intends to continue data collection at this location.
4. **Municipal Separate Storm Sewer System (MS4) Program Update**
 - Staff has completed a draft of the MS4 Annual Report as required by SCDHEC.
5. **MS4 Minimum Control Measure (MCM) - #1 Public Education and Outreach, and MS4 MCM - #2 Public Participation and Involvement**
 - The May River Watershed Action Plan Advisory Committee (WAPAC) meeting took place on 02/23/23. ***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 conducted sampling 01/24/23 and 02/07/23. The human genetic marker was not detected in any sample collected in January. February results are pending. SCDHEC will be collecting samples again on 03/14/23.
 - 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)**
 - No activity.
10. **MS4 MCM – #6 Good Housekeeping (Ditch, Drainage and Roadside Maintenance)**
 - Public Services performed weekly street sweeping on Calhoun Street, Highway 46, Bruin Road, May River Road, Pin Oak Street, and curbs and medians on Simmonsville and Buck Island Roads.
 - Performed ditch inspections.
 - Arrow ditch (2,569 LF)
 - Red Cedar ditch (966 LF)
 - Buck Island roadside ditch (15,926 LF)
 - 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. May River Watershed Action Plan Implementation Summary*
3. MS4 Minimum Control Measures #1 and #2 – WAPAC Public Notice
4. MS4 Minimum Control Measure #3 – Illicit Discharge Detection and Elimination
 - a. Stormwater Infrastructure Inventory Map
 - b. *E. coli* Concentrations Trend Map
 - c. Microbial Source Tracking Trend Map – Human Source
 - d. Microbial Source Tracking Map – All Sources
 - e. Illicit Discharge Investigations
5. MS4 Minimum Control Measure #4 – Construction Site Stormwater Runoff Control
6. MS4 Minimum Control Measure #5 – Stormwater Plan Review and Related Activity
7. Citizen Drainage, Maintenance and Inspections Concerns Map
8. Citizen Request for Watershed Management Services and Activities Map
9. CIP Project Schedules

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

	19-19				19-19A				19-19B				19-19C				19-24				19-16			
	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)
December	17.0	79.0	33.0		22.0	49.0	49.0		17.0	4.5	17.0		4.5	17.0	49.0		4.0	6.8	6.8		11.0	7.8	13.0	
November	70.0	33.0	33.0		31.0	33.0	13.0		17.0	7.8	7.8		13.0	4.0	4.5		13.0	4.5	6.1		4.5	2.0	13.0	
October	49.0	49.0	23.0		79.0	26.0	46.0		31.0	13.0	13.0		21.0	23.0	23.0		33.0	23.0	11.0		79.0	17.0	14.0	
September	110.0	33.0	540.0		49.0	11.0	350.0		49.0	17.0	350.0		33.0	13.0	170.0		33.0	2.0	79.0		33.0	11.0	33.0	
August	49.0	49.0	23.0		49.0	49.0	23.0		23.0	23.0	11.0		23.0	49.0	13.0		17.0	14.0	17.0		22.0	14.0	11.0	
July	33.0	350.0	920.0		13.0	64.0	49.0		23.0	79.0	95.0		7.8	33.0	130.0		7.8	33.0	23.0		17.0	13.0	46.0	
June	NS	49.0	13.0		NS	79.0	4.5		NS	13.0	11.0		NS	17.0	2.0		NS	22.0	1.8		NS	2.0	9.3	
May	70.0	2.0	4.5		49.0	49.0	4.5		23.0	23.0	4.0		22.0	23.0	1.8		6.8	23.0	1.8		4.5	7.8	2.0	
April	33.0	33.0	4.5		33.0	23.0	4.5		13.0	22.0	1.8		6.8	17.0	2.0		13.0	7.8	1.8		13.0	2.0	1.8	
March	170.0	33.0	33.0		49.0	11.0	23.0		130.0	17.0	2.0		49.0	13.0	4.5		70.0	2.0	2.0		33.0	2.0	2.0	
February	17.0	79.0	23.0		7.8	70.0	31.0		21.0	79.0	17.0		4.5	23.0	22.0		4.5	7.8	2.0		6.8	6.8	11.0	
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	36.0	21.0	26.0	28.0	27.0	16.0	18.0	18.0	15.0	12.0	15.0	14.0	14.0	10.0	10.0	9.0	8.0	9.0	8.0	9.0	7.0
** Truncated 90th Percentile	106.0	139.0	192.0	204.0	59.0	69.0	91.0	97.0	50.0	58.0	72.0	68.0	37.0	39.0	54.0	64.0	31.0	35.0	41.0	40.0	35.0	33.0	32.0	24.0

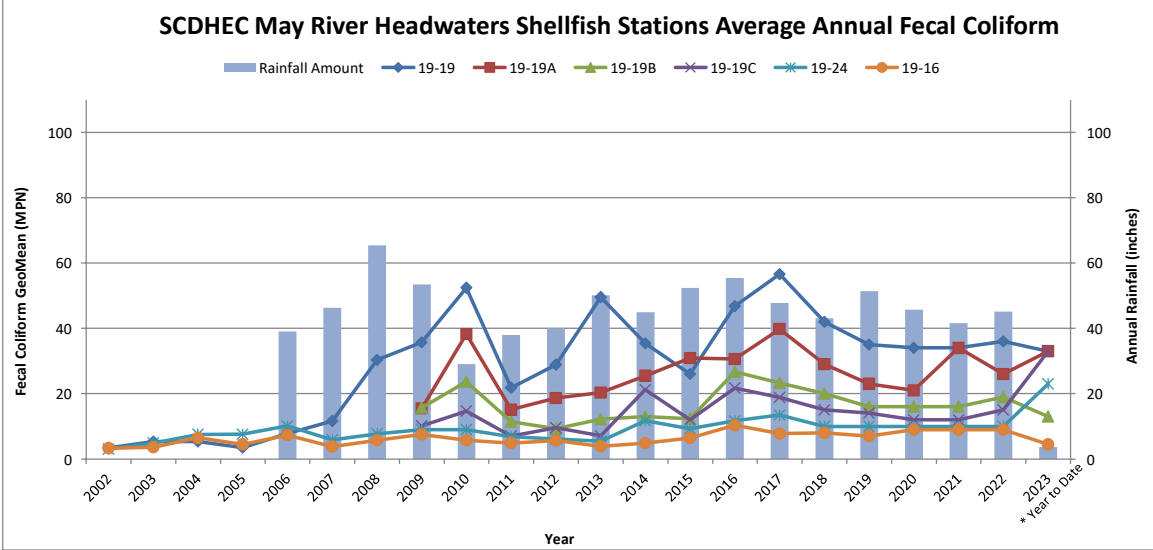
NS = No Sample

SCDHEC Regulatory Requirements:

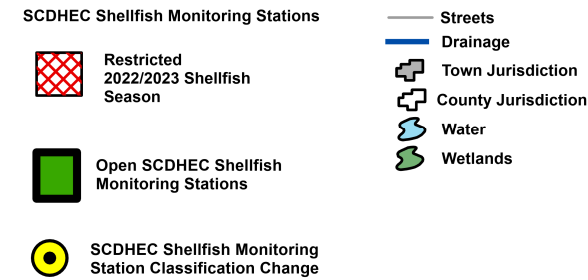
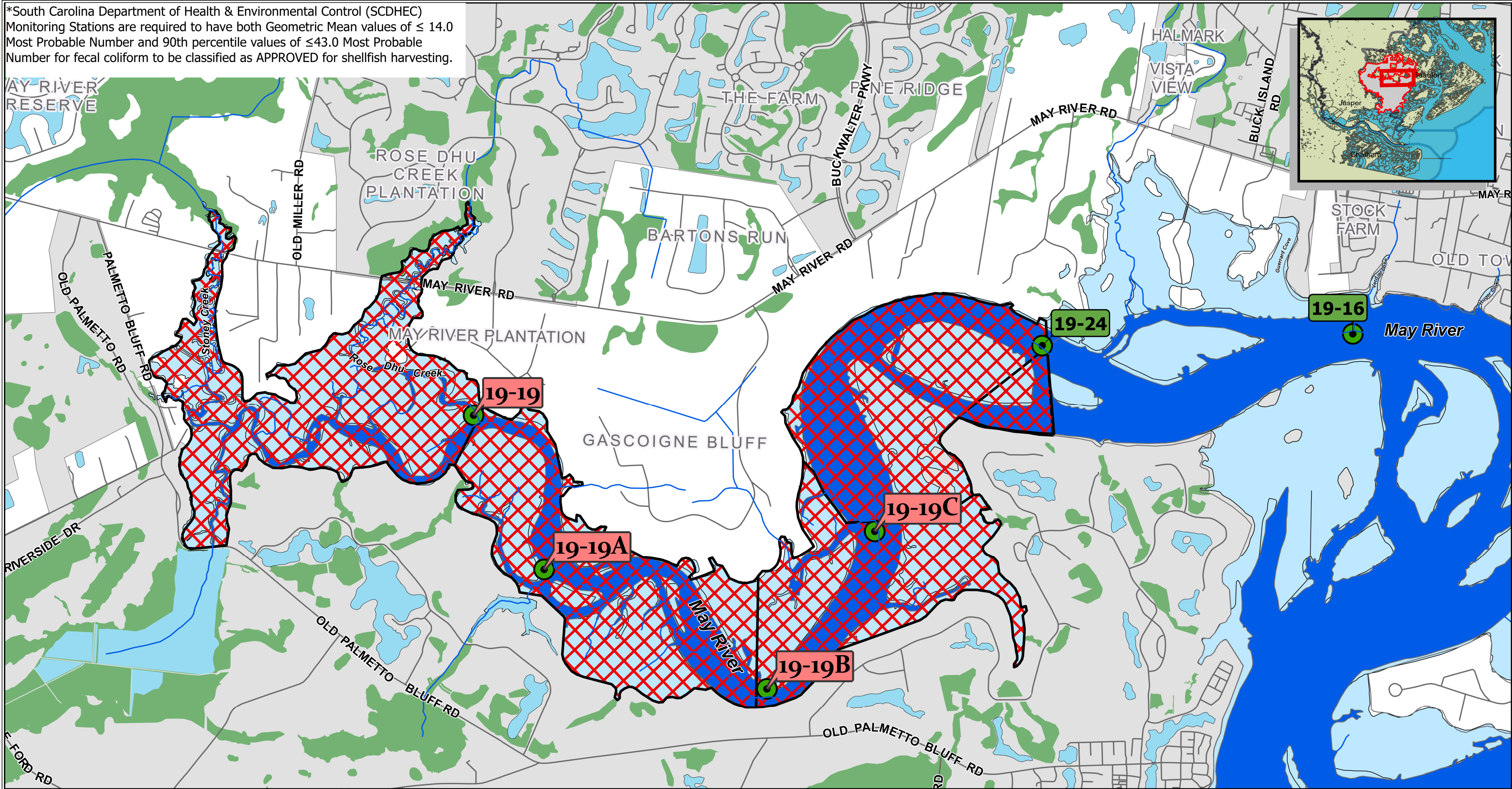
Geometric Mean ≤ 14

90th Percentile ≤ 43

** Town staff calculations utilizing SCDHEC statistics

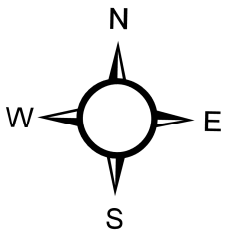
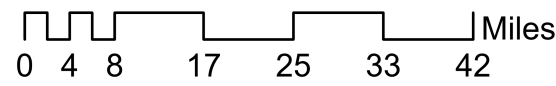


*South Carolina Department of Health & Environmental Control (SCDHEC)
Monitoring Stations are required to have both Geometric Mean values of ≤ 14.0
Most Probable Number and 90th percentile values of ≤ 43.0 Most Probable
Number for fecal coliform to be classified as APPROVED for shellfish harvesting.



