



BEAUFORT COUNTY STORMWATER MANAGEMENT UTILITY BOARD AGENDA Wednesday, August 16, 2017 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 19, 2017 (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 (backup)

5. UNFINISHED BUSINESS

- 6. NEW BUSINESS
 - A. Special Presentation: Town of Port Royal Cypress Wetlands Modification Project Tony Maglione, Consultant
 - B. Recommendation to Award Consultant Contracts for the FY18 Group CIP Projects

7. PUBLIC COMMENT

8. NEXT MEETING AGENDA

A. September 20, 2017 (backup)

9. ADJOURNMENT





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

July 19, 2017 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 07/24/2017

Board Members

Ex-Officio Members

Present	Absent	Present	Absent
Don Smith	Marc Feinberg	Andy Kinghorn	Scott Liggett
William Bruggeman	Allyn Schneider	Kim Jones	Van Willis
James Fargher			
Larry Meisner			
Patrick Mitchell			

Beaufort County Staff

Eric Larson David Wilhelm Rebecca Baker Melissa Allen Patricia Wilson Donald McKay

Visitors

Alice Howard, County Council District 4 Jeff Netzinger, Town of Hilton Head Jeff Buckalew, Town of Hilton Head Denise Parsick, Beaufort SW Conservation District Lamar Taylor, City of Beaufort

1. Meeting called to order – Don Smith

- A. Agenda Approved.
- B. May 17, 2017 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:

https://www.bcgov.net/departments/Administrative/beaufort-county-council/boards-andcommissions/council-appointed/board-list/stormwater-management-utilityboard/agendas/2017/071917.pdf

A. June Stormwater Manager Report – Eric Larson

Mr. Eric Larson thanked the Chairman, Mr. Don Smith, for making the decision to cancel June's meeting to allow staff the opportunity to attend the funeral for Jimmie Stanley who was a long time Public Works employee. He expressed that thoughts and prayers are with their family as they continue to heal.

Mr. Larson indicated that he will provide the July report and refer back to the June report on occasion.

B. Utility Update – Eric Larson

In reference to item #2, Mr. Eric Larson noted an increase in fees for Town of Hilton Head, as they have changed over Option E for their rate structure.

Mr. Larson mentioned that tax run work and preparation began on July 1st and staff is busy checking data.

C. Monitoring Update – Eric Larson

USCB has renewed their agreement with the Town of Bluffton and their funding levels stayed the same at \$120,000 a year.

Mr. Larson explained that the County is developing a monitoring plan with USCB to use as a pre-construction base line for new construction projects and these projects will likely take two years to complete. Mr. Don Smith asked if the County was happy with the work the lab is doing. Ms. Kim Jones said the Town of Bluffton has been working with them since 2009 and they have met every need they have had. Mr. Larson responded that the County is fine with their performance and indicated they meet with the lab on a regular basis to check on progress. He noted the are doing almost all of the MS4 monitoring and are full accredited with all of their procedures and looking to expand their capabilities.

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

Mr. Larson mentioned that the SWIC did not meet over the last month. Mr. Andy Kinghorn asked if SWIC has been deemphasized. Mr. Larson explained that they are now meeting on an as needed basis, as content and attendance had been dropping due to other focuses such as MS4. He mentioned that they communicate through phone and email when it is necessary and meet as needed to discuss larger issues or updates.

E. Stormwater Related Projects – Eric Larson

In reference to Okatie West, Mr. Larson referred back to the June report explaining that DHEC informed the County that funding for the grant has been cut off early. The project is now scheduled for completion by July 31, 2018 and is currently ahead of that schedule.

Mr. Larson provided an update on easements, informing the board that the County has reached an agreement with the property owner on Pleasant Point, to include liability. An agreement (restricted covenant) has been signed and will be recorded in the future.

F. Professional Contracts Report – Eric Larson

Mr. Larson explained that Joe Mina with ATM is working on making a recommendation on the CIP list. When he finished with the modeling, he wasn't finding a correlation between the modeling results and the projects of the 2006 plan. After interviewing municipalities and jurisdictions and getting a list of their priorities, the recommendation for the Master Plan will consist of a blend of known hot spots, complaint areas, perceived problems from impaired watersheds, and projects as a result of the modeling.

In reference to the FY18 Project Grouping, Mr. Larson informed the board that there is a proposal out for consulting services for four projects, two from last year that were delayed due to Hurricane Matthew and two projects that were planned this year. In response to a question, Mr. Larson responded that it is all one package, but the option to select a second firm is available, should the selected firm not have the capacity or manpower to complete all

four projects. He noted Brewer Memorial is not part of the 2006 master plan; it is a smaller demonstration project that was added to solve an isolated drainage problem in a high profile location to demonstrate BMPs to the public.

Mr. Larson gave a brief overview of the other three projects.

- Sawmill Creek overtopping was noted as an issue in the 2006 master plan, located on HWY 278 which is an evacuation route. A stormwater feature will be built in coordination with a frontage road that will connect the frontage road from BMW over to Tanger 1. The embankment that creates the frontage road will be used as a dam, stormwater detention facility, to help regulate the flow and prevent the overtopping of 278.
- Salt Creek near Battery Creek High School will be a regional wet detention facility to try to intercept some of the flow from that sub watershed into Albergotti Creek.
- Shanklin Road goes into Albergotti Creek and is in front of the runway on the Air Station. The government purchased the land to create a wetland bank, the County's goal is to create a water quality feature in that sub watershed that will meet approval of the Marine Corps, without attracting birds.

G. Regional Coordination – Eric Larson

Mr. Larson noted he will be meeting with the consultant for an update on the Factory Creek Watershed (Coleman Pond) project. They will be going over final design and ensuring all permits are in place for construction in the final phase.

In reference to item #4, Municipal "County" Infrastructure, Mr. Larson pointed out that discussion is taking place about the Attorney General's option, which expanded from roads to all infrastructures. County Council has authorized the County Administrator, Gary Kubic, to discuss this opinion on County roads within incorporated areas with the Town and City Managers. He noted is important for the Board to be aware of, as it could affect operations and funding of the utility.

H. Municipal Reports – Eric Larson

Please reference the report which is included in the posted agenda. No additional updates.

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

Mr. Larson noted that that you can see by the report that the work load is starting to substantially increase with the MS4 program in place. Stormwater regulation started reporting the number of violations that the County had had to issue.

Regarding #4, MS4 permit by rule, Mr. Larson mentioned that it was approved by County Council and a letter has been sent to DHEC. The County began operating as such and has begun NPDES permitting (construction stormwater) as an MS4 and on behalf of DHEC as of July 1, 2017.

Mr. Larson pointed out that the Pond Conference will be taking place at USCB in October with a full day of technical speakers, tailored toward a broad spectrum of audiences such as home owners, developers and engineers. In response to a questions Mr. Larson explained that Carolina Clear will be responsible for advertising and will do so by avenues such as email lists for their newsletters, social media, mailers, announcements during the SWUB meeting, and a County press release. He explained the County did this event in 2015 and had over 100 participants, and expects this year's participation to be 100+ as well.

J. Maintenance Projects Report – David Wilhelm

Mr. David Wilhelm reported on the completion of the HWY 278 ponds, Warsaw Road, and Mint Farm Pond projects.

