



BEAUFORT COUNTY
STORMWATER MANAGEMENT UTILITY BOARD AGENDA
Wednesday, September 12, 2018
2:00 p.m.
Executive Conference Room, Administration Building
Beaufort County Government Robert Smalls Complex
100 Ribaut Road, Beaufort, South Carolina
843.255.2805

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

1. CALL TO ORDER – 2:00 p.m.
 - A. Approval of Agenda
 - B. Approval of Minutes – July 11, 2018 ([backup](#))
2. INTRODUCTIONS
3. PUBLIC COMMENT
4. REPORTS
 - A. Utility Update – Eric Larson, P.E. ([backup](#))
 - B. Monitoring Update – Eric Larson, P.E. ([backup](#))
 - C. Stormwater Implementation Committee Report – Eric Larson, P.E. ([backup](#))
 - D. Stormwater Related Projects – Eric Larson, P.E. ([backup](#))
 - E. Upcoming Professional Contracts Report – Eric Larson, P.E. ([backup](#))
 - F. Regional Coordination – Eric Larson, P.E. ([backup](#))
 - G. Municipal Reports – Eric Larson, P.E. ([backup](#))
 - H. MS4 Update – Eric Larson, P.E. ([backup](#))
 - I. Maintenance Projects Report – David Wilhelm, P.E. ([backup](#))
5. UNFINISHED BUSINESS
 - A. Battery Creek 319 Final Billing - Eric Larson
6. NEW BUSINESS
 - A. Special Presentation –DHEC Superfund and RCRA Programs – Ken Taylor and David Scaturo, SC DHEC
 - B. Easement Acquisition Updates on Trask Parkway and Oyster Street – Eric Larson ([backup](#))
 - C. Waters of the US (WOTUS) Rule and NACo Recommendation – Eric Larson ([backup](#))
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
 - A. October 10, 2018 ([backup](#))
9. ADJOURNMENT

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

July 11, 2018 at 2:00 p.m. in Executive Conference Room, Administration Building, Beaufort County Government Robert Smalls Complex, 100 Ribaut Road, Beaufort, South Carolina

Draft Minutes 07/16/2018

Board Members

Present

Don Smith
Marc Feinberg
William Bruggeman
James Fargher
Patrick Mitchell

Absent

Allyn Schneider

Ex-Officio Members

Present

Van Willis
Andy Kinghorn
Kim Jones

Absent

Scott Liggett

Beaufort County Staff

Eric Larson
Melissa Allen
Katie Herrera
Chris Inglese

Visitors

Dr. Alan Warren, USCB Lab
Neil Desai, City of Beaufort
Brian Eber, Town of Hilton Head Island
Jeff Netzing, Town of Hilton Head Island
Alice Howard, County Council
Ellen Comeau, Clemson Extension
Sam Connor, Beaufort County Resident
Randy Moody, SC DHEC
Mike Pearson, SC DHEC

1. Meeting called to order – Don Smith

- A. Agenda – Approved.
- B. June 13, 2018 Minutes – Approved.

2. Introductions – Completed.

3. Public Comment(s) – None.

4. Reports – Mr. Eric Larson and Mr. David Wilhelm provided a written report which is included in the posted agenda and can be accessed at:

<http://www.bcgov.net/departments/Administrative/beaufort-county-council/boards-and-commissions/council-appointed/board-list/stormwater-management-utility-board/agendas/2018/071118.pdf>

A. Utility Update – Eric Larson

In reference to the SoLoCo (item #1), on June 26th interest was expressed to participate, but the decision was made to go back to respective councils to discuss. The SoLoCo will be meeting on July 24th to finalize the FAQ. The consultant is waiting for a Notice to Proceed.

B. Monitoring Update – Eric Larson

In reference to #2, the County is working on a draft plan with consultant Beth McLaughlin and that should be ready soon. The next step would then be to share the plan with Dr. Warren and his staff and then present it to DHEC. Mr. Don Smith asked if the new restricted areas are included. Mr. Larson said yes, there are two new TMDL areas that are included. He said they are also looking at a monitoring plan for 303d streams to keep an eye on those areas as well.

In reference to #3B, the Okatie West project was modified to add an experimental BMP and there will be special monitoring to see the effectiveness of Bold and Gold [filter]. Mr. Smith asked if there is baseline data on the stream. Mr. Larson indicated there was.

C. Stormwater Implementation Committee (SWIC) Report – Eric Larson

Please reference the report, no additional updates.

D. Stormwater Related Projects – Eric Larson

Please reference the report, no additional updates.

E. Professional Contracts Report – Eric Larson

Mr. Larson gave an update on the capital improvement projects. The field work for Shanklin Road and Salt Creek are done and they are in the middle of geotech investigation and wetlands delineation, which should be done at the end of the month. The concept design for these two projects should be ready by the end of September. Brewer Memorial and Saw Mill Creek are around 75% complete with concept design.

F. Regional Coordination – Eric Larson

In reference to item #3, sanitary sewer extension options, Mr. Larson mentioned that the action items for staff (County, Town of Bluffton and BJWSA) are to focus on creating manageable project pieces that are prioritized in those watershed areas. In response to questions, Ms. Kim Jones explained that the purpose of the meetings is to set priorities (approximately a \$50 million plan). They would need to set criteria for priority, such as failing septic tanks areas (and flooding areas). She also noted that the plan was based on six distinct areas of the May River.

G. Municipal Reports – Eric Larson

Mr. Neil Desai mentioned that with new fiscal year, some new projects for the City of Beaufort will begin: Hermitage Outfall, Twin Lakes Outfall, Battery Shore Subdivision and Azalea Drive. Mr. Andy Kinghorn indicated the City will be working with DOT to resolve some concerns as well.

Mr. Smith asked Ms. Jones about the jump in violations compared to number of inspections in Bluffton. Ms. Jones replied that there was a lot of rain on sites that were out of compliance as well as some being out of the timeframe allotted to correct their BMPs. Mr. Brian Eber echoed what Ms. Jones reply that increased rain leading to increased violations; they saw this on Hilton Head as well.

H. Municipal Separate Storm Sewer System (MS4 Update) – Eric Larson

Mr. Larson noted that the County MS4 program is seeing good trends with respect to inspections and violation. In reference to item # 5, it will be discussed under new business. In reference to item #7, the NOI for the permit has been submitted.

I. Maintenance Projects Report – Eric Larson

Please reference the report, no additional updates.

5. Unfinished Business

A. Regionalization – Recommendation to Enter into Contract with Consultant and Enter into MOUs with Participating Jurisdictions – Mr. Larson indicated the County would be interested in participating in regional standards even if there was only one partner. Mr. Marc Feinberg asked if there is money in the budget if there is only one partner and the cost [\$180k] was split in half. Mr. Larson indicated that half of the funds are in the budget; the proposed cost share has Beaufort County at \$105k.

Mr. Billy Bruggeman asked if there will be different stormwater standards based on where you are. Mr. Larson explained that there would be a base set of standards and an overlay of standards by watersheds, not by political jurisdictions.

Mr. Patrick Mitchell asked if it is worth the consultant's time if there are only two or three participating municipalities and could others join on the back end if they decided later they want to participate. Ms. Jones mentioned the Town of Bluffton has budgeted for it and it is already in their work plan; the Town would be a participant. Mr. Larson explained there are five areas considering, but no one has made a commitment in writing yet. Mr. Larson and Ms. Jones both agree it is worth it only if two partners look to work regionally. Mr. Larson explained that a decision (at a higher level) would have to be made to determine if there would be a "buy in after the fact" option.

Mr. Smith asked why it is worth it? Ms. Jones explained it was initiative in their strategic plan to take a look at the ordinance and continued impairments, as there is an improved state of knowledge in design standards that are not reflected. The Town was prepared to do this alone, so when the regional approach came along it made sense to do it on a larger scale. Mr. Larson commented that it would help with jurisdiction shopping issues and watershed level planning, as well as regional projects that need collaboration for funding and getting off the ground [i.e. Mossy Oaks].

In response to a question about the cost, Mr. Larson explained the proposal is scalable, so if only two jurisdictions participate the price could be adjusted accordingly since the proposal has unit prices for meetings and other tasks.

A motion was made to recommend Mr. Larson's recommendation, which was to recommend if there are partners to cost share with, to hire the selected consultant [Center for Watershed Protection], and enter into one of more Memorandum of Understandings with one or more municipal partners to co-fund the project. The motion was approved (5/0). [The SoLoCo Memo is attached.](#)

6. New Business

A. Special Presentation – Shellfish Monitoring - Mr. Mike Pearson with South Carolina DHEC Shell Fish Program presented information to the Board. Mr. Pearson shared that he has been with DHEC for 27 years and in 2007 became the Shell Fish Program Manager. He brought along Randy Moody, the local manager at the Beaufort DHEC office.

Mr. Pearson shared shellfish sanitation origins and the responsibilities of DHEC's shellfish program. He explained the water quality standards and classifications.

In response to a question about fecal coliform, Mr. Pearson explained it is a wide spectrum of bacteria and they do not differentiate between fecal coliform (wildlife and human). Mr. Marc Feinberg asked about administrative closures, if there is a certain distance. Mr. Pearson explained it is based on a particular model, and that is how the buffer zone for the closure is created.

Mr. Pearson shared shellfish classification percentages and new area closure maps. In Area 14 (Coosaw River/Whale Branch) there was a change at station 13; Half Moon Creek went to restricted (1000 foot closure at mouth of the creek). In Area 15 there was a change in Wallace Creek, it will be managed conditionally this year. In Area 16A, Morgan River/St. Helena Sound, the Village Creek station at the mouth went restricted this year. In Area 17, Broad River, Habersham Creek upgraded and Station 16 is approved. In Area 20 (Hilton Head) there are two closures in the headwaters portion of Broad Creek and Jarvis Creek.

Mr. Pearson noted that the FDA is who oversees their program.

Mr. Smith commented that Area 17 is a large body of water with little development; he asked if they had any idea where the issue is coming from. Mr. Pearson commented that brings up a good point. They are required to close back to an approved station. He explained that the distance between those stations in that area is large. He used May River as an example and shared that they added more (3) stations to help mitigate the distance between a bad station and the good one.

Mr. Pearson explained that they operate on systematic random sampling which is predetermined one year in advance for the dates they will be gathering data. Due to high tide, low tide, wind, rain, this method gives better representation overtime. They have two options for capturing data, worst case scenario (immediately after a storm) or a long term trend system (systematic random sampling).

Ms. Jones asked if there are any developments of using different indicators other than fecal coliform. Mr. Pearson said they are not; fecal coliform has been a tried and true measure. The illnesses are not there, so it is working.

There was discussion about whether or not this type of data has direct importance to the Stormwater Board when looking at certain issues that need addressed. Mr. Smith asked what DHEC does in areas they continue to see degrades in. Mr. Pearson said they try to partner with the communities; the local people have the local knowledge and are able to stimulate the local groups to get involved. They do shoreline surveys to look at land use activities, different dischargers and potentials.

Ms. Jones asked about the three year rolling average for new closure areas, since they were harvestable last year. Mr. Pearson commented it is a tough concept; they have to base it on the trends, which is the system they operate under. He noted that the areas that continue to flip-flop are the areas of concern. In response to a question, he explained most illnesses are from vibrio bacteria that naturally grow and not fecal coliform. They haven't seen illness associated with runoff pollution.

Mr. Bruggeman asked if they sample oysters or the water. Mr. Pearson said they sample the water. They can sample the tissues, but it is more expensive.

Mr. Desai asked if there are any trends in upgrades/downgrades along the eight coastal counties. Mr. Pearson commented that the trend tends to hover around 70%, areas will flip-flop.

[The Shellfish Monitoring presentation is attached.](#)

B. Discussion Regarding Local and DHEC Stormwater Permitting – Mr. Larson explained that the County accepts the local permit application and then applicant is then required to go to DHEC for a permit as well. The Charleston DHEC office looks for local MS4 approval, they may choose to do a review or simply process the application, and issue a NPDES permit at the State Level. Then the County will issue the local permits (zoning and building).

There has been increased pressure to change to the process due to the delay in time it is taking to get permits. DHEC desires that the County has a process that keeps them out of their process, which would not mandate the applicant to have a state permit as a condition of the local permit like it currently does. The County's proposal is to remove statements that require proof of the state permit, as they are confident their standards are higher than the state permit. During an inspection, as part of MS4 program, the County is supposed to ensure the state permit is onsite. This is where they would check for the state permit. With this change, the County would no longer be holding up local permits waiting on DHEC permitting.

Mr. Larson recommended that the board vote to approve the proposed changes to the BMP manual and submit a letter to DHEC to resolve the permitting issue. He noted that changes to BMP manual per the ordinance start and end with the Stormwater Utility Board.

In response to a question, Mr. Larson explained that it is administrative changes only, taking the responsibility off of the County and putting it on the applicant.

A motion was made to approve the proposed amendments to the County's BMP manual and submit a letter to DHEC to change the MS4 permit stormwater management plan. The motion was approved (5/0).

Attached is a draft letter to DHEC and proposed changes to BMP manual to make a change to the permitting process.

C. Okatie West Project Field Day – Mr. Larson informed the Board that the Open House Site Visit would for Okatie West Regional Stormwater Detention Project will be taking place on Friday, July 27th from 1:00 p.m. to 4:00 p.m. at the project site. It is grant requirement and an opportunity for the community to see the finished project and speak with the team that built the project. [The Okatie West Open House flyer is attached.](#)

7. Public Comment(s) – None.

8. Next Meeting Agenda – Approved.

9. Meeting Adjourned

MEMORANDUM

TO: Members of the Southern Lowcountry Regional Board (SoLoCo)
Elected representatives of the City of Beaufort, & Towns of Port Royal & Yemassee

FROM: SoLoCo Stormwater Technical Subcommittee (incl. staff from BC, JC, ToB, CoB, CoH,
and ToPR)

DATE: June 18, 2018

SUBJECT: Recommendations to select a consultant and fund a project to develop a regional
stormwater technical standard and model ordinance

Recommendation:

The Stormwater Technical Subcommittee recommends the elected officials of SoLoCo and throughout the Lowcountry region agree to the procurement of the Center for Watershed Protection, a stormwater consultant, to assist with the development of regional stormwater design standards and a model ordinance. Further, the subcommittee recommends that the cost of said project be shared among all jurisdictions based on a distribution using population figures. The project cost will be \$179,554.

Background:

As directed by our elected officials, making up the membership of the SoLoCo, at the December 5, 2017 meeting, staff members representing participating jurisdictions of the SoLoCo have met multiple times to develop a plan to write a unified regional stormwater technical standard that could be implemented uniformly throughout the region. Understanding the importance of the regional approach, these staff members invited staff from other jurisdictions not part of the SoLoCo, namely the City of Beaufort and Town of Port Royal. This subcommittee has been working to develop a scope of work to achieve these goals. Staff members quickly realized this is an effort that cannot be done within the limited resources, budget, and time of existing departments.

On March 27, 2018, the subcommittee presented a proposal to the SoLoCo Board to hire a consultant and co-fund the project in the amount of \$179,554. During that meeting, the Towns of Ridgeland and Hilton Head Island stated they would not be participating in the project. The SoLoCo Board voted that the members of the Board should consider the request as each jurisdiction prepared their annual budgets. They further agreed to reconvene at the June meeting and state their commitment to participate and fund the project as proposed.

Following that meeting, discussions among the subcommittee members concluded that with a 3-month window until a decision would be made that we should do a 2nd Request for Qualifications and solicit additional proposals. Our scope of services was identical to the scope presented in March. In summary, the project will:

- Benchmark the region among similar communities in SC and the southeast coast
- Define stormwater design standards that are consistent with our mission statement
- Engage stakeholders before, during, and after the standards are developed

The subcommittee received two proposals: 1) The Center for Watershed Protection, and 2) Wood Environment & Infrastructure Solutions. The subcommittee convened on June 1, 2018 to review and rank proposals. In general, both teams were found to be qualified for the project. However, the fee proposals were significantly different, \$179,554 and \$223,420, respectively. Without an overwhelming reason to pay more for the same end product, the subcommittee selected the Center for Watershed Protection without further deliberation.

The following options for a cost sharing arrangement among the participating jurisdictions for this scope of work are as follows. Based on statements made to the SoLoCo Board at the March 27, 2018 meeting, the Towns of Hilton Head Island and Ridgeland have been removed from the proposed cost share:

Cost Share for Regional SW Std. Development	Split by Population ⁽²⁾		<i>Split by land mass (sq. mi)</i> ⁽³⁾		<i>Even Distribution</i>
Port Royal	12,785 (7.6%)	\$13,669	<i>19.0</i> <i>(1.8%)</i>	<i>\$3,282</i>	<i>\$29,925</i>
Beaufort, City	13,445 (8.0%)	\$14,374	<i>24.7</i> <i>(2.4%)</i>	<i>\$4,260</i>	<i>\$29,926</i>
HHI ⁽⁴⁾	N/A	\$0	<i>N/A</i>	<i>\$0</i>	<i>\$0</i>
Bluffton	18,897 (11.3%)	\$20,203	<i>52.2</i> <i>(5%)</i>	<i>\$9,015</i>	<i>\$29,926</i>
Unincorp. BC	98,494 (58.7%)	\$105,302	<i>267.8</i> <i>(26.0%)</i>	<i>\$46,703</i>	<i>\$29,926</i>
Yemassee ⁽¹⁾	N/A	\$0	<i>N/A</i>	<i>\$0</i>	<i>\$0</i>
Unincorp. Jasper	18,603 (11.1%)	\$19,889	<i>624.2</i> <i>(60.0%)</i>	<i>\$107,717</i>	<i>\$29,926</i>
Hardeeville	5,721 (3.4%)	\$6,116	<i>49.7</i> <i>(4.8%)</i>	<i>\$8,576</i>	<i>\$29,925</i>
Ridgeland ⁽⁴⁾	N/A	\$0	<i>N/A</i>	<i>\$0</i>	<i>\$0</i>
Total		\$179,554		<i>\$179,554</i>	<i>\$179,554</i>

⁽¹⁾ Beaufort County will assume this cost wholly on behalf of the Town of Yemassee.

⁽²⁾ Source: Vintage July 1, 2016 Population Estimates: Population Estimates

⁽³⁾ Source: Beaufort County GIS data for BC, Wikipedia search, JC Comp. Plan for JC. (excludes water areas)

⁽⁴⁾ Hilton Head Island and Ridgeland have chosen not to participate in the regional effort.

After careful consideration of the pros and cons for each option, the subcommittee came to consensus on a distribution of cost based on population. While annexations can shift costs, the impacts of growth from development is most evident in population changes. It is the opinion of the subcommittee that the need for uniform regional stormwater standards for future growth is equally as great in “built out” communities facing redevelopment pressures. Population figures more fairly represent needs now and in the future. Thus, the subcommittee recommends a cost share based on population figures. Once the project is underway, the needs and concerns of all jurisdictions participating should be addressed evenly without preference to the larger financial contributors.

The Stormwater Technical Subcommittee thanks you for your continued commitment to regionalism and this important environmental and development topic.



South Carolina Department of Health and Environmental Control
Healthy People. Healthy Communities.

Beaufort County Stormwater Management Utility Board Meeting July 2018

Mike Pearson

South Carolina DHEC
Shellfish Sanitation Section

Shellfish Sanitation - Origins

- Public Health Controls of Shellfish became a national concern in the late 19th and early 20th centuries, with a large number of illnesses associated with consuming raw Shellfish.
- A wide spread typhoid outbreak during the winter of 1924, prompted the US Surgeon General to develop necessary controls to ensure a safe shellfish supply to the consuming public.

Responsibilities

- **Classification of growing waters**
- Patrol of closed growing waters
- Plant Sanitation

Growing Water Classification

- Sample 465 stations monthly
- Data is summarized in Annual Sanitary Survey for each of the 25 Growing Areas, covering approximately 580,000 acres.
- Waters are classified as Approved, Conditionally Approved, Restricted or Prohibited.

Shellfish Water Quality Standards

Approved

- Geometric Mean of 14 FC/100ml
- 90th Percentile of 43 FC/100ml
- Based on a Three Year Trend**

Old Primary Contact Standard for Swimming:

Mean of 200 FC/100ml

One time 400 FC/100ml

Shellfish Water Quality Standards

Restricted

- Geometric Mean of 88 FC/100ml
- 90th Percentile of 260 FC/100ml

Other Classifications

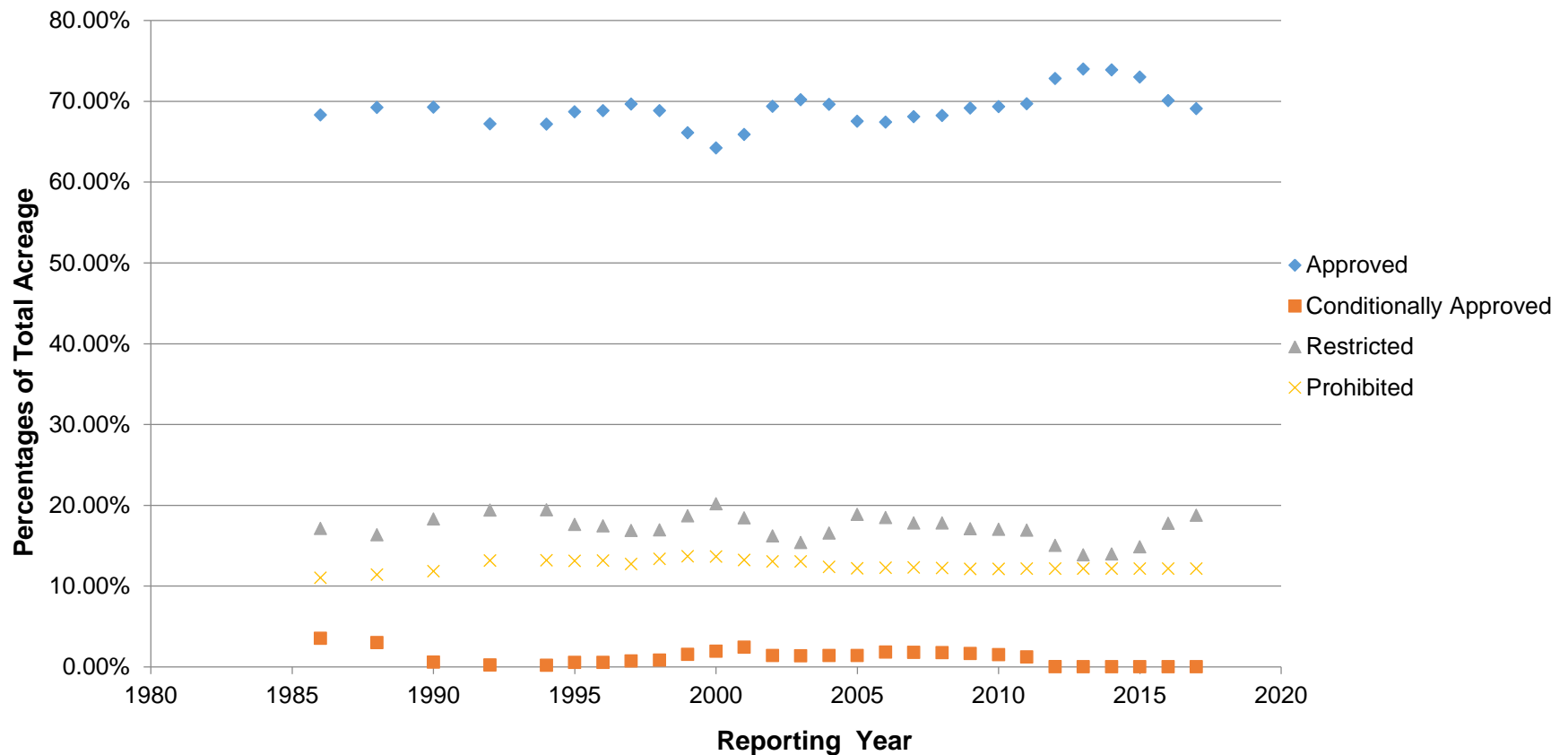
Conditional Management

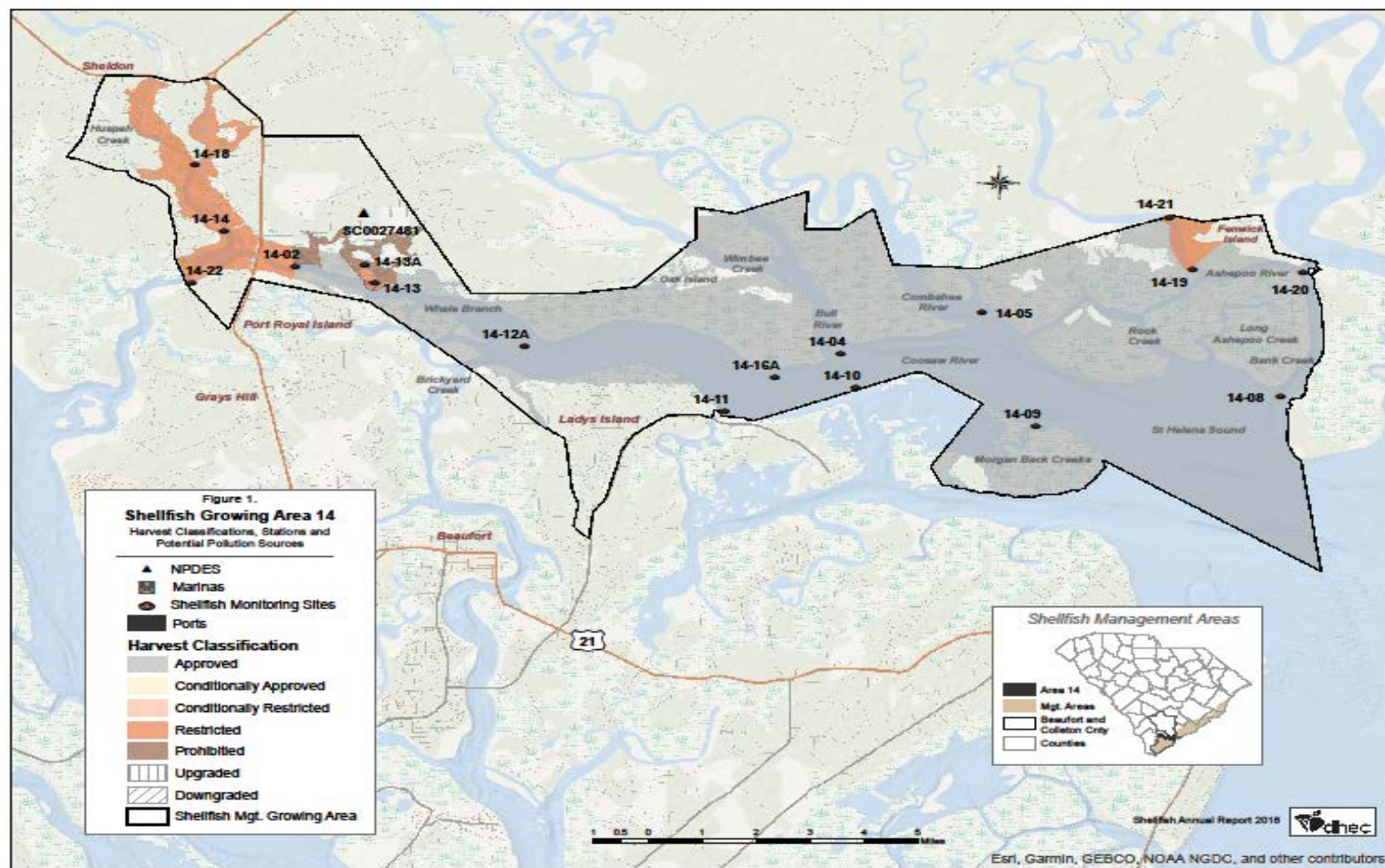
- Based on a measureable parameter (rainfall or river stage)

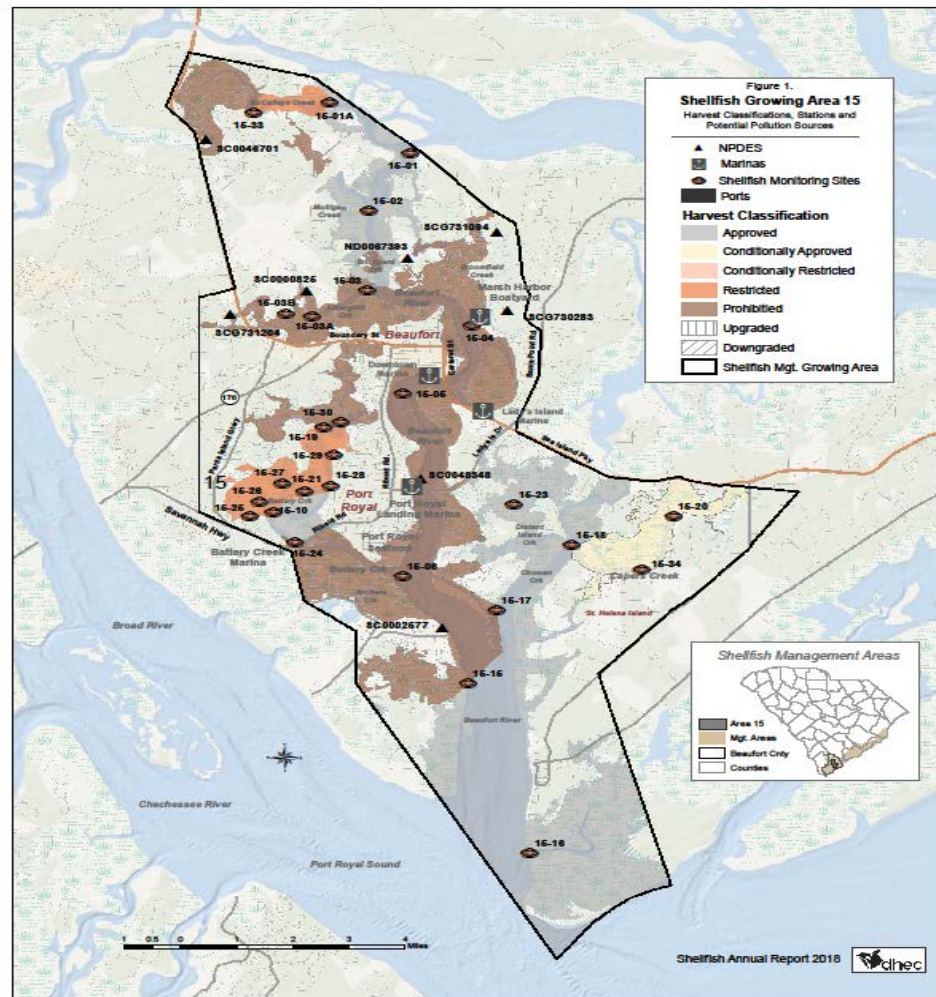
Prohibited

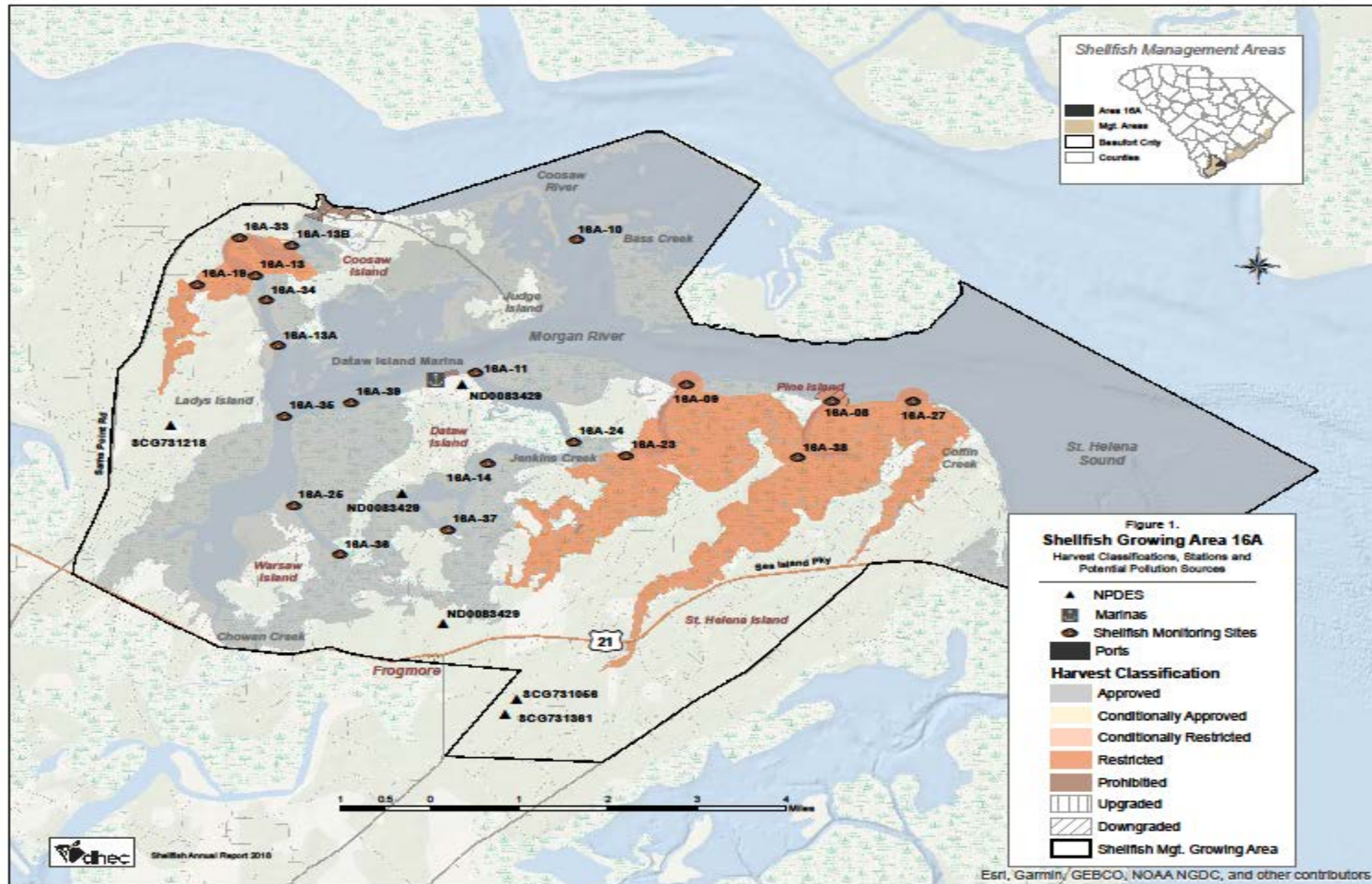
- Administrative Closure due to potential pollution (marinas and wastewater outfalls)

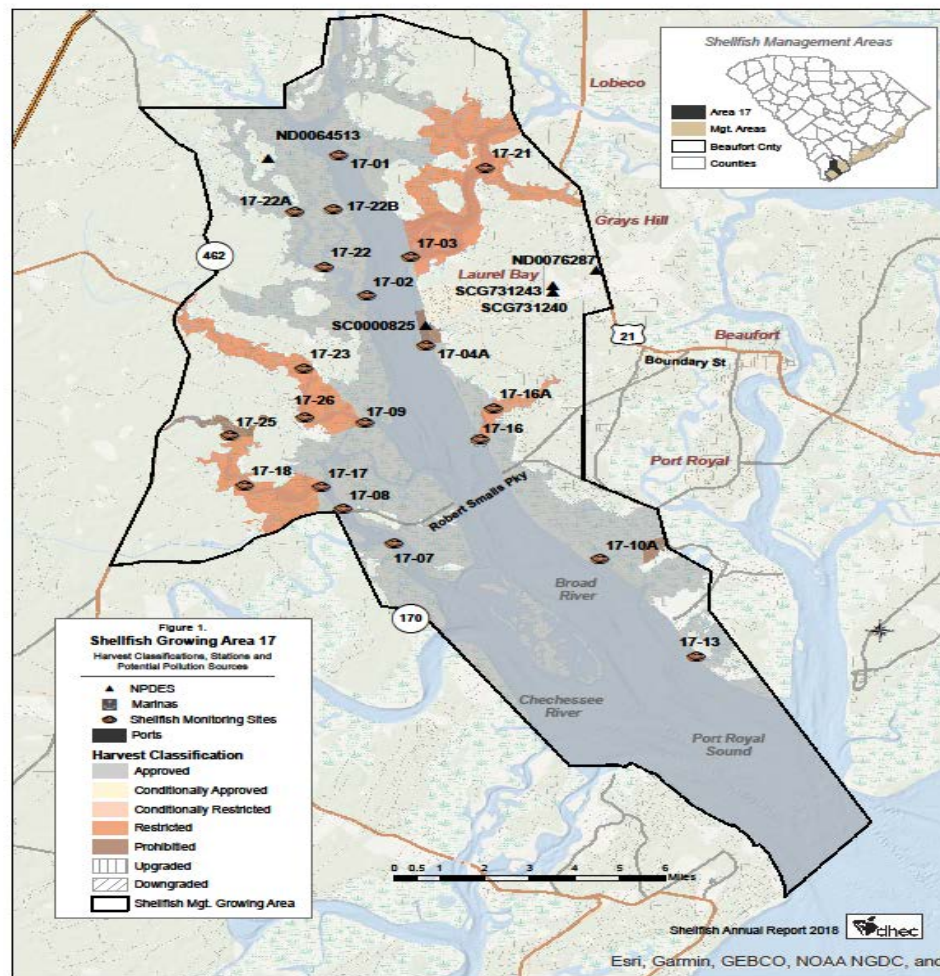
SHELLFISH CLASSIFICATION PERCENTAGES 1986 - 2017

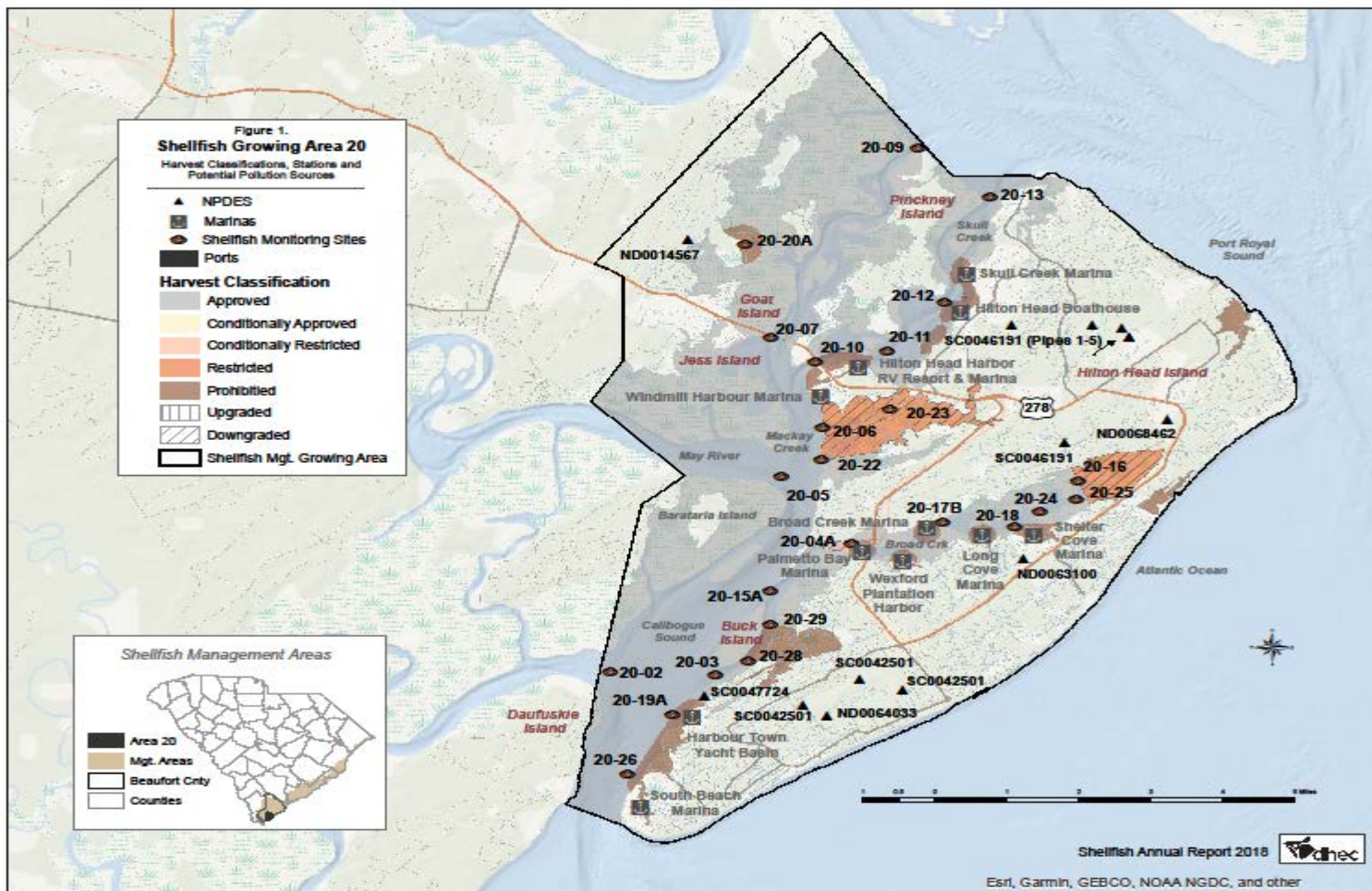














Helpful Links

South Carolina DHEC

www.scdhec.gov

Interstate Shellfish Sanitation Conference

www.issc.org

US Food and Drug Administration

www.fda.gov

Contact Information

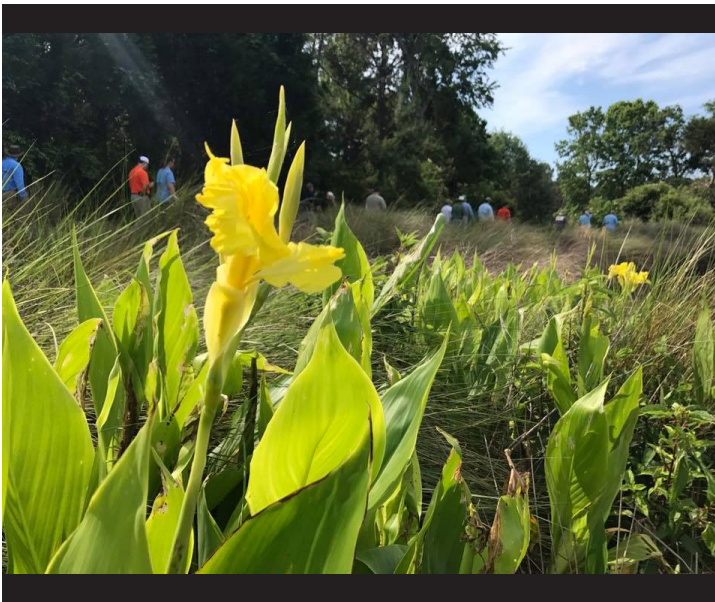
- Mike Pearson – Program Manager
Email – pearsodm@dhec.sc.gov
Phone – 843-238-4378
- Randy Moody – Beaufort – Manager
Email – moodyjr@dhec.sc.gov
Phone – 843-846-1030

Okatie West Regional Stormwater Detention Project Site Visit and Open House

Friday, July 27th, from 1:00p.m. to 4:00p.m.

