



BEAUFORT COUNTY  
STORMWATER MANAGEMENT UTILITY BOARD AGENDA  
Wednesday, April 19, 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 – March 15, 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
  - A. Hearing on Stormwater Fee Appeal – Nemours Plantation ([backup](#))
6. NEW BUSINESS
  - A. Proposed Budget for FY2018 ([backup](#))
7. PUBLIC COMMENT
8. EXECUTIVE SESSION
  - A. Receipt of Legal Advice Incident to Potential Litigation - Project PP Continuation
9. MATTERS ARISING OUT OF EXECUTIVE SESSION
10. NEXT MEETING AGENDA
  - A. May 17, 2017 ([backup](#))
11. ADJOURNMENT



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

March 15, 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 03/21/2017

### Board Members

#### Present

Don Smith  
Patrick Mitchell  
William Bruggeman  
Marc Feinberg  
Larry Meisner  
James Fargher

#### Absent

Allyn Schneider

### Ex-Officio Members

#### Present

Scott Liggett  
Van Willis  
Andy Kinghorn

#### Absent

Kim Jones

### Beaufort County Staff

Eric Larson  
David Wilhelm  
Rebecca Baker  
Melissa Allen  
Carolyn Wallace  
John Miller  
Robert Gecy

### Visitors

Bill Baugher, Town of Bluffton  
Alice Howard, County Council  
Ellen Comeau, Clemson Extension  
Denise Parsick, Beaufort S&W Conservation Dist.  
Rikki Parker, Coastal Conservation League  
Ernie Wiggers, Nemours Wildlife Foundation

#### 1. Meeting called to order – Don Smith

- A. Agenda – Approved.
- B. February 15, 2017 - 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/2017/031517.pdf>

#### A. Utility Update – Eric Larson

In reference to item #1, Mr. Eric Larson announced that we received the signed agreement from the USDA for the Emergency Watershed Protection grant today. The grant is approximately \$700,000 and the County now has 220 days to clean up debris on the stormwater easements.

In response to a question, Ms. Denise Parsick explained that since there is a conservation district in Beaufort, USDA NRCS funding is available to the County for Emergency Watershed Protection.

**B. Monitoring Update – Eric Larson**

Mr. James Fargher asked why mercury was added to the testing, as it hasn't been done in the past. Mr. Larson responded that those parameters were added at the request of the Town of Bluffton, since we are in the process of drafting an agreement for shared testing and results in shared watersheds. Mr. Bill Baugher mentioned that as part of the MS4 303d sampling requirements, it has been added since mercury is an impairment in the New River.

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

Mr. Larson indicated that the SWIC will be meeting next week and that the committee will receive an update on the Stormwater Management Plan from the consultant (ATM).

**D. Stormwater Related Projects – Eric Larson**

In reference to item #2, Mr. Larson noted that the public meetings went very well with the two districts that the County meet with to explain processes and what is needed to begin stormwater projects.

**E. Professional Contracts Report – Eric Larson**

In reference to the Master Plan, the County is meeting next week to review a milestone submittal from ATM. The project is scheduled to finish by the end of the year.

**F. Regional Coordination – Eric Larson**

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

**G. Municipal Reports – Eric Larson**

Mr. Scott Liggett mentioned that the Town of Hilton Head is still working to respond to all of the debris within the drainage systems.

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

Mr. Larson indicated that the number of active permits is increasing as a result of the new permitting program.

An explanation and live demonstration of Beaufort County Connect App and Data Manager was presented to the Board. In response to a question, Mr. Robert Gecy explained that the citizens will receive feedback when status changes are made and public comments are entered from County staff. He explained that this has been designed to work county-wide and that the Connect App is connected to the County GIS system, so it sends the complaint to the appropriate municipality within Beaufort County when it is received.

**I. Maintenance Projects Report – David Wilhelm**

Mr. David Wilhelm's noted that his maintenance report for March contained five major projects and nine minor projects.

*HWY 278 Retrofit Pond #8* – 1-acre pond to collect stormwater runoff from HWY 278, before going into the marsh is complete.

*Fox Island* – This project impacted 10 parcel and 3 county roads. 160 feet of pipe was installed, as well as a flapgate on the outfall.

*Hamar Street* – Joint project where the City of Beaufort paid for the cost of the design that was done by Ward Edwards, SCDOT covered the cost of materials (pipes and structures), and Beaufort County contributed the cost of labor and equipment.

Mr. Wilhelm shared the Stormwater Project List which was created to organize and schedule stormwater projects based on priority (threat to health and safety, how long it has been an issue, etc.) and includes an estimate of how long a project will take to help provide a timeline of when work may begin on a particular project.

## **5. Unfinished Business –**

Mr. Don Smith asked Mr. Scott Liggett about the affects that the rain and flooding from Hurricane Matthew had on the constructed BMP's in the Town of Hilton Head. Mr. Liggett explained that all the pump stations sustained damage, water intruded into the pumps, so they are working to repair the pumps. Estimate to repair the system is around three million dollars. Mr. Liggett noted that the first 11 projects have been completed. In response to a question, he explained that the pumps are custom built out of Florida and the insurance adjustors and claim process has had a large impact on the amount of time it is taking to get the pumps back up, as they don't want to compromise a valid claim.

## **6. New Business**

**A. Special Presentation: Carolina Clear and the Lowcountry Stormwater Partners** - Ms. Ellen Comeau presented information on Carolina Clear and their mission to educate communities about water quality, water quantity, and the cumulative effects of stormwater. She explained the different programs they offer, such as Certified Stormwater Plan Reviewer and the Carolina Rain Garden Initiative, and services, such as mass media campaigns and consortium management.

Ms. Comeau talked about the creation of Lowcountry Stormwater Partners and the growth it has had with additional organizations joining. The Lowcountry Stormwater Partners held a strategic education plan meeting on September 29, 2016 and with input and ideas from the meeting they were able to develop the 2016-2018 Lowcountry Stormwater Partners Strategic Regional Outreach Plan that is part of MCM1 and MCM2 compliance of the MS4 program permit.

[The Carolina Clear and the Lowcountry Stormwater Partners presentation is attached to the minutes.](#)

### **B. Hearing on Stormwater Fee Appeal – Nemours Wildlife Foundation**

Mr. Eric Larson presented facts regarding the Nemours Wildlife Foundation appeal and history of the rate structure study and change in calculations.

Ms. Carolyn Wallace mentioned that the land type and acreage is determined by the assessor's office and provided clarification on how stormwater fees for parcels that have the agriculture use exemption are calculated.

Mr. Ernie Wiggers presented information regarding the appeal submitted for Nemours Wildlife Foundation.

Ms. Rikki Parker, with Coastal Conservation League, spoke in support of Mr. Wiggers and the Nemours Wildlife Foundation appeal.

Mr. Don Smith presented some pictures of Nemours Plantation, providing a visual of some areas of the plantation that have had timbering operations.

The appeal made by Nemours Plantation is in regard to the fact that a disturbed runoff coefficient was used versus the undisturbed when calculating stormwater fees, as the land use of the plantation involves sivilculture which is calculated different than cropland (undisturbed) per the 2005 rate study. County staff evaluated the stormwater utility fees and it has been determined that according to County ordinance and adopted policy, the fees are calculated correctly.

A motion was made to table the stormwater fee appeal and direct staff to get advice from legal counsel and consultants regarding the distinction between agriculture versus sivilculture, as well as the financial impact on the stormwater utility if the board was to propose a change to the existing policy. The Board unanimously (6:0) approved to table the stormwater fee appeal by Nemours Wildlife Foundation.

[The Nemours Plantation appeal reports and supporting documents are attached to the minutes.](#)

**7. Public Comment(s) – None.**

**8. Executive Session**

A motion was made to go into Execution Session. The Board unanimously (6:0) approved to go into Executive Session.

**9. Matters Arising Out of Executive Session**

A motion was made to table Project PP of the Executive Session. The Board unanimously (6:0) approved to table Project PP.

**10. Next Meeting Agenda – Approved.**

Addition for April 19th to Unfinished Business: Hearing on Stormwater Fee Appeal  
Addition for April 19th – Executive Session – Project PP Continuation

**11. Meeting Adjourned**

WATER RESOURCES OUTREACH

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# CAROLINA CLEAR AND THE LOWCOUNTRY STORMWATER PARTNERS

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WE ALL LIVE DOWNSTREAM



# INTRODUCING ELLEN COMEAU



ST. LAWRENCE  
UNIVERSITY



# WHAT IS CAROLINA CLEAR?



# CLEMSON<sup>®</sup>

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## COOPERATIVE EXTENSION

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“We improve the economy, environment, and well-being of South Carolinians through the delivery of unbiased, research-based information and education.”



# WHAT DOES CAROLINA CLEAR DO?



- “Carolina Clear... educates communities about water quality, water quantity, and the cumulative effects of stormwater.”



- Providing **compliance-based** education and involvement opportunities
- Result in **behavior changes and increased awareness** of stormwater issues.

