

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

August 10, 2016 at 2:00 p.m. in Executive Conference Room, Administration Building, Beaufort County Government Robert Smalls Complex, 100 Ribaut Road, Beaufort, South Carolina

### Board Members

#### Present

Don Smith  
Allyn Schneider  
James Fargher  
Patrick Mitchell  
William Bruggeman  
Larry Meisner

#### Absent

Marc Feinberg

### Ex-Officio Members

#### Present

Kim Jones  
Scott Liggett  
Van Willis

#### Absent

Andy Kinghorn

### Beaufort County Staff

Eric Larson  
David Wilhelm  
Rebecca Baker  
Patricia Wilson  
Danny Polk  
Robert O'Quinn

### Visitors

Alice Howard, Beaufort County Council  
Alan Warren, USCB  
Reed Armstrong, Coastal Conservation League  
Denise Parsick, Bft. Soil and Water Conservation Dis.  
Gloria White  
Bonnie Adams  
Brian McIlwee, TOHHI  
Bates Rambow, TOHHI

1. **Meeting called to order** – Don Smith
  - A. Agenda – Approved
  - B. June 8, 2016 Minutes - Approved.

2. **Introductions** – Completed.

3. **Public Comment(s)** –

4. **Reports** – Mr. Eric Larson, Mr. David Wilhelm, and Mrs. Rebecca Baker 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/2016/081016.pdf>

### Utility Update – Eric Larson

Mr. Eric Larson discussed an organizational chart change and his title change which reflect departments under his charge. His title has been changed to Director of Environmental Engineering and Land Management.([backup](#))

### **Monitoring Update – Eric Larson**

Mr. Larson said that Mrs. Rebecca Baker will discuss monitoring updates under the MS4 Update. Dr. Alan Warren with USCB commented that the lab is having to hand deliver Source Water (used in testing) samples to Columbia because that is the closest certified South Carolina Lab for analyzing the Source Water. The Lab is in the process of obtaining the needed certifications to avoid transporting samples in the future.

### **Stormwater Implementation Committee (SWIC) Report – Eric Larson**

The SWIC met on August 3, 2016. Mr. Larson said the meeting would be discussed under MS4 Update.

### **Stormwater Related Projects – Eric Larson**

Mr. Larson noted several easements that the County is trying to acquire. The Leo Green Road Easement will be discussed during New Business. Mr. Larson also mentioned the completion of the Bluffton Parkway 5A “Flyover” project. Several Stormwater and Public Works staff attended a joint final inspection prior to opening to traffic. This project has a lot of innovative Best Management Practices (BMPs) that the County will maintain. Examples are Hydrodynamic separator devices and filter devices which are used to keep the water running off the bridge clean. Mr. Don Smith added that Boundary Street has installed similar devices.

### **Professional Contracts Report – Eric Larson**

Mr. Larson informed board members that the County Administrator has retained Bowman Consulting to do a third party evaluation of the Highway 170 Widening Drainage Project. Mr. Joe Fersner, a retired DHEC engineer, is evaluating all plans, design, construction and oversight of the project and associated drainage on a portion of the road adjacent to the Buckwater Crossings. His expert opinion will help to determine if the project has caused increased flooding to the adjacent property owner’s development.

### **Regional Coordination**

Mr. Larson stated that the Factory Creek Watershed Regional Detention Basin “Phase II” has been permitted for the first stage of three phases. Mr. Larson also pointed out that he has completed his review of the Hilton Head National Redevelopment Zone Change and he is working with Planning staff to proactively address citizen concerns.

### **Municipal Reports – Eric Larson**

*Town of Hilton Head Island* – ([backup](#)) Brian McIlwee and Bates Rambow presented a new Inventory and Modeling system designed to track stormwater inventory. Mr. Bates Rambow demonstrated how the system he designed links an Access Data Base with GIS data; which allows for evaluating, scoring, and creating projects based on details of the project. This system will be used for asset management in the future and is currently linked to the webpage so it is available to staff at any location using multiple devices.

*Town of Bluffton* – Mrs. Kim Jones was happy to report that the town of Bluffton has been granted their third 319(h) grant award which totals about \$1 million over a span of 8 years. The project will be located in the head waters of the May River, more specifically in the May River Preserve area. The goal is to create a Greentree Reservoir, which is a modified pond. This will be a partnership with Beaufort County because a majority of the project is located in unincorporated Beaufort County.

Mrs. Jones also announced a Public May River Action Plan Advisory Committee Meeting on Wednesday, August 17, 2016. This is a special meeting to discuss prioritizing a public sewer connection policy. The meeting will be at 1:00 PM at the Oscar Frasier Park in the Rotary Community Center.

*City of Beaufort* – Mr. Larson reported that the Battery Creek Pond Funded by an EPA 319(h) Grant project partnership between the City of Beaufort and Beaufort County will hold a public meeting on Thursday, August 25 at Beaufort City Hall in Council Chambers from 6:00 PM to 8:00 PM. Mr. Larson is hoping that drone footage will be available for the meeting.

*Town of Port Royal* - Mr. Van Willis (Town Manager) reported that the Town of Port Royal has done sewer inventories, and he is still working with residents to improve the system. The Town and the County are working together on the Green Pond drainage project and the Town is working on Cypress Wetlands improvements.

### **Municipal Separate Storm Sewer System (MS4 Update) – Rebecca Baker**

*Management Plan and Monitoring Update* – Mrs. Rebecca Baker displayed a map provided by ATM (Applied Technology and Management) highlighting preliminary hot spots (pollutants of concern) based on land use. Once empirical data is available, the top 10% of pollutant loading areas of concern will most likely change.

*Plan Review* – Mrs. Baker referenced a table from her report which lists all the plan reviews for June and July. She also offered for the other municipalities to include their reviews in her reports. Mrs. Baker discussed the number of active permits, inspections performed and drainage related complaints investigated by Mr. Danny Polk (Stormwater Inspection Superintendent).

*Public Education* - Mrs. Baker said the MOA for Clemson Extension's Carolina Clear was approved. Staff is working with Carolina Clear on the planning process of the education program. Mrs. Baker thanked Mrs. Denise Parsick and Beaufort Soil and Water Conservation District for their education services this past year. In eight months they managed to reach about 20,000 people.

*BMP (Best Management Practices) Manual* – Mrs. Baker said the final completion is expected in September. A meeting will be held August 31<sup>st</sup> in the Executive Conference Room with Planning, Engineering and staff of the final review. Mrs. Baker explained that the BMP Manual is a 365 paged document outlining the stormwater design, construction and other aspects of stormsewer drainage systems.

