### Beaufort County Stormwater Management Utility Board Meeting Agenda August 1, 2012 ~ 2:00 p.m. ~

Location: Beaufort Industrial Village 102 Industrial Village Bldg. 2 Burton, S.C. 29906

- 1) Call to Order: Don Smith
  - A. Approve meeting agenda
  - **B.** Approval of minutes from previous meeting: July 11, 2012 (backup)
- 2) Introductions
- 3) Public Comment
- 4) Reports
  - **A.** SW/Form-based Code Subcommittee report
  - B. Monitoring Update-Bob Klink
  - C. Financial Report Alan Eisenman (financial update) (unaudited year end)
  - **D.** Upcoming Professional Contracts Report Dan Ahern (backup)
  - E. Utility Updates Dan Ahern (backup)
  - **F.** Maintenance Project Report Eddie Bellamy
- 5) Unfinished Business
  - **A.** Regional Coordination Dan Ahern
  - **B.** Adjustment and Credit Manual Dan Ahern (backup)
- 6) New Business
- 7) **Public Comment**
- 8) Next Meeting/Agenda (backup)
- 9) Adjournment

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

July 11, 2012 at 2:00 p.m. in Beaufort County Council Chambers Draft July 25, 2012

<b>Board Members</b>		Ex-Officio Members		
	A b good	Dungan4	A b a a m 4	

Present	Absent	Present	Absent
Don Smith	James Fargher	Andy Kinghorn	Tony Maglione
Allyn Schneider		Ron Bullman	Scott Liggett
Donald Cammerata			

Patrick Mitchell William Bruggeman John Youmans

Beaufort County Staff Visitors

Dan Ahern

Lori Sexton

Rob McFee

Reed Armstrong, Coastal Conservation League
Laura Lee Rose, Clemson Extension
Lamar Taylor, City of Beaufort

County Council
Paul Sommerville

Eddie Bellamy

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

- **A.** Agenda approved
- **B.** May 2, 2012 Minutes were approved as posted
- **2. Introductions** New Board member, Patrick Mitchell representing Lady's Island.
- 3. Public Comment none
- 4. Reports
  - A. Stormwater (SW)/Form based code Subcommittee Report
    - No actions since last meeting

### B. Monitoring Annual Report – Dan Ahern for Bob Klink

- Reported a number of things:
  - o The Water Budget Study is ongoing and our inspector Danny Polk met with Dr. Badr July 10th.
  - o Reported that there are 2 impairment areas in Battery Creek, CoB and ToPR. Met with the ToPR and they would like to address these impairments separately. The problem station being addressed is 15-25 (Shellfish monitoring station); the ToPR brought up a concern that the watershed boundary may be wrong and appears to be more upstream watershed from another creek that runs under 802. Bob Klink and Dan Ahern will be meeting with the

engineer on the 802 expansion to get the "As Built Drainage" to see how much of 802 goes in there. One of our board members, John Youmans is upstream from 15-25 station and he has given permission to use his dock to sample from. SW Inspector Danny Polk has also spoken to another home owner and they too have given permission to sample from their dock. Sampling will be set-up for upstream & downstream; this may take some time possibly a year's worth of data to answer the question if it is or isn't the problem. We'll get the data to see if this is part of the solution, if it is then there is an area on the other side of 802 that is a wetland. The upland portion of this area may be developed and if this area is a problem then this may open up a partnership to work on a solution that solves the impairment downstream. Don Smith asked how large is the drainage area on the south side of the highway and Dan Ahern said it was about 3 or 4 blocks but didn't know for sure because they didn't know how much of the 802 drainage area was.

Don Cammerata wanted to know the sampling process. Dan Ahern told him through an agreement with USCB, sampling would be done on a weekly schedule and the samples would be taken to USCB Lab to process.

- o Continued with monitoring initiatives; presented the board with two MOU's for concurrence:
  - MOU with USCB to guide transfer of water quality monitoring to their lab –

The SW Utility Board supports the proposed MOU between Beaufort County and USCB regarding Water Quality Monitoring.

USCB and Mariculture Center; had two meetings and have developed a joint project that will be monitoring salinity change with rainfall events in the May River, Okatie Rivers and Battery Creek. This effort has already paid dividends in that the scientists at USCB and SC Marine Resources Division that the Waddell Mariculture Center is under has already aligned concurrence on this draft MOU and proposed study. –

The SW Utility Board supports the proposed MOU between SCDNR; USCB; ToB and Beaufort County on joint salinity monitoring in the May River, Okatie River, and Battery Creek.

- Next GEL Monitoring Meeting is July 31, 2012 at 1:30 in the PW Conference Room.

### C. Upcoming Professional Contracts Report - Dan Ahern

Reported on a number of items:

- O Two new additions in pipeline came from our effort to address Mr. Kubic's goal of having a joint project between USCB, Mariculture Center and the Utility. This effort will help the Utility and Town of Bluffton in our restoration efforts and may allow us to assess the impacts of our ongoing restoration projects. This won't be a contract, this will be an agreement.
- The other contract in the works has come about as a result of starting back up an initiative by the Utility to look at the SWMP recommended drainage upgrades and determine which required more detailed evaluation. We are doing this on a watershed by watershed basis and it may take a year to complete. The SWMP modeled over 100 road overtoppings that would occur after development at 25 and 100 year storm events. We have been using previous reviews by Andrews and Burgess to better size drainage included in the 802 Highway

expansions and will be using their analysis for Highway 170 identified overtopping. This one was unique in that the 2008 analysis identified that the road would have to be raised at the modeled overtopping to allow for the larger pipes to be installed. This was incorporated into the new design for highway 170.

o The final new item is associated with our updating the 2007 Adjustment and Credit Manual. We have drafted proposed changes and wanted the original consultants to review to see if they have any suggestions.

#### D. Utility Updates - Dan Ahern

**Financial Updates:** This month's reports were attached to the agenda. Alan Eisenman will be back next month to give the preliminary end of year figures.

**StormCon Presentation:** Bob Klink and Dan Ahern will be presenting at this year's national meeting on "Integrating Stormwater Quantity and Quality Requirements with Equivalent Impervious Cover". They requested a short one minute video on the presentation and the Beaufort County Channel folks helped us develop one.

**Webcasts:** Since the last Board meeting we hosted another CWP Webcast on stream restoration and the next one will be August 15, 2012 titled "Get the Dirt on Stormwater". We will try to schedule this to be held at BIV #2.

**Meeting with DHEC June 8, 2012:** County and Municipal representatives met with DHEC SW representatives to discuss delegation and MS4 designation. There was very little interest in communities receiving delegation of the program. The State provided the census data and based on the 2010 census and explained possible designation alternatives. Presented a power point to highlight this information and show the urbanized area and clusters.

**10 Year Report:** The report reviewed last month will be taken to County Council at its July 23<sup>rd</sup> meeting. It was also reported that Beaufort County will have an ad in Sunday's paper (July 15<sup>th</sup>) to announce this report as part of making this known to SW Fee payers.

**Advertising of Stormwater Manager's position:** Beaufort County has advertised the Stormwater Manager's position. If things go according to plans, Dan Ahern will be resigning as Stormwater Manager and moving to a part-time support position that has been established in the budget. This may take at least two months to accomplish.

### E. Maintenance Project Reports – Eddie Bellamy

Mr. Bellamy reported on three major projects (1) Gray Road; (2) Bridgewood Road Outfall and (3) South Point Trail Outfall. Additionally, reported 16 minor and/or routine maintenance projects which were reported in the shortened format.

#### 5. Unfinished Business –

### A. Regional Coordination – Dan Ahern

The SWIC met June 21<sup>st</sup> and started new efforts on sharing of Restoration Plan activities. The next meeting will be August 16<sup>th</sup>.

Don Smith asked if there were any word on the efforts to collect military fees. Dan Ahern said that they have been in contact with a Naval Commander in Jacksonville, just spoke 2 weeks ago and we're still waiting on an update. If this resolution can be resolved with the Naval Hospital then this may be

the template resolution used for the Marine Corp. Air Station. Donald Cammerata wanted to know if this does get resolved then how will this money be collected, from this point forward or backwards and Dan Ahern said that how it's resolved is negotiable.

### B. IGA Update – Eddie Bellamy for Rob McFee

The City of Beaufort has submitted a draft IGA that they have taken to their City Council. Our staff has reviewed it and is recommending approval. While City of Beaufort is adopting separate stormwater standards to reflect their emphasis on redevelopment, they will be using section 3 of the County's BMP manual and we are happy that all development north of the Broad will be using the same technical procedures. We are requesting that the board approve this IGA and recommend approval by the County. –

The SW Utility Board concurs with and recommends signing of the draft IGA with City of Beaufort.

#### 6. New Business –

A. Election of Chairman and Vice Chairman – Designated Board Member Board members elected Don Smith as Chairman and Allyn Schneider as Vice Chairman.

### B. Adjustment and Credit Manual – Dan Ahern

As mentioned in the professional contracts section, we have drafted changes to the 2007 manual to update it for the new volume control requirements. We would like the Board to weigh in on these changes and we hope to come back to the Board in August with a version for approval. One area that may need to be addressed is the amount of credit for the different options. Would like to get your comments by July 23<sup>rd</sup> then these can be addressed before submitting the final version for concurrence at the August 1<sup>st</sup> Board meeting.

Board members were concerned about conflict of interest being an Appeals Board with the same members for the Advisory Board may want legal or staff advice for this and Dan Ahern said that is why he wanted their input on this. Don Smith says with Zoning issues, staff tries to work with folks and if they don't agree it goes to the Zoning Board Appeals, after that is court. Don Smith suggested that we may want an appeals board in between staff and court. Donald Cammerata still feels staff is better position to make those decisions. Don Smith doesn't feel that they can answer this.

- **7. Public Comment** Don Smith wanted to know if the volume controls have been working smoothly. Dan Ahern said there haven't been any problems, been a number of calls and Zoning people have gotten really good at this. They sit down with the folks and walk them thru the check list and print the form out for them.
- 8. Next meeting agenda Proposed August 1, 2012 Agenda, Board meeting will be held in BIV 2.
- 9. Meeting adjourned.

