



## MEMORANDUM

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**TO:** TOWN COUNCIL  
**FROM:** Department of Engineering  
**SUBJECT:** Department of Engineering Consent Agenda  
**DATE:** August 9, 2016  
**CC:** Marc Orlando, ICMA-CM, Town Manager

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### CAPITAL IMPROVEMENTS PROGRAM (CIP) & SPECIAL PROJECTS UPDATES

#### PATHWAYS

##### **1. Goethe/Shults Sidewalks: Engineered Design Phase**

- The engineer has addressed the comments from SCDHEC/OCRM and the permit has been issued.
- The encroachment permit application to Beaufort County has been submitted.
- Working on different proposals for lighting with SCE&G.
- **Next Steps:**
  - Sent Easement Offer Letter packages to residents on July 14, 2016.
  - Working on the bid package.

#### SEWER & WATER

##### **1. Buck Island-Simmons ville Sewer & Sidewalks (Phase 3): Construction Phase**

- All the testing has been done with Hussey Gay Bell (HGB) & BJWSA.
- Finalized the as-built and closeout package with BJWSA.
- We negotiated an acceptable solution between BJWSA and Jordan Construction on the 3 sections of gravity sewer main that were a little flatter on grade than designed.
- We have taken additional water samples on Kitty Rd. because the previous samples were more than 30 days old.
- The contractor has started to connect the residences to the sewer.
- **Sidewalk:**
  - The change order for us to add the sidewalk to the Jordan contract was denied by CDBG.
  - CDBG did agree to allow us to move the cost of the sidewalk to other categories that are eligible for CDBG reimbursement without affecting the total grant amount.
  - We can bid the job out without the additional burden of the CDBG requirements which opens it up to more local contractors and will result in a much lower price.

- **Next Steps:**

- Finalize all residential connections to water and sewer mains.
- Rebid the sidewalks.
- Permanent grassing to be completed.
- Work with Palmetto Electric for lighting along new sidewalk.

## **2. Buck Island-Simmons ville Sewer (Phase 4): Engineered Design Phase**

- The contractor recommendation for Town Council was approved at the July 12<sup>th</sup> Council Mtg.
- The contract has been submitted to CDBG for approval.
- We have the contractor working on BJWSA material submittals and will set up the BJWSA Pre-Construction meeting as soon as they are approved.
- **Next Steps:**
  - Approval of contract by CDBG Administrator.
  - Pre-construction conference with CDBG and BJWSA.
  - Issuance of Notice to Proceed.
  - Construction to start in August.

## **3. Buck Island-Simmons ville Sewer (Phases 5): Engineered Design Phase**

- Design is complete and approved by BJWSA.
- **Next Steps:**
  - Prepare and submit packages to DHEC/OCRM/SCDOT.
  - Engineer to start on the easement exhibits.

## **4. Jason Street Sanitary Sewer: Engineered Design Phase**

- The engineer has addressed the BJWSA comments and is getting ready to send the plans to SCDOT & DHEC.
- The project was split into three (3) phases to be bid with alternates and permit the project in smaller phases. This will save time at the end and allow us to include the May River Rd. section or save it for a future project.
- **Next Steps:**
  - Continue to press the schedule with BJWSA.

## **5. Toy Fields: Complete**

- Recommend to close out this contract. All 12 residents are tied into system and landscaping has been installed around pump station.

## **ROADWAY IMPROVEMENTS**

### **1. May River Road Streetscape (Final Phase): Design Phase**

- Encroachment Permit including Design Exception submitted the SCDOT District office on May 10, 2016.
- Received first comments from SCDOT District Office on Encroachment permit application. Response to comments was submitted by Thomas & Hutton Engineering on July 6, 2016.
- Second round of response - SCDOT responded to T&H comments on July 15, with six (6) directed toward "Design Exception," ten (10) relating to District Permit, one (1) relating to Maintenance, and two (2) relating to Traffic.
- Request for second bid was sent to eleven (11) contractors with three (3)

- declining due to their current workload.
- July 18 bid opening was a repeat of previous with the same two contractors submitting bids
- DHEC permit application was submitted to the Charleston Office on June 23, 2016.
- DHEC initial response was received on Friday July 22th, requesting justification for detention waiver. Overall good review.
- Town of Bluffton Public Project Application also submitted on June 23, 2016.
- Development Review Committee met on July 12, with request for clarification on drainage plan.
- Easement acquisition: Easement documents and exhibits have been prepared and signed on 27 of 38 parcels. Seven (7) additional parcels have committed verbally on voluntary contribution of easements. The remaining four (4) are currently under negotiation.
- J.T. Tiller has completed the preliminary landscape design for the project. Meeting planned with Roberts Vaux and other community representatives for review and input on design
- **Next Steps:**
  - Meet with owners of tracts 8,10,12,14, & 16 relative to planned fencing design and location.
  - Finalize negotiations with four (4) remaining properties and execute easement documents.

## **2. Dr. Mellichamp Drive**

- Conceptual Planning work underway with Witmer, Jones Keefer.
- Engineering Request For Qualifications (RFQ) was advertised the week of July 25, 2016 for engineering, surveying and related services.
- Scope submitted for PARD grant application for funding of additional parking improvements at MC Riley Sports Complex (\$89,900.00).
- **Next Steps:**
  - Evaluate proposals from Engineering Consultants.

## **HISTORIC DISTRICT IMPROVEMENTS**

### **1. Calhoun Street and Adjacent Area Study: Conceptual Design Phase**

- "T" striping complete and Bike Racks installed.
- **Next Steps:**
  - Identify and stripe Handicap spaces.

### **2. Historic District Lighting & Parking Signs**

- **Calhoun Street Infill Lighting**
  - **Next Steps:**
    - Lease agreements have been executed.
    - Install conduit.
- **Bluffton Road Street Lighting**
  - Initial lease agreement has been executed.
  - New budget for additional lighting, striping and crosswalk were submitted.
  - **Next Steps:**
    - Obtain SCDOT approval for all signage, striping and crosswalk.
    - Additional Lease Agreement has been executed.

- Install conduit for new lease agreement.

## **PARK DEVELOPMENT**

### **1. Parks and Recreation Improvements: DuBois Park - Construction Phase**

- Received proposals from The Greenery and Ocean Woods for additional lighting.
- Received four (4) proposals for the Shade Sails above park swings.
- **Next Steps:**
  - On hold pending further direction from senior staff.

### **2. Oyster Factory Park: Construction Phase**

- **Dock**
  - Final reimbursement check has been received from DNR Grant.
  - **Next Steps:**
    - Design and construct Life Jacket Station
- **Parking Lot**
  - Parking lot is **complete**
  - **Next Steps:**
    - Install shade trees in parking islands in Fall of 2016.
- **Garvin House**
  - Flooring system is under construction.
  - Porches are under construction.
  - Main structure is tied into the flooring system.
  - Budget for landscape and hardscape were submitted.
  - Interpretive signage program conceptualization has been started.
  - **Next Steps:**
    - Start framing and stabilization at all existing walls.
    - Deconstruct existing exterior fireplace.
    - Start framing at porches.