Join Beaufort County Stormwater as they host an open house at the newly completed Okatie West Regional Stormwater Detention Project, a Clean Water Act Section 319 grant project!

Come and learn about the current designs and techniques in detention as well as bacteria and nutrient removal from local stormwater managers and professionals!



All stormwater professionals, contractors, developers, property managers, and stakeholders are invited!

Representatives from Beaufort County, Ward Edwards Engineering, R. B. Baker, USCB Water Quality Lab, & Environmental Conservation Solutions, LLC will provide:

- *Project design demonstrations*
- *Guided tours*
- *Answers to any questions*

DIRECTIONS:

The project site is located off of SC 170 in the Okatie area east of Sun City. Use the address for National HealthCare as your guide. The project entrance is just north of the NHC entrance on the right as you travel northbound.

Use caution when entering and exiting SC 170. Follow the access road northeast to the project site. Be advised the access road is not paved and the terrain is rugged so plan accordingly.

Parking is limited.



This event will be held rain or shine! For more information, contact Melissa Allen:

melissaa@bcgov.net

(843)-255-2805



**BEAUFORT COUNTY
STORMWATER UTILITY**

120 Shanklin Road

Beaufort, South Carolina 29906

Voice (843) 255-2805 Facsimile (843) 255-9436



August 8, 2018

Stormwater Manager's Report for the Stormwater Utility Board Meeting

Utility Update

1. THERE IS NO MEETING AUGUST 8, 2018. THIS REPORT IS BEING DISTRIBUTED VIA EMAIL TO BOARD MEMBERS. IT WILL BE INCLUDED IN THE MEETING MINUTES FOR SEPTEMBER 12, 2018.
2. Southern Lowcountry Regional Board (SoLoCo) –
 - a) Funding commitments for the Regional Stormwater Standard Development by each municipality are pending. The subcommittee met July 20 to discuss the concept further, at the request of the CoB, and they also finalized a FAQ document for the SoLoCo use. [See attached](#). The members of the SoLoCo took action on July 24th to commit to the project; We have verbal commitments from The Town of Bluffton, City of Hardeeville, and Jasper County. The Town of Hilton Head Island and the Town of Ridgeland have verbally stated they will not participate in the project. Discussions with the City of Beaufort and Town of Port Royal continue but we do not have any decision from those two municipalities; Staff met with CoB staff to discuss the issue in detail. The County is drafting MOA for each participating municipality. The County Council took action on the recommendation from SWUB on July 23 and have approved signing a contract with the Center of Watershed Protection for the project.
3. Regionalization
 - a) See SoLoCo update.
4. American Public Works Association, SC Chapter – Eric Larson will be presenting August 7-10, 2018 on the County's Connect application for smartphones that is used as a public involvement and complaint reporting tool for the MS4 program.
5. Special projects – Staff has begun research on the various topics provided by the Board for future meetings:
 - a) Superfunds and other monitored sites – DHEC staff have agreed to present at the September meeting.
 - b) Military Site's Stormwater management – Staff has not made contact with representatives at MASC, PI, and Naval Hospital at this time.
 - c) The Town of Bluffton's July May River Watershed Action Plan Advisory Committee (WAPAC) had a speaker from SC-DNR on "living shorelines". It was an informative talk and might be a topic for the SWUB at a future meeting.

Monitoring Update

1. Lab Update (From Dr. Alan Warren and Lab Manager Danielle Mickel) – No update was available at the time of this report.
2. Monitoring Plan updates – Our consultant is still working on the final draft of the updated monitoring plan. We are adding future special projects to the plan and revised the monitoring plan for the Beaufort River TMDL after discussions with DHEC.

Stormwater Implementation Committee (SWIC) Report

1. The SWIC has not met in the last month.

Stormwater Related Projects

1. Okatie West / SC 170 Widening Retrofit (Construction = \$993,048, CO#1 Design \$8,000, CO#1 &2 Const. \$25,739) Construction is complete; we have a few punch list items to fix. An open house style site visit was held on July 27, 2018 and allowed the public and development community to come to the site and learn about the project. Attendance was low but we had quality attendees from within the Stormwater community attend.
2. Wallace Road – We continue to work on a project to resolve some drainage problems associated with the State Road runoff and perceived runoff from Oyster Bluff Subdivision. Our first concept design was found to be infeasible so we are currently working a design within the ROW of Wallace Road that will require SCDOT approval and encroachment permit. Total cost will likely be the burden of the County due to a past encroachment permit condition of approval for an asphalt trail along the road.
3. Administration Building Parking Lot and SCDOT pipe failures – We a few months we have been trying to work with DOT and the City of Beaufort on a project to slip line a failing pipe from Ribaut Road to the marsh running through County property. The County parking lot DOES NOT contribute to flow in the pipe. We have been unable to get the DOT to take responsibility of the pipe; they state their easement puts this burden on the landowner and the County Administration obviously disagrees. The County pays SWU fees to the City on this site; the City claims they also have no responsibility for the pipe since it drains a State Road and has refused to participate in the cost of the solution. The County is going forward with emergency procurement to hire a contractor to fix the pipe. The County intends to file claim against DOT and perhaps the City for reimbursement after the project is complete.
4. Easements – Staff is working on numerous easement requests and meets monthly to review status. Several condemnations are still being pursued using outside legal counsel. Nothing new to report.

5. Complaints – Recent heavy rains have overwhelmed the Stormwater staff with complaints. Our crews are working through the complaints and addressing needed repairs as fast as possible while managing other internal high priority projects.

Professional Contracts Report

1. CIP FY 18 Grouping Stormwater Projects – (Design - Ward Edwards \$202,000, Andrews Engineering \$560,490, Const. est. \$5,512,900) – All projects are in early design phase. Concept plans are scheduled to be ready in September. Next step will be authorizing final design and permitting. No additional update at this time.

Regional Coordination

1. Factory Creek Watershed Regional Detention Basin “Phase I” & Academy Park Subdivision (Design Cost \$49,873, Tree Mitigation Cost \$18,200 & \$18,200, Construction Cost by the Developer) – Construction is ongoing. No additional update at this time.
2. Factory Creek Watershed Regional Detention Basin “Phase II” (Design Cost = \$63,390, Tree Mitigation Cost is pending, Construction Cost by the Developer) – Final stage is under construction. No additional update at this time.
3. Town of Bluffton and Beaufort County Joint meetings on Sanitary Sewer in the May River watershed – Staff of both the County and Town of Bluffton has prepared a memo and presented it to BJWSA prioritizing multiple small projects for sewer extension in the May River watershed. BJWSA is preparing conceptual design and cost estimates to be presented to the joint council at a future meeting.
4. Mossy Oaks Task Force – See Municipal Reports.
5. Graves Property / Pepper Hall Public / private partnership – Stormwater staff, along with Community Development Department staff, met with the developer’s attorney to draft a MOU for the public-private partnership on the project. Stormwater staff met with the developer’s engineer to go over Stormwater design requirements. It is expected the County will cost share in the Stormwater construction but the financial commitment is unknown at this time. No additional update at this time.
6. SESWA Fall Conference – October 3-5, 2018 at the Marriott Convention Center, Palmetto Dunes, Hilton Head Island, SC. Registration is open. This conference is not limited to SESWA members. Any Board member or member of the development community that wants to attend, should go to www.seswa.org and watch for registration information. This is an excellent training at a reasonable cost, and local.
7. Charleston area MS4 group – No meeting this past month.

Municipal Reports

1. Town of Hilton Head Island (From Jeff Netzing, Stormwater Manager and Brian Eber, MS4 Coordinator)
 - i. No information was available at the time of this report.
2. Town of Bluffton (From Kim Jones, Watershed Management Division Director)
 - i. [See attached report.](#)
 - ii. The Town has organized a ditch maintenance meeting with the County and SCDOT representatives to discuss current level of service from each agency and how we can educate the Town Council on the coordination to set expectations. Future goals may include trying to improve LOS or delegate responsibility to one another.
3. City of Beaufort (From Neil Desai, Asst. Public Works Director)
 - i. Mossy Oaks Task Force – No update at this time.
 - ii. No additional information was available at the time of this report.
4. Town of Port Royal (From Van Willis, Town Manager and Tony Maglione, consultant)
 - i. No information was available at the time of this report.

MS4 Report

1. Plan Review – [See the attached chart](#) for Beaufort County Stormwater staff plan review workload for the past 12 months.
2. Stormwater Permits – [See the attached chart](#) for Beaufort County Stormwater permits issued for the past 12 months.
3. Monthly Inspection summary - [See the attached chart](#) for Beaufort County Stormwater staff inspection, complaint, IDDE, and violations summary for the past 12 months.
4. Staff began mapping BMPs on July 17th. [See attached chart.](#)
5. Public Education – Lowcountry Stormwater Partners (LSP), via Carolina Clear, continues to work on several initiatives towards public education and outreach. No additional information was available at the time of this report.
6. Construction permitting – After approval from the SWUB last month, staff has submitted the requested revision to the BMP Manual and our SWMP / MS4 permit to DHEC. We asked for a 30-day response. We are still awaiting a response.
7. Monitoring plan update – See Monitoring Update.
8. MS4 Statewide General permit – Nothing new to report.

9. Statewide General permit for Construction – Nothing new to report.
10. New staff – The County hired a 4th Stormwater Inspector. Amber Woods comes to the County from the City of Bowling Green, KY as an intern with their MS4 program. Her experience and knowledge of water quality and monitoring will be a great addition to our team. She started work August 6th.

Q&A about Regionalization of Stormwater Standards in Beaufort and Jasper Counties

July 20, 2018 - Prepared by staff in the Stormwater Technical Subcommittee

The following is a short summary of reoccurring concerns and questions raised over the past year concerning this topic. Staff has prepared this document to aid in the continued discussion.

1. **Framing the “Problem”** – It was important to conduct a “front end analysis” and identify the issues each jurisdiction is experiencing so that the region leaders can define constraints and determine where we are alike and different.

Below is a summary of each jurisdiction’s comments:

- Beaufort County – Differing standards and program implementation is causing confusion within the development community. The future, dealing with continued growth, impairments, and MS4 programs, is going to require us to do things differently than we have in the past. Regionalization of Stormwater management will help us address our needs more efficiently and effectively.
- Jasper County - Sees a spill-over of growth into their area from past development in Beaufort County. They desire to preserve natural resources and our watersheds / waterways. We need to be environmental stewards. They are uncertain about when MS4 will come, but they want to be ready.
- City of Beaufort – Staff what’s to “tee up” the “problem”. How do the issues of a 300-year old city differ from newer development in the suburbs? Their issues: 1) Aging infrastructure, 2) Joint ownership of assets with DOT, yet no funding from DOT, 3) Lack of sufficient funding and lack of staff and equipment to address needs, 4) Infill Development, 5) Bedroom community expectations, 6) Encouraging redevelopment of downtown business, 7) Need for political support at leadership, City staff, and citizen level, 8) Ability to respond to citizen complaints.
- Town of Hilton Head Island - They are an island and don’t share watersheds, however, at a staff level, a regional standard is considered a benefit. They are completely built out. They don’t see the “jurisdiction shopping” in their community. Potential future downgrades of watersheds could possibly be counteracted by newer standards. They have aging infrastructure too.
- City of Hardeeville - They were already thinking about revising their standards before the regional approach was proposed. They are in both Jasper and Beaufort counties and feel they need to address concerns of both communities. They are anticipating MS4 coming from SC-DHEC and want to be ready and not have to do it on their own; They want to learn from what MS4s in Beaufort County did. There is significant cost savings to partner on standards development.
- Town of Bluffton - They were budgeted to redefine standards in FY 18 and also feel the regional approach is better. There is significant cost savings to partner on standards development. Watershed approach better than political boundaries.
- Town of Port Royal – Staff from the Town are unable to attend the subcommittee to provide input. However, past conversations lead the subcommittee members to believe that the Town’s needs are not unlike the City of Beaufort: rich history, aging infrastructure, infill / redevelopment pressures, growing need for additional resources, community support.
- Town of Ridgeland – Town staff have publicly stated their Council is not interested in joining this effort. Staff has provided the subcommittee with several reasons why they do not think regionalization will benefit their community: 1) They do not have any Town owned and

maintained infrastructure, 2) they do not believe SC-DHEC will designate their jurisdiction as a MS4 for at least another decade, 3) their watersheds are very different from those in Beaufort County, and 4) concern over a (perceived) loss of control over their Stormwater program if they join the regional approach.

The subcommittee also sought out the advice of our partners in the community:

- Port Royal Sound Foundation – the community needs to build awareness and appreciation of the waters. What happens if the water isn't clean? What if we have beach closures? How will that affect the economy? There is a lot of work that needs to be done to understand what is wrong with our waters and how can we address it. The message needs to be unified.
- Clemson University's Carolina Clear program – Historically, Carolina Clear has been able to organize MS4s to work together in one program rather than 3, 5, 8, or more independent MS4s. Often individual MS4s do not have the ability to do education and outreach in-house effectively, due to lack of funding, educated staff, etc. Carolina Clear has proven success in meeting MS4 compliance and educating the public. Regional participation will assure our citizen engagement is effective.
- University of South Carolina Beaufort Water Quality Lab – Several years ago, USCB saw a need to serve the community and established the Lab to support Stormwater management efforts. Regionalizing efforts and standards in the community would make monitoring manageable and affordable.

While the needs in each jurisdiction vary, there are enough similarities to support a regional approach to addressing the "Problem". There is consensus within the subcommittee to recommend the development of a regional Stormwater technical standard.

2. ***"Why do I need to change my standard?"*** - Perhaps this is the most important question to be answered. Stormwater design criteria vary from one political jurisdiction to another, but we all have the same goal – Protecting the environment. This can be seen in the Mission Statement and Goals and Objectives presented by the subcommittee back in the spring. (attached for reference). The three MS4s in the region, ToHHI, ToB, and BC are implementing the same permit differently than one another. **This may lead to "jurisdiction shopping", yet water doesn't know jurisdictional boundaries.** Tremendous growth for the last 20 years has led to multiple streams with water quality impairments or TMDL mandates in place. Lesser design standards in the past resulted in development being built that does not have the higher level of stormwater management required today and are continuing to contribute to water quality and flooding problems. We need to prevent further impairments from occurring. Many jurisdictions are making significant investment on testing and capital projects to address these issues. Periodic assessment and comparison of existing standards with current state of knowledge regarding stormwater management is an industry standard. There are economic and possible environmental advantages to be gained by adopting a model ordinance of regional stormwater standards. With Jasper County and its municipalities starting to see large scale growth, it is desired that our region be proactive in Stormwater management.
3. ***"What are the benefits of regional Stormwater management?"*** – One benefit is MS4 permitting. The MS4 program is defined by the Clean Water Act. By definition, an MS4 is 50,000+ population or 1,000 people per square mile or contiguous to another MS4. In the 2010 census, the Hilton Head Island Urban Area and numerous urban clusters met this definition. DHEC only designated the Hilton Head Urban Area and mandated permitting, electing not to designate the

urban clusters, which included parts of the City of Beaufort, Town of Port Royal, Jasper County, City of Hardeeville, and the Town of Ridgeland. The statewide general MS4 permit is up for renewal at the end of the 2018 calendar year. It is very likely DHEC will name additional MS4s with the new permit issuance. All communities in Beaufort County and Jasper County may potentially be required to submit a permit within 180 days of notification. One MS4 program requirement is for the designated jurisdiction to adopt regulatory and enforcement authority standards to control stormwater discharges into Waters of the United States. Through permit directed minimum measures, EPA intends to move communities through a process of local policy and ordinance review that encourages infill development in higher density areas, reduces impervious surface and provides protections for sensitive areas. Small MS4 permits require an assessment of ordinances, policies, and procedures that, among other things, direct growth to identified areas (EPA, 2017). Regardless of MS4 designation, as mentioned above, there are economic and environmental advantages to participate in the development of a regional model stormwater ordinance and design guidelines.

4. ***"I don't have infrastructure, so I won't be an MS4"*** - the MS4 program is much more than owning and maintaining County, Town, or City owned stormwater infrastructure such as pipes and ditches. A small MS4 is a designation by USEPA or the NPDES permitting authority (SC-DHEC). It is based on population, criteria by the permitting authority or by petition to the NPDES permitting authority. It is not based on infrastructure. The permit has a public education component, an illicit discharge detection program, and a plan review, inspection, and enforcement program for private development. If you have impaired streams in your jurisdiction, you are required to perform water quality monitoring as well. You don't avoid MS4 designation by simply having everything in your jurisdiction owned by SCDOT or private POAs.
5. ***"I don't have the same issues as other jurisdictions"***
 - a. Urban v. rural
 - b. Fresh v. salt water
 - c. Water quality impairments
 - d. Redevelopment pressures
 - e. Flooding and conveyance v. water quality

The technical subcommittee has already recognized there are obstacles to overcome for a regional stormwater model ordinance and design manual. Not every political jurisdiction has the same stormwater issues. However, with few exceptions, every jurisdiction shares a watershed with another jurisdiction. **Water does not know political boundaries.** The region consists of impaired watersheds, urban redevelopment areas, salt water estuaries with shellfish bed closures, and fresh water stream watersheds experiencing flooding during heavy rains. The subcommittee has only briefly talked about this at this time. Addressing the needs of each jurisdiction is one of the tasks for the consultant to solve when hired. ***The subcommittee is envisioning the concept of "overlays". The technical standards would be set up with a basic set of stormwater design standards for each jurisdiction that meet the minimum SC-DHEC requirements. Then, based on the particular waterbody issue, we would have additional standards, or overlays, that could be applied to individual watersheds.***

- For example, the May River is a salt water stream with fecal coliform bacteria impairments. Overlay requirements might include additional restrictions on volume control and bacteria removal.

- In Ridgeland and northwest Jasper County, flooding due to poor conveyance is an issue. Overlay requirements in those areas might consist of higher detention requirements, volume control, and a need to retrofit existing systems as part of the approval process for a new development.
- A final example is Hilton Head Island v. Beaufort County. HHI is built out and experiencing redevelopment. Hilton Head Island's focus has been to not further degrade the system, so they might not desire higher standards in place to "retrofit" for volume control or pollutant removal. However, it is noteworthy that SC-DHEC recently announced that the headwaters of Broad Creek are closed for shellfish harvesting for the upcoming season due to presence of high fecal coliform levels. For that reason, their needs may be changing. In comparison, much development occurred in Beaufort County before standards were in place resulting in impairments in the Opatie River and elsewhere. Beaufort County believes retrofitting with volume control and higher detention requirements is needed in these areas.

Each watershed could be analyzed and the appropriate overlays used accordingly, all while having the entire "toolbox" being available proactively within the code in the event that the watershed changes over time.

6. **"Other jurisdictions requirements are too restrictive compared to ours and/or they don't fit my needs in my communities"** - The comparison of stormwater ordinances showed Beaufort County has the most restrictive set of standards. **As stated previously, not every watershed has the same problems. The same "overlay" concept can keep that "highest" standard when needed, but place "reasonable" or "best" standards on those watersheds that have not degraded or have improved over time and regulations can be "dialed back".** Our consultant will help us define those needs.
7. **"My citizens aren't willing to pay for the high Level of Service and SWU fees."** - By joining this stormwater ordinance regionalization effort, you ARE NOT agreeing to having a SWU in the future but rather agreeing to a unified stormwater ordinance. **Each jurisdiction will retain the ability to determine their level of service and how to fund their programs.**
8. **Building efficiency into Stormwater Management, environmental protection, and economic growth.** - Developers need uniform processes and standards in each jurisdiction. We need to address impairments at the watershed scale, not by political boundaries. Our waters are unique in that we have little "upstream" source of water that would contribute to water quality and flooding problems. The entire region needs to be involved so that not only the residents, but visitors, see how well we are doing with protection of the environment, which will continue to support our tourism industry.
9. **"How will the standard be designed?"** – The subcommittee has recommended hiring a consultant to facilitate the process of creating a regional Stormwater technical standard. Bringing expertise and a broader view of Stormwater management from across the State and the east coast will assure our standards are consistent with best management practices and allow us to continue to "set the bar" as a regionally and nationally recognized community that is dedicated to protecting the environment. The scope of services will lead us through a series of meetings, both internally and externally, before work begins to fully answer the question "why" and frame the problem. Our "front end analysis" will "tee up" the needs that will be addressed in the writing of the regional standard. Next, the consultant will research our counterparts in similar communities to

find those with similar needs and learn how they are managing them. The deliverables for the project will include a model ordinance and a technical guide that has merged our codes with our comparative communities and developed a series of technical requirements that will effectively and uniformly met our needs. Another series of public meetings will roll out the draft document to solicit public input before finalizing the standard. Throughout the process, the subcommittee members will serve as the “owner”, meeting with the consultant, making decisions, and monitoring results. **Each participating community will have an equal stake in the outcome.** The goal will be that we develop a Stormwater standard that every community can adopt without modification from one jurisdiction to another.

References:

EPA Administered Permit Programs: The National Pollutant Discharge Elimination System, 40 C.F.R. § 122.34(b)(5)(iii). 2017.

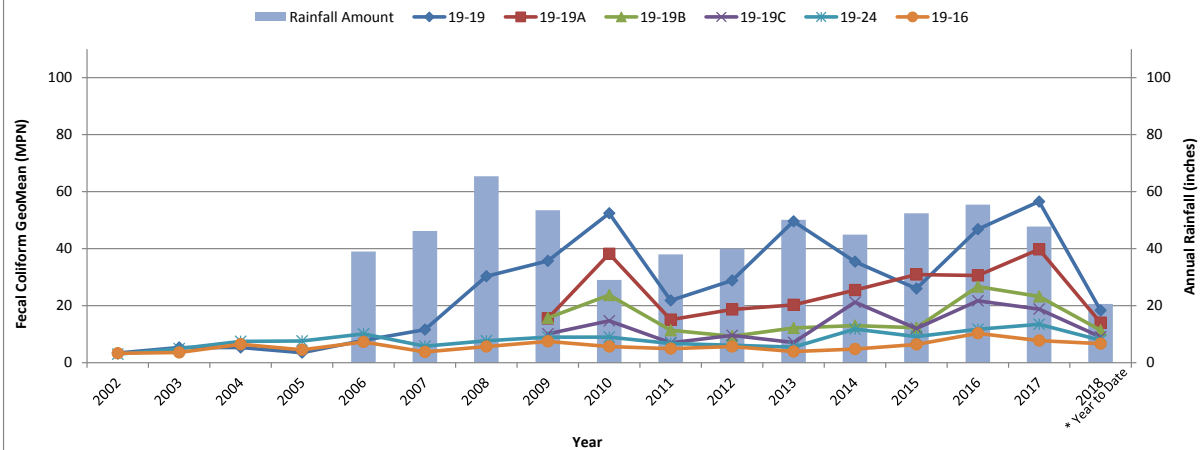
	19-19				19-19A				19-19B				19-19C				19-24				19-16			
	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018
	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)
December	110.0	79.0	1600.0		33.0	23.0	920.0		27.0	49.0	540.0		7.8	33.0	240.0		6.8	7.8	220.0		4.5	23.0	49.0	
November	NS	33.0	49.0		NS	13.0	33.0		NS	7.8	7.8		NS	14.0	31.0		NS	13.0	2.0		NS	33.0	2.0	
October	23.0	NS	22.0		49.0	NS	49.0		4.5	NS	33.0		23.0	NS	23.0		7.8	NS	6.8		4.5	NS	2.0	
September	46.0	23.0	17.0		17.0	110.0	7.8		9.3	23.0	11.0		17.0	13.0	4.5		23.0	4.5	2.0		4.5	7.8	1.8	
August	6.8	NS	79.0		17.0	NS	70.0		13.0	NS	21.0		13.0	NS	33.0		24.0	NS	33.0		4.0	NS	33.0	
July	17.0	79.0	350.0	23.0	7.8	17.0	110.0	33.0	6.8	22.0	130.0	11.0	11.0	17.0	49.0	7.8	2.0	49.0	49.0	13.0	4.5	13.0	22.0	4.5
June	33.0	79.0	23.0	11.0	46.0	130.0	49.0	23.0	11.0	70.0	13.0	23.0	14.0	110.0	17.0	7.8	4.5	33.0	7.8	4.5	11.0	23.0	4.5	1.8
May	NS	70.0	17.0	17.0	NS	23.0	23.0	33.0	NS	49.0	7.8	17.0	6.8	49.0	2.0	13.0	6.8	14.0	23.0	23.0	23.0	17.0	4.5	13.0
April	1.8	23.0	7.8	33.0	33.0	23.0	23.0	13.0	17.0	13.0	4.5	17.0	17.0	13.0	7.8	17.0	13.0	7.8	13.0	49.0	17.0	1.8	4.5	17.0
March	170.0	33.0	350.0	22.0	130.0	33.0	11.0	21.0	49.0	33.0	33.0	4.5	17.0	17.0	13.0	11.0	13.0	11.0	13.0	7.8	6.8	7.8	33.0	9.3
February	13.0	23.0	13.0	17.0	14.0	17.0	7.8	7.8	1.8	13.0	13.0	17.0	1.8	11.0	9.3	17.0	7.8	6.8	4.5	2.0	2.0	1.8	1.8	7.8
January	79.0	110.0	95.0	13.0	79.0	33.0	79.0	2.0	49.0	49.0	31.0	4.5	33.0	17.0	49.0	2.0	17.0	7.8	27.0	1.8	7.8	17.0	33.0	4.5
Additional Samples																								
Additional Samples																								
Average Annual GeoMean	26.0	46.8	56.5	18.3	30.9	30.6	39.8	14.0	12.3	26.7	23.3	11.4	12.0	21.7	18.8	9.1	9.2	11.7	13.5	7.9	6.4	10.3	7.7	6.7
** Truncated GeoMetric Mean	37.0	37.0	44.0	39.0	21.0	30.0	36.0	30.0	11.0	16.0	20.0	22.0	11.0	16.0	16.0	16.0	7.0	9.0	10.0	11.0	4.0	6.0	7.0	8.0
** Truncated 90th Percentile	205.0	105.0	203.0	181.0	95.0	89.0	133.0	132.0	51.0	69.0	83.0	80.0	55.0	65.0	57.0	61.0	30.0	29.0	37.0	47.0	13.0	21.0	29.0	30.0

NS = No Sample

AS = Additional Samples

** Town staff calculations utilizing DHEC statistics

SC DHEC Shellfish Monitoring Stations Average Annual Fecal Coliform



ACTIVITY - POLICY	STATUS
May River Watershed Action Plan Update	To be completed with direction and input from Water Quality Technical Advisory Committee, May River Watershed Advisory Committee, and Town Council, public and staff. Action Plan Update is a FY19-20 priority of WAPAC and Council. WAPAC scope direction provided 2/22/18 to include watershed health indicators of bacteria, biotic & abiotic parameters and social/cultural/economic indicators. Staff met with SCDHEC to confirm hybrid 5R and traditional watershed-based plan approach will be accepted. To be initiated at start of FY19 with anticipated completion in early FY20.
Sewer Connection & Extension Policy	Council adopted the Sewer Connection & Extension Policy on 9/26/17. WAPAC proposed prioritization phases for sewer extension in Historic District for FY 19-23 and recommended revisions to Sewer Connection Ordinance on 2/22/18. Staff has initiated septic system maintenance education via outreach and with Lowcountry Stormwater Partners. Town Council considered WAPAC recommended amendments to Sewer Connection Program on 4/10/18. Will consider for 2nd & Final Reading on upon Septic to Sewer Conversion Program establishment. Town Council Workshop of Septic to Sewer Conversion Program on 7/17/18. Ordinance and Program adoption anticipated 9/11/18.
ACTIVITY - PROJECTS	STATUS
Sanitary Sewer Extension	Buck Island/Simmons Road (BIS) Phases I, II, III and IV are completed. Toy Fields is completed. Six phases of sewer extension are proposed in the 5-year Capital Improvement Program. Current project updates are included in Engineering Consent Agenda under "Sewer & Water."
May River 319 Grant Phase 1 - New Riverside Pond (Grant award of \$483,500 in 2009)	Completed in 2013. Per water quality tests, a statistically significant reduction in fecal coliform bacteria concentration exists pre-pond versus post-pond. However, bacteria levels re-load prior to discharging into the May River, leading to additional BMP installation of Filtrexx proprietary filter socks. Installed 12/12/17 to maintain bacteria reduction. Downstream failing septic system was located by Staff and reported to County & SCDHEC for remediation.
May River 319 Grant Phase 2 - Pine Ridge (Grant award of \$290,000 in 2011)	Completed in 2016. In post-construction monitoring phase to assess project efficacy.
May River 319 Grant Phase 3 - Town Hall Parking Retrofit (Grant award of \$231,350 in 2016)	Staff a workplan amendment for this grant award to include stormwater retrofits at Town Hall was approved by SCDHEC & EPA . Current project updates are included in Engineering Consent Agenda.
Stoney Creek Wetlands Restoration: Preliminary Design Phase	Wetlands restoration project with the goal to reduce stormwater volume reaching the May River. Conceptual design completed and approved by property owners. Current project updates are included in Engineering Consent Agenda.
May River Watershed Water Quality Model	Preliminary 2002 Palmetto Bluff Duck Pond Drainage area watershed model complete. Completed New Riverside BMP model for comparison to field observations. Rose Dhu Creek sub-watershed "Existing Conditions" portion of the Headwaters Water Quality Model is underway. Staff is re-evaluating this project having received County Master Plan Update in April 2018.

ACTIVITY - FINANCIAL	STATUS
Additional Funding Opportunities	Exploring partnership opportunities with BJWSA for future sewer phases. WAPAC FY19-20 priority to assess Stormwater Utility Fee structure to support initiatives initiates 7/26/18.
ACTIVITY - PROGRAMS	STATUS
Public Outreach/Participation/Involvement (MS4 Minimum Control Measure #1 & 2)	Outreach and involvement efforts continue through county-wide partnership with Carolina Clear as Lowcountry Stormwater Partners - Neighbors for Clean Water, through local cleanups, civic group presentations, and the May River Watershed Action Plan Advisory Committee. Current updates are included in Engineering Consent Agenda and Attachment 3.
Infrastructure Mapping/GIS (MS4 Minimum Control Measure #3)	Data points continue to be collected with new development to meet MS4 requirements & populate water quality model. Current updates are included in Engineering Consent Agenda Attachment 4a.
Water Quality Monitoring Program (MS4 Minimum Control Measure #3)	<ol style="list-style-type: none"> 1. SCDHEC Shellfish monitoring results 2. Fecal coliform bacteria "hot spot" concentrations 3. Microbial Source Tracking of human sources of bacteria 4. Illicit Discharge investigation and monitoring 5. BMP efficacy monitoring 6. MS4 monitoring Current updates are included in Engineering Consent Agenda Attachments 1, 4b, 4c, and 4d.
Construction Site Stormwater Runoff Control Program (MS4 Minimum Control Measure #4)	Sediment and erosion control inspections with escalating enforcement response. Current updates are included in Engineering Consent Agenda Attachment 5.
Stormwater Plan Review & Related Activity Program (MS4 Minimum Control Measure #5)	SCDHEC delegated plan review-related activities. Current updates are included in Engineering Consent Agenda Attachment 6.
Ditch Inspection/Maintenance Program (MS4 Minimum Control Measure #6)	Continued coordination with SCDOT, Beaufort County and Town Public Works to inspect and maintain ditches within the Town's jurisdiction. Current updates are included in Engineering Consent Agenda Attachment 7 and under "Public Works."
Septic System Maintenance Program	FY18 funding is \$10,000 and administered by Growth Management via the Neighborhood Assistance Program (NAP). On-going assistance offered to Town residents regardless of financial status through Neighborhood Assistance Program. Current updates, as reported by NAP, are included in Engineering Consent Agenda Attachment 8.
Sewer Connection Program	In FY18 Council allocated \$200,000 for a Sewer Connection Program as well as \$10,000 for assistance to connect income-qualified individuals to existing sanitary sewer as part of the Neighborhood Assistance Program. Council adopted the Sewer Connection & Extension Policy at 9/26/17 meeting. CIP projects were prioritized as part of FY19 Budgeting Process. Sewer Connection Ordinance changes anticipated following Connection Program development. Septic to Sewer Conversion Program discussed at Council's Quarterly Workshop on 7/17/18. Ordinance and Program adoption anticipated 9/11/18.



**TOWN OF BLUFFTON
MAY RIVER WATERSHED ACTION PLAN ADVISORY COMMITTEE
MEETING AGENDA**

Oscar Frazier Community Park
Rotary Community Center (11 Recreation Court), Bluffton SC 29910
Thursday, July 26, 2018, 10:00 a.m.

- I. CALL TO ORDER**
- II. NOTICE REGARDING POSTING OF MEETING PER SOUTH CAROLINA FREEDOM OF INFORMATION (FOIA) REQUIREMENTS**
- III. ROLL CALL AND CONFIRMATION OF QUORUM**
- IV. ADOPTION OF AGENDA**
- V. ADOPTION OF MINUTES – May 24, 2018**
- VI. PUBLIC COMMENTS**

Every member of the public who is recognized to speak shall address the Chairman and in speaking, avoid disrespect to the Committee, Town Staff, and other members of the meeting. For the record, state your name and address prior to speaking.