## Programs Offered:

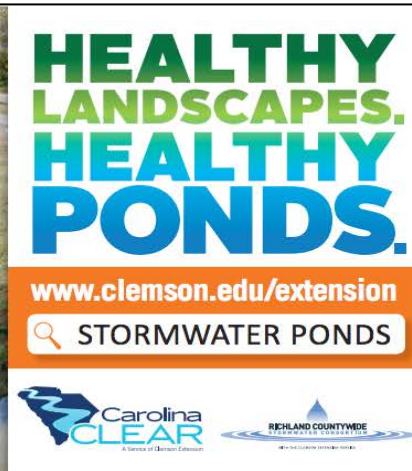
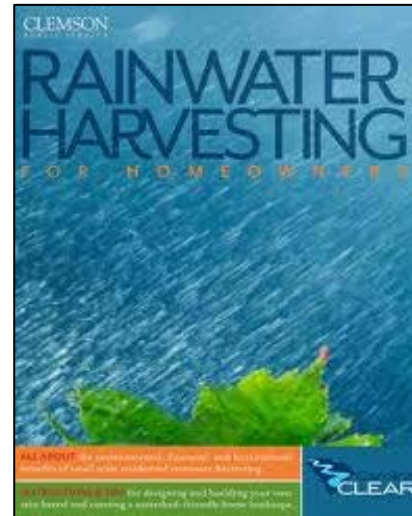
- Certified Erosion Prevention and Sediment Control Inspector
- Certified Stormwater Plan Reviewer
- 4-H2O
- Carolina Yards
- Post Construction BMP Inspector
- Master Pond Manager
- Stormwater BMP Training for Contractors
- Silt Fence and Beyond Workshop
- Carolina Rain Garden Initiative



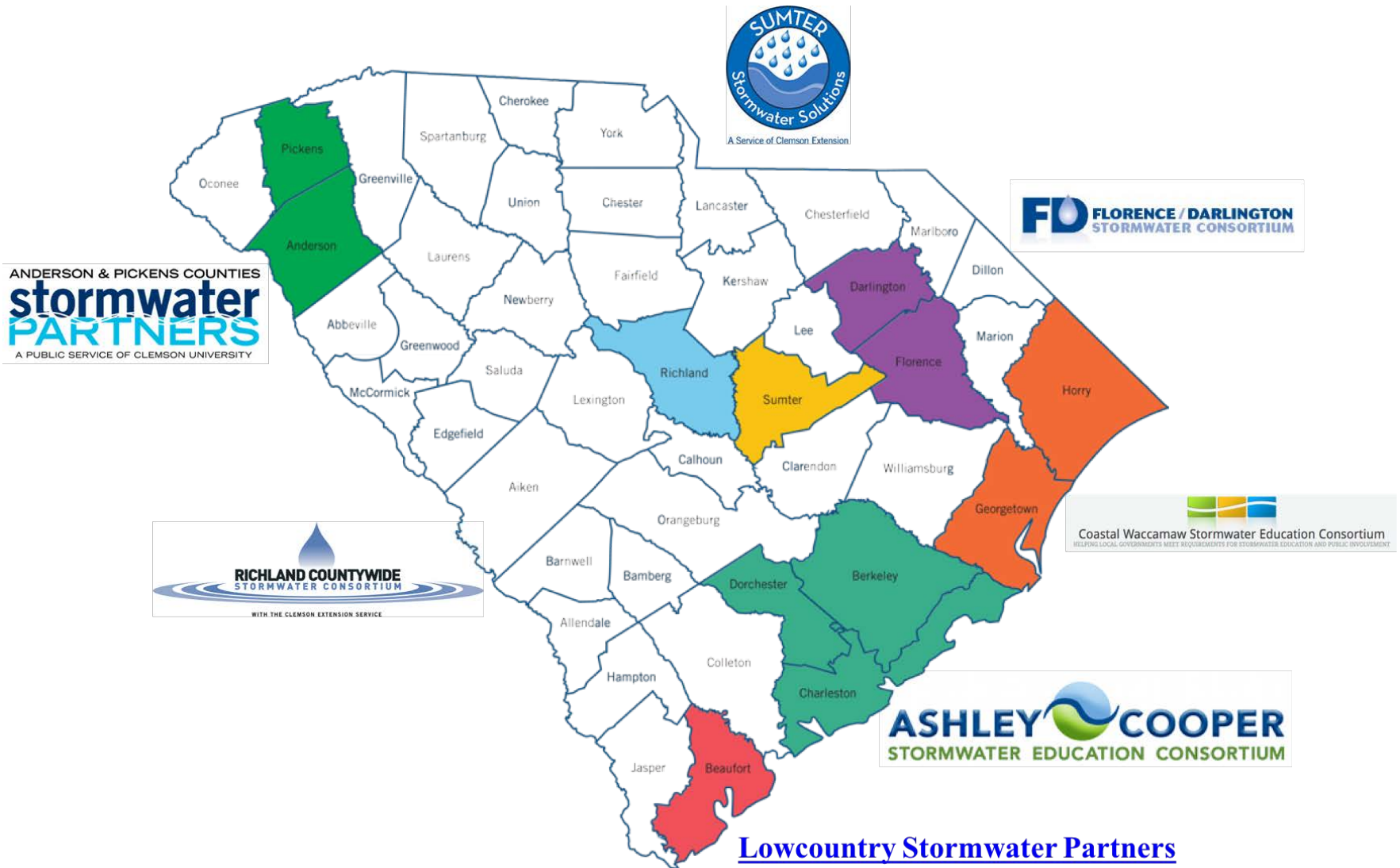
# WHAT DOES CAROLINA CLEAR DO?

## Other Services:

- Mass Media Campaigns
- Statewide Surveys
- Community Specific Workshops
- BMP Installation and Signage
- Libraries of Online Resources
- Consortium Management



# CONSORTIUMS?



# LOWCOUNTRY STORMWATER PARTNERS



# LOWCOUNTRY STORMWATER PARTNERS



**COASTAL  
DISCOVERY  
MUSEUM**  
Experience The  
Lowcountry Up Close



**COASTAL  
CONSERVATION  
LEAGUE**



**SAVANNAH  
RIVERKEEPER®**  
It's Your River, Protect It!



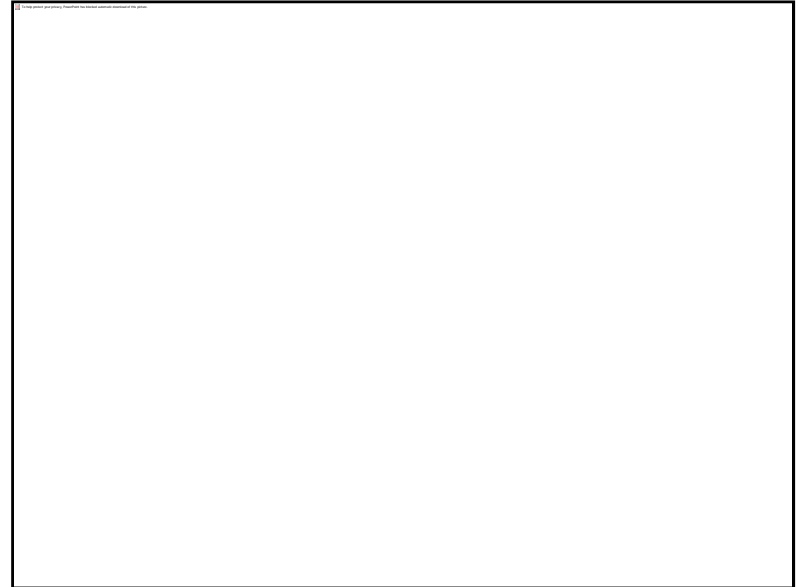
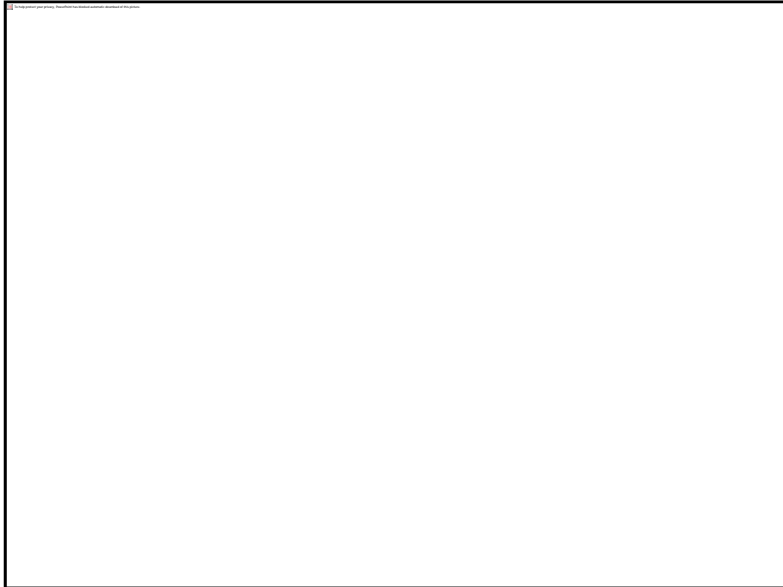
## Strategic Education Plan Meeting

- September 29<sup>th</sup>, 2016
- Goals:
  - Identify primary POCs for the region
  - Identify target audiences/behaviors
  - Brainstorm potential solutions, programs, and partners



## Strategic Education Plan Meeting

- MS4 presentations
- Local Perspectives survey
- POC brainstorming and prioritization exercise
- Small group discussions





# LOWCOUNTRY STORMWATER PARTNERS



POC	Target Behavior and/or Activity
Post-Construction Maintenance	Stormwater pond focus
Runoff Volume	Dilution of saltwater, impacts on estuary and ecosystem, influence on pollutant loading
Littering	Plastics
Bacteria	Bacteria's impact to waterways and risk to public health awareness for area residents
Fertilizer (Nutrients)	Proper application of fertilizers
Irrigation Practices	Proper timing and amounts of irrigation
Irrigation Source	Pond water
Septic Tanks	Installation, proper maintenance, knowledge of septic safe materials
Construction Runoff	Awareness of sediment control options
Sanitary Sewer Overflows	User disposal practices
Failing Infrastructure	Maintenance, knowing when to call for repairs, public versus private infrastructure

# LOWCOUNTRY STORMWATER PARTNERS



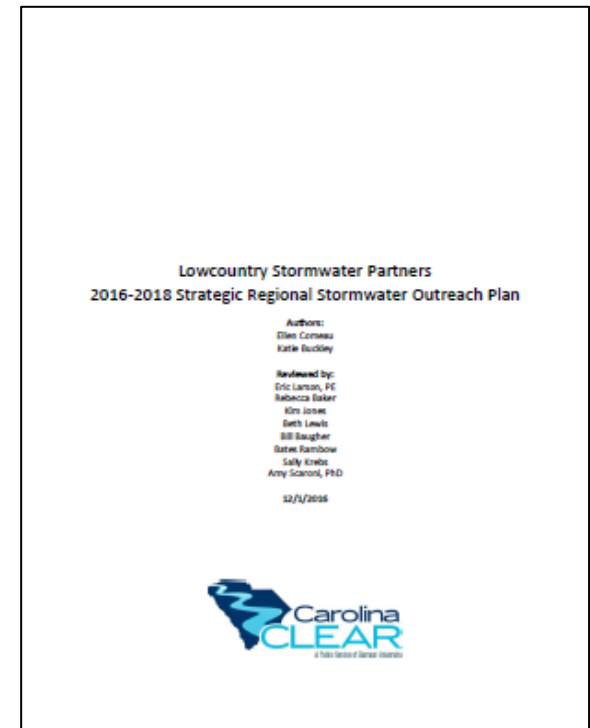
POC	Target Behavior and/or Activity
Linking Land Use Change to Natural Resources	Quality of community, livelihoods of fisherman, shrimpers, and oyster farmers, property values
Illegal Dumping	Proper disposal practices, supplies for spill prevention and control
Lawn Debris	Proper disposal of grass clippings and other landscape debris
Infiltration	Site-specific better management practices, reducing and/or mitigating impervious cover
Pesticides	Proper use and application of pesticides
Copper	Pond applications
Commercial Grease Trap Maintenance	Awareness and regular maintenance
Boat/Dock/Marina Maintenance	Awareness of boat maintenance practices, local ordinances, and proper waste disposal
Gas Stations	Maintenance and runoff
Commercial Car Washes	Polluted runoff, pop-up, and charity car washes
Pharmaceuticals	Opportunity to properly dispose of pharmaceuticals
Pool Discharge	Proper de-chlorination, low or no impact draining
Large Item Dumping	Proper disposal, illegal dumped, link to bacteria and rodents, flooding concerns in ditches