## **TOWN FACILITIES**

### **1. Buckwalter Place Multi-County Commerce Park**

- A public-private partnership agreement was established among the Town of Bluffton, the Bluffton Public Development Corporation, and Southeastern Development Associates (formerly known as Blanchard and Calhoun Commercial) for continued public infrastructure investment supportive of the multi-county commerce park.
- Development permit issued.
- **Next Steps:**
  - Mass grading to begin in June 2016 with a building pad completed by end of May 2017.

### **2. Town Hall Redevelopment**

- All interviews were completed and scored.
- Architectural Design Firm has been selected.

- **Next Steps:**
  - Finalize contract process with selected Architectural Firm.
  - Submit negotiated contract with selected Architectural Design Team to Town Council at August Town Council Meeting.
  - Advertise Request For Proposals (RFP) for a Construction Manager at Risk.

## **WATERSHED MANAGEMENT**

### **1. Stoney Creek Wetlands Restoration: Data Collection & Analysis Phase**

- Following receipt of the draft water budget including hydrology and hydraulics reports on 4/1/16, data collection in support of developing design alternatives was extended due to above average rainfall over the winter.
- Data collection will continue for approximately 2 months into the “dry” season to measure the effects on the water table. This activity is in support of developing preliminary conceptual designs for property owner review/negotiations.
- **Next Steps:**
  - Final Summary Memo including conceptual design options was received July 5, 2016 and is in Staff review.

### **2. 319 Grant Phase 2 (Pine Ridge): Construction Phase**

- Substantial completion inspection occurred July 27, 2016 with punch list items to be completed by first week of August.
- Staff submitted a 319 Grant amendment request to extend the grant deadline to January, 30 2017 and reallocate unspent funds. If approved by SCDHEC, the remaining 319 Grant Phase 2 funds will be reallocated to purchase engineered bacteria removal media filter socks to be installed in the wetland ditch downstream from the New Riverside Pond to maintain bacteria removal efficiency, and to install littoral shelf plantings within ponds in the Pine Ridge Community.
- **Next Steps:**
  - Contractor completes punch list items.
  - Receive grant extension and work plan approval from SCDHEC.

### **3. 319 Grant Phase 3 (May River Preserve Pond):**

- SCDHEC notified staff that following several minor work plan clarifications, the grant of \$231,350 will be awarded.
- **Next Steps:**
  - Execute grant contract with SCDHEC by August 31, 2016.
  - Obtain easement for access, construction and maintenance from property owner.

### **4. Okatie 319 Grant (Buckwalter School Campus Pond Retrofit):**

- SCDHEC notified staff that project was not awarded, but with more supporting data, the application could be re-submitted in the future.
- **Next Steps:**
  - Remove from FY17 CIP program and allocate funds to support May River Preserve Pond Project and expansion of Pine Ridge Project.
  - Collect supporting water quality data from Pine Ridge project to

evaluate project efficacy and consider re-submitting a grant application for FY18 or FY19.

#### **5. Stormwater Utility Management Plan Update**

- Beaufort County is the managing partner for this county-wide stormwater master plan update by Applied Technology & Management.
- A series of Public Meetings was held across the County to gather input for the Management Plan Update. The Bluffton meeting was held on Wednesday, June 22, 2016.
- Following public input, Staff is investigating with ATM if the May River Watershed Action Plan water quality model can be completed as part of the Management Plan Update.
- **Next Steps:**
  - Contractor is to provide alternatives and cost-estimates to complete the water quality model in August.

### **DIVISION/STAFF UPDATES**

#### **Project Management**

- Pat Rooney transferred from Planning to Project Management

#### **Watershed Management**

- In support of the Development Review process staff performed:
  - 27 Development Plan Reviews,
  - 4 Development Surety Reviews,
  - 17 Certificate of Construction Compliance Inspections,
  - 4 Pre-Construction meetings,
  - 3 Pre-Clearing inspection, and
  - 3 Post-Construction BMP.
- **May Data Collection –**
  - Collected data from 4 monitoring stations at Niver Property.
  - Collected data from 3 monitoring stations at Pine Ridge.
  - 34 in stream flow/velocity measurements collected.
- Watershed Management staff attended Part IV of Pathogens in Urban Stormwater Systems: Source Controls and Stormwater Control Measures Webinar at the Bluffton Library.
- Watershed Management staff attended the Geo-caching the Rain: Using Geocaching to Educate the Public Webinar hosted by Southeast Stormwater Association.
- Watershed Management staff attended a public meeting held by SCDHEC with regards to regulation changes to R.61-68, Water Classifications and Standards.
- Watershed Management staff met with Dr. Alan Warren, with the USCB Water Quality Laboratory, to discuss statistical analyses of water quality monitoring program data.
- Watershed Management staff met with the new Keep Beaufort County Beautiful Coordinator to discuss support of the Town's two annual cleanups and potential opportunities to continue working together in Bluffton.
- Watershed Management staff participated in the Stormwater Utility Board, Stormwater Implementation Committee, and MS4 and Water Quality

Monitoring sub-committee meetings. These meetings allow the three (3) MS4 permit holders/jurisdictions to partner on permit requirements including education and outreach and water quality monitoring.

- May River Watershed Management Plan Advisory Committee held its quarterly meeting on July 26<sup>th</sup>.

### **Public Works**

- **Ditch/Drainage Maintenance –**

- Performed weekly, street sweeping on Calhoun Street, Highway 46, Simmonsville Road, and Buck Island Road curbs and medians.
- Performed routine maintenance on ditches and drainage features throughout the jurisdictional limits of the Town.
- Removed over 900 lbs. of vegetative debris from storm drains and drain inlets in Old Town, Buck Island and Simmonsville Rd from the Heavy rain Storm
- Commenced routine mowing of roadside Ditches, Main waterway ditch banks, Palmetto Bluff Pond and New River Trail.

