



Town of Bluffton

2017-2018 Annual Report

For authorization to discharge
Storm Water from Regulated
Municipal Separate Storm Sewer Systems (MS4)
Under
SC NPDES Phase II General Permit (SCR031302)

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|---|--|
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Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Responsible Official Signature:

UCIAC, brd

Date: / /

Marc Orlando, Town Manager, ICMA-CM

(The responsible official may authorize another person or person occupying a specific position to certify this report if this authorization is made in writing and submitted to the Department. Please attach a copy of the authorization with this report, if applicable)

TOWN OF BLUFFTON **STORMWATER MANAGEMENT PLAN ANNUAL REPORT**

INTRODUCTION

As a requirement of the Town of Bluffton's NPDES permit, a program assessment report has been submitted to the South Carolina Division of Water Quality to document the progress of program components outlined in the Permittee's Stormwater Management Plan. The following information is provided to document program activities associated with inspections of facilities and municipal operations, educational programs, monitoring and sampling, implementation of BMP's and other stormwater activities as outlined in the stormwater management plan.

MISSION STATEMENT

The mission of the Stormwater Management Program is to restore, protect, and preserve the surface waters within the Town of Bluffton and to maintain, repair, map, and evaluate drainage systems.

PROGRAM DESCRIPTIONS

Stormwater Monitoring and Administration

- ▶ Manages the day-to-day operations of the Stormwater Management Program
- ▶ Implements the requirements of the Town's Municipal Separate Storm Sewer System (MS4) Program
- ▶ Performs watershed master planning by developing maps and inventories of the entire drainage system within the Town
- ▶ Monitors stormwater run-off as part of the program's efforts to improve water quality
- ▶ Provides educational programming to increase public awareness of water quality issues
- ▶ Beaufort County Stormwater Utility and County Assessor's Office monitors stormwater billings for residential and non-residential customers in conjunction with the Stormwater Utility Board and the County Revenue Division
- ▶ Reviews and approves stormwater management plans
- ▶ Repairs, replaces, and upgrades the Town's drainage system
- ▶ Removes debris from culverts and bridge abutments with streams and creeks

STORMWATER MANAGEMENT PERFORMANCE

Table 1 - Performance Measures and Service Trends

	Actual Plan Year 16-17	Actual Plan Year 17-18	Projected Plan Year 18-19
Effectiveness			
Achieve 91% collection rate of revenues for non-residential customers	92%	94%	94%
Achieve 92% collection rate of revenues for residential customers	95%	95%	95%
Respond to 100% of illicit discharge complaints by citizens within 24 hours	100%	100%	100%
Complete 100% of compliance schedules for water quality resolutions within 30 calendar days	100%	100%	100%
Complete 100% of plan reviews within 10 business days of receipt	100%	100%	100%
Provide 30 educational programs annually	36	36	38
Ensure 100% of stormwater devices are built in accordance with approved plans	100%	100%	100%
Workload			
Number of pollution prevention inspections completed	1	48	50
Number water quality samples taken	1350	1323	1400
Number of catch basins inspected	22	40	60
Linear feet of pipe inspected or cleared	20	100	320
Number of new and redevelopment project plans reviewed annually	233	265	300

STORMWATER MANAGEMENT ADMINISTRATION

BUDGET HIGHLIGHTS

- ▶ Budgeted revenues from stormwater fees reflect no fee increase and have been adjusted to align with the actual revenues collected in the current year.
- ▶ Stormwater fees are collected by Beaufort County via annual property tax bills and dispersed to the Town for Stormwater Management Program support.

STORMWATER ORDINANCE INFORMATION

- ▶ The Code of Ordinances of the Town of Bluffton serves as the current municipal code. The Code is updated every five years with consideration of doing it annually. It includes all adopted Ordinances. Lists of recently adopted, new, and amended Ordinances are located on the first page of the online Code and continue to remain listed until they are codified into the Code.

The Code of Ordinances of the Town of Bluffton is located at https://library.municode.com/sc/bluffton/codes/code_of_ordinances.

- ▶ Unified Development Ordinance has been adopted for the purpose of providing guidance for land use and development and redevelopment within the Town of Bluffton, in accordance with the Town's Comprehensive Plan, for its physical, social, and economic growth and development. The zoning and land development regulations contained in this Unified Development Ordinance are enacted to protect and promote the public health, safety, convenience, order, appearance, prosperity, and general welfare, as well as the efficiency and economy of the Town.

The Unified Development Ordinance is located on the Town of Bluffton website <http://www.townofbluffton.sc.gov/pdfs/izone.pdf>.

STORMWATER MANAGEMENT PROGRAM

1. STORM SEWER SYSTEM INFORMATION

1.1 Population Served:

Bluffton is located in the southern area of the Lowcountry Region of South Carolina. Situated in Beaufort County, Bluffton is the second-largest town in Beaufort County and has an estimated population of 21,085 citizens. This is a permanent population number. (U.S. Census Bureau Population Estimate, 2017)

1.2 Growth Rate:

The Town of Bluffton approved 46 annexations starting in 1987 with the last occurring in 2015. As a result of development in the annexed areas, the population of the Town increased by 983% from 2000 to 2010. Total population in the 2010 census for Bluffton was 12,530. The percent increase in population from 2010 to 2017 was 59.43%. Annualized over the seven-year period, the annual growth rate is 9.75%.

1.3 Jurisdictional and MS4 Service Areas:

The Town of Bluffton does not have any Extraterritorial Jurisdiction Areas at this time. The square mile area for the Town is 54 mi².

1.3.1 Latitude of Center of MS4 Area: N32° 13.49'
Longitude of Center of MS4 Area: W80° 55.26'

1.3.2 Storm Sewer Service Area (square miles): 54 mi²

1.4 Municipal Separate Storm Sewer System (MS4):

The Town of Bluffton is delineated into 4 different watersheds that drain the Town and its surrounding area. The majority of streams within these watersheds flow in a southeasterly direction into the May River. The remaining streams flow to the Okatie, Colleton, and New Rivers.

The Town is conducting stormwater inventory update assessments for all the watersheds. The objectives of the updated inventories are to provide a comprehensive update of the existing storm sewer inventory (contained within public, private, and industrial properties), and assess the impacts of stormwater discharges on the quality of Bluffton's receiving waterbodies.

Information obtained from updated inventories show that Bluffton has approximately 262 miles of stormwater conveyance of which 230 miles, or 87.78%, is open channel. The inventory also shows that there are 6,269 structures such as catch basins and manholes.

1.4.1 MS4 maintenance activities:

The Town of Bluffton and Beaufort County have an Inter-Governmental Agreement (IGA) (Appendix A3) that allows the entities to enter into agreements to share costs and responsibilities related to NPDES permit compliance. Such agreements and cost allocations shall be reflected in each entity's annual budget.

1.5 Land Use Composition Estimates:

The land use estimates below are from the Town of Bluffton's Growth Management Department:

<u>Land Use Group</u>	
Residential	72.44 %
Commercial	7.77%
Industrial	0.39 %
Parks	3.90 %
Institutional	2.88 %
Mixed Use	1.04%
Historic	2.11 %
Agricultural	9.45 %
TOTAL	100.0%

1.5.1 Estimate Methodology:

Classifications are based on zoning districts with the corresponding acreage versus the total acreage of the Town of Bluffton. For this assessment, schools have been calculated as "institutional" and parks are listed separately (typically included in the residential classification). "Agricultural" areas are zoned as agriculture although the denotation is also used for large residential lots. "Mixed Use" is composed of residential and commercial land use.

1.6 Total Maximum Daily Load (TMDL) Identification:

The Okatie River TMDL was approved by the US Environmental Protection Agency in September 2010. The TMDL specifically addresses fecal coliform bacteria levels that have resulted in the closure of four shellfish monitoring stations located in the headwaters of the Okatie River.

Town of Bluffton's TMDL Water Quality Recovery Plan (WQRP) was submitted to SCDHEC in December 2017 as the Town's permit requires. The Town of Bluffton has collaborated with Beaufort County to update the Beaufort County Stormwater Master Plan, including an updated evaluation of the Okatie Watershed stormwater collection system and to coordinate water quality monitoring efforts as outlined by Beaufort County's Monitoring Plan. (Appendix A4)

2. RECEIVING STREAMS

2.1 Major River Basins: Savannah and Salkehatchie River Basins

2.2 Name and Identification Number of the Primary Receiving Streams and Impoundments:

The following inventory receives stormwater runoff from the MS4 jurisdictional area. All streams and impoundments are located within four watersheds and include the May River Basin, Okatie/Colleton River Basins, and the New River Basin.

Table 2- Identifying Impaired Streams and All Sensitive Waterbodies

WATERBODY NAME	Sampling Stations	Impairment(s)
Colleton River	RO-01125, 18-06, 18-15	303(d) - Dissolved Oxygen (RO-01125)
May River	19-19, 19-19A, 19-19B, 19-19C, 19-24, 19-16, 19-26, 19-18, 19-25, 19-01	303(d)- Fecal Coliform (19-19, 19-19A, 19-198, 19-19C)
New River	MD-118, RT-06021, RT-08085,	303(d)- Enterococcus & Mercury MD-118 303(d) - Enterococcus (RT-06021)
Okatie River	18-07, 18-08, 18-16, 18-17	TMDL - Fecal Coliform

3. EXISTING WATER QUALITY PROGRAMS

3.1 Local Programs:

3.1.1 Floodway and Floodway Fringe Regulations:

Bluffton has adopted floodway and floodway fringe regulations per the Town's Unified Development Ordinance in order to control alteration of natural drainage patterns, control development and to ensure stream velocities are not significantly increased.

3.1.2 Erosion and Sediment Control:

The Town has established a program as authorized by the South Carolina Sedimentation Pollution Control Act of 1973. The Erosion Control requirements in section 5.10.3(D) of the Unified Development Ordinance (UDO) and Chapter 9 in our Stormwater Design Manual (SWDM) regulate land disturbing activities in order to control accelerated erosion and sedimentation to prevent the pollution of water and other damage to ponds and watercourses.