## Prioritized POCs for the Following Three Years

Priority	Pollutant
1	Post-Construction Maintenance
2	Freshwater (Runoff Volume)
3	Litter
4	Bacteria
5	Nutrients
6	Sediment

## 2016-2018 Lowcountry Stormwater Partners Strategic Regional Outreach Plan

- Part of MCM1 and MCM2 compliance
  - Excel Sheet
    - Specific programs and their targeted audiences, behaviors, and goals
  - Written document
    - Describes the background data and discussions that informed the plan



# LOWCOUNTRY STORMWATER PARTNERS



Target Pollutant								Program/Activity
Post-Construction Maintenance	Freshwater (Runoff Volume)	Litter	Bacteria	Nutrients	Sediment	General Stormwater Awareness	Other	
x						x		Participation in the Carolina Clear Mass Media Campaign 2014-2017 Stormwater Ponds
x						x		Stormwater Pond Billboards
x			x	x	x	x		Stormwater Pond Conference
x	x	x	x	x	x	x		Watershed Friendly Business Program
x	x		x	x	x	x		Neighbors for Clean Water

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LSP October 2016 Newsletter

LSP November 2016 Newsletter

LSP December 2016 Newsletter

### Education Plans

2016-2018 Outreach Plan PDF Excel

### Reports

Final 2015 Report

Final 2014 Report

Final 2013 Report

[www.clemson.edu/extension/carolinaclear/regional-consortiums/lsp/index.html](http://www.clemson.edu/extension/carolinaclear/regional-consortiums/lsp/index.html)

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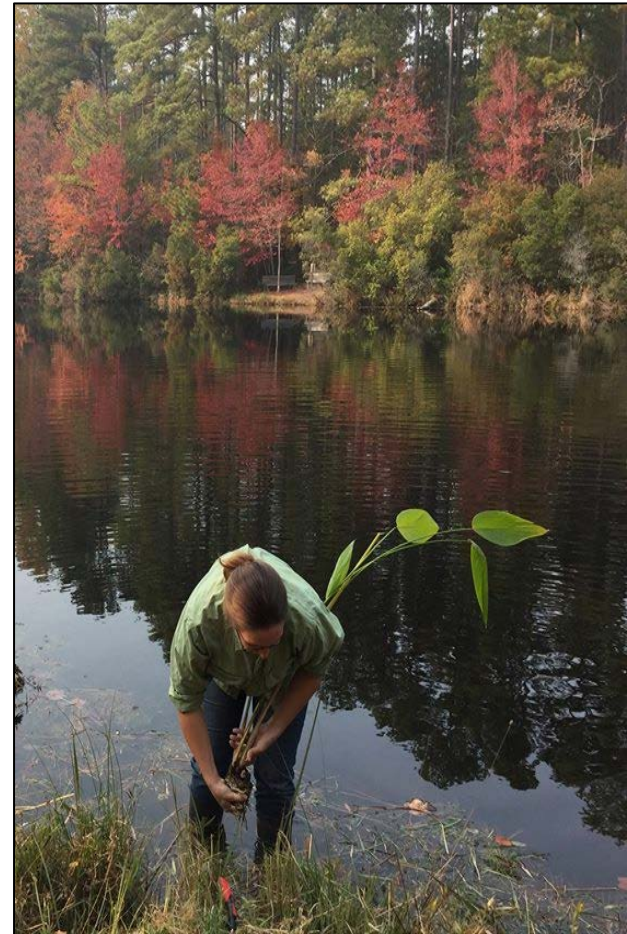
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## Past Events and Looking Ahead

- *Master Gardener Rain Garden Workshop*
- *Sun City Shorescape Project*
- *PRSF Maritime Center Birthday Celebration*
- *Rotary Club Lectures*
- *Website and Social Media Launch*
- *1<sup>st</sup> Consortium Meeting*
- Logo Creation
- Touch-A-Truck
- St. Helena Elementary School Career Day
- Hosting Master Pond Manager
- Planning a Fall Stormwater Pond Conference
- Great American Cleanup and River Sweep





ecomeau@clemson.edu



facebook.com/NeighborsforClean  
Water Facebook.com/

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# THANK YOU!

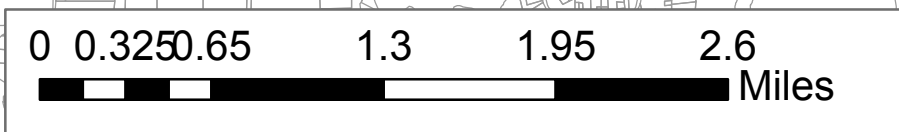
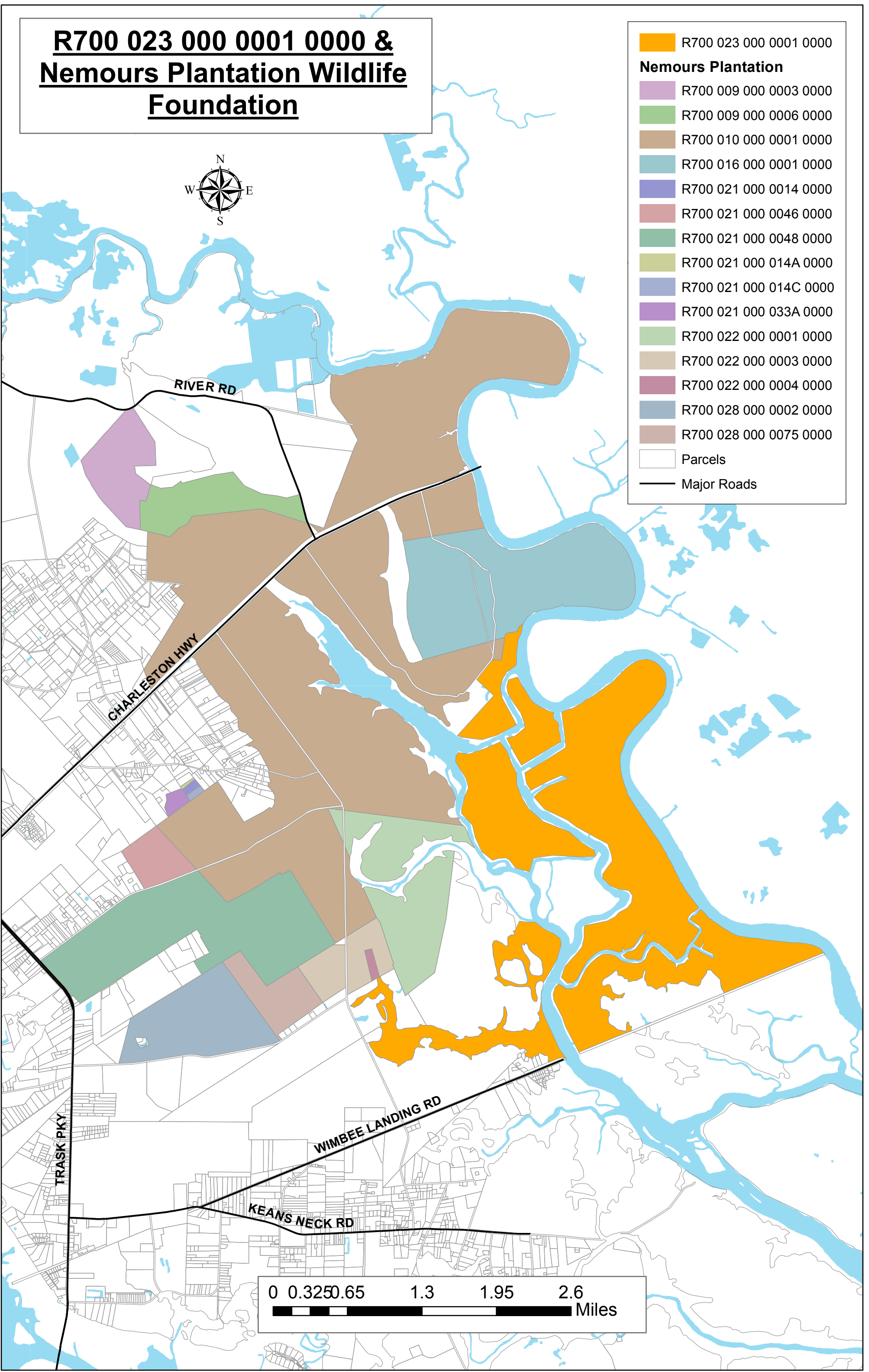
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# R700 023 000 0001 0000 & Nemours Plantation Wildlife Foundation



- R700 023 000 0001 0000
- Nemours Plantation**
- R700 009 000 0003 0000
- R700 009 000 0006 0000
- R700 010 000 0001 0000
- R700 016 000 0001 0000
- R700 021 000 0014 0000
- R700 021 000 0046 0000
- R700 021 000 0048 0000
- R700 021 000 014A 0000
- R700 021 000 014C 0000
- R700 021 000 033A 0000
- R700 022 000 0001 0000
- R700 022 000 0003 0000
- R700 022 000 0004 0000
- R700 028 000 0002 0000
- R700 028 000 0075 0000
- Parcels
- Major Roads





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



**INTEROFFICE MEMORANDUM**

**TO:** Stormwater Utility Board (aka Stormwater Fees Appeals Board)  
**FROM:** Eric W. Larson, Stormwater Manager *Eric W. Larson*  
**SUBJECT:** Nemours Plantation SWU Fee appeal  
**DATE:** March 15, 2017

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On January 31, 2017, the Stormwater Utility received an appeal from Nemours Plantation. The request is attached and included by reference. The appeal covered the following parcels:

R700 021 000 033A 0000	R700 022 000 0003 0000	R700 028 000 0075 0000
R700 009 000 0006 0000	R700 021 000 0014 0000	R700 021 000 0046 0000
R700 021 000 0048 0000	R700 021 000 014A 0000	R700 021 000 014C 0000
R700 022 000 0001 0000	R700 022 000 0004 0000	R700 009 000 0003 0000
R700 010 000 0001 0000	R700 016 000 0001 0000	R700 028 000 0002 0000

#### Background

As a brief summary of this grouping of parcels, the Nemours Plantation is held as a non-profit entity dedicated to preserve the land. Some of the parcels have conservation easements placed upon them while others are simply held as voluntary preservation. There are sparsely located structures throughout the parcels and many of the forested area have active Silviculture practices. A few of the tracts are partially or completely with salt marsh or freshwater wetland. Lastly, many of the tracts are already receiving the “agricultural exemption” for taxes, which reduces stormwater fees by a factor of 10x as defined in the previous SWU rate structure adopted in 2005.