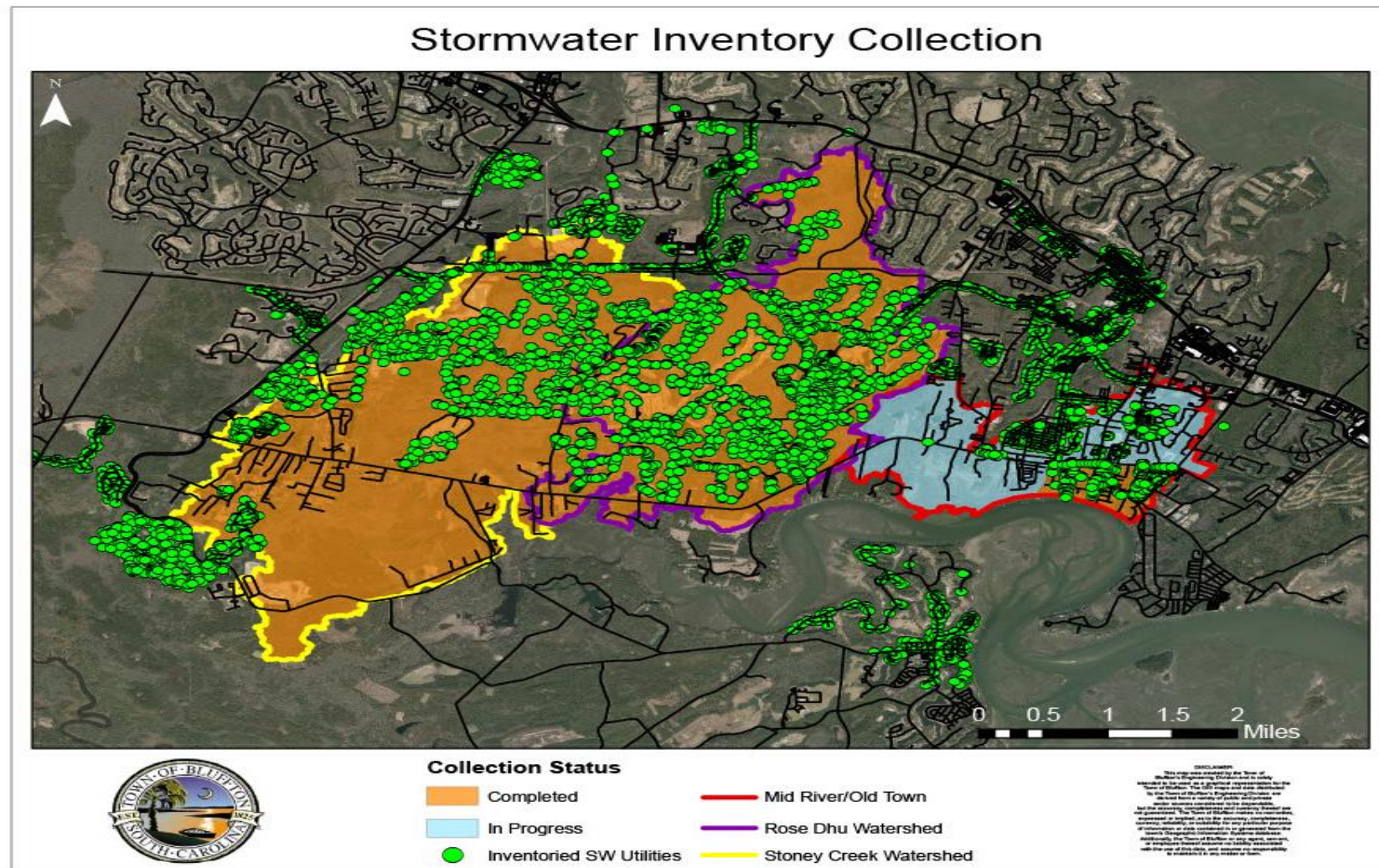
COMMENTS ARE LIMITED TO THREE (3) MINUTES.
- VII. PRESENTATIONS, CELEBRATIONS AND RECOGNITIONS:**
 - 1. Living Shoreline Presentation – Dr. Peter Kingsley-Smith, Senior Marine Scientist, SCDNR – Marine Resources Research Institute
- VIII. OLD BUSINESS**
 - 1. Update on Strategic Plan Priority: Septic to Sewer Conversion Program
 - 2. Water Quality Monitoring (standing item)
 - a. Weekly Sampling Update
 - b. Microbial Source Tracking (MST) Update
 - c. SCDHEC Shellfish Data Update
- IX. NEW BUSINESS**
- X. DISCUSSION**
- XI. ADJOURNMENT**

NEXT MEETING DATE: Thursday, August 23, 2018

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

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

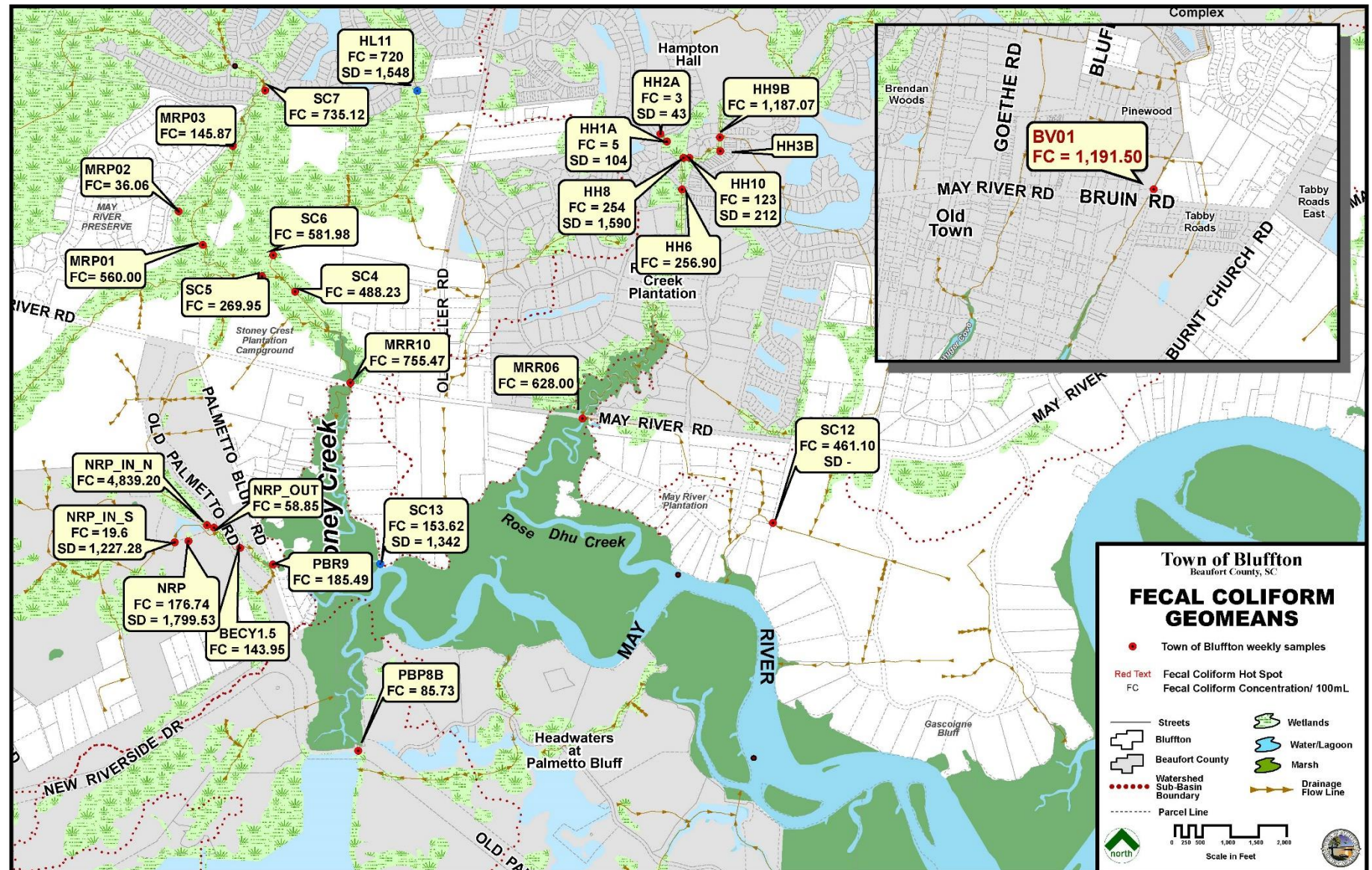
MS4 Minimum Control Measure #3 – IDDE (Illicit Discharge Detection & Elimination): Stormwater Infrastructure Inventory



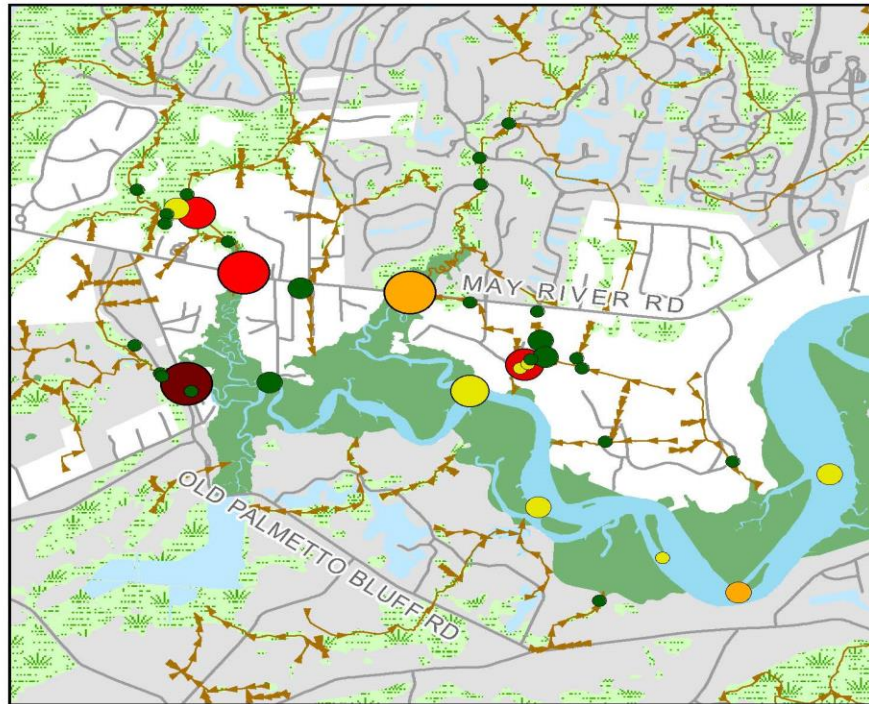
Stormwater Infrastructure Inventory Collection Status

FY 2019 YTD Collection Totals	138
FY 2018 Collection Totals	3,777
FY 2017 Collection Totals	3,874

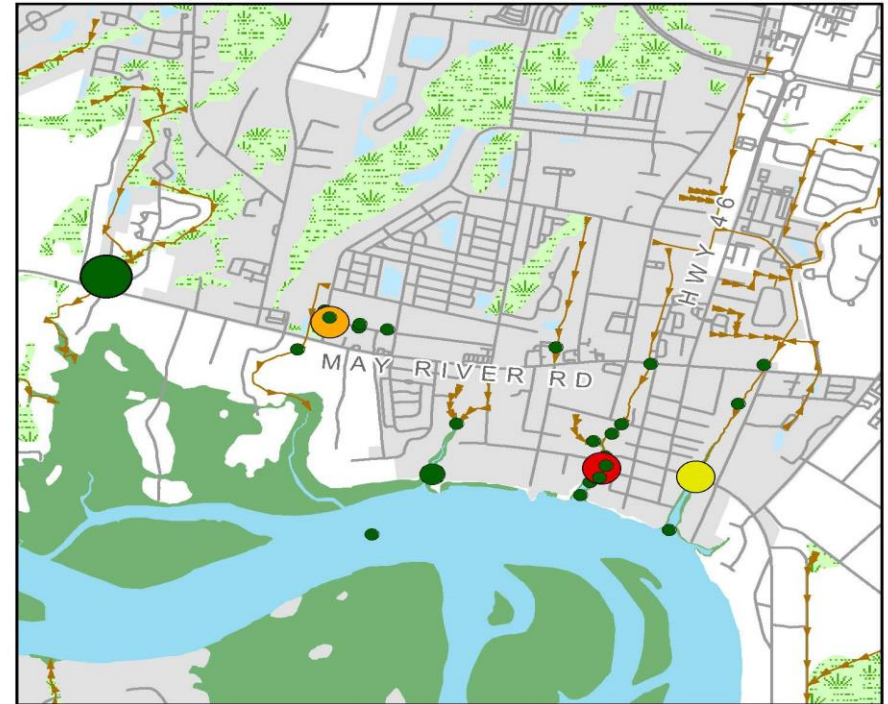
MS4 Minimum Control Measure #3 – IDDE: Fecal Coliform Concentrations Trend Map



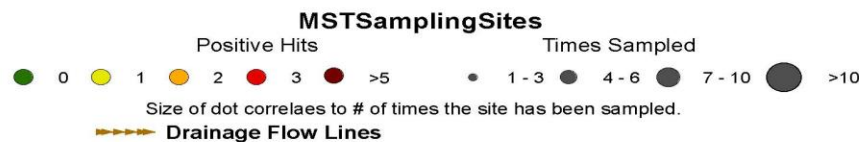
MS4 Minimum Control Measure #3 – IDDE: Microbial Source Tracking (MST) Trend Map



Microbial Source Tracking Trend Map
Headwaters May River



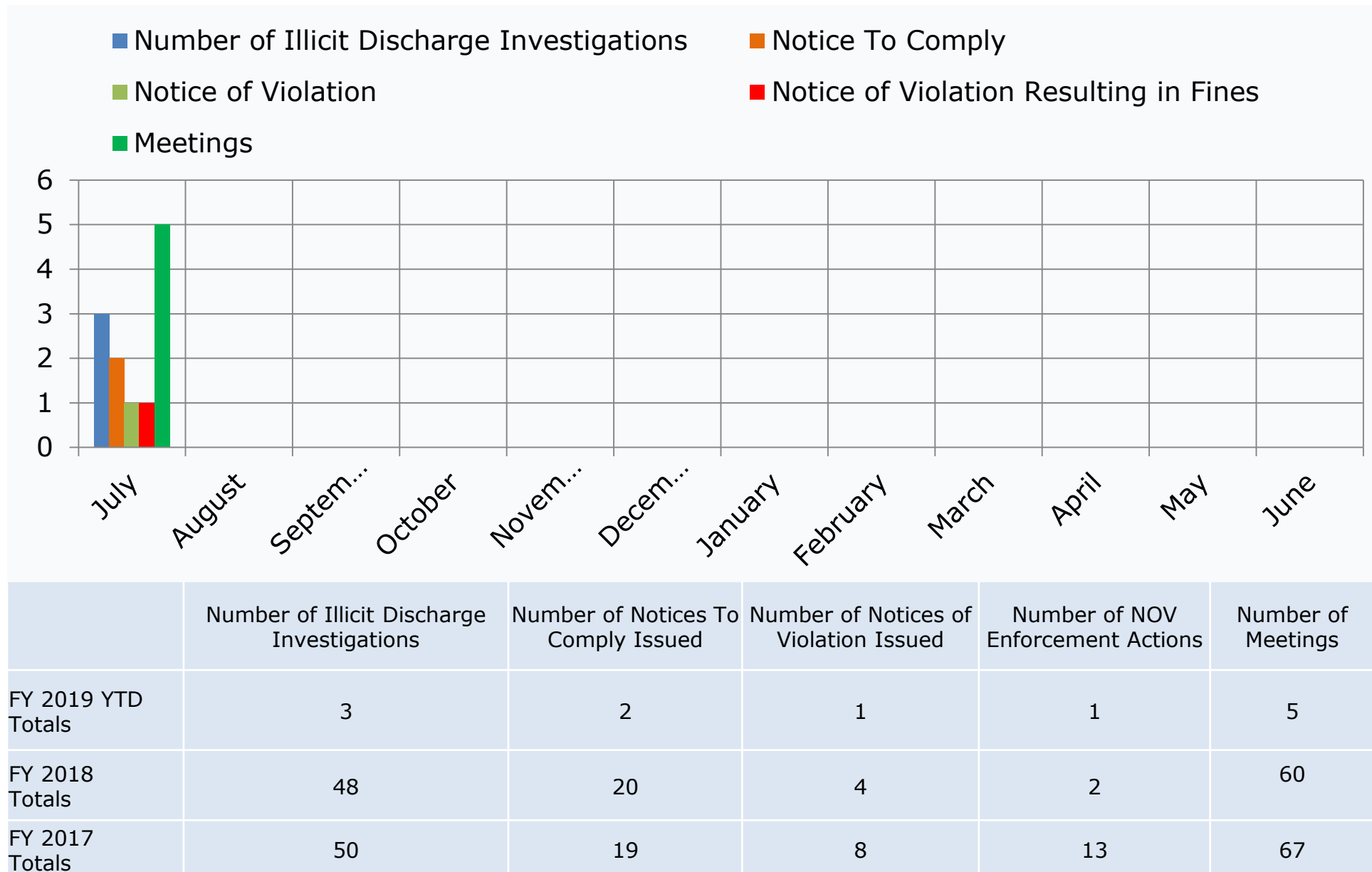
Microbial Source Tracking Trend Map
Old Town May River



Updated: 07/23/2018

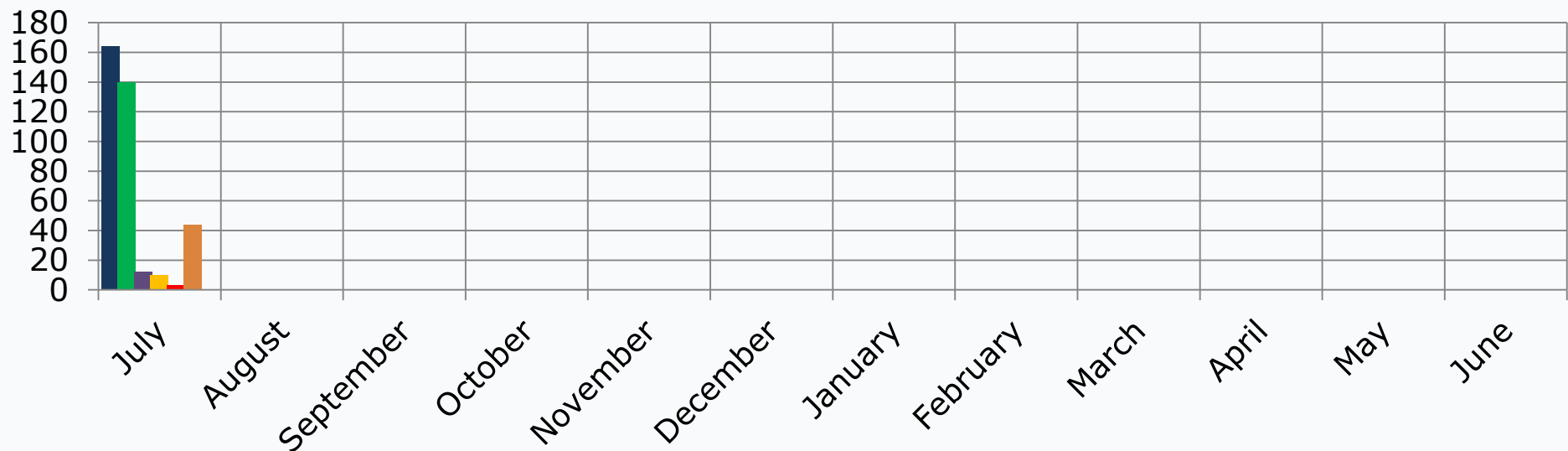


MS4 Minimum Control Measure #3 – IDDE: Illicit Discharge Investigations



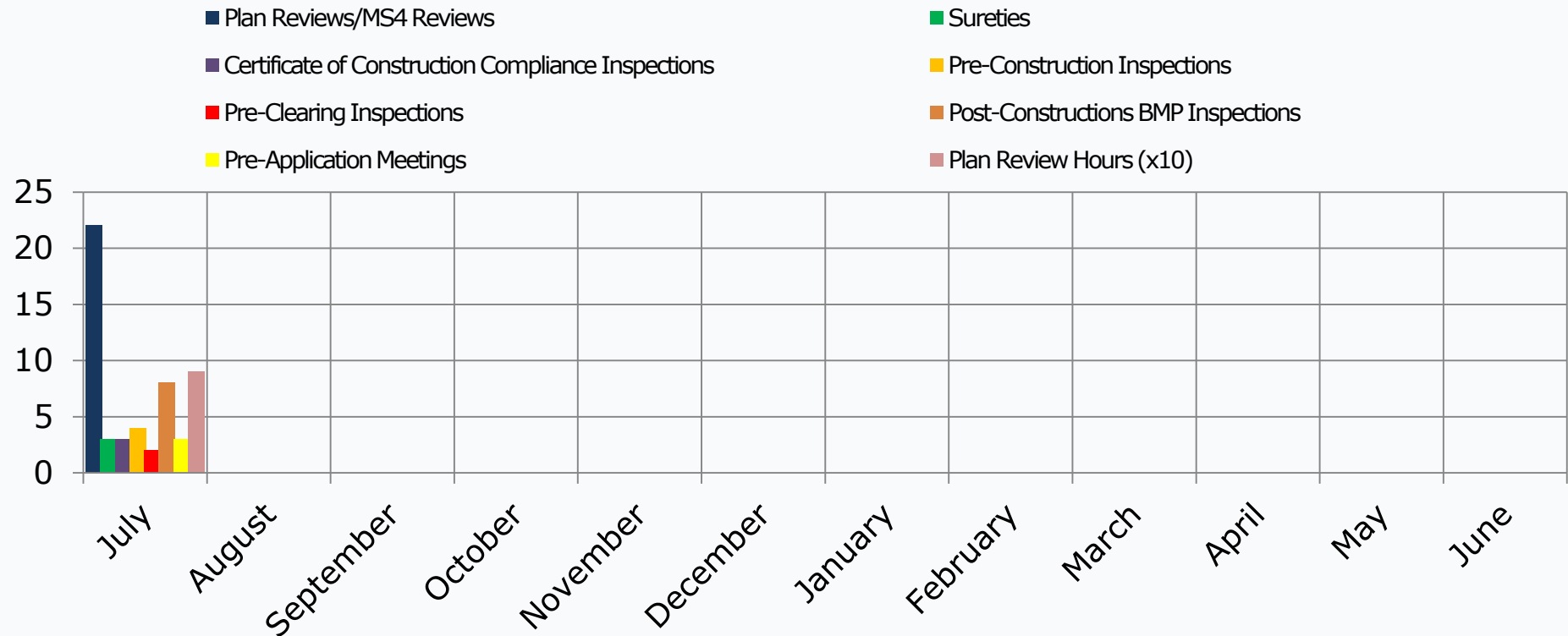
MS4 Minimum Control Measure #4 - Construction Site Stormwater Runoff Control

- Erosion & Sediment Control Inspections (E&SC)
- Number of Inspections Passed
- Number of Notice To Comply (NTC)
- Number of Notice of Violation (NOV)
- Number of Fines for Notice of Violation
- Number of Erosion & Sediment Control Meetings



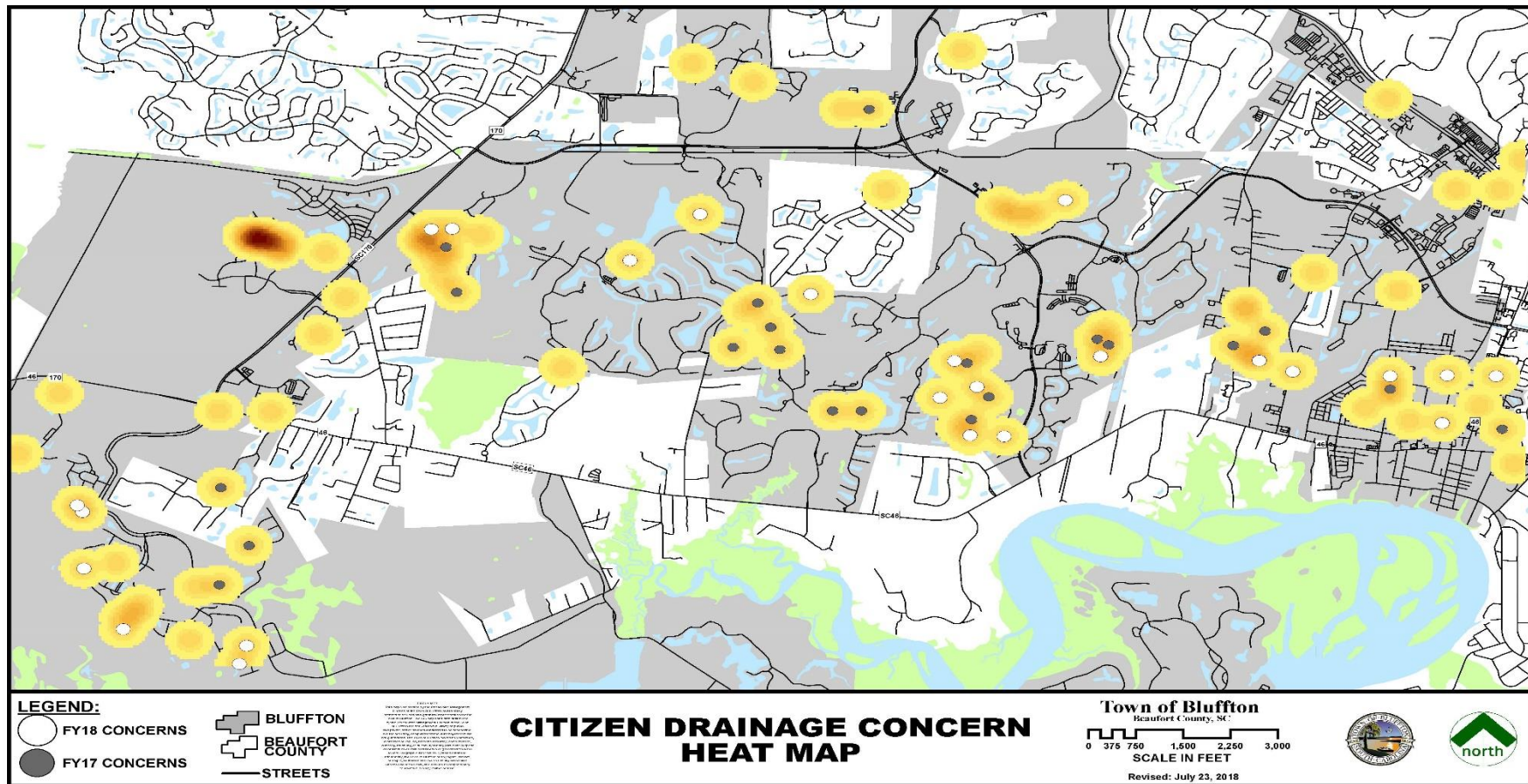
	Number of Sediment & Erosion Control Inspections	Number of Inspections Passed	Number of NTC Issued	Number of NOVs Issued	Number of NOV Enforcement Actions	Number of E&SC Meetings
FY 2019 YTD Totals	164	140	12	10	3	44
FY 2018 Totals	1504	1159	300	83	10	499
FY 2017 Totals	1,219	862	233	58	10	237

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



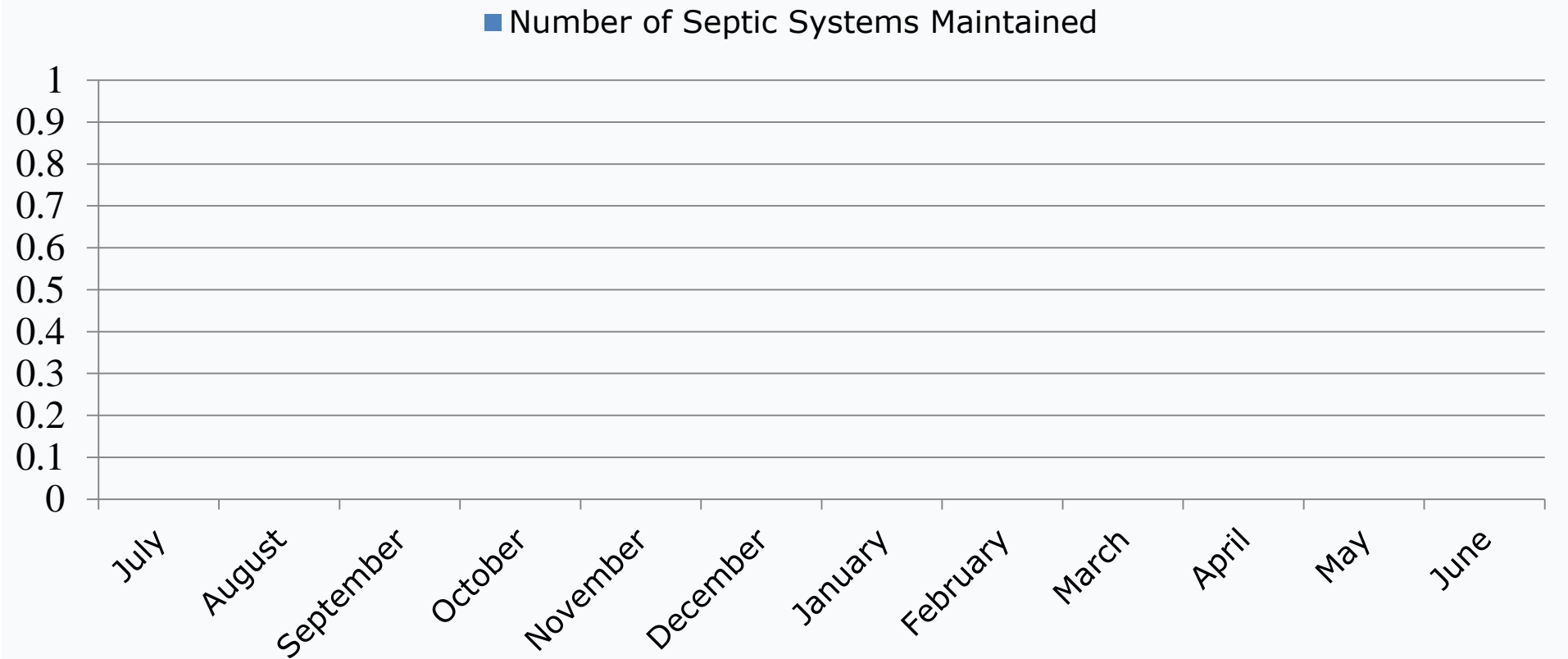
	Plan Reviews MS4 Reviews	Sureties	Certificate of Construction Compliance Inspections	Pre- Construction Meetings	Pre-Clearing Inspections	Post Construction BMP Inspections	Pre-Application Meetings	Total Plan Review Hours
FY 2019 YTD Totals	22	3	3	4	2	8	3	90 Hrs.
FY 2018 Totals	242	59	50	32	32	88	88	1,210 Hrs.
FY 2017 Totals	253	62	96	47	45	7	23	1,265 Hrs.

Citizen Drainage Concern Heat Map (Drainage, Maintenance and Inspections)



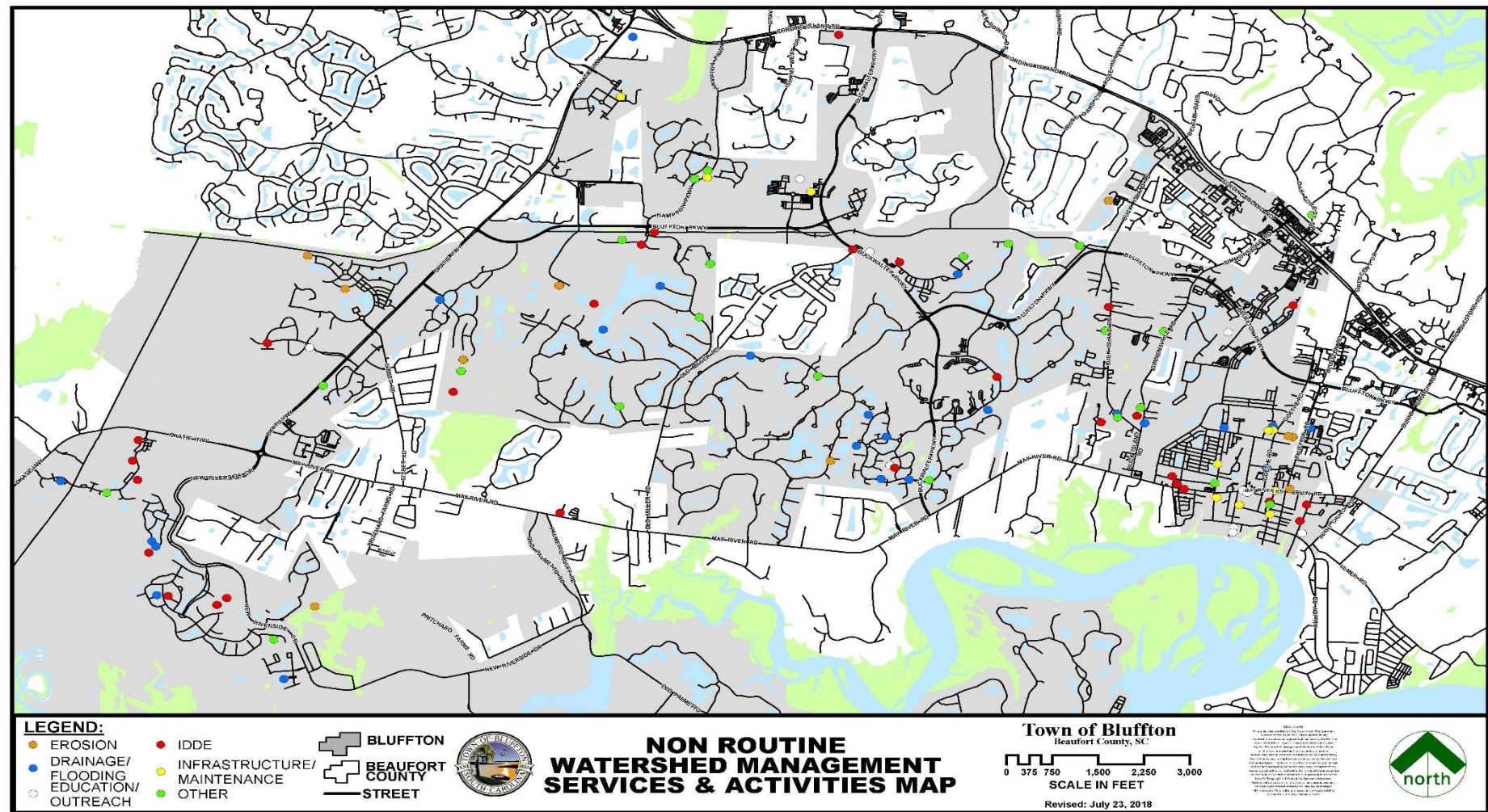
	Number of Drainage Concerns Investigated	Number of Meetings
FY 2019 YTD Totals	2	2
FY 2018 Totals	48	75
FY 2017 Totals	72	80

Septic System Maintenance Assistance



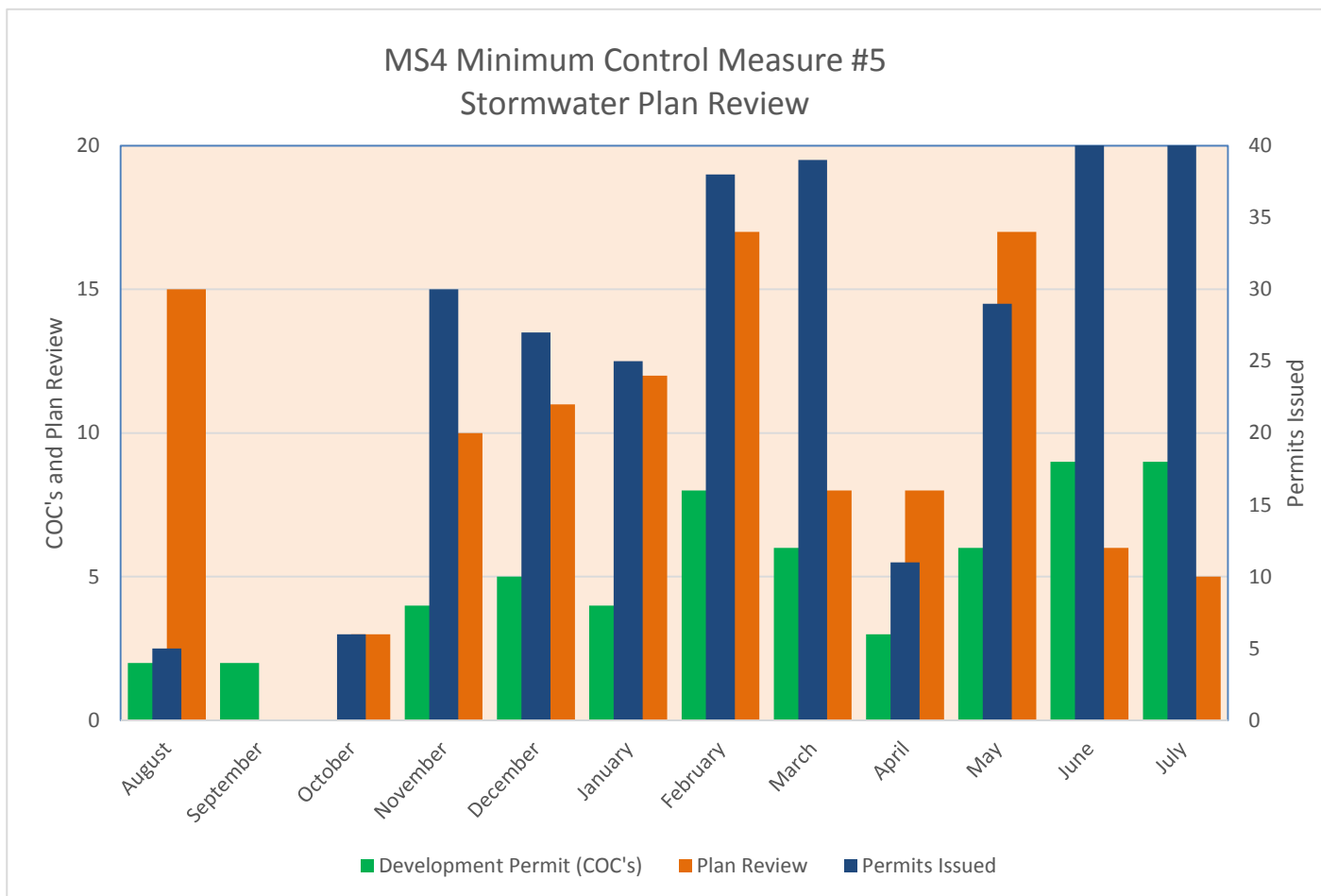
	Number of Septic Systems Maintained
FY 2019 YTD Totals	0
FY 2018 Totals	16
FY 2017 Totals	18