Town of Bluffton
Beaufort County, SC

SCDHEC SHELLFISH HARVESTING STATUS



WAPAC Meeting Presentation 2020 May River Watershed Action Plan Update & Modeling Report Overview and Status

Overview

- May River Watershed Action Plan Update (MRWAP) & Modeling Report **completed** November 2020.
- Bluffton Town Council Adoption of May River Watershed Action Plan Update & Modeling Report 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 the 2011 May River Watershed Action Plan (henceforth 2011 Action Plan) Best Management Practices (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 model and the model outputs. This highly technical information is necessary for future Water Quality Model (henceforth WQ Model) calibration and use for consistency.
 - **5.0 Recommendations** includes strategies to improve the Town's
 - Water quality monitoring efforts in order to calibrate the WQ Model further (§5.1),
 - Develop strategies and BMPs for fecal coliform bacteria reduction (§5.2),
 - Conduct an evaluation of 2011 Action Plan BMP projects (§5.3),
 - Methodology used to develop 2020 MRWAP Update recommended projects (four septic to sewer conversion projects and eleven stormwater BMP retrofit projects) with cost-estimates and ranking/prioritization (§5.4).
 - **6.0 Conclusions** offers a summary of the WQ Model results in context of current state of knowledge.
 - **7.0 References** documents the prior research findings used to inform recommendations.
 - **Appendices** reference supporting materials:
 - Montie et al. (2019) "Technical Report: Historical Analysis of Water quality, Climate Change Endpoints, and Monitoring in Natural Resources in the May River,"
 - Technical Memo from Dr. Rachel Noble,
 - Watershed Treatment Model Spreadsheets, and
 - Detailed Project Cost Estimate Spreadsheets.

2020 MRWAP 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 subwatershed and 11 in Rose Dhu Creek subwatershed. Based on WQ Model outputs, these projects alone may potentially reduce the fecal coliform (FC) loading by 3.46×10^{13} FC per year.
- The estimated septic to sewer conversion costs of these projects is \$5.5 million.

Work Performed and Current Status

Discussions with the Town of Bluffton, Beaufort County and Beaufort Jasper Water Sewer Authority (BJWSA) have been held about future Septic to Sewer Program projects identified above. The Stoney Creek subwatershed Septic to Sewer Project has been identified as the next priority project to pursue under the Septic to Sewer Program.

1. 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.

2020 MRWAP Update Eleven Impervious Restoration (stormwater retrofit) Project Recommendations/Evaluations and Other Work:

- 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 were identified in the Rose Dhu Creek (6 projects) and Stoney Creek (5 projects) subwatersheds:

- Bluffton Early Learning Center (BELC)
- Boys and Girls Club of Bluffton (BGC)
- Benton House (BH)
- Bluffton High School (BHS)
- Buckwalter Recreation Center (BRC)
- Lowcountry Community Church (LCC)
- McCracken Middle School/Bluffton Elementary School (MMSBES)
- May River High School
- One Hampton Lake Apartments (OHLA)

- Pritchardville Elementary School (PES)
 - Palmetto Pointe Townes (PPT)
- Based on WQ Model outputs, these projects alone may potentially reduce FC loading by
 - 2.99×10^{14} FC reduction for the Full Stormwater Retention Volume (SWRv) (entire sub-basin drainage area catchment).
 - 2.53×10^{14} FC reduction for the Reduced SWRv projects (impervious area drainage area of sub-basin catchment).
- The estimated of Full SWRv projects costs is \$32.7 million and the estimated cost of Reduced SWRv projects is \$22.6 million.
- Currently the Towns' Impervious Restoration Program is targeting Reduced SWRv for future projects.

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

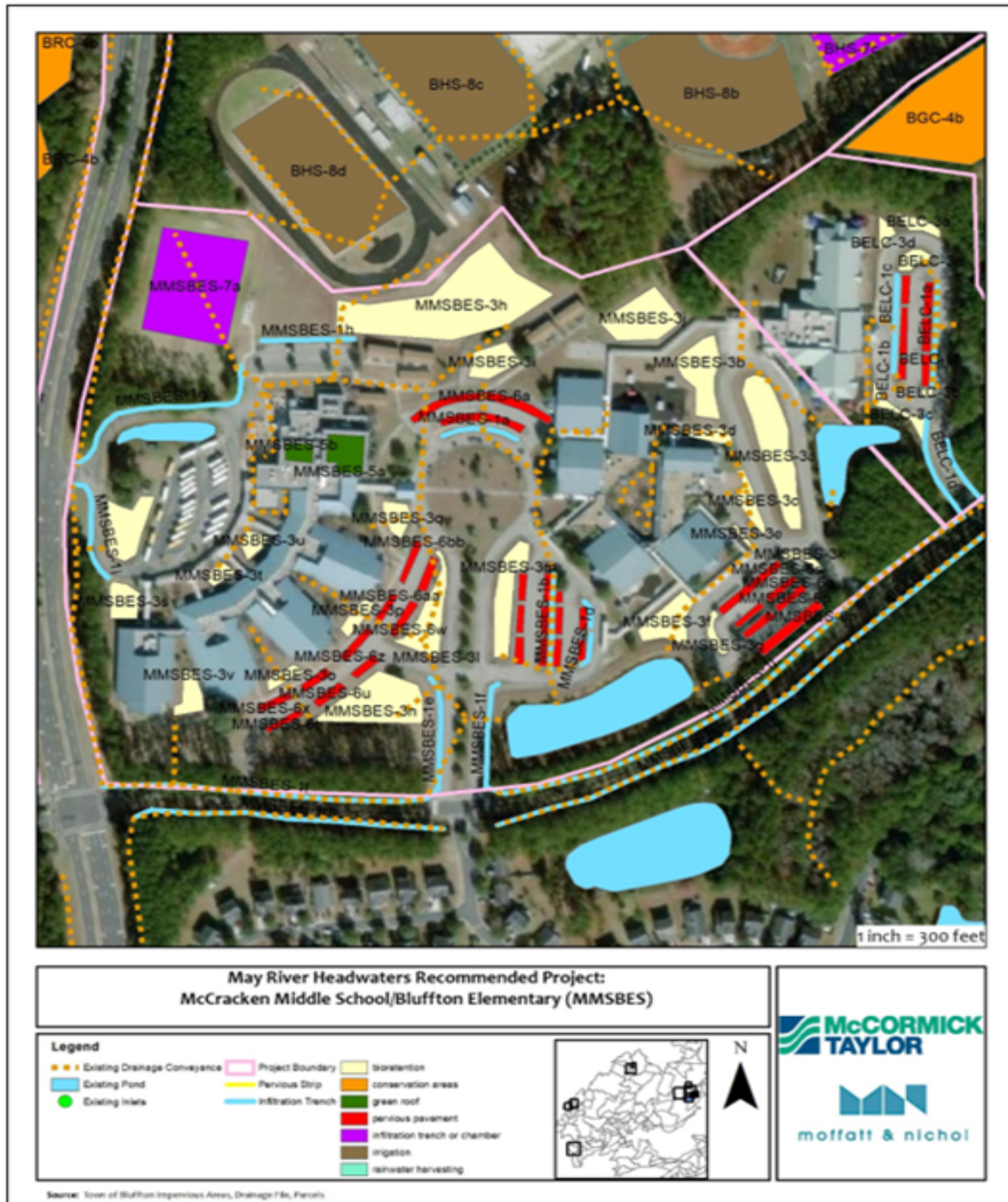


Figure 52. McCracken Middle School/Bluffton Elementary School Proposed Stormwater BMP Retrofits

Work to be Performed

- Drafted a detailed scope of work for Engineering Consultant Firm review and cost proposal (Expression of Interest) regarding performance of the following work elements related to 2020 MRWAP Update recommendations for implementation:

Task 1: 2020 MRWAP Update eleven (11) site locations

- Evaluate eleven (11) sites and proposed BMPs.
- Update concept plans for the eleven (11) sites based on site evaluations, recommendations, and discussions.
- Perform geotechnical evaluations (augers and borings to evaluate existing soil type, infiltration rates and groundwater table elevation) at each site at locations related to BMP locations and develop updated concept plans for each site.
- Refine updated concept plans and use for presentations to Property Owner to discuss Impervious Restoration Program goals, objectives and gain support for Program and their participation.
 - 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/Water Quality (WQ) treatment in cost effective approach.
 - Determine estimated pollutant load reductions.
 - Develop site specific BMP details.
 - Develop preliminary BMP maintenance schedule and cost for each site.
- Preliminary Design development plans will be presented to the Property Owner for review and discussion. Other Impervious Restoration Program details (maintenance responsibilities, easements, incentives, etc.) developed as part of the Impervious Restoration Program (see Policy Document Formulation below) will also be discussed in hopes of establishing a commitment from the Property Owner to participate in the Program. Once a “commitment” is secured from the Property Owner, the project site will be moved to Final design, permitting, and ultimately construction.

Task 2: Identify fifteen (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 South Carolina Department of Transportation (SCDOT) Right of Way (RoW).

Town of Bluffton Impervious Restoration/BMP Retrofit Policy Documents.

Task 3: Section 5.4.4. Stormwater BMP Retrofit Projects of the 2020 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 the 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.

Work Completed and Current Status

- The Expression of Interest was submitted to three (3) consultant firms under existing Master Service Agreements (MSAs) with the Town for review and a request for response.
- All three (3) Firms responded, and their respective responses were evaluated, scored and discussed.
- A recommendation for Award was made and the Consulting Firm of Goodwyn, Mills and Cawood selected.
 1. Phase I of this work is in process under existing FY22 funding from Watershed Management Division.
 2. Phase II of this work will be presented for Town Council review and approval in the August Town Council Meeting and FY23 funding.
- Phase I work completed by Consultant and Town:
 1. Review of recommendations of the 2020 MRWAP Update.
 2. On-site evaluations at each proposed site.
 3. Meetings with Beaufort County School District.
 - Six (6) of the eleven (11) sites are located on Beaufort County School District (henceforth School District) property. The School District is deemed an important project partner and as such several meetings have been held to discuss the Impervious Restoration Program and need for project BMPs to improve water quality. The School District has granted permission for the Town of Bluffton to perform initial site investigations, provided the Town with site specific plans, future

development plans for each site, and expressed a willingness to participate in the Program.