# BEAUFORT COUNTY, SOUTH CAROLINA STATEMENT OF NET ASSETS

Stormwater Utility June 30, 2012 & June 30, 2011

ACCETC	P	Unaudited and Preliminary June 30, 2012		<b>Audited</b> June 30, 2011	
ASSETS Current Assets Cash and Investments with Trustee Receivables, Net Inventories Prepayments Total Current Assets	\$	2,321,372 24,899 102,941 20,202 2,469,414	\$	1,521,863 328,208 119,640 13,978 1,983,689	
Capital Assets Accumulated Depreciation		2,798,912 (1,797,930) 1,000,982		2,896,543 (1,673,468) 1,223,075	
Total Assets	\$	3,470,396	\$	3,206,764	
LIABILITIES Liabilities Account Payable Accrued Payroll Accrued Compensated Absences Total Current Liabilities		60,752 41,539 4,470 106,761		45,944 35,486 4,470 85,900	
Long Term Liabilities Accrued Compensated Absences Net Other Postemployment Benefits Obligation Total Long Term Liabilities		64,937 606,898 671,835		70,037 456,898 526,935	
Total Liabilities		778,596		612,835	
NET ASSETS Invested in Capital Assets, Net of Related Debt Unrestricted		1,000,982 1,690,818		1,223,075 1,370,854	
Total Net Assets	\$	2,691,800	\$	2,593,929	

# Unaudited and Preliminary BEAUFORT COUNTY, SOUTH CAROLINA STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS

### Stormwater Utility

For the Period Ended June 30, 2012

				Percent
	Budget		Budget to	of
	FY 2012	 June 30, 2012	Actual	Budget
Operating Revenues				
Stormwater Utility Fees	\$ 3,344,133	\$ 3,061,063	(283,070)	92%
Stormwater Utility Project Billings	64,278	62,282	(1,996)	97%
Interest	11,389	 	(11,389)	0%
Total Operating Revenues	3,419,800	 3,123,345	(296,455)	91%
Operating Expenses				
Personnel	1,986,780	1,779,869	(206.911)	90%
Purchased Services	770.938	664,923	(106,015)	86%
Supplies	426,223	347,623	(78,600)	82%
Depreciation	285,859	283,059	(2,800)	99%
Total Operating Expenses	3,469,800	3,075,474	(394,326)	89%
Operating Income (Loss)	(50,000)	47,871	97,871	-100%
Non-Operating Revenues (Expenses)				
Gain (Loss) on Sale of Capital Assets	50,000	50,000	-	100%
Total Non-Operating Revenues (Expenses)	50,000	50,000		100%
Change in Net Assets	-	97,871	97,871	
Net Assets, Beginning	2,593,929	 2,593,929		
Net Assets, Ending	\$ 2,593,929	\$ 2,691,800	97,871	104%

### Audited

#### BEAUFORT COUNTY, SOUTH CAROLINA STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS Stormwater Utility

### For the Period Ended June 30, 2011

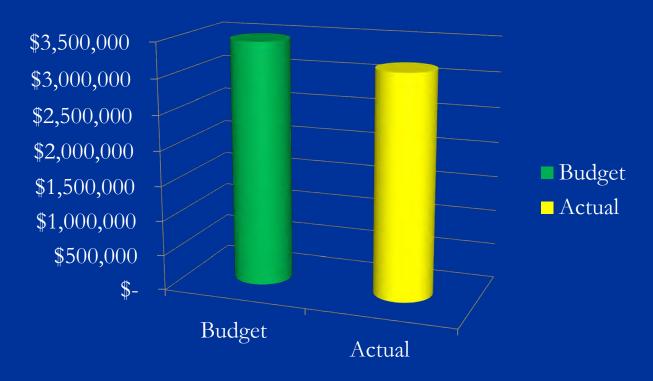
				Percent
	Budget		Budget to	of
	FY 2011	June 30, 2011	Actual	Budget
Operating Revenues				
Stormwater Utility Fees	\$ 3,177,379	\$ 3,221,747	44,368	101%
Stormwater Utility Project Billings	 244,278	 159,897	(84,381)	65%
Total Operating Revenues	 3,421,657	 3,381,644	(40,013)	99%
Operating Expenses				
Personnel	2,348,058	2,097,665	(250,393)	89%
Purchased Services	1,055,280	918,534	(136,746)	87%
Supplies	415,971	456,972	41,001	110%
Capital Purchases	290,060	· -	(290,060)	0%
Depreciation	285,000	 285,787	787	100%
Total Operating Expenses	 4,394,369	 3,758,958	(635,411)	86%
Operating Income (Loss)	(972,712)	(377,314)	595,398	39%
Non-Operating Revenues (Expenses)				
Gain (Loss) on Sale of Capital Assets	_	(5,356)	(5,356)	100%
Interest Earned	-	5,353	5,353	100%
Total Non-Operating Revenues (Expenses)	-	(3)	(3)	100%
Transfers In (Out)	(10,000)	(10,000)	-	100%
Change in Net Assets	(982,712)	(387,317)	595,395	39%
Net Assets, Beginning	 2,981,246	 2,981,246		
Net Assets, Ending	\$ 1,998,534	\$ 2,593,929	595,395	130%



# Stormwater Management Utility Board

# June Unaudited Financials

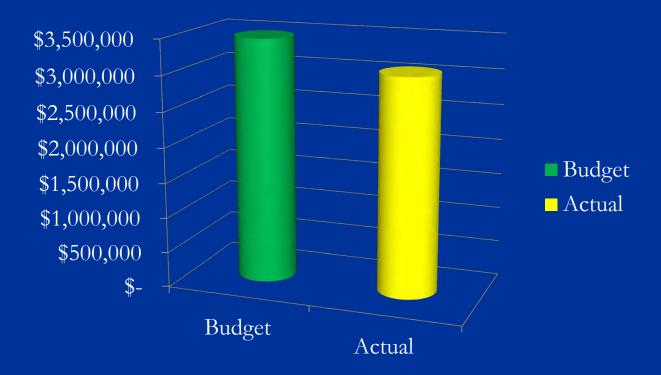
FY 12 Revenues vs. Budget



Actual revenues are \$296,000 less than budget revenues or 91%, but does not include 60 day accrual revenue

# June Unaudited Financials

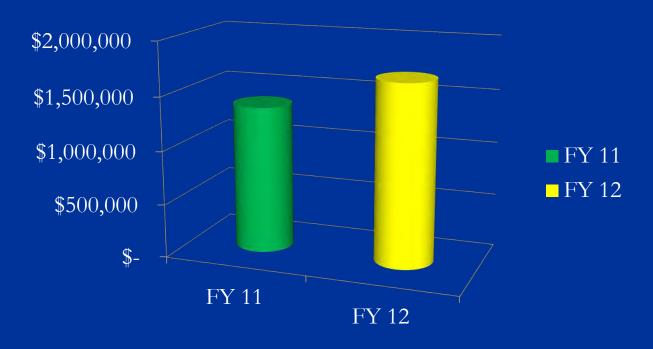
FY 12 Expenses vs. Budget



Actual expenses are \$394,000 less than budget expenses or 89%. Stormwater has run an average of 4 vacancies during the year and this has impacted crew production.

# June Unaudited Financials

### Unrestricted Fund Balance from Balance Sheet



Increased by \$319,000 or 19%

# **Questions or Comments**



Professional Contracts – August 2012 Report

Covers all contracts on track to get approved

#### Format will be

- 1. Contact Name
- 2. Contractor
- 3. Amount
- 4. Purpose and Description
- 5. Status
- 6. Projects funded from last report

Administrative Parking Lot – Additional Consultant Services; Andrews and Burgess; \$5,000; additional engineering associated with pervious pavement and contractor demo assistance and paving contract supervision. Presently on hold till funding is decided.

**Upgrade of On-lot Web Program** – Create and Solve; estimated \$2,000; Will be a program upgrade to include more bioretention options than rain gardens. Will start when we have time to meet with contractor.

**Joint Monitoring Project** - Waddell Mariculture Center/SCDNR; \$16,808; Will be for joint salinity monitoring in May and Okatie Rivers and Battery Creek. Hope to be able get data to see which areas are more sensitive to runoff and measure impacts of retrofits.

**Joint Monitoring Project** - USCB; \$8,192; Will be for joint salinity monitoring in May and Okatie Rivers and Battery Creek. Hope to be able get data to see which areas are more sensitive to runoff and measure impacts of retrofits.

**Review of Select Modeled Road Overtopping** – Andrews and Burgess; estimated \$20,000; Will be for overtopping of concerns that are identified by an ongoing watershed review. Have identified two that need review: Paige Point Road and Trask Parkway.

Review of Draft Revisions to Adjustment and Credit Manual – CDM; estimated \$2,000; Staff developed a new draft with wording changes and are asking original developers to conduct a review of changes.

**Monitoring Data Review** – CDM; estimated \$5,000; Presently operating on monitoring protocol developed by CDM before volume control requirements. SWIC review of SWMP indicated a need to develop flow data. Bacteria seems to be overriding issue with stormwater. Need to get recommendations on next steps in our monitoring program and requested Rich Wagner to submit proposal for this review.

### **Projects Funded since Last Report**

Currently none but a number are in process

# **Project Summaries**

August 2012



Project Summary

Project: Alljoy Area -

Completed: Oct-11

Allendale Street, Martha Lane, Fairfax Street, Brunson Street, Sailors Choice, Thomas Lawton Drive, Garnett Street, Luray Street, Mullet Street and Tillman Street.

Project #: 2012-517

Project Total: \$43,407.94

Narrative Description of Project:

Project improved 5,231 L.F. of drainage system. Cleaned out 3,546 L.F. of roadside ditch. Cleaned out (12) catch basins. Jetted (14) crossline pipes, (50) driveway pipes, 108 L.F. of outfall pipe and 1,577 L.F. of roadside pipe.