Citizen Request for Watershed Mngt. Services & Activities Map



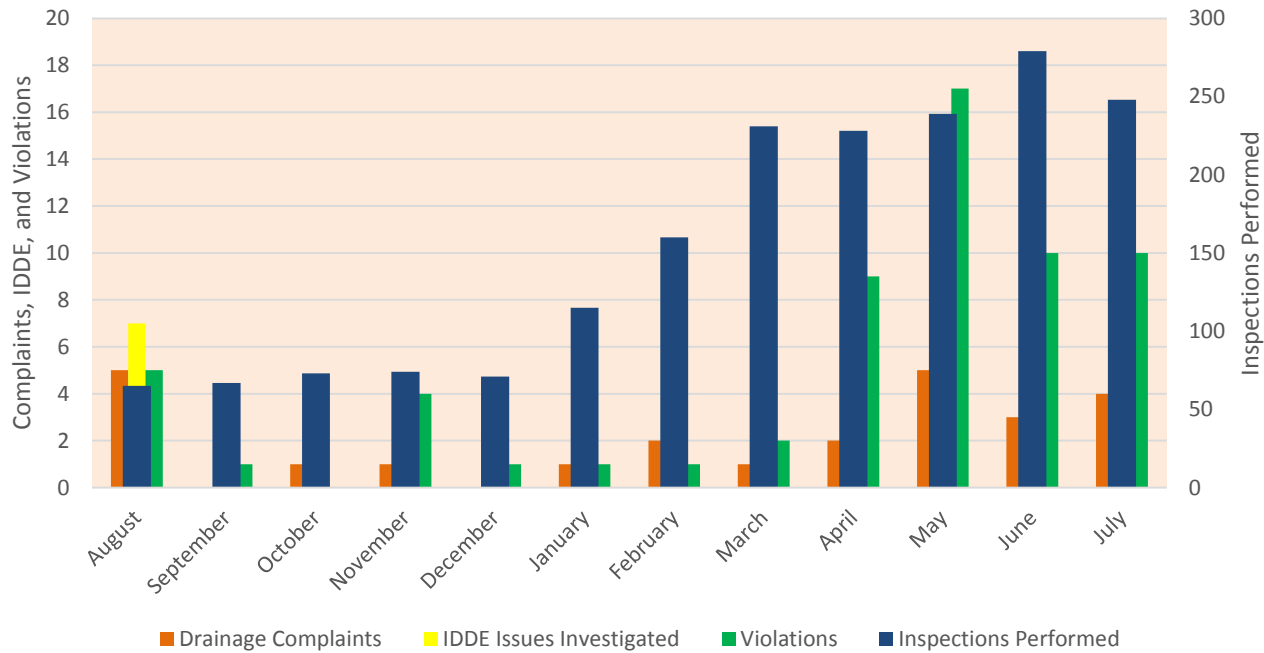
	Number of Citizen Requests Investigated	Number of Meetings
FY 2018 YTD Totals	8	12
FY 2018 Totals	75	79
FY 2017 Totals	53	82

7/24/2018

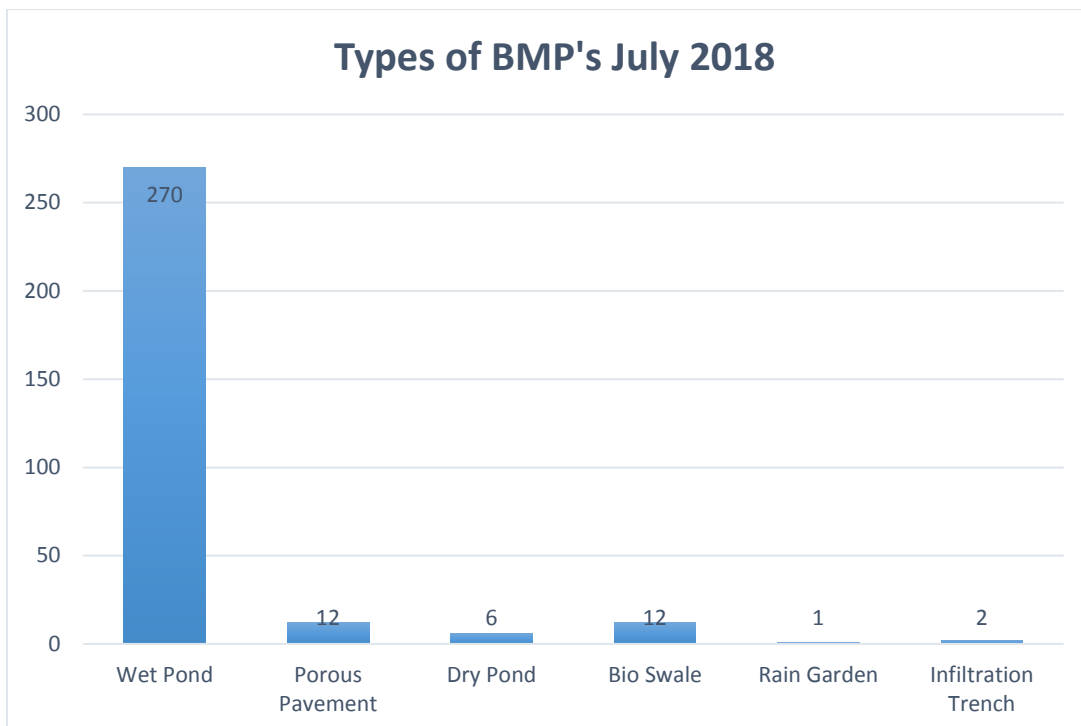
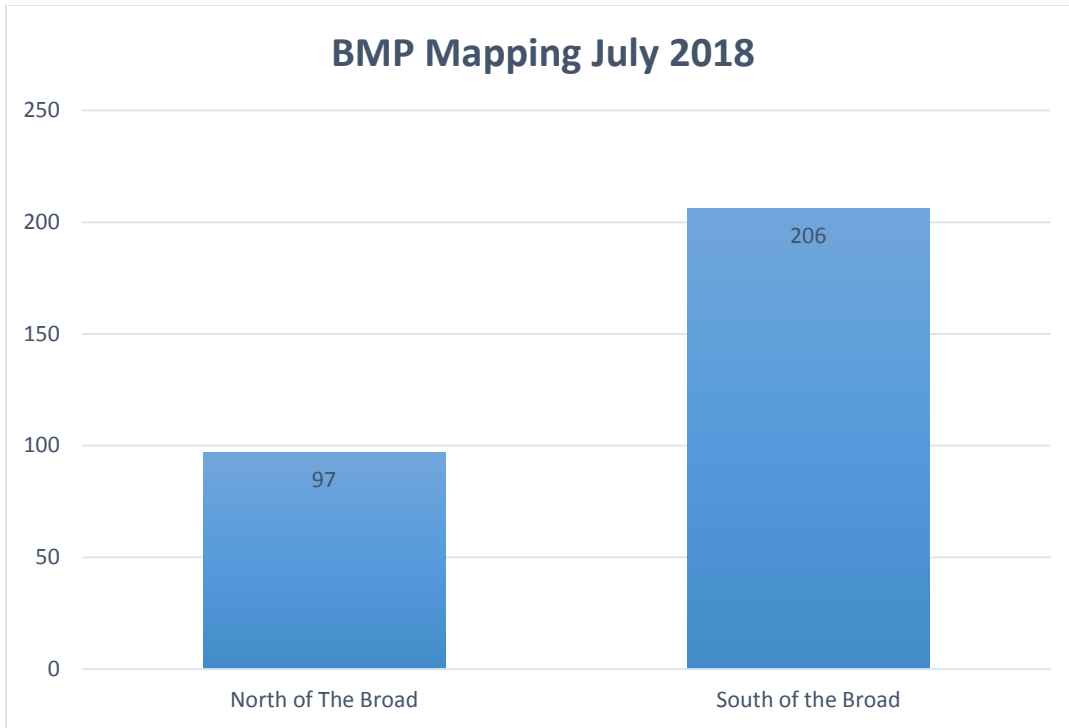


TYPE	August	September	October	November	December	January	February	March	April	May	June	July	Last 12 Months
Development Permit (COC's)	2	2	0	4	5	4	8	6	3	6	9	9	58
Plan Review	15	0	3	10	11	12	17	8	8	17	6	5	112
Permits Issued	5	0	6	30	27	25	38	39	11	29	47	45	302

MS4 Minimum Control Measure #4 Erosion Sediment Control Inspections



TYPE	August	September	October	November	December	January	February	March	April	May	June	July	Last 12 Months
Inspections Performed	65	67	73	74	71	115	160	231	228	239	279	248	1850
Drainage Complaints	5	0	1	1	0	1	2	1	2	5	3	4	25
IDDE Issues Investigated	7	1	1	3	2	0	1	0	0	1	0	1	17
Violations	5	1	0	4	1	1	1	2	9	17	10	10	61





MEMORANDUM

Date: August 8, 2018

To: Stormwater Management Utility Board

From: David Wilhelm, P. E., Public Works Director

Re: **Maintenance Project Report**

This report will cover ten minor projects. The Project Summary Reports are attached.

Minor or Routine Projects:

- **St Helena Island Bush Hog – St Helena Island (SWUD 8):** This project improved 73,223 feet of drainage system. The scope of work included bush hogging 67,261 feet of channel and 5,962 feet of roadside ditch. The total cost was **\$33,916.29**.
- **Lady's Island Bush Hog – Lady's Island (SWUD 7):** This project improved 63,334 feet of drainage system. The scope of work included bush hogging 63,334 feet of channel. The total cost was **\$32,676.85**.
- **Port Royal Island Bush Hog – Port Royal Island (SWUD 6):** This project improved 24,286 feet of drainage system. The scope of work included bush hogging 24,286 feet of channel. The total cost was **\$10,335.09**.
- **Joe Capers Road – St. Helena Island (SWUD 8):** This project improved 258 feet of drainage system. The scope of work included cleaning out 258 feet of roadside ditch, installing 2 driveway pipes and rip rap for erosion control. The total cost was **\$7,484.59**.
- **Island Tank Road & John Davis Court – Port Royal Island (SWUD 6):** This project improved 1,354 feet of drainage system. The scope of work included cleaning out 446 feet of channel and 908 feet of roadside ditch, jetting 17 driveway pipes and 3 crossline pipes. The total cost was **\$6,797.25**.
- **St Helena Island Vacuum Truck – St. Helena Island (SWUD 8):** This project improved 292 feet of drainage system. The scope of work included cleaning out 18 catch basins, jetting 1 driveway pipe, 2 access pipes, 11 crossline pipes and 292 feet of channel pipe. The total cost was **\$5,399.73**.
- **Gumwood Drive – Lady's Island (SWUD 7):** This project improved 595 feet of drainage system. The scope of work included cleaning out 595 feet of roadside ditch. The total cost was **\$2,859.32**.
- **Rice Road – Port Royal Island (SWUD 6):** The scope of work included installing 1 driveway pipe. The total cost was **\$2,662.91**.
- **Gamecock Way – Port Royal Island (SWUD 6):** This project improved 920 feet of drainage system. The scope of work included cleaning out 920 feet of channel. The total cost was **\$2,233.44**.

- **Candy Johnson Drive – St Helena Island (SWUD 8):** This project improved 646 feet of drainage system. The scope of work included cleaning out 646 feet of channel. The total cost was **\$1,502.09.**



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: St. Helena Island Bush Hog

Activity: Routine/Preventive Maintenance

Duration: 10/31/17-03/26/18

Narrative Description of Project:

Project improved 73,223 L.F. of drainage system. Bush hogged 67,261 L.F. of channel and 5,962 L.F. of roadside ditch. This project consisted of the following areas: Lands End Road (1,481 L.F.), Hunters Grove Road (1,268 L.F.), Orange Grove Road (1,826 L.F.), James D Washington Road (400 L.F.), Jack Johnson Drive (1,400 L.F.), Peaches Hill Circle (3,516 L.F.), Sycamore Hill Drive (1,773 L.F.), Capers Island Circle (544 L.F.), David Green Road (960 L.F.), Scott Hill Road (2,158 L.F.), No Man Land Road (1,705 L.F.), Wiggfall Road (410 L.F.), Candy Johnson Lane (665 L.F.), Bridgewood Road (775 L.F.), Scott Community Center (1,814 L.F.), Toomer Road (2,669 L.F.), Willow Whisp Lane (1,000 L.F.), Tombee Lane (1,904 L.F.), Archer Fields Lane (1,341 L.F.), Kelis Lane (4,349 L.F.), Ephraim Road (2,534 L.F.), White Sands Circle (4,139 L.F.), Luther Warren Drive (836 L.F.), Shiney Road (702 L.F.), Ladson Road (1,690 L.F.), Simmons Road (3,226 L.F.), Seaside Road (2,094 L.F.), Nathan Pope Road (5,390 L.F.), Cee Cee Road (220 L.F.), Drop Off Center (1,900 L.F.), James Grant Road (1,691 L.F.), Mattis Drive (650 L.F.), Major Road (2,042 L.F.), Warsaw Island Road (5,208 L.F.), Patchwork Lane (856 L.F.), JB Lane (1,289 L.F.), John Fripp Circle (836 L.F.)

2018-300 / St. Helena Island Bush Hog

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
CBH / Channel- bushhogged	672.0	\$14,922.45	\$6,647.05	\$1754.25	\$0.00	\$8,902.81	\$32,226.55
HAUL / Hauling	8.0	\$185.60	\$80.08	\$45.16	\$0.00	\$89.10	\$399.94
RDBH / Roadside ditch - bushhogged	20.0	\$445.70	\$187.32	\$41.31	\$0.00	\$286.80	\$961.13
TC / Traffic Control - Jobsite	8.0	\$178.26	\$14.40	\$10.40	\$0.00	\$114.72	\$317.78
2018-300 / St. Helena Island Bush Hog Sub Total	708.5	\$15,742.90	\$6,928.85	\$1,851.12	\$0.00	\$9,393.43	\$33,916.29
Grand Total	708.5	\$15,742.90	\$6,928.85	\$1,851.12	\$0.00	\$9,393.43	\$33,916.29

Before



During



After





Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Lady's Island Bush Hog

Activity: Routine/Preventive Maintenance

Duration: 03/20/17-03/29/18

Narrative Description of Project:

First Rotation: 03/20/17- 03/29/18: Project improved 63,334 L.F. of drainage system. Bush hogged 63, 334 L.F. of channel. This project consisted of the following areas: Chowan Creek Bluff (4,959 L.F.), Lady's Island Airport (19,424 L.F.), Airport Circle (4,076 L.F.), Faculty Drive (3,937 L.F.), Alumni Road (4,184 L.F.), Shorts Landing Road (1,283 L.F.), Holly Hill Road (861 L.F.), Thomas Sumpter Street (5,714 L.F.) Wade Hampton Drive (2,278 L.F.), Jasper Lane (1,240 L.F.), Sams Point Road (3,846 L.F.), Braeburn Lane (1,182 L.F.), Shallowford Downs (400 L.F.), Lucy Creek Drive (833 L.F.), Token Lane (1,800 L.F.), Pleasant Point Drive (1,180 L.F.), Brickyard Point Road (1,029 L.F.), Deveaux Road (1,711 L.F.), Eustis Landing Road (861 L.F.), Honeysuckle Lane (784 L.F.), Francis Marion Circle (514 L.F.), Sheppard Road (590 L.F.), Old Distant Road (648 L.F.)

2018-302 / Lady's Island Bush Hog	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.0	\$21.79	\$0.00	\$0.00	\$0.00	\$0.00	\$21.79
CBH / Channel- bushhogged	679.0	\$14,381.32	\$7,477.69	\$1,721.13	\$0.00	\$9,074.92	\$32,655.06
2018-302 / Lady's Island Bush Hog Sub Total	680.0	\$14,403.11	\$7,477.69	\$1,721.13	\$0.00	\$9,074.92	\$32,676.85
Grand Total	680.0	\$14,403.11	\$7,477.69	\$1,721.13	\$0.00	\$9,074.92	\$32,676.85



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Port Royal Island Bush Hog

Activity: Routine/Preventive Maintenance

Duration: 11/20/17-04/05/18

Narrative Description of Project:

Second Rotation: 11/20/17-04/05/18: Project improved 24,286 L.F. of drainage system. Bush hogged 24,286 L.F. of channel. This project consisted of the following areas: Young Circle (330 L.F.), Gillison Loop (520 L.F.), Chisolm Hill Road (3,850 L.F.), Gamecock Way (2,630 L.F.), Paukie Island Road (1,000 L.F.), Smalls Hill Road (1,255 L.F.), Mulrain Road (540 L.F.), Smith Road (330 L.F.), Salem Drive East (1,200 L.F.), Ihly Farm Road (4,090 L.F.), Quail Drive (335 L.F.), Shanklin Road (8,206 L.F.)

2018-301A / Port Royal Island Bush Hog

	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
CBH / Channel- bushhogged	232.0	\$4,823.29	\$2,473.90	\$648.12	\$0.00	\$2,378.88	\$10,324.19
2018-301A / Port Royal Island Bush Hog Sub Total	232.5	\$4,834.19	\$2,473.90	\$648.12	\$0.00	\$2,378.88	\$10,335.09
Grand Total	232.5	\$4,834.19	\$2,473.90	\$648.12	\$0.00	\$2,378.88	\$10,335.09



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Joe Capers Road

Activity: Routine/Preventive Maintenance

Duration: 12/12/17-01/02/18

Narrative Description of Project:

Project improved 258 L.F. of drainage system. Clean out 258 L.F. of roadside ditch. Installed (2) driveway pipes and rip rap for erosion control.

2018-557 / Joe Capers Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
DPINS / Driveway Pipe - Installed	20	\$457.70	\$123.96	\$636.45	\$0.00	\$297.00	\$1,515.11
HAUL / Hauling	63	\$1,375.74	\$499.26	\$2,223.21	\$0.00	\$510.78	\$4,608.99
RSDCL / Roadside Ditch - cleanout	20	\$422.70	\$67.54	\$21.76	\$0.00	\$148.50	\$660.49
RRI / Rip Rap - Installed	20	\$425.60	\$30.18	\$65.86	\$0.00	\$148.50	\$670.14
UTLOC / Utility locates	0.5	\$12.35	\$0.00	\$0.00	\$0.00	\$6.62	\$18.97
Joe Capers Road Sub Total	124	\$2,704.99	\$720.94	\$2,947.27	\$0.00	\$1,111.39	\$7,484.59
Grand Total	124.0	\$2,704.99	\$720.94	\$2,947.27	\$0.00	\$1,111.39	\$7,484.59

Before



During



After





Project: Joe
Capers Road

Activity: Routine/
Preventive
Maintenance

Project #:
2018-557

Township/SW Dist:
St. Helena Island/8

Completed:
January 2018

Legend

Drainage Type

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

0 40 80 160 240 320
Feet

1 inch = 170 feet

Prepared By: BC Stormwater Management Utility
Date Print: 04/11/18
File: C:\project summaries map\Joe Capers Road_2018-557



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Island Tank Road & John Davis Court

Activity: Routine/Preventive Maintenance

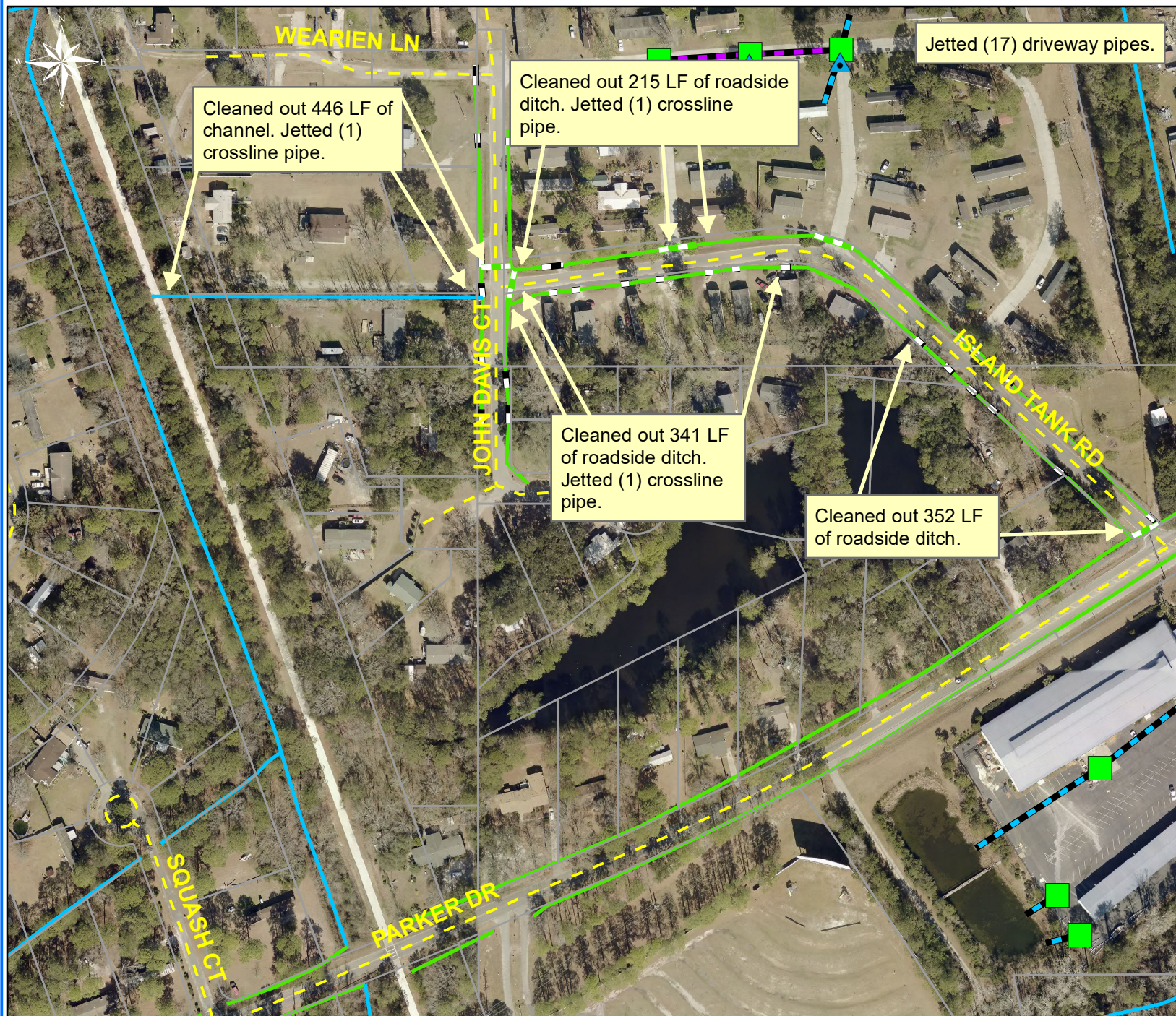
Duration: 08/30/17-09/25/17

Narrative Description of Project:

Project improved 1,354 L.F. of drainage system. Cleaned out 446 L.F. of channel and 908 L.F. of roadside ditch. Jetted (17) driveway pipes and (3) crossline pipes.

2018-524 / Island Tank Road & John Davis Court	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
CCO / Channel - cleaned out	90.0	\$1,823.40	\$508.82	\$102.24	\$0.00	\$1,129.50	\$3,563.96
CLPJT / Crossline Pipe - Jetted	10.0	\$222.80	\$43.40	\$46.95	\$0.00	\$143.40	\$456.55
DPJT / Driveway Pipe - Jetted	10.0	\$222.80	\$43.40	\$25.61	\$0.00	\$143.40	\$435.21
HAUL / Hauling	53.0	\$1,136.01	\$499.26	\$379.69	\$0.00	\$187.46	\$2,202.42
UC / Utility Coordination	1.0	\$24.70	\$0.00	\$0.00	\$0.00	\$13.23	\$37.93
UTLOC / Utility locates	2.0	\$49.40	\$8.04	\$6.39	\$0.00	\$26.46	\$90.29
2018-524 / Island Tank Road & John Davis Court Sub Total	166.5	\$3,490.01	\$1,102.92	\$560.87	\$0.00	\$1,643.45	\$6,797.25
Grand Total	166.5	\$3,490.01	\$1,102.92	\$560.87	\$0.00	\$1,643.45	\$6,797.25

No Pictures Available



Project: Island Tank Road & John Davis Court

Activity: Routine/ Preventive Maintenance

Project #: 2018-524

Township/SW Dist: Port Royal Island/6

Completed: September 2017

Legend

Drainage Type

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

Prepared By: BC Stormwater Management Utility

Date Print: 04/11/18

File: C:\project summaries map\Island Tank Road and John Davis Ct_201-524

0 50 100 200 300 400 Feet

1 inch = 210 feet



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: St. Helena Island Vacuum Truck
 McTeer Drive, Chisholm Road, Tombee Road, Wards Landing Road, Harbor
 Breeze Drive, Bay Point Road, Sea Pines Road, Lands End Road, Levant Byas
 Road, Mattis Drive, Renell Road

Activity: Routine/Preventive Maintenance
Duration: 08/21/17-11/30/17

Narrative Description of Project:

Project improved 292 L.F. of drainage system. Cleaned out (18) catch basins. Jetted (1) driveway pipe, (2) access pipes, (11) crossline pipes and 292 L.F. of channel pipe.

2018-309 / St Helena Island Vacuum Truck	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
APJT / Access pipe - jetted	8.0	\$178.24	\$34.72	\$25.30	\$0.00	\$114.72	\$352.98
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
CBCO / Catch basin - clean out	80.0	\$1,782.40	\$347.20	\$218.39	\$0.00	\$1,147.20	\$3,495.19
CLPJT / Crossline Pipe - Jetted	22.0	\$490.16	\$95.48	\$86.32	\$0.00	\$315.48	\$987.44
CPJ / Channel Pipe - Jetted	12.0	\$267.36	\$62.88	\$50.91	\$0.00	\$172.08	\$553.23
2018-309 / St Helena Island Vacuum Truck Sub Total	122.5	\$2,729.06	\$540.28	\$380.92	\$0.00	\$1,749.48	\$5,399.73
Grand Total	122.5	\$2,729.06	\$540.28	\$380.92	\$0.00	\$1,749.48	\$5,399.73

Before

During

After



Project: St. Helena
Island Vacuum
Truck- McTeer
Drive and Sea
Pines Dirve
Map #1

Activity: Routine/
Preventive
Maintenance

Project #:
2018-309

Township/SW Dist:
St. Helena Island/8

Completed:
November 2017



Legend

Drainage Type

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

0 60 120 240 360 480
Feet

1 inch = 250 feet

Prepared By: BC Stormwater Management Utility

Date Print: 03/29/18

File: C:\project summaries map\St. Helena Island Vac Truck- McTeer Drive Map#1_2018-309



Project: St. Helena
Island Vacuum
Truck-Chisholm
Road
Map #2

Activity: Routine/
Preventive
Maintenance














Project #:
2018-309

Township/SW Dist:
St. Helena Island/8

Completed:
November 2017

Legend

Drainage Type

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

0 20 40 80 120 160
Feet

1 inch = 83 feet

Prepared By: BC Stormwater Management Utility

Date Print: 03/29/18

File: C:\project summaries map\St. Helena Island Vac Truck- Chisholm Road Map#2_2018-309



Project: St. Helena
Island Vacuum
Truck- Tombee
Road
Map #3

Activity: Routine/
Preventive
Maintenance

Project #:
2018-309

Township/SW Dist:
St. Helena Island/8

Completed:
November 2017

Legend

Drainage Type

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

0 20 40 80 120 160
Feet

1 inch = 83 feet

Prepared By: BC Stormwater Management Utility

Date Print: 03/29/18

File: C:\project summaries map\St. Helena Island Vac Truck- Tombee Road Map#3_2018-309



Project: St. Helena
Island Vacuum
Truck- Wards
Landing Road
Map #4

Activity: Routine/
Preventive
Maintenance

Project #:
2018-309

Township/SW Dist:
St. Helena Island/8

Completed:
November 2017

Legend

Drainage Type

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

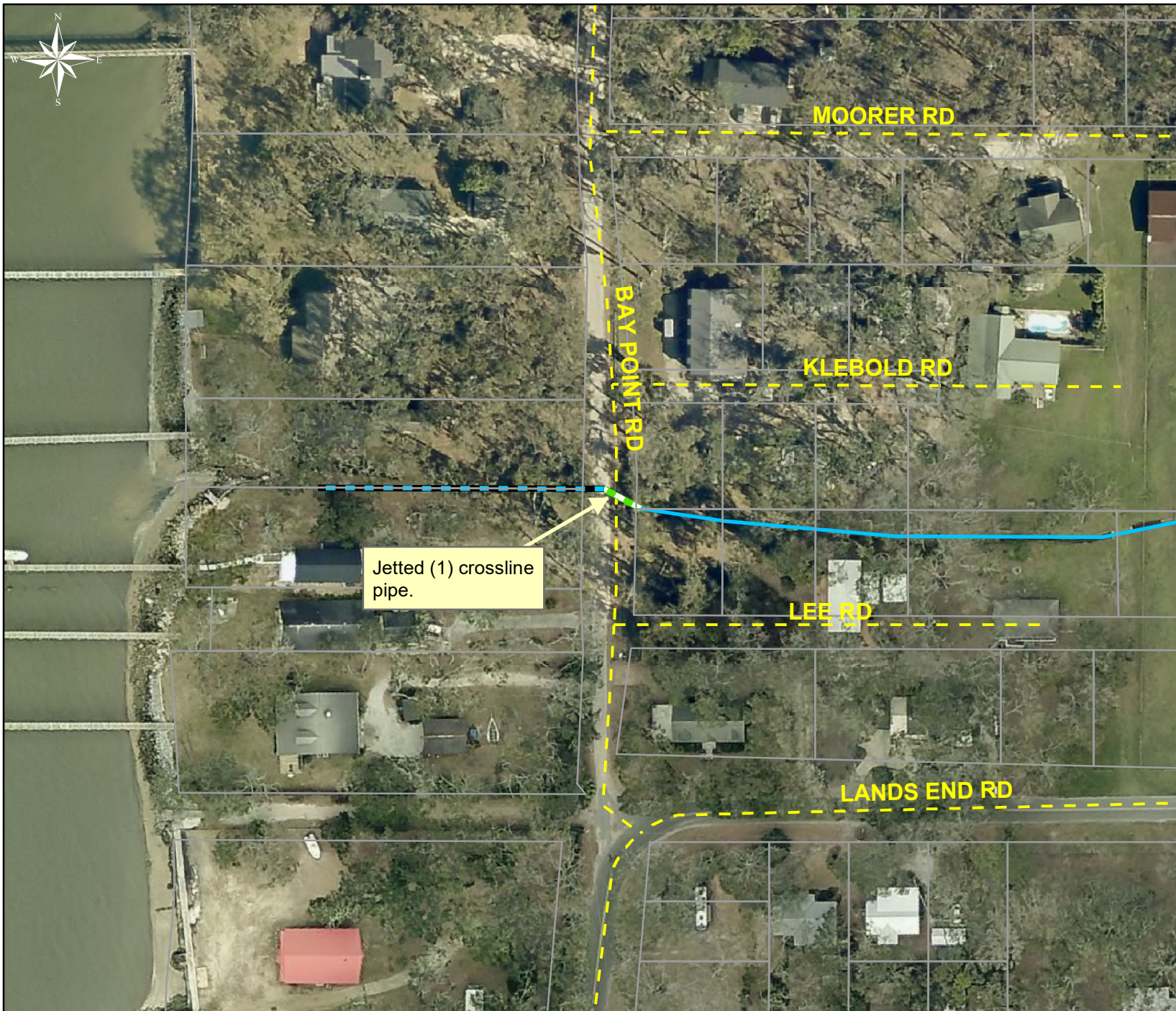
0 60 120 240 360 480
Feet

1 inch = 250 feet

Prepared By: BC Stormwater Management Utility

Date Print: 03/29/18

File: C:\project summaries map\St. Helena Island Vac Truck- Wards Landing Rd Map #4_2018-309



Project: St. Helena
Island Vacuum
Truck- Bay Point
Road
Map #5

Activity: Routine/
Preventive
Maintenance














Project #:
2018-309

Township/SW Dist:
St. Helena Island/8

Completed:
November 2017

Legend

Drainage Type

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

0 25 50 100 150 200
Feet

1 inch = 100 feet

Prepared By: BC Stormwater Management Utility

Date Print: 06/25/18

File: C:\project summaries map\St. Helena Island Vac Truck- Bay Point Rd Map #5_2018-309



Project: St. Helena
Island Vacuum
Truck- Renell
Road
Map #6

Activity: Routine/
Preventive
Maintenance

Project #:
2018-309

Township/SW Dist:
St. Helena Island/8

Completed:
November 2017

Legend

Drainage Type

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

0 40 80 160 240 320
Feet

1 inch = 170 feet

Prepared By: BC Stormwater Management Utility

Date Print: 06/25/18

File: C:\project summaries map\St. Helena Island Vac Truck- Renell Rd Map #6_2018-309



Project: St. Helena
Island Vacuum
Truck- Lands End
Road
Map #7

Activity: Routine/
Preventive
Maintenance

Project #:
2018-309

Township/SW Dist:
St. Helena Island/8

Completed:
November 2017

Legend

Drainage Type

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

0 40 80 160 240 320
Feet

1 inch = 170 feet

Prepared By: BC Stormwater Management Utility

Date Print: 03/29/18

File: C:\project summaries map\St. Helena Island Vac Truck- Lands End Road Map #7_2018-309



Project: St. Helena
Island Vacuum
Truck- Levant Byas
Road
Map #8

Activity: Routine/
Preventive
Maintenance

Project #:
2018-309

Township/SW Dist:
St. Helena Island/8

Completed:
November 2017

Legend

Drainage Type

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

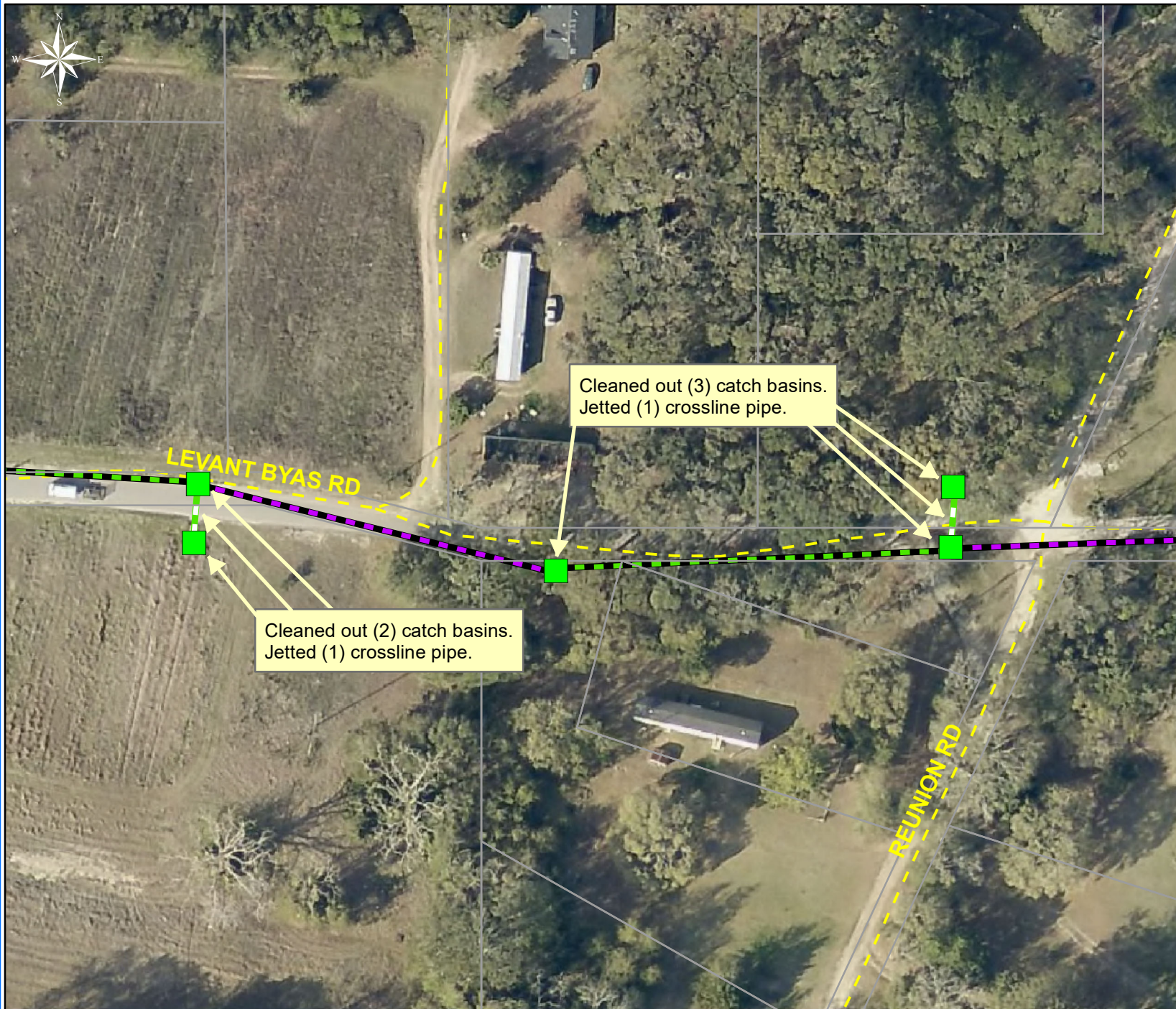
0 25 50 100 150 200
Feet

1 inch = 100 feet

Prepared By: BC Stormwater Management Utility

Date Print: 03/29/18

File: C:\project summaries map\St. Helena Island Vac Truck- Levant Byas Road Map #8_2018-309



Project: St. Helena
Island Vacuum
Truck- Levant Byas
Road
Map #9

Activity: Routine/
Preventive
Maintenance

Project #:
2018-309

Township/SW Dist:
St. Helena Island/8

Completed:
November 2017

Legend

Drainage Type

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

Prepared By: BC Stormwater Management Utility

Date Print:03/29/18

File:C:\project summaries map/St. Helena Island Vac Truck- Levant Byas Road Map #9_2018-309



Project: St. Helena
Island Vacuum
Truck- Mattis
Drive
Map #10

Activity: Routine/
Preventive
Maintenance

Project #:
2018-309

Township/SW Dist:
St. Helena Island/8

Completed:
November 2017

Legend

Drainage Type

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

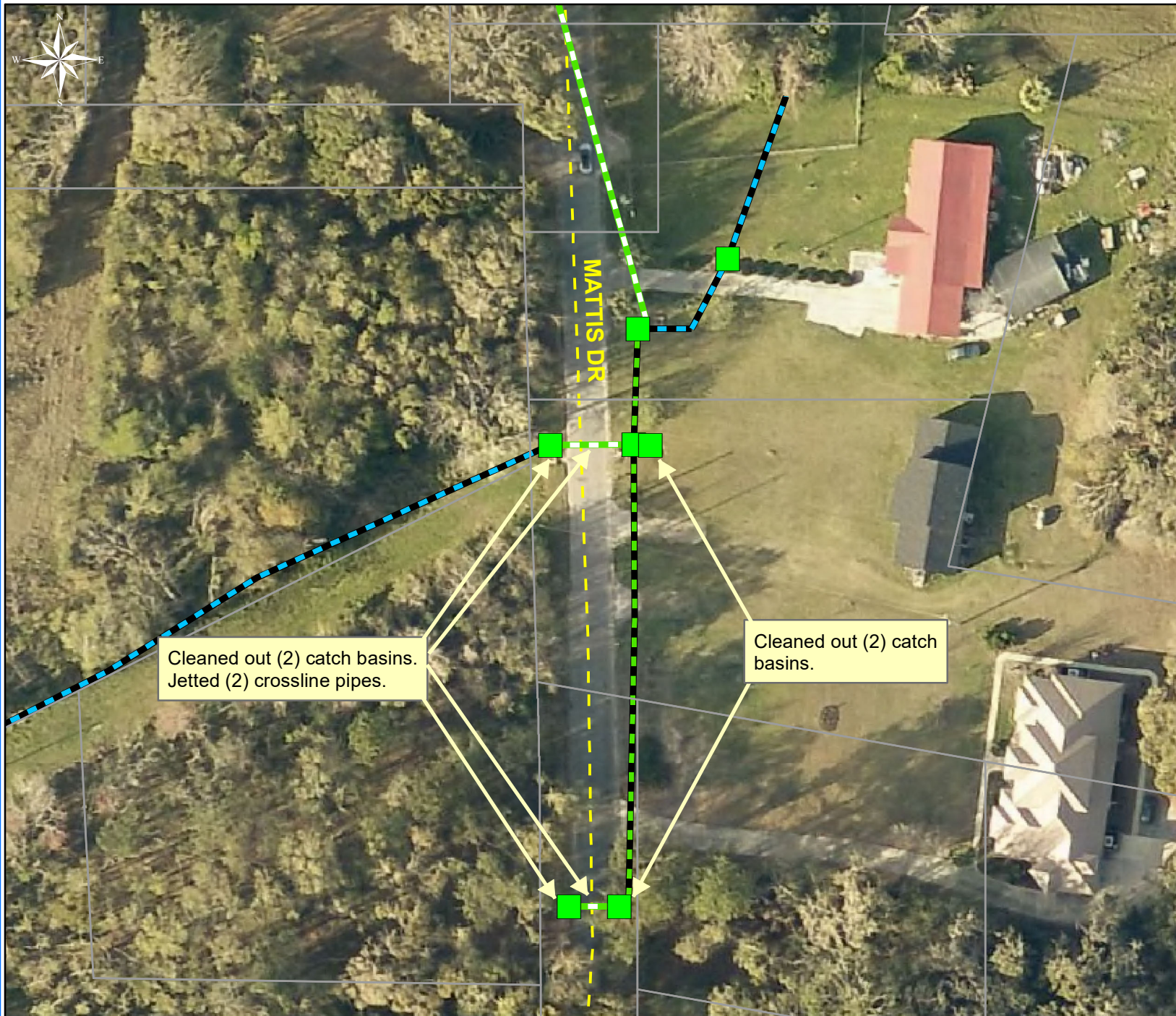
0 50 100 200 300 400
Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print: 03/29/18

File: C:\project summaries map\St. Helena Island Vac Truck- Mattis Drive Map #10_2018-309



Project: St. Helena
Island Vacuum
Truck- Mattis
Drive
Map #11

Activity: Routine/
Preventive
Maintenance

Project #:
2018-309

Township/SW Dist:
St. Helena Island/8

Completed:
November 2017

Legend

Drainage Type

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

0 15 30 60 90 120
Feet

1 inch = 67 feet

Prepared By: BC Stormwater Management Utility
Date Print: 03/29/18

File: C:\project summaries map\St. Helena Island Vac Truck- Mattis Drive Map #11_2018-309



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Gumwood Drive

Activity: Routine/Preventive Maintenance

Duration: 12/07/17-12/14/17

Narrative Description of Project:

Project improved 595 L.F. of drainage system. Cleaned out 595 L.F. of roadside ditch.