- Drafted a Letter to Non-School Property Owners describing the Impervious Restoration Program and requesting meetings to discuss and gain support.
4. Policy Document Formulation has been initiated and includes research of similar Impervious Restoration Programs Nationwide.

Other, Related 2020 MRWAP Update Recommendations

- Adopt proposed regional Southern Lowcountry Post-Construction Stormwater Ordinance and Design Manual - **completed** September 2021.
- The Town should incorporate volume reduction BMPs (those that encourage infiltration) within existing and future Capital Improvement Projects (CIP) to the maximum extent practical (MEP), especially for project locations with well-drained soils (HSG A or B) – **in progress**, see below.
 - **Work Performed and Current Status**
 - Bridge Street Streetscape Project
 - Project design/permitting is complete, and Construction Contract has been awarded.
 - Incorporated Infiltration BMPs within the project to capture and treat 1.95" of rainfall over impervious surfaces within the project area, prior to discharge into the May River.
 - Received Section 319 Grant from the South Carolina Department of Health and Environmental Control (SCDHEC) to cost-share on construction of proposed BMPs.
 - 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 and ultimately the May River.
 - Submitted Section 319 Grant proposal to SCDHEC to cost-share cost of construction of proposed BMPs. Pre-proposal was accepted, and Full Proposal was requested by SCDHEC. Under Review.
- In-House Microbial Source Tracking – **in progress**, see below
 - The Town entered a Memorandum of Understanding (MOU) with the University of South Carolina Beaufort (USCB) in July 2021 to establish and fund a regional Microbial Source Tracking (MST) laboratory capable of accepting environmental water quality samples.
 - Analytical services are provided by the USCB-MST laboratory for all environmental samples collected by the Town.
 - Staff is working with the USCB-MST Laboratory to assess the utility of fecal markers in regional watersheds, including the May River watershed as recommended in the 2020 May River Watershed Action Plan Update and Model Report.
- 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 MRWAP Update.
- Staff is collecting intermittent flow data in conjunction with grab samples at monitoring sites in the May River Headwaters as recommended in the 2020 MRWAP Update.
- Staff working with consultant to identify recommended strategies to gain required intermittent flow data.
- Future (new) Water Flow Monitoring Locations.
 - **Work Performed and Current Status**
 - The 2020 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.
 - The Town of Bluffton established Sontek IQ Plus continuous flow measuring instruments in Stoney Creek, Rose Dhu Creek, and Heyward Cove subwatersheds. In addition, the Town collected intermittent flow data at the time of water quality grab sampling and established a weather station in the May River Watershed. The Town hired a consultant to review all the Town’s continuous, intermittent, and precipitation data and to determine:
 - Useful data had been 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 has been completed.
 - Duck Pond was deemed inconsequential, not needed due to drainage area size and proximity/outfall to tidal waters.
 - If data review resulted in insufficient data, develop a monitoring program that would produce the data needed.
 - Rose Dhu Creek continuous flow data review resulted in data that was insufficient to calibrate Model.
 - Final report identifying recommended strategies to gain required data is in process.
 - In process of purchasing telemetry stations to equip continuous flow monitoring stations with real-time data access for the Rose Dhu and Palmetto Bluff subwatersheds.



May River Watershed Action Plan Advisory Committee Meeting

Thursday, February 23, 2023 at 3:00 PM

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

AGENDA

I. CALL TO ORDER

II. ROLL CALL AND CONFIRMATION OF QUORUM

III. ADOPTION OF THE AGENDA

IV. ADOPTION OF MINUTES

V. PUBLIC COMMENTS

VI. PRESENTATIONS, CELEBRATIONS AND RECOGNITIONS

1. Proposed Approach to Updating a Baseline Assessment of Environmental and Biological Conditions in the May River, Beaufort County, South Carolina – Andrew Tweel, Assistant Marine Scientist, SC Department of Natural Resources

VII. OLD BUSINESS

1. May River Watershed Action Plan Project Implementation Status Report - Dan Rybak, Project Manager

VIII. DISCUSSION

1. WAPAC Strategic Priority Two (2), to Update Assessments of Current Environmental Health Status of the Town's Watersheds Compared to Historical Conditions to Inform Management Opportunities, e.g., the 2004 Report "A Baseline Assessment of Environmental and Biological Conditions in the May River, Beaufort County, South Carolina" Completed by SC Department of Natural Resources, USGS, and NOAA to Compare Current Environmental and Biological Conditions to the Baseline. – Beth Lewis, Water Quality Program Administrator

IX. NEW BUSINESS

1. Introduction of Nicole Wright, Stormwater Technician - Bill Baugher, Watershed Division Manager
2. Port Royal Sound Foundation State of the Sound Symposium Highlights – Al Stokes, WAPAC Committee
3. Revised Federal Definition of Urbanized Area (UA) – Beth Lewis, Water Quality Program Administrator

4. Town Requirements for Meeting Minutes - Beth Lewis, Water Quality Program Administrator
5. Burnt Church Road Project, Coordination Between Beaufort County and Town of Bluffton – Beth Lewis, Water Quality Program Administrator

X. ADJOURNMENT

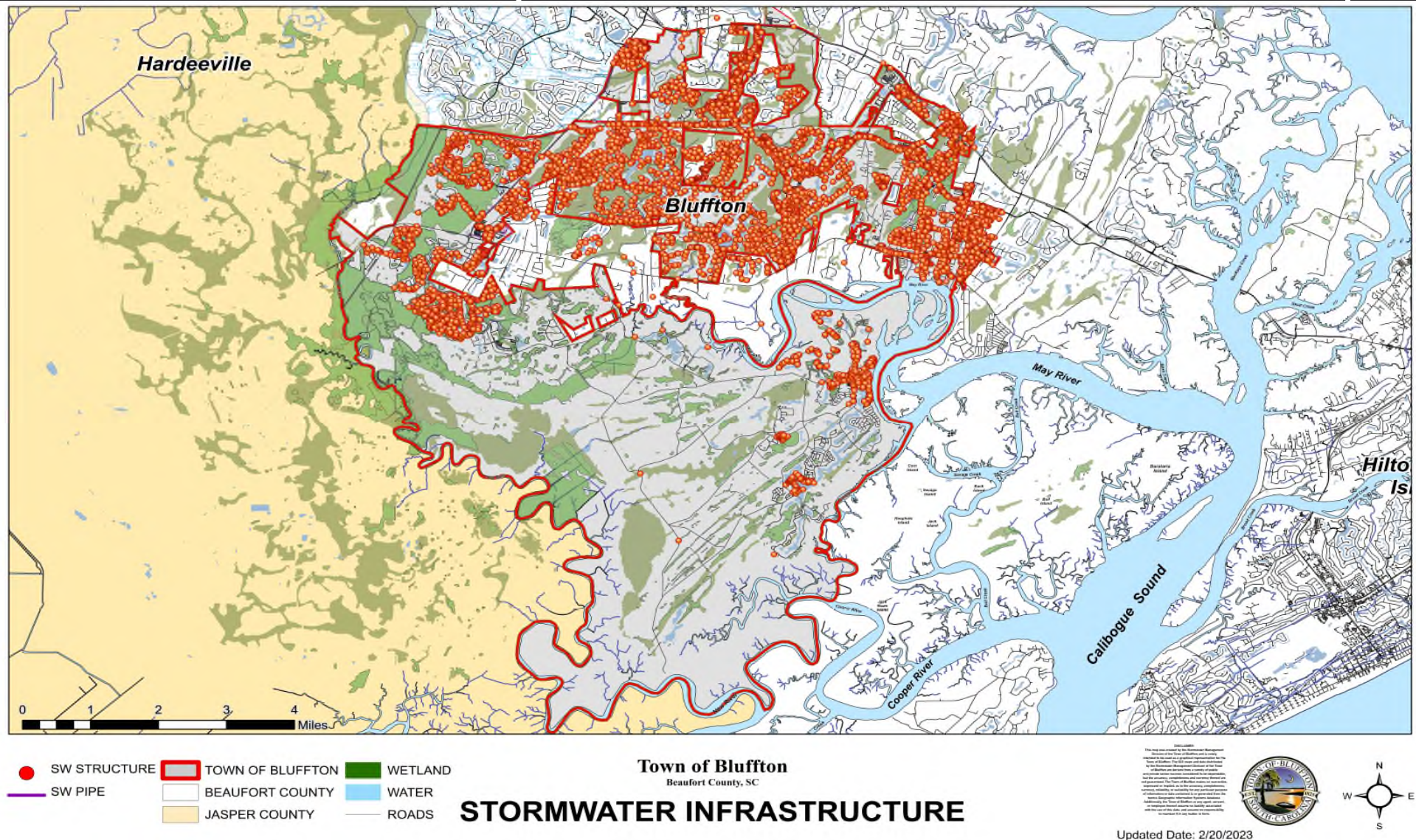
NEXT MEETING DATE: MARCH 23, 2023 - 3:00 P.M.

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

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

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

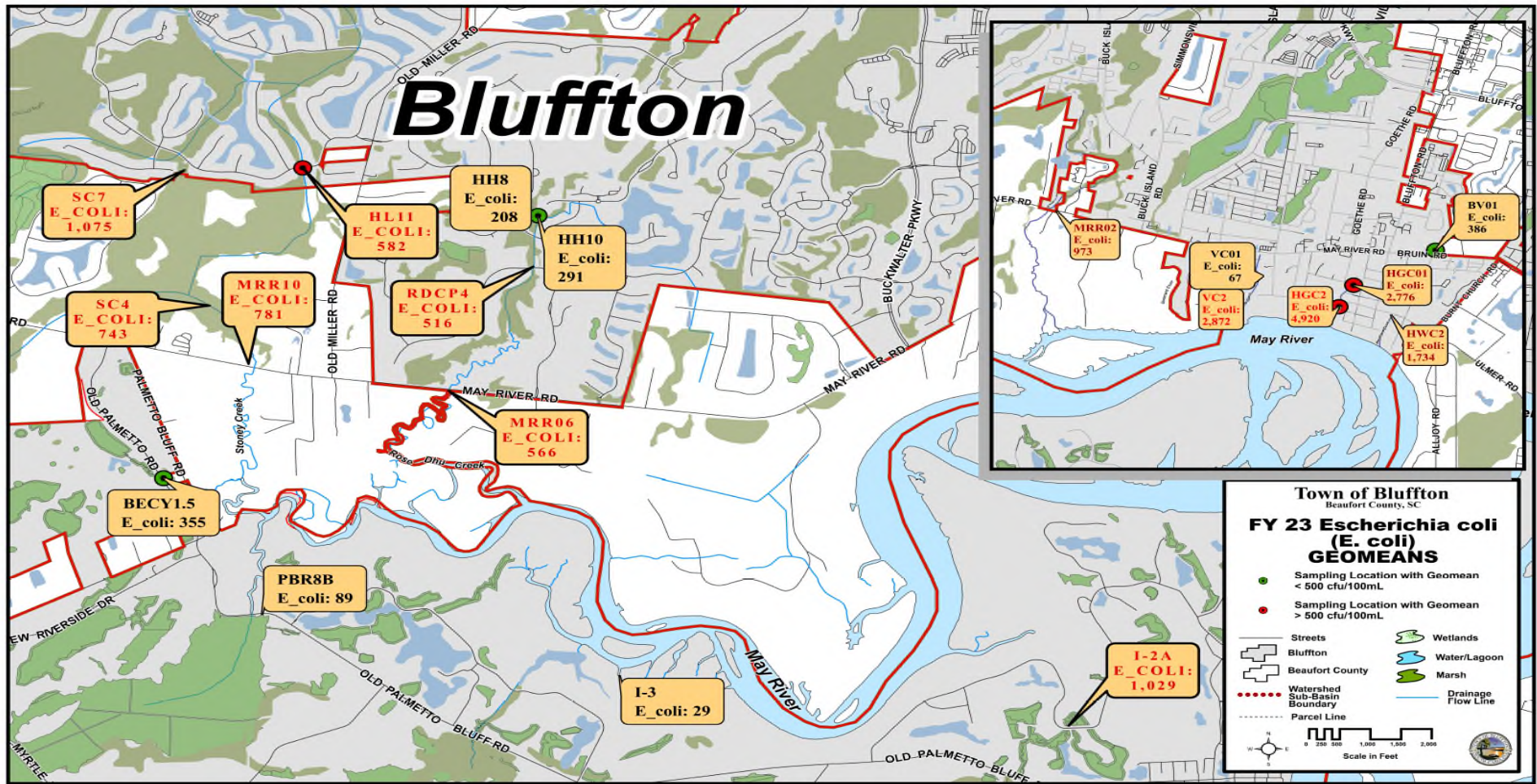
MS4 Minimum Control Measure #3 – IDDE (Illicit Discharge Detection & Elimination): Stormwater Infrastructure Inventory