Before

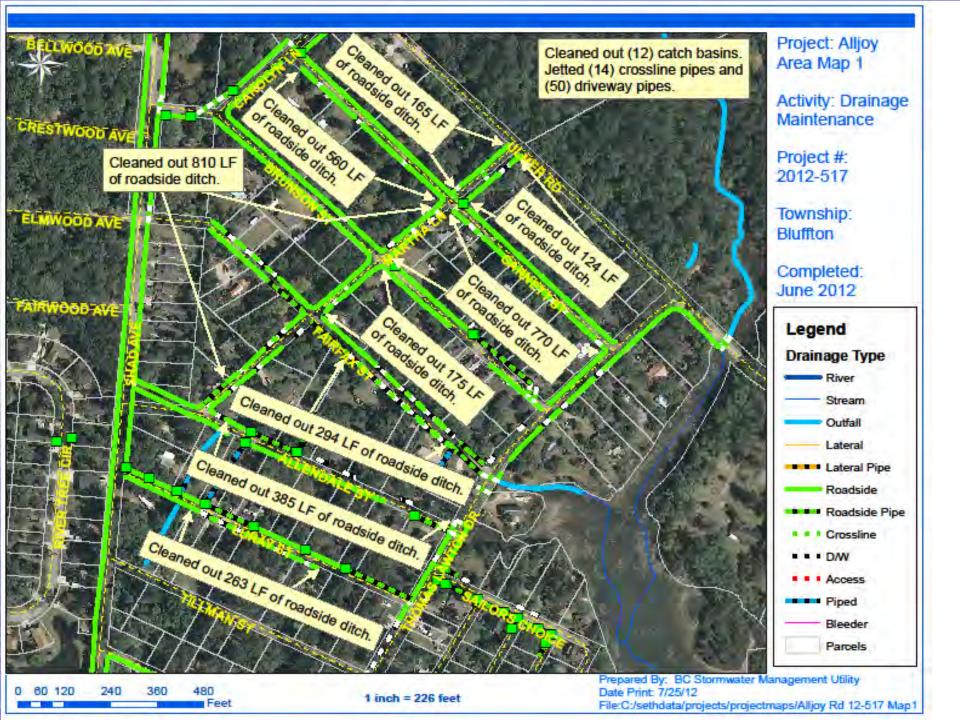


Site Photographs



After









Project Summary

Project: Folly Road Outfall Completed: Jan-12

Project #: 2012-003 Project Total: \$27,191.49

Narrative Description of Project:

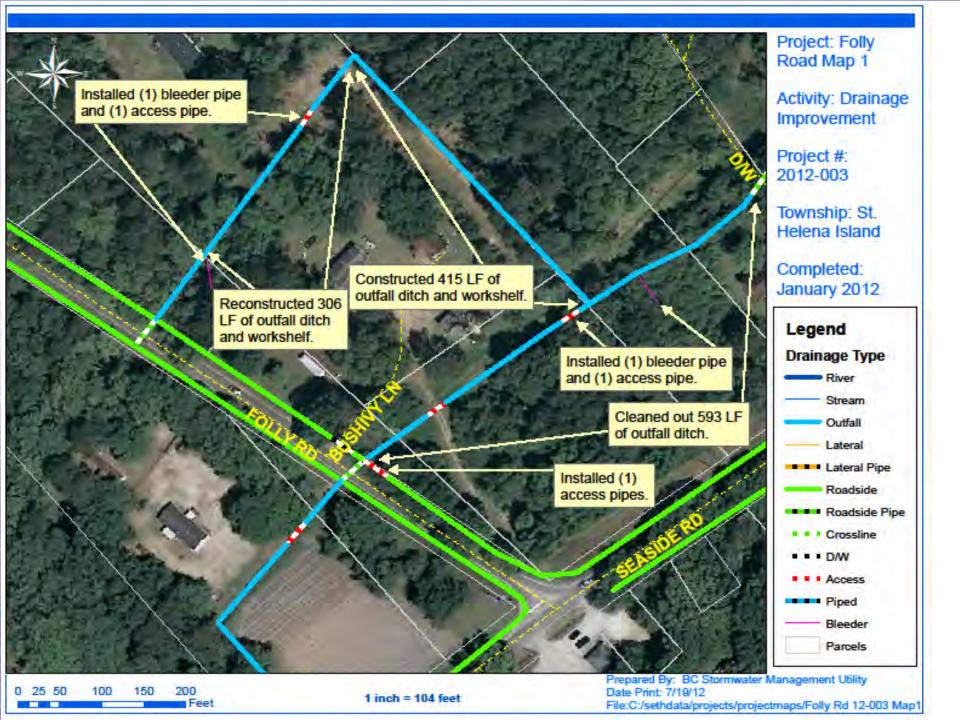
Project improved 1,314 L.F. of drainage system. Shinn cut 940 L.F. of outfall ditch and workshelf. Constructed 415 L.F. of outfall ditch and workshelf. Reconstructed 306 L.F. of outfall ditch and workshelf. Installed (2) bleeder pipes, (3) access pipes, rip rap and hydroseeded for erosion control.

### Site Photographs













Project Summary

Project: Dulamo Subdivision -

Completed: Feb-12

Cusabo Road and Escamaco Circle

Project #: 2012-508

Project Total: \$20,334.82

Narrative Description of Project:

Project improved 3,283 L.F. of drainage system. Cleaned out 3,283 L.F. of roadside ditch. Cleaned out (1) catch basin. Jetted (1) access pipe, (2) crossline pipes and (24) driveway pipes.



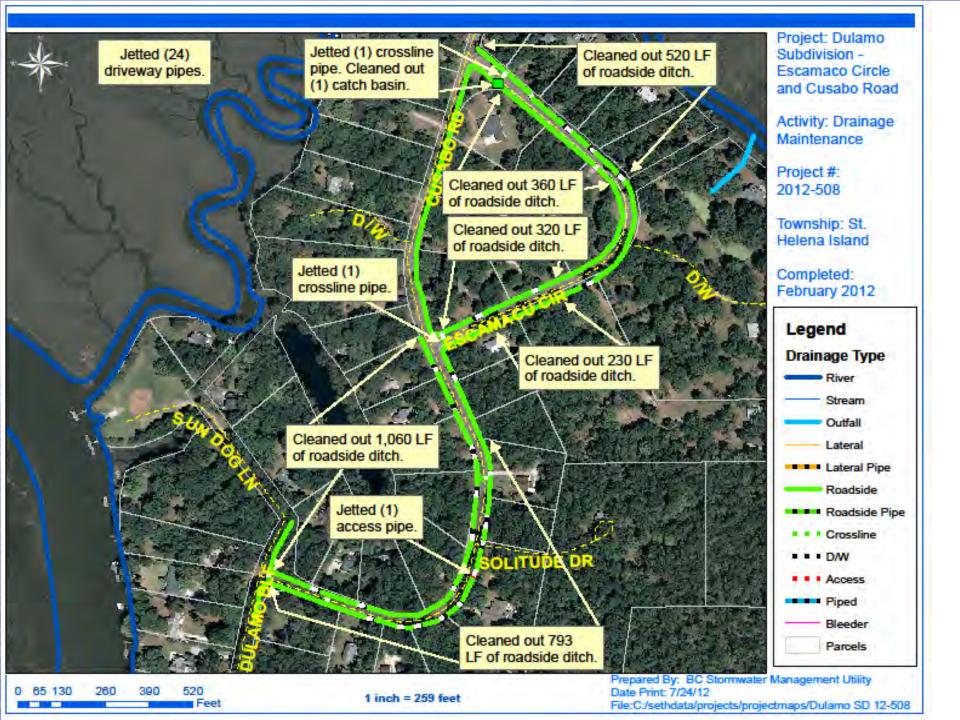


### Site Photographs



### After







Project Summary

Project: Sea Island Pkwy/Halifax Rd Outfall Completed: May-12

Project #: 2012-010 Project Total: \$25,708.99

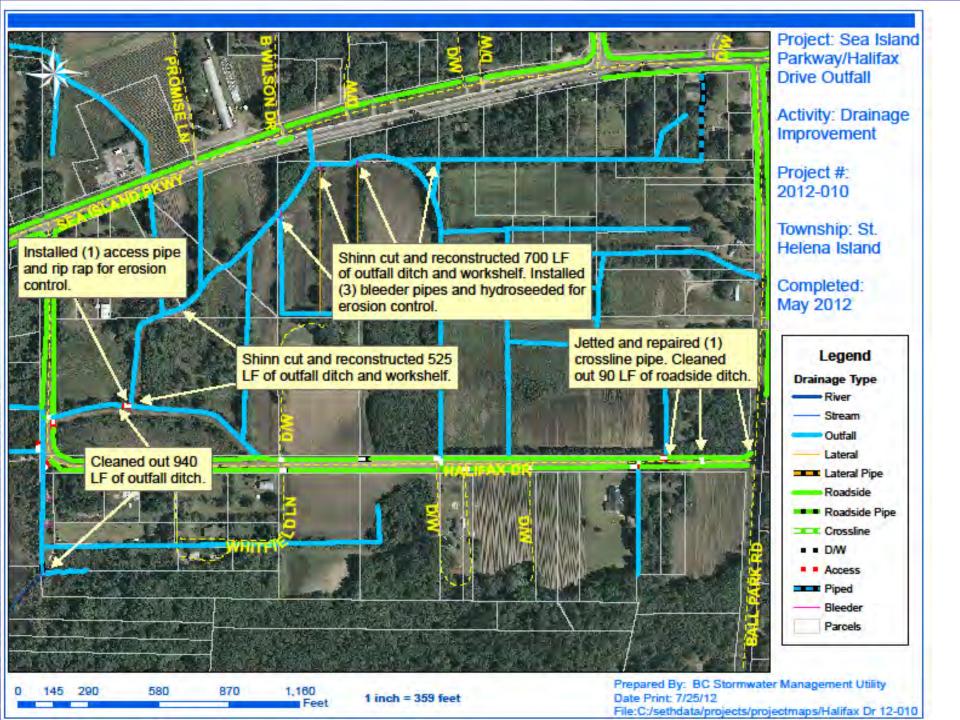
Narrative Description of Project:

Project improved 2,255 L.F. of drainage system. Shinn cut and reconstructed 1,225 L.F. of outfall ditch and workshelf. Cleaned out 940 L.F. of outfall ditch and 90 L.F. of roadside ditch. Installed (1) access pipe and (3) bleeder pipes. Jetted and repaired (1) crossline pipe. Installed rip rap and hydroseeded for erosion control.











Project Summary

Project: Flycatcher Lane, Chickadee Lane

Completed: Jun-12

and Wood Duck Lane

Project #: 2011-528

Project Total: \$33,442.35

Narrative Description of Project:

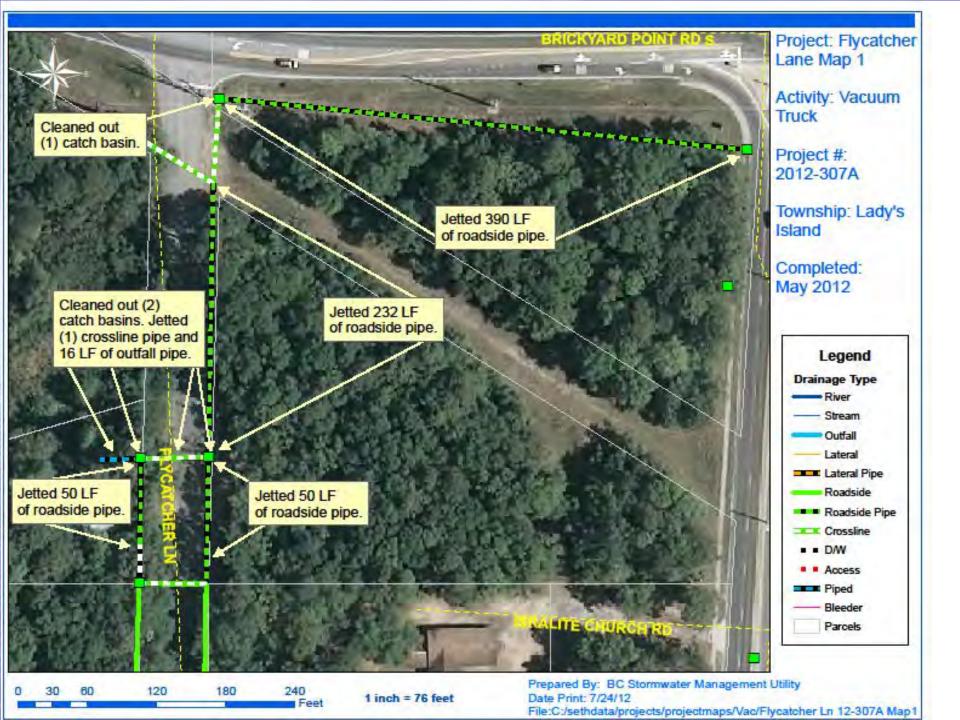
.Project improved 5,006 L.F. of drainage system. Cleaned out 5,006 L.F. of roadside ditch. Jetted (28) driveway pipes and (3) crossline pipes.