*Stormwater Implementation Committee (SWIC)* – Mrs. Baker said that one of the main topics was a possible name change from Neighbors for Clean Water to something more regionally recognizable. A strategic planning meeting will be held on September 29<sup>th</sup> from 9:00 AM -2:00 PM at Port Royal Sound Education Building.

### **Maintenance Projects Report – David Wilhelm**

Mr. David Wilhelm commented that the Arrow Road project costs greatly exceeded estimated costs. His goal is to supply more accurate information on initial estimates. He compared the costs of linear foot of Katie Miller Drive which were \$5.50 versus \$19.00 per linear foot for Arrow Road. Mr. Wilhelm said the high traffic area near the Sea Pines Circle increased the time and labor components of the cost. Mr. Wilhelm pointed out the Possum Hill Road project which only covered 28 feet of drainage system and cost \$12,283.33. This drainage problem was affecting a telephone pole and was a potential safety hazard. Extensive work was necessary to divert drainage around the pole.

**5. Unfinished Business –**

*Rate Study Final Report/Update on Municipalities* – Mr. Larson reported that the County adopted option E of the rate study in 2015. The City of Beaufort and the Town of Port Royal adopted option E in 2016 but they are not increasing rates for the typical single family home. The Towns of Hilton Head and Bluffton accepted their reports and adopted option A (No change to their rate structure) with no rate increases.

**6. New Business –**

Stormwater Ordinance Revision Related to Condos and Submerged/Marsh Properties – Mr. Larson discussed how submerged properties have been lost to erosion and/ or the ocean. These properties have not received tax notices because the properties have zero value. In 2015, these properties received Stormwater Fees because they have Parcel Identification Numbers. The updated credit manual credited the (GA) Gross Area fee, but the \$12.00 Administration fee was still being accessed. This Ordinance Revision allows for the Utility to waive the administrative fee. The County has also created a Trust that will allow parcel owners to grant a quitclaim deed to the County and give the property to the Government.

Mr. Larson also explained that master accounts for Condos were billed a Gross Area fee in 2015 due to the new rate structure and many condo master account ownerships / entities have been dissolved or no longer exist. Many tax notices were returned as undeliverable. The proposed ordinance revision reassigns Gross Area (GA) fees to the condo unit rather than the master account. This will be revenue neutral to the County but makes the fees easier to collect.

The board voted unanimously (6:0) to recommend the Stormwater Ordinance Revision Related to Condos and Submerged/Marsh Properties for approval to Beaufort County’s Natural Resources Committee.

Recommendation for Two Easements on Creg Green’s Property be Abandoned in Exchange for an Alternate Requested Easement – Mr. Eric Larson displayed an Easement Map showing how the County would like to abandon two easements in exchange for one easement on Creg Green’s property off of Leo Green Road. This easement would address a drainage issue that the County previously tried to address, but was not successful in completing.

Ms. Bonnie Adams (Citizen of Beaufort County) had questions about ownership of parcels off Leo Green Road. Mr. Larson said he would get with her after the meeting to answer her questions. Ms. Adams also had questions about who had right of way of Leo Green Road. The board voted unanimously (6:0) to recommend to the Natural Resources Committee the proposed abandonment of two easements on Creg Green’s property in exchange for an alternate requested easement.

**7. Public Comment(s)** – Beaufort County Councilwoman Alice Howard thanked all parties involved in the Green Pond drainage project.

**8. Next Meeting Agenda** – Approved and included in posted agenda.

**9. Meeting Adjourned**

## Existing

Engineering, Infrastructure, and Land Development Division

Environmental Engineering

Planning

Public Works

Disaster Recovery  
General Support  
Roads & Drainage  
Solid Waste & Recycling  
Stormwater

Zoning

\* Note:  
Division branches of  
“Facilities and Construction Engineering”  
and  
“Transportation Engineering”  
remain unchanged.

## Proposed

Engineering, **Transportation, and Land Management** Division \*

Environmental Engineering & **Land Management**

**Community Development**

Planning  
Zoning

Public Works

**Operations**

Roads  
Stormwater

Solid Waste & Recycling

Stormwater

Regulatory / MS4  
Capital Projects  
Utility Management

Disaster Recovery

# Town of Hilton Head Island

## Storm Water Utility Board Presentation



August 10, 2016

# Introduction

## Town of Hilton Head Island Public Projects & Facilities / Engineering Division

- Scott Liggett, PE – Director PP&F / Chief Engineer
- Bryan McIlwee, PE – Asst. Town Engineer / SW Manager
- Bates Rambow – SW Data and Compliance Administrator

# Background

- Town SWU fee = \$108.70 / SFU; last changed in FY 2010 (\$83.23/SFU)
- FY17 Revenues are expected to be ±\$3.56M
- Bond debt of ±\$1.15M/year. Anticipated to be paid off in 2026
- 4 Staff fully funded by SWU fee; 3 Staff partially funded (10-20%)