• The last of the four ponds on HWY 278 is complete. The final pond was a one acre pond located next to the Berkeley Hall construction entrance. The four ponds total about six and a half (6.5) acres: Pickney Hall is a one acre pond, Berkeley Hall is a one acre pond, Barrell Landing is two ponds totaling an acre, and Running Deer is about 3.5 acres. 84,000 cubic yards of material was removed from the pond sites and taken to the Bluffton recreation center to build up future sports fields. PALs partnered in this project, as they shared half of the excavation and hauling cost and in return got a large quantity of material at a greatly reduced rate. The County is monitoring the pond sites on a routine basis to ensure they are properly maintained.

• Warsaw Island Road project (3,500 feet of road side ditch was cleaned) was completed at end of September. The area was hydroseeded and since the vegetation didn't have a chance to establish before Hurricane Matthew, the County had to go back in and clean it up, which is why the cost is almost nearly double what a typical project of this nature would cost.

• Mint Farm Pond off of James Road the pond was constructed in a subdivision without any kind of outfall in it, so when the pond filled up the houses were subject to flooding. The water elevation was lowered, three catch basins and channel pipe were installed, so now as the pond water rises it will divert off once it reaches a certain elevation.

5. Unfinished Business – None.

6. New Business

A. Special Presentation: Town of Hilton Head Island – EWP Efforts – Mr. Jeff Buckalew gave an overview of the Town of Hilton Head's efforts with regard to disaster debris recovery from Hurricane Matthew. He explained that prior to the storm the Town had a debris management plan that was approved by FEMA which qualified them for an extra 2% in funding assistance. They also had drainage agreements with many of the gated communities as well as MOAs for debris removal, in addition to ordinances established prior to the storm, which helped them when applying for funding assistance.

After Hurricane Matthew passed it was essential for emergency clearing to begin to be able access critical facilities and begin damage assessments after getting staff back on island. After doing some research it was determined they needed to go through NRCS, using their Emergency Watershed Program (EWP) for funding assistance for debris removal. FEMA expressed that all resources needed to be exhausted before contacting them for additional assistance. The Town of Hilton Head began with the exigency program through NRCS, which is available for life threatening situations, which they identified with repetitive loss areas to flooding from their GIS system.

One challenge they ran into was that the local share for the grant was over \$100,000, so it was debated whether or not they needed to go to Town Council for approval. The exigency program allows only 10 days for all of the work to be completed from the date it is signed. Once signed, the Town immediately applied for the 10 day extension as the result of a recommendation

from NRCS to ensure they have plenty of time, should they run into challenges such as poor weather conditions or issues with equipment. Knowing that any unused funds had to go back to NRCS, the Town asked if they were allowed to do additional work if any money and time were left after completing the approved work. The Town was told they could do additional work only if it fell within the geographic zones that were approved and it was similar work. They had 11 channels approved and ended up being able to complete 13.

After finishing the exigency projects the Town began working on a standard grant through NRCS. This type of grant allows 220 days for work to be completed. They continued doing project scopes to determine the amount of work, cost estimates and review property rights. In some cases they had to go out and acquire right of entry and easements that were needed to complete work. The Town finished the standard grant work a few weeks ago and NRCS submitted a letter indicating they had depleted all available NRCS funds, so they could work on trying to get FEMA assistance.

The Town is currently working with FEMA and developed new project scopes and reviewed property rights. FEMA had different criteria for property rights, in which they require you to have them in place prior to a storm. They are expected to complete all federal subsidized drainage debris work by September.

Mr. Buckalew noted that NRCS and FEMA were very different to work with as NRCS utilized thorough bureaucracy (wait to start) versus proceed at your own risk with FEMA. The transition between the two for funding assistance was very unclear, but they worked through it. The local match for the assistance programs was 25%.

Some lessons that were learned throughout the process were to research up front, effective communication (knowing who the right person to reach out to), having organized data in GIS and property right agreements in place, knowing roles and responsibilities, creating a flow chart of the process, establishing a funding reserve, and having access to good contractors and monitors.

In reference to a question about the pump stations, Mr. Buckalew indicated that the Town has two pump stations with major damage that they are working to repair. They are looking into the possibility of installing a mechanical debris screen as a preventative measure for the future.

The EWP presentation is attached to the minutes.

B. *SC170 Drainage Issues* – The property owner was not present, so this agenda item was not discussed.

7. Public Comment(s) – None.

8. Next Meeting Agenda – Approved.

9. Meeting Adjourned



Town of Hilton Head Island

Using Federal Assistance to Remove Disaster Debris from Drainage Ways Hurricane Matthew June, 2017





- Debris Management Plan
- Easements and MOA with PUD/POA
- Ordinances (Post-Disaster Debris Collection, and Storm Water Ord)
- Pre-Event Competitive Contracts



Hurricane Matthew

- Emergency Clearing
- Critical Facilities Access/Assessments
- Getting Staff back to the Island
- The Feds Who does what?
- Direction and Action



USDA - NRCS

- Emergency Watershed Protection Program (EWP)
- Staff Research
- Data Development
- Coordination (local, state, federal)
- Exigency vs Standard work Grants



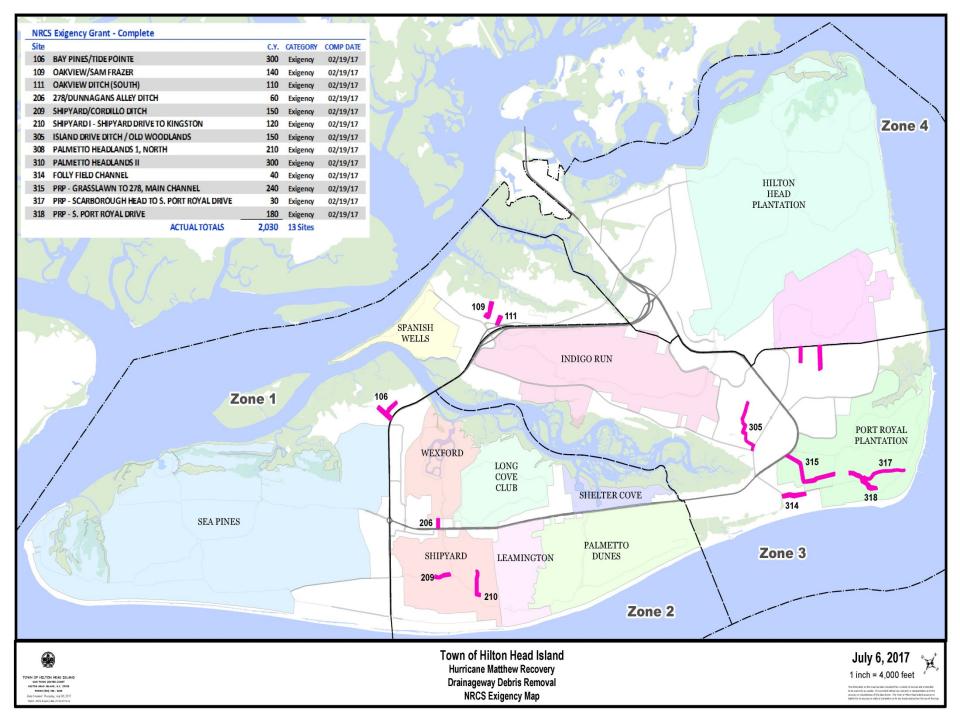
Exigency Grant

- Tied to Repetitive Loss Areas
- Developed Project Scopes/Estimates
- Debris Removal Only (No Bank Stabilization or Sediment Removal)
- Attorney Opinion of Property Rights
- In-House Grant Execution
- Federal Grant Execution
- 10-Days to Complete all work