3.1.3 NPDES MS4 Phase II Permit:

The Town was issued its stormwater permit that became effective December 2015. Program components include public education and outreach, public involvement and participation, illicit discharge detection and elimination, construction site runoff controls, post-construction site runoff controls, and pollution prevention and good housekeeping for municipal operations.

3.1.4 Code Enforcement Section:

Community Code Enforcement Officer and MS4 Program Manager enforces the Town of Bluffton Codes with a fair and balanced approach . This is achieved through partnerships, education, awareness, and building community trust. Community Code Enforcement efforts utilize different resources to obtain an equitable result.

Community Code Enforcement Officer and MS4 Program Manager focus on both residential and commercial codes of the UDO and the MS4 Enforcement Response Plans (ERP) (appendix AS) regarding IDDE, erosion and sediment control, weeded lots, shrubbery, solid waste in yards and curbside trash. It also includes the storm drainage system, sanitary sewers (manholes), creek beds and drainage ditches.

3.1.5 Other Programs that Support Water Quality within the Town of Bluffton:

1. Emergency Spill Response through the Bluffton Township Fire District
2. Beaufort County Household Hazardous Materials Disposal Program
3. Beaufort County Electronics Recycling and Paper Shredding Events Program
4. Keep Beaufort County Beautiful
5. Beaufort County Waste Oil Disposal
6. Beaufort County Recycling Program
7. Beaufort County Connect Smartphone Application (to report IDDE)
8. Palmetto Pride's Clean Team including Adopt-a-Highway and Adopt-a-Stream programs
9. Town of Bluffton three Annual Cleanup Events including the May River Cleanup & the Beach Sweep River Sweep
10. Town of Bluffton curbside recycling
11. Town of Bluffton roadside trash pickup events
12. The Town of Bluffton May River Watershed Action Plan Advisory Committee
13. The Town of Bluffton Water Quality Technical Advisory Committee
14. The Town of Bluffton Watershed Boundary and Cove Drainage Roadway Signs
15. Informational kiosk at the Bluffton Library
16. Support of ongoing local research performed by the University of South Carolina Beaufort (USCB)
17. Sanitary Sewer System Maintenance Beaufort Jasper Water Sewer Authority (BJWSA)
18. Together for Beaufort
19. Carolina Clear's Lowcountry Stormwater Partners

3.2 State Programs:

3.2.1 Okatie TMDL Development:

Staff from the Town's Watershed Management Division served on the Technical Assistance Committee (TAC) as members.

3.2.2 Stormwater NPDES Permit Compliance:

The Town of Bluffton' s Watershed Management Division staff collaborates with the SCDHEC Environmental Quality Control Region #8 concerning industrial NPDES permit requirements, water quality enforcement issues, ensuring NPDES permit

compliance for municipal operations, regulatory shellfish sampling, and microbial source tracking sampling.

4. PERMITTING INFORMATION

4.1 Responsible Party Contact List:

Table 3 - Responsible Party Contact List

Contact Information	Plan ComQonen t	Goals
Marc Orlando Town Manager 843-706-4511 843-706-4553 (fax) morlando@townofbluffton.com	Overall Administration	*Delegated Signing Official for NPDES correspondence.
Bryan McIlwee Director of Engineering 843-706-7824 843-706-4553 (fax) bmilwee@townofbluffton.com	MS4 Administration	* Annual status report * Implement 319 grant stream enhancement projects * Development and overall implementation of Phase II program components
Derrick Coaxum Public Works Division Manager 843-706-7835 843-706-4533 (fax) dcoaxum@townofbluffton.com	MS4 Maintenance	* Inspect/Clean catch basins * Repair storm pipes * Sweep curb & gutter streets * Implements drainage improvements within the Town's right-of-way
Kim Jones Watershed Management Division Manager 843-706-6962 843-706-4553 (fax) kjones@townofbluffton.com	MS4 Administration & Implementation of Phase II Program Components	* Annual status report * Implement 319 grant stream enhancement projects * Development and implementation of Phase II program components * Project Manager of Capital Improvement Projects * Responsible for the coordination of environmental assessment projects
Bill Baugher MS4 Program Manager 843-706-7805 843-706-4553 (fax) wbaugher@townofbluffton.com	MS4 Administration & Implementation of Phase II Program Components	* Implementation of Phase II program components * Respond to illicit activity complaints * Dry Weather composite sampling - quarterly (13 sites) * Field Parameter screening - Bi-Weekly (29 locations) * Municipal facility inspection * Annual Stormwater BMP inspections * MS4 & Growth Management Plan Review * Responds to citizens' drainage complaints * Environmental Code Enforcement Officer * Illicit Discharge & Elimination * Good Housekeeping * Code Enforcement
Matthew Carey GIS Analyst/ Asset Manager 843-706-4520 336-747-4553 (fax) mcarey(a).townofbluffton.com	MS4 Maintenance and Inventory	* Identifies areas for potential drainage improvements within the Town's right-of-way * Inventory Mapping * Infrastructure asset collection

Beth Lewis Water Quality Program Administrator 843-706-4559 336-747-4553 (fax) blewis@townofbluffton.com	Public Education & Outreach Public Involvement & Participation Water Quality	* Participate with Carolina Clear and the Lowcountry Stormwater Partner * Website maintenance - keep current. * Distribute educational information. * Develop brochures, flyers * Presentations - at least 20/yr. * Participate in community events * May River Clean Up 2/yr. * Coordinates WQ sampling for MS4 Compliance
Andrea Berry Stormwater Inspector 843-706-4581 843-706-4553 (fax) aberry@townofbluffton.com	Construction Site Stormwater Runoff Control	*Regulate certain land disturbing activities pursuant to the South Carolina Sedimentation Pollution Control Act of 1973. * MS4 Plan Review * Responds to citizens' drainage complaints

4.2 Organizational Chart:

The Watershed Management Division's organizational chart is enclosed in Appendix A, which is located at the end of this Annual Report.

4.3 Signing Official:

The Bluffton Town Council has authorized Mr. Marc Orlando, Town Manager, as the signing official and appropriate person to sign the permit application.

4.4 Duly Authorized Representative:

The permit application responsibility is not being delegated to another individual and/or position than the signing official.

5. CO-PERMITTING INFORMATION

Not applicable to the Town of Bluffton. The Town of Bluffton will not be co-permitting with any other Phase II community.

6. RELIANCE ON OTHER GOVERNMENT ENTITY

The Town of Bluffton will not rely on another government entity for permit compliance. However, the Town of Bluffton will pursue the collective sharing of resources and knowledge with other local Phase II communities, as the need arises through MOU's, MOA's and IGA's.

7. PUBLIC EDUCATION AND OUTREACH

7.1 PUBLIC EDUCATION:

Objectives:

1. Conduct public outreach activities.
2. Raise public awareness on the causes and impacts of stormwater pollution on local waterways.
3. Inform the public on actions they can take to prevent or reduce stormwater pollution.
4. Develop and distribute educational materials (e.g. materials include various media such as brochures, postcards, signage, websites, etc.) to the community.

Public awareness and education about natural resources is crucial to the process of protecting and restoring water quality. Clemson University's Extension Program (Carolina Clear) and the five governmental jurisdictions within Beaufort County (Beaufort County, the Town of Bluffton, the Town of Hilton Head Island, the City of Beaufort, and the Town of Port Royal) have partnered to deliver public education and outreach and public involvement/participation programming to general and targeted audiences. The goal of this partnership is to achieve compliance with the public education and outreach and public involvement/participation requirements of the NPDES Phase II Stormwater Program. The Town of Bluffton through a IGA contract with Beaufort County, the above-mentioned parties have agreed:

1. Clemson will deliver public education and outreach and public involvement/participation with a goal to create a more aware and involved public in regard to stormwater management decisions. The educational programs will include components designed for various residential and commercial audiences and others targeted for their impact to stormwater and nonpoint source pollution.
2. Beaufort County's contract with Clemson Extension represents the communities of the City of Beaufort, Town of Bluffton, Town of Hilton Head Island, and Town of Port Royal. Together these jurisdictions form the foundation for Beaufort's regional education and outreach arm, Lowcountry Stormwater Partners (LSP). These members from Lowcountry Stormwater Partners have and will continue to participate in the regional decision-making process to define regional priorities in regard to behaviors, pollutants, and audiences to be targeted for outreach. As part of Beaufort County's contract with Clemson, LSP has also provided input as available on audience demographics, behaviors based on staff observations, residential and commercial impacts related to stormwater management that may lead to compliance and enforcement actions, and other input based on stormwater operations.
3. Clemson will raise public awareness using a mass media approach. Billboard and television public service announcements, radio broadcasts and interviews, newspaper articles, stories and advertisements, and publications are among the outlets considered for use in this effort.
4. Each of the public-related activities described in the Lowcountry Stormwater Partners Strategic Plan will be a part of the core program on an annual basis and will target a specific audience, all subject to modification with the approval of the Lowcountry Stormwater Partners and Clemson, as well as acknowledging regulatory direction and interpretation by South Carolina DHEC.

The following BMP tables represent a combination of on-going activities, as well as some innovative pilot projects designed to achieve NPDES compliance. The Stormwater Public Education and Outreach Program, a component of the Town's SWMP, is designed to inform citizens, business owners, civic groups, and organizations how to reduce stormwater pollution. An informed and knowledgeable community is crucial to the success of the Town's SWMP by ensuring greater support and compliance with our program.