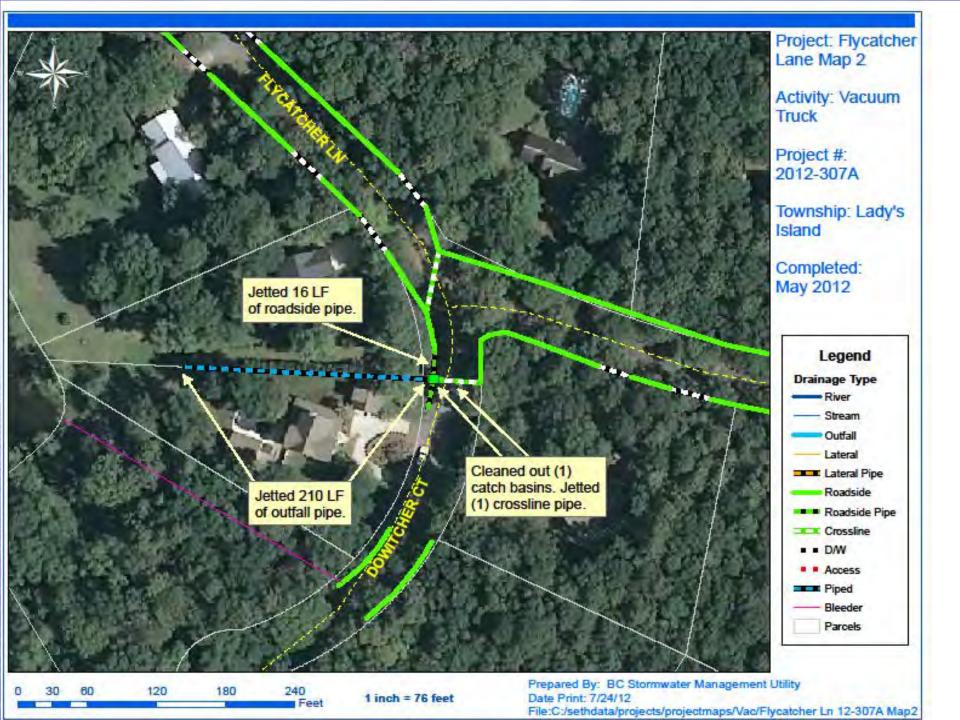
### Site Photographs

Before









- Port Royal Island Vacuum Truck
   Aug. 11– Port Royal Island
  - -Cleaned out (5) catch basins, jetted (2) cross line pipes and 88LF. of outfall pipe on Murray and Blackburn Pierce Drives.

- Royal Pines Boulevard
   Aug. 11 Lady's Island
  - -Grubbed, cleared and reconstructed 250LF. of outfall ditch. Cleaned out another 765LF. and jetted (1) cross line and (2) access pipes.

- Industrial Park Pond
   Nov. 11 Port Royal Island
  - Bush hogged 5,146 LF. of pond perimeter, repaired several washouts, and seeded for erosion control.

- Port Royal Island Tree Removal Nov. 11 – Port Royal Island
  - Removed several fallen trees from the work shelf of (2) outfalls.

- Bluffton Bush Hog
  - Dec. 11 Bluffton
  - -Bush hogged 2,374 LF. of outfall ditch.
  - -Total Cost \$1,480 or \$.54 per LF.

- Sheldon Area Tree Removal
   Dec. 11 Sheldon
  - Removed several fallen trees from (4) different work shelves.

- Port Royal Island Vacuum Truck
   Feb. 12 Port Royal Island
  - Cleaned out (2) catch basins and jetted (1) cross line pipe on Donaldson Camp Road.

- Lady's Island Vacuum Truck
   Feb. 12 Lady's Island
  - Cleaned out (2) catch basins, (6) cross line pipes, (7) driveway pipes, (1) access pipe and 16 LF. of outfall pipe on (4) different roads.

- Folly Road Outfall
   Feb. 12 St. Helena Island
  - Cleaned out 400 LF. of outfall ditch and installed (1) bleeder and (1) access pipe.

- Simmonsville Road Outfall
   Feb. 12 Bluffton
  - Shinn cut and cleaned out 2990 LF. of outfall ditch.

- Wimbee Landing Road
   Mar. 12 Sheldon
  - Constructed 900 LF. of roadside ditch, replaced (1) driveway and (1) access pipe, jetted out another driveway pipe and installed rip rap.

- Sheldon Area Vacuum Truck
   Mar. 12 Sheldon
  - Cleaned out (1) catch basin, jetted (1) access and (1) driveway pipe.

- Roseida RoadMar. 12 Port Royal Island
  - Cleaned out 4,247 LF. of outfall ditch.

- Mint Farm Pond
   Mar. 12 Port Royal Island
  - Removed fallen debris from the pond perimeter.

- Bluffton Vacuum Truck
   Apr. 12 Bluffton
  - Cleaned out (8) catch basins, jetted
     (1) cross line pipe and 28 LF. Of outfall pipe in Sandy Pointe .

- Port Royal Island Tree Removal
   Apr. 12 Port Royal Island
  - Removed a fallen tree from the work shelf and removed blockage from the ditch flow line.

- Burton Wells Park
   Apr. 12 Port Royal Island
  - Installed an access pipe including rip rap and seeding to allow access to the back side of the outfield fence on one of the ball fields.

- Port Royal Island Vacuum Truck
   May 12 Port Royal Island
  - Cleaned out (7) catch basins, jetted (7) cross line pipes, 388 LF. of roadside pipe and 16 LF. of outfall pipes on (5) roads.

- Lady's Island Vacuum Truck
   May 12 Lady's Island
  - Cleaned out (13) catch basins, jetted
     (3) cross line pipes, 226 LF. of outfall pipe and 738 LF. of road side pipe.

- Pond MaintenanceMay 12
  - Burton Wells Park; Shanklin
     Convenience Center; and Sun City
  - Bush hogged 3,453 LF. of pond perimeter on (3) separate ponds and helped install the pond evaporation device.

- Rivers End SubdivisionMay 12 Bluffton
  - Removed blockage from the flow line and concrete left from a previous project. Installed a driveway.

- Ephraim Road Outfall
   May 12 St. Helena Island
  - Removed blockage and cleaned out
     260 LF. of outfall ditch.

- Pleasant Point Drive Outfall
   May 12 Lady's Island
  - Repaired a water line damaged during a previous project.

- Tanglewood Drive
   May 12 Port Royal Island
  - Repaired a wash out in a road side ditch.

- Chesterfield Lake Drive
   Jun. 12 Port Royal Island
  - Removed a tree from the work shelf, extended an access pipe, and reworked 50 LF. of work shelf for an outfall ditch.

- Bluffton Bush Hog
   Jun. 12 Bluffton
  - Bush hogged 1,291 LF. Of outfall ditch.
  - Total cost \$1,164 or \$.90 LF.

- Lady's Island Vacuum Truck
   Jun. 12 Lady's Island
  - Cleaned out (2) catch basins, jetted out (1) cross line pipe and 90 LF. of outfall pipe on Ethel Grant Lane.

- Indian Hill Road
   Jun. 12 Sheldon
  - Jetted out a cross line pipe under the road, that didn't solve the flooding issue so the pipe was replaced with twin smaller pipe at the correct elevation.

- Burton Wells Road
   Jun. 12 Port Royal Island
  - Reconstructed 132 LF. of road side ditch to the correct elevation to operate properly with new construction in conjunction with the new park.

- Marsh Drive
   Jun. 12 Lady's Island
  - Cleaned 10,767 LF. of valley drains.

- Dolphin Point Drive
   Jun. 12 Lady's Island
  - Removed blockage from the flow line by hand.

- Huron DriveJun. 12 Port Royal Island
  - Removed blockage from the flow line.

- Knightsbridge Road
   Jun. 12 Bluffton
  - Repaired a sink hole at a catch basin.

#### ADJUSTMENT AND CREDIT MANUAL BEAUFORT COUNTY, SOUTH CAROLINA

#### **Table of Contents**

ECTION _		<b>PAGE</b>	
TABLE OF CONTENTS			
SECTION 1 -	INTRODUCTION	3	
1.1 Defin	itions	3	
SECTION 2 –	USER FEE ADJUSTMENT AND CREDITS	8	
2.1 User 1	Fee Adjustments	8	
	Additional Stormwater Adjustments	9	
2.2 User 1	Fee Credits	10	
2.2.1	Restrictions	10	
2.2.2	Terms	10	
2.2.3	Integrated Non-Structural BMP Program Credit	11	
2.2.3.	1 Educational Program	11	
2.2.3.	2 On-Site Refuse Control Program	12	
2.2.3.	3 On-Site Stormwater System Maintenance and		
	Cleaning Program	12	
2.2.3.	4 Paved Area Sweeping Program	12	
2.2.3.	5 Used Motor Oil Recycling Program	13	
2.2.3.	6 Sanitary Sewer/Storm Sewer Cross-Connection		
	Inventory Program	13	
2.2.3.			
	Quality Program	13	
2.2.3.	8 Storm Drain Stenciling Program	14	
2.2.3.	9 Designated Vehicle Washing Area	14	
2.2.4	NPDES Industrial Stormwater Permit Credit	14	
	Other Non-Structural BMP Credit	15	
2.2.6	Education Credit	15	
2.2.7	Stormwater Quality Control Structural BMP Credit	16	
2.2.8	Stormwater Volume Control Credit	17	
	Fee Credit Calculation – Example 1	17	
2.2.10	Fee Credit Calculation – Example 2	18	
SECTION 2	ADDI ICATION DDOCEDIDES	10	

SECTION 4 – APPEALS		19
4.1	Process	19
4.2	Establishment of Stormwater Management Fees and Credits Appeals Board	20
SECT	ION 5 – ENFORCEMENT POLICY	20

Appendix A – Adjustment Forms; Credit Application Forms; Enforcement/Appeal Forms

#### Section 1 - Introduction

Beaufort County established a Stormwater Management Utility on September 10, 2001. The utility provides the County with the authorization to establish and collect just and equitable rates, fees, and charges for the services and facilities provided by the utility system. The County is further authorized by the South Carolina Statutes to construct, reconstruct, improve, and extend the Stormwater Management system.