Exigency Grant

- Awarded 1/31/17
- Extension Requested Immediately
- Used Local on-call drainage contracts
- Work Completed 2/1/17 2/19/17
- \$477,698 Total Budget (\$366,598 Fed, \$111,099 Local, \$30,909 T.A.)
- \$222,896 = Actual Cost (\$167,172 Fed, \$55,724 match)
- 13 Channels, 2030 CY removed

















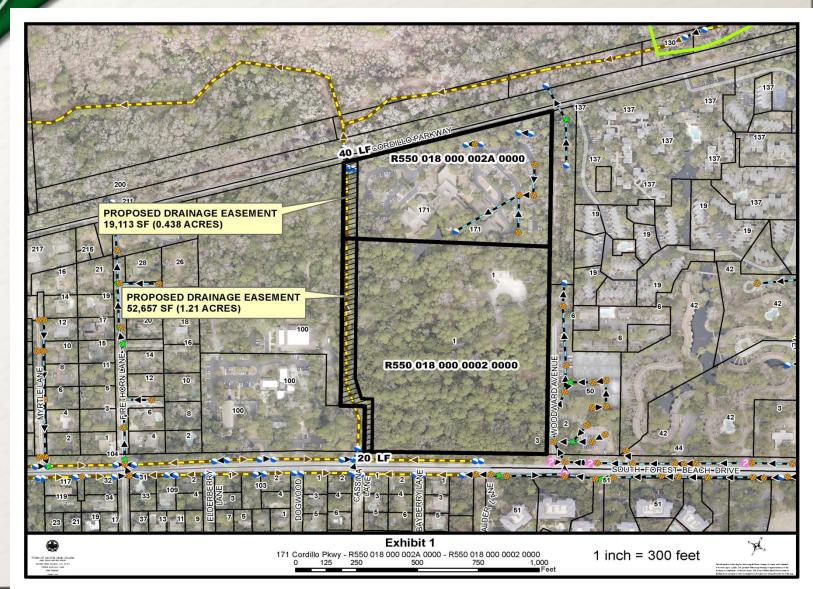




Standard Grant

- Developed Project Scopes/Estimates
- Property Rights
- Federal Grant Execution
- Awarded 5/11/17
- 220-Days to Complete all work
- Work Began 5/15/17
- Work was Completed as of 7-5-17

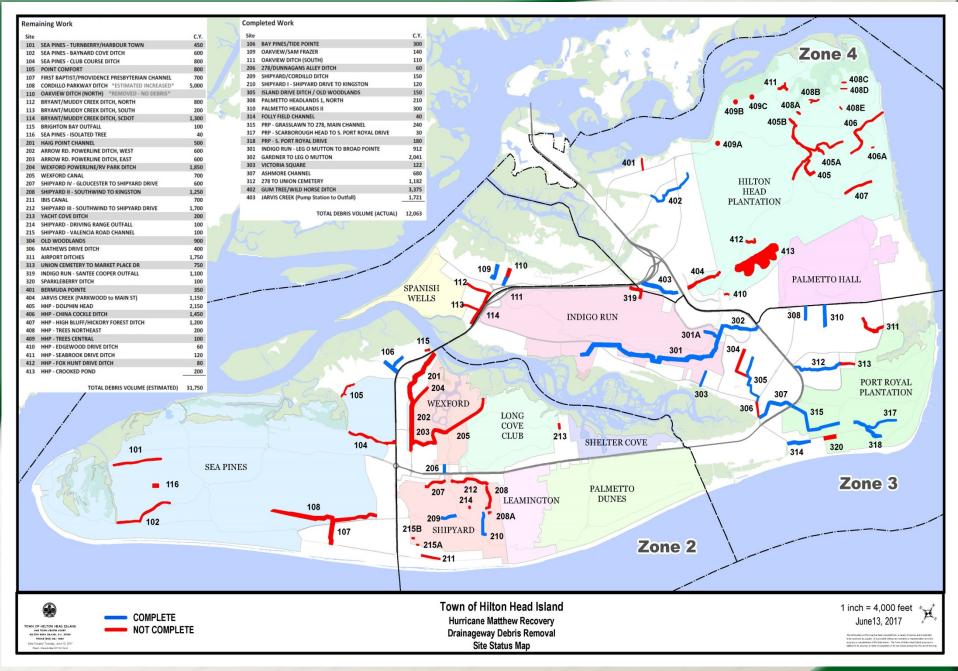






Standard Grant

- Using Crowder Gulf and Tetra Tech Debris Contracts
- \$1,316,219 Total Grant Award -(\$1,010,122 Fed, \$306,097 Local Match, \$91,829 TA)
- \$1,419,516 = Actual Cost (\$1,010,122
 Fed, \$409,394 Local Match and TA)
- 14 Channels, 18,460 CY (actuals)
- Depleted All Available Funds











FEMA Public Assistance

- Developed Project Scopes/Estimates (for FEMA PW)
- Property Rights (different criteria)
- \$2,079,300 Job Order
- 38 Channels @ 27,200 CY (est.)
- Work Began 7/11/17
- Work to be Completed by 10/9/17



NRCS vs. FEMA

- Differences in Programs / Agencies
- NRCS-EWP • Thorough Bureaucracy
- FEMA Public Assistance
 o Proceed at Your Risk
- The Nebulous Transition



Total Projected Costs

- NRCS expected to provide \$1,177,294 with a local match (25%) of \$480,118
- FEMA expected to provide \$1,778,000, with a local match (25%) of \$593,000
- Total Fed Assistance \$2,955,294
- Total Town Cost \$1,073,118

Total Project Completion

 We expect to be completed with all federally subsidized drainage debris work by September.



Lessons Learned

- Research
- Communication
- Organized Data GIS is key
- Property Rights Dedications / Town Codes
- Funding Reserves
- Process Map with flow chart
- Roles and Responsibilities Org Chart
- Good Contractors / Monitors





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

August 16, 2017

Stormwater Manager's Report for the Stormwater Utility Board Meeting

Utility Update

- 1. Tax Run 2017 Work began July 1. We are working towards an October 15 completion date. Stormwater staff met with the Tax Assessor's office staff in late July to work through some bugs in the data management. Our consultant delivered a final user's guide to the SWU fee database and trained our staff on its use a final time before the contract ends.
- 2. Annual Credit application compliance reports Any property owner receiving a credit must report to the County to confirm compliance with the BMPs implemented by the applicant in order to continue to receive the credit. The staff has reviewed and approved 6 of the 7 annual reports. The remaining is pending submittal and review.

Monitoring Update

- Lab Update (From Dr. Alan Warren and Lab Manager Danielle Mickel) Beaufort County:
 - Completion of MS4 quarterly sampling and analyses for both wet and dry events for the first three quarters.
 - Continual weekly sampling for Battery Creek 319 Pond Project.
 - Dr. Alan Warren to provide graphical comparison of in vs. out for E. coli and fecal coliform bacteria for the Battery Creek 319 Pond Project.
 - Continuation of efforts for structural system at specific MS4 site for discharge monitoring.