Table 4 - Best Management Practice (BMP) Summary for Public Education and Outreach

Progress on Goal(s) for permitting years

00 In Planning

XX Ongoing

YY Completed

EV Evaluation

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	RESPONSIBLE POSITION/PARTY
1	Identified target pollutants and target pollutant sources	<ul style="list-style-type: none"> • Fecal Coliform, including pet waste and septic systems • Fertilizers • Post Construction Maintenance, especially Stormwater Ponds • Litter • Freshwater Runoff Volume • Sediment related to Construction 		YY	YY	YY	EV	MS4 Program Manager Water Quality Program Administrator Carolina Clear, LSP
2	Identified target audiences	<ul style="list-style-type: none"> • Developers, Design Engineers, and Landscapers • Homeowner Associations (HOA's) and individual homeowners. • Pet owners and Septic tank owners • Homeowners • Businesses and golf courses 		YY	YY	YY	EV	MS4 Program Manager Water Quality Program Administrator Carolina Clear, LSP
3	Informational Website https://www.clemson.edu/extension/countylincoln/regional-consortiums/jsp/index.html https://www.townofbluffton.sc.gov/	<ul style="list-style-type: none"> • Frequent updates, as needed 			YY	YY	EV	MS4 Program Manager Water Quality Program Administrator Carolina Clear, LSP

4	Developed and distributed public education materials to identified user groups	<ul style="list-style-type: none"> • Homeowners • Businesses • Developers and Contractors • Classrooms • Hispanic Community 			yy	yy	EV	MS4 Program Manager Water Quality Program Administrator Carolina Clear, LSP
5	Media Campaign	<ul style="list-style-type: none"> • Generalized stormwater runoff pollution and targeted topics 			yy	yy	EV	MS4 Program Manager Water Quality Program Administrator Carolina Clear, LSP
6	Stormwater Hotline & Beaufort County Connect Smartphone Application	<ul style="list-style-type: none"> • To report illicit activity and obtain information on volunteer opportunities 			yy	yy	EV	MS4 Program Manager Water Quality Program Administrator Carolina Clear, LSP
7	Establish a Public Education and Outreach Program and Implement within 12 months of the permit issue date	<ul style="list-style-type: none"> • Press releases and newspaper articles • Informational printed materials • Targeted direct mail campaigns • Public meetings • Public events (Annual Cleanups and other community events as identified) • Presentations to businesses, classrooms, and homeowner groups • Distribution of promotional give-a-way materials • Information on local cable access 			yy	yy	EV	MS4 Program Manager Water Quality Program Administrator Carolina Clear, LSP

7.1.1 Primary Pollutants and Behaviors of Concern

Primary Pollutants of Concern (POCs) were ranked through a group discussion exercise during the Lowcountry Stormwater Partners Strategic Planning meeting held on September 29, 2016. A total of twenty-four pollutants and behaviors of concern were identified through this group discussion. Members of LSP then identified which were most essential to focus education and outreach efforts on. The six POCs identified were as follows:

1. Post-Construction Maintenance & Inspection
2. Runoff-volume Mitigation and Minimization of Freshwater Loading to Estuarine Systems
3. Illegal Littering
4. Bacteria Impact Awareness and Septic System Management
5. Fertilizer Need, Selection, and Application
6. Sediment Related to Construction Site Runoff

7.1.2 Target Audiences, Behaviors, Potential Partners, and Programs for Primary POC's

In addition to determining what POCs were essential to focus on, LSP members also identified target audiences, behaviors, potential partners, and programs for primary POCs with small group discussions. (Appendix F)

1. Post-Construction Maintenance and Inspection, especially related to Stormwater Ponds
 - Concern: Failure to maintain an engineered stormwater practice is affecting the quality of receiving waters and could be contributing to municipal and county operations and monitoring requirements.
 - Target Audiences: Homeowner Association (HOA) management, property management companies, golf course management, commercial property management, county/municipal staff, developers, elected officials, waterfront residents, pond management and landscape companies
 - Messages: The purpose of BMPs and their function, regular maintenance is required for long-term BMP function and healthy waterways, recognition of ownership and responsibilities (public versus private), relationship to stormwater utility fee, benefits of maintenance
 - Resources and Partners: Lagoon committees, pond management companies, Department of Natural Resources (DNR), Port Royal Sound Fountain (PRSF), State/MS4 design manuals
 - Short-term Goals: To increase awareness of proper inspection and maintenance practices
 - Long-term Goals: Demonstrate the application of this knowledge and training for better site control, maintenance, and less polluted discharge
2. Runoff Volume Mitigation and Minimization of Freshwater Loading to Estuarine Systems
 - Concern: Large amount of freshwater runoff is harming the local ecosystem.
 - Target Audiences: Elected officials and local planning departments (to set up comprehensive plan for development impacts), developers and engineers

(designing with Low Impact Development (LID)), HOAs, residents (landscaping choices), schools

- Messages: Freshwater as a conveyance for other pollutants, grassroots approach to drive political will, saltwater vs. freshwater, impact to local seafood - shellfish and finfish - and the subsequent economic impact to the community
- Resources and Partners: Eco-tours, Department of Natural Resources (DNR), Lowcountry Institute, local communities, Experience Green, Savannah River Keeper, native plant nurseries, existing presentations to HOA groups, existing Low Impact Development (LID) presentations, rain barrel giveaways, county credit program, Port Royal Sound Foundation (PRSF)
- Short-term Goals: To increase awareness of the effect of freshwater on saltwater ecosystems, increase use of infiltration and retention practices
- Long-term Goals: Community-wide acceptance of infiltration and retention practices to curb freshwater intrusion

3. Illegal Littering

- Concern: Poorly maintained dumpsters, unsecured trash in vehicles, illegal dumping, and tourist generated trash as well as plastic, tires, grass clippings are contributing marine debris and reducing the quality of local waterways for both wildlife and residents
- Target Audiences: Tourists, boating community, motorists, residents, commercial businesses, contractors, schools
- Messages: Prevent litter in the first
- Resources and Partners: Palmetto Pride, Keep Beaufort County Beautiful, National Oceanic and Atmospheric Administration (NOAA) Marine Debris program, Adopt-A-Highway, Department of Transportation (DOT), Beaufort County environmental crime unit and app, Sea Grant Clean Marine program, Port Royal Sound Foundation (PRSF)
- Short-term Goals: To increase awareness of proper disposal practices
- Long-term Goals: To decrease the amount of litter in local waterways and to receive feedback from residents detailing a reduced amount of illegal dumping and littering in their neighborhoods

4. Bacteria Impact Awareness

- Concern: Public needs to be made aware of the multiple sources of bacteria in our watersheds and impacts on our waterways.
- Target Audiences: Pet owners, area residents, commercial businesses, schools
- Message: High levels of bacteria within our waterways can be a risk to shellfish beds, awareness of bacteria sources in watersheds
- Resources and Partners: Department of Health and Environmental Control (DHEC), National Resources Conservation Service (NRCS), Soil and Water Conservation District (SWCD), Department of Natural Resources (DNR), National Estuarine Research Reserves (NERR), Port Royal Sound Foundation (PRSF)
- Short-term Goals: To increase awareness of the sources of bacteria in local watersheds and the impact bacteria has on local waterways

- Long-term Goals: Affect practices that contribute to bacterial loading in waterways

5. Septic System Management

- Concern: Septic systems that are not properly designed, maintained, or used can become a source of bacteria in local waterways and cause negative environmental and health impacts.
- Target Audiences: Septic system owners
- Messages: Identification and responsibility of ownership of septic systems, better management practices for septic systems, improved record keeping of septic system maintenance
- Resources and Partners: Installers, Department of Health and Environmental Control (DHEC), National Resources Conservation Service (NRCS), Soil and Water Conservation District (SWCD), University of South Carolina Beaufort (Dr. Warren), Department of Natural Resources (DNR), National Estuarine Research Reserves (NERR), Port Royal Sound Foundation (PRSF)
- Short-term Goals: To increase awareness of proper septic system inspection and maintenance
- Long-term Goals: Septic system owners reporting knowledge gain and application in regard to awareness, inspection, and maintenance

6. Fertilizer Need, Selection, and Application

- Concern: Residents and landscapers applying fertilizer without acquiring a soil test first can apply too much fertilizer, select a fertilizer which doesn't suit their needs (leading to over application), and/or apply fertilizer when the plants will be less able to absorb it, leading to nutrient-rich stormwater runoff
- Target Audiences: Homeowners, landscapers, turf industry
- Messages: Don't guess- soil test!, apply fertilizer based upon need, soil testing and selecting the appropriate type and amount of fertilizer for the need can save time, money, and protect local waterways, over application of fertilizer can lead to higher levels of nutrients in waterways which can cause oxygen depletion, fish kills, harmful algal blooms, and unsightly conditions.
- Resources and Partners: Experience Green, National Resources Conservation Service (NRCS), Soil and Water Conservation District (SWCD), University of South Carolina Beaufort (Dr. Warren), Department of Natural Resources (DNR), National Estuarine Research Reserves (NERR), Port Royal Sound Foundation (PRSF)
- Short-term Goals: To increase awareness of soil testing, facilitate following and interpreting soil test results, and proper fertilizer selection and application
- Long-term Goals: Demonstrate increase in soil testing awareness, knowledge gain and application of knowledge in regard to fertilizer need, selection, when to fertilize and/or how much fertilizer to use

7. Sediment Related to Construction Site Runoff

- Concern: When construction sites do not properly install, use, and/or maintain sediment and erosion control measures, it indicates a lack of understanding of the importance of these measures as well as local compliance and enforcement

policies. The sediment leaving these sites can impact the quality of local waterways and shellfish beds.