In Tax Year 2015, the first year after the rate structure change, the County did make adjustments to fees on three tracts as a result of being deemed marsh or by demonstrating the existence of a conservation easements. In 2016, as a result of the completion of the rate study and reassessment of properties, the land cover was updated from “undisturbed” to “disturbed”, mainly due to the silviculture practices. This changes runoff assumptions from 0.1% to 0.5% and hence increases fee amount under the older fee structure used with the Agricultural Exemption.

#### Analysis of the Appeal

The rate study completed in May 2005 contemplated a rate structure that assumed runoff factors based on land use and land cover. The use of the study recommendations was supported by the SWU Ordinance. Vacant and agricultural lands were given runoff factors between 0.001 and 0.005. As explained in the study, undisturbed lands would produce the lowest amount of runoff. In practice, the SW staff has uniformly applied either a 0.001 factor for undisturbed, natural lands or 0.005 for any land that appears to be harvested or otherwise disturbed from the natural state. This equated into a SWU fee by “assuming” 0.1% or 0.5% impervious cover for lands without improvements, converting the acreage into one or more SFU units, and multiplying that factor by the SWU fee rate. This subjective procedure was replaced by the IA and GA component billing structure adopted in 2015.

In approximately 2009, the South Carolina Legislature passed a law to prohibit the charging to SWU fees to agricultural lands UNLESS the jurisdiction already had such a SW Utility in place. This effectively allows Beaufort County to continue to charge SWU fees on Ag Exempt properties (based on the same terms, conditions, and amounts, aka rates) but prohibits the increase of said rates. As a result, even though the rate structure was changed in 2015, the SWU staff continues to use the older rate structure and \$50/SFU rate to calculate the fee. However, Staff is allowed to change the fee if the land use condition changes. In the case of many of the parcels in question in this appeal, routine reassessment that occurred with the 2015 Rate Study determined the land was being disturbed, effectively changing the conditions of the parcels and the amount of the SWU fee.

While not mentioned as part of the Appeal, a last issue involves the improvements located on the parcels. There are numerous dwellings and other buildings located on the properties. Even with conservation easements and agricultural exemptions, the County is allowed by the ordinance to charge for the impervious runoff generated. The recent reassessment noted additional structures on multiple parcels, resulting in an increased fee.

The Appeal's citation of the SC Sediment and Erosion Control Act is not applicable in that the Appeal is about the charging of SWU Fees, not permitting land disturbance. Similarly, the citation of the USEPA Clean Water Act as it relates to silviculture is irrelevant as this section is related to NPDES permitting, not SWU fees.

#### Conclusion

The attached table summarizes the SWU fees for the past three tax years and compares them to the rate calculated using the new rate structure had Ag Exemptions and Conservation Easements not been applied. In some cases, the reassessment actually lowered the SWU fee. All of the increases are directly related to the reassessment of ground cover conditions or addition of built improvements. This routine assessment is allowed by the SWU ordinance as better data becomes available.

It is noteworthy that two of the parcels included in the Appeal, R700 016 000 0001 0000 and R700 010 000 0001 000, were adjusted in 2015 due to conservation easements that allowed for silviculture activities. The owner has not provided any evidence that these remaining parcels have such conservation easements.

Also of note is the fact that between 2014 and 2015, these parcels continued to receive the Ag Exemption and were not subjected to the increased rates associated with the new rate structure.

#### Recommendation

Staff has evaluated the SWU fees for these parcels and determined they are accurately calculated per County ordinance and adopted policy and free of error.

Nemours Wildlife Foundation  
**Find Report**  
January 14 - 16, 2016

PIN_	Class	2014	2015	2016	Current Structure	Comments	Add. Comments
R700 021 000 033A 0000	AgVac Classified	9.58	9.58	48.84	106.00	22 acres active silviculture (crop field)	undisturbed to disturbed
R700 022 000 0003 0000	AgImp Forest	493.70	493.70	493.70	692.00	Robert - Improved vs. vacant; SFR gone as of 2013 aerial photo; \$479.46 w/ SFR removed & all acres classed as timberland	already disturbed; SFR demolished
R700 028 000 0075 0000	AgVac Forest	75.53	75.53	384.55	644.00	173.24 acres of active silviculture	undisturbed to disturbed
R700 009 000 0006 0000	AgVac Forest	91.81	91.81	467.39	902.00	210.56 acres of active silviculture	undisturbed to disturbed
R700 021 000 0014 0000	AgVac Forest	2.49	2.49	12.65	47.00	5.7 acres of active silviculture	undisturbed to disturbed
R700 021 000 0046 0000	AgImp Forest	334.40	334.40	289.58	585.50	(2) SFR - ;652.3 acres of cropland (Geraldine - Vacant vs Improved)	changed to improved and lowest runoff because of crops.
R700 021 000 0048 0000	AgVac Forest	185.74	185.74	945.61	3,040.00	(1) SFR (Robert - dwelling; Vickie - 426 acres in tax system vs. 950.51 acres in GIS);\$993.39 w/ SFR added, 1 acre assigned to SFR, and 425 acres timberland	undisturbed to disturbed, found 1 SFR & sheds; 524.51 acreage discrepancy b/t tax system & GIS. Per Assesor's office, acreage in tax system is correct & parcel lines in GIS cannot be adjusted (no plat).
R700 021 000 014A 0000	AgVac Classified	0.88	0.88	2.66	27.00	1 acre timber and 1 acre crop	undisturbed to disturbed
R700 021 000 014C 0000	AgVac Forest	2.18	2.18	11.10	42.00	5 acres of active silviculture	undisturbed to disturbed
R700 022 000 0001 0000	AgVac Classified	191.84	191.84	870.14	1,175.00	60 acres crop, 380 acres timberland and 200 acres marsh;	undisturbed to disturbed;
R700 022 000 0004 0000	AgVac Forest	4.36	4.36	22.20	70.00	10 acres of active silviculture	undisturbed to disturbed
R700 009 000 0003 0000	AgVac Forest	117.78	117.78	599.06	887.00	269.88 acres of active silviculture	undisturbed to disturbed
R700 010 000 0001 0000	AgImp Forest	1,714.38	1,714.38	1,714.38	10,263.50	Conservation easement - calc includes (7) SFRs and 3416 of timber cal as undisturbed	already been corrected with credit program.
R700 016 000 0001 0000	AgImp Forest	539.33	539.33	304.50	304.50	(4) SFR, (2) in Tier 3, (1) in tier 2, and (1) in tier 1; 100% CREDIT ON GA	already been corrected with credit program.
R700 028 000 0002 0000	AgVac Forest	194.54	194.54	871.46	1,448.00	379.2 acres of active silviculture and 67 acres crop	undisturbed to disturbed
		<b>3,958.54</b>	<b>3,958.54</b>	<b>7,037.82</b>	<b>20,233.50</b>		

January 31, 2017

To: Stormwater Management Utility Board and staff

Re: Appeal of Stormwater Fees for Nemours Plantation

From: Ernie P. Wiggers, President & CEO

The purpose of this letter is to appeal the 2016 stormwater fee assessed for the Nemours Plantation in northern Beaufort County. This property is owned by and operated by the Nemours Plantation Wildlife Foundation, a public non-profit 501(c)(3) cooperation dedicated to natural resources stewardship, scientific investigations related to natural resources conservation, and education. I serve as its President and CEO and oversee its day to day operations. Nemours Plantation properties are classified as AgVac Classified, AgVac Forest, or AgImp Forest. The stormwater fee for this property in 2015 was \$3,958.54 but increased to \$7,037.82 in 2016. When I inquired to the Stormwater Management office why the fees increased I was told their GIS analysis indicated trees had been harvested and the timberland acres were now 'disturbed' and consequently carry a higher fee rate.

For the reasons I outline below, I ask the Board to reconsider the higher stormwater fees assessed for this property and these fees recalculated accordingly. I am willing to present the reasons for my appeal to the full stormwater board membership. Thank you.

The reasons for my appeal are these:

1. I challenge the assertion that normal timber operations which comply with state issued Best Management Practices increase stormwater runoff or reduce quality of this runoff. We follow best management practices developed by the SC Forestry Commission to minimize both surface runoff and water quality issues. I request the opportunity to analyze the empirical data the county used to make this conclusion.
  - a. Due to our long growing seasons in Beaufort County, vegetation quickly becomes established and robust on sites where trees have been harvested because of the increased sunlight reaching the forest floor. There is only a very small period of time when bare ground may exist during these operations.
  - b. Not all timber operations result in complete removal of standing trees. Our pine plantations are thinned 1-2 times before final harvest. These thinnings remove the 3<sup>rd</sup> or 5<sup>th</sup> row of planted pine or remove individual, poor quality trees. The majority of trees remain during these thinning operations. GIS analysis may show trees have been used but stand integrity has not been disturbed or altered.
  - c. Some silvicultural operations have been conducted to reduce tree basal area to  $\leq 60$  ft square/ac to restore savanna habitat for threatened and endangered species such as the red cockaded woodpecker. These savannas quickly develop a robust understory of grasses and other

herbaceous plants.