Town of Bluffton:

- Analyses of quarterly MS4 samples.
- CIP project bi-weekly analyses.
- Review/revision of MOU between USCB and TOB.

Palmetto Bluff:

- Monthly sampling and analyses for wet and dry events.
- Data reduction/reporting.

GEL-HHI:

- Analysis for Hilton Head Island E.coli samples 4x/Qtr.
- Data reduction/reporting.
- Leamington Community:
 - Collection and analyses of Learnington's stormwater lagoon system (Qtrly)
 - Data reduction/reporting.

- Monthly report.
- Consultation.

USCB Lab:

- Monthly (and as needed) calibration of equipment and instruments.
- Maintenance on equipment.
- Maintenance on vehicle.
- Certification Upkeep-including review of QA/QC, logbooks, COC's.
- On-going efforts to obtain additional certification; no new certs obtained during this Qtr.
- Monthly sterility checks on Lab water for TOC, TRC, HPC, Conductivity, metals.
- Research on software for laboratory management systems.
- Account tracking for all accounts-expenditures, deposits, ledgers, PO's
- Logistics, planning, scheduling of all activities.
- Procurement of all required materials, supplies and equipment.
- Assessments and consultations.
- 2. CIP FY 18 Grouping Stormwater Projects Dr. Alan Warren and Mr. Larson met in July to discuss the non-MS4 compliance monitoring needs. Staff is considering adding this scope to the consultant engineer(s) that will be hired to design these projects. Current workload of both the USCB lab staff and County staff is limited to perform these additional tasks. The work would be funded from the CIP fund budget for design. (Also see Professional Contracts)

Stormwater Implementation Committee (SWIC) Report

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

Stormwater Related Projects

- 1. Okatie West / SC 170 Widening Retrofit (Design and Construction = \$915,000 Budget) - Nothing new to report.
- 2. Easements Staff is working on numerous easement requests and meets monthly to review status.

Professional Contracts Report

- 1. Stormwater Management Plan (Master Plan) Update (\$475,000 Budget; \$239,542 County portion) Mr. Larson met with the consultant to review progress. The modeling work is complete and ATM has begun drafting the final report and CIP recommendations. A draft will be delivered to the SWIC to review sometime in the coming months. The project is still on schedule for a December 2017 completion.
- CIP FY 18 Grouping Stormwater Projects Four projects from the 2006 Stormwater Management Plan, further defined by the 2011 Retrofit Study were advertised for Engineering Design Services in June. Four proposals were received on July 19th. Staff

interviewed all four firms on August 1 and 2. The selection committee consisted of the following individuals:

- a) Eric Larson, Stormwater Manager
- b) Rebecca Baker, MS4 Coordinator
- c) Danny Polk, Stormwater Inspection Superintendent
- d) Andrea Atherton, Engineering Department Capital Projects Manager
- e) Chris Inglese, Asst. County Attorney

The four consultants interviewed were:

- a) Andrews Engineering / CDM Smith
- b) ATM / Davis and Floyd
- c) Thomas and Hutton
- d) Ward Edwards Engineering

The four projects are:

- a) Brewer Memorial Park Demonstration Wet Pond Project \$79,500 total budget
- b) Sawmill Creek Overtopping / Forby land \$300,000 total budget
- c) Salt Creek South M1 \$4,090,000 total budget
- d) Shanklin Road M2 \$6,680,000 total budget
- The recommendations from the committee will be presented in New Business.
- 3. Clemson Extension services to Beaufort County A proposal to partner with Clemson Extension on the Brewer Memorial Park project is pending. All consultants proposing on the CIP FY 18 Group projects were interested and willing to partner with Clemson if this portion of the project becomes a reality.

Regional Coordination

- 1. Factory Creek Watershed Regional Detention Basin "Phase II" (Design Cost = \$63,390, Tree Mitigation Cost is pending, Construction Cost by the Developer) Mr. Larson met with the design engineer to discuss project progress. The project is in the process of being permitting for the expanded second and third phases. The two phases were submitted to DHEC together for approval. Staff made site visits and directed corrections to the site as a result of complaints from adjacent properties.
- 2. Battery Creek Watershed Pond retrofit / EPA 319 grant project Nothing new to report.
- Polk Village / Riverbank Drive outfall pipe Mr. Larson met with representatives with SCDOT's local office and district office in Charleston. A cost sharing proposal was discussed and agreed upon in concept. County staff is awaiting a decision from DOT district office.
- 4. Wallace Road drainage This state road on Lady's Island has a drainage problem causing lot flooding. The County received an encroachment permit in early 2000s to install an asphalt trail along the road. A condition of the permit is that the County would be responsible for drainage of the road since the plan involved filling of one of the roadside ditches. As a result, the County is now considering piping a section of the road to relieve the flooding. The SCDOT is willing to approve another encroachment permit for the proposed solution.
- 5. Municipal "County" Infrastructure –Meetings between County staff and Town of Hilton Head Island and Town of Bluffton are scheduled within the next two weeks.

Municipal Reports

- 1. Town of Hilton Head Island (From Jeff Netzinger, Stormwater Manager and Brian Eber, MS4 Coordinator)
 - i. No information was available at the time of this report.
- Town of Bluffton (From Kim Jones, Watershed Management Division Director)

 See attached report.
- 3. City of Beaufort (From Neil Desai, Asst. Public Works Director)
 - i. No information was available at the time of this report.
- 4. Town of Port Royal (From Van Willis, Town Manager and Tony Maglione, consultant)
 - i. The special presentation for today's meeting is a briefing on the Town's Cypress wetland project.
 - ii. No information was available at the time of this report.

MS4 Report

1. Plan Review – There were 14 projects reviewed in July by Beaufort County Stormwater staff and 4 stormwater permits (tier II) issued in July.

Project Name	Review Type	Date	Comments
Beaufort County Animal Services	Final	7/31/17	Permit Issued
BJWSA Operations Chelsea Plant	Final	7/27/17	Permit Issued
Berkley Hall Lot 363 View Corridor	View Corridor	7/26/17	Deferred
Cuffy Mines	Discussion	7/26/17	Discussion
Cherokee Farms Phase 1	Final	7/26/17	Approved with conditions
Parkers Oyster Bluff	Final	7/26/17	Approved with conditions
Dataw Island Lot 52 Bulk Head	Final	7/25/17	Permit Issued
St. Gregory Pump Station	Final	7/18/17	Permit Issued
Carolina Est. Lot 91	River Buffer Waiver	7/12/17	Deferred
Harbor Island Lot 18	River Buffer Waiver	7/12/17	Approved
Horse Island Lot 15	River Buffer Waiver	7/12/17	Deferred
Moss Creek Gate Access	Final	7/12/17	Deferred
Greene Acres	Final	7/12/17	Deferred

- 2. Stormwater Permits There were 8 permits (tier I & II) issued in July:
- 3. Monthly Inspection summary for July
 - a) Number of active permits = 51
 - b) Number of inspections performed = 84
 - c) Number of drainage related complaints investigated = 1