- Target Audiences: Engineers, developers, contractors, sub-contractors
- Messages: Sediment and erosion controls are important and necessary parts of an active construction site; their maintenance and combination of practices protects water quality, maintains a site as active and in compliance, and minimizes costly revisits and frequent replacements of BMPs.
- Resources and Partners: Soil and Water Conservation District (SWCD), local planning departments, local stormwater inspectors, developers, engineering firms
- Short-term Goals: To increase awareness of how to stay in compliance with local construction ordinances, to increase awareness of sediment and erosion control measure function and maintenance
- Long-term Goals: To report a decrease in the number of violations after local construction sites receive education

7.1.3 Public Education and Outreach Activity Program Summary Information:

1. The Town of Bluffton participates in a consortium of local governments which pools resources to provide stormwater education across Beaufort County with a consistent message. This consortium started as an intergovernmental agreement with Beaufort County, the Town of Hilton Head Island, the Town of Port Royal, and the City of Beaufort to use the Town of Bluffton's Neighbors for Clean Water campaign for stormwater education and awareness throughout Beaufort County. The Beaufort County Conservation District (henceforth Conservation District) was hired to perform education and outreach services on behalf of these partners. The Conservation District held the contract until July 1, 2016. At that time the consortium agreed to have Clemson Extension's Carolina Clear Program become the new service provider for stormwater education and outreach throughout Beaufort County. The consortium and Carolina Clear decided to move away from the Neighbors for Clean Water name to a new name, Lowcountry Stormwater Partners (LSP). Neighbors for Clean Water was adapted to become a tag line of LSP.
2. The Town of Bluffton has been continuing its Pet Waste campaign. In 2009, upon receipt of the Town's first 319 grant award, the Town purchased approximately thirty-six pet waste stations to place within the May River Watershed, targeting specific areas. Eighteen pet waste stations are located in Old Town Bluffton parks and the remainder were provided to HOA's within the May River Watershed. The Town's Public Works Division continues to service the eighteen stations located in Old Town Bluffton, reducing the transport of pet waste left on the ground. In addition, pet waste brochures were also distributed through the Beaufort County Animal Shelter, at the May River Cleanup, and door-to-door to communities near a water quality monitoring station following microbial source tracking results.
 - o In 2014 & 2016, televised Stormwater Public Service Announcements (PSA's) were produced through a partnership between the Town of Bluffton, Beaufort County, and the Beaufort County Channel. These PSA's continue to air on Beaufort County's primary government access channel, the County Channel and the County

Channel's YouTube page. The Town of Bluffton Police Department developed a PSA titled "Keep Bluffton Beautiful" in 2017 to educate residents regarding the harm of litter in our local ecosystem. This PSA was shared on the Town of Bluffton and the Town of Bluffton Police Department's social media outlets. It can also be viewed on the Town of Bluffton's YouTube page. In 2018, Carolina Clear developed a PSA educating South Carolina residents about the importance of picking up pet waste and its importance to the May River and public health.

- a. The County Channel (local access) aired the following PSA TV ads: Stormwater Pollution: Your Watershed Begins Here; Stormwater Pollution: Pet Waste; Stormwater Pollution: Lawn Care/Fertilizer Use; and Stormwater Pollution: Litter.
3. Carolina Clear uses television, radio, billboards, and the internet to extend stormwater education messages to a broader audience. The 2018 billboard campaign focused on pet waste. These billboards are up in many locations around our consortium regions, including I-95. The Town of Bluffton also advertises the May River Cleanup and the Beach Sweep/River Sweep utilizing an electronic billboard located off of Highway 170. Event billboards are displayed for approximately one month prior to the events.
4. The Town of Bluffton installed May River Watershed identification signs in 2014 at four major entryways into the May River watershed - Buckwalter Parkway, Bluffton Road, Burnt Church Road, and May River Road. These signs aimed to enhance the public's awareness of the watershed in which they live and visit and to specifically encourage good stewardship of our valuable wetlands and overall watershed by reminding everyone to "Love Our River, Never Litter".

In 2015, the next phase of the Town's project was to install Cove Identification Signs. With support from Palmetto Pride grant funds, the Town installed six signs throughout Old Town to identify the coves draining to the May River. Signs were placed along Bridge Street at both Heyward Cove and Huger Cove, at a location near Verdier Cove along Thomas Heyward Street, and near a drainage system at Lawrence Street, in the heart of downtown Bluffton, that leads to Huger Cove. The goal was and is to create a sense of ownership and responsibility for all of our local waterways. Awareness is the first step toward becoming interested in the watershed, which leads to the public becoming more involved in decision-making and hands-on watershed and water quality protection and restoration efforts. These signs are still in place and are continually viewed by traveling residents and tourists as they enter the May River Watershed and move across our coves in Old Town Bluffton.

5. In 2016, The Town of Bluffton produced an informational brochure regarding the Town's Municipal Separate Storm Sewer System (MS4) program. The objective was to increase citizen knowledge about the Town's MS4 designation and new ordinances/requirements that would be forthcoming. The Town of Bluffton produced this brochure in both Spanish and English. The Town has these brochures available year-round at Town Hall and has distributed a total of 400 English and 250 Spanish MS4 brochures at various community events, including the Town's two annual cleanups.

6. In 2017 the Town of Bluffton has produced two new educational handouts. These handouts are designed for residential homebuilders and local contractors and highlight the Town and SC DHEC's Sediment and Erosion Control Best Management Practices. These handouts were printed and distributed throughout 2017 and 2018.
7. The Town of Bluffton utilized EPA's "Do Your Part, Be SepticSmart" flyers, in English and Spanish, to distribute to residents at the time of surface effluent septic inspections. Over 100 septic system educational flyers were distributed to local residents through this program.
8. Presentations were given at various schools within the Beaufort County School District during the past year. In summary, The Town of Bluffton's efforts include 5 presentations given to students across a broad range of ages, reaching a total of 560 students. Depending on the age group, presentations used visual aids, such as PowerPoint, hands on water quality data collection, or allowed students to build their own watershed from provided materials. In addition, Town staff worked with MC Riley Elementary to host the May River Cleanup Participation Challenge. The grade level with the most students and families present at the Town's May River Cleanup was awarded with an educational presentation by Coastal Kingdom. This presentation featured local flora and fauna.
9. There were several additional presentations for 243 individuals outside of the school system. Town staff presented to Home Owners Associations' in the Bluffton area including the Haven and Palmetto Bluff. Town staff also took part in the Hilton Head Island - Bluffton Chamber of Commerce Leadership Town Day, where staff presented information on our local ecosystem and current water quality challenges that exist in local tidal rivers. Town staff also took part in the HBA Building Official Roundtable lunch, the Bluffton Arts and Seafood Festival, Kiwanis, and Master Naturalist Volunteer Fair.
10. Town staff actively presents data from the Town's water quality monitoring program and projects at municipal meetings, conferences, association meetings, Beaufort County Stormwater Utility Board meetings, and the Town's Watershed Action Plan Advisory Committee (WAPAC). Conferences include the South Carolina Water Resources Conference, the South Carolina Association of Stormwater Managers meeting, and Southeast Coastal Resiliency Panel. Town staff reached approximately 545 individuals with these presentations.
11. The Town of Bluffton's post-construction BMP maintenance program requires that the Town work with residents and HOA's to resolve maintenance needs. The Town staff has held 6 meetings with different HOA representatives and/or the property management company to discuss the Town's BMP inspection program, maintenance, and annual reporting requirements.
12. The Town of Bluffton had 10 articles published in local newspapers, magazines, and online. These articles highlighted the Town's May River Cleanup, the work of the Watershed Management Division Manager, and the benefits of floating wetlands. In

addition, the Town was awarded by the Southeast Stormwater Association and Stormwater Solutions (SWS) for implementation floating wetlands into a Town owned stormwater pond, the New Riverside Pond. The floating wetlands project continues both organizations' websites.

- Residents of the Town of Bluffton can call the County's non-emergency dispatch to report stormwater pollution at any time. In addition, the Town of Bluffton is utilizing Beaufort County's "Beauf01i County Connect" Smartphone Application. This application allows citizens to directly report illicit discharges, complaints, concerns, and requests 24 hours a day.

7.2 Public Involvement and Participation:

Objectives :

- Provide opportunities for the public to participate in program development and implementation. LSP seeks to educate through involvement, teaching individuals how to prevent pollution through responsible, simple changes in practices, behaviors, and procedures. In addition, the Town of Bluffton continually seeks to involve individuals in our program development and implementation.
- Comply with applicable state and local public notice requirements. The Town of Bluffton has an established public involvement and participation program.

Table 5 - Best Management Practice (BMP) Summary for Public Involvement and Participation

Progress on Goal(s) for permitting years

00 In Planning X Ongoing YY Completed EV Evaluation

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	RESPONSIBLE POSITION/PARTY
1	Administer a Public Involvement Program	<ul style="list-style-type: none"> Please reference BMPs #2 through #5 below. 			YY	YY	EV	MS4 Program Manager Water Quality Program Administrator Carolina Clear, LSP
2	Allow the Public an opportunity to review and comment on the Stormwater Management Plan	<ul style="list-style-type: none"> Monthly Watershed Action Plan Advisory Committee Meetings, Stormwater Utility Board meetings, social media, and program evaluations 			YY	YY	EV	MS4 Program Manager Water Quality Program Administrator Carolina Clear, LSP
3	Organize a Volunteer Community Involvement Program	<ul style="list-style-type: none"> Three Town Sponsored Cleanups Lowcountry Stormwater Partners (LSP) Storm Drain Marker Program LSP Workshops and Certifications for 			YY	XX	EV	MS4 Program Manager Water Quality Program Administrator Carolina Clear, LSP

		Residents and Professionals • LSP Promotion of SC Adopt-A- Stream Program						
4	Establish a Mechanism for Public Involvement	• Watershed Action Plan Advisory Committee Meetings			YY	YY	EV	MS4 Program Manager Water Quality Program Administrator Carolina Clear, LSP
5	Establish Hotline/Hotline	• To report polluters and/or concerns through Beaufort County Connect Smartphone Application			YY	YY	EV	Beaufort County MIS MS4 Program Manager Water Quality Program Administrator

7.2.1 Target Audience:

The target audience for public involvement projects includes all members of the community. Youth groups, college students, church groups, environmental groups, families, homeowner organizations, and businesses are invited to partake in public involvement projects.