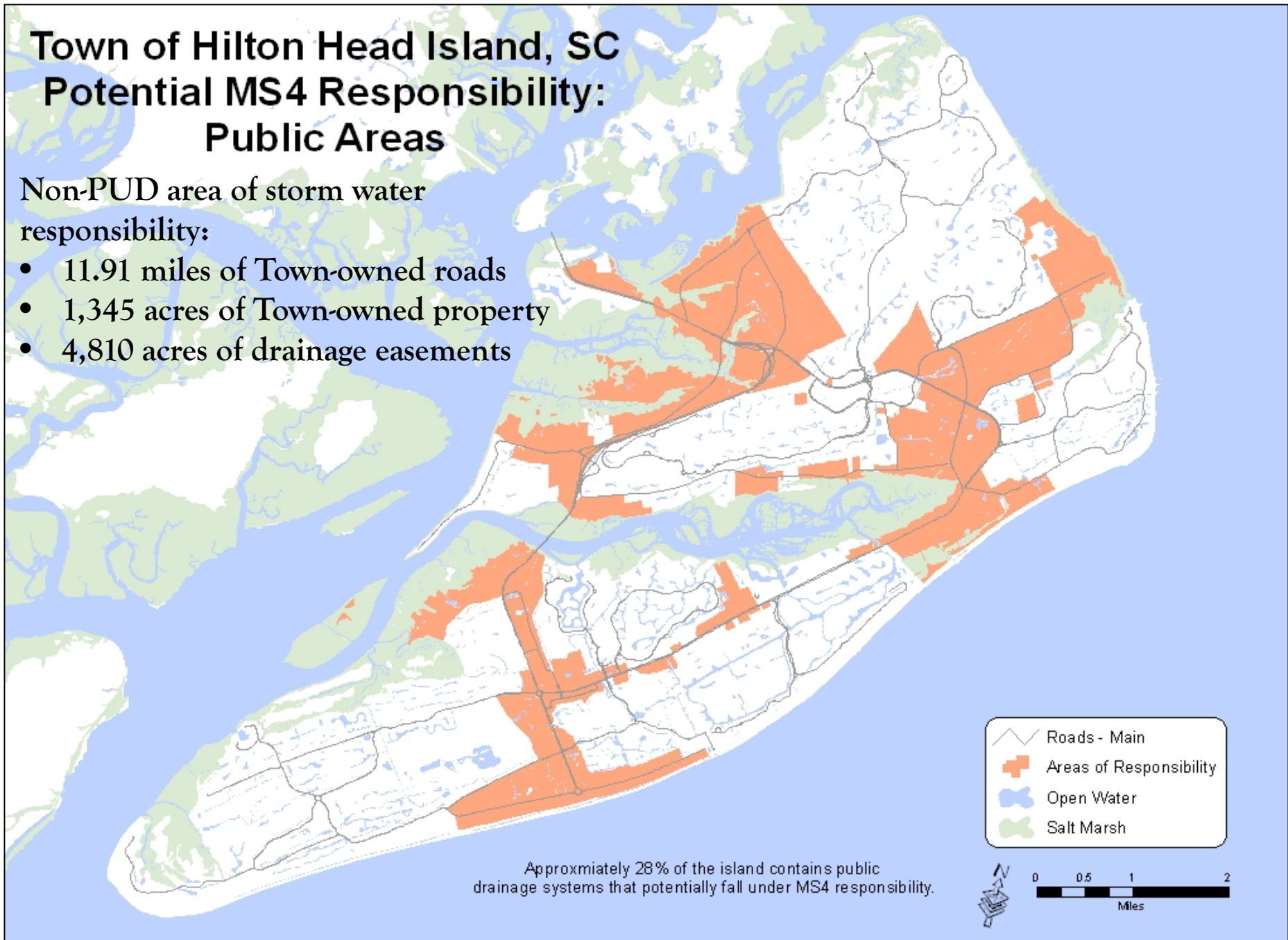


# Town of Hilton Head Island, SC

## Potential MS4 Responsibility: Public Areas

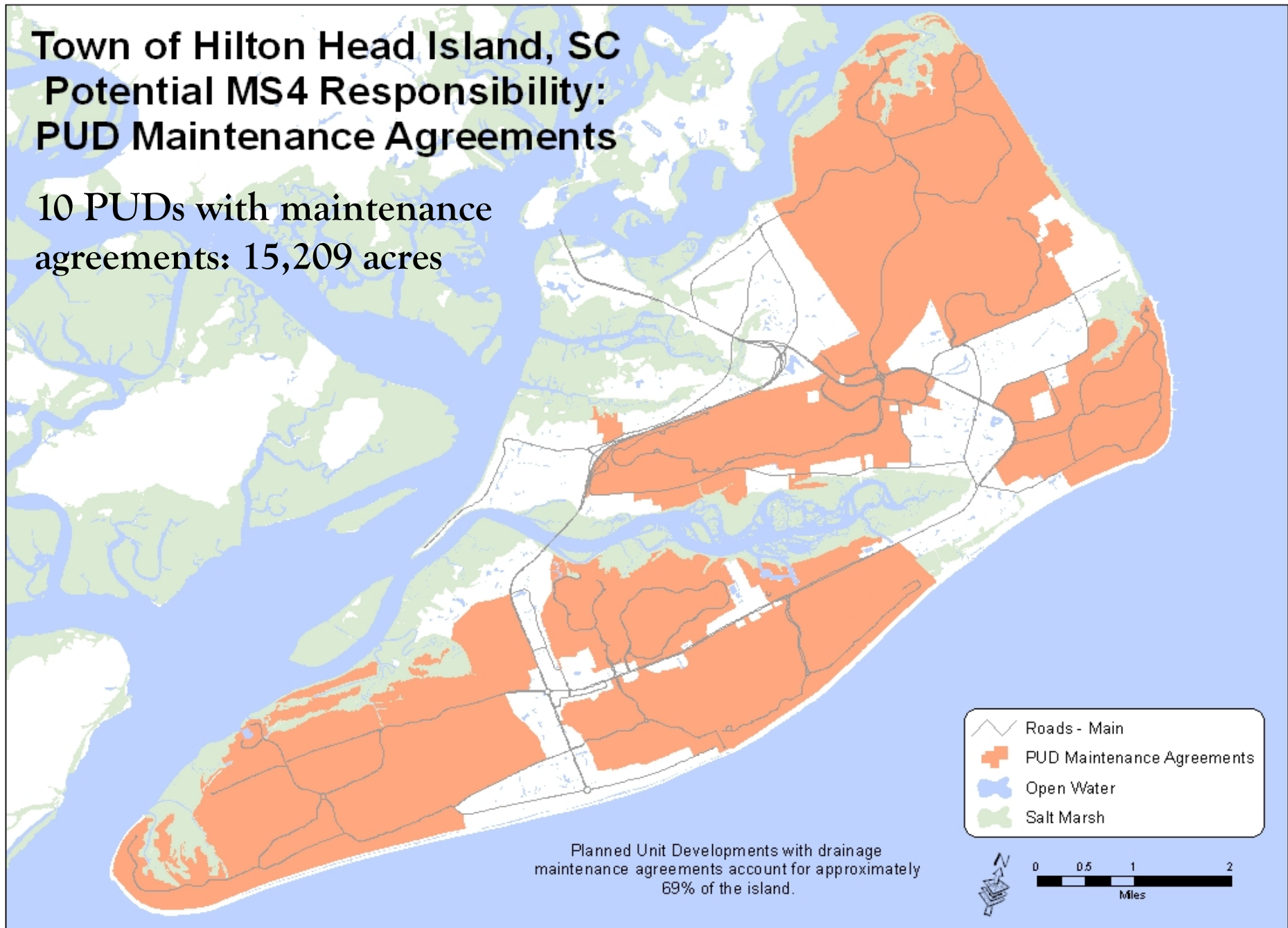
Non-PUD area of storm water responsibility:

- 11.91 miles of Town-owned roads
- 1,345 acres of Town-owned property
- 4,810 acres of drainage easements