- **Performed inspection on the following ditches:**

- Brown's property ditch
- Palmetto Bluff Pond
- Picked up litter and debris along the following road shoulders around the Town:
  - Simmonsville Road
  - Buck Island Road
  - Goethe Road
  - McCracken Circle
  - Masters Way
  - Hampton Parkway
  - Shultz Road
  - Dr. Mellichamp Road
  - Hilderbrand Road

- **Beautification Program –**

- Eagles Field
  - Mowing the field
  - New fence has been installed. Rake the ball-field
- Play ground is now open. Ongoing trash cleanup throughout Old Town including:
  - May River Road
  - Burnt Church Road
  - Highway 46
  - Simmonsville Road
  - Buck Island Road
- Ongoing routine landscape maintenance at the following facilities:
  - Town Hall new pine straw has been spread around the building.
  - DuBois Park new sod has been laid in thin areas.
  - Calhoun Dock
  - 1261 May River Road
  - 1264 May River Road

- Oyster Factory Park new landscaping has been installed.
  - Law Enforcement Center
  - Buckwalter Park new pine straw has been installed.
  - Eagle's Field
  - Rotary Community Center
  - Public Works Facility
  - Pritchard Park
  - Corner Park on Bruin Road & Pritchard Street –Replaced crosswalk
- **JULY Town Trash & Recycling Program –**
    - total phone calls
      - new services
      - trash pickups missed
      - recycle pickups missed
      - broken carts
      - missing carts and bins replaced
      - miscellaneous calls
    - Total Town of Bluffton residences served
    - Staff continues communications with Waste Management reviewing level of services and current monthly services.
- **JULY Work Requests Completed –**
    -

**Attachments:**

1. May River Watershed Action Plan Update\*
2. SCDHEC Shellfish Harvesting Monitoring Data
3. Fecal Coliform Concentrations Trend Map
4. Erosion and Sediment Control Inspections
5. Illicit Discharge Investigations
6. Drainage Concerns
7. Stream/Ditch Inspection
8. Septic System Maintenance Assistance
9. Citizen Request for Stormwater Services Heat Map
10. Headwater Infrastructure Capture Map

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

| ACTIVITY - PROJECTS                                 | STATUS   |
|---|--|
| Septic Conversion to Sanitary Sewer                 | Buck Island/Simmons Road (BIS) Phases I and II are completed. Toy Fields is completed. <b>BIS Phase III in final stages with individual connections being made. BIS Phase IV construction contract is under review by CDBG. BIS Phase V is designed and easement exhibits are being drafted. Jason/Able Street sewerage is led by BJWSA and being split into phases for implementation.</b>  |
| May River 319 Grant Phase I - New Riverside Pond    | Weekly water quality testing ongoing. A statistically significant reduction in fecal coliform bacteria concentration exists pre-pond versus post-pond. However, bacteria levels re-load to previous levels prior to discharging into the May River. This leads to management decisions with BMP placement as well as BMPs in-series to maintain bacteria reductions. <b>If approved through the pending amendment, 319 Grant Phase 2 funds will be reallocated to purchase engineered bacteria removal media filter socks to be installed in the wetland ditch downstream from the pond outfall to prevent bacteria re-load prior to discharging to the May River.</b> |
| May River 319 Grant Phase II - Pine Ridge           | Data collection ongoing. <b>Project is nearing construction completion with the substantial completion inspection conducted on June 27, 2016. Staff has submitted a 319 Grant amendment request to extend the grant deadline to January, 30 2017 and reallocate unspent funds to plant the littoral shelves and enhance the 319 Phase I New Riverside Pond project.</b>  |
| May River 319 Grant Phase III - May River Preserve  | <b>Staff has been notified that following minor modifications to the work plan the May River Preserve Pond Project (319 Grant Phase III) will be selected for funding for \$231,350. This will be construction of a shallow pond.</b>  |
| Stoney Creek Wetlands Restoration: Conceptual Phase | Adjacent and offsite survey work has been completed for preliminary wetland delineation, site characteristics and topography. A work authorization for wetland and subsurface hydrology evaluation was approved by the property owners. <b>The Final Memo &amp; Report was submitted July 5, 2016 and is in Staff review.</b>  |

|  |  |
|--|--|
| <p>May River Watershed Water Quality Model</p> | <p>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. <b>To expedite completion, Staff is Investigating with the County's Stormwater Master Plan Update contractor, ATM, if they can complete the May River Watershed Action Plan water quality model as part of the Management Plan Update. ATM is to provide alternatives and cost-estimates for consideration in August.</b></p> |
| <p><b>ACTIVITY - POLICY</b></p>                | <p><b>STATUS</b></p>   |
| <p>May River Watershed Action Plan Update</p>  | <p>To be completed as part of Jones' Ph.D. dissertation with direction and input from staff, the public, Water Quality Technical Advisory Committee, May River Watershed Advisory Committee, and Town Council during FY17 through FY18 in connection with Comprehensive Plan Update.</p>   |
| <p><b>ACTIVITY - PROGRAMS</b></p>              | <p><b>STATUS</b></p>   |
| <p>Sewer Connection Program</p>                | <p>As part of FY17 budget Council allocated \$200,000 for a Sewer Connection Program. Staff is working with the May River Watershed Action Plan Advisory Committee to develop a draft policy for prioritization of efforts for Council's consideration at a future workshop. Through Neighborhood Assistance Program, income qualified individuals can receive assistance to connect to existing sanitary sewer. Funded at \$10,000 for FY17.</p>  |
| <p>Septic System Maintenance Program</p>       | <p>On-going assistance offered to Town residents in need regardless of financial status through Neighborhood Assistance Program.</p>   |
| <p>Water Quality Monitoring Program</p>        | <p>Bacterial "hot spot" monitoring continues within the headwaters as does BMP efficacy monitoring. <b>Proposed expansion of program to meet MS4 requirements under development.</b></p>   |
| <p>Sediment &amp; Erosion Control Program</p>  | <p><b>Sediment and erosion control inspections with escalating enforcement response continue.</b></p>  |
| <p>Ditch Inspection/Maintenance Program</p>    | <p><b>Coordinate with SCDOT, Beaufort County and Town Public Works to inspect and maintain ditches within the Town's jurisdiction.</b></p>   |
| <p>Infrastructure Mapping/GIS</p>              | <p>Data points continue to be collected as new development occurs to populate water quality model and meet MS4 requirements.</p>   |

|   |   |
|---|---|
| Public Outreach/Participation/Involvement                                 | Outreach and involvement efforts continue through county-wide partnership with Carolina Clear as Neighbors for Clean Water and through local cleanups and school classes. |
| Development Plan Review Program   | Staff supports development plan review process to ensure current BMPs for water quality and water quantity are incorporated into new developments.                        |
| <b>ACTIVITY - FINANCIAL</b>   | <b>STATUS</b>   |
| Additional Funding Opportunities - Buckwalter School Campus Pond Retrofit | The Buckwalter School Campus project was not selected for funding by the 319 Grant Selection Committee.   |