7.2.2 Public Involvement and Participation Program Summary Information:

- Overall, public involvement opportunities in Bluffton's Watershed Management Division have remained stable and strong in response to growing awareness of stormwater issues.
- The Town of Bluffton hosts three cleanups annually including the May River Cleanup, the Town's participation in the statewide Beach Sweep/River Sweep, and a Town sponsored roadside Keep Bluffton Beautiful cleanup event. This year, due to Hurricane Florence, the Town's local participation in the South Carolina Beach Sweep/River Sweep was canceled. The May River Cleanup had 350 volunteers participate, as well as 18 local businesses donate goods and services. As part of the May River Cleanup, volunteers were given different volunteer duties during the event. Volunteers collected 2,880 lbs. and were able to sort & recycle 500 lbs. of this waste. In addition, volunteers marked 30 storm drains throughout Old Town Bluffton. Local environmental education groups had booths setup so volunteers could learn about local water quality issues, local flora and fauna, and the Town's curbside solid waste and recycling program in conjunction with the May River Cleanup.
- The Lowcountry Stormwater Partners website and Facebook page is continually updated with information for citizens.
<https://www.clemson.edu/extension/carolinaclear/regional-consortiums/lsp/index.html>
- Citizens, business representatives, and citizen groups attend monthly May River Watershed Action Plan Advisory Committee (WAPAC) meetings to participate in stormwater program decision making. In addition, the Town serves as an ex-officio member of the Beaufort County Stormwater Utility Board. Both of these

committees/boards invite citizens to participate in these discussions. The agenda for each meeting is posted on the Town's website.

- The Watershed Management Stormwater Inspector provides on-site Pre-Construction stormwater training and education sessions for developers on sediment and erosion control practices and expectations. Town staff met with 666 contractors, developers, and engineers to discuss proper sediment and erosion control techniques.

8. ILLICIT DISCHARGE DETECTION AND ELIMINATION

Objectives:

- Detect and eliminate illicit discharges, including preventable spills and illegal dumping into the municipal separate storm sewer system (MS4).
- Address significant contributors of pollutants to the MS4.
- Implement appropriate enforcement procedures and actions.
- Develop a map showing major MS4 outfalls to state waters receiving discharges.
- Inform employees, businesses, and general public of hazards associated with illegal discharges and improper disposal of waste.

Table 6 - Best Management Practice (BMP) Summary for Illicit Discharge Detection and Elimination

Progress on Goal(s) for permitting years

00 In Planning XX Ongoing YY Completed EV Evaluation

BMP	Measurable Goals	YR	YR	YR	YR	RESPONSIBLE POSITION/PARTY	
		1	2	3	4		5
Develop and Implement an Illicit Discharge Detection and Elimination (IDDE) Program	As a Phase II permit compliance measure, the Town of Bluffton had previously completed this BMP requirement. Town Council adopted the UDO Ordinance in November 2011. Upon adoption, Watershed Management staff implemented the policy.			XX	XX	EV	MS4 Program Manager Water Quality Program Administrator Stormwater Inspector
2 Establish and Maintain Appropriate Legal Authorities	If warranted, a Notice of Violation (NOV) is issued with required compliance measures and due date. NOV is tracked by designated staff until final resolution is achieved. Enforcement actions are described in Article 5.10.5 of the UDO.			XX	XX	EV	MS4 Program Manager Stormwater Inspector

3	Develop a Storm Sewer System Base Map and Inventory of Major Outfalls	The Town of Bluffton is in the process of outfall identification and creation of a comprehensive stormwater system inventory.			XX	XX	EV	MS4 Program Manager GIS Analyst/ Asset Manager Stormwater Inspector
4	Maintain an Inventory of Major Outfalls that discharge to Waters of the State	The Town of Bluffton is in the process of performing outfall screening by means of GIS and field investigations. If dry weather flows are observed, Watershed staff will collect samples for lab analyses.			XX	XX	EV	MS4 Program Manager GIS Analyst/ Asset Manager Water Quality Program Administrator Stormwater Inspector
5	Inspection and Detection Program to Detect Dry Weather Flows to MS4 Outfalls in Targeted Areas	Written standard operating procedures were established in December 2016. Illicit discharges or connections are permanently removed from the IMS4 in accordance with the UDO.			XX	XX	EV	MS4 Program Manager Water Quality Program Administrator Stormwater Inspector
6	Employee Training	Create and distribute a web-based power point presentation and booklet to all current and new municipal employees that are not administrative positions.			00	00	EV	MS4 Program Manager Water Quality Program Administrator Stormwater Inspector Town Employees
7	Provide Public Education	Create and distribute pollution prevention brochures, fliers, and posters for business operations.			XX	XX	EV	MS4 Program Manager Water Quality Program Administrator Stormwater Inspector Carolina Clear, LSP
8	Establish a Public Reporting Mechanism	The public can access the Town's Homepage, Citizen Service Request webpage, and provide notification of illicit discharges to the Stormwater staff, Beaufort County Connect Smartphone Application & non-emergency phone number 843-524-2477			XX	XX	EV	Town Customer Service Center IMS4 Program Manager Stormwater Inspector Beaufort County MIS
9	Establish Procedures to Identify and Eliminate Failed Septic Systems and Sanitary Sewer Overflows (SSO)	Standard operating procedures for IDDE of failed septic tank systems were established in Spring 2006 and revised in July 2011. Detected SSOs are reported to Customer Service Center. Utilize the Town's Microbial Source Tracking (MST) sampling program implemented in December 2016 to identify and eliminate failing septic systems and SSOs			XX	XX	EV	MS4 Program Manager Stormwater Technicians Water Quality Program Administrator

8.1 Establish and Maintain Appropriate Legal Authorities:

The Town of Bluffton UDO addresses an illicit discharge, connection, and disposal (UDO 5.10.5) which fully regulates the introduction of illegal pollutants to the Town's MS4 and receiving streams. The Watershed Management staff is adequate to provide enforcement actions, as per the existing UDO. The adopted ordinance has an enforcement section that provides for notice of violations and civil penalties.

8.2 Develop a Storm Sewer System Base Map and Inventory of Major Outfalls:

Inventories of the initial four watersheds are being completed. Watershed Management staff is in the process of revising or developing watershed master plans as well as stormwater sewer

system inventories for the annexed areas of the Town of Bluffton. The inventory is accessible as a GIS layer and amended from submitted new development as-built plans and 'in-the-field' surveyed locations.

8.3 Maintain an Inventory of Major Outfalls that Discharge to Waters of the State:

As part of master planning updates, new outfalls that have resulted from new development since the original inventory will be added to the list of MS4 outfalls. Upon completion of the stonn sewer base map and inventory of major outfalls, Watershed Management staff will perform field assessments in order to obtain the required information in accordance with the Town's NPDES pennit.

8.4 Inspect/Detect Dry Weather Flows at MS4 Outfalls in Targeted Areas:

Illicit discharge detection and elimination procedures are contained within the Watershed Management Division's Sampling Manual. The Center for Watershed Protection and Mr. Robert Pitt published a guidance manual for program development and technical information regarding illicit discharge detection and elimination (IDDE). When compared to the IDDE manual created by the Center of Watershed Protection, the Watershed Management Division's standards of operating procedures were very similar. The Watershed Management Division incorporated Chapters 11, 12, and 13 from the Center for Watershed Protection's IDDE technical manual into its own procedures.

8.5 Employee Training:

Create and distribute a web-based PowerPoint presentation and booklet to all current and new municipal employees that are not administrative positions. Lowcountry Stormwater Partners has training materials available for borrowing to participating municipalities.

The Watershed Management Division held three Good Housekeeping trainings for the Town's Public Works Staff, Project Management Staff, and Police Department Staff. The Public Works training focused on IDDE, spill prevention, and good housekeeping best management practices. The focus of the Project Management Division handles the Town's Capital Improvement Projects. The Project Management Division 's training was on sediment and erosion control best management practices and IDDE. The Police Department training focused on IDDE and spill prevention. A total of 28 employees were a part of the training.

8.6 Provide Public Education:

Create and distribute pollution prevention brochures, fliers, and posters for business operations.

8.7 Establish a Public-Reporting Mechanism:

Citizens may call the Customer Service Center Line 843-706-4500 to report illicit discharges, connections, and disposal within the Town's limits. All pertinent information regarding reporting procedures is posted on the Town of Bluffton's website, www.townofbluffton.sc.gov via the Watershed Management Division' s homepage. Additionally, non-emergency phone number 843-524-2477 and Beaufort County Connects Application are available for public reporting.

8.8 Establish Procedures to Identify and Eliminate Failed Septic Systems and Sanitary Sewer Overflows:

The Town, in December 2016, implemented a Microbial Source Tracking (MST) sampling program. The MST sampling program supplements the Town's weekly fecal coliform monitoring program and its primary objective has been to assist Town staff with identifying and eliminating failing septic tanks and SSO's within the May River Watershed. To date, the Town's MST sampling program has resulted in:

- a. Identification and elimination of five failing septic systems in the May River Watershed, and
- b. Multiple system checks of Beaufort Jasper Water Sewer Authority (BJWSA), owned infrastructure following positive MST results.

The Town of Bluffton, through ongoing collaboration, works with the local South Carolina Department of Health and Environmental Control (SC DHEC) Environmental Affairs Office and Beaufort County Stormwater. This collaboration ensures correction of the septic system failures that have been identified. In addition, the Town works with SC DHEC's Shellfish Program to have MST samples pulled in conjunction with the state's routine fecal coliform sampling at six shellfish stations located in the May River.

Upon encountering a failing septic tank system, Watershed Management staff will provide notification to the MS4 Program Manager immediately. If the failure is located in the Town's jurisdiction, the MS4 Program manager will inform the homeowner of the septic assistance program and have the septic system repaired. If outside of our jurisdiction, the MS4 Program Manager will work with SCDHEC and the Beaufort County to eliminate the failure. Watershed Management Staff tracks the issue until resolution. All encountered sanitary sewer overflows or leaks are promptly reported to BJWSA Customer Service Center Line, which can be directly accessed by calling 843-987-9200.