# Town of Hilton Head Island, SC Potential MS4 Responsibility: PUD Maintenance Agreements

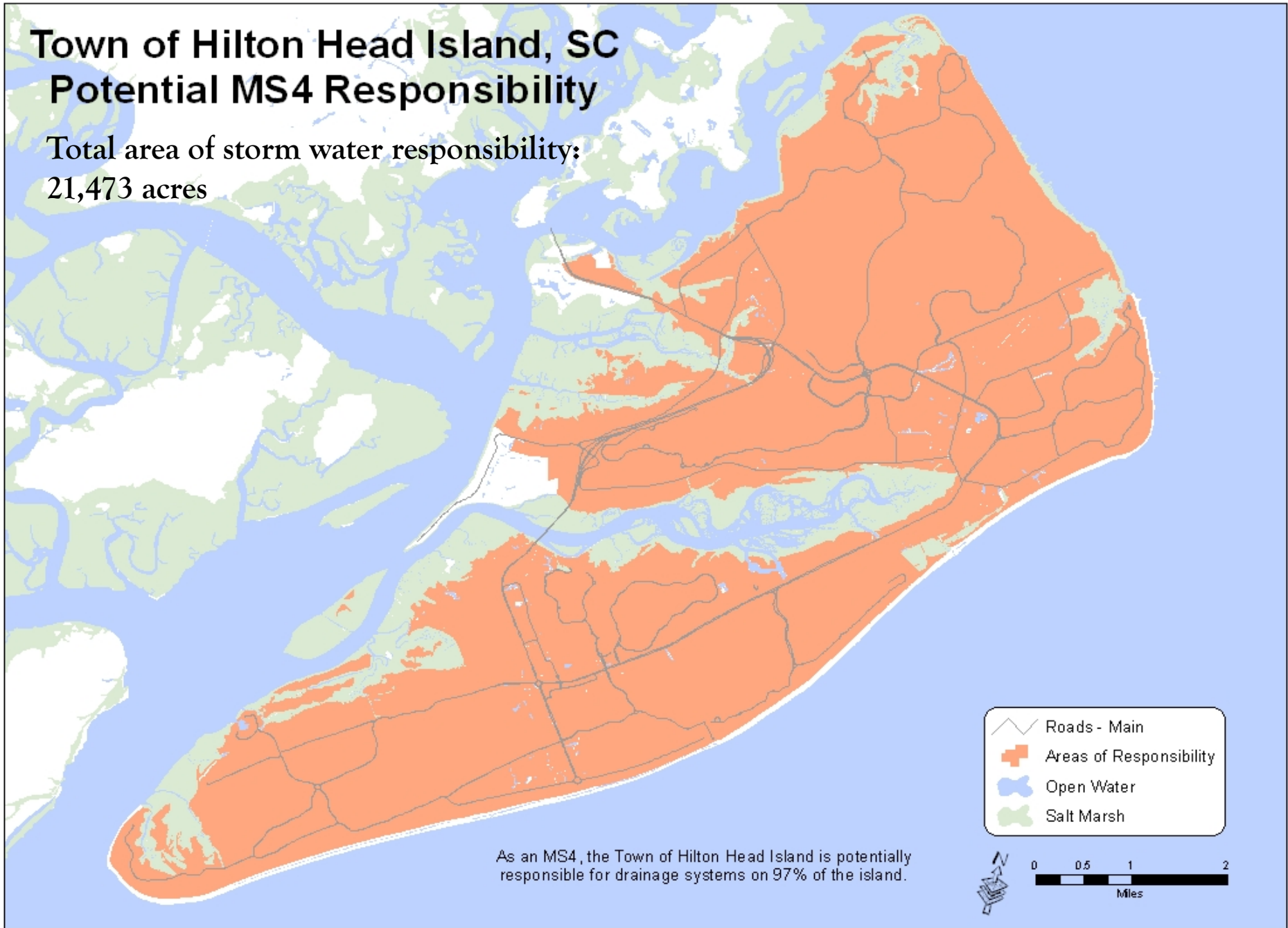
10 PUDs with maintenance  
agreements: 15,209 acres



Planned Unit Developments with drainage  
maintenance agreements account for approximately  
69% of the island.

# Town of Hilton Head Island, SC Potential MS4 Responsibility

Total area of storm water responsibility:  
21,473 acres



As an MS4, the Town of Hilton Head Island is potentially responsible for drainage systems on 97% of the island.

# Inventory & Modeling

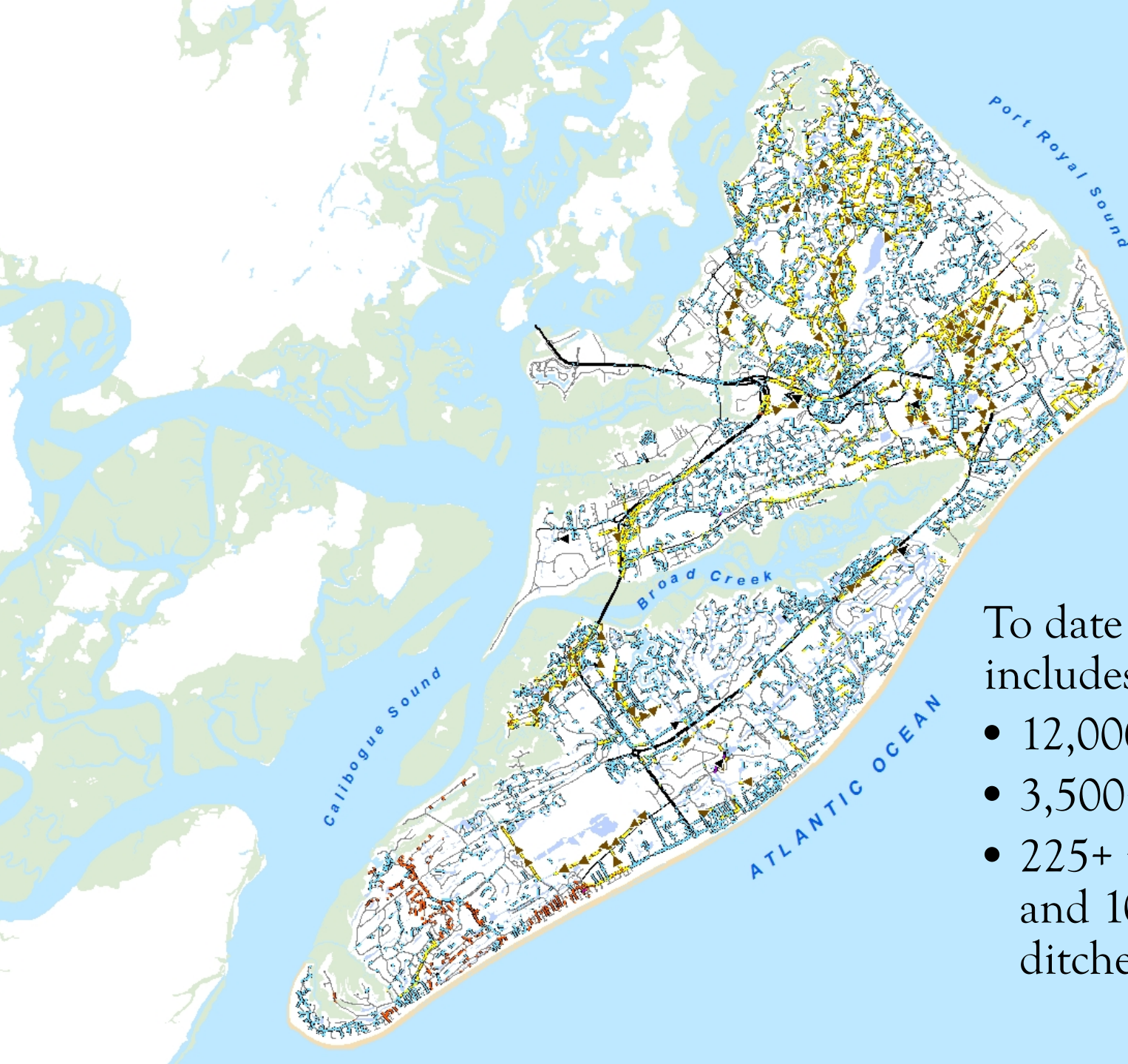
## Purpose:

- Operation and Maintenance of system
- NPDES Permit Compliance
- Hydrologic & Hydraulic modeling (XP-SWMM)
- Water Quality modeling (IDEAL)
- Stormwater and Watershed Master Plans

## Inventory Status:

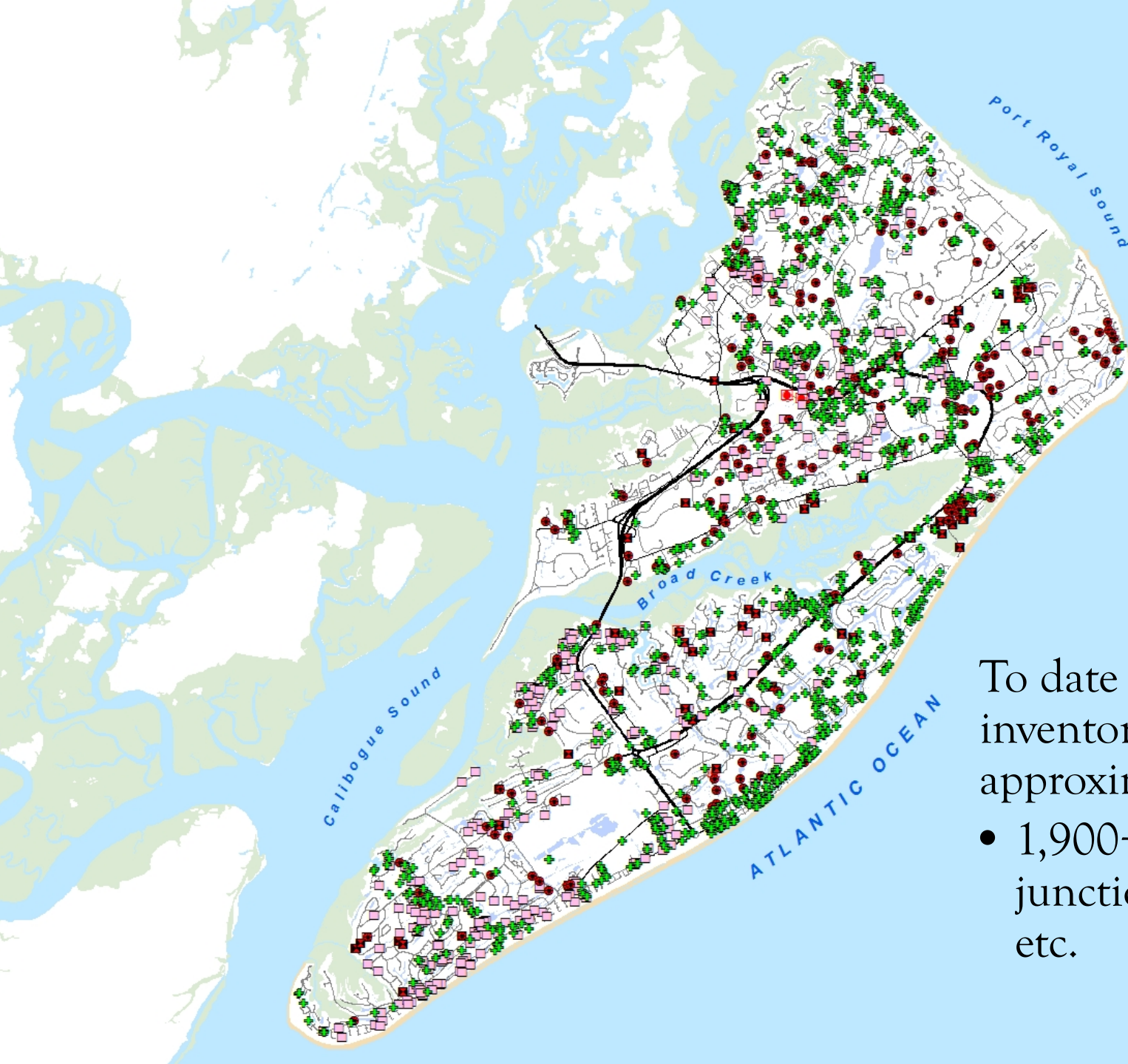
- 1995 - Initial island-wide inventory (macro level)
- 2008 - WK Dickson inventory of Shipyard Plantation
- 2010 - Bates Rambow inventoried Port Royal Plantation
- 2012 - Woolpert inventoried Hilton Head Plantation and Point Comfort
- 2013-2016 - Sea Island Land Survey and Town interns performed inventory of remaining areas





To date the inventory includes:

- 12,000+ pipes
- 3,500+ conveyances
- 225+ miles of pipes and 100+ miles of ditches.



To date the inventory includes approximately:

- 1,900+ weirs, junctions, stubs, etc.





To date the inventory includes approximately:

- 8,000+ inlets, catch basins, etc.