- d) Number of IDDE issues received and investigated = 1
- e) Number of Violations (verbal, written, fines, or stop work orders) = 6
- f) Number of Development Permit certificates of completion = 2
- 4. Ernest Road / Celland Site Prep. sand mine site The project has been on the agenda for the Staff Review Team for several months. The project requires a Special Use Permit from the ZBOA. Stormwater staff attended the ZBOA meeting on July 27th to address Stormwater concerns of the public and the ZBOA members. The decision was postponed and staff continues to work with the applicant, the public, and DHEC mine permitting staff to address the issues.
- 5. County Drones staff of Stormwater and GIS met to get a demonstration of the two county owned drones. There are numerous opportunities to use the drones for inspections related to the MS4 program and our asset management needs. The Stormwater Department may need to consider providing funding to the Drone project to purchase an infrared camera which would be very useful in detecting illicit discharges into streams.
- 6. Plan review tracking software The Community Development Department has requested a revised proposal from Energov. FY 18 funding is not sufficient for full implementation. Staff is prioritizing needs to reduce costs to fit the budgeted allocation.
- MCM6 Good Housekeeping training County staff from Stormwater, Public Works, Mosquito Control, and the Airports attended mandatory training on MCM6, part of the MS4 permit.
- 8. Public Education Lowcountry Stormwater Partners, via Carolina Clear, continues to work on several initiatives towards public education and outreach.
 - a) During the month of July LCP traveled to Daufuskie Island to present the Carolina Yards Workshops to the residence. The workshop focused soil, irrigation and yard maintenance.
 - b) Upcoming Events:
 - i. August 22^{nd –} MS4 / Municipality Education and Involvement Update Meeting, 8:30-10:30am at BJSWA conference room.
 - ii. The County and Ward Edwards will be attending the first annual STEAM festival at Port Royal Maritime Center on Saturday August 26, 2017 from 10:00am and 3:00pm.
 - iii. October 19, 2017 Pond Management Conference/Workshop
 - Event Time: 8AM-4PM
 - Location: USCB Gateway Campus Campus Center (Multi-purpose Rm) & Library Rm 267/237
 - Expected number of participants: 100
 - Parking: Free
- 9. MS4 Update: Effective July 1st, 2017 the County will be reviewing the C-SWPPP for SCDHEC. The procedures are as follows:
 - a) All construction activity projects located within the County or unincorporated County area will be required to follow the new MS4 review procedures for a Certified Stormwater Pollution Prevention Plan (C-SWPPP). The first step is to submit an application for a Development permit and Stormwater permit. The fee for the stormwater permit is \$75.00. All members of the SRT will need to review and approve

the project. A copy of the stormwater permit will be submitted with a SCDHEC Notice of Intent (NOI). You may want to submit your SCDHEC NOI concurrent with your application to the County. Since there needs to be a valid permit application in house for Ocean and Coastal Resource Management (OCRM) to start the Coastal Zone Consistency Certification (CZC) review process, it is suggested that you send the concurrent \$125 fee.

b) SCDHEC will issue NPDES Construction General Permit (CGP) coverage based on the MS4's approval. There will be no review fee for SCDHEC as the MS4 does the C-SWPPP reviews. SCDHEC will send out an email stating they received the NOI, but will have to wait on the CZC Certification and the MS4 approval before they can issue NPDES CGP coverage. DHEC has stated that they can review the NOI within 7 days, but has the option to do a full review C-SWPPP if they deem necessary and will request hard copy of C-SWPPP.

ACTIVITY - POLICY	STATUS
May River Watershed Action Plan Update (Grant award of \$55,000 in 2017)	To be completed with direction and input from staff, the public, Water Quality Technical Advisory Committee, May River Watershed Advisory Committee, and Town Council. Notified verbally on 4/7/17 that due to anticipated Federal Budget cuts to the EPA, SCDHEC rescinded the grant. Action Plan Update is not currently not budgeted for completion in FY18.
Sewer Connection Policy	WAPAC adopted Sewer Connection Policy framework 9/22/16. Staff presented information for consideration and recommendation to Town Council during 6/22/17 meeting. Town Council provided feedback at 7/18/17 Workshop to develop a Sewer Connection Policy. A draft Policy to direct a program will be presented to WAPAC at 8/24/17 meeting and Council at 9/12/17 meeting.
ACTIVITY - PROJECTS	STATUS
Sanitary Sewer Extension	Buck Island/Simmonsville Road (BIS) Phases I, II, and III are completed. Toy Fields is completed. 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. Weekly water quality testing on-going. 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.
May River 319 Grant Phase 2 - Pine Ridge (Grant award of \$290,000 in 2011)	Completed. In post-construction monitoring phase to assess project efficacy.
May River 319 Grant Phase 3 - May River Preserve (Grant award of \$231,350 in 2016)	This project includes construction of a shallow pond known as a Green Tree Reservoir. 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. 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. Currently proposed for completion in FY19 following the Action Plan Update.
ACTIVITY - FINANCIAL	STATUS
Additional Funding Opportunities	No updates.

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 and through local cleanups and civic engagements.
Water Quality Monitoring Program (MS4 Minimum Control Measure #3)	 SCDHEC Shellfish monitoring results Fecal coliform bacteria "hot spot" concentrations Microbial Source Tracking of human sources of bacteria Illicit Discharge investigation and monitoring BMP efficacy monitoring MS4 monitoring Current updates are included in Engineering Consent Agenda Attachments 2, 3b, 3c, and 3d.
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 3a.
Sediment & Erosion 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 4.
Development Plan Review Program (MS4 Minimum Control Measure #5)	SCDHEC delegated plan review-related activities. Current updates are included in Engineering Consent Agenda Attachment 5.
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. Town is initiating an easement acquisition program. Current updates are included in Engineering Consent Agenda Attachment 6 and under "Public Works."
Septic System Maintenance Program	FY18 funding is \$10,000. On-going assistance offered to Town residents regardless of financial status through Neighborhood Assistance Program. Current updates are included in Engineering Consent Agenda Attachment 7.
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 Assitance Program. WAPAC reviewed and recommended possible revisions to the existing sewer connection ordinance and policy for Town Council consideration at the Quarterly July Town Council Workshop 7/18/17. Based on Council feedback a draft Policy to direct a program will be presented to WAPAC at 8/24/17 meeting and Council at 9/12/17 meeting.