8.9 Illicit Discharge Detection and Elimination Program Summary Information:

1. Mapping updates to the storm sewer drainage system continue from initial efforts conducted in the prior years. Currently the Town has performed inventory updates within the May River headwaters, and Old Town District. Currently, GIS Analyst/ Asset Manager is incorporating a 'Hydraulic and Hydrologic' Program into the Town's GIS database, thus increasing personnel's capability of isolating illicit discharges or connections. Stormwater Discharge Outfalls are being identified and field-screening were conducted as part of this process.
2. Staff has responded to 43 illicit discharge situations and issued 1 Notice of Violation.
3. No civil penalties were issued this year because all violators achieved compliance.
4. As part of the storm sewer inventory update, outfalls are investigated and screened for the presence of pollutants.
5. As part of the Town's Good Housekeeping and Pollution prevention programs, 28 Town employees were trained to identify illicit discharges and how to report them. Customer Service Center Line takes illicit discharge related calls 24 hours a day and submits them to staff for investigation. Residents of the Town of Bluffton can also call the County's non-emergency dispatch to report stormwater pollution at any time and utilizing Beaufort

County's "Beaufort County Connect" Smartphone Application. This application allows citizens to directly report illicit discharges, complaints, concerns, and requests 24 hours a day.

9. CONSTRUCTION SITE RUNOFF CONTROLS

Objectives:

1. Reduce pollutants in stormwater runoff from construction activities disturbing one or more acres of land surface, and those activities less than one acre which are part of a larger common plan of development.
2. Provide procedures for public input, sanctions to ensure compliance, requirements for construction site operations to implement appropriate erosion and sediment control practices, review of site plans, which incorporate consideration of potential water quality impacts , and procedures for site inspection and enforcement of control measures.
3. Develop a locally delegated program that meets the state requirements covering the jurisdictional area of the pennittee which complies with the required minimum of this Section.

The Town of Bluffton has established a local program to administer the Sedimentation Pollution Control Act of 1973. Per the town's program, as detailed in UDO 5.10.3(D). The NPDES permit requirements will be fulfilled using this existing program. Permits are required for any tract of land-disturbing activity that are equal to or greater than five acres or less than five acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or greater. (NPDES 2012 CGP)

Table 7 - Best Management Practice (BMP) Summary for Construction Site Runoff Controls

Progress on Goal(s) for permitting years

00 In Planning XX Ongoing YY Completed EV Evaluation

	BMP	Measurable Goals	YR	YR	YR	YR	YR	RESPONSIBLE
			!	£	J	.1		POSITION/PARTY
1	Erosion and Sediment Control Program	<ul style="list-style-type: none"> • Local program mandates sediment & erosion control practices for construction activities disturbing more than five acres or less than five acres of total land area that is part of a larger common plan of development 			XX	XX	EV	MS4 Program Manager Stormwater Inspector

2	Plan Review Process - monthly review of final plans for approval or denial of Development Permit.	<ul style="list-style-type: none"> Local program adheres to regulations and requirements of the Sedimentation Pollution Control Act of 1973. 			XX	XX	EV	MS4 Program Manager Stormwater Inspector
3	Field Inspections, Complaint Response, and Enforcement Procedures	<ul style="list-style-type: none"> On-site inspections are conducted once per 30 days; on average, 124 inspections are completed per 30 days. In addition, staff responded to all received complaints within 28 hours of first knowledge. Article 5 of the Town's Unified Development Ordinance as well as ERP has numerous provisions regarding enforcement actions. 			XX	XX	EV	MS4 Program Manager Stormwater Inspector
4	Notify the responsible Town Divisions that have enforcement capabilities in order to eliminate construction site wastes from entering the MS4 and/or Waters of the State	<ul style="list-style-type: none"> Building Inspectors ensure construction debris and trash removal from sites. Off-site sediment and any other pollutants that enter the MS4 or Waters of the State are resolved by the Watershed Management Division. Project Managers receive training to monitor Town projects 			XX	XX	EV	MS4 Program Manager Stormwater Inspector
5	Educational and Training Materials	<ul style="list-style-type: none"> Inspector distributes educational pamphlets illustrating proper pollution controls methods and devices. Inspector conducts on-site educational discussions with licensed contractors. 			XX	XX	EV	Stormwater Inspector
6	Public Information	<ul style="list-style-type: none"> Town Website - publicized contact information for MS4 Program Manager, including telephone number and e-mail address 			XX	XX	EV	Town of Bluffton's CustomerService Division Town of Bluffton's Marketing and Communication Department

9.1 Erosion and Sediment Control Program:

The Watershed Management Division requires sediment & erosion control measures at construction sites. Article 5.10 of the Unified Development Ordinance regulates land disturbing activities within the jurisdictional boundaries of the Town of Bluffton.

9.2 Requirements for Construction Site Operators:

Article 5.2 of the Unified Development Code, states that no person shall undertake any land disturbing activity without first obtaining a permit from the Town. It states that any area exceeding 1 acer of surface area on one tract for construction of a single-family dwelling or on one tract for any other purpose must be permitted. Once permitted, UDO mandates the creation and submittal of a development plan and the Town of Bluffton Stormwater Design Manual provides the design standards criteria for erosion and sedimentation control measures, structures, and devices.

The Watershed Management Division monitors and eliminates construction site wastes for adverse impacts to water quality. Off-site sediment recovery and maintenance of erosion control structures are regulated and enforced by the Watershed Management Division. Any other pollutants that are directly (or indirectly) discharged, disposed, or illicitly-connected to storm drain systems (public or private-owned) or to Watercourses and Waters of the State, which are located within the Town limits and any of the Town's extra territorial jurisdictions, are also monitored and enforced by the Watershed Management Division.

9.3 Educational and Training Materials for Construction Site Operators:

Erosion Control Inspector performs on-site educational discussions with licensed contractors and developers on a volunteer basis through our service requests and/or after issuance of violations. These educational discussions are interactive, personal, and are conducted on-site if possible. This permit year, Staff has conducted over 420 education discussions with builders, contractors, and subcontractors.

9.4 Plan Reviews:

When finalized, development plans are submitted to the Town of Bluffton for permit approval of land disturbing activities. The Certified Stormwater Plan Reviewer determines regulatory compliance in accordance with the Sedimentation Pollution Control Act of 1973.

9.5 Public Information:

Citizens can report an illicit activity or erosion and sediment control concerns by calling the Customer Service Center Line at 843-706-4500, the non-emergency phone number 843-524-2477 and Beaufort County Connects Application which are available for public reporting.

By contacting the MS4 Program Manager whose contact information on the Town of Bluffton's website at www.townofbluffton.sc.gov via the Watershed Management Division's homepage.

The Watershed Management Division responds to e-mails and received complaints from citizens within 24 hours of first knowledge.

9.6 Inspection and Enforcement Procedures:

One of five qualified erosion control inspectors conducts on-site inspections. Routine inspections are performed once every 30 days to ensure program compliance. However, the frequency of inspections increases, as needed, for overall program compliance.

Enforcement action provisions are described in Article 5. IO of the Unified Development Ordinance. The Town of Bluffton will not issue a development permit for a site unless the sediment and erosion control plan has been approved. Deviation from the approved plan will result in a Notice of Violation (NOV) from an erosion control inspector with violations of noncompliance and a compliance due date will be listed. Mitigation activities are enforced in the event of off-site sedimentation. If the corrective measures are not resolved by the due date, a Stop Work Order may be executed on the development site. In addition, the Town of Bluffton may impose a monetary fine until absolute resolution has been achieved.

9.7 Construction Site Runoff Control Program Summary Information:

In the past year, Watershed Management staff has reviewed 252 plans and have conducted 1,674 construction site inspections. Those inspections have resulted in the issuance of 276 Notice to Comply, 82 Notice of Violations, 8 Stop Work Orders, and 3 civil penalties.

10. POST-CONSTRUCTION SITE RUNOFF CONTROLS

Objectives:

1. Manage stormwater runoff from new development/redevelopment that drains to the MS4 and disturbs an acre or more of land surface, including projects less than an acre, which are part of a larger common plan of development or sale.
2. Provide a mechanism, which requires long-term operation and maintenance ofBMPs.
3. Ensure controls are in place, which minimizes water quality impacts.

Table 8 - Best Management Practice (BMP) Summary for Post-Construction Site Runoff

Progress on Goal(s) for permitting years

00 In Planning

XX Ongoing

YY Completed

EV Evaluation

	BMP	Measurable Goals	YR 1	y R 2	YR 3	YR 4	YR 5	RESPONSIBLE POSITION/PARTY
1	Post-Construction Stormwater Management Program	<ul style="list-style-type: none"> • Adopt and implement a Post Construction Stormwater maintenance requirement within 18 months of permit issuance. 			00	XX	EV	Watershed Manager MS4 Program Manager Stormwater R&R•

2	Strategies which include BMP's appropriate for the MS4	<ul style="list-style-type: none"> The Town is referencing the Stormwater Design Manual as engineering criteria for stormwater plan submittals. 			00	XX	EV	Watershed Manager MS4 Program Manager
3	Establish Nutrient Sensitive Waters protection measures	<ul style="list-style-type: none"> The Town is referencing the Stormwater Design Manual as engineering criteria for stormwater submittals. 			XX	XX	EV	Watershed Manager MS4 Program Manager
4	Establish a program under the Post Construction minimum measure to control the sources of fecal coliform to the maximum extent practicable	<ul style="list-style-type: none"> The Town has implemented both structural and non-structural BMP's to control fecal coliform such as pet waste stations and the approval of infiltration devices which are known to have the best pathogen removal 			XX	XX	EV	Watershed Manager MS4 Program Manager Stormwater Technician
5	Operation and Maintenance Plan	<ul style="list-style-type: none"> An operation and maintenance plan is required as part of the permit approval process 			00	XX	EV	MS4 Program Manager
6	Educational materials and training for developers	<ul style="list-style-type: none"> Multiple training sessions have been provided leading to and after implementation of the ordinance. Materials guiding stormwater applications, example calculations and other information have been provided on the stormwater website. 			00	XX	EV	Watershed Manager

*Stormwater Restoration and Recovery contract funded by Town of Bluffton to do 3rd party inspections for Post Construction inspections

10.1 Post-Construction Stormwater Management in New Development and Redevelopment:

The Watershed Management Division oversees and enforces the Town's post-construction stormwater management program. The Town of Bluffton has adopted the Stormwater Design Manual as a technical guide for designing structural BMPs within its municipal boundaries.