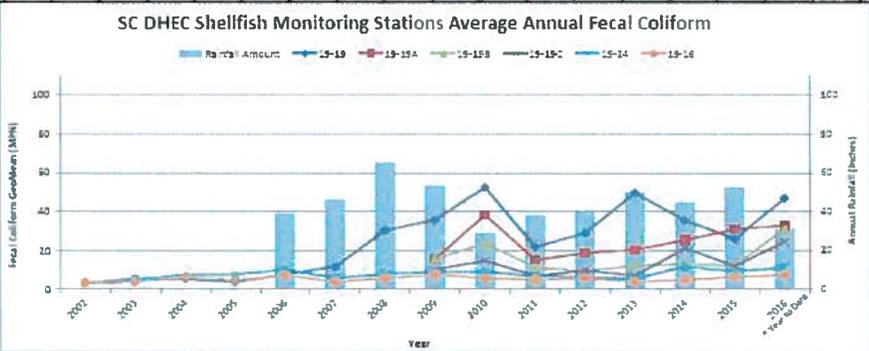
# Attachment 2

## SCDHEC Shellfish Harvesting Monitoring Data

Attachment 2

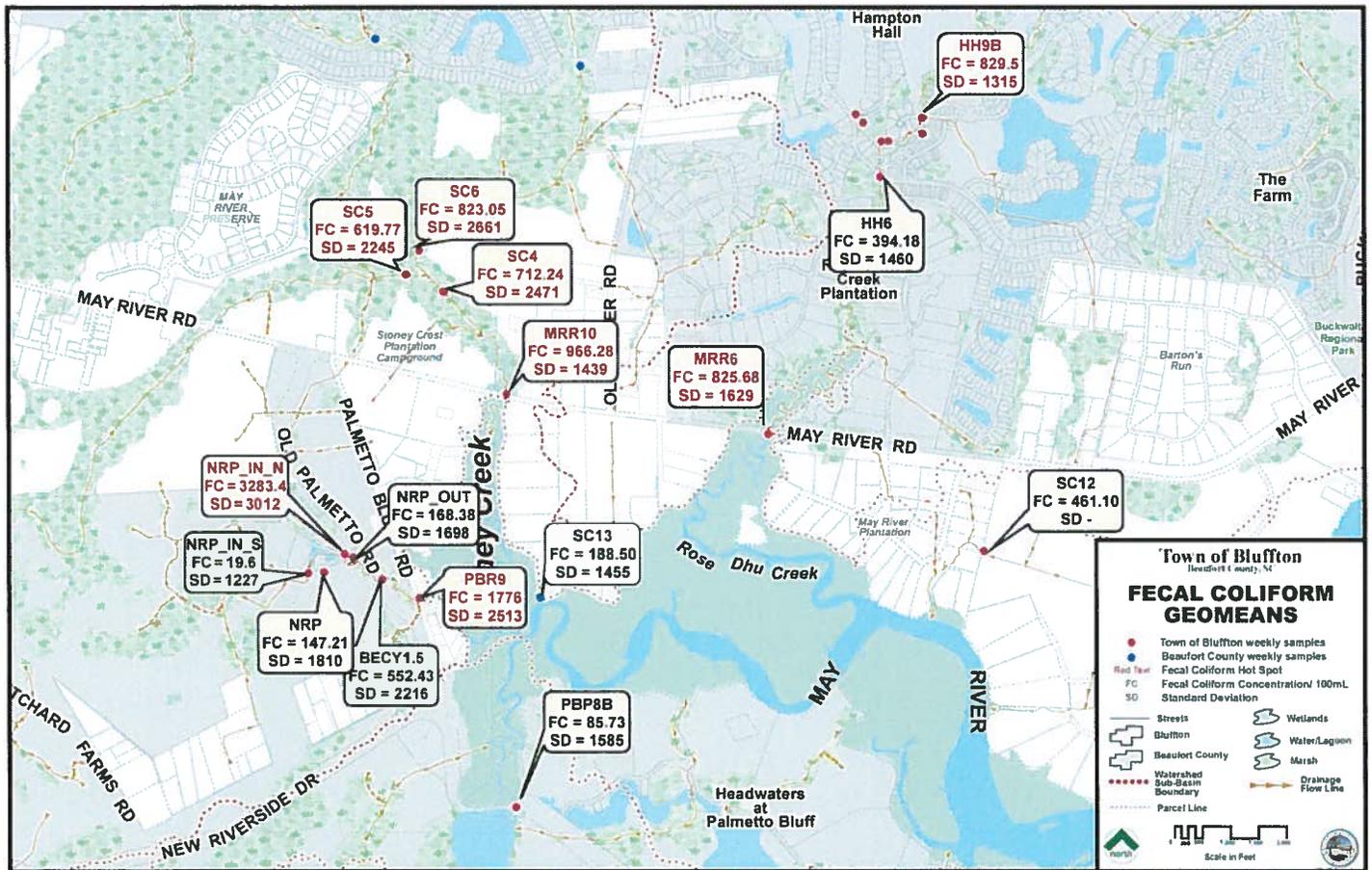
|                           | 15-19                |                      |                      |                      | 15-19A               |                      |                      |                      | 15-19B               |                      |                      |                      | 15-19C               |                      |                      |                      | 15-24                |                      |                      |                      | 15-16                |                      |                      |                      |
|---------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|                           | 2013                 | 2014                 | 2015                 | 2016                 | 2013                 | 2014                 | 2015                 | 2016                 | 2013                 | 2014                 | 2015                 | 2016                 | 2013                 | 2014                 | 2015                 | 2016                 | 2013                 | 2014                 | 2015                 | 2016                 | 2013                 | 2014                 | 2015                 | 2016                 |
|                           | Fecal Coliform (MPN) |
| December                  | 7.0                  | 11.0                 | 110.0                |                      | 7.0                  | 7.5                  | 33.0                 |                      | 7.5                  | 11.0                 | 27.0                 |                      | 7.8                  | 23.0                 | 7.8                  |                      | 1.8                  | 33.0                 | 9.8                  |                      | 4.5                  | 13.0                 | 4.5                  |                      |
| November                  | 11.0                 | 49.0                 | NS                   |                      | 17.0                 | 33.0                 | NS                   |                      | 17.0                 | 17.0                 | NS                   |                      | 2.0                  | 53.0                 | NS                   |                      | 13.0                 | 31.0                 | NS                   |                      | 13.0                 | 9.8                  | NS                   |                      |
| October                   | 13.0                 | 17.0                 | 25.0                 |                      | 13.0                 | 7.5                  | 49.0                 |                      | 70.0                 | 4.5                  | 4.5                  |                      | 15.0                 | 8.8                  | 23.0                 |                      | 2.0                  | 4.5                  | 7.8                  |                      | 4.5                  | 2.0                  | 4.5                  |                      |
| September                 | 33.0                 | 27.0                 | 48.0                 |                      | 17.0                 | 17.0                 | 17.0                 |                      | 7.5                  | 2.0                  | 6.3                  |                      | 19                   | 4.5                  | 17.0                 |                      | 7.8                  | 4.5                  | 23.0                 |                      | 8.8                  | 2.0                  | 4.5                  |                      |
| August                    | 11.0                 | 49.0                 | 8.5                  |                      | 2.0                  | 49.0                 | 17.0                 |                      | 23                   | 33.0                 | 13.0                 |                      | 8.2                  | 73.0                 | 13.0                 |                      | 0.2                  | NS                   | 24.0                 |                      | 1.8                  | 17.0                 | 4.0                  |                      |
| July                      | 6.8                  | 17.0                 | 17.0                 |                      | 4.5                  | 7.5                  | 7.8                  |                      | 7.5                  | 1.8                  | 8.8                  |                      | 2.0                  | 1.8                  | 11.0                 |                      | 1.7                  | 2.0                  | 2.0                  |                      | 1.7                  | 1.8                  | 4.5                  |                      |