MEMORANDUM

Date: August 16, 2017

To: Stormwater Management Utility Board

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

Re: Maintenance Project Report

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

Minor or Routine Projects:

- Trask Parkway Channel 1 Sheldon (SWUD 5): The project scope included cleaning 2,475 feet of channel. The total cost was **\$5,969.69**.
- **Prescott Road Sheldon (SWUD 5):** The project scope included cleaning 704 feet of roadside ditch and 674 feet of channel. The total cost was **\$5,216.76**.
- **Coker Lane Sheldon (SWUD 5):** The project scope included cleaning 1,719 feet of channel. The total cost was **\$3,439.20.**
- **Blacksmith Circle Port Royal Island (SWUD 6):** The project scope included repairing a catch basin. The total cost was **\$3,411.60**.
- **Paige Point Bluff Sheldon (SWUD 5):** The project scope included installing a driveway pipe. The total cost was **\$1,194.35.**
- **Capehart Circle Port Royal Island (SWUD 6):** The project scope included cleaning 171 feet of channel. The total cost was **\$896.52**.
- **Cusabo Road St. Helena Island (SWUD 8):** The project scope included resetting a catch basin. The total cost was **\$337.78.**



Project Summary: Trask Parkway Channel #1

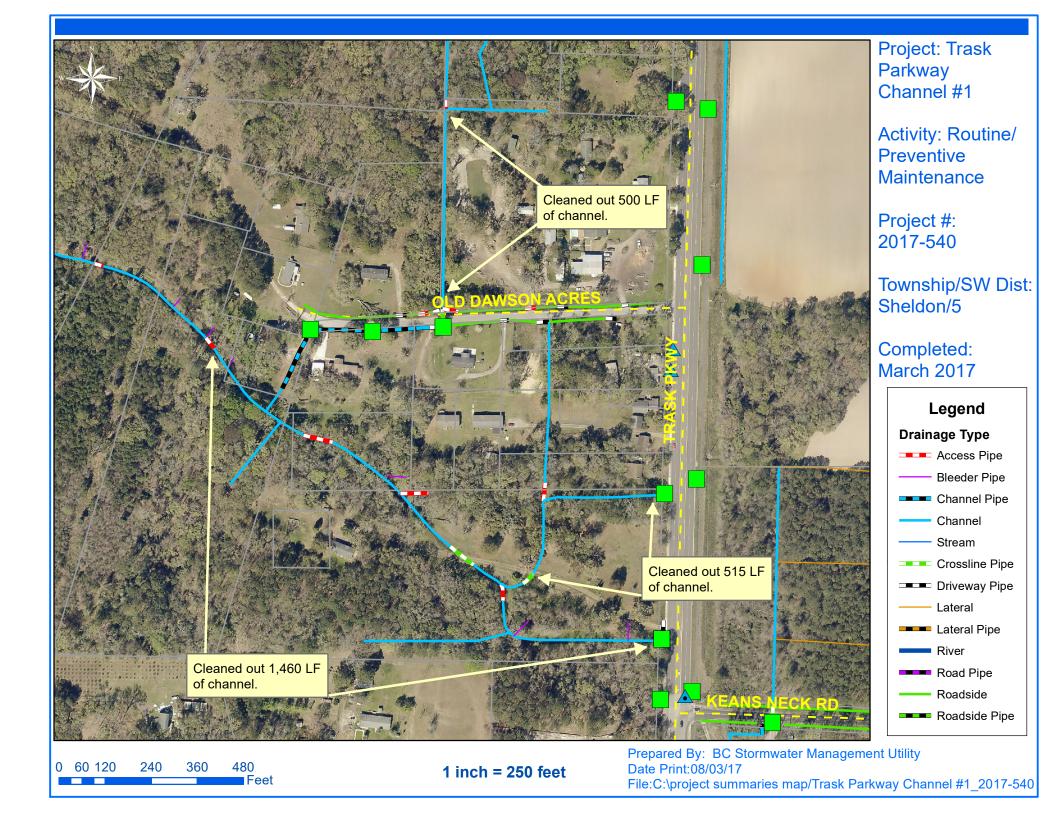
Project improved 2,475 L.F. of drainage system. Cleaned out 2,475 L.F. of channel.

Narrative Description of Project:

Activity: Routine/Preventive Maintenance

Duration: 3/13/17 - 3/15/17

2017-540 / Trask Parkway Ch #1	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contracto Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$11.75	\$0.00	\$0.00	\$0.00	\$6.62	\$18.36
CCO / Channel - cleaned out	120.0	\$2,882.10	\$504.32	\$67.05	\$0.00	\$1,697.40	\$5,150.87
HAUL / Hauling	16.0	\$356.32	\$150.72	\$62.70	\$0.00	\$230.72	\$800.46
2017-540 / Trask Parkway Ch #1 Sub Total	136.5	\$3,250.17	\$655.04	\$129.75	\$0.00	\$1,934.74	\$5,969.69
Grand Total	136.5	\$3,250.17	\$655.04	\$129.75	\$0.00	\$1,934.74	\$5,969.69





Activity: Routine/Preventive Maintenance

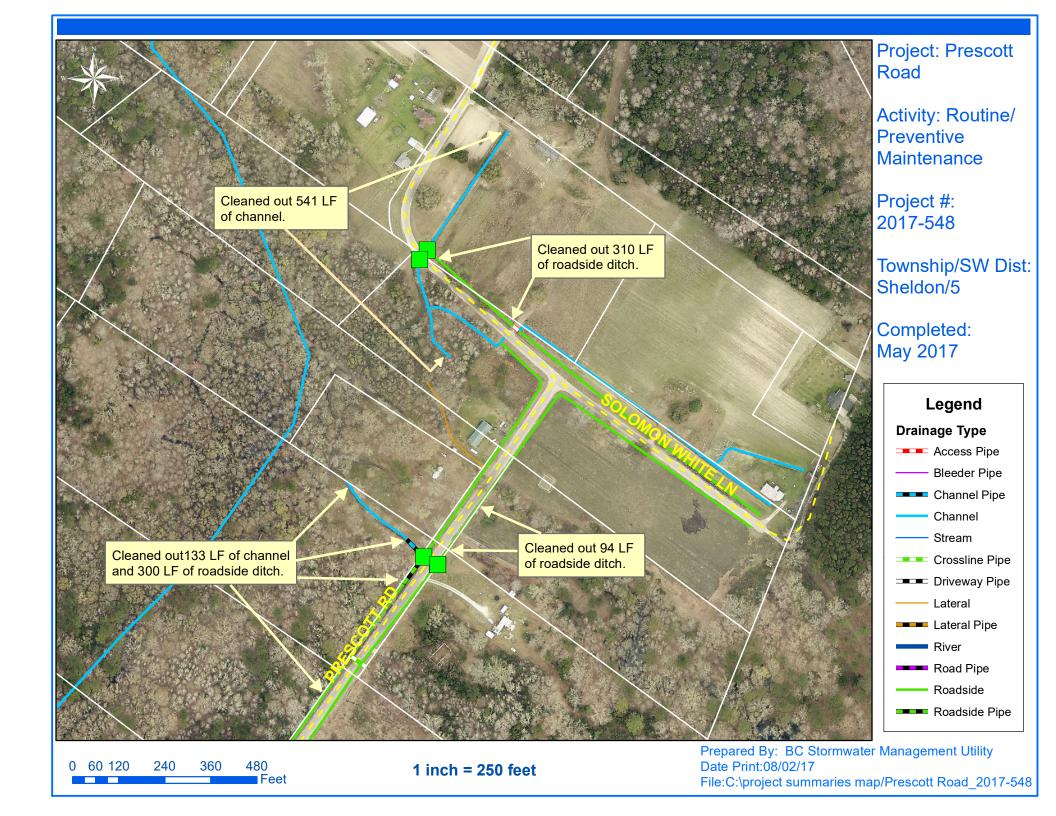
Duration: 5/9/17 - 5/11/17

Project Summary: Prescott Road

Narrative Description of Project:

Project improved 1,378 L.F. of drainage system. Cleaned out 704 L.F. of roadside ditch and 674 L.F. of channel.