2. Both the state of South Carolina and the U.S. government have produce rulings which prohibit an increase in stormwater fees when traditional land use practices such as tree harvesting are implemented. I cite the following and especially note the sections that are highlighted (see next page):

**State law on the ag exemption:** [http://www.scstatehouse.gov/sess118\\_2009-2010/bills/453.htm](http://www.scstatehouse.gov/sess118_2009-2010/bills/453.htm)

### ***Fee impositions***

*SECTION 2. Section 6-1-330 of the 1976 Code is amended by adding a new subsection to read:*

*"(D) The governing body of a county may not impose a fee on agricultural lands, forestlands, or undeveloped lands for a stormwater, sediment, or erosion control program unless Chapter 14, Title 48 allows for the imposition of this fee on these lands; provided, that any county which imposes such a fee on these lands on the effective date of this subsection may continue to impose that fee under its same terms, conditions, and amounts."*

**Chapter 14, title 48:** <http://www.scstatehouse.gov/code/t48c014.php>

***SECTION 48-14-10. Short title.***

*This chapter may be cited as the "Stormwater Management and Sediment Reduction Act".*

*HISTORY: 1991 Act No. 51, Section 2.*

***SECTION 48-14-20. Definitions.***

*(8) "Land disturbing activity" means any use of the land by any person that results in a change in the natural cover or topography that may cause erosion and contribute to sediment and alter the quality and quantity of stormwater runoff.*

***SECTION 48-14-30. Restriction of land-disturbing activities generally.***

*(A) Unless exempted, no person may engage in a land disturbing activity without first submitting a stormwater management and sediment control plan to the appropriate implementing agency and obtaining a permit to proceed.*

*(B) Each person responsible for the land disturbing activity shall certify, on the stormwater management and sediment control plan submitted, that all land disturbing activities will be done according to the approved plan.*



*(C) All approved land disturbing activities must have associated therein at least one individual who functions as responsible personnel.*

*HISTORY: 1991 Act No. 51, Section 2.*

**SECTION 48-14-40.** *Certain land-disturbing activities exempt from provisions of chapter.*

***The provisions of this chapter do not apply to the following land disturbing activities:***

*(A) Land disturbing activities on agricultural land for production of plants and animals useful to man, including but not limited to: forages and sod crops, grains and feed crops, tobacco, cotton, and peanuts; dairy animals and dairy products; poultry and poultry products; livestock, including beef cattle, sheep, swine, horses, ponies, mules, or goats, including the breeding and grazing of these animals; bees and dairy products; fur animals and aquaculture, except that the construction of an agricultural structure of one or more acres, such as broiler houses, machine sheds, repair shops, and other major buildings and which require the issuance of a building permit shall require the submittal and approval of a stormwater management and sediment control plan prior to the start of the land disturbing activity.*

***(B) Land disturbing activities undertaken on forest land for the production and harvesting of timber and timber products.***

**EPA Office of Water December 2012:**

[https://www3.epa.gov/npdes/pubs/sw\\_forestroad\\_factsheet.pdf](https://www3.epa.gov/npdes/pubs/sw_forestroad_factsheet.pdf)

### **Summary**

*The U.S. Environmental Protection Agency (EPA) has announced that it has revised its Phase I stormwater regulations to clarify that stormwater discharges from logging roads do not constitute stormwater discharges associated with industrial activity and that a National Pollutant Discharge Elimination System (NPDES) permit is not required for these stormwater discharges. In Northwest Environmental Defense Center v. Brown, (NEDC) 640 F.3d 1063 (9th Cir. 2011), a citizen suit was filed alleging violations of the Clean Water Act for discharging stormwater from ditches alongside two logging roads in state forests without a permit. The court held that because the stormwater runoff from the two roads in question is collected by and then discharged from a system of ditches culverts and channels, there was a point source discharge of industrial stormwater for which an NPDES permit is required. The EPA did not intend for logging roads to be regulated as industrial facilities. However, in light of the NEDC decision, the EPA is revising 40 CFR 122.26(b)(14) to clarify the Agency's intent.*

## **Silvicultural Rule**

*Prior to the 1987 amendments, the EPA promulgated the Silvicultural Rule in which the Agency defined "silvicultural point source" to specify which silvicultural discharges were to be included in the NPDES program. The rule defines silvicultural point source to mean any "discernible, confined and discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which pollutants are discharged into waters of the United States" and further explains that "[t]he term does not include non-point source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance from which there is natural runoff."*

3. Summary of Timber Management Practices on Nemours Plantation
  - a. We use a registered forester to carry out our timber management operation. Our forester follows best management practices as governed by the SC Forestry Commission for minimizing water runoff while maintaining water quality.
  - b. Our timber management practices require a 40 foot wide buffer between waterways or marshes and stands undergoing silvicultural operations.
  - c. Silvicultural practices do not always result in the removal of all trees, i.e. a clearcut. Pine stands are typically thinned by removing the 3<sup>rd</sup> or 5<sup>th</sup> row of planted pines, or remove individual, poor quality trees within a stand. This is done to reduce competition for growing space, sunlight, and nutrients for the remaining trees.
  - d. Silvicultural practices are also used to establish specific habitat conditions which support threatened and endangered species. We have reduced tree stocking density to about 60 ft<sup>2</sup> of basal area across several hundred acres to restored pine savanna habitat. This habitat is home to many of our threatened and endangered wildlife including the red-cockaded woodpecker. We have cooperated with both state and federal conservation agencies to release red-cockaded woodpeckers on this property and hope to continue and expand this restoration project. This savanna has become an outdoor classroom for our educational programs and laboratory for our research program.
  - e. The understory in these savannas promotes a very robust and biologically diverse plant community. In some instances as many as 50 different species of plants can be identified within a 10 meter square plot. Many of these species are also threatened and endangered and many are native grasses that are incredible filters for rainfall runoff.
  - f. Whether for silvicultural or economic purposes when prescriptions require all trees to be harvested, the site quickly recovers. Our soils carry a rich, diverse seed bank and within a few weeks grasses as well as

other herbaceous plants occupy the site. With our flat topography, there is little runoff and no ditches or other erosion develops. Further, we immediately replant these sites with pine seedlings following best management practices.

Table. Comparison of stormwater fees for individual parcels on Nemours Plantation for 2015 and 2016.

Date	Name	Memo	Account	Clr	Split	Amount	Amount
						2015	2016
Jan 14 - 16, 16							
01/15/2016	Beaufort County Treasurer	00530777 22 ac	6029 - Other tax		Accounts Payable	\$ 9.58	\$ 48.84
01/15/2016	Beaufort County Treasurer	00530982, 216 ac	6029 - Other tax		Accounts Payable	\$ 493.70	\$ 493.70
01/15/2016	Beaufort County Treasurer	05003006, 173 ac	6029 - Other tax		Accounts Payable	\$ 75.53	\$ 384.55
01/15/2016	Beaufort County Treasurer	00522768, 211 ac	6029 - Other tax		Accounts Payable	\$ 91.81	\$ 467.39
01/15/2016	Beaufort County Treasurer	00530009, 6 ac	6029 - Other tax		Accounts Payable	\$ 2.49	\$ 12.65
01/15/2016	Beaufort County Treasurer	00530358, 657 ac	6029 - Other tax		Accounts Payable	\$ 334.40	\$ 289.58
01/15/2016	Beaufort County Treasurer	00530376, 426 ac	6029 - Other tax		Accounts Payable	\$ 185.74	\$ 945.61
01/15/2016	Beaufort County Treasurer	00530562, 2 ac	6029 - Other tax		Accounts Payable	\$ 0.88	\$ 2.66
01/15/2016	Beaufort County Treasurer	00530580, 5 ac	6029 - Other tax		Accounts Payable	\$ 2.18	\$ 11.10
01/15/2016	Beaufort County Treasurer	00530964, 640 ac	6029 - Other tax		Accounts Payable	\$ 191.84	\$ 870.14
01/15/2016	Beaufort County Treasurer	00530991, 10	6029 - Other tax		Accounts Payable	\$ 4.36	\$ 22.20
01/15/2016	Beaufort County Treasurer	00522731, 270 ac	6029 - Other tax		Accounts Payable	\$ 117.78	\$ 599.06
01/15/2016	Beaufort County Treasurer	00522777, 5914 ac	6029 - Other tax		Accounts Payable	\$ 1,714.38	\$ 1,714.38
01/15/2016	Beaufort County Treasurer	00526416, 898 ac	6029 - Other tax		Accounts Payable	\$ 539.33	\$ 304.50
01/15/2016	Beaufort County Treasurer	00532613, 446 ac	6029 - Other tax		Accounts Payable	\$ 194.54	\$ 871.46
Jan 14 - 16, 16						<b>\$ 3,958.54</b>	<b>\$ 7,037.82</b>



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



April 19, 2017

**Stormwater Manager's Report for the Stormwater Utility Board Meeting**

Utility Update

1. Hurricane Matthew Response and Recovery – Our work under the Emergency Watershed Protection (EWP) program to clear the debris along our system is ongoing. CERES is doing all the work and Force Account was not needed. The schedule is 6-8 weeks. Work began March 25, 2017.
2. FY 18 SWU Management fee – The Management fee budget was approved by the Towns of Bluffton and Port Royal and the City of Beaufort. Town of Hilton Head Island's approval is pending. The deadline to approve the budget was April 1, 2017. Hilton Head's delay in approval is in part to ongoing decision making related to switching the "Option E" from the 2015 Rate Study recommendation in FY 18. If they switch, the management fee will be calculated differently.
3. FY 18 Budget – The proposed County Stormwater Department FY 17-18 budget will be presented under New Business. Staff recommends approval of the Budget.
4. Nemour Plantation SWU Fee Appeal – Under Old Business, County Staff and our Rate consultant will present a report and recommendation related to the current rate structure and the request to amend it as it relates to this appeal.

Monitoring Update

1. Lab Update (From Dr. Alan Warren and Lab Manager Danielle Mickel) - No information was available at the time of this report.
2. Battery Creek 319 Grant project - Sampling is ongoing on a weekly basis by the USCB lab staff to determine the effectiveness of the pond.
3. MOA to share monitoring and to address coordinated IDDE work – County staff has drafted a MOA and sent to the Town staff for comment.
4. Monitoring Plan Implementation - The County has started the first quarter sampling and will be taking one wet and one dry sample every quarter.

Stormwater Implementation Committee (SWIC) Report

1. The SWIC committee met March 22, 2017 to review the current progress on the Stormwater Management Plan update. [Minutes from the meeting are attached.](#)

## 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. High priority projects are in County Council districts 1(Sheldon/Dale/Burton) and 3 (St. Helena). Easements for Project PP will be discussed in Executive Session.