# Service Requests

Service requests regarding flooding, water quality, maintenance, and/or the performance of the drainage system come from various sources:

- Phone calls
- E-mails
- Referrals from Town Staff or Town Council
- “Walk-ins” from the public
- Stormwater Hotline, 843-671-RAIN (7246)

## Request Status:

- 612 Service Requests since initial tracking began in 2009
- 352 Service Requests from private PUD’s (58% of total)
- 163 Stormwater Service Requests in FY16
- 91 Open Requests



# Service Requests - Tracking

2008: Microsoft Excel Spreadsheet

- Project tracking only
- Inefficient
  - Hundreds of Rows; Multiple Worksheets
  - Duplicate Information
  - Redundant User Input or Formulas to link cells;  
User Error
- Long-term Size Limitations

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW DEVELOPER LASERFICHE ACROBAT

Normal Page Break Preview Custom Views Ruler Formula Bar Gridlines Headings Zoom 100% Zoom to Selection New Window Arrange All Freeze Panes Split Hide View Side by Side Synchronous Scrolling Reset Window Position Switch Windows Macros

E12 FIDDLER'S COVE SINKHOLE

A B C D E F G H I J K L M N O P Q R S T U

TOWN OF HILTON HEAD ISLAND - STORM WATER MAINTENANCE PROJECTS

RANK	RATING	PROJECT GIS ID NUMBER	REQUEST DATE	PROJECT NAME	PROJECT LOCATION / ADDRESS	CONTACT NAME(S)	CONTACT PHONE / E-MAIL	SCHEDULE TO BEGIN WORK	EST. COST	ESMT REQ'D (R/W or PUD)	IN ROAD R/W (OWNER)	PRMT REQ'D (ENV or ENCR)	PROBLEM DESCRIPTION / PROJECT DESCRIPTION	INACTIV E	NEED PRMTS	NEED ESMTS	DSGN ENGR	UNDER CNSTR	DONE	JOB NO.	
4	1	High	20090801	08/07/2009	YACHT COVE SINKHOLE	5 YACHT COVE DR		ASAP	\$11,836	NO		NO	Sinkhole in road							FY10-01	
6	2	High	20090901	09/09/2009	VICTORIA SQUARE - BANK STABILIZATION	VICTORIA SQUARE / INDIGO RUN		ASAP	\$22,888	NO											FY10-02
7	3	Low	20090902	09/09/2009	PALMETTO HEADLANDS - DITCH MAINT	PALMETTO HEADLANDS		WINTER 10		NO											FY10-03
8	4	High		09/09/2009	AIRPORT OUTFALL	BTW AIRPT & DILLON RD		FALL 09	\$5,658	YES											FY10-04
9	5	High		09/09/2009	FOLLY FIELD DRAINAGE	FOLLY FIELD ROAD / STARFISH		ASAP		YES											FY10-05
10	6	Low		09/09/2009	CORPUS CHRISTE DRAINAGE	CORPUS CHRISTE & NEW ORLEANS		SPRING 10		R/W	COUNTY	ENCR									FY10-06
11	7	Low		09/09/2009	GOLDEN HND SINKHOLE	41 GOLDEN HND IN HHP		FY 2010		PUD											FY10-07
12	8	High		09/09/2009	FIDDLER'S COVE SINKHOLE	45 FOLLY FIELD ROAD		ASAP	\$3,080												FY10-08
13	9	Low		09/22/2009	PINELAND - OLD WOODLANDS	400-416 WM HILTON PKWY		ASAP													FY10-09
14	10	Med		09/16/2009	ARROW ROAD DITCHES AND TIDE FLAPS	88 ARROW RD & REAR OF POST OFC		SPRING 2010		NO											FY10-10
15	11	Med		09/16/2009	MYRTLE LANE ROAD FLOODING	ENTIRE STREET		SUMMER 2010		R/W	TOWN	DHEC / THHI	No storm infrastructure, pvmt poor conditions - re-build entire road - new section with storm								FY10-11
16		Med		09/16/2009	HICKORY LANE ROAD FLOODING	ENTIRE STREET		SUMMER 2010		R/W	TOWN	DHEC / THHI	No storm infrastructure, pvmt poor conditions - re-build entire road - new section with storm								FY10-12
17	12	High		09/01/2009	PEMBROKE DRIVE	165 PEMBROKE DRIVE		ASAP	\$2,750	R/W	COUNTY										FY10-13
18	13	Med		09/04/2009	WILD HORSE DITCH - BUSH HOG	HHP TO WILD HORSE, PEREGRINE PT		ASAP													FY10-13
19	14	High		09/17/2009	58 S PT ROYAL CULVERTS	58 S PORT ROYAL DR IN PRP		WINTER 10		PUD	N/A	N/A	Replace CMP with RCP								FY10-14
20	15	High		09/17/2009	55 SCARBOROUGH HEAD CULVERTS	55 SCARBOROUGH HEAD RD IN PRP		WINTER 10		PUD	N/A	N/A	Replace CMP with RCP								FY10-15
21	16	Low		09/17/2009	PALMETTO PARKWAY OUTFALL	1 PALMETTO PARKWAY & WHP		WINTER 10													FY10-16
22	17	Low		09/22/2009	BENJAMIN DRIVE	BENJAMIN DRIVE DITCH						NO	Clean existing ditch								FY10-17
23	18	Med		09/23/2009	SQUIRE POPE DRAINAGE	CEDAR WELL APTS DITCH EXCAV		WINTER 10													FY10-18
24	19	High		09/28/2009	PALMETTO PARKWAY SINKHOLE	60 PALMETTO PARKWAY		ASAP	\$11,174												FY10-19
25	20	High		10/01/2009	GRASSLAWN AVE PIPE VIDEO	GRASSLAWN AVE PRP		WINTER 10	\$4,750												FY10-20
26	21	High		10/01/2009	CYGNET CT & BEST LAGOON VIDEO	OFF SEABROOK DR IN HHP		WINTER 10	\$5,170												FY10-21
27	22	med		10/01/2009	FOLLY FIELD RD - BEACH AND TENNIS DITCH	40 FOLLY FIELD ROAD		WINTER 10													FY10-22
28	23	High		10/01/2009	PAULINE MANOR AT MATHEWS	11 PAULINE MANOR		ASAP	\$15,730												FY10-23
29	24	Med		10/05/2009	MARBLEHEAD DRIVEWAYS	17 & 19 MARBLEHEAD		ASAP	\$2,333												FY10-24
30	25	High		10/13/2009	SQUIRE POPE HEADWALL	BTW 56 & 89 SQUIRE POPE RD		ASAP	\$5,433												FY10-25
31	26	High		10/13/2009	SQUIRE POPE HEADWALL	BTW 56 & 89 SQUIRE POPE RD		ASAP	-\$3,104												CO10-25A
32	27	Low		10/14/2009	NORTH ISLAND STAGING SITE	111 LEG O'MUTTON ROAD		FY 2010													FY10-26
33	28	Med		10/22/2009	PALMER SIMMONS/MUDDY CR	MUDDY CREEK NEAR CAMPBELL DR		ASAP	\$7,691												FY10-27
34	29	Low		11/03/2009	CROSS ISL PKWY - PATH BANK EROSION	PATH NEXT TO XP ADMIN BLDG		FY2010													FY10-28
35	30	High		10/29/2009	INDIGO/VICTORIA EASEMENT ACC	ACROSS FROM 46 SUSSEX LANE		ASAP	\$9,640												FY10-29
36	31	High		12/04/2009	HIGH BLUFF ROAD LAGOON PIPES	HIGH BLUFF AT OYSTER REEF COVE		ASAP	\$56,844												FY10-30C
37	32	Low		11/06/2009	BAY PINES / TIDE POINTE SYSTEM	BAY PINES AND TIDE POINT CHANNEL		WINTER 10	\$22,979				Nhood system requiring survey and engineering								FY10-31
38	33	Med		11/05/2009	SYGC CLUBHOUSE FLOOD PROOFING	45 SHIPYARD DRIVE		WINTER 10													FY10-32
39	34	Low		11/05/2009	POND BEHND OLD ISL PACKET BLDG	15 EXECUTIVE PARK RD		WINTER 10													FY10-33
40	35	High		11/05/2009	JARVIS WETLAND DITCH / RESTORATN	4 NATURE'S WAY		WINTER 10													FY10-33
41	36	Med		11/05/2009	AVOCET RD / SPINNAKER BANK ERSN	19 LAGOON RD		SPRING 10													FY10-34
42	37	Low		11/23/2009	CROSS ISL PKWY PATHWAY FLUMES	EROSION AT END OF FLUMES		WINTER 10					Erosion where flume meets pipe under pathway, provide concrete intake at pipe.								FY10-35
43	38	High		08/17/2009	LAWTON SINKHOLE/PIPE REPAIRS	179 GREENWOOD DRIVE		SUMMER 09	\$7,832												
44	39	High		10/20/2009	LAWTON PUMP REMOVAL/INSPCTN	179 GREENWOOD DRIVE		FALL 09	\$10,187												
45	40	High		11/23/2009	LAWTON PUMP FLANGE REPAIRS	179 GREENWOOD DRIVE		FALL 09	\$15,867												
46	41	High		07/01/2009	JARVIS STARTER #3 TRANSFORMER	4 NATURE'S WAY		SUMMER 09	\$3,960												
47	42	High		12/02/2009	WEXFORD PUMP NUMBER 1 REPAIRS	46 YORKSHIRE DRIVE		FALL 09	\$85,987												
48	43	High		12/04/2009	HHPSD #1 JARVIS MAINT CONTR	4 NATURE'S WAY		SUM/FALL 09	\$2,700												
49	44	High		12/08/2009	MISSION COMM SCADA MON CONTR	VARIOUS PUMP STATIONS		FY 2010	\$3,991												
50	45	High		12/23/2009	CIRCLE CTR GRATE REPLACEMENT	CIRCLE CTR OFF POPE AVENUE		ASAP	\$683												FY10-40
51	46	High		01/07/2009	HERON ST SINKHOLE	9 HERON ST OFF OF NFB		ASAP	\$2,690												FY10-41
52	47	High		01/12/2010	WEXFORD PUMP NUMBER 2 REPAIRS	46 YORKSHIRE DRIVE		ASAP	\$22,342												
53	48	Med		01/14/2010	MATHEWS/MATLDA DITCH STABILIZE	MATLDA LN AT MATHEWS INTSCVN		ASAP													FY10-42
54	49	High		01/14/2010	FOLLY FIELD OUTFALL SURVEY	FOLLY FIELD AND STARFISH DRIVE		SPRING 2010	\$5,843												FY10-43
55	50	Low		01/14/2010	JARVIS PUMP HOUSE REPAINT	4 NATURE'S WAY		WINTER 10	\$3,325												FY10-44
56	51	Med		01/28/2010	CARRABAS TURN LANE DI UPGRADE	INT OF FOLLY FIELD RD AND US 278		WINTER 10													FY10-45
57	52	High		01/20/2010	TABBY WALK MATHEWS OUTFALL	TABBY WALK APARTMENTS		EMERGENCY	\$1,843												FY10-46
58	53	High		01/20/2010	MARSHLAND RD PWY BRIDGE WASHOUT	BTWN RIVER CLUB AND BROAD PTE		EMERGENCY	\$4,524												FY10-47
59	54	High		01/25/2010	GUM TREE ROADSIDE DITCH	NED CT TO KATIE MILLR		SPRING 2010	\$9,734												FY10-48