2017-548 / Prescott Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contracto Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$11.75	\$0.00	\$0.00	\$0.00	\$6.62	\$18.36
CCO / Channel - cleaned out	68.0	\$1,503.76	\$637.51	\$95.50	\$0.00	\$686.44	\$2,923.21
HAUL / Hauling	26.0	\$501.28	\$244.92	\$89.54	\$0.00	\$0.00	\$835.74
RSDCL / Roadside Ditch - Cleanout	40.0	\$895.20	\$203.46	\$45.33	\$0.00	\$276.50	\$1,420.49
UTLOC / Utility locates	0.5	\$12.35	\$0.00	\$0.00	\$0.00	\$6.62	\$18.97
2017-548 / Prescott Road	135.0	\$2,924.34	\$1,085.89	\$230.37	\$0.00	\$976.17	\$5,216.76
Sub Total							
Grand Total	135.0	\$2,924.34	\$1,085.89	\$230.37	\$0.00	\$976.17	\$5,216.76





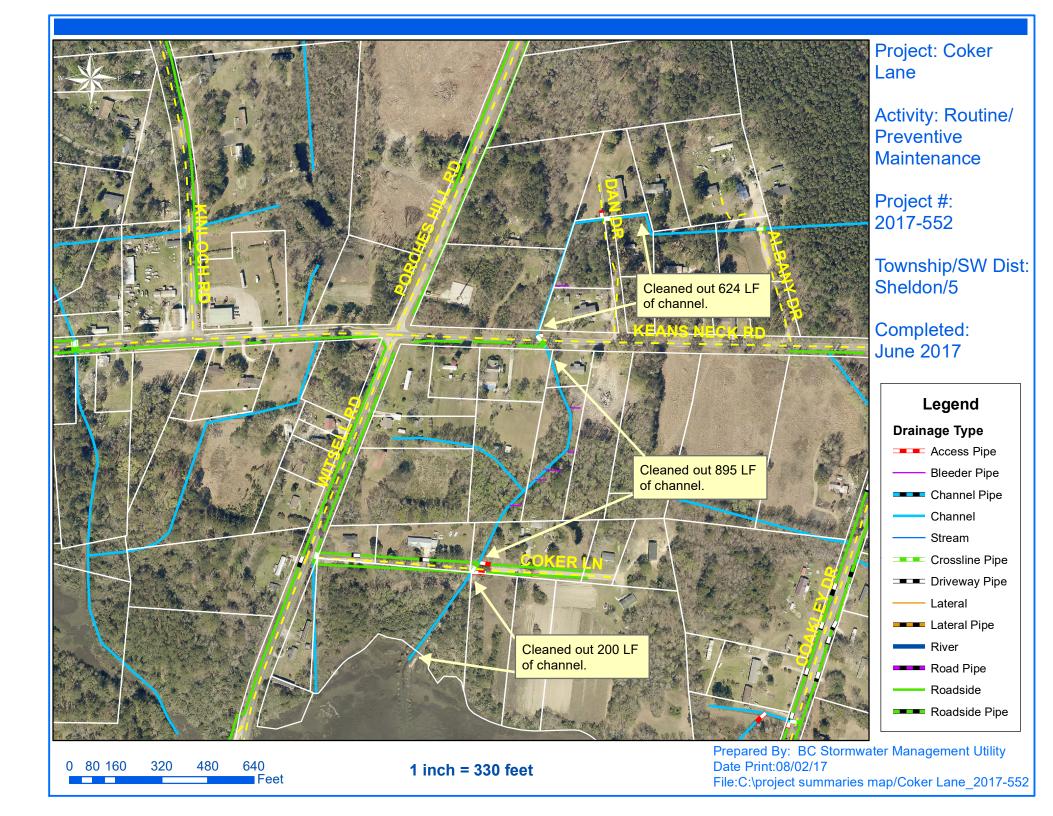
Project Summary: Coker Lane
Narrative Description of Project:

Project improved 1,719 L.F. of drainage system. Cleaned out 1,719 L.F. of channel.

Activity: Routine/Preventive Maintenance

Duration: 5/15/17 - 6/1/17

2017-552 / Coker Lane	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contracto Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$11.75	\$0.00	\$0.00	\$0.00	\$6.62	\$18.36
CCO / Channel - cleaned out	64.0	\$1,448.97	\$320.13	\$57.02	\$0.00	\$778.58	\$2,604.69
HAUL / Hauling	24.5	\$476.85	\$230.79	\$86.88	\$0.00	\$21.63	\$816.15
2017-552 / Coker Lane Sub Total	89.0	\$1,937.56	\$550.92	\$143.90	\$0.00	\$806.82	\$3,439.20
Grand Total	89.0	\$1,937.56	\$550.92	\$143.90	\$0.00	\$806.82	\$3,439.20





Project Summary: Irongate Subdivision - Blacksmith Circle

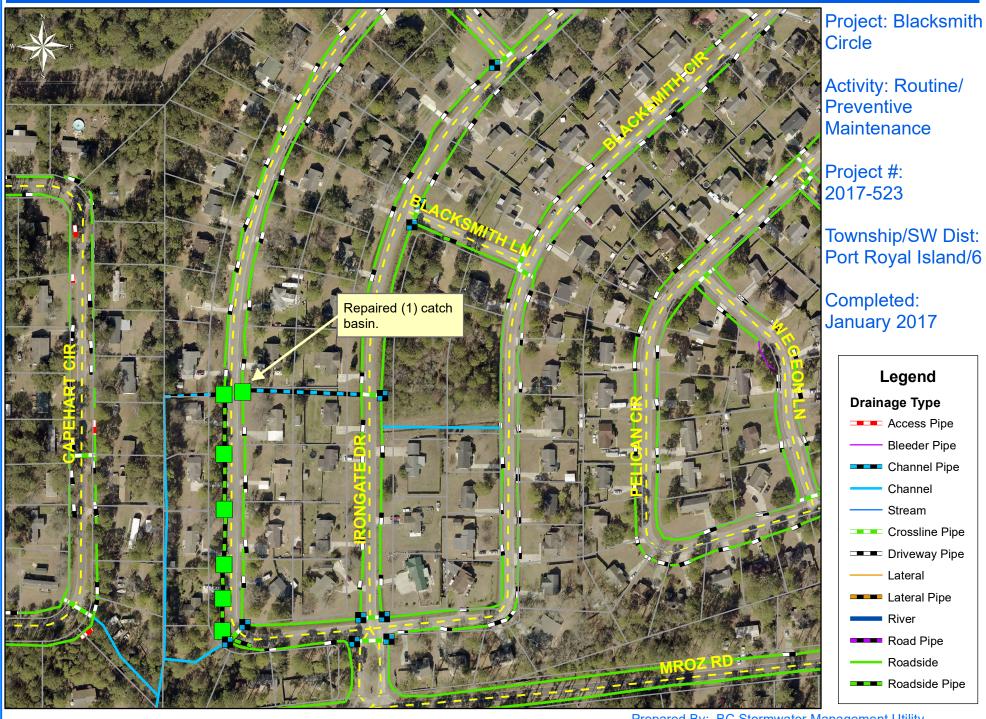
Narrative Description of Project:

Repaired (1) catch basin.