2018-540 / Gumwood Drive	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
HAUL / Hauling	15.0	\$334.05	\$141.30	\$94.08	\$0.00	\$216.30	\$785.73
RSDCL / Roadside Ditch - Cleanout	45.0	\$1,082.40	\$283.04	\$42.98	\$0.00	\$616.35	\$2,024.77
UTLOC / Utility locates	1.0	\$24.70	\$0.00	\$0.00	\$0.00	\$13.23	\$37.93
2018-540 / Gumwood Drive Sub Total	61.5	\$1,452.05	\$424.34	\$137.06	\$0.00	\$845.88	\$2,859.32
Grand Total	61.5	\$1,452.05	\$424.34	\$137.06	\$0.00	\$845.88	\$2,859.32

Before



During



After





Project: Gumwood Drive

Activity: Routine/
Preventive
Maintenance

Project #:
2018-540

Township/SW Dist:
Lady's Island/7

Completed:
December 2017

Legend

Drainage Type

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

0 50 100 200 300 400
Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility
Date Print: 04/25/18
File: C:\project summaries map\Gumwood Drive_2018-540



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Rice Road

Activity: Routine/Preventive Maintenance

Duration: 03/27/18-03/29/18

Narrative Description of Project:

Installed (1) driveway pipe.

2018-592 / Rice Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
DPINS / Driveway Pipe - Installed	20.0	\$431.60	\$142.72	\$253.94	\$0.00	\$214.65	\$1,042.91
HAUL / Hauling	11.0	\$244.97	\$103.62	\$516.78	\$0.00	\$158.62	\$1,023.99
PP / Project Preparation	15.0	\$334.15	\$18.00	\$18.32	\$0.00	\$214.65	\$585.12
2018-592 / Rice Road Sub Total	46.5	\$1,021.62	\$264.34	\$789.04	\$0.00	\$587.92	\$2,662.91
Grand Total	46.5	\$1,021.62	\$264.34	\$789.04	\$0.00	\$587.92	\$2,662.91

Before

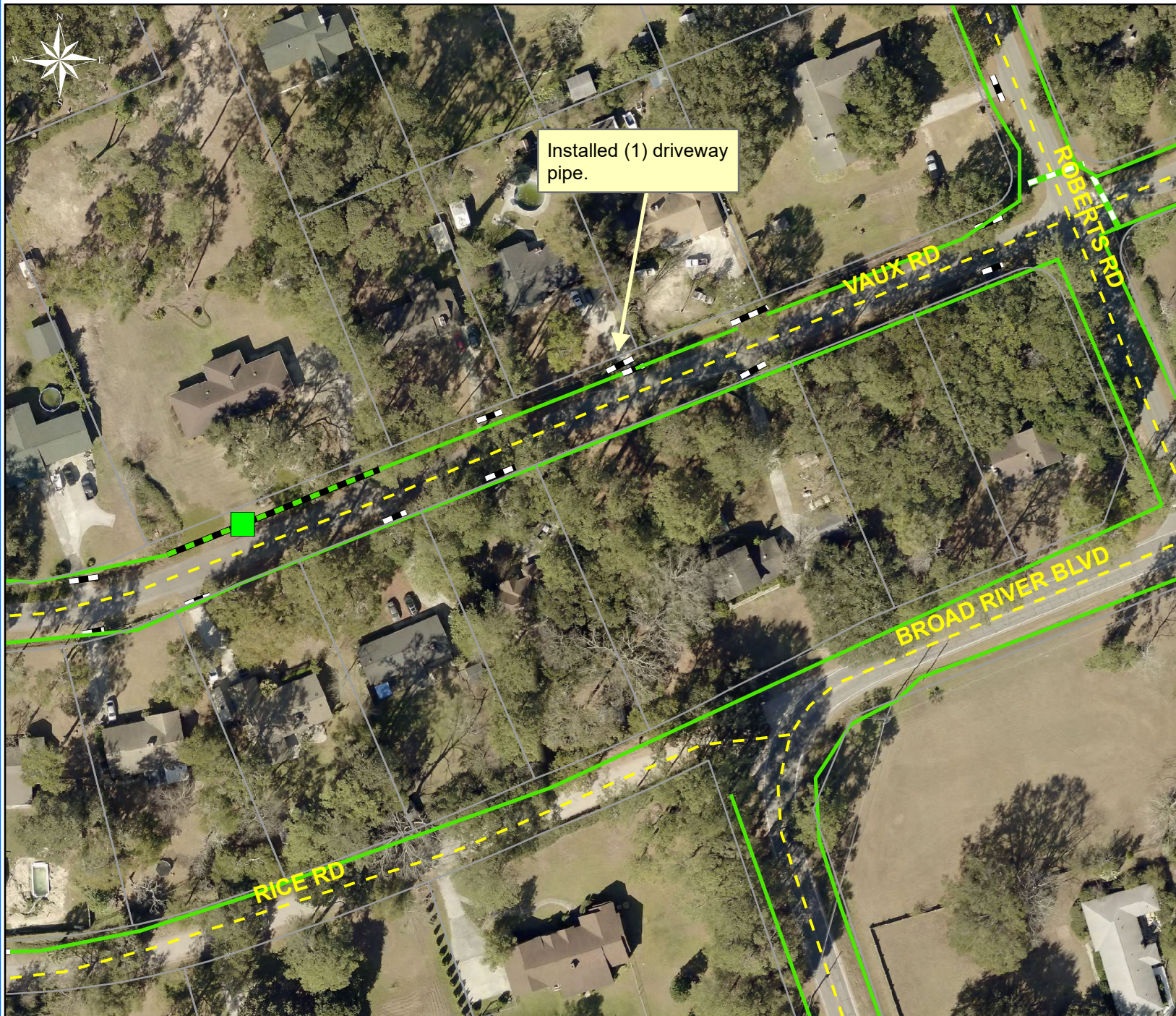


During



After





Project: Rice Road

Activity: Routine/
Preventive
Maintenance

Project #:
2018-592

Township/SW Dist:
Port Royal Island/6

Completed:
March 2018

Legend

Drainage Type

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

0 25 50 100 150 200
Feet

1 inch = 100 feet

Prepared By: BC Stormwater Management Utility
Date Print: 06/21/18
File: C:\project summaries map\Rice Road_2018-592



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Gamecock Way Channel #1

Activity: Routine/Preventive Maintenance

Duration: 11/28/18-03/07/18

Narrative Description of Project:

Project improved 920 L.F. of drainage system. Cleaned out 920 L.F. of channel.

2018-536 / Gamecock Way Channel #1	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
CCO / Channel - cleaned out	55.0	\$1146.55	\$202.62	\$77.86	\$0.00	\$535.20	\$1962.23
HAUL / Hauling	5.0	\$111.35	\$47.10	\$29.77	\$0.00	\$72.10	\$260.32
2018-536 / Gamecock Way Channel #1 Sub Total	60.5	\$1,268.80	\$249.72	\$107.63	\$0.00	\$607.30	\$2,233.44
Grand Total	60.5	\$1,268.80	\$249.72	\$107.63	\$0.00	\$607.30	\$2,233.44

Before

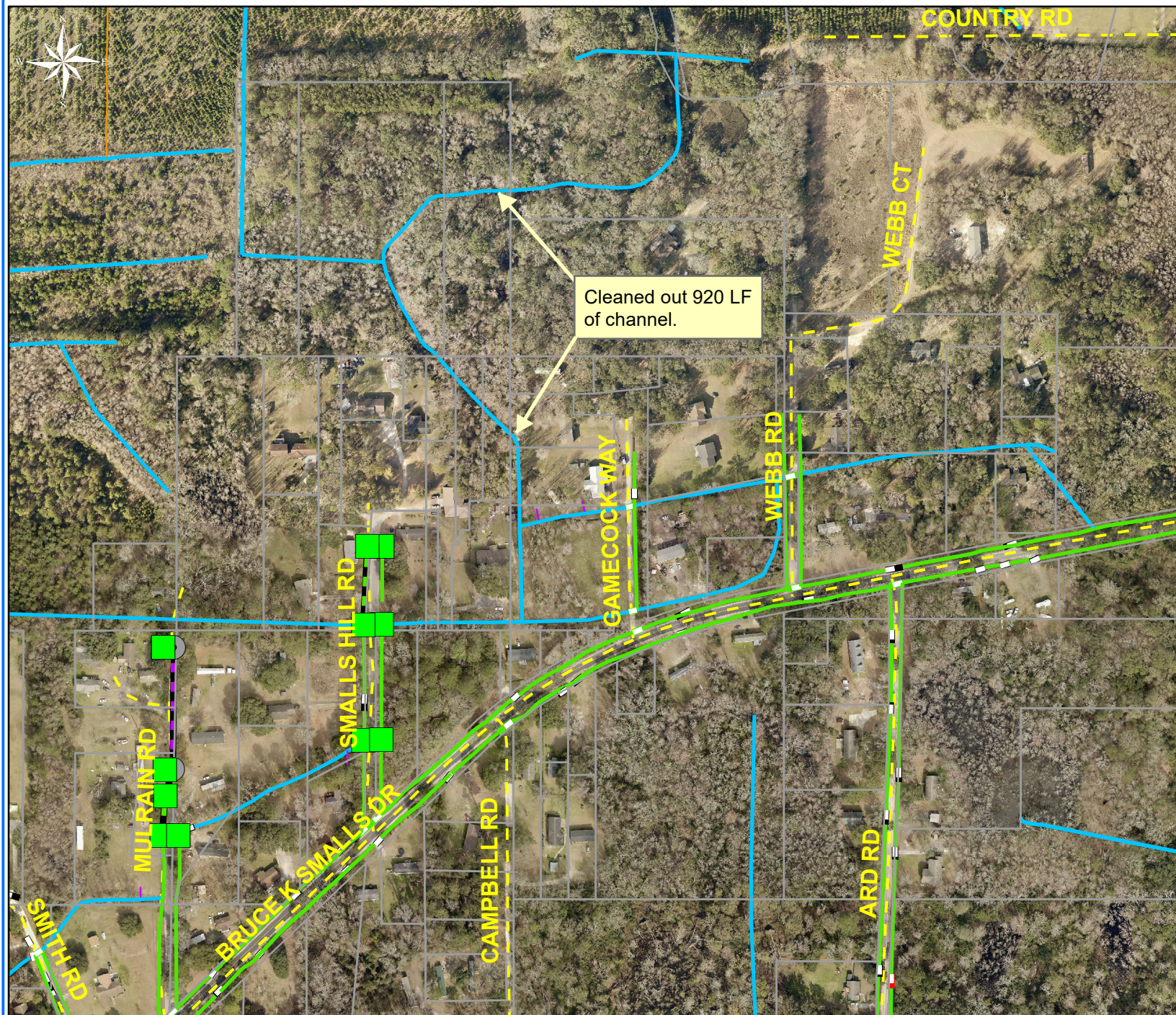


During



After





Project: Gamecock
Way Channel #1

Activity: Routine/
Preventive
Maintenance














Project #:
2018-536

Township/SW Dist:
Port Royal Island/6

Completed:
March 2018

Legend

Drainage Type

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

0 80 160 320 480 640
Feet

1 inch = 330 feet

Prepared By: BC Stormwater Management Utility

Date Print: 06/25/18

File: C:\project summaries map\Gamecock Way Channel #1_2018-536



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Candy Johnson Drive Channel #1

Activity: Routine/Preventive Maintenance

Duration: 02/07/2018

Narrative Description of Project:

Project improved 646 L.F. of drainage system. Cleaned out 646 L.F. of channel.

2018-571 / Candy Johnson Drive Channel #1	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
CCO / Channel - cleaned out	30.0	\$607.80	\$110.31	\$29.82	\$0.00	\$376.50	\$1124.43
HAUL / Hauling	10.0	\$217.90	\$94.20	\$35.70	\$0.00	\$0.00	\$347.80
UTLOC / Utility locates	0.5	\$12.35	\$0.00	\$0.00	\$0.00	\$6.62	\$18.97
2018-571 / Candy Johnson Drive Channel #1 Sub Total	41.0	\$848.95	\$204.51	\$65.52	\$0.00	\$383.12	\$1,502.09
Grand Total	41.0	\$848.95	\$204.51	\$65.52	\$0.00	\$383.12	\$1,502.09

Before



During



After





Project: Candy
Johnson Drive
Channel #1

Activity: Routine/
Preventive
Maintenance














Project #:
2018-571

Township/SW Dist:
St. Helena Island/8

Completed:
February 2018

Legend

Drainage Type

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

0 50 100 200 300 400
Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print: 06/25/18

File: C:\project summaries map\Candy Johnson Drive Channel #1_2018-571



**BEAUFORT COUNTY
STORMWATER UTILITY**

120 Shanklin Road

Beaufort, South Carolina 29906

Voice (843) 255-2805 Facsimile (843) 255-9436



September 12, 2018

Stormwater Manager's Report for the Stormwater Utility Board Meeting

Utility Update

1. Southern Lowcountry Regional Board (SoLoCo)
 - a) Nothing new to report.
 - b) See Regionalization below.
2. Regionalization
 - a) Regional Stormwater Design Standard and Model Ordinance Project - The City of Beaufort has verbally committed to the project. Discussions with the Town of Port Royal continue but we do not have any decision from them. The County is drafting MOA for each participating municipality for their signature. Kick off meeting for the project is scheduled for September 20, 2018.
 - b) Regionalization of programs – No action. This is pending additional discussion after the Reg. SW Std. is completed.
3. Staffing in County Public Works and Stormwater – After evaluation of workload and discussion on steps needed to become more proactive with compliant response and scheduled, Staff recommended to the Interim County Administrator to create two new superintendent positions. One of these new superintendents will be in the Stormwater Infrastructure department. The purpose and goal of this position is complaint and data management. This person will solely focus on keeping the status of complaints and work orders update, interaction with complaints, and reporting data to management. The position is equal in skill and pay to the existing superintendent, who will focus efforts on operations and crew personnel management.
4. New staff – The County hired a 4th Stormwater Inspector. Amber Woods comes to the County from the City of Bowling Green, KY as an intern with their MS4 program. Her experience and knowledge of water quality and monitoring will be a great addition to our team. She started work August 6th.
5. StormCon 2018 – Staff member Katie Herrera attended the annual conference. As a result of contacts made at the event, Beaufort County has been awarded a free BMP from a vendor. We are looking for a highly visible site to install the product and demonstrate its function.
6. SCASM – Staff attended the 3rd quarter meeting on September 6. The theme / topic of the

meeting was using technology for MS4 management. Sessions included drone use in mapping and inspections and permitting / data management software.

7. Special projects – Staff has begun research on the various topics provided by the Board for future meetings:
 - a) Superfunds and other monitored sites – DHEC staff have agreed to present at today's meeting.
 - b) Military Site's Stormwater management – Staff has made contact with representatives at MCAS, PI, and Naval Hospital. Larson visited the MCAS on September 5th. Site visit for the other two sites have not been scheduled at this time.
 - c) Living shorelines – No action at this time.
 - d) Other ideas?

Monitoring Update

1. Lab Update (From Dr. Alan Warren and Lab Manager Danielle Mickel)
 - a) Beaufort County:
 - i. Received samples on 8/21 from an alleged illicit. This sample was analyzed for metals, nutrients, in-situ, and fecal and will be resampled for fecal on 9/4/18.
 - ii. Sampled and analyzed water from Okatie Pond Gold and Bold filter on 8/21/18 for fecal/ e.coli, in-situ, metals, and nutrients (including o-phosphate).
 - iii. Continued analysis of Walmart Pond (Bluffton-278) which began on 6/12/18 and occurs every other week.
 - iv. Port Royal
 1. requested another collection and analysis of their Cypress Wetlands. This is to occur in September for both a wet and dry event to coincide with previous collection.
 2. requested collection and analysis in the port redevelopment area. This will occur quarterly for wet events immediately.
 - v. MS4 third quarter has started.
 - b) USCB Lab:
 - i. New hire started (Hamp Simkins) on 8/13/18 and proceeding to train.
 - ii. Accepting weekly sample from Water Oak Utility for E.coli.
 - iii. Exploration of new TKN method approved for state certification.
 - iv. Certification Upkeep-including review of QA/QC, logbooks, COC's.
 - v. On-going efforts to obtain additional certification; no new certs obtained during this Qtr.
 - vi. New laboratory management system is to launch in September.
 - c) Town of Bluffton:
 - i. Continue with weekly sample analysis.
 - ii. Additional bi-monthly nutrient (T-N, T-P) parameter analysis for NRP-pond site.
 - iii. 3rd Qtr MS4 has finished.
 - d) Palmetto Bluff:
 - i. Site visits in Palmetto Bluff for new hire.
 - e) GEL-HHI:
 - i. Analysis for Hilton Head Island E.coli samples 4x/Qtr, including data

reduction/reporting, and invoicing.

2. Monitoring Plan updates – The final draft is being reviewed internally by staff and with UACB Lab staff. We are planning for an October implementation.

Stormwater Implementation Committee (SWIC) Report

1. The SWIC has not met in the last month. They will be meeting as part of the Reg. SW Std. project kick off meeting September 20.

Stormwater Related Projects

1. Okatie West / SC 170 Widening Retrofit (Construction = \$993,048, CO#1 Design \$8,000, CO#1 &2 Const. \$25,739) Construction is complete; we still have a few punch list items to fix. Monitoring has begun. The first round of samples showed very good bacteria removal numbers from both the pond and the Bold & Gold filter. Analysis of metals and nutrients gave uncertain results; follow up samples will confirm or dismiss any potential problems. The final grant report was submitted on August 31. A webinar sponsored by Alliance Consulting Engineers was held on August 31 and featured the Bold & Gold installation.
2. Wallace Road – SCDOT approval and encroachment permit for pending.
3. Administration Building Parking Lot and SCDOT pipe failures – Construction began on the pipe repair on September 4. Work is at night at the direction of County Council.
4. Easements – Staff is working on numerous easement requests and meets monthly to review status. Several condemnations are still being pursued using outside legal counsel. Actions on two items are on today's agenda.
5. Complaints – See comments under Utility Update.
6. Alljoy subwatershed flooding – At the urging of multiple residents and elected officials for the area, staff has begun to plan for a regional study of the flooding issues in the lower (east) portion of the Alljoy area. It has been plagued with flooding problems varying from perceived lack of conveyance and recorded high tide events. This project is outside of the current CIP plan, it was not contemplated in the management plan update, and is currently not funded.

Professional Contracts Report

1. CIP FY 18 Grouping Stormwater Projects – (Design - Ward Edwards \$202,000, Andrews Engineering \$560,490, Const. est. \$5,512,900) – All projects are in early design phase. Concept plans are scheduled to be ready in September. Next step will be authorizing final

design and permitting. No additional update at this time.

Regional Coordination

1. Factory Creek Watershed Regional Detention Basin “Phase I” & Academy Park Subdivision (Design Cost \$49,873, Tree Mitigation Cost \$18,200 & \$18,200, Construction Cost by the Developer) – Construction is ongoing. No additional update at this time.
2. Factory Creek Watershed Regional Detention Basin “Phase II” (Design Cost = \$63,390, Tree Mitigation Cost is pending, Construction Cost by the Developer) – Final stage is under construction. No additional update at this time.
3. Town of Bluffton and Beaufort County Joint meetings on Sanitary Sewer in the May River watershed – BJWSA working on alternate costs. The joint committee of Beaufort County and Town of Bluffton Councils has not been set at this time. No additional update at this time.
4. Mossy Oaks Task Force – See Municipal Reports.
5. Graves Property / Pepper Hall Public / private partnership – Stormwater staff met with the developer’s engineer to go over conceptual Stormwater design on September 5.
6. SESWA Fall Conference – October 3-5, 2018 at the Marriott Convention Center, Palmetto Dunes, Hilton Head Island, SC. Registration is open. This conference is not limited to SESWA members. Any Board member or member of the development community that wants to attend, should go to www.seswa.org and watch for registration information. This is an excellent training at a reasonable cost, and local.
7. Charleston area MS4 group – No meeting this past month.
8. US 278 “super street” widening on Jenkins Island (Windmill Harbor area) – Stormwater and Traffic Engineering staff have been working with our consultant, HDR, to propose a water quality design for this section of proposed road widening to meet County standards. We are proposing the SCDOT own and maintain this system after construction. Approval from DOT is pending.
9. Battery Creek 391 Grant project – Due to an apparent email delivery failure, the County never received reimbursement requests from the City for the jointly funded project along Old Jericho Road (The Gray Pond project). These invoices were supposedly sent in January and July 2017. The total amount due is \$205,136.92. Not realizing reimbursement was not complete, the County closed the purchase orders at the end of FY 2018 and returned the funds to the Stormwater Reserve. The City contacted the County in August 2018 to follow up on these unpaid invoices. Per the MOA with the City on this project, this amount is now due. The County is processing payment.

Municipal Reports

1. Town of Hilton Head Island (From Jeff Netzing, Stormwater Manager and Brian Eber, MS4 Coordinator)
 - i. No information was available at the time of this report.
2. Town of Bluffton (From Kim Jones, Watershed Management Division Director)
 - i. [See attached report.](#)
 - ii. Regional ditch maintenance team meeting with the County and SCDOT representatives is set for September 20, 2018.
 - iii. County Staff attended the monthly May River WAPAC meeting on August 23. The main topic of discussion was the Town's sanitary sewer extension program.
3. City of Beaufort (From Neil Desai, Asst. Public Works Director)
 - i. Mossy Oaks Task Force – Next meeting is set for September 19th. The City was awarded a CDBG grant for \$1 million.
 - ii. No additional information was available at the time of this report.
4. Town of Port Royal (From Van Willis, Town Manager and Tony Maglione, consultant)
 - i. No information was available at the time of this report.

MS4 Report

1. Plan Review – [See the attached chart](#) for Beaufort County Stormwater staff plan review workload for the past 12 months.
2. Stormwater Permits – [See the attached chart](#) for Beaufort County Stormwater permits issued for the past 12 months.
3. Monthly Inspection summary - [See the attached chart](#) for Beaufort County Stormwater staff inspection, complaint, IDDE, and violations summary for the past 12 months.
4. BMP mapping update. [See attached chart.](#)
5. Public Education – Lowcountry Stormwater Partners (LSP), via Carolina Clear, continues to work on several initiatives towards public education and outreach. A quarterly meeting of all Partners was held on August 21. No additional information was available at the time of this report.
6. Construction permitting – Staff responded to questions from DHEC concerning the requested revision to the BMP Manual and our SWMP / MS4 permit to DHEC. We are still awaiting a response for approval or declining the changes.
7. Monitoring plan update – See Monitoring Update.

8. MS4 Statewide General permit – An invitation only group of MS4s met with DHEC representatives on Sept. 6 to discuss options for the reissuance of the General permit in 2019.
9. Statewide General permit for Construction – Nothing new to report.
10. 2015 WOTUS Rule and NACo recommendation for support to re-write – County Council Natural Resources Committee is considering a resolution to support NACo efforts to push for a remand and rewrite of the 2015 WOTUS rule. Currently, SC is 1 of 26 states that have successfully stayed the rule through legal action. The main focus of the new rule is to broaden the definition of Waters of the United States. SESWA has been lobbying against the new rule due to the potential impact on MS4 programs. Under the rule, Stormwater ditches and ponds hydraulically connected to navigable streams could be classified as WOTUS, limiting ability to perform O&M and CIP.

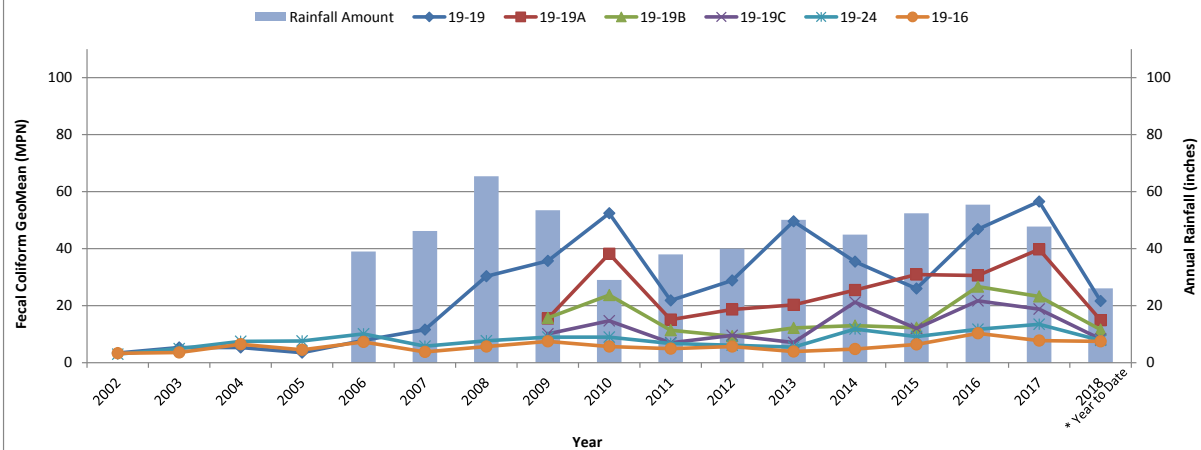
	19-19				19-19A				19-19B				19-19C				19-24				19-16			
	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018
	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)	Fecal Coliform (MPN)
December	110.0	79.0	1600.0		33.0	23.0	920.0		27.0	49.0	540.0		7.8	33.0	240.0		6.8	7.8	220.0		4.5	23.0	49.0	
November	NS	33.0	49.0		NS	13.0	33.0		NS	7.8	7.8		NS	14.0	31.0		NS	13.0	2.0		NS	33.0	2.0	
October	23.0	NS	22.0		49.0	NS	49.0		4.5	NS	33.0		23.0	NS	23.0		7.8	NS	6.8		4.5	NS	2.0	
September	46.0	23.0	17.0		17.0	110.0	7.8		9.3	23.0	11.0		17.0	13.0	4.5		23.0	4.5	2.0		4.5	7.8	1.8	
August	6.8	NS	79.0	70.0	17.0	NS	70.0	23.0	13.0	NS	21.0	13.0	13.0	NS	33.0	4.5	24.0	NS	33.0	7.8	4.0	NS	33.0	17.0
July	17.0	79.0	350.0	23.0	7.8	17.0	110.0	33.0	6.8	22.0	130.0	11.0	11.0	17.0	49.0	7.8	2.0	49.0	49.0	13.0	4.5	13.0	22.0	4.5
June	33.0	79.0	23.0	11.0	46.0	130.0	49.0	23.0	11.0	70.0	13.0	23.0	14.0	110.0	17.0	7.8	4.5	33.0	7.8	4.5	11.0	23.0	4.5	1.8
May	NS	70.0	17.0	17.0	NS	23.0	23.0	33.0	NS	49.0	7.8	17.0	6.8	49.0	2.0	13.0	6.8	14.0	23.0	23.0	23.0	17.0	4.5	13.0
April	1.8	23.0	7.8	33.0	33.0	23.0	23.0	13.0	17.0	13.0	4.5	17.0	17.0	13.0	7.8	17.0	13.0	7.8	13.0	49.0	17.0	1.8	4.5	17.0
March	170.0	33.0	350.0	22.0	130.0	33.0	11.0	21.0	49.0	33.0	33.0	4.5	17.0	17.0	13.0	11.0	13.0	11.0	13.0	7.8	6.8	7.8	33.0	9.3
February	13.0	23.0	13.0	17.0	14.0	17.0	7.8	7.8	1.8	13.0	13.0	17.0	1.8	11.0	9.3	17.0	7.8	6.8	4.5	2.0	2.0	1.8	1.8	7.8
January	79.0	110.0	95.0	13.0	79.0	33.0	79.0	2.0	49.0	49.0	31.0	4.5	33.0	17.0	49.0	2.0	17.0	7.8	27.0	1.8	7.8	17.0	33.0	4.5
Additional Samples																								
Additional Samples																								
Average Annual GeoMean	26.0	46.8	56.5	21.7	30.9	30.6	39.8	14.9	12.3	26.7	23.3	11.6	12.0	21.7	18.8	8.3	9.2	11.7	13.5	7.9	6.4	10.3	7.7	7.5
** Truncated GeoMetric Mean	37.0	37.0	44.0	40.0	21.0	30.0	36.0	30.0	11.0	16.0	20.0	21.0	11.0	16.0	16.0	15.0	7.0	9.0	10.0	10.0	4.0	6.0	7.0	7.0
** Truncated 90th Percentile	205.0	105.0	203.0	181.0	95.0	89.0	133.0	127.0	51.0	69.0	83.0	77.0	55.0	65.0	57.0	58.0	30.0	29.0	37.0	45.0	13.0	21.0	29.0	30.0

NS = No Sample

AS = Additional Samples

** Town staff calculations utilizing DHEC statistics

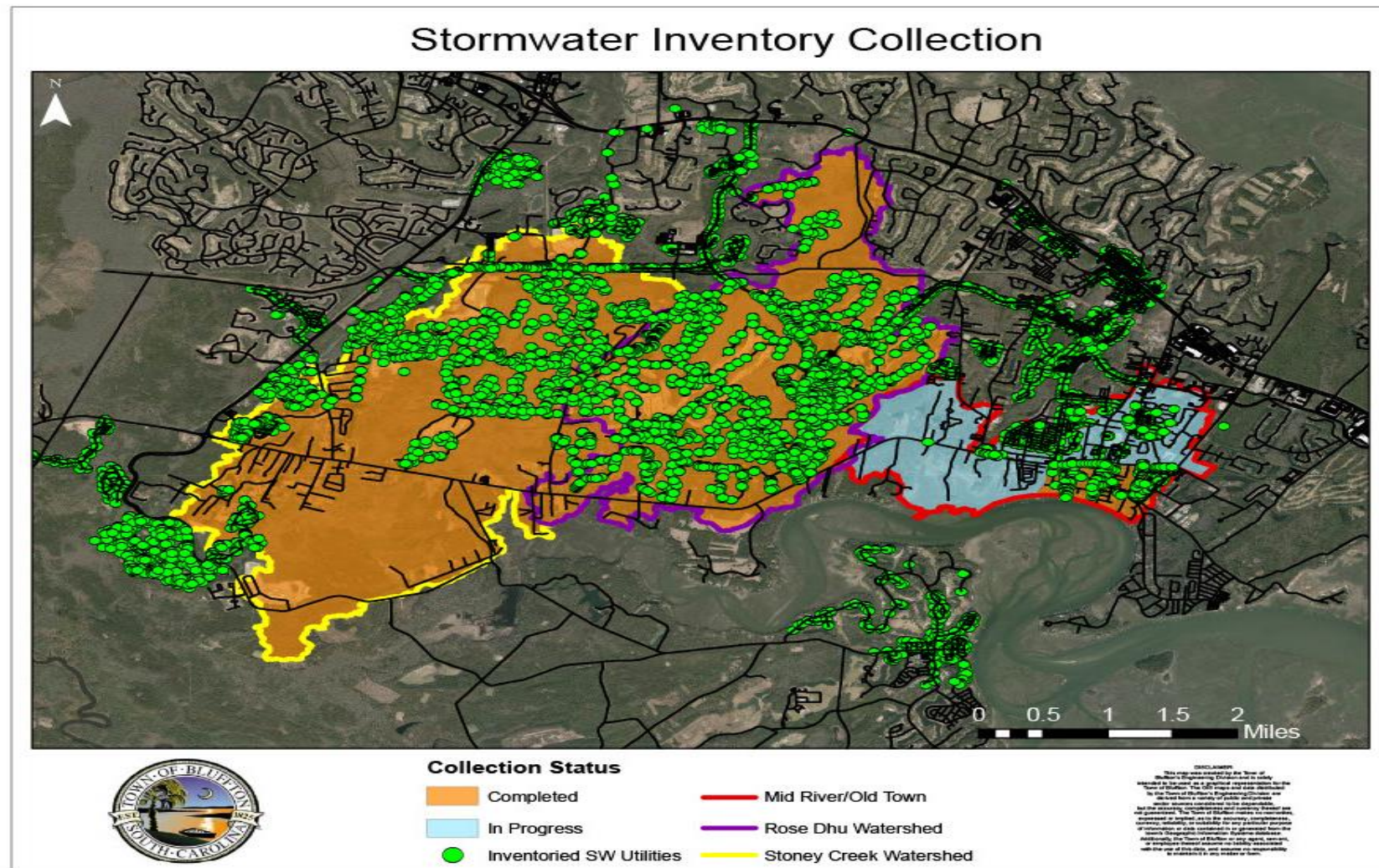
SC DHEC Shellfish Monitoring Stations Average Annual Fecal Coliform



ACTIVITY - POLICY	STATUS
May River Watershed Action Plan Update	To be completed with direction and input from Water Quality Technical Advisory Committee, May River Watershed Advisory Committee, and Town Council, public and staff. Action Plan Update is a FY19-20 priority of WAPAC and Council. WAPAC scope direction provided 2/22/18 to include watershed health indicators of bacteria, biotic & abiotic parameters and social/cultural/economic indicators. Staff met with SCDHEC to confirm hybrid 5R and traditional watershed-based plan approach will be accepted. To be initiated at start of FY19 with anticipated completion in early FY20.
Sewer Connection & Extension Policy	Council adopted the Sewer Connection & Extension Policy on 9/26/17. WAPAC proposed prioritization phases for sewer extension in Historic District for FY 19-23 and recommended revisions to Sewer Connection Ordinance on 2/22/18. Staff has initiated septic system maintenance education via outreach and with Lowcountry Stormwater Partners. Town Council considered WAPAC recommended amendments to Sewer Connection Program on 4/10/18. Will consider for 2nd & Final Reading upon Septic to Sewer Conversion Program establishment. Town Council Workshop of Septic to Sewer Conversion Program on 7/17/18. Ordinance and Program adoption anticipated 9/11/18.
ACTIVITY - PROJECTS	STATUS
Sanitary Sewer Extension	Buck Island/Simmons Road (BIS) Phases I, II, III and IV are completed. Toy Fields is completed. Six phases of sewer extension are proposed in the 5-year Capital Improvement Program. Current project updates are included in Engineering Consent Agenda under "Sewer & Water."
May River 319 Grant Phase 1 - New Riverside Pond (Grant award of \$483,500 in 2009)	Completed in 2013. Per water quality tests, a statistically significant reduction in fecal coliform bacteria concentration exists pre-pond versus post-pond. However, bacteria levels re-load prior to discharging into the May River, leading to additional BMP installation of Filtrex proprietary filter socks. Installed 12/12/17 to maintain bacteria reduction. Downstream failing septic system was located by Staff and reported to County & SCDHEC for remediation.
May River 319 Grant Phase 2 - Pine Ridge (Grant award of \$290,000 in 2011)	Completed in 2016. In post-construction monitoring phase to assess project efficacy.
May River 319 Grant Phase 3 - Town Hall Parking Retrofit (Grant award of \$231,350 in 2016)	EPA & DHEC permitted a workplan amendment for this grant award to include stormwater retrofits at Town Hall. Current project updates are included in Engineering Consent Agenda.
Stoney Creek Wetlands Restoration: Preliminary Design Phase	Wetlands restoration project with the goal to reduce stormwater volume reaching the May River. Conceptual design completed and approved by property owners. Current project updates are included in Engineering Consent Agenda.
May River Watershed Water Quality Model	Preliminary 2002 Palmetto Bluff Duck Pond Drainage area watershed model complete. Completed New Riverside BMP model for comparison to field observations. Rose Dhu Creek sub-watershed "Existing Conditions" portion of the Headwaters Water Quality Model is underway. Staff has included this project beginning in mid-FY19 following completion of the County Master Plan Update in April 2018.