The County's Stormwater Management Utility establishes a mechanism for billing the costs of operating and maintaining the County's stormwater management system, and financing the necessary repairs, replacements, improvements, and extensions. The County's ordinance provides the mechanisms for billing and payment, accounting for capital contributions, and establishing the Stormwater Utility Fund. This Adjustment and Credit Manual outlines the guidelines under which the County will grant adjustments and credits to stormwater user fees, and grant credits to nonresidential and other privately owned stormwater facilities that provide value to the Utility by controlling stormwater quantity and quality, or auxiliary services. The Utility also will use the credit process to provide incentives for improvements to private systems.

#### 1.1 Definitions

The following definitions shall apply in the use of this Adjustment and Credit Manual. Words used in the singular shall include the plural, and the plural, the singular; words used in the present tense shall include the future tense. The word "shall" is mandatory and not discretionary. The word "may" is permissive. Words not defined herein shall be construed to have the meaning given by common and ordinary use as defined in the latest edition of Webster's Dictionary.

**ACCELERATED WATER EROSION.** The wearing away of the land surface by stormwater runoff, or snow melt water, occurring at a much more rapid rate than geologic or normal erosion, primarily as a result of denuding the land and/or altering its slope.

**ADJUSTMENT.** The adjustment of the user fee assessed to a particular parcel based on the more detailed assessment of the impervious area on that parcel.

AGRICULTURAL LANDS. Those lands utilized for any agricultural use, including forestry.

**APPEAL.** The process of filing a dispute with the fee determination, fee adjustment or fee credit as recognized by the County.

**APPLICANT.** Any person, or a duly designated representative applying for a permit or other type of county, federal, or state regulatory approval to proceed with a project.

APPROVING AGENCY. The approving agency shall be the Stormwater Management Utility.

**AQUIFER.** An underground formation, group of formations, or part of a formation that is permeable enough to transmit, store, or yield usable quantities of water.

**AS-BUILT PLANS.** The final plans amended to include all locations, dimensions, elevations, capacities, features and capabilities, as actually constructed and installed.

**BEST MANAGEMENT PRACTICES (BMP), Manual for Stormwater Best Management Practices, Current Edition.** County manual defining acceptable programs, technologies, processes, site layout techniques and criteria, operating methods, measures, or devices to maintain or restore pre-development hydrology with regard to rate, volume, quality, and duration of the water flow.

**CHANNEL.** A natural stream that conveys water. A ditch, or passageway, excavated to permit or accommodate the flow of water.

COUNTY. Beaufort County, South Carolina and its authorized agents.

**COUNTY ENGINEER.** A professional engineer designated by and representing Beaufort County, South Carolina or such engineer's authorized designee.

**CLEARING.** The removal of trees, brush, and other ground cover from all or a part of a tract of land, but shall not include mowing.

COMPENSATING STORAGE. Equivalent floodplain storage provided to counterbalance floodplain filling.

**CONCENTRATED STORM RUNOFF.** Surface runoff that converges and flows primarily through water conveyance features such as swales, gullies, waterways, channels, or storm sewers and which exceeds the maximum specified flow rates of filters or perimeter controls intended to produce or control sheet flow.

COUNCIL. The County Council of Beaufort County, South Carolina.

COUNTY. Beaufort County, South Carolina.

**CUSTOMER.** The owner of any parcel that is receiving a stormwater utility fee from Beaufort County, South Carolina.

**DETENTION or TO DETAIN.** The prevention of, or to prevent, the discharge, directly or indirectly, of a given volume of stormwater runoff into surface waters by providing temporary on-site storage.

**DEVELOPMENT or DEVELOPMENT ACTIVITY.** The alteration, construction, installation, demolition or removal of a structure, impervious surface, pipe, conduit, cable or line, above or below ground, or the clearing, scraping, grubbing, killing or otherwise removing the vegetation from a site; or adding, removing, exposing, excavating, leveling, grading, digging, burrowing, dumping, piling, dredging or otherwise significantly disturbing the soil, mud, sand or rock of a site.

**DIRECTLY CONNECTED IMPERVIOUS AREAS.** Those impervious areas which are directly connected to the County's drainage system by a ditch, storm sewer, channel, or other man-made device for the conveyance of stormwater runoff.

**DISCHARGE.** The flow of water from a project, site, aquifer, drainage basin, or other drainage facility.

**DITCH.** An artificial waterway for the purpose of irrigation or for stormwater conveyance.

**DRAINAGE FACILITY.** Any component of a stormwater management system.

**DRAINAGE SYSTEM.** All facilities used for the movement of stormwater through and from a drainage area including, but not limited to, any and all of the following:

- conduits, pipes and culverts, including appurtenant features such as catch basins, inlets, manholes, and headwalls.
- · channels, ditches, flumes, curbs, streets and other paved areas, and
- all watercourses, standing or flowing bodies of water, and wetlands.

While some such facilities may be isolated in a given storm event, all are interconnected in a given drainage system for a storm event exceeding a certain magnitude.

**DWELLING UNIT.** Any building or portion thereof designed or used exclusively as the residence or sleeping place of one or more families, but not including a tent, cabin, trailer or trailer coach, boarding or rooming house, hotel, or mobile home.

**EASEMENT.** A grant by a property owner for a specified use of all or a specified portion of land to a person or the public at large.

**EROSION.** The wearing or washing away of soil by the action of water.

**EQUIVALENT IMPERVIOUS COVER (EIC)** – Metric that measures how effectively impervious surface runoff is reduced relative to pre-development pervious surface runoff.

**EVAPOTRANSPIRATION** – Retention of stormwater in a manner that allows for the runoff to return to atmosphere.

**FACILITIES.** Various drainage works that may include inlets, conduits, manholes, energy dissipation structures, channels, outlets, retention/detention basins, and other structural components.

FEMA. Federal Emergency Management Agency.

**FOREBAYS.** Areas with hardened bottoms, located at detention basin inlets, that are designed to trap coarse sediment particles by separating approximately ten percent of the basin volume from the remainder of the basin with a lateral sill, rock-filled gabions, a retaining wall, or horizontal rock filters.

**FREEBOARD.** The space from the top of an embankment to the highest water elevation expected for the largest design storm stored. The space is often required as a safety margin in a pond or detention basin.

**FREQUENCY YEAR STORM.** A rainfall event expressed as an exceedence probability with a specified chance of being equaled or exceeded in any given year, as follows:

One Year	100 percent
Two Year	50 percent
Ten Year	10 percent
Twenty-Five Year	4 percent
Fifty Year	2 percent
One-Hundred Year	1 percent

**GROUNDWATER.** Water below the surface of the ground, in known or defined natural channels, whether flowing or not

HYDROGRAPH. A graph of inflow and/or discharge versus time for a selected point in the drainage system.

**IMPERVIOUS SURFACE.** A surface which has been compacted or covered with a layer of material so that it is resistant to infiltration by water, including semi-pervious surfaces such as compacted clay, most conventionally surfaced streets, roofs, sidewalks, parking lots, and other similar surfaces.

**INSPECTOR.** A person designated by the Stormwater Utility Manager who conducts the necessary inspection of stormwater related work to ensure conformance with the Approved Plan and the provisions of this chapter.

INTENSITY. The depth of accumulated rainfall per unit of time.

**MAINTENANCE.** The action taken to protect, preserve, or restore the as-built, functionality of any facility or system.

**NONRESIDENTIAL DEVELOPED PROPERTY.** A developed property that is not utilized for dwelling units with the County.

**NOTICE.** A written or printed communication conveying information or warning.

**OPEN CHANNEL.** An uncovered ditch, channel, or swale used to convey stormwater runoff.

**OWNER.** The person in whom the fee, ownership, dominion, or title of property (i.e., the proprietor) is vested. This term may also include a tenant, if chargeable under his lease for the maintenance of the property, and any agent of the owner or tenant including a developer.

**PARCEL or PARCEL OF LAND.** A tract, or contiguous tracts, of land in the possession of, owned by, or recorded as property of the same claimant person as of the effective date of the Stormwater Regulations.

**PEAK RATE OF FLOW.** The maximum rate of discharge resulting from a given storm event.

**PERMITTEE.** Any person who has been granted a permit to proceed with a project.

**PERSON.** Any individual, firm, corporation, governmental agency, business trust, estate, trust, partnership, association, two or more persons having a joint or common business interest, or any other legal entity.

**POA** (**PROPERTY OWNER'S ASSOCIATION**). The legally recognized, non-profit group or organization representing the interest of the property owners within a specified jurisdiction.

**POSITIVE OUTLET.** A gravity discharge from a basin via overland flow, artificial waterway, natural waterway, or pipe.

**POST-DEVELOPMENT.** The hydrologic and hydraulic condition of a project site immediately following completion of the development for which a permit has been approved.

**PRE-DEVELOPMENT.** The hydrologic and hydraulic condition of a project site immediately before development or construction begins.

**PRIVATE.** Property or facilities owned by individuals, firms, entities, corporations, and other organizations and not by local, state or federal governments.

**PROFESSIONAL ENGINEER.** A professional engineer licensed by the State of South Carolina, skilled in the practice of civil engineering and the engineer of record for the project under consideration.

POA. Property Owner's Association as defined by County regulations.

PUBLIC. Property or facilities owned by local, state or federal governments.

RAINFALL INTENSITY. The depth of accumulated rainfall per unit of time.

RATE. Volume of water, or other material, per unit of time.

**RECEIVING WATERS or WATER BODY.** Any water body, watercourse, or wetland into which surface water flows.

**RETENTION or TO RETAIN.** The prevention of, or to prevent, the discharge, directly or indirectly, of a given volume of stormwater runoff into surface waters by complete on-site storage.

**REUSE** – The retention of stormwater runoff to use for irrigation or other beneficial use.

SEDIMENT. Solid material, whether mineral or organic, that is in suspension, is being transported, or has been

moved from its place of origin by water.

**SEDIMENT CONTROL DEVICE.** Any structure or area that is designed to hold runoff water until suspended sediment has settled out.

**SINGLE FAMILY DETACHED UNIT (SFU).** The statistical average estimated to be 4,900 square feet of horizontal impervious area for each single family detached residential dwelling unit within the County and as established by Ordinance. The horizontal impervious area includes, but is not limited to, all areas covered by structures, roof extensions, patios, porches, driveways, and sidewalks.