Stormwater Infrastructure Inventory Collection Status

Collection Totals	16,657
FY 2023 YTD Collection Totals	2,341
FY 2022 Collection Totals	2705

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

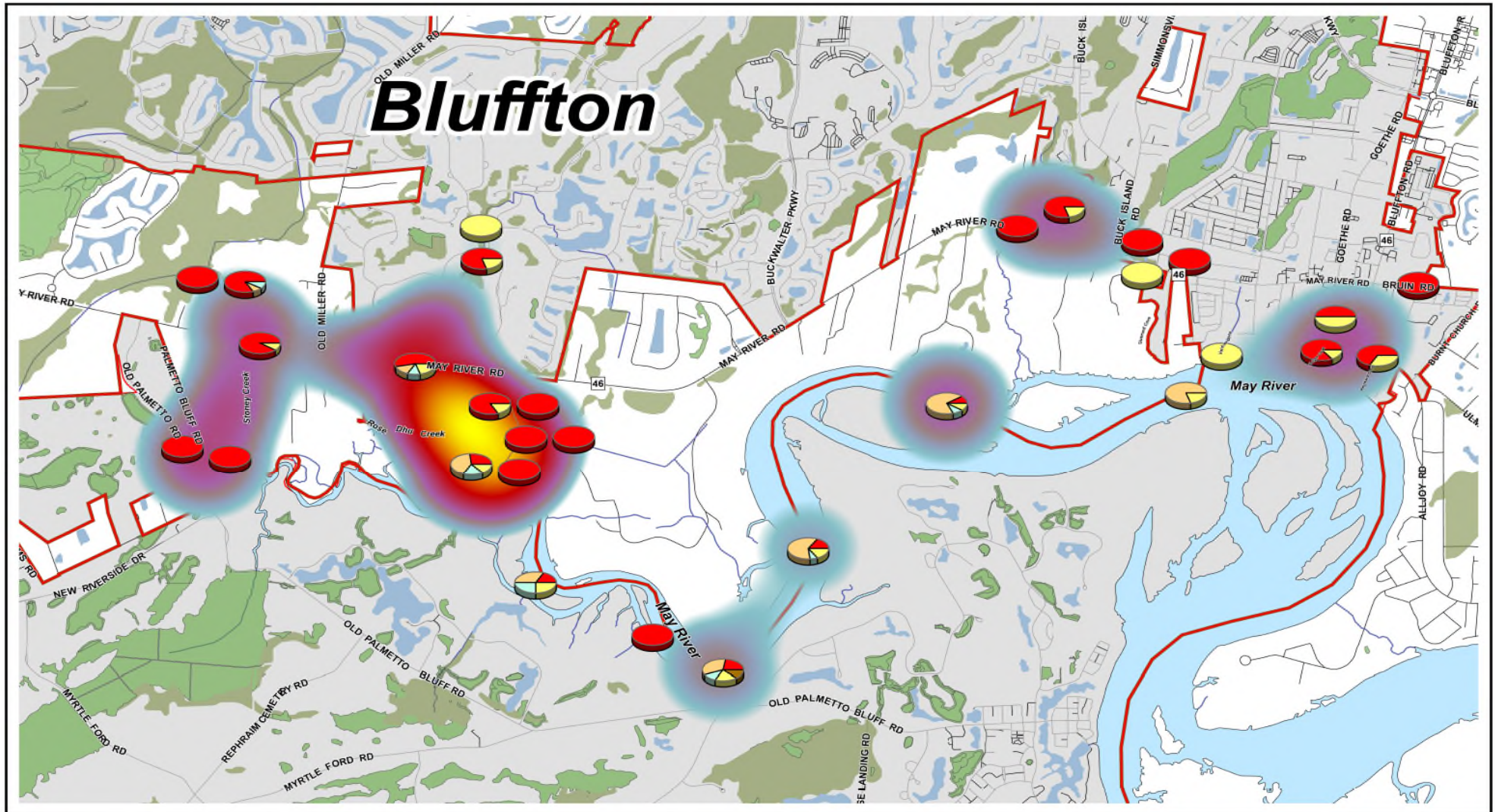


E coliform geomeans updated as of: 2/20/2023

	USCB Water Quality Samples	Microbial Source Tracking Samples	MS4 Quarterly Samples Collected
FY 2023 YTD Totals	364	68	72
FY 2022 Totals	447	78	119
FY 2021 Totals	380	115	179

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

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



MSTSamplingResults



Human
Bird
Deer
Dog
Horse

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

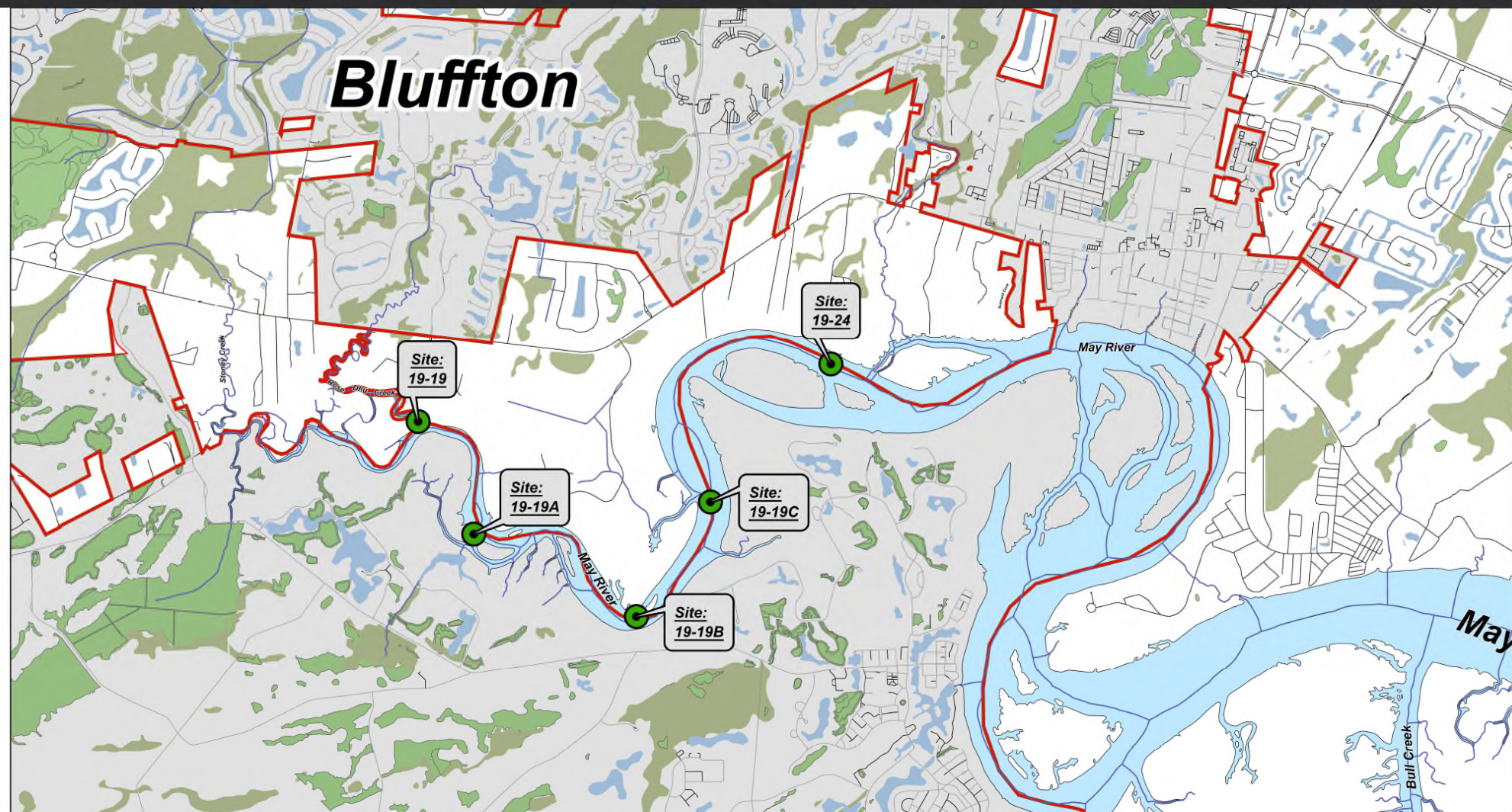
Town of Bluffton
Beaufort County, SC

Town Jurisdiction
Beaufort County
Drainage Flow Lines



Updated Date: 2/20/2023

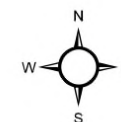
MS4 Minimum Control Measure #3 – IDDE: Microbial Source Tracking (MST) Map – Human Sources