# Service Requests - Tracking

2011-current: Staff-developed Microsoft Access database application to track and report requests and projects.

- More Efficient
- Not linked to GIS Inventory
- High - Medium - Low Priority Scheme; Inconsistent rankings due to user subjectivity
- Inconsistent Problem Description
- Requires knowledge of Access
- Coding Requirements

# Town of Hilton Head Island Storm Water Maintenance Projects



**Project ID** 
**Request Date** 
**Priority** 
**Project Name**

**Location** 
**PUD**

**Description of Problem/Project**

**Contact Name** 
**Contact Phone** 
**Contact E-mail**

**Project Status** 
**Schedule/Budget Status** 
**Year** 
**Estimated Cost** 
**Year Completed**

**Notes**

**Project Manager** 
**Right of Way Owner (if applicable)**

**Link to Project Folder**

	<u>PERMITS</u>					<u>OTHER</u>		
	<u>THHI</u>	<u>COUNTY</u>	<u>DHEC</u>	<u>SCDOT</u>	<u>USACE</u>	<u>Easement(s)</u>	<u>Survey</u>	<u>Engineering</u>
<b>Required</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Obtained</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Service Requests - Tracking

2013-current: Access Database linked to GIS

- Mapping Capabilities
- Projects and Requests linked together
- Consistent Problem Descriptions
- Numeric Evaluation
- Requires knowledge of GIS
- Additional Coding Requirements

## STORMWATER SERVICE REQUESTS

Back

Next

Add Request

Find Request

Close Form

Request ID: 679

Nearest Address 7 Sawtooth Court

Qualification:

QUALIFIES

Status:

CLOSED

Score:

6

Request Info Evaluation Project

Request Date	Nearest Address	PUD	Property or Right of Way Owner	Easement?
05/17/2016	7 Sawtooth Court	HILTON HEAD PLANTATION	PRIVATE	<input checked="" type="checkbox"/>
ContactName	ContactPhone	ContactEmail	EnteredBy	
Matt Topping	843-301-5200	matt.topping@suntrust.com	BRYAN	
Qualification	Status	GIS ID# (enter Node or Conveyance ID)		
QUALIFIES	CLOSED	40588		