| June                      | 163.0                | NS                   | 33.0                 | 75.0                 | 820.0                | NS                   | 48.0                 | 130.0                | 1.7                  | NS                   | 11.0                 | 70.0                 | 1.7                  | NS                   | 14.0                 | 118.0                | 11.0                 | NS                   | 4.5                  | 33.0                 | 7.5                  | NS                   | 11.0                 | 23.0                 |
| May                       | 49.0                 | 33.0                 | NS                   | 70.0                 | 13.0                 | 33.0                 | NS                   | 23.0                 | 7.5                  | 8.2                  | NS                   | 49.0                 | 7.8                  | 49.0                 | 8.8                  | 40.0                 | 4.0                  | 7.8                  | 8.8                  | 14.0                 | 2.0                  | 2.0                  | 23.0                 | 17.0                 |
| April                     | 173.0                | 133.0                | 1.8                  | 25.0                 | 49.0                 | 79.0                 | 33.0                 | 23.0                 | 2.0                  | 17.0                 | 17.0                 | 15.0                 | 1.7                  | 240.0                | 17.0                 | 13.0                 | 1.7                  | 23.0                 | 13.0                 | 7.8                  | 2.0                  | 13.0                 | 17.0                 | 1.8                  |
| March                     | 70.0                 | 73.0                 | 170.0                | 33.0                 | 49.0                 | 35.0                 | 130.0                | 33.0                 | 17.0                 | 11.0                 | 49.0                 | 33.0                 | 25.0                 | 13.0                 | 17.0                 | 17.0                 | 22.0                 | 8.8                  | 13.0                 | 11.0                 | 2.0                  | 4.5                  | 8.8                  | 7.8                  |
| February                  | 350.0                | 110.0                | 13.0                 | 25.0                 | 48.0                 | 33.0                 | 16.0                 | 17.0                 | 70.0                 | 70.0                 | 1.8                  | 13.0                 | 40.0                 | 79.0                 | 1.4                  | 11.0                 | 17.0                 | 33.0                 | 7.8                  | 9.8                  | 7.8                  | 13.0                 | 2.0                  | 1.8                  |
| January                   | 23.0                 | 49.0                 | 70.0                 | 110.0                | 17.0                 | 79.0                 | 79.0                 | 33.0                 | 25.0                 | 13.5                 | 49.0                 | 49.0                 | 15.0                 | 11.0                 | 33.0                 | 17.0                 | 4.8                  | 7.8                  | 17.0                 | 7.8                  | 4.5                  | 2.0                  | 7.8                  | 17.0                 |
| Additional Samples        |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
| Additional Samples        |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |                      |
| Average Annual Coliforms  | 48.0                 | 35.4                 | 26.0                 | 48.8                 | 20.3                 | 25.5                 | 30.0                 | 32.0                 | 12.2                 | 15.0                 | 12.3                 | 31.3                 | 7.1                  | 21.2                 | 13.0                 | 24.6                 | 6.5                  | 11.8                 | 8.2                  | 11.3                 | 5.9                  | 8.8                  | 8.4                  | 7.4                  |
| Truncated Geometric Mean  | 34.0                 | 31.0                 | 37.0                 | 37.0                 | 23.0                 | 17.0                 | 21.2                 | 29.0                 | 14.0                 | 10.0                 | 11.0                 | 16.0                 | 10.0                 | 7.0                  | 11.0                 | 17.0                 | 7.0                  | 6.0                  | 7.0                  | 10.0                 | 5.0                  | 4.0                  | 4.0                  | 6.0                  |
| Truncated 95th Percentile | 172.0                | 207.0                | 305.0                | 107.0                | 110.0                | 82.0                 | 85.0                 | 82.0                 | 61.0                 | 40.0                 | 51.0                 | 80.0                 | 43.0                 | 29.0                 | 55.0                 | 71.0                 | 28.0                 | 21.0                 | 30.0                 | 25.0                 | 17.0                 | 13.0                 | 13.0                 | 20.0                 |