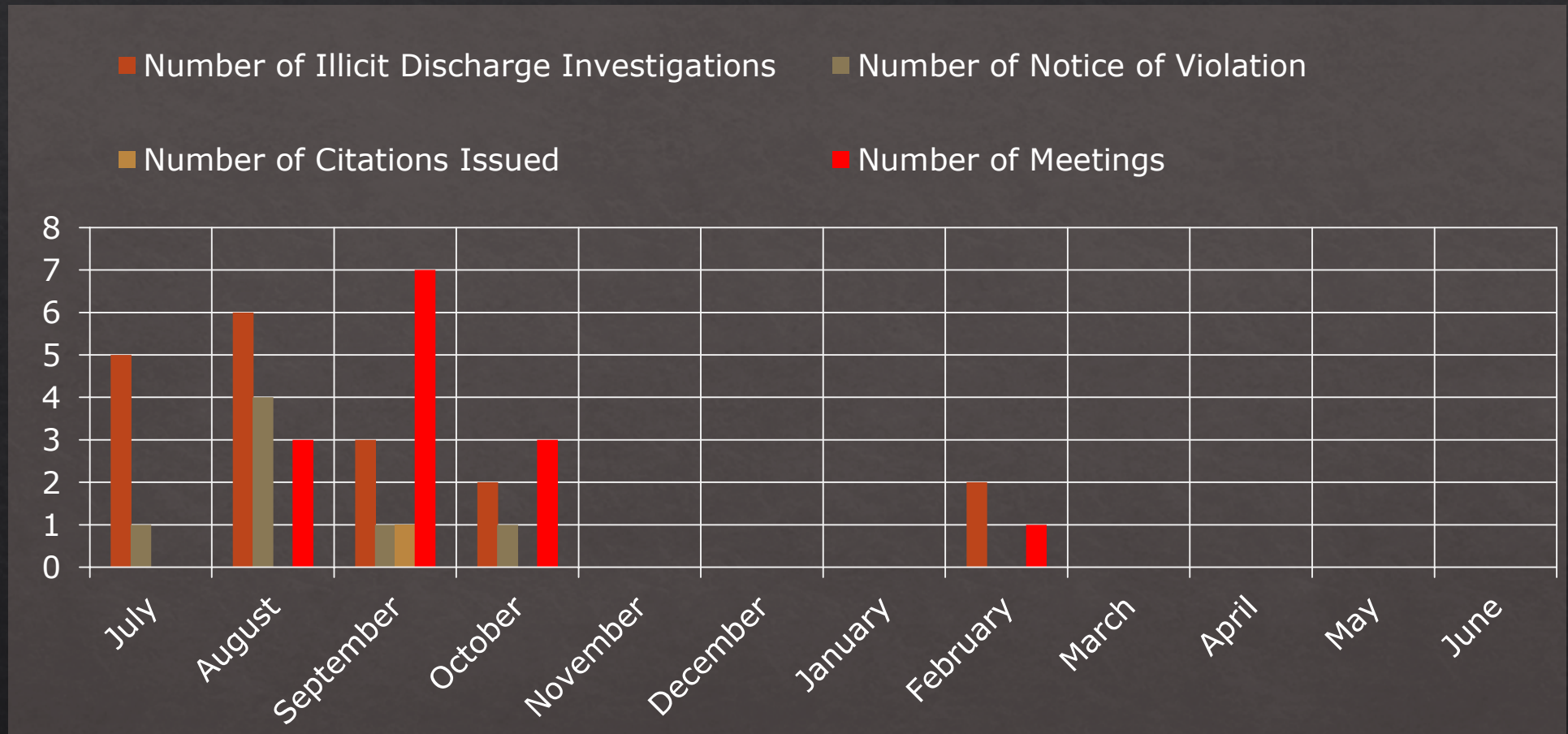
MICROBIAL SOURCE TRACKING LOCATIONS

Sampling Results January 2023

Town of Bluffton
Beaufort County, SC



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



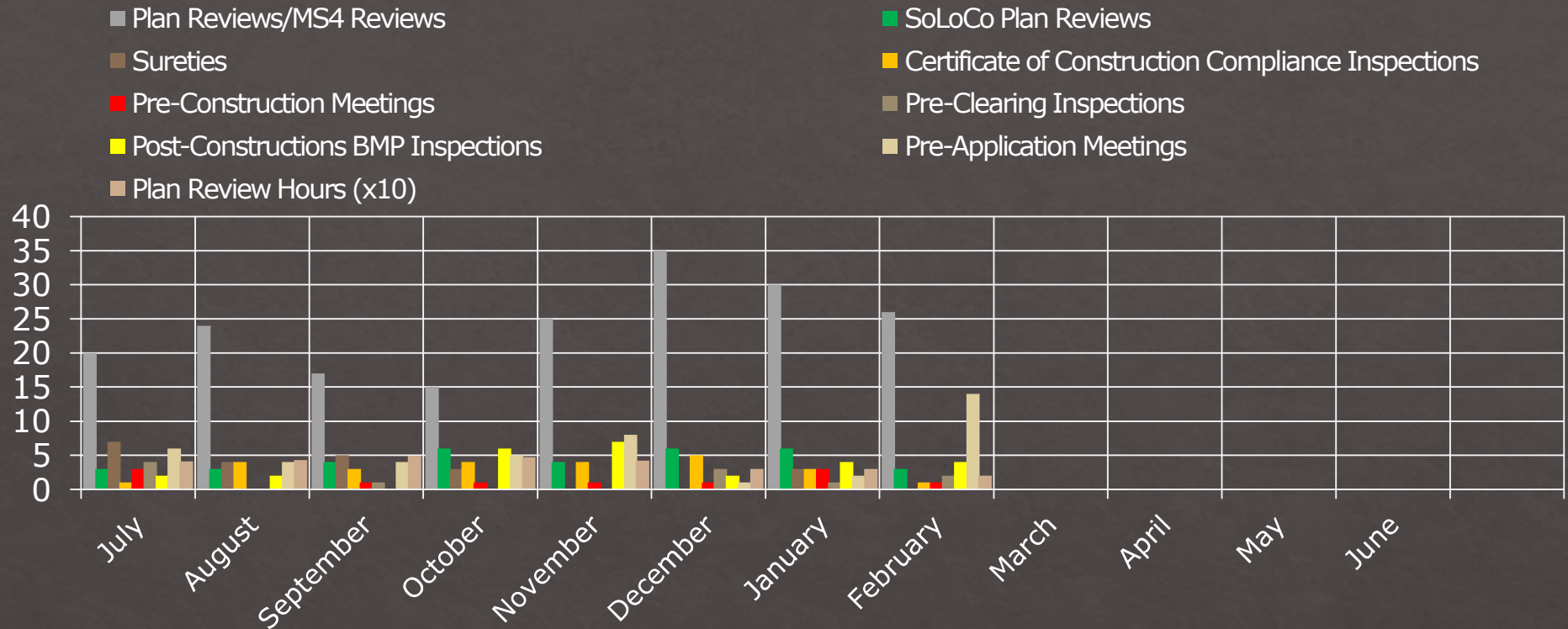
	Number of Illicit Discharge Investigations	Number of Notices of Violation Issued	Number of Citations Issued	Number of Meetings
FY 2023 YTD Totals	18	7	1	14
FY 2022 Totals	30	5	3	17
FY 2021 Totals	36	11	1	29

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



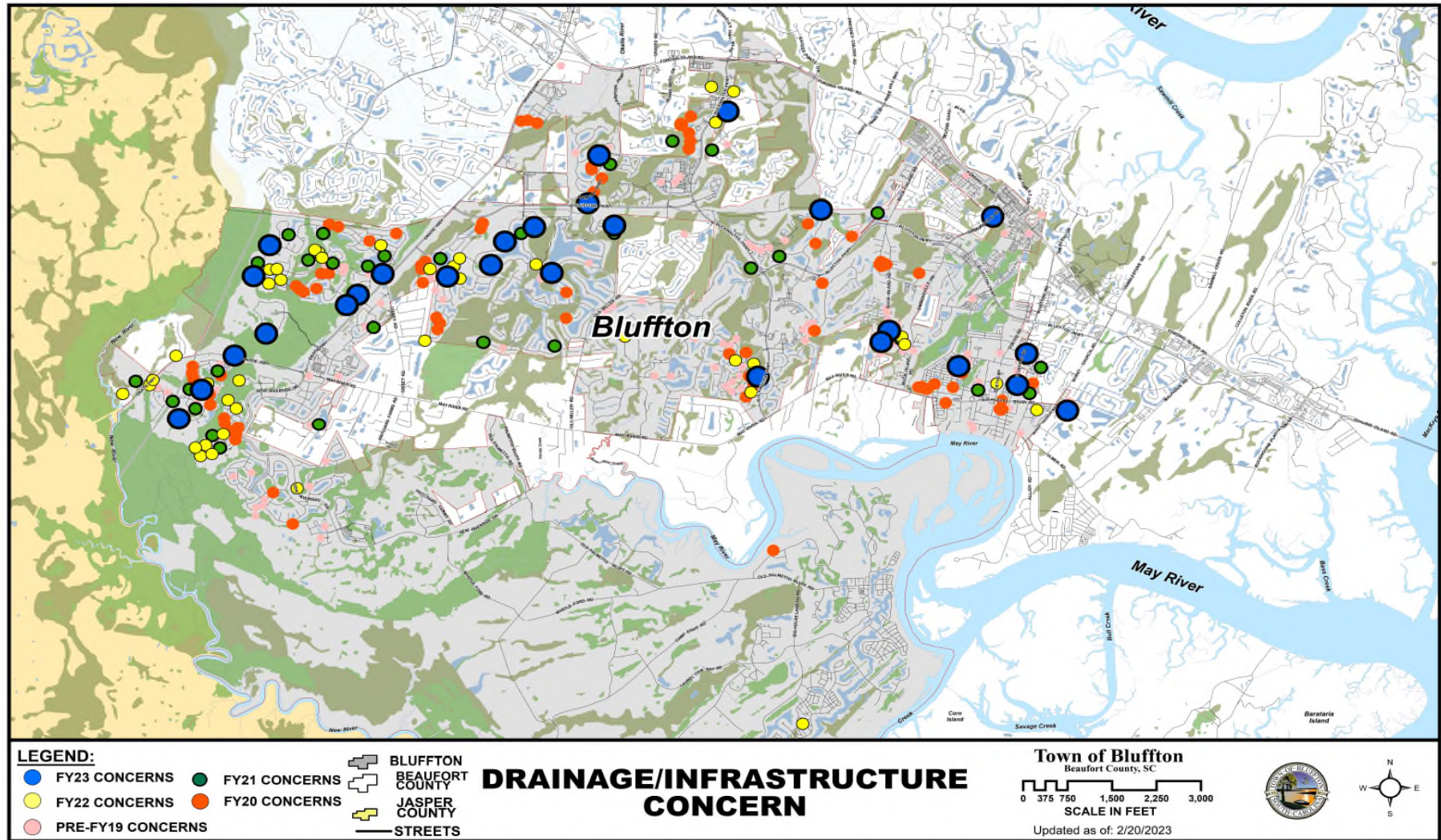
	Number of Sediment & Erosion Control Inspections	Number of Inspections Passed	Number of NOV's Issued	Number of SWO Issued	Number of Citations Issued	Number of E&SC Meetings
FY 23 YTD Totals	1581	1342	215	24	0	467
FY 2022 Totals	3127	2701	392	49	0	673
FY 2021 Totals	1,805	1,527	267	32	4	413