10.2 Operation and Maintenance:

As required by the Town's permit the Watershed Management Division will ensure that Post construction stormwater BMPs are inspected once per permit cycle. The Watershed Management Division has implemented a Memorandum of Agreement (MOA) with Stormwater Restoration and Recovery for third party inspections. This program notifies the designated property owner of the post-construction BMP inspections results. A copy of The Town's MOA with R & R examples of inspections reports located in Appendix B.

10.3 Fecal Coliform Source Control:

The Town of Bluffton strives to reduce fecal coliform inputs to the MS4 to the maximum extent practicable. The Town will strive to implement structural BMPs which encourage the die-off of fecal coliform bacteria to the maximum extent practicable.

The Town and Beaufort Jasper Water and Sewer Authority (BJWSA) have an extensive Capital Improvement Program to extend sewer collection system. Watershed Management staff work closely with BJWSA to locate and resolve sanitary sewer overflows located in the MS4.

10.4 Programs with development/redevelopment draining to Shellfish Salt Waters (SA):

The Town is referencing the Stormwater Design Manual as engineering criteria for stormwater submittals.

10.5 Programs with development/redevelopment draining to Trout Waters (TR):

The Town of Bluffton does not have any drainage areas that go into TR waters.

10.6 Programs with development/redevelopment draining to Nutrient Sensitive Waters:

Drainage from a portion of the Town of Bluffton flows to the Okatie River which has a TMDL plan for fecal coliform. The Town of Bluffton has been working with Beaufort County as they update their water quality monitoring plan. Structural and non-structural BMPs will be utilized to address the requirements of TMDL. These BMPs will provide sediment removal, which ultimately reduces the nutrient and fecal coliform inputs to the Okatie River.

10.7 Comprehensive Watershed Protection Plan:

The Town of Bluffton has a Comprehensive Post Construction Management Plan to meet the requirements of section 4.2.5.

10.8 Non-Structural BMPs:

Currently, the Town of Bluffton has implemented a Comprehensive Plan for growth - the UDO, which was adopted in 2011. Environmental quality is a key subject area, with an objective of protecting our local watersheds, wetlands, and streams. Development is subject to zoning restrictions, erosion control measures, stream buffers, floodplain management, and stormwater management.

10.9 Structural BMPs:

The Town of Bluffton is considering the implementation of the South Carolina Coastal Zone Low Impact Manual, which provides sizing and performance criteria for water quality BMPs. In addition, Town Council adopted water quantity standards for the stormwater design manual in order to mitigate downstream effects of flooding and erosion.

10.10 Regulatory Mechanism:

The Town of Bluffton created, adopted, and implemented its post-construction BMP inspection ordinance in 2007. This ordinance includes comprehensive regulatory procedures in order to ensure compliance. Notice of Violations, remedies, and monetary penalties are examples of regulatory tools contained within the post-construction ordinance that the Watershed Management Division utilizes as enforcement mechanisms.

10.11 Implement a Post Construction Stormwater Best Management Practices Inspection Program:

Under a Master Service Agreement, Stormwater Restoration & Recovery Services (R&R) will inspect sites within the Town's jurisdiction for performance standards that are addressed in the Stormwater Design Manual. This will ensure the long-term maintenance of post-construction stormwater BMPs control measures and help maintain an inventory of post-construction stormwater control measures through onsite inspection reports.

10.12 Post-Construction Stormwater Control Summary Information:

1. The Watershed Management Division has inspected 44 water quality control BMPs during the past pennit year. Please note: these devices were constructed prior to the issuance of the NPDES Permit and are not subject to its requirements. However, the inspection finding is as follow:
 - a. The number of BMPs that are categorized as 'poor'= 4 (9%)
 - b. The number ofBMPs that are categorized with 'minor issues'= 40 (91%)
 - c. The number of BMPs with 'no deficiencies' = 0 (0%)

11. POLLUTION PREVENTION AND GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

Objective:

1. Prevent or Reduce Stormwater Pollution from Municipal Operations.

The Town of Bluffton will implement a program that addresses operation and maintenance of municipal operations in order to reduce pollutant runoff into the MS4.

Table 9-Best Management Practice (BMP) Summary for Pollution Prevention and Good Housekeeping for Municipal Operations

Progress on Goal(s) for permitting years

00 In Planning XX Ongoing YY Completed EV Evaluation

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	RESPONSIBLE POSITION/PARTY
1	Develop an Operation and Maintenance Program	<ul style="list-style-type: none"> • The Town of Bluffton has implemented the following programs to prevent or eliminate pollutants from entering the MS4: street sweeping, household garbage and recycling pick-up, and street drainage maintenance. 			00	XX	EV	Watershed Manager MS4 Program Manager Stormwater Inspector

2	Develop Site Pollution Prevention Plan for Municipal Facilities	<ul style="list-style-type: none"> The Stormwater Division has identified 0 municipal facilities that require a SWPPP for PY 2018. 			00	XX	EV	MS4 Program Manager
3	Inspection and evaluation of facilities, operations, and the MS4 system and associated structural BMPs	<ul style="list-style-type: none"> Site evaluations are conducted for the need of structural BMPs; if the opportunity is presented, the Watershed Management will work to implement the appropriate controls. Once controls are implemented, BMP effectiveness will be evaluated. 			00	XX	EV	Watershed Manager MS4 Program Manager Stormwater Inspector Public Works Director
4	Conduct staff training	<ul style="list-style-type: none"> Create and distribute a PowerPoint presentation and booklet to all current and new municipal employees that are not administrative positions. 			00	YY	EV	Stormwater Inspector
5	Review of municipal-owned or operated regulated industrial activities	<ul style="list-style-type: none"> As a result of SWPPP Reviews for Phase II NPDES permittees, Watershed Management has been reviewing municipal operations. Town staff will complete results and follow-up actions. 			00	XX	EV	MS4 Program Manager
6	Spill Response Procedures	<ul style="list-style-type: none"> For municipally owned facility that is not required to apply for a Phase II stormwater permit SWPPP, an abbreviated plan will be created and implemented. A key component of this abbreviated SWPPP is spill response plan and procedures, which are site-specific 			00	XX	EV	MS4 Program Manager
7	Prevent or minimize contamination of stormwater runoff from all areas used for vehicle and equipment cleaning	<ul style="list-style-type: none"> During SWPPP site assessments, vehicle and equipment-washing techniques are evaluated. If needed, washing procedures are modified to prevent or minimize exposure to surface waters. These procedures are documented in the SWPPP and verified on a BMP checklist. 			00	XX	EV	MS4 Program Manager

11.1 Affected Operations:

The facilities listed in the table below are municipal operations that have been/will be inspected with the creation and implementation of the Town's own stormwater pollution prevention plan.

11.2 Develop an Operation and Maintenance Program:

The Town of Bluffton has created comprehensive programs to prevent the exposure of pollutants from entering the Waters of the State or MS4 - please reference the BMP Summary Table 10.

Table 10 - Impacted Municipal Operations by Pollution Prevention and Good Housekeeping Requirements

Town Department	Operational Activities	Contact Name	NPDES Permit Number
Police	Evidence Storage and Vehicle Preparation	Sgt. Michelle Mayers	<i>N/A</i>
Public Works Division	Chemical Storage and Fertilizer Application Sand, and Soil Storage and Maintenance Activities Properties that may cause or contribute to stormwater pollution	Derri ck Coaxum	<i>N/A</i>
Growth Management Neighborhood Services	Septic Assistance Program	Brad Mole	<i>N/A</i>

11.3 Develop Site Pollution Prevention Plan for Municipal Facilities:

The Watershed Management Division has identified two municipal-owned facilities that at this time do not require a pollution prevention plans however, are locally being developed. (Table 10).

1. Public Work Facility
2. Public Work Vegetation Storage Facility.

11.4 Inspection and Evaluation of Facilities, Operations, and the MS4 system and associated Structural BMPs:

The Watershed Management Division has been conducting good housekeeping inspections of municipal owned facilities since January 2015. The inspection procedure focuses on current best management practices of chemical storage, waste disposal, outdoor processes, material loading and unloading, and automotive-related activity. In addition, Watershed Management Division evaluates the effectiveness of structural BMPs, stormwater discharge outfall condition, off-site erosion, and recommends corrective measures and/or BMP implementation (structural and non-structural) for the facility.

11.5 Conduct Staff Training:

Create and distribute a PowerPoint presentation and booklet (currently under development) to all cmTent and new municipal employees that are not administrative positions.

11.6 Review of Municipality-Owned or Operated Regulated Industrial Activities

As a result of the SWPPP creation and implementation process, the Watershed Management Division is complying with this permit requirement. The MS4 Program Manager will review existing SWPPPs (or create SWPPPs if deemed necessary by the Town), sampling monitoring reports, and the execution of recommended corrective measures.

11.7 Spill Response Procedures:

For municipally-owned facilities that are **not** required to apply for a Phase II stormwater permit, an abbreviated plan will be created and implemented. A key component of this abbreviated SWPPP is spill response plan and procedures that are site-specific.

11.8 Prevent or Minimize Contamination of Stormwater Runoff from all areas used for Vehicle and Equipment Cleaning:

Upon inspection of each affected facility, structural and nonstructural BMPs will be recommended. If structural BMPs cannot be installed, the vehicle servicing area will have access to drip pans and a spill kit to clean all automotive fluids that may have been accidentally been released to the open environment. Proper good housekeeping practices for preventing or eliminating contaminants from being exposed to stormwater runoff during vehicle and equipment cleaning activities will be described in the SWPPP, under the section of the *BMP Summary Section*. Each facility will implement and perform the appropriate cleaning operation procedures in accordance with the SWPPP.

11.9 Pollution Prevention and Good Housekeeping for Municipal Operations Summary Information:

1. SWPPP's have been created for the Public Works Yard. Please refer to Appendix C for a comprehensive list of municipal facilities.
2. As the Town of Bluffton assimilates new employees, Town employees will receive a copy of the handbook, Stormwater Runoff: Municipal Good Housekeeping and Pollution Prevention (This handbook is currently in development).
3. Fleet maintenance occurs outside of the Town's Jurisdictional Boundary.