Activity: Routine/Preventive Maintenance

Duration: 12/29/16 - 1/3/17

2017-523 / Irongate Subdivision	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contracto Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$11.75	\$0.00	\$0.00	\$0.00	\$6.62	\$18.36
BKFILL / Back Fill	27.0	\$657.72	\$64.63	\$32.97	\$0.00	\$391.71	\$1,147.03
CBREP / Catch basin - repaired	18.0	\$432.54	\$21.60	\$85.88	\$0.00	\$258.84	\$798.86
HAUL / Hauling	2.0	\$44.54	\$18.84	\$28.43	\$0.00	\$28.84	\$120.65
SD / Soft Digging	30.0	\$686.40	\$130.20	\$64.60	\$0.00	\$445.50	\$1,326.70
2017-523 / Irongate Subdivision Sub Total	77.5	\$1,832.95	\$235.27	\$211.88	\$0.00	\$1,131.50	\$3,411.60
Grand Total	77.5	\$1,832.95	\$235.27	\$211.88	\$0.00	\$1,131.50	\$3,411.60



0 50 100 200 300 400 Feet

1 inch = 210 feet

Prepared By: BC Stormwater Management Utility Date Print:08/03/17 File:C:\project summaries map/Blacksmith Circle_2017-523



Project Summary: Paige Point Bluff

Activity: Routine/Preventive Maintenance

Duration: 3/22/17

Narrative Description of Project:
Installed (1) driveway pipe.

2017-543 / Paige Point Bluff	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contracto Cost	Indirect Labor	Total Cost
AUDIT / Audit Project	0.5	\$11.75	\$0.00	\$0.00	\$0.00	\$6.62	\$18.36
DPINS / Driveway Pipe - Installed	15.0	\$342.25	\$75.26	\$287.28	\$0.00	\$219.75	\$924.54
HAUL / Hauling	5.0	\$111.35	\$47.10	\$20.90	\$0.00	\$72.10	\$251.45
2017-543 / Paige Point Bluff	20.5	\$465.35	\$122.36	\$308.18	\$0.00	\$298.46	\$1,194.35
Sub Total							
Grand Total	20.5	\$465.35	\$122.36	\$308.18	\$0.00	\$298.46	\$1,194.35











Prepared By: BC Stormwater Management Utility Date Print:08/02/17 File:C:\project summaries map/Paige Point Bluff_2017-543

0 20 40 80 120 160 Feet

1 inch = 83 feet



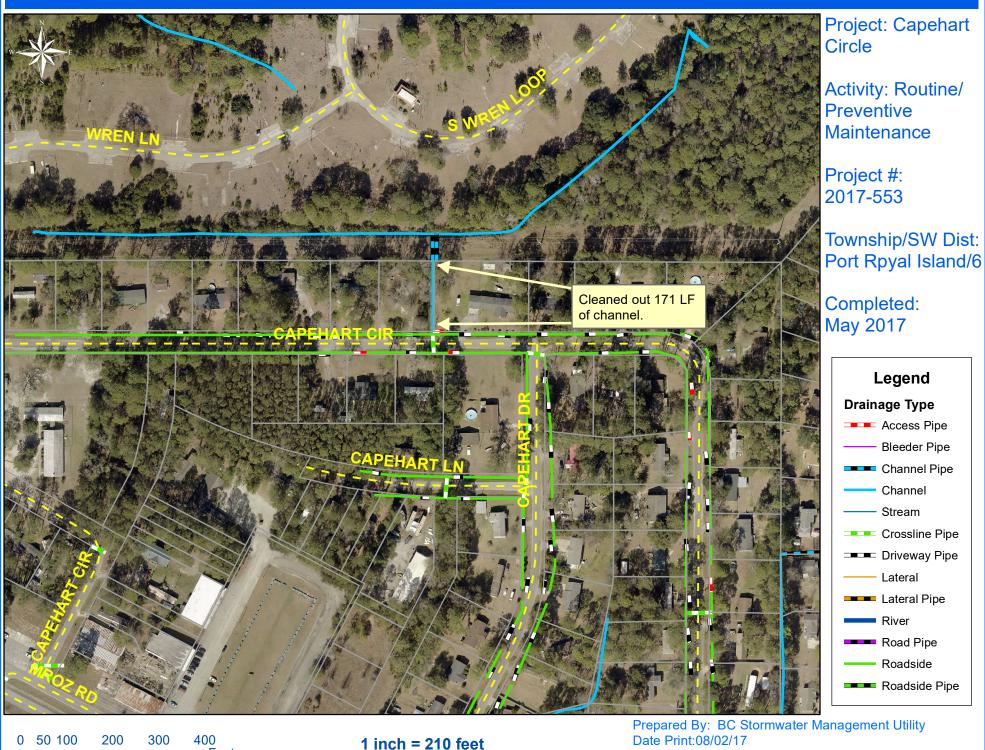
Project Summary: Capehart Circle Narrative Description of Project:

Project improved 171 L.F. of drainage system. Cleaned out 171 L.F. of channel.

Activity: Routine/Preventive Maintenance

Duration: 5/18/17

2017-553 / Capehart Circle AUDIT / Audit Project CODT / Clean out ditches	Labor Hours 0.5 15.0	Labor Cost \$11.75 \$334.13	Cost \$0.00 \$75.26	Material Cost \$0.00 \$12.95	Contracto Cost \$0.00 \$0.00	Indirect Labor \$6.62 \$209.55	Total Cost \$18.36 \$631.88
HAUL / Hauling 2017-553 / Capehart Circle Sub Total	5.0 20.5	\$111.35 \$457.22	\$47.10 \$122.36	\$15.73 \$28.68	\$0.00 \$0.00	\$72.10 \$288.26	\$246.28 \$896.52
Grand Total	20.5	\$457.22	\$122.36	\$28.68	\$0.00	\$288.26	\$896.52



Feet

Date Print:08/02/17 File:C:\project summaries map/Capehart Circle_2017-553



Project Summary: Cusabo Road	Activity: Routine/Preventive Maintenan							
Narrative Description of Project: Reset (1) catch basin lid.			Duration: 4/20/17					
2017-530A / Cusabo Road	Labor Hours	Labor Cost	Equipment Cost	Material Cost	Contracto Cost	Indirect Labor	Total Cost	
AUDIT / Audit Project CBLRE / Catch Basin Lid - Reset 2017-530A / Cusabo Road Sub Total	0.5 8.0 8.5	\$11.75 \$175.96 \$187.71	\$0.00 \$34.03 \$34.03	\$0.00 \$43.55 \$43.55	\$0.00 \$0.00 \$0.00	\$6.62 \$65.88 \$72.50	\$18.36 \$319.42 \$337.78	
Grand Total	8.5	\$187.71	\$34.03	\$43.55	\$0.00	\$72.50	\$337.78	

Before







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Project: Cusabo

Activity: Routine/ Preventive Maintenance

Project #: 2017-530A

Township/SW Dist: St. Helena Island/8

Completed: April 2017





BEAUFORT COUNTY STORMWATER MANAGEMENT UTILITY BOARD AGENDA Wednesday, September 20, 2017 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 August 16, 2017 (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 (backup)
- J. Financial Report Chanel Lewis (backup)
- 5. UNFINISHED BUSINESS
- 6. NEW BUSINESS
- 7. PUBLIC COMMENT
- 8. NEXT MEETING AGENDA A. October 18, 2017 (backup)
- 9. ADJOURNMENT