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



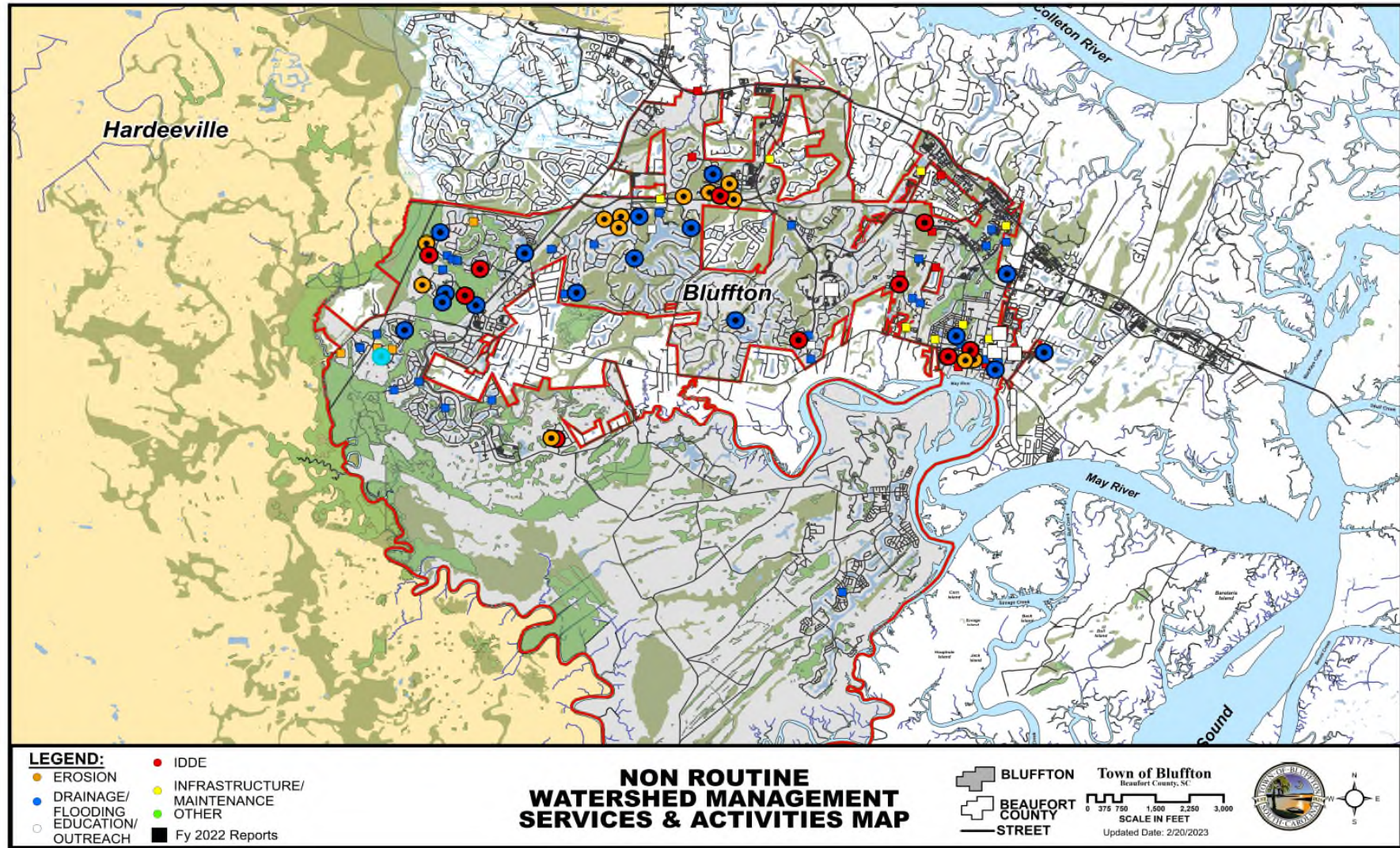
	Plan Reviews MS4 Reviews	SoLoCo Plan Reviews	Sureties	CCC Inspections	Pre-Construction Meetings	Pre-Clearing Inspections	Post Construction BMP Inspections	Pre-Application Meetings	Total Plan Review Hours
FY 2023 YTD	192	35	22	25	11	11	27	44	302 Hrs.
FY 2022 Totals	231	13	42	26	30	23	44	26	454 Hrs.
FY 2021 Totals	186	0	61	55	24	24	22	41	789 Hrs.

Citizen Drainage, Maintenance and Inspections Concerns Map



	Number of Drainage Concerns Investigated	Number of Meetings
FY 2023 YTD Totals	50	42
FY 2022 Totals	38	34
FY 2021 Totals	45	39

Citizen Request for Watershed Mngt. Services & Activities Map
















	Number of Citizen Requests Investigated	Number of Meetings
FY 2023 YTD Totals	8	10
FY 2022 Totals	33	21
FY 2021 Totals	46	36



BOUNDARY STREET STREETSCAPE PROPOSED SCHEDULE	
--	--

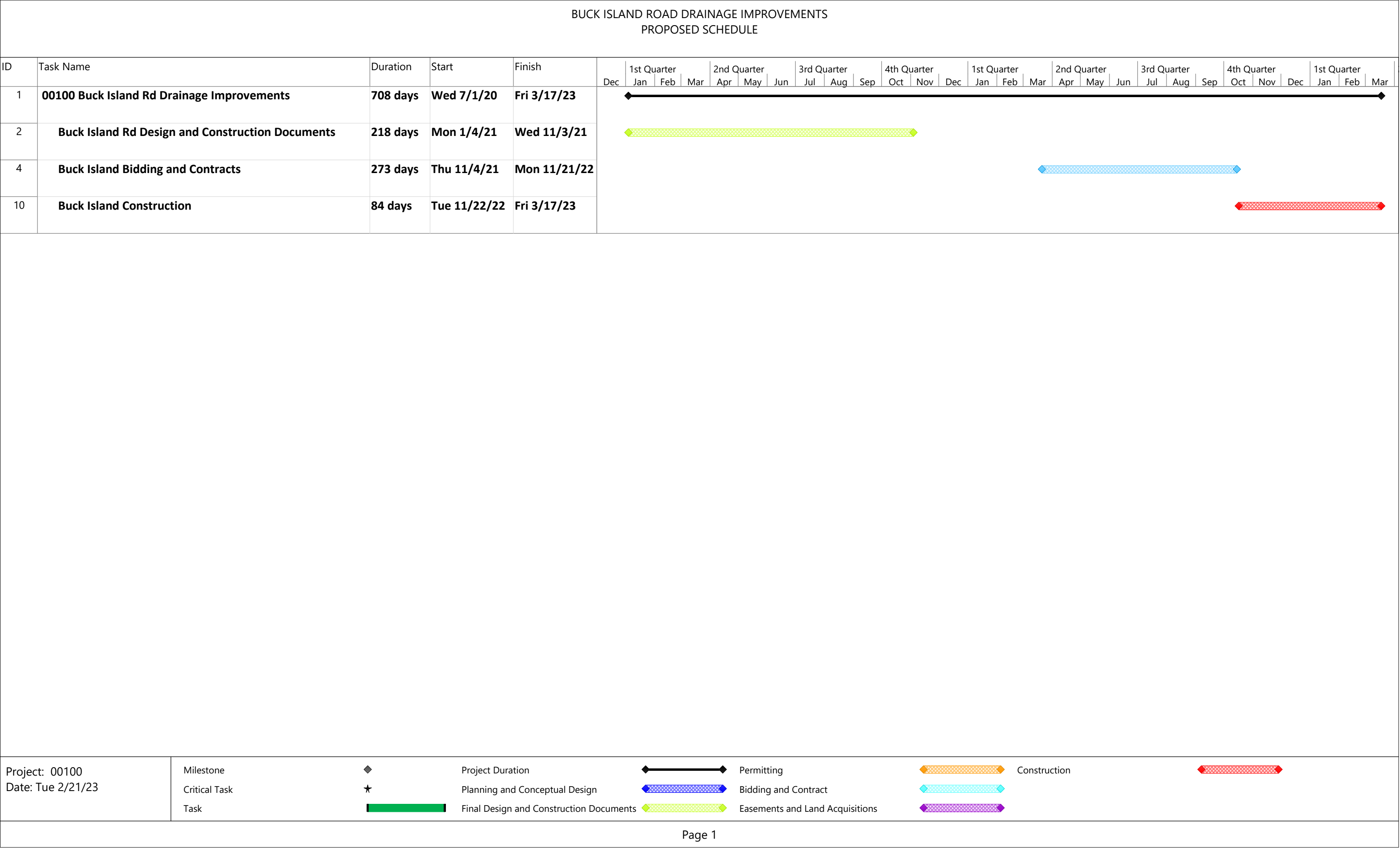
ID	Task Name	Duration	Start	Predecessors	Finish	Quarter																							
						Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
1	BOUNDARY STREET STREETSCAPE	689 days	Mon 9/7/20		Thu 4/27/23																								
2	Planning and Conceptual Design	379 days	Mon 9/7/20		Thu 2/17/22																								
14	Final Planning and Construction Documents	260 days	Fri 2/18/22		Thu 2/16/23																								
20	Permitting Phase	150 days	Fri 10/28/22		Thu 5/25/23																								
25	Easements and Land Acquisition	268 days	Fri 10/28/22		Tue 11/7/23																								

Project: 00094 Date: Tue 2/21/23	Baseline Milestone		Task		Permitting		Baseline	
	Baseline Summary		Project Duration		Bidding and Contract			
	Milestone		Planning and Conceptual Design		Easements and Land Acquisitions			
	Critical Task		Final Design and Construction Documents		Construction			

BRIDGE STREET STREETScape PROPOSED SCHEDULE

ID	Task Name	Duration	Start	Finish	Timeline																														
					September 9/4	October 9/18	October 10/2	October 10/16	November 10/30	November 11/13	November 11/27	December 12/11	December 12/25	January 1/8	January 1/22	February 2/5	February 2/19	March 3/5	March 3/19	April 4/2	April 4/16	May 4/30	May 5/14	May 5/28	June 6/11	June 6/25	July 7/9	July 7/23	August 8/6	August 8/20	September 9/3	September 9/17	October 10/1	October 10/15	
1	Bridge Street Streetscape	287 days	Tue 9/20/22	Wed 10/25/23																															
2	Construction	287 days	Tue 9/20/22	Wed 10/25/23																															

Project: 00082 Date: Tue 2/21/23	Milestone	◆	Project Duration	◆————◆	Permitting	◆————◆	Construction	◆————◆
	Critical Task	★	Planning and Conceptual Design	◆————◆	Easements and Land Acquisition	◆————◆		
	Task	■	Final Design and Construction Documents	◆————◆	Bidding and Contracts	◆————◆		



[illegible]