## Professional Contracts Report

1. Stormwater Management Plan (Master Plan) Update – (\$475,000 Budget; \$239,542 County portion) – The Modeling is complete and once the municipalities have determined that the model is in agreement with the areas of concern, the model will be updated. It was discovered that the 2006 data from the original SWP was incomplete so additional inventory will be needed to finish the model. ATM is in the process of preparing a list of recommendations of areas of concern and will begin formulating and updating the CIP while continuing to update the existing inventory.
2. FY 17 CIP projects – There were numerous CIP projects that were supposed to be began to be designed for FY 17. Hurricane Matthew has limited the Staff time needed to prepare the RFPs and begin the consultant selection process. Those projects will be moved to FY 18.

## 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) – Nothing new to report.
2. Hilton Head National – Staff presented to the County Council subcommittee at a public meeting on March 30, 2017 on the basics of the stormwater BMP Manual and how it would be applied to this development.

## Municipal Reports

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

## MS4 Report

1. Plan Review - There were 10 projects reviewed and 8 stormwater permits issued in April to Beaufort County Public Works staff.

<b>Projects Name</b>	<b>Development Permit No.</b>	<b>Date Permit Issued</b>	<b>Review Date</b>	<b>Review Type</b>	<b>Comments</b>
Cootages at Coosa			3/15/2017	Final	Approved w/conditions
May River Village Appts. Pavilion	5367	03/08/17	3/8/2017	Final	Approved
Habershaw Island			3/1/2017	PreApp	3 commercial sites
Oyster Bluff Amenity			3/1/2017	Final	Deferred Incomplete application
Beaufort County Animal Services 170			3/2/2017	Final	Under review
206 May River			3/8/2017	Final	Deferred
Fripp Island Lot 1B	5366	03/24/17	9/14/2016	Waiver	Deferred w/conditions.
Haig Point Deck Waiver	5368	03/23/17	3/22/2017	Final	Approved
Giuseppi's Pizza	5364	03/15/17	3/1/2017	Final	Approved
May River Village Appts. Pavilion	5367	03/08/17	3/8/2017	Final	Approved

2. Inspection summary for March 8, 2017 to April 7, 2017  
 Number of active permits = 36  
 Number of inspections performed = 15  
 Number of drainage related complaints investigated = 6  
 Number of certificates of completion = 1
3. MS4 Program Inspections – Staff has completed a report of the County’s Solid Waste Convenience Centers. The Solid Waste Manager is reviewing the results and plans to implement the recommendations in FY 18. Other County facility inspections are pending.
4. Public Education – April 1, 2017 - Touch a Truck Event was held at the Tanger Outlet 1 in Bluffton. The Staff estimates 700 people attended with 170 direct contacts through the educational information provided.



5. Upcoming Events:

- Beaufort County Pond Conference held the 1<sup>st</sup> planning meeting. Pond Conference is scheduled to be held in October.
- May River Cleanup is scheduled for April 22, 2017. [See attached flyer.](#)

6. DHEC NPDES permitting transition – A coordination meeting was held on March 27, 2017. Numerous DHEC staff from the local office, Charleston District Office, and Columbia’s Central office attended along with Staff from the County, Town of Bluffton, Town of Hilton Head Island, and the City of Beaufort. We discussed the schedule for transitioning DHEC’s authority for full NPDES permitting review to the local MS4s. Also discussed was a possibility of the County amending its coverage area to become County-wide rather than the limited MS4 boundary. [See attached map.](#) The County is already implementing the MS4 permit requirements county-wide via the approved BMP Manual and Ordinance. The advantage to a county-wide

“permit by rule” would be consistency for the development community when dealing with Beaufort County and DHEC. A disadvantage would be the additional effort and cost to regulate a larger area but this was already planned for and programmed with the Rate Increase and expanded program and staffing. The County has not responded to DHEC with an answer to this change.





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#### MEETING NOTES

TO: Eric Larson, Director, Environmental Engineering & Land Management  
Beaufort County  
FROM: Joseph A. Mina, P.E.  
DATE: March 22, 2017  
RE: Beaufort County Stormwater Plan Update Public Meeting Notes

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This memo is intended to present the summary of Task 5 Modeling results to the SWIC at their meeting on March 22, 2017, and to update the SWIC on current progressing the overall SWMP update and implementation project.

#### **Status of Task 5 – Modeling to date:**

At a previous SWIC meeting in November, ATM presented the results of the analysis of the drainage basins with respect to land use changes, and previously computed Water Quality sampling results presented in July to the SWIC and further refined in December for the county's MS4 reporting. The 7 watersheds approved by the SWIC are as follows:

- Morgan River
- Colleton River
- Calibogue Sound
- Coosaw River
- Beaufort River
- New River
- May River

ATM proceeded to update modeling for both Water Quality and Hydrology & Hydraulics for the 7 chosen basins. Modeling of Hydrology and Hydraulics was done using ICPR 3.0. This provides a comprehensive set of calculations and output which considers the interconnected nature of the facilities, and generates output showing performance of the systems based on pre-set warning elevations and boundary conditions. These conditions were previously determined as part of the 2006 study and will be updated based on information received from the SWIC and various jurisdictions with respect to improvements within the watershed. So far, no specific information on improvements within the watershed have been provided. Additionally, there is little to no data linking the ICPR models to the GIS data and actual locations of the problems identified in the model. ATM requests this information from all SWIC members as an action item of this meeting.

Water quality models were further updated from the July & December reporting using WMM and WASP modeling. Currently, the modeling is being reconciled with the GIS, and like the ICPR models, there is no real correlation between GIS and models. Additional study or data is needed to determine the actual locations of problems. As a general summary of the WQ results, there is little change to the problem areas identified in the 2006 study. ATM received information from the County, Bluffton, and Port Royal regarding BMP installations in their watersheds, and this was included in the models.

Summary output from the ICPR models is presented in tabular format for SWIC review at this meeting. This shows the original model output of problem areas compared to the 2017 problem areas for each watershed approved for study. Additionally, a table (taken from the 2006 study) with recommended improvements from 2006 is included with comments and correlation to the current ICPR modeling. This shows the missing

areas. In the Calibogue Sound basin, there are no modeled problems, however there are listed issues in the 2006 study. It is unknown where this information was developed. ATM has not received any additional data outlining these areas. The Morgan river watershed has issues with the model, as the 2006 existing model does not include a scenario for the watershed, although the watershed is modeled in the 2006 future scenario, and has been updated and run for the current 2017 modeling task.

**Summary of Findings, Recommendations, and Next Steps:**

Based on the modeling completed, and input from the SWIC, ATM's next steps will be to prepare summaries of the model data, both WQ and H&H, and present recommendations of problem areas to address in the updated CIP. Due to the missing information, there is some additional review and analysis needed to better correlate and prepare actual improvement estimated. It is requested that the County contact the previous consultant to determine if there is any information missing from what was previously provided. If this information can be reviewed, ATM will incorporate it and include the results in the final summaries. Should the information need to be reproduced from the currently available data, ATM will discuss further steps with the County.

With the existing information, ATM can develop a list of recommendations for SW Inventories as outlined in Task 8 of the contract. ATM will prepare a list of these recommendations in consultation with the county and produce a memo with the list of areas for concentration of the County and Municipalities' efforts in continued inventory updates along with a GIS layer showing the priority areas.

With the existing information, ATM can work with the county to begin formulation of an updated CIP. While the modeling is a part of this process, additional information and data is taken into consideration, and the process can move forward while determining if additional modeling information is available.

For the remaining tasks, Review of EOS/LOS, Develop SWMP operational plan, and Report development and presentations, ATM will begin work on these tasks, and work with the county to complete them in accordance with the updated schedule provided.



# 17th Annual May River Cleanup & 7th Annual Earth Day Celebration

*Join us for coffee provided by the Bluffton Starbucks & a free lunch provided by the Hardeeville Walmart! All supplies provided by our event partners!*

**#MayRiverCleanup  
#LoveBluffton**

**SATURDAY,  
APRIL 22, 2017**

**Oyster Factory Park,  
Bluffton, SC**

**Cleanup:**

**9 am - 11:30 am**

**Earth Day:**

**10 AM - 1 PM**

For more information  
contact Beth Lewis at  
[blewis@townofbluffton.com](mailto:blewis@townofbluffton.com)  
or (843) 706-4559  
[www.townofbluffton.sc.gov](http://www.townofbluffton.sc.gov)

**Thank You, Partners!**







## MEMORANDUM

Date: April 19, 2017

To: Stormwater Management Utility Board

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

Re: **Maintenance Project Report**

This report will cover two major projects and two minor projects. The Project Summary Reports are attached.

### **Major Projects – Storm Drainage System Improvements:**

- **278 Retrofit Pond #2 – Bluffton (SWUD 9):** This approximately two acre pond off Running Deer Road in Bluffton was the third of four ponds constructed to control stormwater from Highway 278. The soil was delivered to the Buckwalter Recreation complex to build up the ground for future soccer fields. The cost of this project was **\$259,535.37**.
- **Turtle Lane – Lady’s Island (SWUD 7):** This project improved 160 feet of drainage system. The project scope included clearing 160 feet of workshelf, installing 105 feet of 15” HDPE pipe, rip rap and hydroseeding. The total cost was **\$21,847.96**.

### **Minor or Routine Projects:**

- **Token Lane – Lady’s Island (SWUD 7):** This project consisted of removing blockages from the ditch flowline and repairing a driveway apron. The total cost of this effort was **\$2,219.92**.
- **Bluffton Bush Hog – Town of Bluffton (SWUD 9):** This project consisted of bush hogging and clearing 185 feet of workshelf. The total cost was **\$590.69**.



**Beaufort County**  
**Public Works**  
**Stormwater Infrastructure**  
*Project Summary*

**Project Summary:** Hwy 278 Retrofit Pond 2 Project

**Activity:** Water Quality

**Narrative Description of Project:**

**Duration:** 9/10/15 - 9/12/16

Constructed a retrofit pond. Installed sediment pad, (1) access pipe, sediment logs, rip rap and hydroseeded for erosion control. Removed sediment pad.