12. MONITOR AND EVALUATE STORMWATER DISCHARGES TO MUNICIPAL SYSTEMS

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1. Evaluate pollutants in stormwater discharges to the permittee's MS4 from hazardous storage, disposal and recovery facilities, industrial facilities subject to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). Industrial facilities that the Permittee determines are contributing or having a potential to contribute a substantial pollutant loading to the municipal storm sewer system.

Table 11 - Best Management Practice (BMP) Summary for Monitoring and Evaluating Stormwater Discharges to Municipal Systems

Progress on Goal(s) for permitting years

00 In Planning XX Ongoing YY Completed EV Evaluation

	BMP	Measurable Goals	Y R 1	Y R 2	YR 3	YR 4	Y R 5	RESPONSIBLE POSITION/PARTY
1	Maintain an Inventory of Industrial Sites	<ul style="list-style-type: none"> A complete list has been created by the Watershed Management Division. This list consists of industrial facilities that are permitted as defined by 40 CFR 122.26, SARA Title III, or identified as having/had an illicit discharge. 			00	XX	EV	MS4 Program Manager Water Quality Program Administrator
2	Inspection Program	<ul style="list-style-type: none"> Our current inventory has been prioritized based upon potential impacts to surface waters. 			00	XX	EV	MS4 Program Manager Stormwater Inspector
3	Establish and Implement Measures to Evaluate Commercial and Industrial Facilities discharging stormwater to the Town of Bluffton's MS4	<ul style="list-style-type: none"> During the course of the on-site inspection, Watershed Management staff evaluates first flush sampling data, visual field observations of the stormwater collection system and outfalls, and effectiveness of non/structural BMPs. 			00	XX	EV	MS4 Program Manager Water Quality Program Administrator

12.1 Maintain an Inventory of Industrial Sites:

At the time of this report no Industrial Sites are located in the Town of Bluffton boundary. This was determined by: industrial facilities that are permitted as defined by 40 CFR 122.26, SARA Title III, or identified as having or had an illicit discharge. The Watershed Management Division will update and revise this on an annual basis.

12.2 Inspection Program:

Initially, inspection techniques consisted of examining every permit compliance measure in accordance with State NPDES Stormwater Permit including inspecting the inside facility for illicit connections and focusing on SWPPP records. The current techniques are based upon the EPA inspection methods, which include observations of effectiveness of non/structural BMPs, the facility's stormwater collection system and stormwater discharge outfalls, site maps, and validation of written SWPPP protocols to actual field observations.

12.2.1 Industrial Facilities Prioritized:

The Town of Bluffton has no prioritized industrial facilities within its municipal limits to be inspected. The Watershed Management Division used the following sources to generate the list:

1. EPA's Envirofacts Database (EPA-regulated facilities and Toxic Release Inventory)
2. SC Department of Health and Environment Control Database (Permitted industrial facilities, as per 40 CFR 122.26)

3. The Town of Bluffton Facilities' Database (Determination of Municipally-owned Operations that are regulated by Phase II requirements)

By combining the above-mentioned databases, if facilities appeared multiple times due to their industrial activities and governmental regulations, the Watershed Management Division, would assign them with a 'high-priority' ranking due to the elevated probability of significant adverse impact to surface waters. The Stormwater Inspector will target these facilities for inspections.

12.3 Establish and Implement Measures to Evaluate Commercial and Industrial Facilities discharging stormwater to the Town's MS4:

During the course of the on-site inspection, the Watershed Management staff evaluates first flush data in regard to benchmark values from the NPDES permit, visual field observations of the stormwater collection system, current and past conditions of stormwater discharge outfalls (by means of qualitative monitoring records), and effectiveness of non/structural BMPs. The Watershed Management Division of the Town of Bluffton has a good working relationship with the SC DHEC Division of Water Quality (DWQ)- Beaufort Regional EQC Office.

12.4 Program to Monitor and Evaluate Stormwater Discharges to Municipal Systems Summary Information:

1. Please refer to Appendix C for facilities inspected during this permit year.

13. WATER QUALITY ASSESSMENT AND MONITORING

Objective:

1. Evaluate the impacts on water quality.

Table 12 - Best Management Practice (BMP) Summary for Water Quality Assessment and Monitoring

Progress on Goal(s) for permitting years

0 0 In Planning

XX Ongoing

YY Completed

EV Evaluation

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	RESPONSIBLE POSITIONS	
1	Water Quality Assessment and Monitoring Plan	<ul style="list-style-type: none"> The Watershed Management Division has created and implemented a water quality assessment and monitoring plan. This plan incorporates goals and actions from the Town's May River Watershed Action Plan. 			XX	XX	EV	Watershed Manager MS4 Program Manager Water Quality Program Administrator	
2	Water Quality Monitoring	<ul style="list-style-type: none"> The Town's draft plan was submitted to SCDHEC in December 2017. Since no comments were received from SCDHEC, the Town is proceeding with its water quality-monitoring plan for implementation. 	The Town of Bluffton implemented a water quality assessment and monitoring plan in October 2010.						Watershed Manager MS4 Program Manager Water Quality Program Administrator
3	Revisions to the Water Quality Assessment and Monitoring Plan	<ul style="list-style-type: none"> The Town of Bluffton will conduct annual review, amend (if needed), and submit any revisions to SCDHEC. 			XX	XX	EV	MS4 Program Manager Water Quality Program Administrator	

13.1 Water Quality Assessment and Monitoring Program:

Water quality samples will be collected on a quarterly, fixed interval basis at each monitoring site - eight monitoring locations have been strategically selected throughout the municipal boundaries. Samples are collected in a grab samples method, in accordance with 40 CFR 136.3. In-situ parameters including turbidity are immediately obtained and recorded streamside (via by a multi-parameter YSI meter).

13.2 Water Quality Assessment and Monitoring Program Summary Information:

1. Please see Appendix E for sampling information.
2. TMDL Plan
3. Memorandum of Agreement with Beaufort County (Appendix A4)

14. TMDL WATER QUALITY RECOVERY PROGRAM

Objective:

1. Town of Bluffton and Beaufort County have entered into Memorandum of Agreement (MOA) for shared MS4 programmatic elements, including water quality monitoring (Appendix E3). Both the Town of Bluffton and Beaufort County have an active Memorandum of Understanding (MOU) with the University of South Carolina Beaufort's (USCB) Water Quality Laboratory analysis of water quality samples (Appendix A4). The County is utilizing USCB Water Quality Laboratory to conduct fecal coliform grab

samples for the Okatie River Watershed. Beaufort County and Town of Bluffton's MOA allows for that data to be mutually shared.

Table 13-Best Management Practice (BMP) Summary for Water Quality Assessment and Monitoring

Progress on Goal(s) for permitting years

00 In Planning XX Ongoing YY Completed EV Evaluation

	BMP	Measurable Goals	YR 1	YR 2	YR 3	YR 4	YR 5	RESPONSIBLE POSITIONS	
1	TMDL Water Quality Assessment and Monitoring Plan	<ul style="list-style-type: none"> The Watershed Management Division with the cooperation with Beaufort County has created and implemented a TMDL water quality assessment and monitoring plan. This plan incorporates both goals and actions from the Town's and Beaufort County TMDL Plan. 			00	XX	EV	Watershed Manager MS4 Program Manager Water Quality Program Administrator	
2	TMDL Water Quality Monitoring	<ul style="list-style-type: none"> The Town's plan was submitted to SCDHEC in December 2017. Since no comments were received from SCDHEC, the Town is proceeding with its water quality-monitoring plan for implementation. 	The Town of Bluffton implemented a TMDL water quality assessment and monitoring plan in December 2017						Watershed Manager MS4 Program Manager Water Quality Program Administrator
3	Revisions to the TMDL Water Quality Assessment and Monitoring Plan	<ul style="list-style-type: none"> The Town of Bluffton will conduct annual review, amend (if needed), and submit any revisions to SCDHEC. 			00	XX	EV	MS4 Program Manager Water Quality Program Administrator	

14.1 Water Quality Recovery Plan Program Summary Information:

Town of Bluffton and Beaufort County have entered into Memorandum of Agreement (MOA) for shared MS4 programmatic elements, including water quality monitoring. Both the Town of Bluffton and Beaufort County have an active Memorandum of Understanding (MOU) with the University of South Carolina Beaufort's (USCB) Water Quality Laboratory for water quality analysis services. The County is utilizing the USCB Water Quality Laboratory to collect and analyze fecal coliform grab samples for the Okatie River Watershed. Beaufort County and Town of Bluffton's MOA allows for that data to be shared for the Okatie River Watershed.

14.2 In 2018, the Watershed Management Division through Beaufort County collected

- 7 fecal coliform,
- 7 e.coli,
- 7 TKN,
- 7 Nitrate/ Nitrogen,
- 7TN,
- 7TP,
- 7 Copper,
- 7 BODS,

- 7 Lead,
- 7 Zinc,

- 7 TSS,
- 7 Chlorophyll-a

samples in the TMDL impaired watershed of the Okatie River. Samples are pulled twice per quarter or one wet weather and one dry weather event. In addition, Beaufort County, through an ongoing agreement with the USCB Water Quality Laboratory, obtained in-situ (including water temperature, dissolved oxygen, pH, salinity, and specific conductivity) and turbidity parameters utilizing an Hach 2100Q portable meter streamside at the time microbiological grab samples were pulled. The Town of Bluffton and Beaufort County has been working with USCB and Beaufort County to share water quality data obtained through the County's monitoring program in the Okatie Watershed. Beaufort County is working to update the County water quality monitoring plan. The Town of Bluffton was provided a draft copy and an opportunity to provide feedback to the County. Town staff completed a review of the document and provided feedback on the draft. Please refer to Appendix F for sampling data and location maps of this permit component program.

Appendix A - Organizational Chart of Staff Responsible for NPDES Permit

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