BUCK ISLAND-SIMMONSVILLE NEIGHBORHOOD SIDEWALKS PROPOSED SCHEDULE												
ID	Task Name	Duration	Start	Finish	Predecessors	2018	2019	2020	2021	2022	2023	
1	SIDEWALKS AND LIGHTING	1440 days	Thu 2/1/18	Wed 8/9/23		J	F	M	A	M	J	J
2	Sidewalk from Jennifer Ct to Simmonsville Rd	405 days	Thu 2/1/18	Wed 8/21/19		F	M	A	M	J	J	A
26						S	O	N	D	J	F	M
27	Sidewalk from Kitty Road to 301 Buck Island Rd	709 days	Thu 2/1/18	Tue 10/20/20		A	M	J	J	A	S	O
53						N	D	J	F	M	A	M
54	Sidewalk from Grayco to Sugaree (Simmonsville Rd)	923 days	Mon 10/1/18	Wed 4/13/22								
80												
81	Sidewalk from Sugaree to Windy Lake (Simmonsville Rd)	553 days	Thu 7/1/21	Mon 8/14/23								
105												
106	Lighting - Kitty Road to 301 Buck Island Rd	419 days?	Thu 5/13/21	Tue 12/20/22								
114												
115	Lighting - Grayco to Windy Lakes	150 days	Thu 1/12/23	Wed 8/9/23								
116												
117												
Project: 00054 Date: Thu 1/26/23		Milestone	◆	Project Duration	◆————◆	Permitting	◆————◆	Construction	◆————◆			
		Critical Task	★	Planning and Conceptual Design	◆————◆	Bidding and Contract	◆————◆					
		Task	■	Final Design and Construction Documents	◆————◆	Easements and Land Acquisitions	◆————◆					

184 BLUFFTON ROAD PARKING IMPROVEMENTS PROPOSED SCHEDULE

ID	Task Name	Duration	Start	Predecessors	Finish																		
0	00098 Buckwalter Place Parking Improvements	363 days	Sun 8/1/21		Wed 12/21/22																		
1	Planning & Conceptual Design	81 days	Sun 8/1/21		Mon 11/22/21																		
5	Final Design & Construction Documents	90 days	Tue 10/5/21		Mon 2/7/22																		
8	Permitting	120 days	Tue 10/5/21		Mon 3/21/22																		
11	Easements & Land Acquisition	21 days	Tue 10/5/21		Tue 11/2/21																		
13	Bidding & Contracts	32 days	Mon 8/1/22		Tue 9/13/22																		
18	Construction	71 days	Wed 9/14/22		Wed 12/21/22																		

Project: 00064 Date: Thu 7/7/22	Milestone	◆	Project Duration	◆————◆	Permitting	◆————◆	Construction	◆————◆
	Critical Task	★	Planning and Conceptual Design	◆————◆	Easements and Land Acquisition	◆————◆		
	Task	■	Final Design and Construction Documents	◆————◆	Bidding and Contracts	◆————◆		

[illegible]

GARVIN-GARVEY HOUSE INTERPRETIVE SIGNAGE
PROPOSED SCHEDULE

ID	Task Name	Duration	Start	Finish	2022																																															
					Mar '22				Apr '22				May '22				Jun '22				Jul '22				Aug '22				Sep '22				Oct '22				Nov '22				Dec '22											
1	GARVIN-GARVEY HOUSE INTERPRETIVE SIGNAGE	179 days	Tue 3/1/22	Fri 11/4/22																																																
2	Planning and Conceptual Design	125 days	Mon 3/7/22	Fri 8/26/22																																																
13	Final Design and Construction Documents	50 days	Mon 8/29/22	Fri 11/4/22																																																
15	Onsite Installation	23 days	Mon 10/31/22	Wed 11/30/22																																																
16																																																				

Project: 00081 Date: Mon 9/19/22	Milestone	◆	Project Duration	◆————◆	Permitting	◆————◆	Construction	◆————◆
	Critical Task	★	Planning and Conceptual Design	◆————◆	Easements and Land Acquisition	◆————◆		
	Task	■	Final Design and Construction Documents	◆————◆	Bidding and Contracts	◆————◆		

GHOST ROADS PROPOSED SCHEDULE	
----------------------------------	--

ID	Task Name	Duration	Start	Finish	2020												2021												2022																							
					Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep											
1	GHOST ROADS	765 days	Thu 9/12/19	Wed 8/17/22																																																
2	Planning and Conceptual Design	765 days	Thu 9/12/19	Wed 8/17/22																																																
3	Preparation of Exhibit	113 days	Thu 9/12/19	Mon 2/17/20																																																
4	Owner Meetings	453 days	Mon 10/7/19	Wed 6/30/21																																																
5	Quit Claim Deed Execution	708 days	Mon 10/7/19	Wed 6/22/22																																																
6	All deeds	40 days	Thu 6/23/22	Wed 8/17/22																																																

Project: 00093 Date: Wed 11/23/22	Milestone	◆	Project Duration	◆————◆	Permitting	◆————◆	Construction	◆————◆
	Critical Task	★	Planning and Conceptual Design	◆————◆	Easements and Land Acquisition	◆————◆		
	Task	■	Final Design and Construction Documents	◆————◆	Bidding and Contracts	◆————◆		

GOETHE-SHULTS NEIGHBORHOOD IMPROVEMENTS PHASE 2
PROPOSED SCHEDULE

ID	Task Name	Duration	Start	Finish	Timeline																																	
					1, 2018 Mar	May	Jul	Sep	Nov	Half 2, 2018	Jan	Mar	May	Half 1, 2019	Jul	Sep	Nov	Half 2, 2019	Jan	Mar	May	Half 1, 2020	Jul	Sep	Nov	Half 2, 2020	Jan	Mar	May	Half 1, 2021	Jul	Sep	Nov	Half 2, 2021	Jan	Mar	May	Half 1, 2022
1	GOETHE/SHULTS NEIGHBORHOOD IMPROVEMENTS PHASE 2	970 days	Mon 4/30/18	Fri 1/14/22																																		
2	PLANNING AND CONCEPTUAL DESIGN	326 days	Mon 4/30/18	Mon 7/29/19																																		
12	FINAL DESIGN AND CONSTRUCTION DOCUMENTS	209 days	Tue 7/30/19	Fri 5/15/20																																		
21	PERMITTING	128 days	Mon 5/18/20	Wed 11/11/20																																		
25	EASEMENTS AND LAND ACQUISITION	187 days	Mon 4/6/20	Tue 12/22/20																																		
32	BIDDING AND CONTRACTS	101 days	Tue 12/1/20	Tue 4/20/21																																		
37	CONSTRUCTION	468 days	Wed 4/21/21	Fri 2/3/23																																		

Project: 00055 Date: Mon 9/19/22	Milestone	◆	Project Duration	◆————◆	Permitting	◆————◆	Construction	◆————◆
	Critical Task	★	Planning and Conceptual Design	◆————◆	Easements and Land Acquisition	◆————◆		
	Task	■	Final Design and Construction Documents	◆————◆	Bidding and Contracts	◆————◆		

<p>HISTORIC DISTRICT SANITARY SEWER EXTENSION PHASE 2 PROPOSED SCHEDULE</p>	
---	--

[illegible]

Project: 00071 Date: Mon 2/20/23	Milestone	◆	Project Duration	◆————◆	Permitting	◆————◆	Construction	◆————◆
	Critical Task	★	Planing and Conceptual Design	◆————◆	Easements and Land Acquisitions	◆————◆		
	Task	■	Final Design and Construction Documents	◆————◆	Bidding and Contracts	◆————◆		

HISTORIC DISTRICT SANITARY SEWER EXTENSION PHASE 3 PROPOSED SCHEDULE

ID	Task Name	Duration	Start	Finish	2021												2022												2023																							
					Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul														
1	PHASE 3	694 days	Mon 11/2/20	Thu 6/29/23																																																
2	Planning and Conceptual Design	236 days	Mon 11/2/20	Mon 9/27/21																																																
9	Final Design and Construction Documents	260 days	Tue 9/28/21	Mon 9/26/22																																																
11	Permitting	30 days	Tue 9/27/22	Mon 11/7/22																																																
14	Easements and Land Acquisition	105 days	Tue 9/21/21	Mon 2/14/22																																																
17	Bidding and Contracts	91 days	Tue 11/8/22	Tue 3/14/23																																																
22	Construction	77 days	Wed 3/15/23	Thu 6/29/23																																																

Project: 00072 Date: Mon 2/20/23	Milestone	◆	Project Duration	◆————◆	Permitting	◆————◆	Construction	◆————◆
	Critical Task	★	Planing and Conceptual Design	◆————◆	Easements and Land Acquisitions	◆————◆		
	Task	■	Final Design and Construction Documents	◆————◆	Bidding and Contracts	◆————◆		

<p>HISTORIC DISTRICT SANITARY SEWER EXTENSION PHASE 4 PROPOSED SCHEDULE</p>	
---	--

ID	Task Name	Duration	Start	Finish	2021												2022												2023																							
					Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov										
1	PHASE 4	779 days	Mon 11/2/20	Thu 10/26/23																																																
2	Planning and Conceptual Design	236 days	Mon 11/2/20	Mon 9/27/21																																																
9	Final Design and Construction Documents	160 days	Tue 9/28/21	Mon 5/9/22																																																
11	Permitting	40 days	Tue 5/10/22	Mon 7/4/22																																																
14	Easements and Land Acquisition	410 days	Tue 9/21/21	Mon 4/17/23																																																
17	Bidding and Contracts	46 days	Tue 4/18/23	Tue 6/20/23																																																
22	Construction	92 days	Wed 6/21/23	Thu 10/26/23																																																

Project: 00073 Date: Tue 2/21/23	Milestone	◆	Project Duration	◆————◆	Permitting	◆————◆	Construction	◆————◆
	Critical Task	★	Planing and Conceptual Design	◆————◆	Easements and Land Acquisitions	◆————◆		
	Task	■	Final Design and Construction Documents	◆————◆	Bidding and Contracts	◆————◆		

<p>HISTORIC DISTRICT SANITARY SEWER EXTENSION PHASE 5 PROPOSED SCHEDULE</p>	
---	--

ID	Task Name	Duration	Start	Finish																		
					Oct	Nov	Dec	2021 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2022 Jan		
1	PHASE 5	779 days	Mon 11/2/20	Thu 10/26/23																		
2	Planning and Conceptual Design	236 days	Mon 11/2/20	Mon 9/27/21																		
9	Final Design and Construction Documents	120 days	Tue 9/28/21	Mon 3/14/22																		
11	Permitting	40 days	Tue 3/15/22	Mon 5/9/22																		
14	Easements and Land Acquisition	410 days	Tue 9/21/21	Mon 4/17/23																		
17	Bidding and Contracts	46 days	Tue 4/18/23	Tue 6/20/23																		
22	Construction	92 days	Wed 6/21/23	Thu 10/26/23																		

Project: 00074 Date: Tue 2/21/23	Milestone	◆	Project Duration	◆————◆	Permitting	◆————◆	Construction	◆————◆
	Critical Task	★	Planing and Conceptual Design	◆————◆	Easements and Land Acquisitions	◆————◆		
	Task	■	Final Design and Construction Documents	◆————◆	Bidding and Contracts	◆————◆		