**SITE.** Any tract, lot, or parcel of land or contiguous combination of tracts, lots, or parcels of land that is in one ownership, or contiguous and in diverse ownership, where development is to be performed as part of a unit, subdivision, or project.

SITE STORMWATER MANAGEMENT PLAN. Refers to the approved, detailed analysis, design, and drawings of the stormwater management system required for all construction.

SOUTH CAROLINA STORMWATER MANAGEMENT AND SEDIMENT CONTROL HANDBOOK (SCDHEC). This handbook includes all existing South Carolina stormwater management regulations required for individuals to submit a stormwater management and sediment reduction permit application to the Department of Health and Environmental Control.

**STORM EVENT.** A storm of a specific duration, intensity, and frequency.

**STORMWATER OR RUNOFF.** Refers to the flow of water which results from, and which occurs during and following a rainfall event.

**STORMWATER MANAGEMENT FEES AND CREDIT APPEALS BOARD.** The Stormwater Management Fees and Credit Appeal Board will advise the County Administrator on appeals to decisions rendered by the Director of Public Works and will consist of three members.

**STORMWATER DESIGN STANDARDS.** The design standards presented in the Stormwater Regulations, and such other standards that may be adopted by the County from time to time.

**STORMWATER MANAGEMENT SYSTEM OR FACILITIES.** Refers to the existing, designed, and/or constructed features which collect, convey, channel, store, inhibit, or divert the movement of stormwater.

**STORMWATER MANAGEMENT PLAN.** The technical and policy manuals, plans, regulations and/or calculations, and any subsequent updates or amendments thereto, used by the County Engineer to administer the stormwater regulations.

**STORMWATER UTILITY MANAGER.** Person responsible for daily operations of the Beaufort County Stormwater Management Utility and reporting to the Public Works Director.

STRUCTURE. Anything constructed or installed with a fixed location on or in the ground.

**SUBGRADE.** The top elevation of graded and compacted earth underlying roadway pavement.

**SWALE.** An artificial or natural waterway which may contain contiguous areas of standing or flowing water following a rainfall event. A swale may be planted with or otherwise contain vegetation suitable for soil stabilization, stormwater re-treatment, and/or nutrient uptake; or may be designed to accommodate or account for soil erodibility, soil percolation, slope, slope length, and contributing area, so as to prevent erosion and reduce the pollutant concentration of any discharge.

UTILITY. The stormwater management utility provided for in Chapter 99 of Beaufort Code of Ordinances.

**VACANT LAND.** A lot or parcel of land that is without any building, structure or improvement, including impervious surfaces, but does not include recreation, green or open space created around private or public facilities nor parcels connected or contiguous thereto for the same or similar uses.

**WATER BODY.** Any natural or artificial pond, lake, reservoir, or other area that ordinarily or intermittently contains water, and which has a discernible shoreline.

**WATERCOURSE.** Any natural or artificial stream, creek, channel, ditch, canal, waterway, gully, ravine, or wash in which water flows either continuously or intermittently, and which has a definite channel, bed, or banks.

**WATER QUALITY.** Those characteristics of stormwater runoff from a land disturbing activity that relate to the physical, chemical, biological or radiological integrity of water.

**WATER QUANTITY.** Those characteristics of stormwater runoff that relate to the rate and volume of the stormwater runoff to downstream areas resulting from land disturbing activities.

**WET DETENTION.** A detention basin that contains a permanent pool of water that will retain runoff for a minimum period of 14 days for an average summer rainfall, and which has a littoral zone over a substantial portion of the pond surface area.

**WETLAND.** An area that is inundated or saturated by surface or groundwater with a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

**WORKS.** All artificial, man made structures, including, but not limited to, canals, ditches, swales, conduits, channels, culverts, pipes, and other construction that connects to, draws water from, drains water into, or is placed in or across the waters of the state.

WATERSHED. Drainage area contributing stormwater runoff to a single point.

#### Section 2 - User Fee Adjustment and Credits

The following procedures address both adjustments and credits for Stormwater user fees. The County grants user fee adjustments when customers identify incorrect information contained in the County's billing database. Adjustments typically occur when the County has incorrectly delineated the impervious area within a nonresidential property, or when residential customers are assigned the incorrect stormwater billing unit.

User Fee Credits are associated with the construction, operation, and maintenance of privately owned stormwater facilities that provide beneficial use to the County in meeting the objectives for the Utility set by County Council. Both residential and nonresidential customers can qualify for user fee adjustments; whereas only nonresidential customers and other stormwater facility operators such as Property Owner's Associations (POAs) qualify for user fee credits. Temporary incentive credits for residential customers may be employed as part of the watershed restoration initiatives. **Appendix A** contains Stormwater Management Utility Forms that are used as part of the adjustment and credit policy.

The Director, Department of Public Works, or designee, will review adjustment and credit requests made during the first fiscal year that the revised stormwater user fee is imposed and when customers implement a change to their existing stormwater facility. These requests will be reviewed within a 6-month period from the date of filing of the request. Stormwater fee changes resulting from such requests shall be retroactive for the first year of the utility's

revised fee structure and will not exceed one year; subsequent evaluations will allow fees to be reduced from the date of the application and will not exceed 6 months.

#### 2.1 User Fee Adjustments

Requests for adjustment of the stormwater user fee shall be submitted through the Stormwater Utility Manager's office, who has authority to administer the procedures and standards, and review criteria for the adjustment of fees as established herein. All requests shall be judged on the basis of the amount of impervious area on the site or on the basis of runoff factors for undeveloped/partially developed land.

The following procedures shall apply to all adjustment requests of the stormwater user fee:

- Any nonresidential owner who has paid stormwater user fees, and who believes the Single Family Unit (SFU) component of his/her stormwater user fee to be incorrect, may submit an adjustment request on a form supplied by the Director, Department of Public Works, or designee. Stormwater Management Utility Form No. 1 is for residential SFU adjustments and Stormwater Management Utility Form No. 2 is for nonresidential SFU adjustments.
- The first step in the adjustment process will be a review of the County's calculation of the impervious area. If resolution is not achieved, the County may request the customer to provide supplemental information to the Stormwater Utility Manager including, but not limited to, survey data prepared by a registered Professional Land Surveyor (P.L.S.) that represents the amount of impervious area and compacted gravel area on a parcel and/or engineering reports prepared by registered Professional Engineer (P.E.). Failure to provide such information may result in the denial of the adjustment request.
- The Stormwater Utility Manager shall respond in writing to all adjustment requests. The response shall provide an explanation of adjustment approval or denial as well as requests for additional information.

Adjustment denials may be appealed to the Stormwater Management Fees and Credits Appeals Board as presented in Section 4.

#### 2.1.1 Additional Stormwater Adjustments

In addition to the requirements presented above, adjustments may also be given when an owner meets any of the following requirements:

- Owner demonstrates rainfall that occurs on an impervious area does not generate runoff (has no outlet), is completely watertight, and has at least 18 inches of freeboard. This adjustment is for unusual structures, such as swimming pools, hazardous material storage areas, etc. For these specific cases, a customer's SFUs will be adjusted by removing from the SFU calculation the amount of impervious area that does not generate runoff.
- Owner demonstrates that on-site gravel is not compacted, not used for vehicular traffic, and not impervious. The County may grant adjustments for non-compacted gravel areas used for landscaping or other purposes. The County considers all compacted gravel areas (drives,

storage areas, etc.) as impervious areas, and as such, no adjustment will be granted. The County Engineer will make the decision regarding the intended purpose of gravel areas and the degree of imperviousness but will not allow more than 50% credit.

#### 2.2 User Fee Credits

Nonresidential customers and other privately owned stormwater facility operators may qualify for user fee credits when they can demonstrate that their existing or proposed stormwater facilities meet current stormwater standards and provide the County value in managing stormwater quantity or quality or auxiliary services. It is the intention of the Utility that the user fee credits will provide incentive to the private facility operators to improve their facilities as County ordinances and standards are changed. The amount of credit will be determined by the County on a case-by-case basis-

#### 2.2.1 Restrictions

- No public or private property shall receive Credit to offset Fees for any condition or activity unrelated to the County's cost of providing stormwater management services.
- b. No Credit will be applied to any parcel that reduces the Fee to an amount less than one Single Family Unit Fee.
- c. Credits will not apply to Stormwater Pollution Prevention Plan (SWP) Review and Inspection fees attributable to new development or redevelopment projects.
- d. Any BMP or portion(s) of the stormwater management within a permanent storm drainage easement maintained by the government (municipality, county or state), shall not be eligible for a fee credit.
- e. Credit shall only be given to the property owner of record. If there are multiple owners in a credit application, then the owner who is the applicant is responsible for getting and submitting a cooperation agreement from other owners participating in application.

#### **2.2.2 Terms**

- a. Credits will only be applied if requirements outlined in this Manual are met, including, but not limited to: maintaining compliance with stormwater standards at the time of initial credit, completion of on-going maintenance, guaranteed right-of-entry for inspections, and submittal of annual self-reports.
- b. Credits will be defined as percent (%) reductions applied as a Credit adjustment to the Fee calculation equation.
- c. Credits are additive for each Credit category described in Sections 2.2.3 2.2.8.
- d. As long as the BMPs are functioning as approved (as demonstrated by self-certification reports and County inspections), the Credit reduction will be applied to the Fee. If the approved practice is not functioning as approved or is terminated, the Credit reduction will be cancelled and the Fee will return to the baseline calculation. Once the Credit reduction has been cancelled, a customer may not reapply for Credit for a period of 12 months and only then if the deficiency has been corrected, as determined by County inspection. (See Section 5 for more details).

Formatted: CDM B/BULLET, Indent: Left: 0.17"

e. Credits will be applied retroactively for the first year of the revised fee program, and for the next billing cycle for the applications received after that.

#### 2.2.3 Option 1. Integrated Non-Structural BMP Program Credit

Credits may be issued for a Site with ongoing implementation of an integrated suite of fundamental non-structural BMPs that will help the County meets its permit objectives. To receive a 10% Credit adjustment as applied to the Fee calculation equation, documentation must be provided to verify that 6 of the 9 following BMPs have been met:

BMP1: Educational Program

BMP2: On-Site Refuse Control Program

BMP3: On-Site Stormwater System Maintenance and Cleaning Program

BMP4: Paved Area Sweeping Program
BMP5: Used Motor Oil Recycling Program

BMP6: Sanitary Sewer/Storm Sewer Cross-Connection Inventory BMP7: Landscaping for Run-Off Rate Control and Water Quality

BMP8: Storm Drain Stenciling Program BMP9: Designated Vehicle Washing Area

Upon receipt of completed Stormwater Credit Application, application approval, and satisfactory on-site inspection to insure that all criteria are being met, Credit will be applied. All requests will be reviewed on an individual basis with findings of the review transmitted back to the customer within sixty (60) days of receipt of a completed application.