ACTIVITY - FINANCIAL	STATUS
Additional Funding Opportunities	Exploring partnership opportunities with BJWSA for future sewer phases. WAPAC FY19-20 priority to assess Stormwater Utility Fee structure to support initiatives initiated 7/26/18.
ACTIVITY - PROGRAMS	STATUS
Public Outreach/Participation/Involvement (MS4 Minimum Control Measure #1 & 2)	Outreach and involvement efforts continue through county-wide partnership with Carolina Clear as Lowcountry Stormwater Partners - Neighbors for Clean Water, through local cleanups, civic group presentations, and the May River Watershed Action Plan Advisory Committee. Current updates are included in Engineering Consent Agenda and Attachment 3.
Infrastructure Mapping/GIS (MS4 Minimum Control Measure #3)	Data points continue to be collected with new development to meet MS4 requirements & populate water quality model. Current updates are included in Engineering Consent Agenda Attachment 4a.
Water Quality Monitoring Program (MS4 Minimum Control Measure #3)	<ol style="list-style-type: none"> 1. SCDHEC Shellfish monitoring results 2. Fecal coliform bacteria "hot spot" concentrations 3. Microbial Source Tracking of human sources of bacteria 4. Illicit Discharge investigation and monitoring 5. BMP efficacy monitoring 6. MS4 monitoring Current updates are included in Engineering Consent Agenda Attachments 1, 4b, 4c, and 4d.
Construction Site Stormwater Runoff Control Program (MS4 Minimum Control Measure #4)	Sediment and erosion control inspections with escalating enforcement response. Current updates are included in Engineering Consent Agenda Attachment 5.
Stormwater Plan Review & Related Activity Program (MS4 Minimum Control Measure #5)	SCDHEC delegated plan review-related activities. Current updates are included in Engineering Consent Agenda Attachment 6.
Ditch Inspection/Maintenance Program (MS4 Minimum Control Measure #6)	Continued coordination with SCDOT, Beaufort County and Town Public Works to inspect and maintain ditches within the Town's jurisdiction. Current updates are included in Engineering Consent Agenda Attachment 7 and under "Public Works."
Septic System Maintenance Program	FY18 funding is \$10,000 and administered by Growth Management via the Neighborhood Assistance Program (NAP). On-going assistance offered to Town residents regardless of financial status through Neighborhood Assistance Program. Current updates, as reported by NAP, are included in Engineering Consent Agenda Attachment 8.
Sewer Connection Program	In FY18 Council allocated \$200,000 for a Sewer Connection Program as well as \$10,000 for assistance to connect income-qualified individuals to existing sanitary sewer as part of the Neighborhood Assistance Program. Council adopted the Sewer Connection & Extension Policy at 9/26/17 meeting. CIP projects were prioritized as part of FY19 Budgeting Process. Sewer Connection Ordinance 1st Reading 4/10/18. Septic to Sewer Conversion Program discussed at Council's Quarterly Workshop on 7/17/18. Second & final Ordinance changes and Program adoption anticipated at 9/11/18.

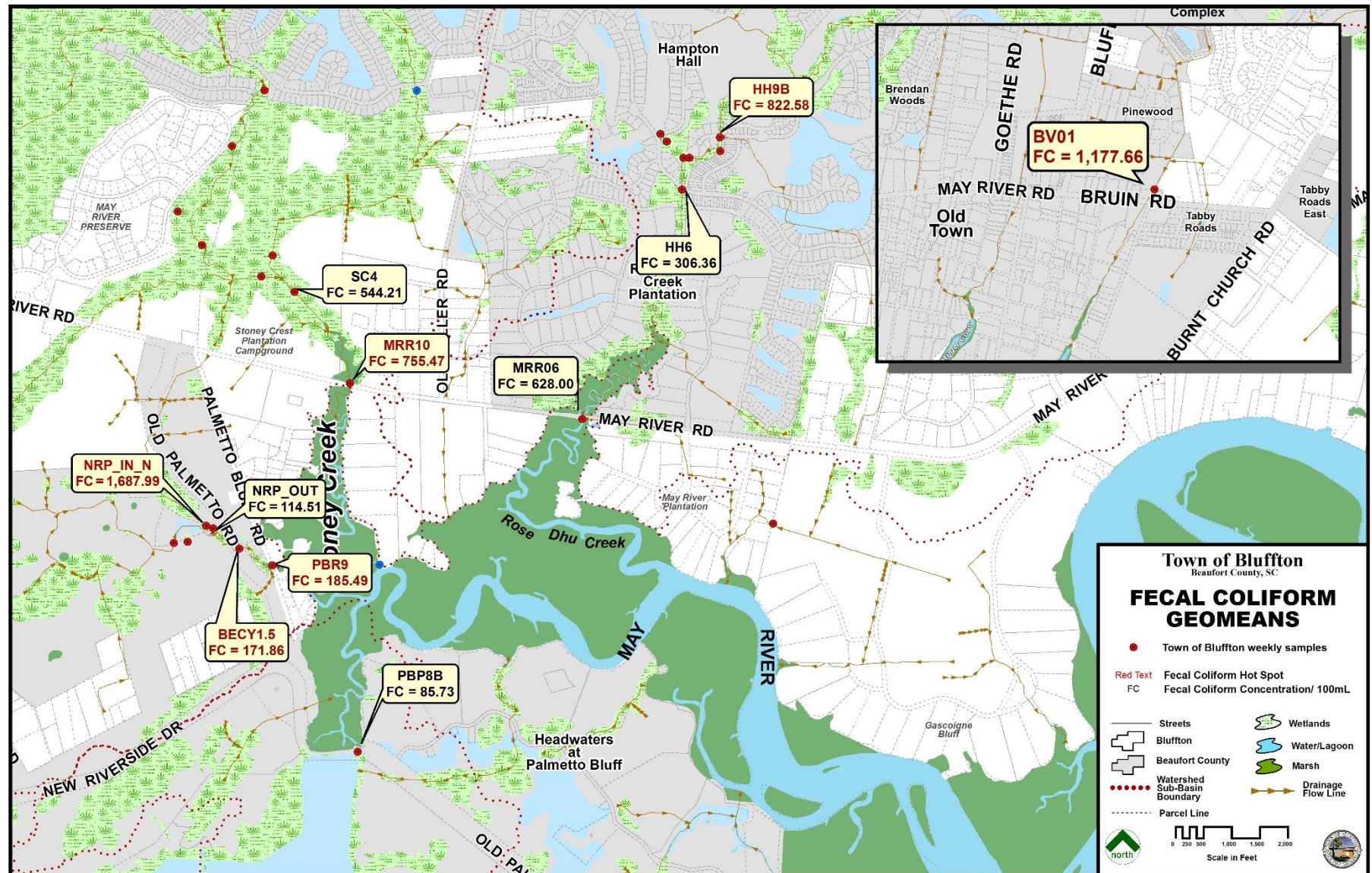
MS4 Minimum Control Measure #3 – IDDE (Illicit Discharge Detection & Elimination): Stormwater Infrastructure Inventory



Stormwater Infrastructure Inventory Collection Status

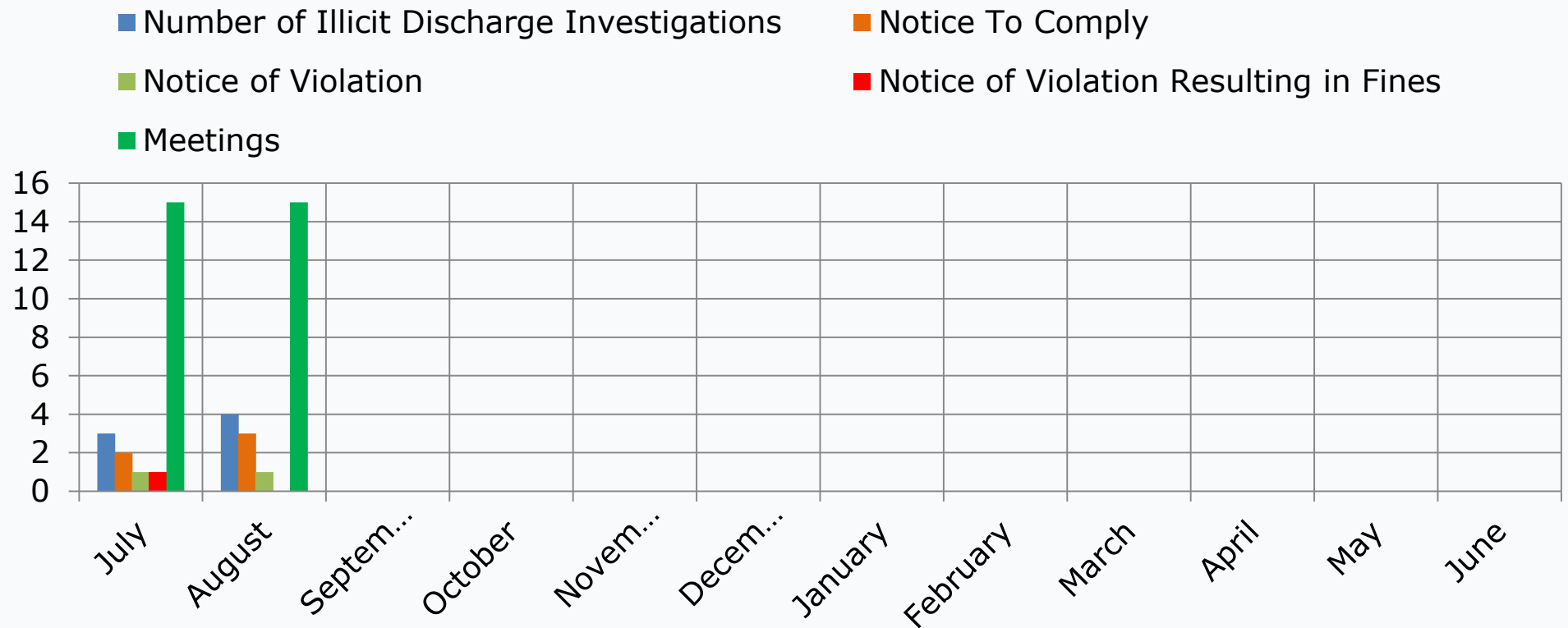
FY 2019 YTD Collection Totals	138
FY 2018 Collection Totals	3,777
FY 2017 Collection Totals	3,874

MS4 Minimum Control Measure #3 – IDDE: Fecal Coliform Concentrations Trend Map



fecal coliform geomeans work file 8/20/18

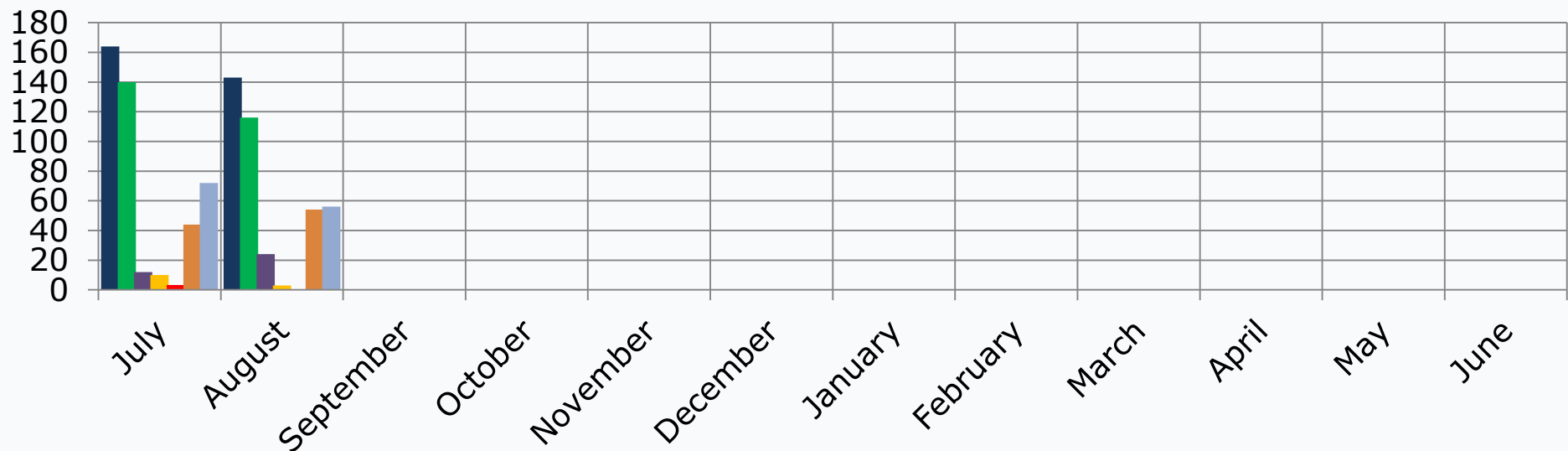
MS4 Minimum Control Measure #3 – IDDE: Illicit Discharge Investigations



	Number of Illicit Discharge Investigations	Number of Notices To Comply Issued	Number of Notices of Violation Issued	Number of NOV Enforcement Actions	Number of Meetings
FY 2019 YTD Totals	7	5	2	1	30
FY 2018 Totals	48	20	4	2	60
FY 2017 Totals	50	19	8	13	67

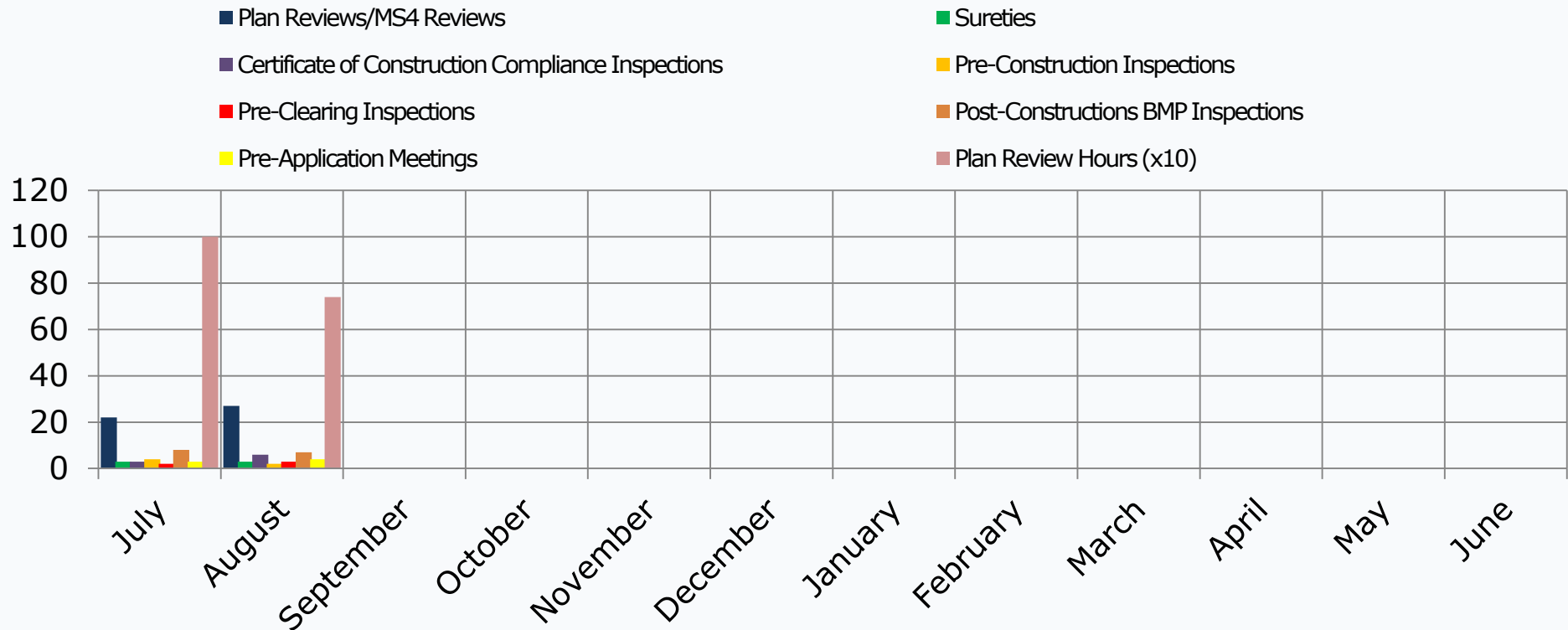
MS4 Minimum Control Measure #4 - Construction Site Stormwater Runoff Control

- Erosion & Sediment Control Inspections (E&SC)
- Number of Inspections Passed
- Number of Notice To Comply (NTC)
- Number of Notice of Violation (NOV)
- Number of Fines for Notice of Violation
- Number of Erosion & Sediment Control Meetings



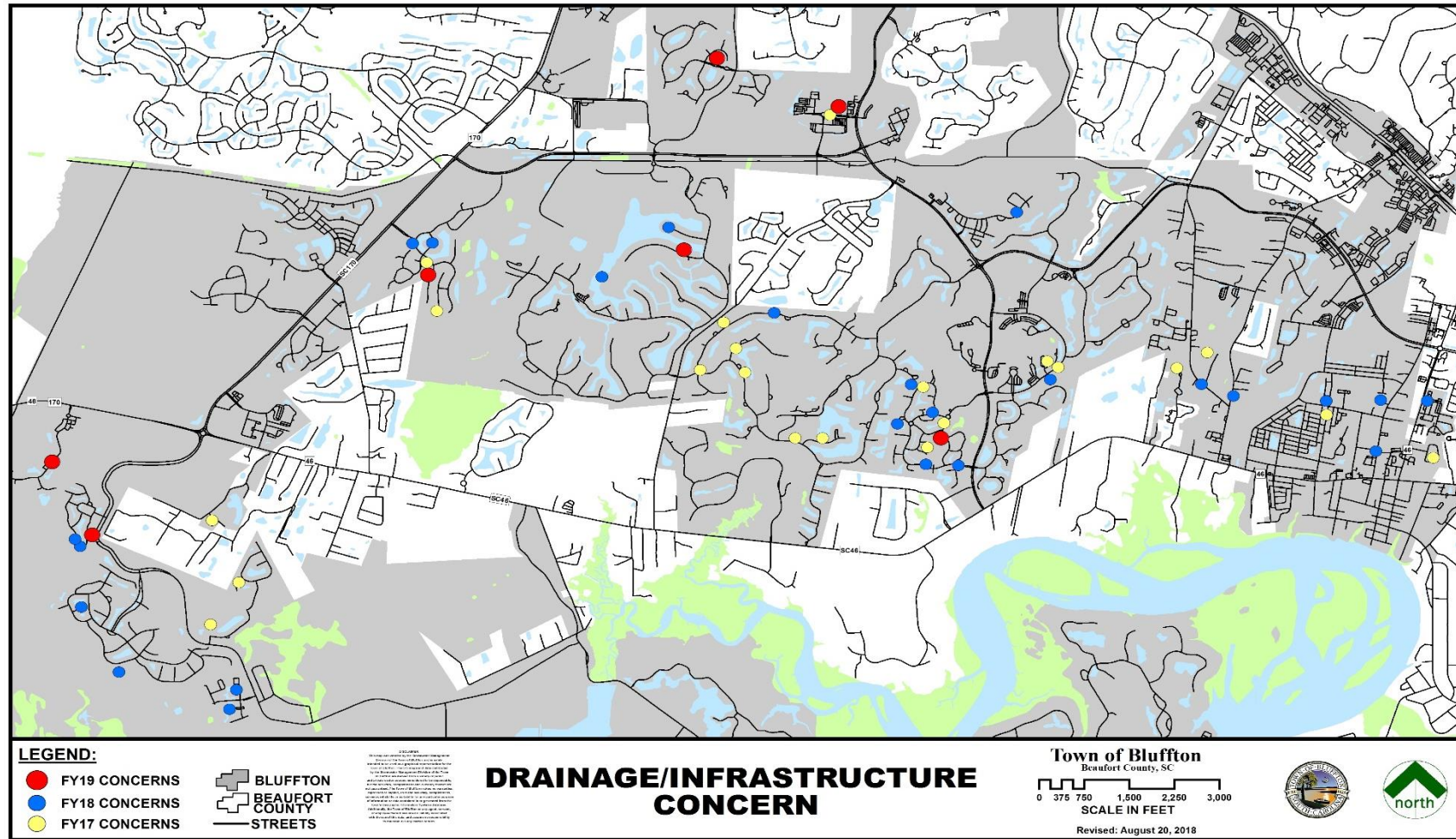
	Number of Sediment & Erosion Control Inspections	Number of Inspections Passed	Number of NTC Issued	Number of NOV's Issued	Number of NOV Enforcement Actions	Number of E&SC Meetings
FY 2019 YTD Totals	307	256	36	13	3	98
FY 2018 Totals	1,504	1,159	300	83	10	499
FY 2017 Totals	1,219	862	233	58	10	237

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



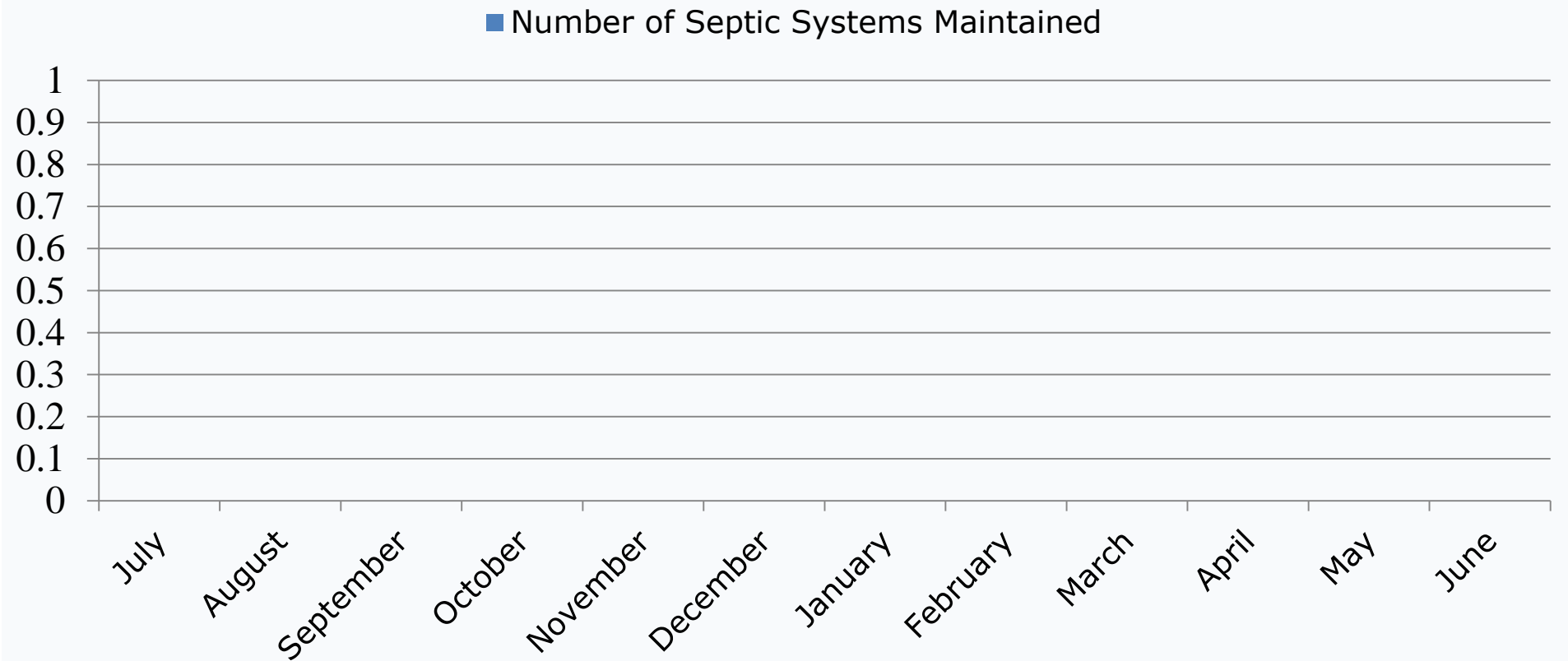
	Plan Reviews MS4 Reviews	Sureties	Certificate of Construction Compliance Inspections	Pre- Construction Meetings	Pre-Clearing Inspections	Post Construction BMP Inspections	Pre-Application Meetings	Total Plan Review Hours
FY 2019 YTD Totals	46	6	9	6	5	15	7	174 Hrs.
FY 2018 Totals	242	59	50	32	32	88	88	1,210 Hrs.
FY 2017 Totals	253	62	96	47	45	7	23	1,265 Hrs.

Citizen Drainage Concern Heat Map (Drainage, Maintenance and Inspections)



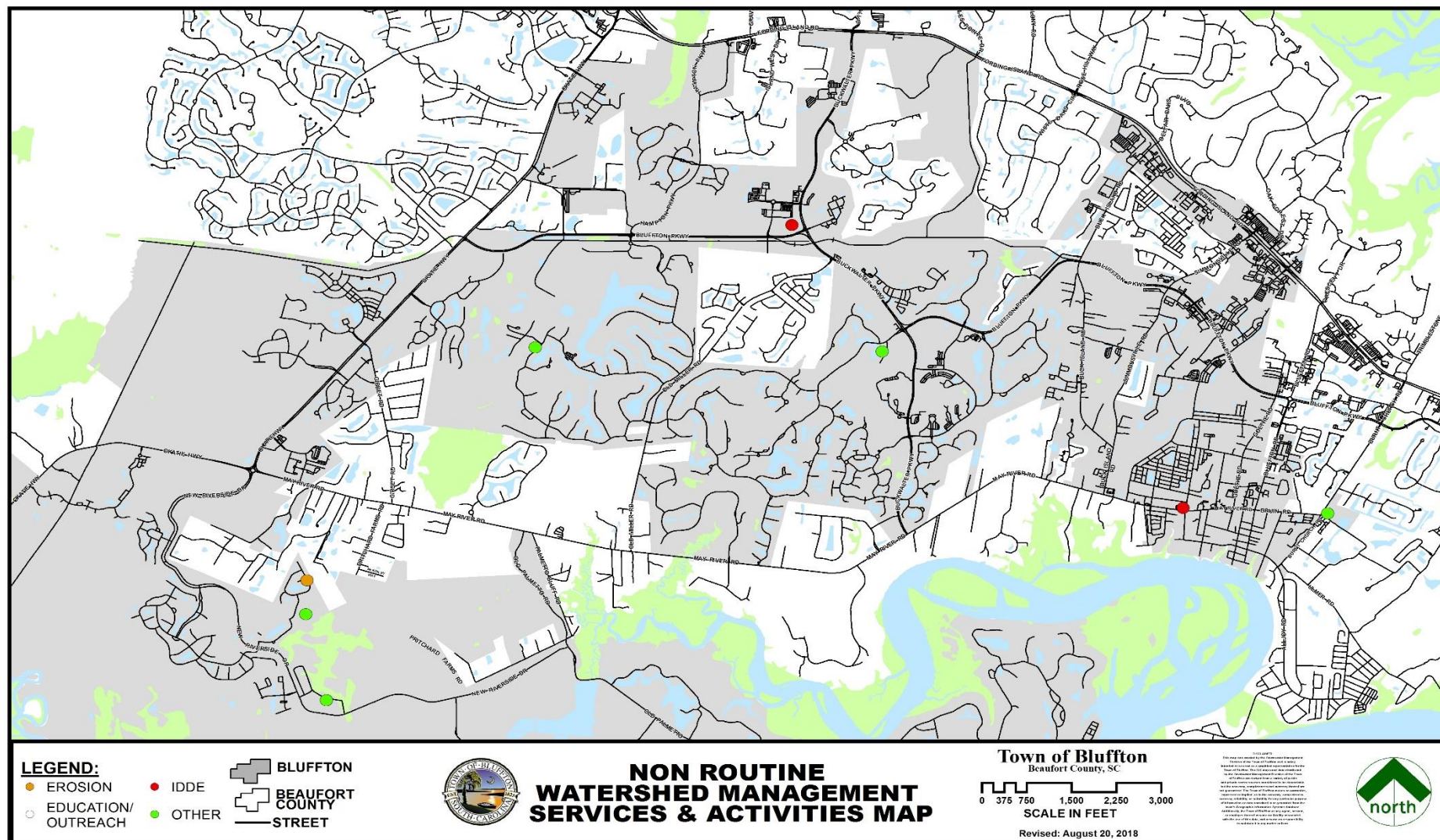
	Number of Drainage Concerns Investigated	Number of Meetings
FY 2019 YTD Totals	7	11
FY 2018 Totals	48	75
FY 2017 Totals	72	80

Septic System Maintenance Assistance



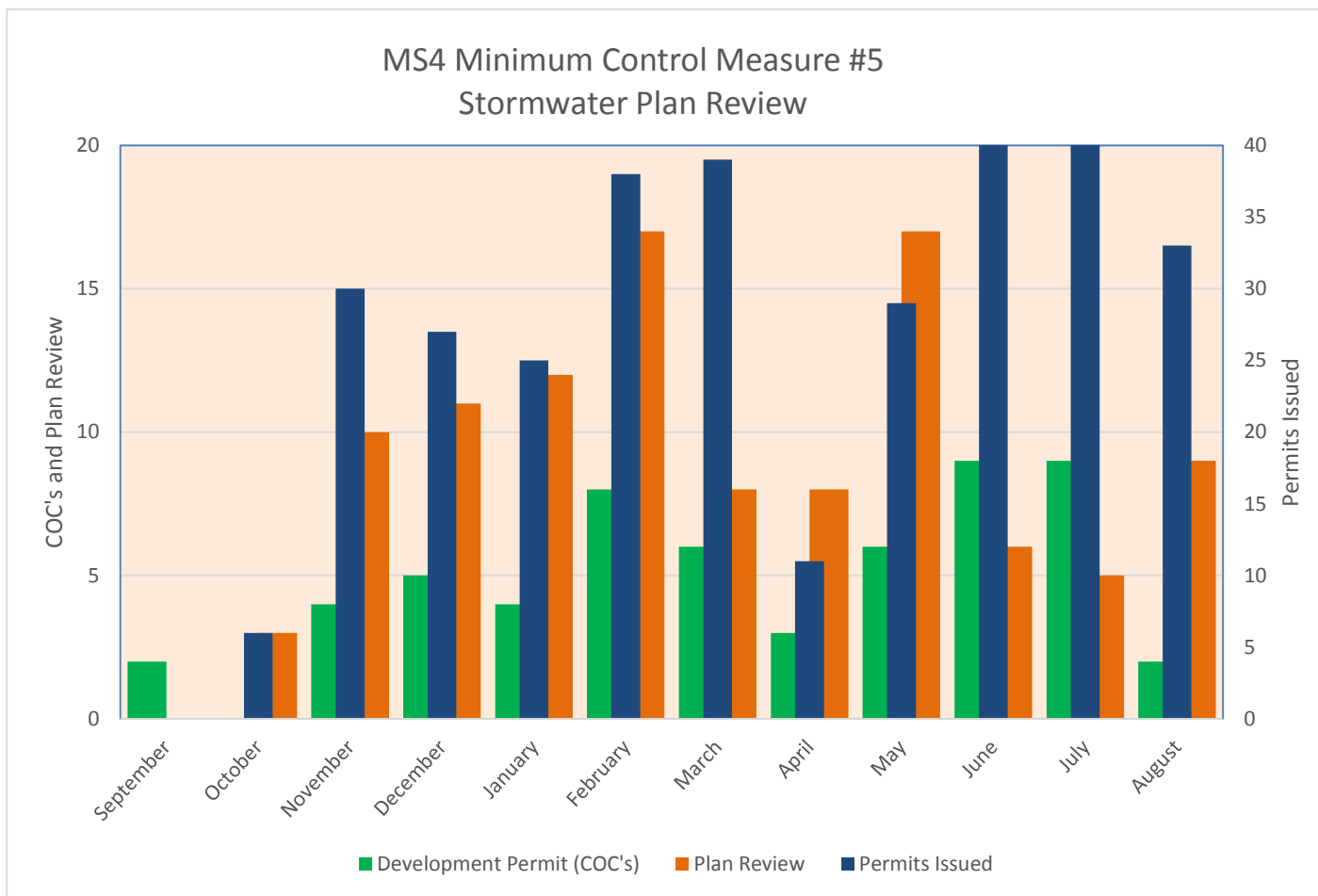
	Number of Septic Systems Maintained
FY 2019 YTD Totals	0
FY 2018 Totals	16
FY 2017 Totals	18

Citizen Request for Watershed Mngt. Services & Activities Map



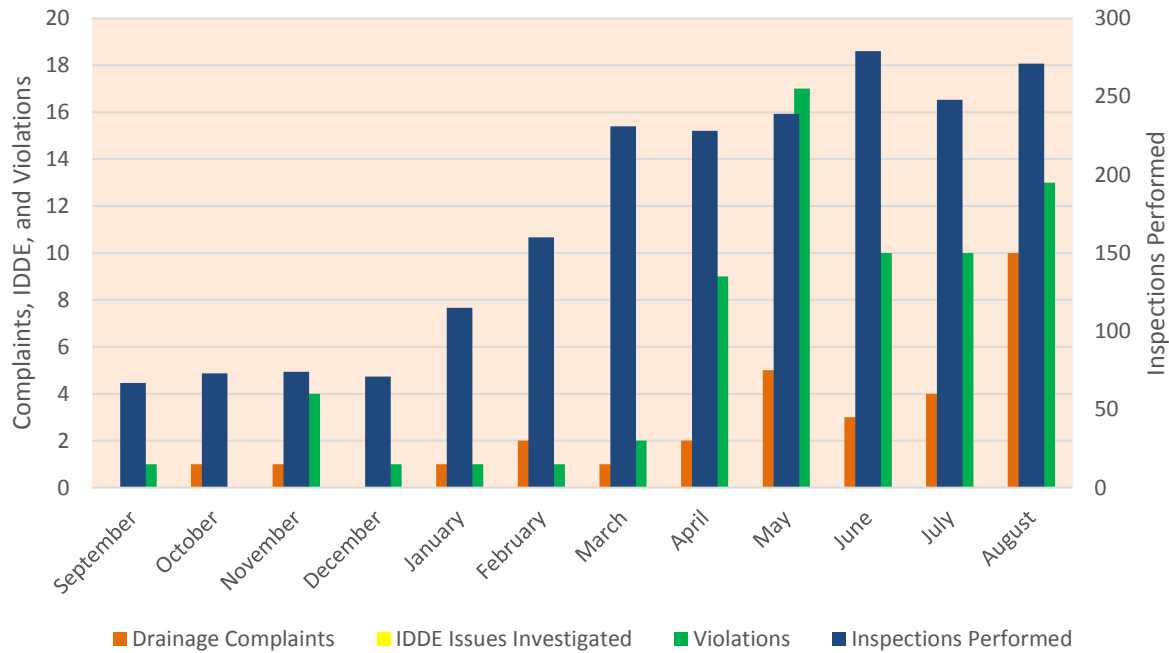
	Number of Citizen Requests Investigated	Number of Meetings
FY 2018 YTD Totals	8	11
FY 2018 Totals	75	79
FY 2017 Totals	53	82

8/20/2018

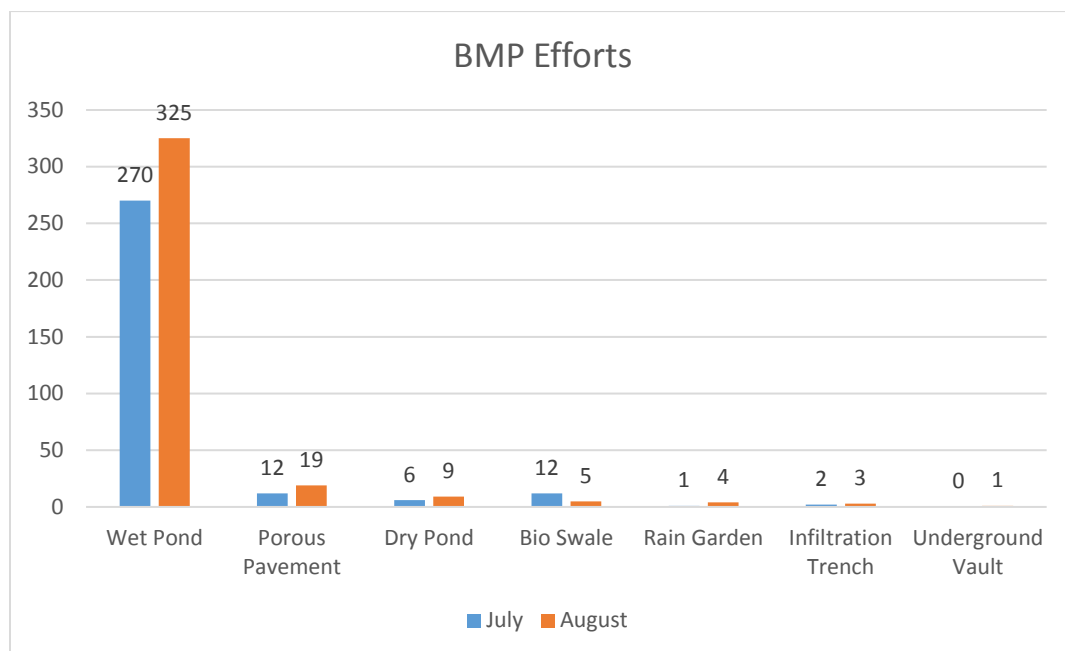
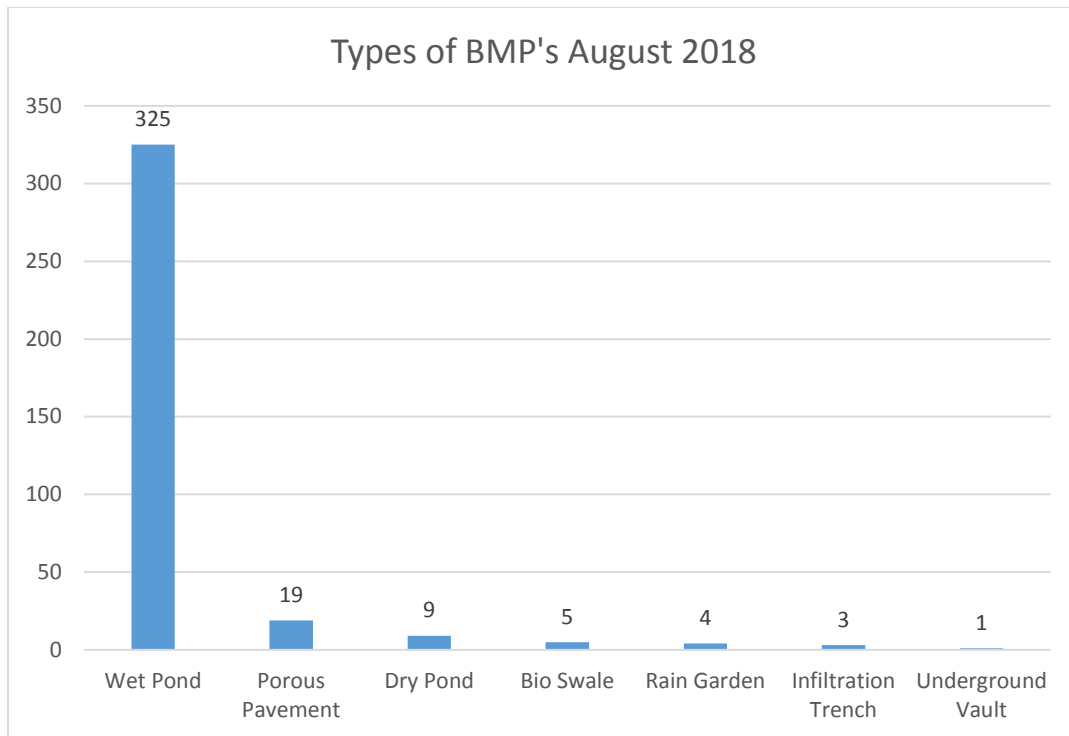


TYPE	September	October	November	December	January	February	March	April	May	June	July	August	Last 12 Months
Development Permit (COC's)	2	0	4	5	4	8	6	3	6	9	9	2	58
Plan Review	0	3	10	11	12	17	8	8	17	6	5	9	106
Permits Issued	0	6	30	27	25	38	39	11	29	47	45	33	330

MS4 Minimum Control Measure #4 Erosion Sediment Control Inspections



TYPE	September	October	November	December	January	February	March	April	May	June	July	August	Last 12 Months
Inspections Performed	67	73	74	71	115	160	231	228	239	279	248	271	2056
Drainage Complaints	0	1	1	0	1	2	1	2	5	3	4	10	30
IDDE Issues Investigated	1	1	3	2	0	1	0	0	1	0	1	2	12
Violations	1	0	4	1	1	1	2	9	17	10	10	13	69





BEAUFORT COUNTY STORMWATER UTILITY
120 Shanklin Road
Beaufort, South Carolina 29906
Voice (843) 255-2805 Facsimile (843) 255-9436
wstormwater@bcgov.net



M E M O R A N D U M

TO: Natural Resources Committee
Stormwater Utility Board

FROM: Eric W. Larson, PE, AICP, CPSWQ, CFM

DATE: August 15, 2018

SUBJECT: Condemnation for Easement – Tracts 0003 and 048D off Trask Parkway

The attached easement exhibit is being proposed by staff at the request of adjacent property owners and Councilmen Dawson to begin formal condemnation procedures to acquire the easements. Multiple written, verbal and personal communications have resulted in unsuccessful voluntary easement acquisitions. Councilmen Dawson has been involved with the acquisition process and supports further action.