HISTORIC DISTRICT SANITARY SEWER EXTENSION PHASE 6
PROPOSED SCHEDULE

ID	Task Name	Duration	Start	Finish	Predecessors	Oct	Nov	Dec	2021 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2022 Jan
1	PHASE 6	779 days	Mon 11/2/20	Thu 10/26/23																	
2	Planning and Conceptual Design	236 days	Mon 11/2/20	Mon 9/27/21																	
9	Final Design and Construction Documents	120 days	Tue 9/28/21	Mon 3/14/22																	
11	Permitting	40 days	Tue 3/15/22	Mon 5/9/22																	
14	Easements and Land Acquisition	410 days	Tue 9/21/21	Mon 4/17/23																	
17	Bidding and Contracts	46 days	Tue 4/18/23	Tue 6/20/23																	
22	Construction	92 days	Wed 6/21/23	Thu 10/26/23																	

Project: 00075
Date: Tue 2/21/23

Milestone



Critical Task



Task



Project Duration



Planing and Conceptual Design



Final Design and Construction Documents



Permitting



Easements and Land Acquisitions



Bidding and Contracts



Construction



LAW ENFORCEMENT CENTER EXPANSION
PROPOSED SCHEDULE

ID	Task Name	Duration	Start	Finish	Timeline																											
					3rd Quarter Sep	4th Quarter Nov	1st Quarter Jan	2nd Quarter Mar	3rd Quarter May	4th Quarter Jul	1st Quarter Sep	2nd Quarter Nov	3rd Quarter Jan	4th Quarter Mar	1st Quarter May	2nd Quarter Jul	3rd Quarter Sep	4th Quarter Nov	1st Quarter Jan	2nd Quarter Mar	3rd Quarter May	4th Quarter Jul	1st Quarter Sep	2nd Quarter Nov	3rd Quarter Jan	4th Quarter Mar	1st Quarter May	2nd Quarter Jul	3rd Quarter Sep	4th Quarter Nov		
1	LEC Expansion	1050 days	Wed 11/18/20	Tue 11/26/24																												
2	Parking and Site Improvements	161 days	Wed 11/18/20	Wed 6/30/21																												
17	Reflection Plaza	219 days	Mon 3/14/22	Thu 1/12/23																												
26	Challenge Course	98 days	Wed 10/12/22	Fri 2/24/23																												
33	Facility Improvements	97 days	Sun 7/14/24	Tue 11/26/24																												

Project: 00077 Date: Tue 2/21/23	Milestone	◆	Project Duration	◆————◆	Permitting	◆————◆	Construction	◆————◆
	Critical Task	★	Planning and Conceptual Design	◆————◆	Easements and Land Acquisition	◆————◆		
	Task	■	Final Design and Construction Documents	◆————◆	Bidding and Contracts	◆————◆		

MAY RIVER ROAD POCKET PARK PROPOSED SCHEDULE	
---	--

D	Task Name	Duration	Start	Finish	Timeline
1	MAY RIVER ROAD POCKET PARK	354 days	Thu 7/1/21	Tue 11/8/22	
2	Planning and Conceptual Design	46 days	Thu 7/1/21	Thu 9/2/21	
6	Final Planning and Construction Documents	140 days	Fri 9/3/21	Thu 3/17/22	
13	Permitting	94 days	Mon 11/29/21	Thu 4/7/22	
18	Bidding and Contract	48 days	Fri 3/18/22	Tue 5/24/22	
24	Construction	106 days	Tue 6/14/22	Tue 11/8/22	

Project: 00080 Milestone Task Planning and Conceptual Design Permitting Easements and Land Acquisitions
 Date: Wed 11/23/22 Critical Task Project Duration Final Design and Construction Documents Bidding and Contract Construction

MAY RIVER WATERSHED ACTION PLAN IMPERVIOUS WATER QUALITY PROJECTS PROPOSED SCHEDULE	
--	--

ID	Task Name	Duration	Start	Finish																												
					Jun	3rd Quarter			4th Quarter			1st Quarter			2nd Quarter			3rd Quarter			4th Quarter			1st Quarter			2nd Quarter					
						Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr					
1	MAY RIVER WATERSHED ACTION PLAN IMPERVIOUS RESTORATION WATER QUALITY PROJECTS	456 days	Fri 7/1/22	Fri 3/29/24																												
2	MRWAP CIP Projects Planning and Preliminary Design	456 days	Fri 7/1/22	Fri 3/29/24																												

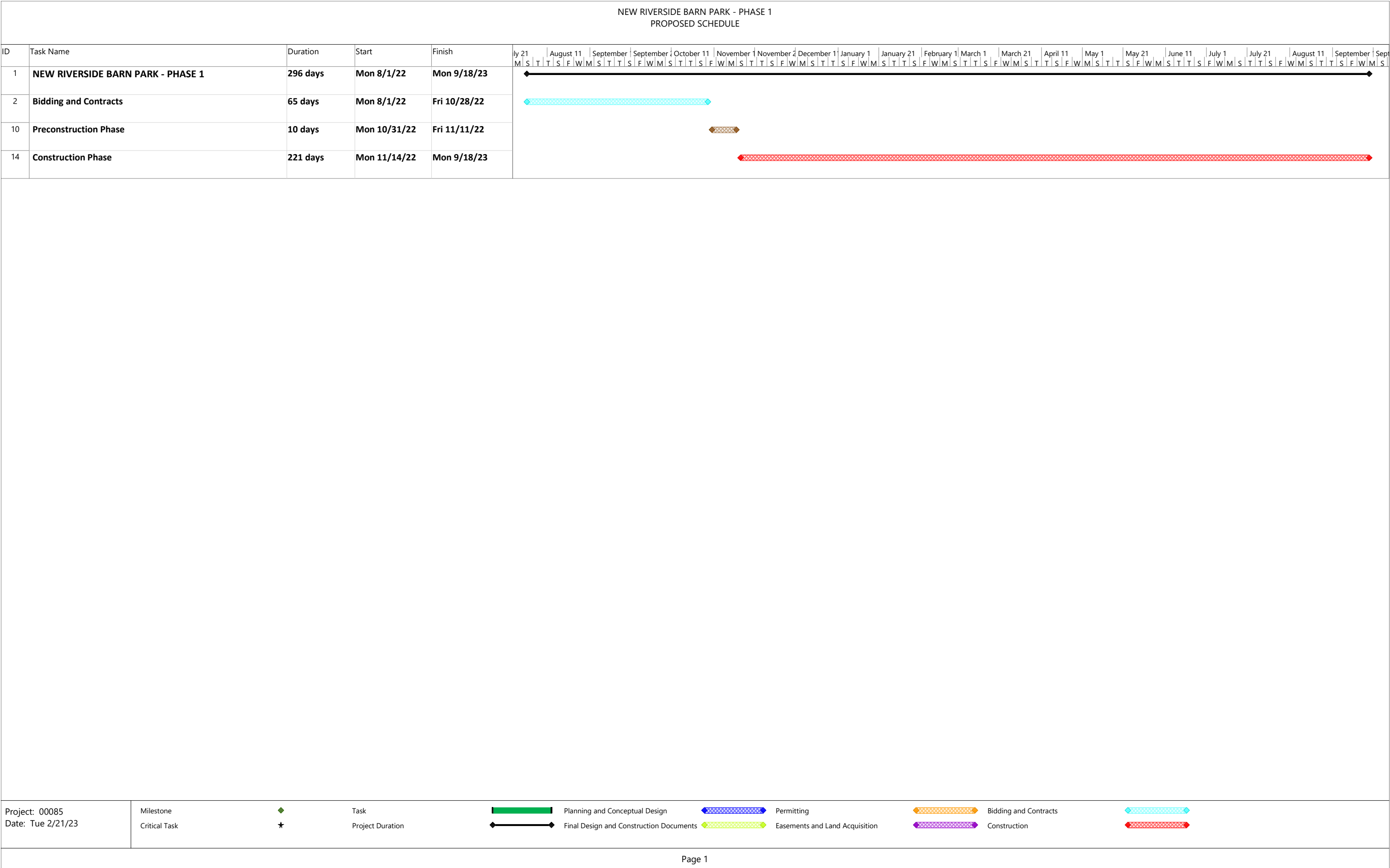
Project: 00105 Date: Tue 2/21/23	Milestone	◆	Project Duration	◆————◆	Permitting	◆————◆	Construction	◆————◆
	Critical Task	★	Planning and Conceptual Design	◆————◆	Bidding and Contract	◆————◆		
	Task	■	Final Design and Construction Documents	◆————◆	Easements and Land Acquisitions	◆————◆		

NEW RIVER LINEAR TRAIL PROPOSED SCHEDULE

ID	Task Name	Duration	Start	Finish																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
					July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
					E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M

Project 00092 Tue 2/21/23	Project Duration		Critical Task		Planning and Conceptual Design		Permitting		Bidding and Contracts	
	Task		Milestone		Final Design and Construction Documents		Easements and Land Acquisition		Construction	







PATHWAY PEDESTRIAN SAFETY IMPROVEMENTS, PHASE 2
PROPOSED SCHEDULE







ID	Task Name	Duration	Start	Finish																																																																			
					January B	January M	January E	February B	February M	February E	March B	March M	March E	April B	April M	April E	May B	May M	May E	June B	June M	June E	July B	July M	July E	August B	August M	August E	September B	September M	September E	October B	October M	October E	November B	November M	November E	December B	December M	December E	January B	January M	January E	February B	February M	February E	March B	March M	March E	April B	April M	April E	May B	May M	May E	June B	June M	June E	July B	July M	July E	August B	August M	August E	September B	September M	September E	October B	October M	October E	November B
1	Pathway Pedestrian Safety Improvements, Phase 2	487 days	Mon 1/16/23	Tue 11/26/24																																																																			
2	Planning and Conceptual Design	88 days	Mon 1/16/23	Wed 5/17/23																																																																			
6	Final Planning and Construction Documents	82 days	Thu 5/18/23	Fri 9/8/23																																																																			
11	Permitting	215 days	Mon 9/11/23	Fri 7/5/24																																																																			
17	Bidding and Contract	52 days	Mon 7/8/24	Tue 9/17/24																																																																			
22	Construction	50 days	Wed 9/18/24	Tue 11/26/24																																																																			

Project: 00050 Date: Mon 1/30/23	Milestone	◆	Project Duration	◆————◆	Permitting	◆————◆	Construction	◆————◆
	Critical Task	★	Planning and Conceptual Design	◆————◆	Bidding and Contract	◆————◆		
	Task	■	Final Design and Construction Documents	◆————◆	Easements and Land Acquisitions	◆————◆		



SARAH RILEY HOOKS MASTER PLANNING
FY 23 PROPOSED SCHEDULE

ID	Task Name	Duration	Start	Finish	Timeline																														
					7/24	August			September				October				November				December				January			February			March				
1	SARAH RILEY HOOKS COTTAGE MASTER PLAN	315 days	Mon 8/1/22	Fri 10/13/23																															
2	Planning	40 days	Mon 8/1/22	Fri 9/23/22																															
6	Design (Master Planning)	115 days	Mon 9/26/22	Fri 3/3/23																															

Project 00101 Fri 7/15/22	Milestone		Project Duration		Permitting		Construction	
	Critical Task	★	Planning and Conceptual Design		Easements and Land Acquisition			
	Task		Final Design and Construction Documents		Bidding and Contracts	