#### 2.2.3.1 Educational Program

Nonresidential customers who wish to receive Fee Credit for educating employees in the area of water quality awareness and protection must agree to the following minimum standards:

- a. Devote fifteen minutes per quarter (or an hour annually) to educating employees about water quality awareness and protection. Additionally, provide basic stormwater management information to new employees. Organizations will be required to submit programs or agendas to the County for environmental education sessions that will include information concerning number of attendees, time(s), place(s), and topic(s) covered during each session along with confirmation that a 50% employee participation goal was met. Pre- and post-session surveys are recommended. Topics must rotate on at least an annual basis.
- b. Post stormwater and water quality-specific educational information obtained from the County, state/federal environmental agencies, or from any other reputable educational resource center in employee frequented areas. Information posted must be clearly visible. Information topics must rotate on at least an annual basis. Copies of posted materials must be provided to the County.
- c. Distribute stormwater and water quality-specific literature obtained from the County, state/federal environmental agencies, or any other reputable educational resource center to all employees on a quarterly basis and provide copies to the County with the annual self-report. Literature topics must rotate on at least an annual basis.

d. All materials to be used in presentations should be reviewed/approved by the County or representative before use in this program.

Nonresidential customers who wish to receive Fee Credit for educating the County regional customer base in the area of water quality awareness and protection must agree to meet the following minimum standards:

- a. Disseminate stormwater and water quality-specific information obtained from the County, state/federal environmental agencies, or any other reputable educational resource center to customers on a quarterly basis using high traffic area kiosks, advertised special events, customer mailings, product label advertisements, public service announcements, ads, educational curricula, or other mass distribution techniques. Information topics must rotate on at least an annual basis. Copies of disseminated materials must be provided to the County along with estimates of the number of customers reached in each annual self-report.
- b. All materials to be used in presentations should be reviewed/approved by the County or representative before use in this program.

#### 2.2.3.2 On-Site Refuse Control Program

In order to receive Credit for the On-Site Refuse Control Program, the following minimum criteria must be satisfied:

- a. Identify or develop the organization's on-site refuse control plan and submit a copy to the County.
- b. Initiate and maintain a solid waste recycling program that meets the County's minimum recycling requirements.
- c. Keep refuse containers covered to eliminate exposure to wind, rain, and snow and where possible, place refuse containers in areas that do not drain to storm sewers.

#### 2.2.3.3 On-Site Stormwater System Maintenance and Cleaning Program

In order to receive Credit for the On-Site Stormwater System Maintenance and Cleaning Program, a detailed management plan for maintaining on-site (nonpublic right-of-way) stormwater structures must be submitted along with documentation that the planned activities were completed. At a minimum, the management plan must address the following structures, where applicable:

- a. Building rain gutters/downspouts must be directed to vegetated areas wherever possible and cleaned at least annually.
- b. Catch basins must be cleaned of litter, debris, and sediment at least once per year.
- c. Stormwater outfalls to private ditches, ravines, or creeks on private land must be cleaned at least once per year.
- d. On-site drainage ditches or channels must be cleaned of any litter and debris and obstructive vegetation should be trimmed at least once per year.

#### 2.2.3.4 Paved Area Sweeping Program

In order to receive Credit for the Paved Area Sweeping Program, the following minimum

#### criteria must be satisfied:

- a. Submit a detailed paved area sweeping plan to include definition of areas to be swept, frequency of sweeping (a minimum of twice per month), debris disposal method, and type of sweeper used.
- b. Provide documentation of plan implementation, such as copies of paid invoices or employee timesheets, or a certification of work accomplished prepared and signed by an officer of the company.

#### 2.2.3.5 Used Motor Oil Recycling Program

In order to receive Credit for the Used Motor Oil Recycling Program, the following minimum criteria must be satisfied:

- a. Provide documentation to confirm disposal of used motor oil at used oil recycling sites (i.e., waste oil generated on-site by the property owner).
- b. Display the County's current list of used oil recycling sites in clearly visible and publicly frequented locations.

#### 2.2.3.6 Sanitary Sewer/Storm Sewer Cross-Connection Inventory Program

In order to receive Credit for the Sanitary Sewer/Storm Sewer Cross-Connection Inventory Program, the following minimum criteria must be satisfied:

- a. Conduct a visual building and grounds survey to identify and inventory the locations of all sanitary and storm sewer connection points.
- b. Provide building and site plans to the County that document the locations of all sanitary sewer and storm sewer connection points and sanitary and storm sewer line locations on a parcel of property.
- c. If instances are found where sanitary sewage plumbing is connected to a storm sewer, the cross connection must be eliminated within thirty (30) days.
- d. If any discharges are in question, the owner should contact the County to determine if elimination for the discharge is required.

#### 2.2.3.7 Landscaping for Run-Off Rate Control and Water Quality Program

In order to receive Credit for the Landscaping and Run-Off Rate Control and Water Quality Program, the following minimum criteria must be satisfied:

- a. Develop a landscape maintenance plan for properties with landscaped areas, utilizing lawn and garden practices that reduce stormwater run-off rates and protect water quality, including, but not limited to, the following recommended practices:
  - i. Unless otherwise indicated by current soil tests, use phosphorus free fertilizer.
  - ii. Apply all yard and garden chemicals sparingly, using the correct rates and recommended times, and not before a rainstorm.
  - iii. Direct sprinklers to vegetated areas and not overlap onto impervious

- surfaces.
- iv. Where turf is considered necessary, maintain it by mowing grass to a height of 2-3". If necessary, seed in the spring and fall, and aerate and dethatch in the fall. Leave grass clippings on the lawn as a natural fertilizer.
- Select hardy plants most suited to this climate and, where possible, reduce the amount of maintained turf and increase naturalized areas.
- vi. Mulch flowerbeds, shrubs and trees to retain water on-site.
- vii. Keep lawn and garden chemicals, garden debris, lawn clippings, and leaves off hard surfaces.

If appropriate to site conditions, the following practices are also recommended:

- viii. Landscapes should be designed to eliminate or at least minimize directlyconnected impervious areas.
- ix. Maintain a 15' to 25' filter strip of tall grass or plantings along water
- x. Plant rain gardens in depressions that otherwise have standing water or to receive roof run-off.
- b. Provide a copy of the landscape management plan to the County along with documentation of employee training for landscape management or landscape contracts that include the above provisions.

Nonresidential customers that provide services above and beyond the basic Landscape Program described above may be eligible for additional Credit. The County will evaluate requests for additional Credit on a case-by-case basis.

#### 2.2.3.8 Storm Drain Stenciling Program

In order to receive Credit for the Storm Drain Stenciling Program, the following minimum criteria must be satisfied:

- a. The County will provide suggestions to any owner/group interested in providing the labor
- b. Post decals or stencil all storm drain inlets with information identifying that it drains to a local water resource. For example, "drains to river" or "drains to creek".
- c. Provide the County with number and location of storm drains on subject parcel.
- d. Provide the County with plan for maintaining stencils/decals.

#### 2.2.3.9 Designated Vehicle Washing Area

In order to receive Credit for the Designated Vehicle Washing Area, the following minimum criteria must be satisfied:

- a. Provide area for vehicles to be washed away from stormwater drains and water
- b. Use environmentally sensitive cleaning materials.
- c. Post location of vehicle washing area.

d. Provide the County with plan for location of vehicle washing area.

#### 2.2.4 Option 2. NPDES Industrial Stormwater Permit Credit

The South Carolina Department of Health and Environmental Control, on behalf of the USEPA, requires certain types of industry to obtain and comply with an NPDES Industrial Stormwater Permit to manage and monitor stormwater runoff from industrial sites. When an NPDES Stormwater Permit issued to a nonresidential customer requires the specified industry to conduct water quality monitoring, they may be eligible for a maximum of an additional 5% Credit, if:

- a. Water quality testing results are consistently at least 10% below their permit required discharge limits during each sampling event,
- b. Copies of the water quality test results are provided to the County, and
- c. Industry is in compliance with all permit requirements.

#### 2.2.5 Option 3. Other Non-Structural BMP Credit

Nonresidential customers seeking a credit may request unique opportunities or approaches to improving water quality. For instance, a nonresidential customer may also be an NPDES MS4 permittee that must implement a Stormwater Pollution Prevention Program for its facility. Another example might be a retail outlet that provides "Park and Ride" space to encourage use of the transit system, thereby minimizing the growth of impervious area by reducing the need for additional parking lots and travel lanes on roadways. The County will review and evaluate these types of unique requests on a case-by-case basis to determine the Credit value for a site to which the BMP is being applied. Maximum Credit for this category is 5%.

#### 2.2.6 Option 4. Education Credit

Those schools, public or private, wishing to receive Fee Credit for educating students and employees in the area of water quality awareness and protection must agree to the following minimum standards:

- a. Devote two hours per half (four hours annually) to educating one grade level of students (or split between two grade levels) about water quality awareness and protection. Educational institutions will be required to submit programs or agendas to the County for environmental education sessions that will include information concerning number of attendees, time(s), place(s), and topic(s) covered during each session. The County will assist with providing materials for the education program. Pre- and post-session surveys are recommended. Topics must rotate on at least an annual basis, or become part of the curriculum for the same grade level each year.
- b. Devote fifteen minutes per quarter (or an hour annually) to educating employees about water quality awareness and protection. Additionally, provide basic stormwater management information to new employees. Topics must rotate on at least an annual basis.
- c. Post stormwater and water quality-specific educational information obtained from the County, state/federal environmental agencies, or from any other reputable educational resource center student and employee frequented areas. Information

- posted must be clearly visible. Topics must rotate on at least an annual basis. Provide copies of posted materials to the County.
- d. Distribute stormwater and water quality-specific literature obtained from the County, state/federal environmental agencies, or any other reputable educational resource center to target students and all employees on an annual basis and provide copies to the County with the annual self-report. Topics must rotate on at least an annual basis.

Maximum credit for this category is 5%.