NS = No Sample  
AS = Additional Samples  
\*\* Truncated Geometric Mean  
\*\* Truncated 95th Percentile



# Attachment 3

## Fecal Coliform Concentrations Trend Map

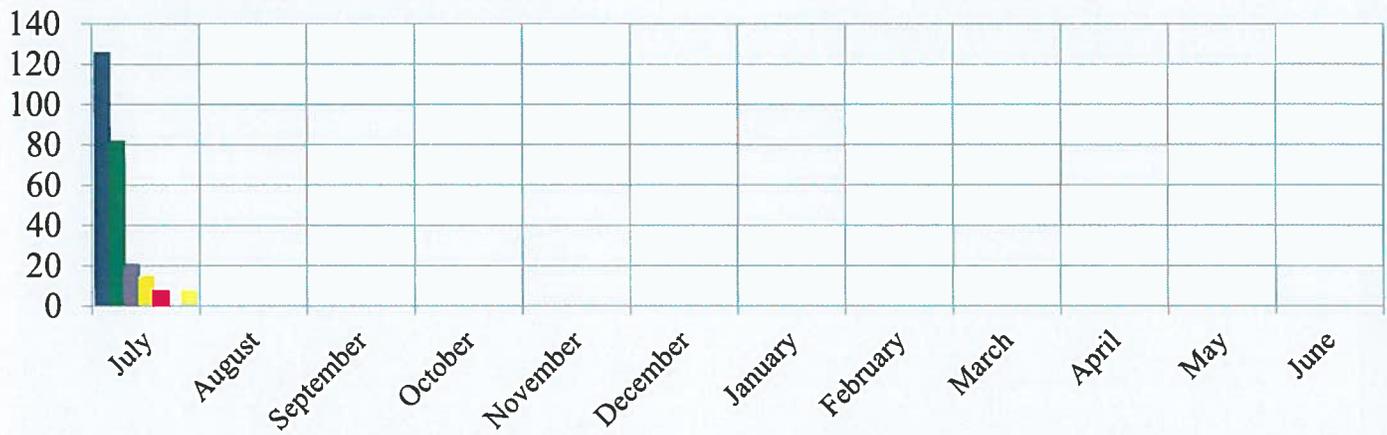


7/27/2016

# Attachment 4

## Erosion and Sediment Control Inspections

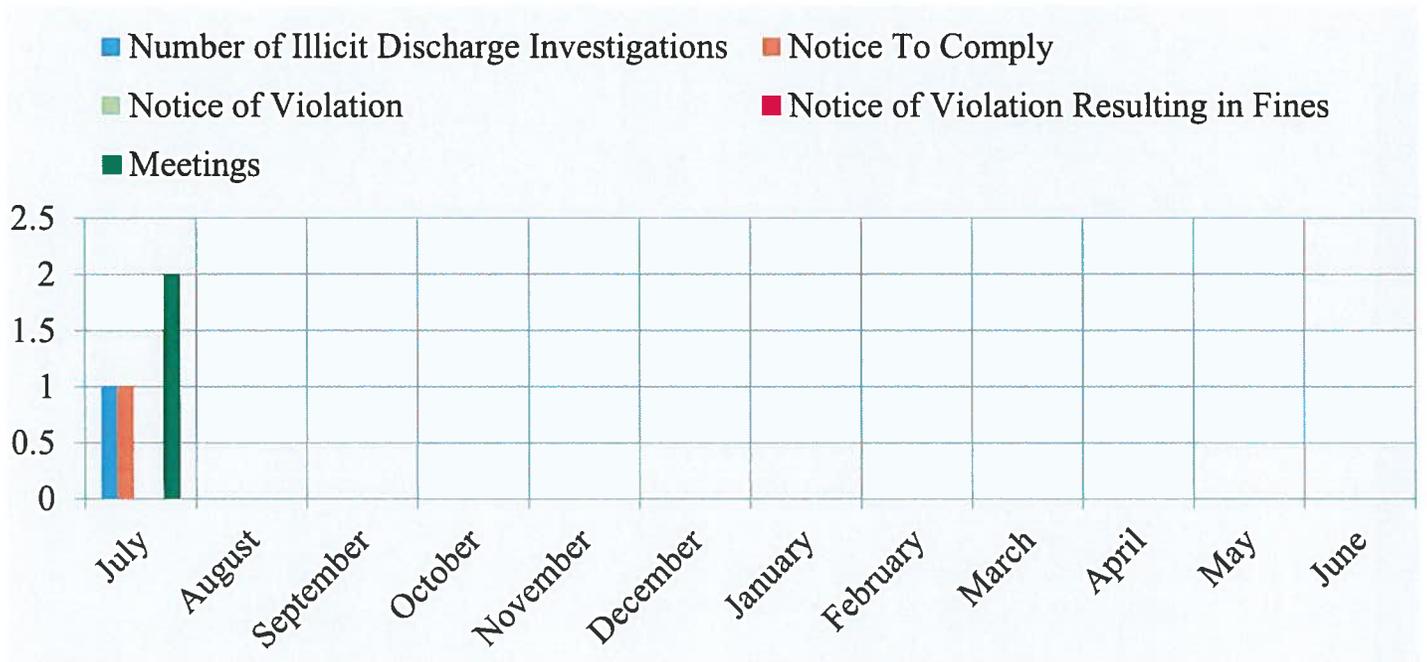
- Erosion & Sediment Control Inspections (E&SC)
- Number of 1st Notice To Comply (NTC)
- Number of Notice of Violation (NOV)
- Number of Erosion & Sediment Control Meetings
- Number of Inspections Passed
- Number of 2nd Notice To Comply
- Number of Fines for Notice of Violation



| FY 2017 YTD | Number of Sediment & Erosion Control Inspections | Number of Inspections Passed | Number of 1st NTC Issued | Number of 2nd NTC Issued | Number of NOVs Issued | Number of NOVs Fines Issued | Number of E&SC Meetings |
|-------------|--|------------------------------|--------------------------|--------------------------|-----------------------|-----------------------------|-------------------------|
|             | 126  | 82                           | 21                       | 15                       | 8                     | 0                           | 8                       |

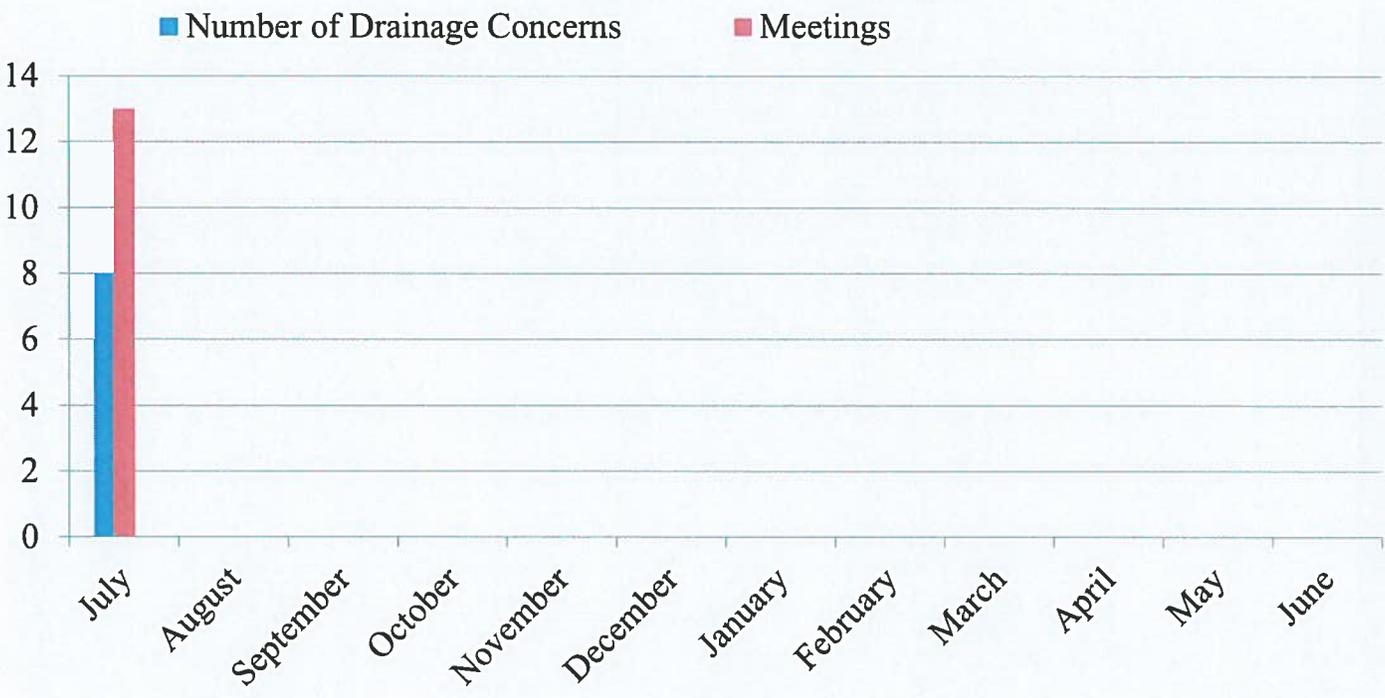
## Attachment 5

# Illicit Discharge Investigations



| FY 2017 YTD | Number of Illicit Discharge Investigations | Number of Notices To Comply Issued | Number of Notices of Violation Issued | Notices of Violation Resulting in Fines | Number of Meetings |
|-------------|--|------------------------------------|---------------------------------------|---|--------------------|
|             | 1  | 1                                  | 0                                     | 0                                       | 2                  |