<b>2014-200 / 278 Pond Water Quality Project</b>	<b>Labor Hours</b>	<b>Labor Cost</b>	<b>Equipment Cost</b>	<b>Material Cost</b>	<b>Contractor Cost</b>	<b>Indirect Labor</b>	<b>Total Cost</b>
APINS / Access pipe - installed	21.0	\$446.95	\$393.74	\$92.33	\$0.00	\$271.88	\$1,204.90
AUDIT / Audit Project	3.0	\$70.47	\$0.00	\$0.00	\$0.00	\$39.69	\$110.16
BUSH / Bush Hogged	9.0	\$205.97	\$162.99	\$22.87	\$0.00	\$133.65	\$525.48
DEBREM / Debris Removal - Jobsite	20.0	\$461.90	\$423.24	\$185.86	\$0.00	\$307.20	\$1,378.20
DWP / Dewatered Pond	20.0	\$461.90	\$115.10	\$61.90	\$0.00	\$307.20	\$946.10
HAUL / Hauling	1,788.8	\$40,788.92	\$16,140.00	\$28,574.25	\$0.00	\$26,222.02	\$111,725.19
HYDR / Hydroseeding	76.0	\$1,739.96	\$1,045.80	\$883.04	\$0.00	\$1,097.96	\$4,766.76
LM / Loading Materials	695.5	\$17,088.12	\$13,425.92	\$3,435.53	\$0.00	\$11,600.74	\$45,550.31
ONJV / Onsite Job Visit	126.0	\$4,159.21	\$447.64	\$210.54	\$0.00	\$2,838.96	\$7,656.35
PDCONST / Ponds - Constructed	548.0	\$12,087.18	\$9,392.48	\$2,493.70	\$0.00	\$7,736.70	\$31,710.06
PGC / Pond - Grubb and Clear	75.0	\$1,736.90	\$1,071.00	\$175.42	\$0.00	\$1,090.15	\$4,073.47
PI / Project Inspection	1.0	\$45.60	\$3.62	\$3.48	\$0.00	\$33.96	\$86.66
PL / Project Layout	3.0	\$136.80	\$10.86	\$5.22	\$0.00	\$101.88	\$254.76
PP / Project Preparation	28.0	\$623.98	\$322.60	\$69.36	\$0.00	\$372.82	\$1,388.76
PROFS / Professional Services	0.0	\$0.00	\$0.00	\$0.00	\$38,073.69	\$0.00	\$38,073.69
PRRECON / Project Reconnaissance	36.0	\$853.56	\$42.48	\$19.59	\$0.00	\$527.24	\$1,442.87
PS / Push up soil	50.0	\$1,140.70	\$828.37	\$369.68	\$0.00	\$758.60	\$3,097.35
RRI / Rip Rap - Installed	30.0	\$678.60	\$386.66	\$0.00	\$0.00	\$440.35	\$1,505.61
SC / Sediment Control	20.0	\$456.10	\$35.40	\$96.25	\$0.00	\$307.20	\$894.95
SPI / Sediment Pad - Installed	49.0	\$1,118.18	\$125.19	\$157.19	\$0.00	\$707.25	\$2,107.81
TT / Travel Time	18.0	\$409.86	\$21.24	\$5.22	\$0.00	\$253.68	\$690.00
WDR / Wash down road	8.0	\$184.08	\$34.72	\$7.50	\$0.00	\$119.64	\$345.94
<b>2014-200 / 278 Pond Water Quality Project</b>	<b>3,625.3</b>	<b>\$84,894.93</b>	<b>\$44,429.05</b>	<b>\$36,868.93</b>	<b>\$38,073.69</b>	<b>\$55,268.77</b>	<b>\$259,535.37</b>
<b>Sub Total</b>							
<b>Grand Total</b>	<b>3,625.3</b>	<b>\$84,894.93</b>	<b>\$44,429.05</b>	<b>\$36,868.93</b>	<b>\$38,073.69</b>	<b>\$55,268.77</b>	<b>\$259,535.37</b>

Before



During



After



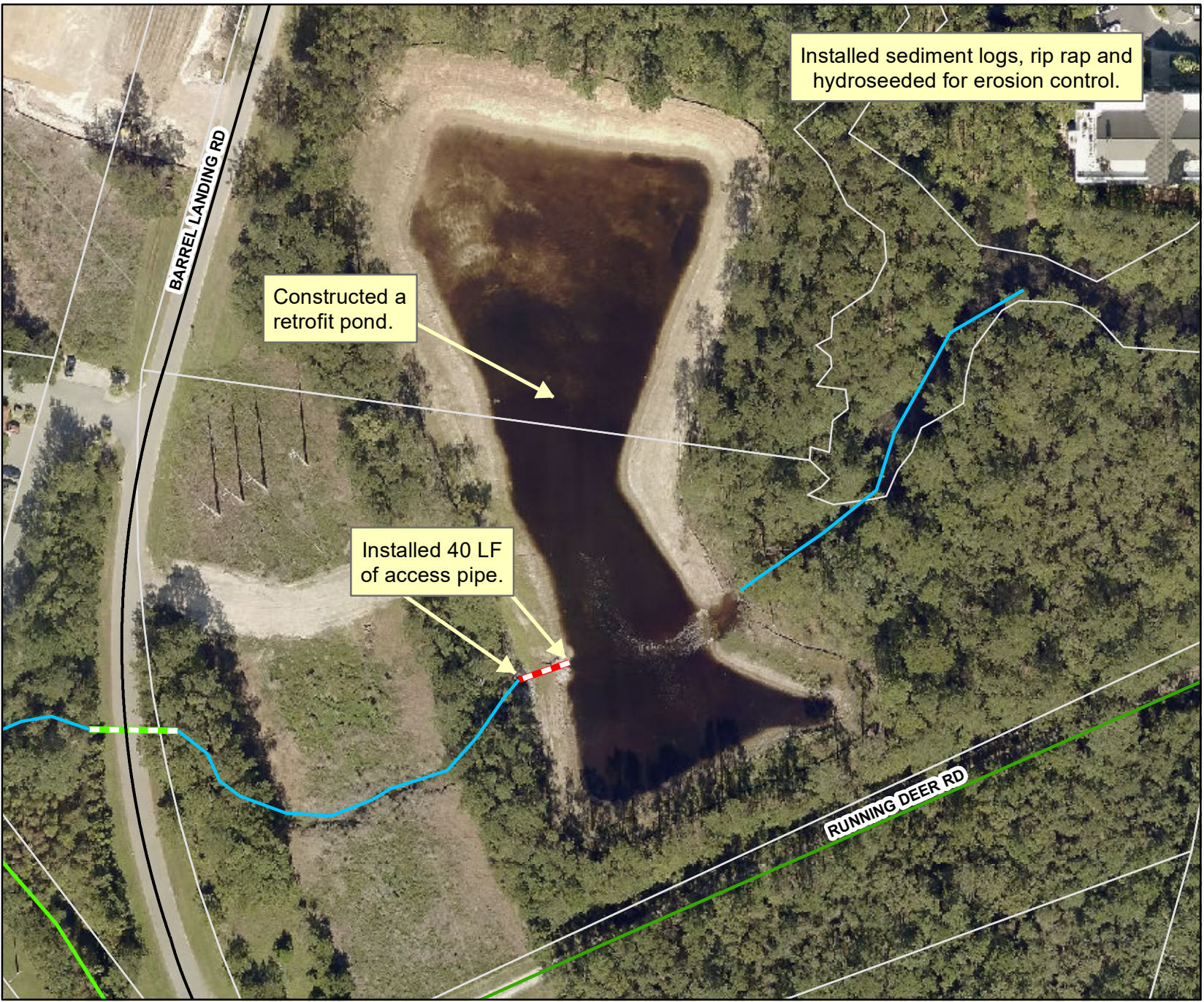
**Project: Hwy 278  
Retrofit Pond 2**

**Activity: Water  
Quality**

**Project #:  
2014-200**

**Township/SW Dist:  
Bluffton/9**

**Completed:  
September 2016**



Drainage Type	
	Access Pipe
	Bleeder Pipe
	Channel Pipe
	Channel
	Creek/Stream
	Crossline Pipe
	Driveway Pipe
	Lateral
	Lateral Pipe
	River
	Road Pipe
	Roadside
	Roadside Pipe



**1 inch = 106 feet**





**Beaufort County  
Public Works  
Stormwater Infrastructure  
Project Summary**

**Project Summary:** Turtle Lane

**Activity:** Drainage Improvement

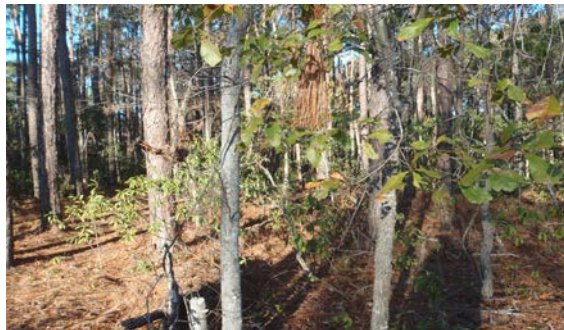
**Narrative Description of Project:**

Project improved 160 L.F. of drainage system. Grubbed and cleared 160 L.F. of workshelf. Installed 105 L.F. channel pipe, rip rap and hydroseeded for erosion control.

**Duration:** 1/9/17 - 3/23/17

<b>2017-003 / Turtle Lane</b>	<b>Labor Hours</b>	<b>Labor Cost</b>	<b>Equipment Cost</b>	<b>Material Cost</b>	<b>Contractor Cost</b>	<b>Indirect Labor</b>	<b>Total Cost</b>
AUDIT / Audit Project	0.5	\$11.75	\$0.00	\$0.00	\$0.00	\$6.62	\$18.36
CBREP / Catch basin - repaired	40.0	\$963.30	\$121.83	\$195.54	\$0.00	\$567.90	\$1,848.57
CPI / Channel Pipe - Installation	65.0	\$1,584.30	\$251.15	\$378.77	\$0.00	\$920.35	\$3,134.57
HAUL / Hauling	79.0	\$1,839.90	\$732.74	\$1,268.14	\$0.00	\$1,111.97	\$4,952.75
HYDR / Hydroseeding	9.0	\$190.32	\$23.24	\$91.62	\$0.00	\$119.70	\$424.88
LM / Loading Materials	40.0	\$919.50	\$150.52	\$17.82	\$0.00	\$543.30	\$1,631.14
PP / Project Preparation	45.0	\$1,066.00	\$93.26	\$27.14	\$0.00	\$626.85	\$1,813.25
RSDCL / Roadside Ditch - Cleanout	50.0	\$1,159.30	\$378.41	\$399.46	\$0.00	\$687.90	\$2,625.07
SC / Sediment Control	52.0	\$1,248.91	\$75.60	\$93.24	\$0.00	\$735.54	\$2,153.29
SG / Shoot Grade	36.0	\$849.60	\$50.40	\$19.47	\$0.00	\$493.82	\$1,413.29
UC / Utility Coordination	1.5	\$37.05	\$0.00	\$0.00	\$0.00	\$19.85	\$56.90
UTLOC / Utility locates	3.0	\$74.10	\$0.00	\$0.00	\$0.00	\$39.69	\$113.79
WSGRB / Workshelf - Grubbed	40.0	\$919.50	\$150.52	\$48.78	\$0.00	\$543.30	\$1,662.10
<b>2017-003 / Turtle Lane Sub Total</b>	<b>461.0</b>	<b>\$10,863.53</b>	<b>\$2,027.67</b>	<b>\$2,539.99</b>	<b>\$0.00</b>	<b>\$6,416.78</b>	<b>\$21,847.96</b>
<b>Grand Total</b>	<b>461.0</b>	<b>\$10,863.53</b>	<b>\$2,027.67</b>	<b>\$2,539.99</b>	<b>\$0.00</b>	<b>\$6,416.78</b>	<b>\$21,847.96</b>

Before



During



After







Project: Turtle Lane

Activity: Drainage Improvement














Project #: 2017-003

Township/SW Dist: Ladys Island/7

Completed: March 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



1 inch = 170 feet



**Beaufort County**  
**Public Works**  
**Stormwater Infrastructure**  
*Project Summary*

**Project Summary:** Token Lane

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

Removed blockage from flowline. Installed driveway apron.