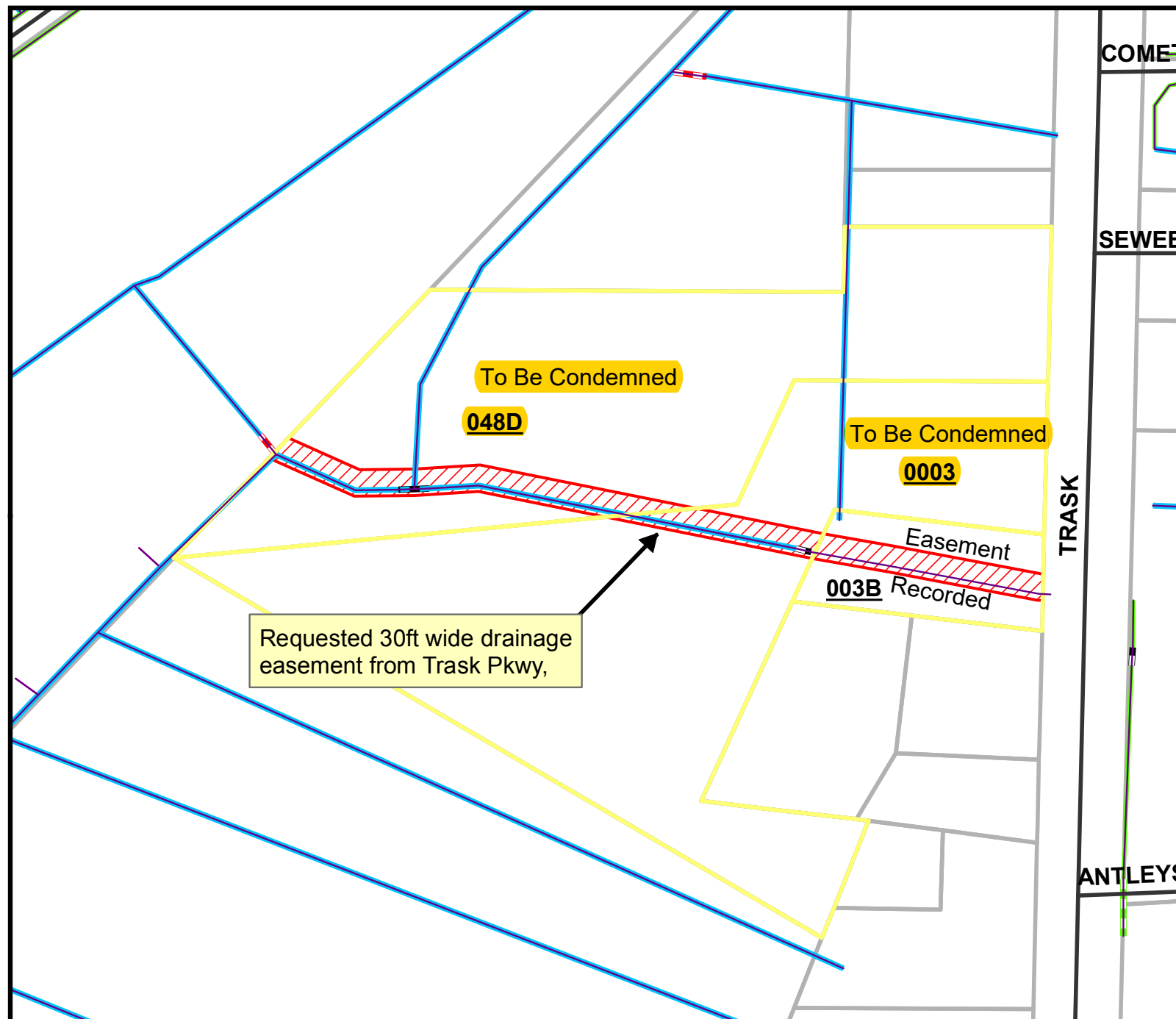
Tracts 0003 and 048D off Trask Parkway

The Stormwater Department often receives requests to maintain this regionally significant system due to flooding issues along Trask Parkway. The process to obtain easements needed for this ditch system formally began in August 2016. The County has a recorded easement from tract 003B but the property owner for both tracts 0003 and 048D has denied granting easement. Councilman Dawson has been instrumental in the efforts to acquire the drainage easements and recommends condemnation of the remaining tracts.

(Exibit "A")
R700 028-
Trask Pkwy

Activity: Drainage
Easement Request

Township:
Sheldon



Legend

- Ditch to be Constructed
- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- Access Pipe
- Bleeder Pipe
- Channel (fka Outfall)
- To be Piped
- Requested Esmt
- Project Parcels



0 50 100 200 300 400
Feet

1 inch = 160 feet

Prepared By: Beaufort Co, Stormwater Management Utility
Print Date: 04/19/2018
File - C:\stormwater\drainage\R700-28traskParkway



BEAUFORT COUNTY STORMWATER UTILITY
120 Shanklin Road
Beaufort, South Carolina 29906
Voice (843) 255-2805 Facsimile (843) 255-9436
wstormwater@bcgov.net



M E M O R A N D U M

TO: Natural Resources Committee
Stormwater Utility Board

FROM: Eric W. Larson, PE, AICP, CPSWQ, CFM

DATE: September 4, 2018

SUBJECT: Release/Abandonment of Stiles Harper, Jr. recorded Drainage Easement recorded in
Deed Book 2830 pages 1939-1941

On or about April 7, 2009, Stiles Harper, Jr. agreed to deed Beaufort County a thirty-foot (30') drainage easement located across the middle of real property identified as TMS No. R600 039 00C 153A 0000 in connection with the construction of a drainage ditch. The drainage easement was recorded with the Beaufort County Register of Deeds on April 13, 2009 at Book 2831 / Pages 1939-1941. Beaufort County Stormwater was unable to construct or maintain the ditch due to the obstructions in the easement area.

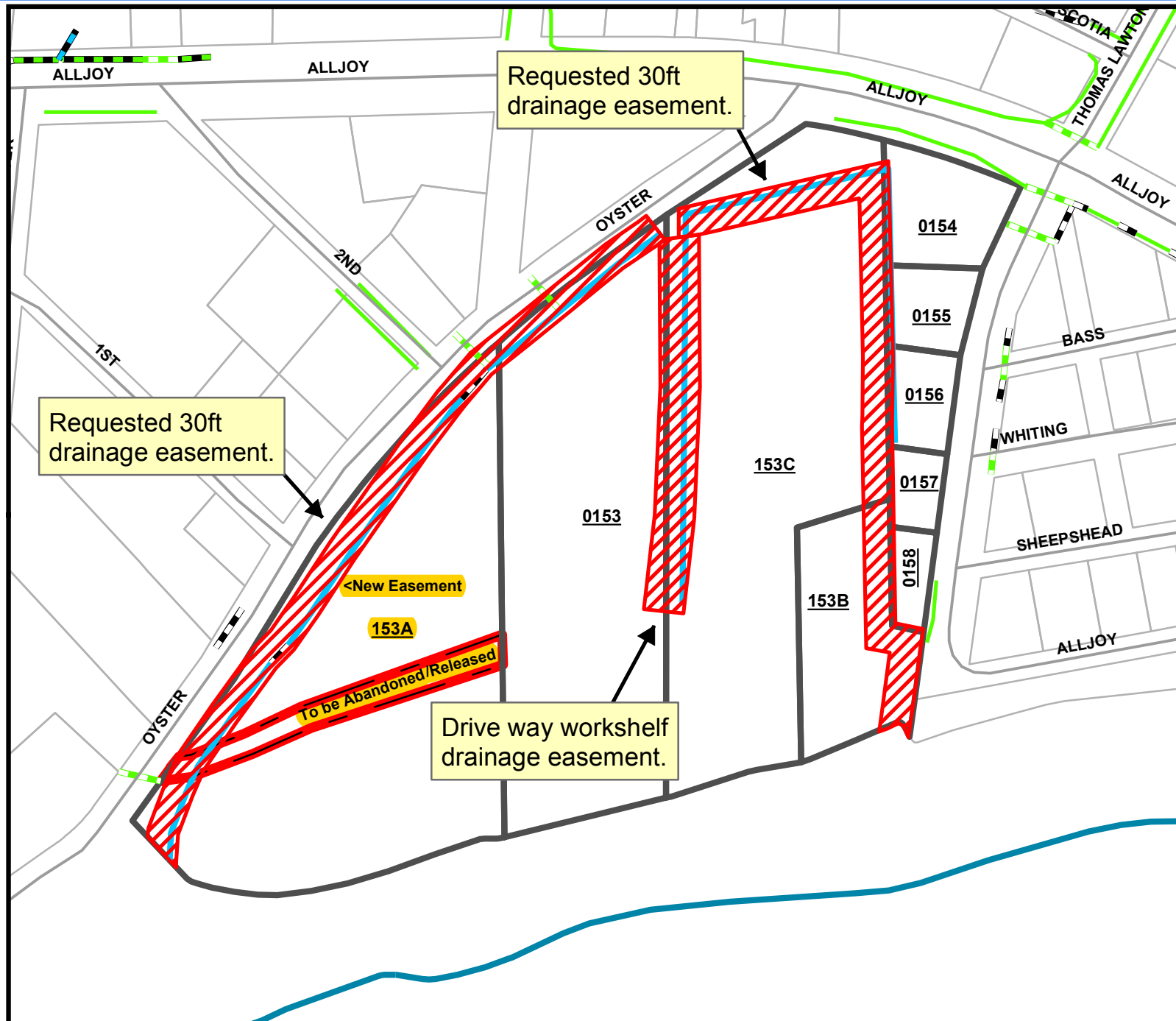
The Stormwater Department has determined that a newly requested easement recorded on August 23, 2018 with the Beaufort County Register of Deeds at Book 3694 / Pages 1939-1941 shall replace the previously recorded easement on the property identified as TMS No. R600 039 00C 153A 0000. Staff recommends the Abandonment/Release of the easement recorded on April 13, 2009 at Book 2831 / Pages 1939-1941. See attached Map for the location of the newly recorded easement and the easement to be abandoned.

Also attached is a draft ordinance with attachments for County Council's Approval.

(Exhibit "A")
R600-039-00C
Oyster Street.

Activity: Drainage
Easement Request

Township:
Bluffton



Legend

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- Access Pipe
- Bleeder Pipe
- Channel (fka Outfall)
- Easements
- Ditch to be Constructed
- Requested Esmt
- Affected Parcels
- Parcels

0 50 100 200 300 400
Feet

1 inch = 142 feet

Prepared By: Beaufort Co, Stormwater Management Utility
Print Date: 06/12/2018
File - C:\stormwater\drainage\R360-039-00A_OysterStreet

ORDINANCE NO. 2018 / __

**AN ORDINANCE AUTHORIZING THE RELINQUISHMENT OF AN EASEMENT
ENCUMBERING PROPERTY IDENTIFIED AS TMS NO. R600 039 00C 153A 0000**

WHEREAS, on or about April 7, 2009, Stiles Harper, Jr, agreed to deed Beaufort County a thirty-foot (30') drainage easement located across the middle of real property identified as TMS No. R600 039 00C 153A 0000 in connection with the construction of a ditch; and

WHEREAS, a thirty-foot (30') drainage easement was recorded with the Beaufort County Register of Deeds on April 13, 2009 at Book 2831 / Pages 1939-1941; and

WHEREAS, the easement referred to above is located in the middle of the property owner's parcel and is obstructed by structures and an asphalt driveway; and

WHEREAS, Beaufort County was unable to construct or maintain the ditch due to the obstructions; and

WHEREAS, Beaufort County has determined that a newly requested easement recorded on August 23, 2018 with the Beaufort County Register of Deeds at Book 3694 / Pages 1939-1941 shall replace the previously recorded easement on the property identified as TMS No. R600 039 00C 153A 0000; and

WHEREAS, The property owner has granted to Beaufort County a thirty-foot (30') drainage easement on the West border of the property identified as TMS No. R600 039 00C 153A 0000 recorded on August 23, 2018 with the Beaufort County Register of Deeds at Book 3694 / Pages 1939-1941 in exchange for relinquishment of the previous thirty-foot (30') drainage easement recorded on April 13, 2009 with the Beaufort County Register of Deeds at Book 2831 / Pages 1939-1941; and

WHEREAS, Beaufort County Council has determined it is in the County's best interest to relinquish the thirty-foot (30') easement which is attached hereto as Exhibit "A"; and

WHEREAS, S.C. Code Ann. §4-9-130 requires that the transfer of any interest in real property owned by the County must be authorized by the adoption of an ordinance by Beaufort County Council.

NOW, THEREFORE, BE IT ORDAINED, BY BEAUFORT COUNTY COUNCIL, that the County Administrator is hereby authorized to take all actions as may be necessary to relinquish the easement herein described and, with particularity, identified on Exhibit "A".

ADOPTED this ___ day of _____, 2018.

COUNTY COUNCIL OF BEAUFORT COUNTY

BY: _____
D. Paul Sommerville, Chairman

APPROVED AS TO FORM:

Thomas J. Keaveny, Interim County Administrator

ATTEST:

Connie L. Schroyer, Clerk to Council

First Reading:

Second Reading:

Public Hearing:

Third and Final Reading:

Chronology

3/27/09
NC
Stormwater
Public Work

Exhibit A

STATE OF SOUTH CAROLINA
COUNTY OF BEAUFORT

BEAUFORT COUNTY SC- ROD
BK 02831 PGS 1939-1941
DATE: 04/13/2009 11:43:23 AM
INST # 2009020610 RCPT# 581282

DRAINAGE EASEMENT

For and in consideration of One Dollar (\$1.00) and improvement of drainage on grantor's land, the receipt whereof is hereby acknowledged, Stiles Harper Jr of Palmetto Point Oyster Street Bluffton, SC 29910. Grantor, does hereby grant and convey unto Beaufort County, Grantee, its successors and assigns, a non-exclusive easement, as shown on attached drawing, in, over, and upon the following land situated in the County of Beaufort, State of South Carolina. The approximate location of the ditch(es) involved on *R600 039 00C 153A 0000* to the non-exclusive easement herein conveyed is shown on the attached drawing.

For or in connection with the construction of a ditch and berm to improve the drainage on the above described lands, such construction to include excavation, widening, deepening, or straightening, for or in connection with the operation, maintenance, and inspection of such a ditch and berm.

1. This easement includes the right of ingress and egress at any time over and upon the above described land, for the purpose of construction, inspection, and maintenance of ditches as referred to above.
2. There is reserved to the Grantee, Beaufort County, the right and privilege to use the above described land of the Grantor for the purposes of maintaining the drainage ditch system.
3. The Grantee is responsible for operating and maintaining the work of improvement herein described.
4. Special Provisions
 - a. The Grantee shall have the right to clear and remove all brush and trees to a width necessary to excavate and/or improve the above drainage ditches. Provided, however, if the Grantor desires to salvage merchantable timber from the area to be cleared, he will do so prior to the time the contractor begins work. It is understood that the Grantee will advise the Grantor at least 10 days in advance of construction.
 - b. Proposed drainage ditches will follow natural draws or present drainage ways as near as practical.
 - c. If the Grantor desires to salvage levees, fences, culverts, or bridges that interfere with the construction or maintenance of drainage ditches, he will have the opportunity to do so prior to construction and maintenance work.

It is agreed that buildings, fences, signs or other obstructions will not be erected by me (or us), my heirs, assigns, or administrators within the limits of the easement herein conveyed.

TO HAVE AND TO HOLD the aforesaid easement in, over and upon the above described land of the Grantor, with all the rights, privileges and appurtenances thereto belonging or in any wise appertaining, unto the Grantee, its successors and assigns, forever.

***Please fill all blanks.**

IN WITNESS WHEREOF, the Grantor has executed this instrument on the 7th day of April, 2009.

[Signature]
(Witness #1)

[Signature]
(Witness #2)

[Signature]
Signature of Grantor

(L.S.)

[Signature]
Signature of Grantor

(L.S.)

STATE OF SOUTH CAROLINA)

COUNTY OF BEAUFORT COUNTY) ACKNOWLEDGEMENT

I, the undersigned Notary Public do certify that Stiles M. Harper Jr.
(Grantor, Print Name)

personally appeared before me, and having satisfactorily proven to be the person or persons whose names are subscribed above, have acknowledged the due execution of the within Drainage Easement.

Witness my official seal this the 7th day of April of 2009

[Signature]
Public Notary for

LORI SEXTON
NOTARY PUBLIC
SOUTH CAROLINA
My Commission Expires March 17, 2018

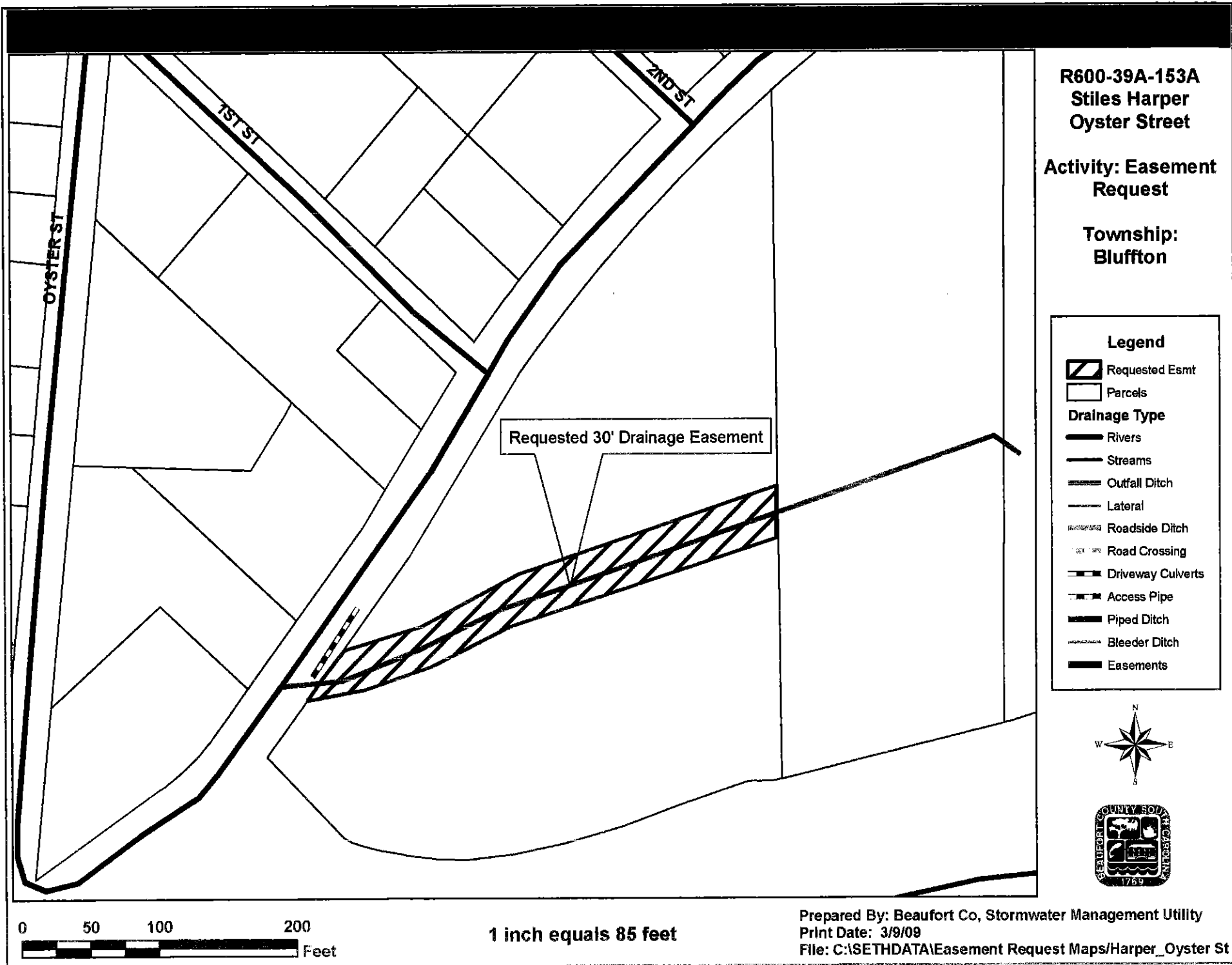
My Commission Expires: March 17, 2018

County Use Only:

Location: Beaufort County _____

Township: Bluffton _____

Tax Map No. 39C _____ Parcel No. 153A _____



3
Camp
Public
works

BEAUFORT COUNTY SC - ROD
BK 3694 Pgs 2240-2242
FILE NUM 2018046319
08/23/2018 03:49:28 PM
REC'D BY kposton RCPT# 903124
RECORDING FEES \$0.00

STATE OF SOUTH CAROLINA)
COUNTY OF BEAUFORT)

DRAINAGE EASEMENT

For and in consideration of One Dollar (\$1.00) and improvement of drainage on Grantor's land, the receipt whereof is hereby acknowledged, **STILES M HARPER JR, 36 OYSTER ST, BLUFFTON, SC 29910** (Grantor). Grantor, does hereby grant and convey unto **Beaufort County** ("Grantee"), its successors and assigns, a non-exclusive easement, as shown on the drawing attached hereto as **Exhibit "A"**, in, over, and upon the property owned by Grantor known as R600 039 00C 153A 0000 and situated in Bluffton, County of Beaufort, State of South Carolina.

For or in connection with the construction, operations, maintenance, and/or reconstruction, collectively known as "work" of a "stormwater drainage system", including but not limited to a ditch, berm, pipe, basin, and other best management practices, to improve the drainage on the above described lands as necessary for Beaufort County to comply with its the federally required MS4 permit, such activity to include excavation, widening, deepening, straightening, laying pipe, installing best management practices, etc. for or in connection with the work of such a stormwater drainage system.

1. This easement includes the right of ingress and egress at any time over and upon the above described land, for the purpose of work of the **stormwater drainage system** as referred to above.
2. There is reserved to the Grantee, Beaufort County, the right and privilege to use the above described land of the Grantor for the purposes of the work on the stormwater drainage system.
3. The Grantee is responsible for the work of the stormwater drainage system improvements herein described.
4. Special Provisions
 - a. The Grantee shall have the right to clear and remove all brush and trees to a width necessary to perform work on the above mentioned stormwater drainage system. Provided, however, if the Grantor desires to salvage merchantable timber from the area to be cleared, he will do so prior to the time the contractor begins work. It is understood that the Grantee will advise the Grantor at least 10 days in advance of construction.
 - b. Stormwater drainage systems will follow natural draws or present drainage ways as near as practical.
 - c. If the Grantor desires to salvage levees, fences, culverts, or bridges that interfere with the work of the stormwater drainage system, he will have the opportunity to do so prior to the Grantee commencing work.

It is agreed that buildings, fences, signs or other obstructions will not be erected by Grantee, its successors, assigns, or administrators within the limits of the easement herein conveyed.

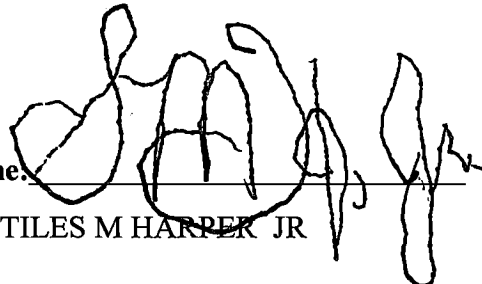
8/23/18

TO HAVE AND TO HOLD the aforesaid easement in, over and upon the above described land of the Grantor, with all the rights, privileges and appurtenances thereto belonging or in any wise appertaining, unto the Grantee, its successors and assigns, forever.

IN WITNESS WHEREOF, the Grantor has executed this instrument on the 23rd day of August, 2018.

Witnesses:

(2) Carolyn Wallace
(Witness #1)

(1) Name: 
STILES M HARPER JR

(3) Patricia 2 Wilson
(Witness #2) (Notary Public May Sign)

(1) Name: _____

STATE OF SOUTH CAROLINA)
COUNTY OF BEAUFORT)

ACKNOWLEDGEMENT

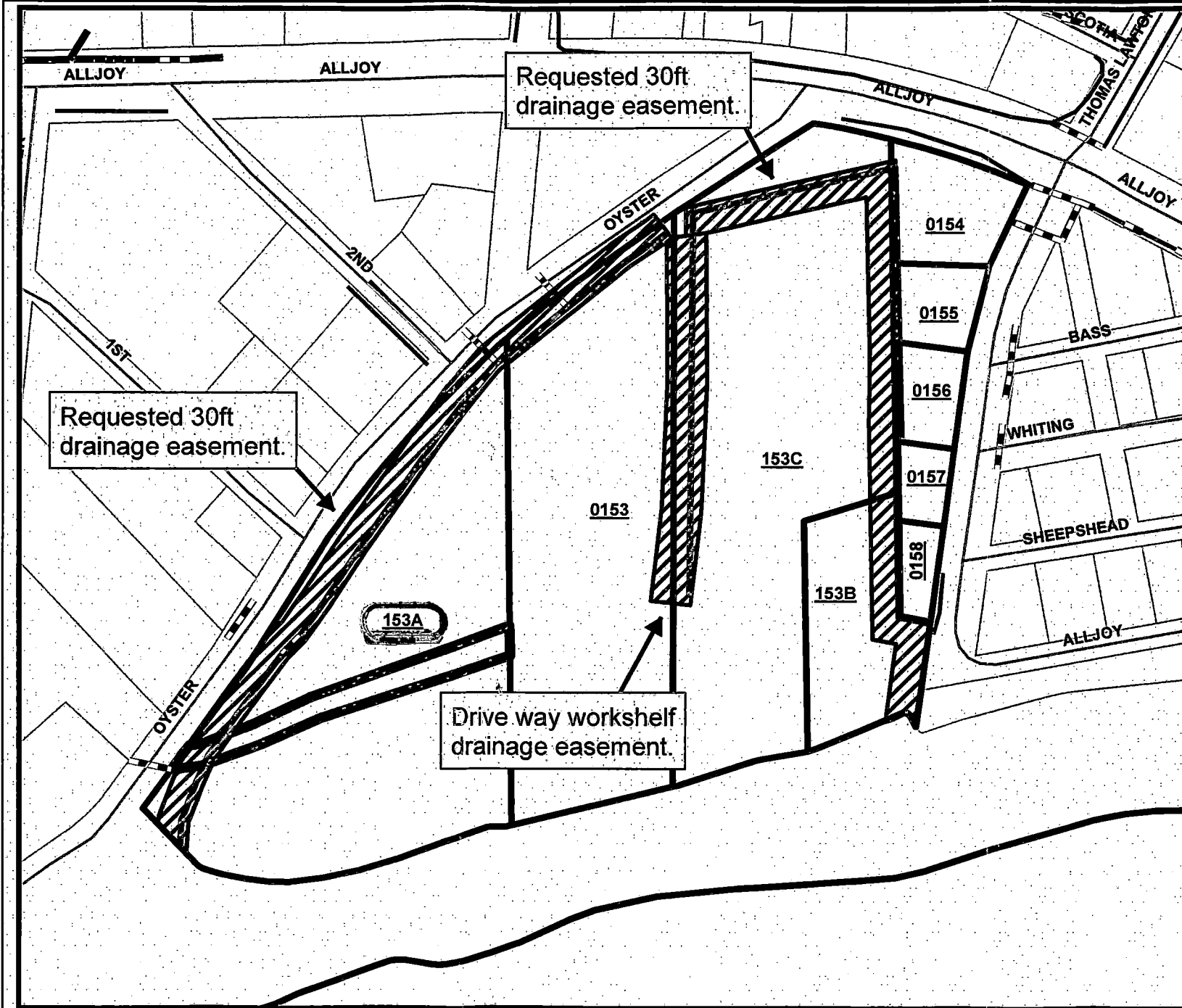
I, the undersigned, a Notary Public for South Carolina, do hereby certify that **STILES M HARPER JR** personally appeared before me this day and, in the presence of the two witnesses above named, acknowledged the due execution of the foregoing instrument.

Witness my hand and seal this 23rd day of August, 2018.

(4) Patricia 2 Wilson
Notary Public for South Carolina
My Commission Expires: April 9, 2021

County Use Only:

Location: Beaufort County
Township: Bluffton
Tax Map No. 39 Parcel No. 153A



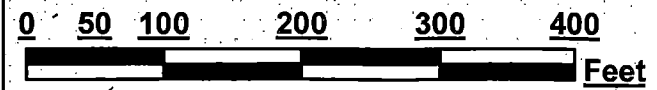
(Exhibit "A")
R600-039-00C
Oyster Street.

Activity: Drainage
Easement Request

Township:
Bluffton

Legend

- River
- Creek/Stream
- River/Creek/Marsh BANK
- Channel Pipe
- Roadside
- Roadside Pipe
- Road Pipe
- Crossline Pipe
- Driveway Pipe
- Lateral
- Lateral Pipe
- Access Pipe
- Bleeder Pipe
- Channel (fka Outfall)
- Easements
- Ditch to be Constructed
- Requested Esmt
- Affected Parcels
- Parcels



1 inch = 142 feet

Prepared By: Beaufort Co, Stormwater Management Utility
Print Date: 06/12/2018
File - C:\stormwater\drainage\R360-039-00A_OysterStreet



Committee Assignments:

Finance – Vice Chairman
Community Services – Member
Governmental – Member
Public Facilities – Member
LCOG - Member

Liaison:

Parks and Leisure Services Board
Liaison
USC-Beaufort Liaison

Post Office Drawer 1228
Beaufort, SC 29901-1228
c/o Clerk to Council Office
Telephone: 843-986-4772
Email: mcovert@bcgov.net

DESK OF THE HONORABLE COUNCILMAN
MICHAEL E. COVERT
COUNTY COUNCIL OF BEAUFORT COUNTY, SOUTH
CAROLINA
District 7

September 5,
2018

Hon. Brian Flewelling
Natural Resources Committee, CHAIR
Beaufort County Council
RE: WOTUS/ Clean Water Act

Brian-

I write you today as Vice CHAIR for the NACO Environmental, Energy and Land Use Committee on WATER. We are reaching out, and NACo is reaching out to our Counties asking for support of the re-write of the “Waters of the US “ (WOTUS) Rule, as evidenced in Executive Order 13778 by President Trump. We ask for support in advocating for the US Environmental Protection Agency and the US Army Corps of Engineers to rewrite the 2015 “WOTUS” rule in a way that recognizes counties’ role as owners of key public safety and water infrastructure and as intergovernmental partners in implementing federal regulations under the Clean Water Act.

This “action”, could be in the form of a Resolution by County Council or a letter from the Committee and Council, sent to the Committees of Jurisdiction. The US House Transportation & Infrastructure Committee (Chair Bill Shuster R-PA, and Ranking Member Peter DeFazio D-OR) and the US Senate Environment & Public Works Committee (Sen. John Barrassoo Chair, R-WYO & Sen. Thomas Carper, Ranking Member D-DEL).

My Best—

Hon. Michael E Covert
Beaufort County Council, 7th District

WHEREAS Beaufort County is a proud member of the south Carolina Association of Counties (SCAC) and the National Association of Counties (NACo) and;

WHEREAS Beaufort County understands and recognizes how important it's fresh and salt water bodies, headwaters, tributaries, rivers, ponds and marsh; are to the Beaufort County environment, eco tourism industry and our quality of life and;

WHEREAS; Beaufort County supports the process of rescinding and rewriting of the 2015 Clean Water Rule (the 2015 Rule) to redefine the "Waters of the United States" (WOTUS) by the Environmental Protection Agency (EPA) and the US Army Corps of Engineers (USACE) in a way that recognizes counties' role as owners of key public safety and water infrastructure and as intergovernmental partners in implementing federal regulations under the Clean Water Act and;

WHEREAS Beaufort County agrees with urging the passage of legislation that codifies the EPA 2012 Integrated Municipal Stormwater and Wastewater Planning Approach Framework (Integrated Planning Framework) under which sewer districts can seek more efficient and affordable solutions to CWQ compliance, and creates demonstration projects under which local communities will be allowed more flexibility in their efforts to comply with the regulatory requirements of the CWA and;

WHEREAS Beaufort County is in agreement that it oppose the EPA's imposition of localized numeric water quality based-effluent limitations or area pollution targets and any provision of any watershed-wide strategy that penalizes local governments by withdrawing current forms of financial assistance or imposing monitoring, management or similar requirements on localities without providing sufficient resources to achieve water quality objectives and;

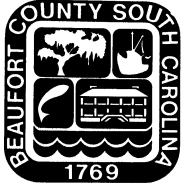
WHEREAS Beaufort County agrees that the EPA should work closely with state and local governments on potential regulations, guidance or clarifications on the agency's authority to regulate groundwater connections under the federal Clean Water Act (CWA) and;

WHEREAS Beaufort County agrees in supporting the enabling of the Secretary of the US Army Corps of Engineers to allow counties to acquire sand by purchase, exchange or otherwise from non-domestic sources for the purpose of beach re-nourishment and;

WHEREAS Beaufort County agrees in support the initiatives of the Coral Reef Reauthorization Act and any similar legislation that will dictate needed resources to improving the health of coral reefs and;

WHEREAS Beaufort County agrees that further study and education is needed by the EPA and other federal agencies on the health and environmental impacts of Per- and Polyfluoroalkyl Substances (PFAS) compounds in all water systems and watersheds and urges those federal agencies involved to work closely with and in combination with state and local governments and;

WHEREAS Beaufort County agrees with the request of the Federal Energy Regulatory Commission (FERC) revise federal guidelines in coordination with state and local governing authorities that operate water control projects to reduce downstream water events, reducing potential flooding events.