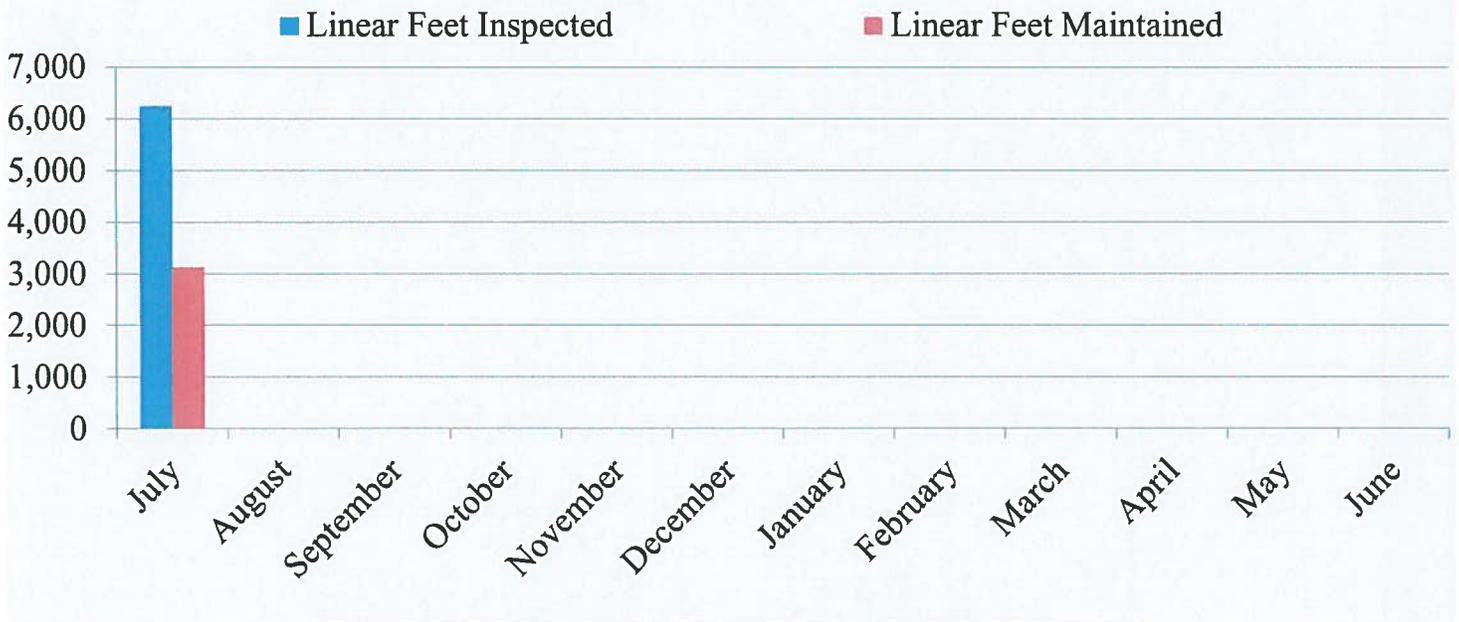
Drainage Concerns



| FY 2017 YTD | Number of Drainage Concerns Investigated | Number of Meetings |
|-------------|--|--------------------|
|             | 8  | 13                 |

# Attachment 7

## Stream/Ditch Inspections



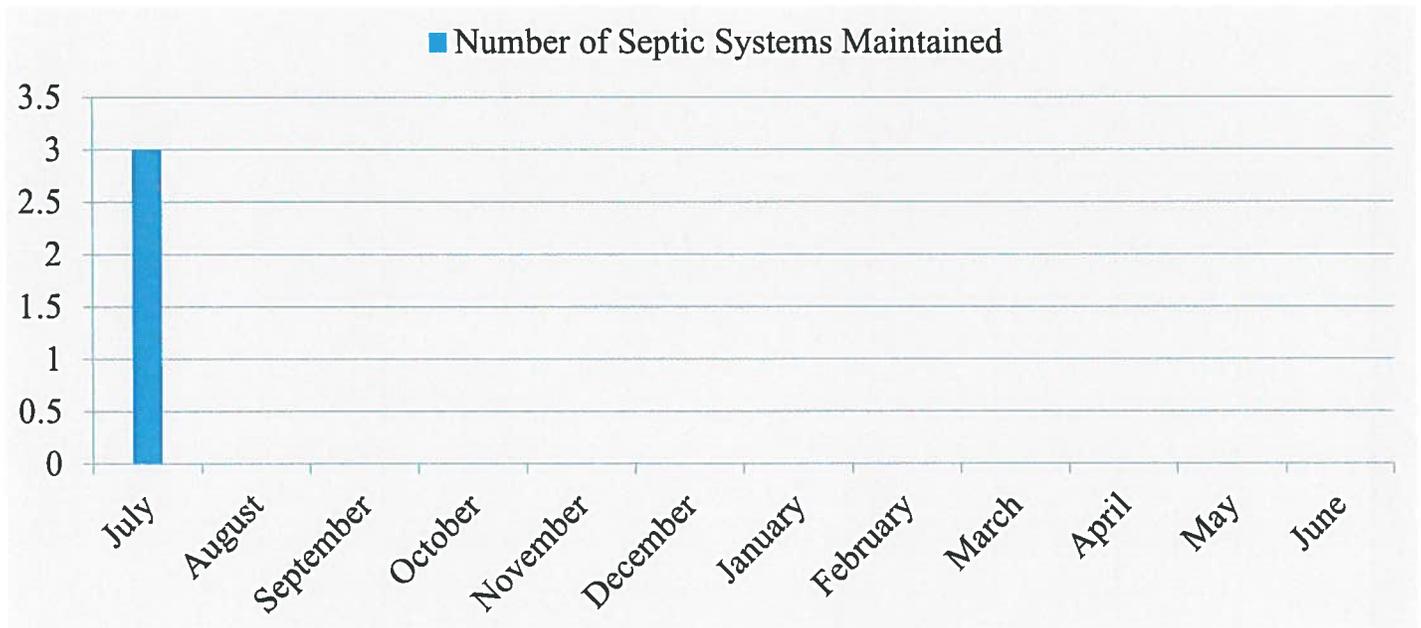
| FY 2016 YTD | Linear Feet Inspected | Linear Feet Maintained |
|-------------|-----------------------|------------------------|
|             | 6254                  | 3132                   |

**Staff Notes:**

- Public Works continues to perform ditch maintenance and respond to drainage issues throughout the Town.
- 33 Stream / Ditches are inspected by Stormwater and Public Works staff as part of the MS4 requirement under the IDDE MCM # 3