**Duration:** 2/14/17

<b>2016-619 / Token Lane</b>	<b>Labor Hours</b>	<b>Labor Cost</b>	<b>Equipment Cost</b>	<b>Material Cost</b>	<b>Contractor Cost</b>	<b>Indirect Labor</b>	<b>Total Cost</b>
AUDIT / Audit Project	0.5	\$11.75	\$0.00	\$0.00	\$0.00	\$6.62	\$18.36
DWASPH / Driveway - Asphalt	32.0	\$693.52	\$36.38	\$11.88	\$0.00	\$432.96	\$1,174.74
HAUL / Hauling	13.0	\$308.95	\$115.31	\$398.70	\$0.00	\$203.86	\$1,026.82
<b>2016-619 / Token Lane Sub Total</b>	<b>45.5</b>	<b>\$1,014.22</b>	<b>\$151.69</b>	<b>\$410.58</b>	<b>\$0.00</b>	<b>\$643.44</b>	<b>\$2,219.92</b>
<b>Grand Total</b>	<b>45.5</b>	<b>\$1,014.22</b>	<b>\$151.69</b>	<b>\$410.58</b>	<b>\$0.00</b>	<b>\$643.44</b>	<b>\$2,219.92</b>

(Pictures Not Available)



Project: Token Lane

Activity: Routine/ Preventive Maintenance

Project #: 2016-619

Township/SW Dist: Ladys Island/7

Completed: February 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



1 inch = 210 feet

Prepared By: BC Stormwater Management Utility  
 Date Print: 04/04/17  
 File: C:\project summaries map\Token Lane\_2016-619



**Beaufort County**  
**Public Works**  
**Stormwater Infrastructure**  
*Project Summary*

**Project Summary:** Bluffton Bush Hog

**Activity:** Routine/Preventive Maintenance

**Narrative Description of Project:**

**Duration:** 7/19/16

Project improved 185 L.F. of drainage system. Bush hogged 185 L.F. of worksheff.

<b>2017-304 / Bluffton Bush Hog</b>	<b>Labor Hours</b>	<b>Labor Cost</b>	<b>Equipment Cost</b>	<b>Material Cost</b>	<b>Contractor Cost</b>	<b>Indirect Labor</b>	<b>Total Cost</b>
AUDIT / Audit Project	0.5	\$11.75	\$0.00	\$0.00	\$0.00	\$6.62	\$18.36
WSBH / Workshelf - Bush Hogged	15.0	\$317.20	\$37.63	\$18.00	\$0.00	\$199.50	\$572.33
<b>2017-304 / Bluffton Bush Hog</b>	<b>15.5</b>	<b>\$328.95</b>	<b>\$37.63</b>	<b>\$18.00</b>	<b>\$0.00</b>	<b>\$206.11</b>	<b>\$590.69</b>
<b>Sub Total</b>							
<b>Grand Total</b>	<b>15.5</b>	<b>\$328.95</b>	<b>\$37.63</b>	<b>\$18.00</b>	<b>\$0.00</b>	<b>\$206.11</b>	<b>\$590.69</b>

Before



During



After



**Beaufort County Stormwater Utility  
Proposed Budget for FY2018**

**Unaudited Projected Revenue**

	FY2017 Budget	FY2018 Proposed Budget
<b>Revenue</b>		
Admin SWU Fees	563,721	565,297
Unincorp/CWI SWU Fees	5,127,347	5,112,155
<b>Total Revenue from SWU Fees</b>	5,691,068	5,677,452
Reimbursable Projects	2,500	-
Interest	864	2,500
Gain on Sale of Capital Assets	-	-
Cost-Share for Joint Efforts	199,191	92,200
Bond	5,000,000	-
<b>Reserve Utilization</b>		
Utility's Cash Balance	1,050,490	976,684
Capital Improvement Fund	104,000	2,140,274
Stormwater Utility	-	-
<b>Projected Revenue Total</b>	12,048,113	8,889,110

\$391,466 - Admin budget  
\$14,915 - CoB C/S for monitoring & PE/O  
\$8,894 - TOPR C/S for monitoring & PE/O  
\$150,022 - County C/S for monitoring & PE/O  
(\$120K+\$90K-\$59,978)

County's SW Admin Fees + SWU Fees - \$4,922,528  
CWI Fees - \$528,352  
Admin fees from municipalities - \$202,763  
CoB C/S Monitoring and PE/O - \$14,915  
ToPR C/S Monitoring and PE/O - \$8,894

**Town of Port Royal (ToPR)**  
\$3,414 - 2 mths cost including change order (SMMP Update \$535,290 C/W, 18 mths project c/s total is \$16,168)  
**City of Beaufort (CoB)**  
\$8,101 - 2 mths cost including change order (SMMP Update \$535,290 C/W, 18 mths project c/s total is \$38,357)  
**Town of Hilton Head Island (ToHHI)**  
\$27,770 - PE/O cost-share \$90K C/W  
\$33,177 - 2 mths cost including change order (SMMP Update \$535,290 C/W, 18 mths project c/s total is \$157,093)  
**Town of Bluffton (ToB)**  
\$8,399 - PE/O cost-share \$90K C/W  
\$11,339 - 2 mths cost including change order (SMMP Update \$535,290 C/W, 18 mths project c/s total is \$53,688)

Anticipating reimbursement from the Okatie West grant

**Efforts (Expenditures)**

	FY2017	FY2018
<b>Administration</b>	404,703	391,466
<b>Utility Activities</b>		
UA/Annual Maintenance	3,267,712	3,189,716
UA/Drainage Enhancement	14,000	14,000
UA/Additional Studies	326,670	123,050
<i>Utility Activities Subtotal</i>	3,608,382	3,326,766
<b>Regulation</b>		
UA/Control Reg	510,549	426,321
UA/WQ Monitoring	130,000	120,000
UA/Public Information/Outreach	72,000	90,000
<i>Regulation Subtotal</i>	712,549	636,321
<b>Reserve Utilization</b>		
Capital Improvement Fund		
Hwy 278 Retrofit	47,590	-
Okatie West/SC 170 Retrofit	73,000	1,210,000
Battery Creek Upper Retrofit	141,800	-
Buckingham Plantation	276,450	276,450
Brewer Memorial Demo Pond	9,500	29,500
Factory Creek Phase I	100,000	100,000
Factory Creek Phase II	100,000	-
Salt Creek South	-	245,000
Shanklin Road	-	330,000
Grober Hill	-	225,000
<i>Reserve Utilization Subtotal</i>	748,340	2,415,950
<b>Capital Improvement Fund</b>		
Surplus (Deficit)	4,355,660	904,957
<b>Utility Operating Fund</b>		
Capital Assets New Purchases	1,050,490	963,650
Reserve Fund	250,000	250,000
Surplus (Deficit)	1,968,479	-
<b>Efforts Total</b>	12,048,113	8,889,110

**Personnel**  
Director of Env Engr - .8 FTE; Business Mngr; GIS/MS4 Data Mngr; Admin Tech - .5 FTE; Fiscal Tech - .1 FTE

**Personnel**  
Superintendent; (2) Foremen; (34) crew & support; (2) Infrastruc Inspec Tech; Fiscal Tech - .2 FTE

**Professional Services**  
\$15K - Survey  
\$5K - Engineering Services  
\$8K - Easement Acquisition  
\$2K - Wetland Delineation/Restoration

Contingency

**\$123,050 - Additional Studies**  
\$52,780 - 2 mths cost (SMMP Update \$475K C/W, 18 mths project)  
\$60,270 - SMMP Update Change order  
\$10K - Contingency

**Personnel**  
Superintendent; MS4 Coord; (2) Inspector; Admin Tech- .5 FTE; Fiscal Tech- .1 FTE  
**Professional Services**  
\$20K - Facility Upgrades (Design Only)

\$120K - USCB Lab

\$90K - Carolina Clear

\$418K County share

\$792K Grant

Construction delayed b/c other parties have not found the revenue for the cost share.

Feasibility Study & Design

Design (Project delayed by property owner)

Design

Design

Design

**Regulatory**  
\$5,650 - Handheld radio w/ mount for MS4 Coord  
\$10K - MUNIS Service contingency  
\$10K - Flow Meter  
**Infrastructure**  
\$330K - Replace (2) Dump Trucks  
\$46K - Replace (1) Labor Truck  
\$150K - Replace JCB Excavator  
\$287K - Sweeper  
\$75K - Wash Facility  
\$50K - Land Acquisition

3rd year



BEAUFORT COUNTY  
STORMWATER MANAGEMENT UTILITY BOARD AGENDA  
Wednesday, May 17, 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 – April 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](#))
  - J. Financial Report – Chanel Lewis ([backup](#))
5. UNFINISHED BUSINESS
6. NEW BUSINESS
  - A. Special Presentation: Boundary Street Project – Neil Pugliese
7. PUBLIC COMMENT
8. NEXT MEETING AGENDA
  - A. June 21, 2017 ([backup](#))
9. ADJOURNMENT