MEMORANDUM

Date: September 12, 2018

To: Stormwater Management Utility Board

From: David Wilhelm, P. E., Public Works Director

Re: **Maintenance Project Report**

This report will cover one major project and nine minor projects. The Project Summary Reports are attached.

Major Project:

- **Laurel Court Channel 1 – Bluffton (SWUD 4):** This project improved 270 feet of drainage system. The scope of work included installing 270 feet of channel pipe, rip rap and hydroseeding for erosion control. The total cost was **\$28,124.87**.

Minor or Routine Projects:

- **First Coleman Road – St Helena Island (SWUD 8):** This project improved 1,655 feet of drainage system. The scope of work included cleaning out 1,655 feet of roadside ditch. The total cost was **\$5,850.34**.
- **Country Manor Road – Port Royal Island (SWUD 6):** This project improved 6,154 feet of drainage system. The scope of work included cleaning out 6,154 feet of channel. The total cost was **\$4,939.00**.
- **Lady's Island Vacuum Truck – Lady's Island (SWUD 7):** This project improved 318 feet of drainage system. The scope of work included cleaning out 4 catch basins, 1 manhole, jetting 168 feet of roadside pipe, 150 feet of channel pipe, 2 driveways and 5 crosslines. The total cost was **\$2,475.86**.
- **Lady's Island Airport – Lady's Island (SWUD 7):** This project improved 285 feet of drainage system. The scope of work included cleaning out 285 feet of channel and 1 catch basin. The total cost was **\$2,471.71**.
- **George Williams Lane – Sheldon (SWUD 5):** The scope of work included installing 1 driveway pipe. The total cost was **\$2,280.29**.
- **Lady's Island Valley Drains – Lady's Island (SWUD 7):** This project improved 5,681 feet of drainage system. The scope of work included cleaning out 5,681 feet of valley drains. The total cost was **\$1,843.31**.
- **Airport Circle – Lady's Island (SWUD 7):** This project improved 290 feet of drainage system. The scope of work included cleaning out 290 feet of roadside ditch. The total cost was **\$1,445.98**.
- **Parrot Creek Drive – Bluffton (SWUD 4):** This project improved 300 feet of drainage system. The scope of work included cleaning out 300 feet of roadside ditch. The total cost was **\$1,325.63**.



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Laurel Court Channel #1

Activity: Drainage Improvement

Duration: 10/24/17-12/14/17

Narrative Description of Project:

Project improved 270 L.F. of drainage system. Installed 270 L.F. of channel pipe, rip rap and hydroseeded for erosion control.

2018-003 / Laurel Court Channel #1	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	1.5	32.69	0.00	0.00	0.00	0.00	32.69
CPI / Channel Pipe - Installation	170.0	3,814.70	1,610.94	5,663.09	0.00	1,906.10	12,994.83
DEBREM / Debris Removal - Jobsite	10.0	240.90	88.03	19.50	0.00	138.25	486.68
HAUL / Hauling	138.0	3,132.59	1,208.56	3,218.91	0.00	1,327.61	8,887.67
HYDR / Hydroseeding	28.0	616.52	88.32	1,245.95	0.00	394.86	2,345.65
RRI / Rip Rap - Installed	52.0	1,181.50	283.74	185.78	0.00	549.15	2,200.17
STAGING / Staging Materials/Equipment	20.0	457.70	36.00	33.60	0.00	297.00	824.30
UTLOC / Utility locates	3.0	74.10	0.00	0.00	0.00	39.69	113.79
WSDR / Workshelf - Dressed	6.0	133.68	10.80	8.58	0.00	86.04	239.10
2018-003 / Laurel Court Channel #1 Sub Total	428.5	9,684.38	3,326.39	10,375.40	0.00	4,738.70	28,124.87
Grand Total	428.5	9,684.38	3,326.39	10,375.40	0.00	4,738.70	28,124.87

Before



During



After





Project: Laurel Court Channel #1

Activity: Routine/
Preventive
Maintenance

Project #:
2018-003

Township/SW Dist:
Bluffton/4

Completed:
December 2017

Legend

Drainage Type

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

0 50 100 200 300 400
Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print: 07/17/18

File: C:\project summaries map\Laurel Court Channel #1_2018-003



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: First Coleman Road

Activity: Routine/Preventive Maintenance

Duration: 04/04/18-04/26/18

Narrative Description of Project:

Project improved 1,655 L.F. of drainage system. Cleaned out 1,655 L.F. of roadside ditch. Jetted (2) crossline pipes and (8) driveway pipes.

2018-596 / First Coleman Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
DPJT / Driveway Pipe - Jetted	10.0	\$222.80	\$43.40	\$38.20	\$0.00	\$143.40	\$447.80
HAUL / Hauling	33.0	\$720.51	\$310.86	\$198.59	\$0.00	\$43.26	\$1,273.22
RS / Road Sweep	40.0	\$871.00	\$135.66	\$27.84	\$0.00	\$254.40	\$1,288.90
RSDCL / Roadside Ditch - Cleanout	80.0	\$1,612.80	\$301.04	\$67.68	\$0.00	\$753.00	\$2,734.52
UTLOC / Utility locates	2.0	\$49.40	\$8.04	\$11.10	\$0.00	\$26.46	\$95.00
2018-596 / First Coleman Road Sub Total	165.5	\$3,487.41	\$799.00	\$343.41	\$0.00	\$1,220.52	\$5,850.34
Grand Total	165.5	\$3,487.41	\$799.00	\$343.41	\$0.00	\$1,220.52	\$5,850.34

Before

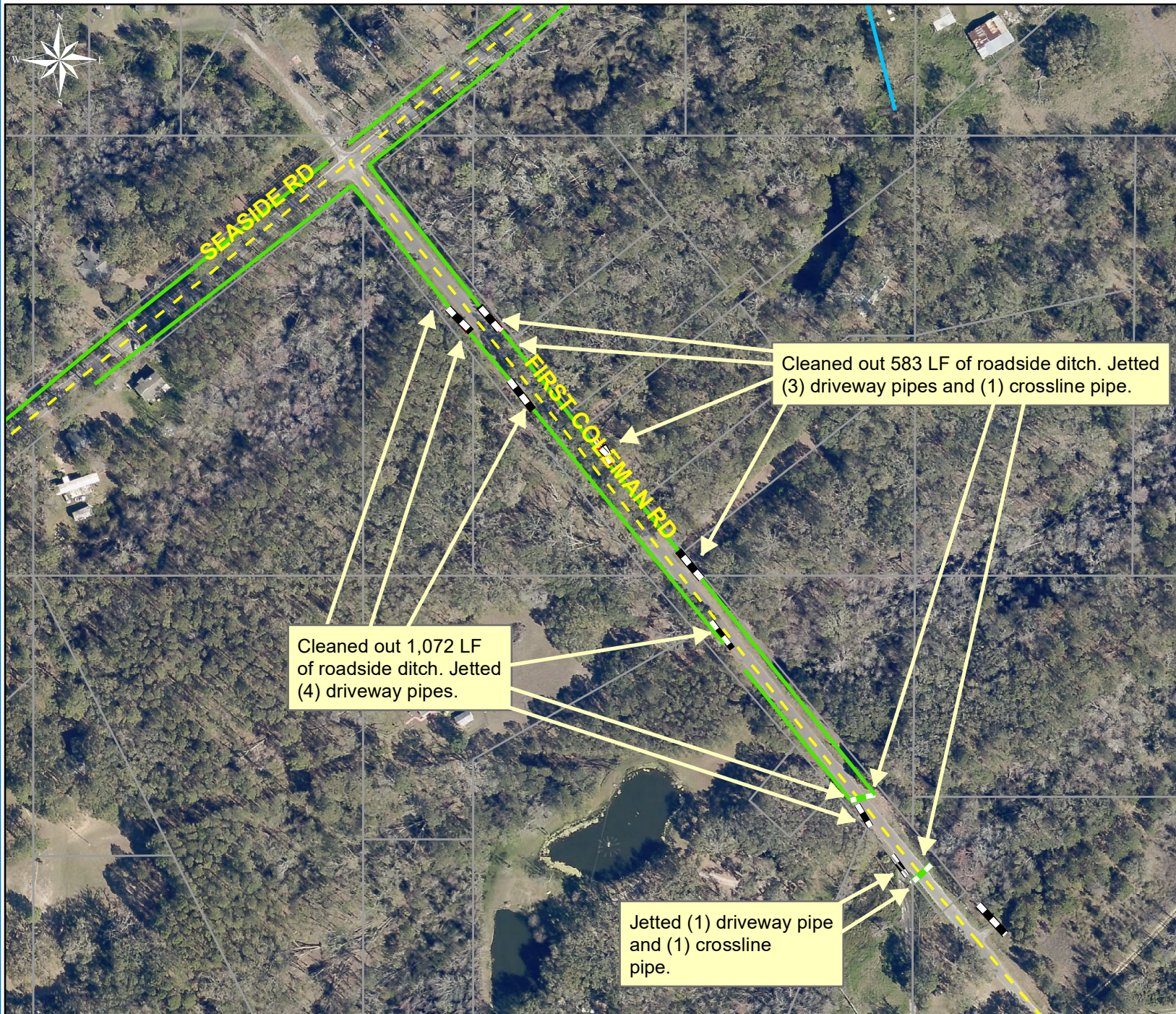


During



After





Project: First Coleman Road

Activity: Routine/
Preventive
Maintenance














Project #:
2018-596

Township/SW Dist:
St. Helena Island/8

Completed:
April 2018

Legend

Drainage Type

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

0 50 100 200 300 400
Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility

Date Print: 07/11/18

File: C:\project summaries map\First Coleman Road_2018-596



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Country Manor Road Channel #1

Activity: Routine/Preventive Maintenance

Duration: 12/18/17-12/28/17

Narrative Description of Project:

Project improved 6,145 L.F. of drainage system. Cleaned out 6,145 L.F. of channel.

2018-559 / Country Manor Channel #1	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
CCO / Channel - cleaned out	122.0	\$2,475.07	\$682.52	\$134.40	\$0.00	\$1,413.42	\$4,705.41
HAUL / Hauling	6.0	\$121.66	\$56.52	\$15.68	\$0.00	\$28.84	\$222.70
2018-559 / Country Manor Channel #1 Sub Total	128.5	\$2,607.63	\$739.04	\$150.08	\$0.00	\$1,442.26	\$4,939.00
Grand Total	128.5	\$2,607.63	\$739.04	\$150.08	\$0.00	\$1,442.26	\$4,939.00

Before

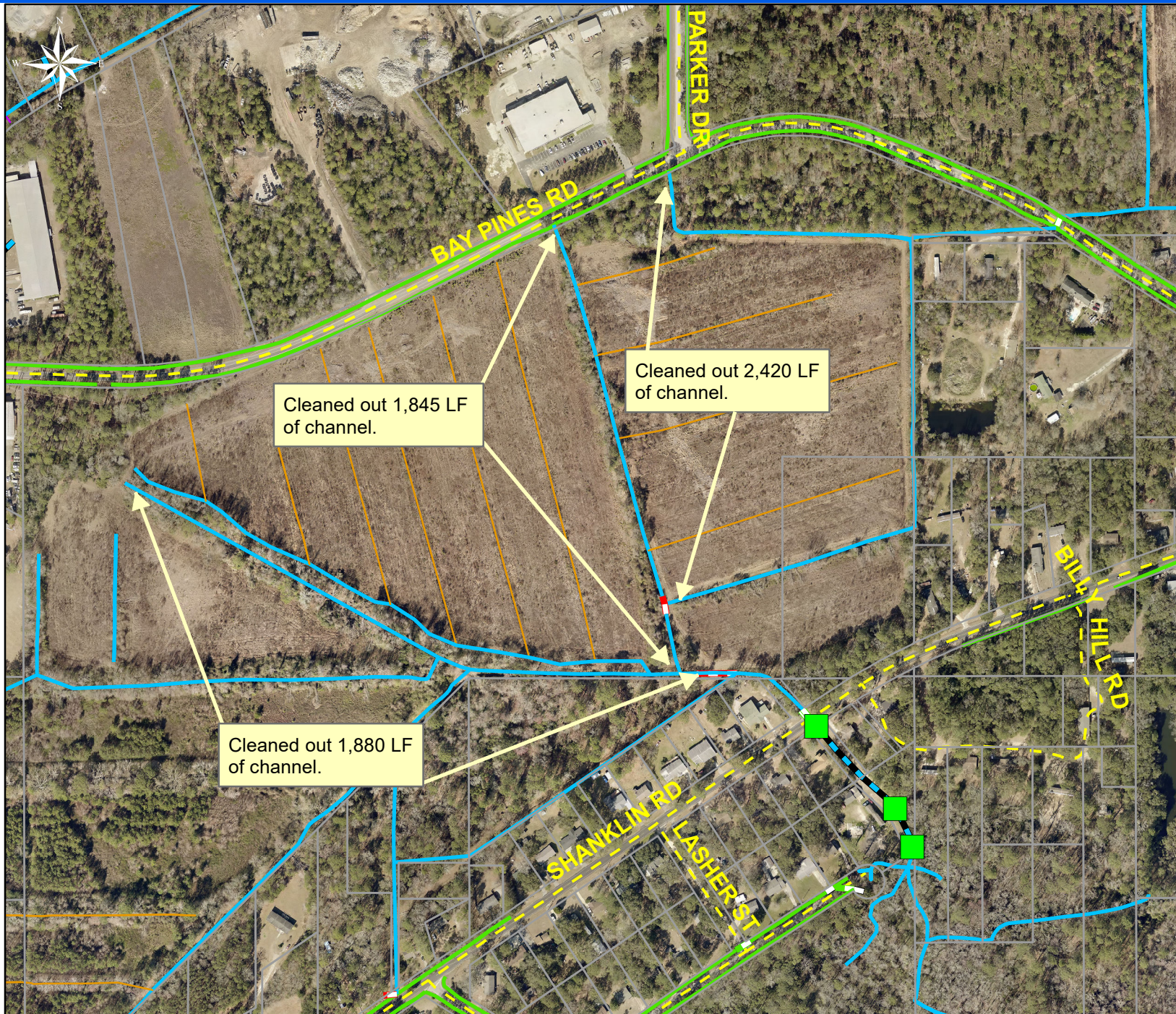


During



After





Project: Country
Manor Road
Channel #1

Activity: Routine/
Preventive
Maintenance

Project #:
2018-559

Township/SW Dist:
Port Royal Island/6

Completed:
December 2017

Legend

Drainage Type

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

0 100 200 400 600 800
Feet

1 inch = 410 feet

Prepared By: BC Stormwater Management Utility

Date Print: 04/11/18

File: C:\project summaries map\Country Manor Channel Road #1_2018-559



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Lady's Island Vacuum Truck-
Needlerush Court, Marquis Way, Le Moyne Court, Dolphin Point Drive, Ethel
Grant Lane

Activity: Routine/Preventive Maintenance

Duration: 06/11/18-06/18/18

Narrative Description of Project:

Project improved 318 L.F. of drainage system. Cleaned out (4) catch basins and (1) manhole. Jetted 168 L.F. of roadside pipe, 150 L.F. of channel pipe, (2) driveway pipes and (5) crossline pipes.

2018-307A / Lady's Island Vacuum Truck	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
CBCO / Catch basin - clean out	12.0	\$267.36	\$52.08	\$55.10	\$0.00	\$172.08	\$546.62
CLPJT / Crossline Pipe - Jetted	28.0	\$623.84	\$121.52	\$101.32	\$0.00	\$401.52	\$1,248.20
DPJT / Driveway Pipe - Jetted	10.0	\$222.80	\$43.40	\$70.20	\$0.00	\$143.40	\$479.80
RB / Remove blockage from flowline	4.0	\$79.44	\$39.48	\$22.59	\$0.00	\$48.84	\$190.35
2018-307A / Lady's Island Vacuum Truck Sub Total	54.5	\$1,204.34	\$256.48	\$249.21	\$0.00	\$765.84	\$2,475.86
Grand Total	54.5	\$1,204.34	\$256.48	\$249.21	\$0.00	\$765.84	\$2,475.86

Before



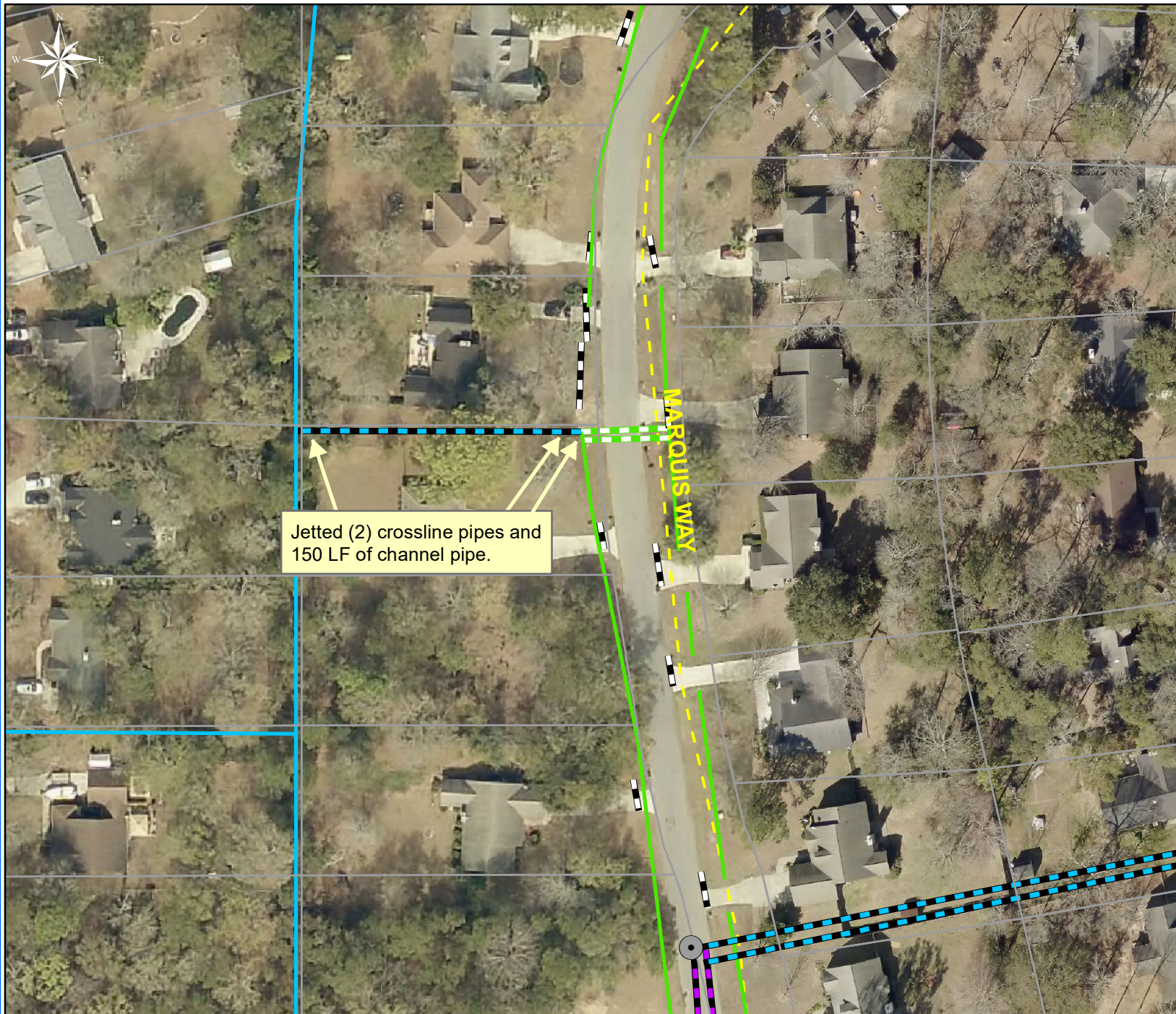
During



After







Project: Lady's
Island Vacuum
Truck- Marquis
Way
Map #2

Activity: Routine/
Preventive
Maintenance

Project #:
2018-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2018

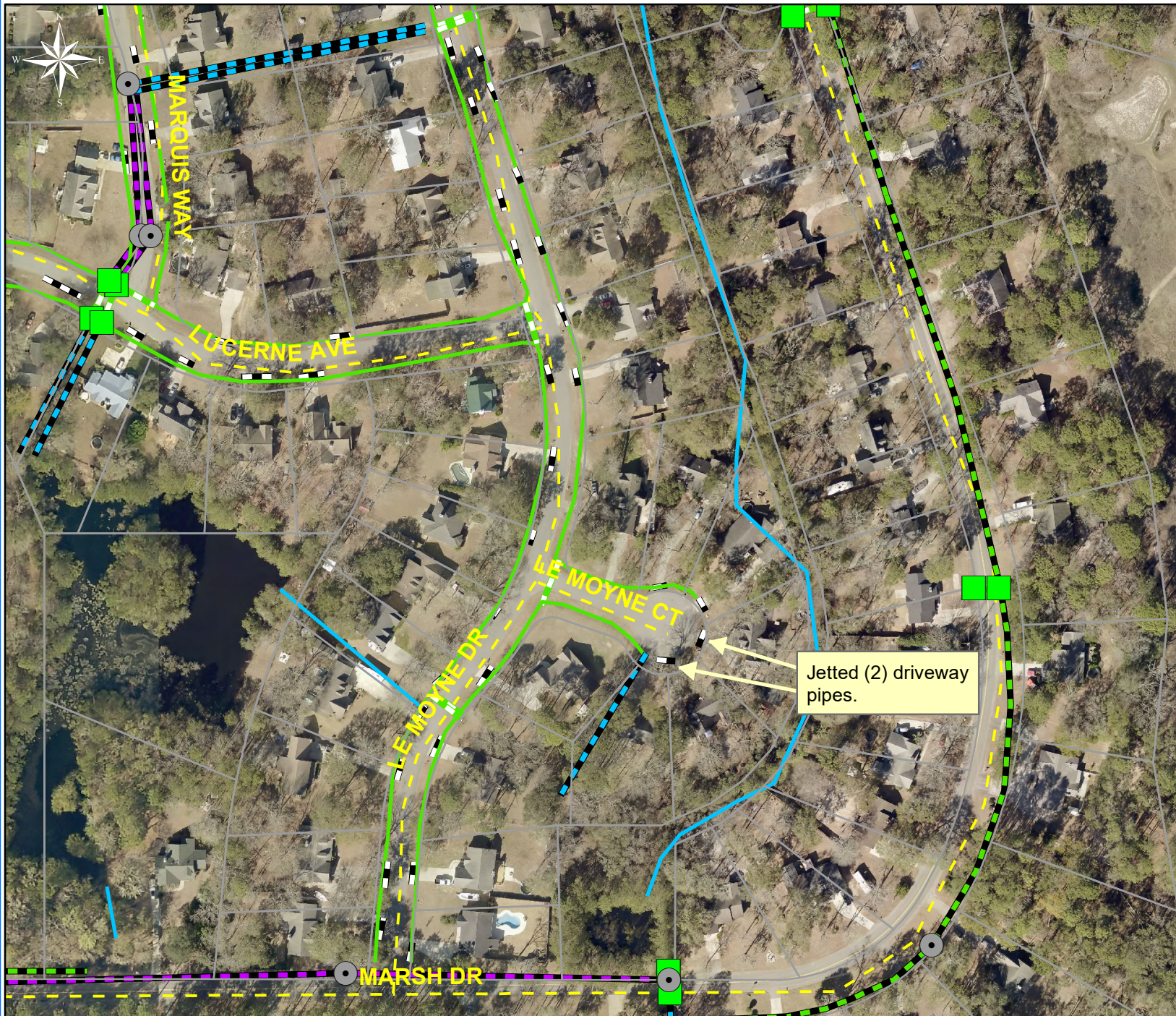
Legend

Drainage Type

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

0 20 40 80 120 160 1 inch = 83 feet
Feet

Prepared By: BC Stormwater Management Utility
Date Print:07/18/18
File:C:\project summaries map\Marquis Way Map #2_ 2018-307A



Project: Lady's
Island Vacuum
Truck- Lemoyne
Court
Map #3

Activity: Routine/
Preventive
Maintenance

Project #:
2018-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2018

Legend

Drainage Type

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

Jetted (2) driveway
pipes.

0 40 80 160 240 320 1 inch = 170 feet
Feet

Prepared By: BC Stormwater Management Utility
Date Print: 07/18/18
File: C:\project summaries map\Lemoyne CT Map #3 2018-307A



Project: Lady's
Island Vacuum
Truck-Dolphin
Point Drive
Map #4

Activity: Routine/
Preventive
Maintenance

Project #:
2018-307A

Township/SW Dist:
Lady's Island/7

Completed:
June 2018

Legend

Drainage Type

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

0 60 120 240 360 480 1 inch = 250 feet
Feet

Prepared By: BC Stormwater Management Utility

Date Print: 07/18/18

File: C:\project summaries map\Dolphin Point Drive Map #4_2018-307A



Project: Ladys
Island Vacuum
Truck- Ethel Grant
Lane
Map #5

Activity: Routine/
Preventive
Maintenance














Project #:
2018-307A

Township/SW Dist:
Ladys Island/7

Completed:
June 2018

Legend

Drainage Type

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

0 10 20 40 60 80
Feet

1 inch = 42 feet

Prepared By: BC Stormwater Management Utility
Date Print: 07/16/18

File: C:\project summaries map\Ladys Island Vac Truck- Ethel Grant Lane Map #5_2018-307A



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Lady's Island Airport

Activity: Routine/Preventive Maintenance

Duration: 02/08/18-02/26/18

Narrative Description of Project:

Project improved 285 L.F. of drainage system. Cleaned out 285 L.F. of channel and (1) catch basin. Repaired seperated joint. Installed (1) access gate.

2018-575 / Lady's Island Airport	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AGI / Access Gate - Installed	10	\$201.60	\$9.00	\$118.10	\$0.00	\$94.13	\$422.82
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
CCO / Channel - cleaned out	20	\$403.20	\$67.54	\$18.32	\$0.00	\$188.25	\$677.31
HAUL / Hauling	8	\$176.72	\$75.36	\$62.14	\$0.00	\$72.10	\$386.32
RP / Replaced Posts	6	\$121.56	\$7.20	\$16.03	\$0.00	\$50.88	\$195.67
SR / Sinkhole repair	15	\$316.02	\$36.84	\$180.74	\$0.00	\$198.99	\$732.59
UTLOC / Utility locates	1	\$24.70	\$4.02	\$4.16	\$0.00	\$13.23	\$46.11
2018-575 / Lady's Island Airport Sub Total	60.5	\$1,254.70	\$199.96	\$399.48	\$0.00	\$617.57	\$2,471.71
Grand Total	60.5	\$1,254.70	\$199.96	\$399.48	\$0.00	\$617.57	\$2,471.71

Before

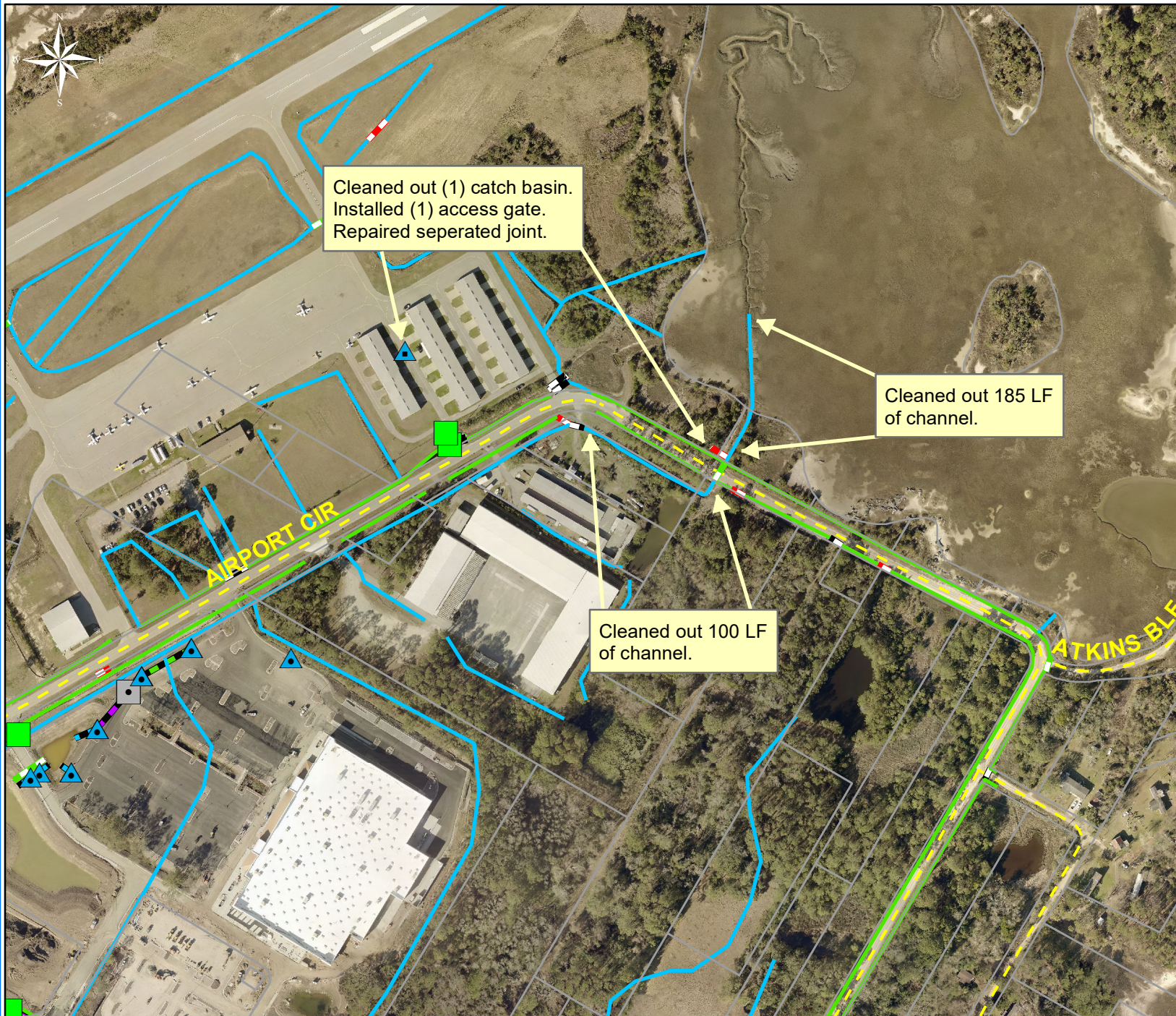


During



After





Project: Lady's
Island Airport

Activity: Routine/
Preventive
Maintenance

Project #:
2018-575

Township/SW Dist:
Ladys Island/7

Completed:
February 2018

Legend

Drainage Type

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

0 80 160 320 480 640
Feet

1 inch = 330 feet

Prepared By: BC Stormwater Management Utility
Date Print:07/11/18
File:C:\project summaries map\Ladys Island Airport_2018-575



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: George Williams Lane

Activity: Routine/Preventive Maintenance

Duration: 02/06/18-02/14/18

Narrative Description of Project:

Installed (1) driveway pipe.

2018-569 / George Williams Lane	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
DPINS / Driveway Pipe - Installed	18.0	\$400.98	\$118.12	\$482.59	\$0.00	\$257.58	\$1259.27
HAUL / Hauling	12.0	\$249.30	\$113.04	\$486.16	\$0.00	\$86.52	\$935.02
UTLOC / Utility locates	1.5	\$37.05	\$6.03	\$12.18	\$0.00	\$19.85	\$75.11
2018-569 / George Williams Lane Sub Total	32.0	\$698.23	\$237.19	\$980.93	\$0.00	\$363.94	\$2,280.29
Grand Total	32.0	\$698.23	\$237.19	\$980.93	\$0.00	\$363.94	\$2,280.29

Before



During



After





Project: George Williams Lane

Activity: Routine/
Preventive
Maintenance














Project #:
2018-569

Township/SW Dist:
Sheldon/5

Completed:
February 2018

Legend

Drainage Type

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

0 40 80 160 240 320
Feet

1 inch = 170 feet

Prepared By: BC Stormwater Management Utility
Date Print: 06/21/18
File: C:\project summaries map\George Williams Lane_2018-569



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Lady's Island Valley Drains- Marsh Drive

Activity: Routine/Preventive Maintenance

Duration: 11/07/17

Narrative Description of Project:

Project improved 5,681 L.F. of drainage system. Cleaned 5,681 L.F. of valley drains. This project consisted of the following area: Marsh Drive (5,681 L.F.)

2018-313 / Lady's Island Valley Drains	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
COVD / Cleaned Out Valley Drains	40.0	\$843.90	\$78.40	\$26.76	\$0.00	\$388.80	\$1,337.86
HAUL / Hauling	10.0	\$222.70	\$94.20	\$33.45	\$0.00	\$144.20	\$494.55
2018-313 / Lady's Island Valley Drains Sub Total	50.5	\$1,077.50	\$172.60	\$60.21	\$0.00	\$533.00	\$1,843.31
Grand Total	50.5	\$1,077.50	\$172.60	\$60.21	\$0.00	\$533.00	\$1,843.31

(Pictures Not Available)

Project: Lady's
Island Valley
Drains- Marsh
Drive

Activity: Routine/
Preventive
Maintenance

Project #:
2018-313

Township/SW Dist:
Ladys Island/7

Completed:
November 2017



Legend

Drainage Type

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

0 160320 640 960 1,280
Feet

1 inch = 670 feet

Prepared By: BC Stormwater Management Utility
Date Print:06/25/18

File:C:\project summaries map\Ladys Island Valley Drains- Marsh Drive_2018-313



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Airport Circle

Activity: Routine/Preventive Maintenance

Duration: 04/05/18

Narrative Description of Project:

Project improved 290 L.F. of drainage system. Cleaned out 290 L.F. of roadside ditch.

2018-589 / Airport Circle	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
HAUL / Hauling	11.0	\$257.12	\$103.62	\$72.62	\$0.00	\$168.87	\$602.23
RSDCL / Roadside Ditch - Cleanout	21.0	\$433.86	\$112.77	\$15.54	\$0.00	\$270.69	\$832.86
2018-589 / Airport Circle Sub Total	32.5	\$701.88	\$216.39	\$88.16	\$0.00	\$439.56	\$1,445.98
Grand Total	32.5	\$701.88	\$216.39	\$88.16	\$0.00	\$439.56	\$1,445.98

Before



During



After





Project: Airport Circle

Activity: Routine/
Preventive
Maintenance

Project #:
2018-589

Township/SW Dist:
Ladys Island/7

Completed:
April 2018

Legend

Drainage Type

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

0 80 160 320 480 640
Feet

1 inch = 330 feet

Prepared By: BC Stormwater Management Utility
Date Print: 07/11/18
File: C:\project summaries map\Airport Circle_2018-575



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Parrot Creek Drive

Activity: Routine/Preventive Maintenance

Duration: 03/26/18-04/04/18

Narrative Description of Project:

Project improved 300 L.F. of drainage system. Cleaned out 300 L.F. of roadside ditch.

2018-587 / Parrot Creek Drive	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contractor Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$10.90	\$0.00	\$0.00	\$0.00	\$0.00	\$10.90
HAUL / Hauling	10.0	\$234.95	\$47.10	\$23.20	\$0.00	\$154.45	\$459.70
RSDCL / Roadside Ditch - Cleanout	20.0	\$409.20	\$105.09	\$37.74	\$0.00	\$254.40	\$806.43
UTLOC / Utility locates	1.0	\$24.70	\$4.02	\$6.66	\$0.00	\$13.23	\$48.61
2018-587 / Parrot Creek Drive Sub Total	31.5	\$679.75	\$156.21	\$67.60	\$0.00	\$422.08	\$1,325.63

Before



During



After



Project: Parrot
Creek Drive

Activity: Routine/
Preventive
Maintenance














Project #:
2018-587

Township/SW Dist:
Bluffton/4

Completed:
April 2018

Legend

Drainage Type

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



0 35 70 140 210 280
Feet

1 inch = 150 feet

Prepared By: BC Stormwater Management Utility
Date Print: 06/25/18
File: C:\project summaries map\Cherokee Farms Road_2018-577



BEAUFORT COUNTY
STORMWATER MANAGEMENT UTILITY BOARD AGENDA
Wednesday, October 10, 2018
2:00 p.m.
Executive Conference Room, Administration Building
Beaufort County Government Robert Smalls Complex
100 Ribaut Road, Beaufort, South Carolina
843.255.2805

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

1. CALL TO ORDER – 2:00 p.m.
 - A. Approval of Agenda
 - B. Approval of Minutes – September 12, 2018 ([backup](#))
2. INTRODUCTIONS
3. PUBLIC COMMENT
4. REPORTS
 - A. Utility Update – Eric Larson, P.E. ([backup](#))
 - B. Monitoring Update – Eric Larson, P.E. ([backup](#))
 - C. Stormwater Implementation Committee Report – Eric Larson, P.E. ([backup](#))
 - D. Stormwater Related Projects – Eric Larson, P.E. ([backup](#))
 - E. Upcoming Professional Contracts Report – Eric Larson, P.E. ([backup](#))
 - F. Regional Coordination – Eric Larson, P.E. ([backup](#))
 - G. Municipal Reports – Eric Larson, P.E. ([backup](#))
 - H. MS4 Update – Eric Larson, P.E. ([backup](#))
 - I. Maintenance Projects Report – David Wilhelm, P.E. ([backup](#))
5. UNFINISHED BUSINESS
6. NEW BUSINESS
 - A. Special Presentation –TBD
 - B. 2019 SWMU Board Meeting Schedule – Eric Larson ([backup](#))
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
 - A. November 14, 2018 ([backup](#))
9. ADJOURNMENT