## Attachment 8

### Septic System Maintenance Assistance

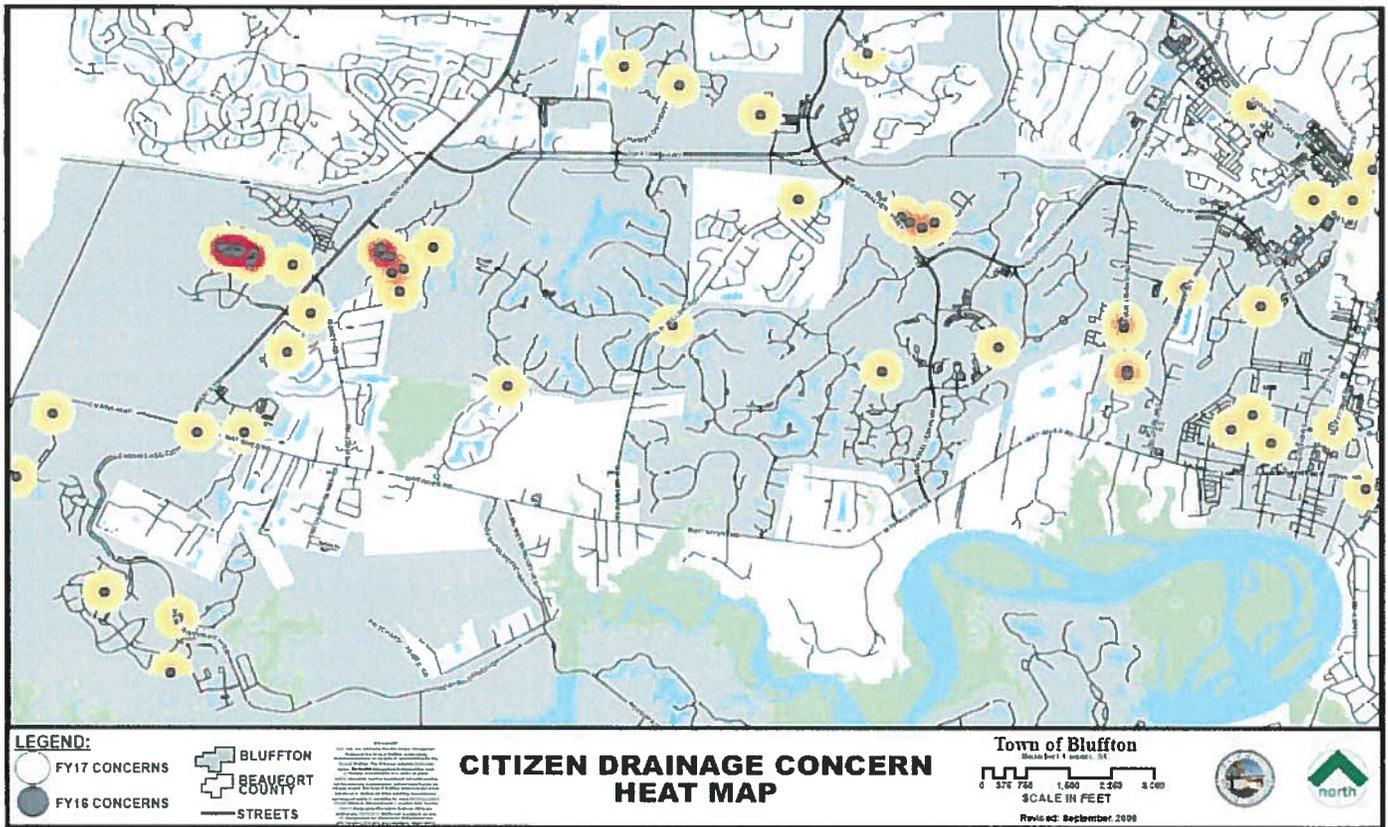


| FY 2017 YTD | Number of Septic Systems Maintained |
|-------------|-------------------------------------|
|             | 3                                   |

Requests for Septic System maintenance are down due to completed connections along Buck Island Road and Simmonsville Road as part of the Phase #3 BIS Sewer project

# Attachment 9

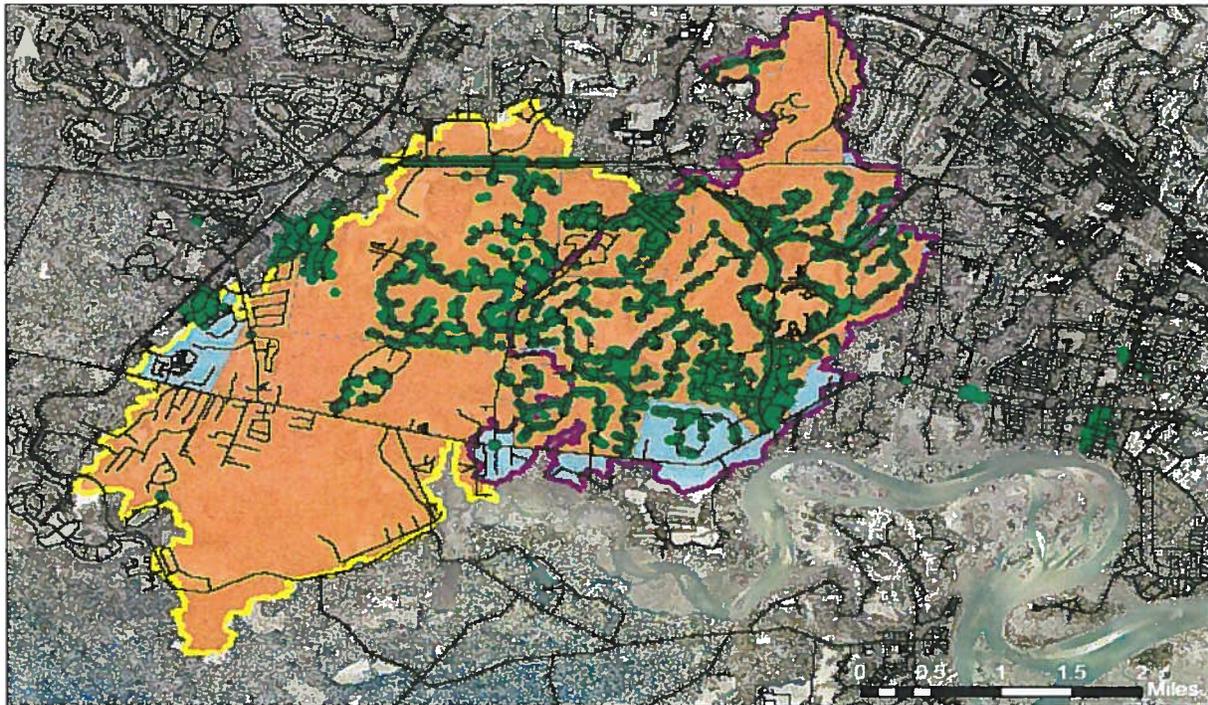
## Citizen Request for Stormwater Services Heat Map



# Attachment 10

## Headwater Infrastructure Capture Map

### Stormwater Inventory Collection



**Collection Status**

- Completed
- In Progress

- Inventoried SW Utilities
- Rose Dhu Watershed
- Stoney Creek Watershed

EXPLANATION  
This map was prepared for the Stormwater Inventory Collection and is not intended to be used as a plan or representation for the City of St. Louis. The City of St. Louis and the Department of Public Works are not responsible for the accuracy of the information shown on this map. The City of St. Louis and the Department of Public Works are not responsible for the accuracy of the information shown on this map. The City of St. Louis and the Department of Public Works are not responsible for the accuracy of the information shown on this map. The City of St. Louis and the Department of Public Works are not responsible for the accuracy of the information shown on this map.