## Problem Type(s)

- |   |  |   |
|---|--|---|
| <input checked="" type="checkbox"/> BUILDING FLOODING | <input type="checkbox"/> STRUCTURE/PIPE FAILURE/SINKHOLE | <input type="checkbox"/> TRASH/DEBRIS/VEGETATION              |
| <input checked="" type="checkbox"/> ROAD FLOODING     | <input type="checkbox"/> POOR/SLOW DRAINAGE              | <input type="checkbox"/> ILLICIT DISCHARGE/ILLEGAL CONNECTION |
| <input checked="" type="checkbox"/> YARD FLOODING     | <input type="checkbox"/> EROSION/SEDIMENT/SILT           | <input type="checkbox"/> OTHER/MISC.                          |

## Problem Description/Notes

Road flooding on Sawtooth Court

At time of call, it was high tide as witnessed by Bryan McIlwee in the field. Sawtooth Court is at the top of the system. Flooding was occurring elsewhere in HHP downstream of this area.

## Actions for this Request (inspections, referral updates, enforcement, etc.)

Date	Action	Employee	Results
05/18/2016	INSPECTION	BRYAN	Evidence of road flooding based on debris line but water had receded. Water was 1' below grate in
*			

# STORMWATER SERVICE REQUESTS

Request ID: 679

Nearest Address: 7 Sawtooth Court

Qualification:

**QUALIFIES**

Status:

**CLOSED**

Score:

**6**

Request Info **Evaluation** Project

Criteria

Infrastructure

Problem Type(s)

Road	Driveway Lane Cul-de-Sac Local Access	Subcollector Collector	Minor Arterial	Major Arterial
Conveyance	Isolated System	Secondary System Secondary Control Structure	Primary System Primary Control Structure	Pump Station Critical Facility
Flood Hazard	Nuisance Flooding Localized Ponding Slow Draining Standing Water (< 1 week)	Minor Road Flooding (Temp) Standing Water (> 1 week) Yard Flooding	Road Flooding Overbank Flooding Crawl Space/Enclosure Flooding	Road Overtopping Building/Dwelling Flooding
Vegetation / Debris	Mowing Overhanging Vegetation	Organic Debris (< 50% blockage)	Organic Debris (>50% Blockage)	Organic Debris (total blockage)
Trash / Pollution	Minor Household Debris	Major Household Debris	Pollution Illicit Discharge Illegal Dumping	Hazardous Material NPDES Mandate
Erosion and Sedimentation	Minor Siltation (<25%) Minor Erosion	Moderate Siltation(50%) Moderate Erosion	Severe Siltation (>50%) Severe Erosion (undercutting)	100% Blockage Critical Failure
Structure Damage	Minor Depression Minor Damage Root Intrusion	Pipe Integrity (>50%) Frame or Grate Damage Damaged Tide Flaps and Gates Minor Sinkhole	Pipe Integrity (<50%) Broken Tide Flaps and Grates Sinkhole	Broken Pumps Generators Electrical Equipment

RequestID **679**

Date of Evaluation  
**05/18/2016**

Total Score  
**6**

Bonus

Relates to other priority projects (Stormwater, CIP, Sewer)	Town Council Priority; Regulatory Mandate
Multiple Related Requests (Hot Spot)	Mitigates an environmental problem / improves env. or water quality

Comments

## STORMWATER SERVICE REQUESTS

Back

Next

Add Request

Find Request

Close Form

Request ID: 679

Nearest Address 7 Sawtooth Court

Qualification:

QUALIFIES

Status:

CLOSED

Score:

6

Request Info

Evaluation

Project

Choose from Existing Projects

545

OR

Create New Project

This Request is associated with the following Project:

ProjectID

545

ProjectName

7 Sawtooth Court

ProjectStatus

COMPLETE

ProjectDescription

Clean and CCTV approximately 250 LF of storm pipe from the road to the back of the houses to determine if there are any blockages.

Line the 214 LF of 15" CMP/HDPE pipe between the houses to prevent root penetration into the block which causes blockages.

ProjectFolder

I:\STORM WATER\Operations and Maintenance\Contracts\C22-201

Edit/View Project Details



# STORMWATER PROJECTS

Close Form

ProjectID 545 Project Name 7 Sawtooth Court

Project Details **Related Requests**

Project Name

ProjectStatus

Project Description/Scope

Clean and CCTV approximately 250 LF of storm pipe from the road to the back of the houses to determine if there are any blockages.

Line the 214 LF of 15" CMP/HDPE pipe between the houses to prevent root penetration into the block which causes blockages.

ProjectFolder

I:\STORM WATER\Operations and Maintenance\Contracts\C22-2012\_Southeast Pipe Survey\Job Orders and Change Orders\Job Order 49 - 7 Sawtooth Court CCTV

TaskType	ProjectID	JobNum	TaskCategory	TaskStatus	FiscalYear	Scope
LINING	545	C22-2012 JO-50	CAPITAL	COMPLETE	2016	Install 214 LF CIPP liner in 15" pipe
TV	545	C22-2012 JO-49	MAINTENANCE	COMPLETE	2016	Clean and CCTV 250 LF of 15" pipe
*						

# STORMWATER PROJECTS

Close Form

ProjectID 545 Project Name 7 Sawtooth Court

Project Details Related Requests

RequestID	RequestDate	PUD	NearestAddress	Priority	Status
538	09/07/2015	HILTON HEAD PLANTATION	Sawtooth Court	MEDIUM	CLOSED
679	05/17/2016	HILTON HEAD PLANTATION	7 Sawtooth Court		CLOSED

View/Edit Related Requests

# GIS web-based Application

- Map-based web application combines inventory and Access database
- Will work on any computer as well as mobile devices in the field
- Will provide users with a map view interface that makes it easy to identify nearby related requests and projects.
- The future goal of this project is to build a web-based ***asset management system*** for the Town's stormwater management program. The major features/elements of the system will include:
  - Service Requests Module
  - Projects Module
  - Infrastructure Module
  - NPDES Module
  - Water Quality Monitoring Module
  - FEMA/Channel Maintenance Module
  - Mobile inspection/data collection forms
  - Staff Tasks/Work Module

# Questions

- Bryan McIlwee, PE – Assistant Town Engineer / Storm Water Manager

843-341-4775

[bryanm@hiltonheadislandsc.gov](mailto:bryanm@hiltonheadislandsc.gov)

- Bates Rambow – Stormwater Data & Compliance Administrator

843-341-4683

[batesr@hiltonheadislandsc.gov](mailto:batesr@hiltonheadislandsc.gov)