#### 2.2.7 Option 5. Stormwater Peak Control Structural BMP Credit

BMPs identified in the BMP Manual will be eligible for a maximum Fee Credit of 10% if flows generated on-site and from upstream areas greater than 0.5 sq mi\_are directed through the BMP or are controlled in accordance with the 25-year, 24-hour storm event. If all flows generated on site are not directed through the BMP in accordance with Appendix A, the maximum fee credit of 10% will be prorated and reduced, reflective of the percentage of the flow generating area not being treated. This Credit will be based upon hydrologic data, water quality data, design specifications, and other pertinent data supplied by qualified, licensed professionals on behalf of property owners. Credits for on-site stormwater facilities shall be generally proportional to the benefit that such systems have on complementing or enhancing the water quality benefit to the County's stormwater management system. In order to receive Credit reduction as applied to the Fee calculation equation, property access, adequate and routine facility maintenance, and self-reporting must be provided by the property owner to the County to verify that the BMP structure is providing its intended benefit. The actual percentage received will be determined through an evaluation of the system benefits provided at the time stormwater leaves the customer's property. BMPs may provide a single benefit or a combination of benefits, in which case credits will be additive.

The percentage of Credit will be calculated using the equation shown in the Credit application (see Appendix A), with a maximum Credit of 10 %. The property owner must complete and submit data that quantifies and demonstrates the achievement of water quality goals. This documentation must be prepared by a qualified, licensed professional engineer and be accompanied by one or combination of the following: testing, modeling, design, and/or construction data that substantiates the hydrologic peak flow reduction requirements obtained from the BMP Manual.

In order to receive Credit reduction as applied to the Fee calculation equation, property access, adequate and routine facility maintenance and self-reporting must be provided by the property owner to the County to verify that the BMP structure is providing its intended benefit

#### 2.2.8 Option 6. Stormwater Volume Control Credit

Stormwater volume control can be achieved through infiltration, evaporatranspiration \_and reuse.

If flows generated on-site and from upstream areas greater than 0.5 sq. mi. are directed through the BMP or are controlled with on-site vegetated open spaces, then a site is eligible for up to a

Formatted: Indent: Left: 0", First line: 0"

maximum of 35% Credit using the equations presented in Appendix A and are based on retaining a 1.95 inch/24 hour storm event. Credits for stormwater volume controls will be based upon hydrologic data, water quantity data, design specifications, and current BMP manual credits supplied by qualified, licensed professional engineers on behalf of property owners.

Nonresidential customers and private property POAs may receive credits for runoff volume reduction best management practices (BMPs) that provide water quality enhancement. The County currently incurs operation and maintenance and capital costs associated with water quality components of the County's stormwater system that needs to be upgraded. Nonresidential customers and private property POAs provide the County with cost savings by constructing new or retrofitting existing stormwater facilities to improve the quality of the County's receiving streams. Customers who apply for credits must provide supporting documentation that their existing or proposed facilities are properly designed to provide volume reduction as outlined in the BMP manual, current edition. Runoff volume reduction BMPs that are eligible for credits include, but are not limited to the following:

- Rooftop practices such as green roofs, evaporative cooling on flat roofs
- Pervious pavement,
- Runoff capture and use for irrigation,
- Disconnection of impervious areas,
- Bioretention, rain gardens and other devices and
- Swales for runoff from highways and roadways.

#### 2.2.9 Fee Credit Calculation - Example 1

BMPs may provide a single benefit or a combination of benefits, in which case credits will be additive. The credit options have a maximum additive credit capacity of 50%. As an example of how a Fee Credit would be applied to a new request, imagine a parcel that receives the following Credits:

1.	Integrated Non-Structural BMP Credit	8%	(max 10%)
2.	NPDES Industrial Stormwater Permit Credit	2%	(max 5%)
3.	Other Non-Structural BMP Credit	1%	(max 5%)
4.	Education Credit	0%	(max 5%)
5.	Stormwater Quality Control Structural BMP Credit	8%	(max 10%)
6.	Stormwater Volume Control Credit	24%	(max 35%)
	OPTIONS 1-6 CREDIT SUBMITAL	43%	(max 50%)

To determine the example Fee, assume the parcel has 30,500 square feet of impervious area. The baseline Fee calculation would be as follows:

Fee = (impervious area in sq/ft.) x (Rate)

SFU sq. ft.

Fee = (30,500)(\$50.00/SFU/year) = \$311.22/year 4,900 sq. ft. (SFU)

Assuming documentation has been provided to prove that all the Program criteria described in the Manual have been and continue to be met, this example customer would receive a 43% Credit adjustment, changing the equation to:

Fee = (30,500)(\$50.00/SFU/year)(1-0.43) = \$177.40/year4,900 sq. ft. (SFU)

This is a savings of \$133.82 per year, for each year the Program criteria are met.

#### 2.2.10 Fee Credit Calculation - Example 3

As an example of how a Fee Credit would be applied to a POA that is responsible for stormwater management facilities within the service area for which the POA has responsibility, a general development that exists in Beaufort County has been selected and contains the following characteristics:

Residential SFUs 250 Nonresidential SFUS 550

All stormwater facilities contained in the development are the responsibility of the POA from the point at which runoff leaves privately-owned parcels until the discharge enters the County system, including onsite detention/retention pond with capacity for volume control reuse.

Assuming BMP calculation indicates that peak flow is controlled for 95% of site times 10% = 9.5%

Assuming volume control, achieves 10% EIC for site and no upstream drainage. Credit = 35%

Therefore, total credit calculation is as follows:

1.	Integrated Non-Structural BMP Credit	10%	(max 10%)
2.	NPDES Industrial Stormwater Permit Credit	0%	(max 5%)
3.	Other Non-Structural BMP Credit	2.5%	(max 5%)
4.	Education Credit	0%	(max 5%)
5.	Stormwater Quality Control Structural BMP Credit	9.5%	(max 10%)
6.	Stormwater Volume Control Credit	35%	(max 35%)

Formatted: Indent: First line: 0"

OPTIONS 1-6 CREDIT SUBMITAL

54.5% (max 50%)

To determine the example for credit returned to the POA, the calculation would be as follows:

Residential SFU charge =  $250 \text{ SFU } \times \$50.00/\text{SFU/year}$  = \$12,500Nonresidential SFU charge =  $550 \text{ SFU } \times \$50.00/\text{SFU/year}$  =  $\frac{\$27,500}{\$40,000/\text{yr}}$ 

Dollars returned to the POA equals

Credit % times fee paid = 0.50% times \$40,000/yr

= \$20,000/yr

Since this is less than the non-residential SFU charge the full credit can be earned and non residential parcel fees will be reduced to reflect a credit of \$20,000.

## 3.0 Application Procedures

A property owner seeking a Fee Credit must comply with the procedures outlined in this Manual and must submit a Fee Credit application (provided in Appendix A). It is recommended that a pre-application meeting with the Beaufort County Engineering Department be held. All information necessary for the Stormwater Utility Manager to make a determination must be supplied as outlined in the Manual and the Credit application. Failure to comply with the procedures outlined in the Manual will result in a denial of the Credit application.

In cases requiring a hydrologic analysis, a qualified professional engineer registered in the State of South Carolina must prepare and certify the documentation provided to verify the hydrologic benefit.

# 4.0 Appeals

#### 4.1 Process

Any person disagreeing with the interpretation or application of a provision in this manual, or the related laws or ordinances pertaining to Stormwater Management in Beaufort County, may appeal in writing by using Stormwater Management Utility Form No. 5.

All appeals will be processed first through Director of Public Works and then the Stormwater Management Fees and Credits Appeals Board, for a recommendation, and then to the Beaufort County, County Administrator for final decision.

Any person still aggrieved may appeal the County Administrators decision to a court of competent jurisdiction.

# **4.2** Establishment of Stormwater Management Fees and Credits Appeals Board

There is hereby established a Stormwater Management Fees and Credits Appeals Board for the purpose of advising the County Administrator on appeals to decisions rendered by the Director of Public Works, or his designee, in the determination of the correct amount of impervious surface located on a person's property and the proper application of the adopted mathematical calculation to determine the required stormwater fee and/or any adjustments to that fee provided for in Section 2.1 of this manual.

The Board shall also advise the County Administrator on appeals to decisions rendered by the Director of Public Works and the County Engineer on applications for User Fee Credits provided for in Section 2.2 of this manual.

The Board shall consist of three members (two primary and one designated third member) from the Stormwater Utility Board members who are appointed by County Council for two year terms. At least one member of this Board should hold a Bachelor of Science degree in Engineering. On appeals involving fees in municipal jurisdictions, the ex-officio board member for that jurisdiction will be replace the third board member.

## 5.0 Enforcement Policy

The County reserves the right to review the application for accuracy and/or inspect and review documentation confirming the provision of the BMPs at any time. If, after its review or inspection, the County finds the application to be inaccurate or the projected level of service is not being provided or continued, the customer will be notified in writing and given 45 days to correct the deficiency. The property owner must provide written documentation to the County Engineer within 45 days of the original notice by the County Engineer that the BMP is being provided or continued as agreed in addition to such evidence as the County Engineer reasonably requires showing that the deficiency has been corrected. If, in the opinion of the County Engineer, the deficiency is not satisfactorily corrected, the Fee Credit attributable to the deficiency will be terminated on the following billing cycle and will remain in effect for a minimum of 12 months. Reapplication for Fee Credit will not be reviewed until the delinquent BMP has been adequately reinstated for three continuous months and evidence of the corrections has been provided with the reapplication.

Annual self-reports will be required every July 31st to document service provision for the preceding calendar year. If the self-reports are incomplete or are not submitted to the County by the required date, the property shall be considered to be in non-compliance with the Credit Program requirements. Non-compliant properties will lose the Credit benefit and the Fee Credit suspension will remain in effect for a minimum of 3 months and will not be reinstated until the complete annual report is received with documentation that the program is being implemented as intended.

Once the Credit reduction has been canceled, a customer may not reapply for that particular

Credit for a period of 12 months and then only if the deficiency has been corrected, as determined by the County inspection. It will be the responsibility of the customer to prove the stormwater management goals are met prior to the Credit being reissued.

All structural water quality control systems that are not listed in the BMP Manual may require, at the request of the County and at no cost to the County, periodic certified laboratory water quality sampling and reporting to insure that the water quality standards are being met.

### Beaufort County Stormwater Management Utility Board Meeting Agenda September 6, 2012

Location: Beaufort Industrial Village (BIV#2)
Beaufort SC, 29906

July 20, 2012 draft,

- 1) Call to Order: Don Smith
  - **A.** Approve meeting agenda
  - **B.** Approval of minutes from previous meeting: August 1, 2012
- 2) Introductions
- 3) **Public Comment**
- 4) **Reports** 
  - **A.** SW/Form-based Code Subcommittee report
  - **B.** Monitoring Update–Bob Klink
  - C. Upcoming Professional Contracts Report Dan Ahern
  - **D.** Utility Updates Dan Ahern
  - **E.** Maintenance Project Report Eddie Bellamy
- 5) Unfinished Business
  - A. Regional Coordination Dan Ahern
- 6) New Business –
- 7) **Public Comment**
- 8) Next Meeting/Agenda
- 9) Adjournment