ADD-ONS

ADD-ONS

COUNTY COUNCIL OF BEAUFORT COUNTY

ADMINISTRATION BUILDING
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AGENDA
NATURAL RESOURCES COMMITTEE
Monday, November 3, 2014
2:30 p.m.
Executive Conference Room, Administration Building
100 Ribaut Road, Beaufort

Committee Members:
Brian Flewelling, Chairman
Cynthia Bensch, Vice Chairman
Gerald Dawson
William McBride
Jerry Stewart
Tabor Vaux
Laura Von Harten

Staff Support: Tony Criscitiello

1. CALL TO ORDER – 2:30 P.M.

2. RECOMMENDATION / FINAL DRAFT OF MS4 PERMIT APPLICATION
   (dhec general permit)
   (dhec ms4 map)
   (county permit application)
   (resolution)

3. ANNOUNCEMENT / STORMWATER WEBCAST: RETROFITTING EXISTING STORMWATER PONDS & BASINS BY THE CENTER FOR WATERSHED PROTECTION
   (backup)

4. CONSIDERATION FOR RECOMMENDATION AND ADOPTION: COMMUNITY DEVELOPMENT CODE
   (testing of code)
   (proposed combined revisions)
   (staff response homebuilders association)

5. CONSIDERATION OF REAPPOINTMENTS AND APPOINTMENTS
   A. Rural and Critical Lands Preservation Review Board (Council Districts 8 and 9)
   B. Stormwater Management Utility Board (unincorporated Bluffton Township and Daufuskie Island)

6. ADJOURNMENT

2014 Strategic Plan: Committee Assignments
Community Development Code: Adoption
Comprehensive Plan for County-owned land: Inventory Use and Direction
Greenprint Map Update (*Goal Accomplished, July 2014*)
Water Quality Office: Next Steps

D H E C

PROMOTE PROTECT PROSPER

South Carolina Department of Health and Environmental Control

www.scdhec.gov/water

STATE OF SOUTH CAROLINA
NPDES GENERAL PERMIT
FOR
STORM WATER DISCHARGES
FROM
REGULATED SMALL MUNICIPAL
SEPARATE STORM SEWER SYSTEMS (SMS4)

The Permit is issued in compliance with the provisions of the SC Pollution Control Act (S.C. Code Sections 48-1-10 *et seq*., 1976) and with the provisions of the Clean Water Act, 33 U.S.C. §1251 et. seq., (hereafter CWA or the Act), as amended by the Water Quality Act of 1987, P.L. 100-4 and subsequent regulations. Upon being granted coverage under this general permit, operators of Regulated Small Municipal Separate Storm Sewer Systems that are described in Subpart 1.2 of this National Pollutant Discharge Elimination System (NPDES) general permit, except for those activities excluded from authorization of discharge in Subpart 1.3 of this permit, are authorized to discharge storm water to waters of the state of South Carolina in accordance with the conditions and requirements set forth herein.

Ann R. Clark

Ann R. Clark, Director
Storm Water, Construction, Agricultural and Dams Permitting Division
Bureau of Water

Permit No.:	**SCR030000**	**Issued:**	**November 1, 2013**
Effective:	**January 1, 2014**	**Expires:**	**December 31, 2018**

Table of Contents

ACRONYMS

BMP	Best Management Practices
BPJ	Best Professional Judgment
CDP	Census Designated Place
CEPSCI	Certified Erosion Prevention and Sediment Control Inspector
CFR	Code of Federal Regulations
COC	Certificate of Coverage
CWA	Clean Water Act, 33 U.S.C. §1251 et. seq., Water Quality Act of 1987, P.L. 100-4
DHEC	Department of Health and Environmental Control
DMR	Discharge Monitoring Report
ELG	Effluent Limitations Guidelines
EPA	Environmental Protection Agency
ERP	Enforcement Response Plan
GPS	Geographic Positioning System
IDDE	Illicit Discharge Detection and Elimination
LCP	Larger Common Plan
MCM	Minimum Control Measure
MEP	Maximum Extent Practicable, CWA §402(p)(3)(B)(iii), Federal Register/Vol. 63, No.6/Friday, January 9. 1998, SC Water Pollution Control Permits Regulation 61-9 122.34(a)
MS4	Municipal Separate Storm Sewer System, SC Water Pollution Control Permits Regulation 61-9 122.26(b)(4) or (7)
MSGP	Multi-Sector General Permit
NOI	Notice of Intent
NOV	Notice of Violation
NSPS	New Source Performance Standards
NPDES	National Pollutant Discharge Eliminating System
ORW	Outstanding Resource Water, SC Water Classifications & Standards 61-68 G
PCA	South Carolina Pollution Control Act
PHF	Pesticides, Herbicides and Fertilizers
POC	Pollutant of Concern
QLP	Qualifying State, Tribal, or local programs, SC Water Pollution Control Permits Regulation 61-9 122.34(c) & 122.44(s)
SC	South Carolina
SFH	Shellfish Harvesting, SC Water Classifications & Standards 61-68 G
SMS4	Small Municipal Separate Sewer System, SC Water Pollution Control Permits Regulation 61-9 122.26(b)(16)
SOP	Standard Operating Procedure
SWMP	Storm Water Management Plan
SWPA	Source Water Protection Area
SWP3	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load, Title 40 Code of Federal Regulations (40 CFR) 130 & SC Regulation 61-110
TN	Trout Natural, SC Water Classifications & Standards 61-68 G
TPGT	Trout Put Grow and Take, SC Water Classifications & Standards 61-68 G
TPT	Trout Put and Take, SC Water Classifications & Standards 61-68 G
UA	Urbanized Area as defined by the U.S. Bureau of Census
WLA	Waste Load Allocation
WQBEL	Water Quality Based Effluent Limitations
WQMS	Water Quality Monitoring Station
WQS	Water Quality Standards

1 Coverage Under this Permit

1.1 Permit Area

This permit authorizes discharges composed entirely of storm water from regulated Small Municipal Separate Storm Sewer Systems (SMS4) in all areas of the State of South Carolina including the Catawba Indian Nation.

1.2 Eligibility

1.2.1 This permit authorizes discharges composed entirely of storm water from SMS4 as defined in South Carolina Water Pollution Control Permits Regulation (SC 61-9) and also in Title 40 of the Code of Federal Regulations (40 CFR), 122.26(b)(16), as designated under either 122.26 or 122.32, or as required either under section 402(p)(3) of the Federal Water Pollution Control Act, Public Law 100-4, or by Title 33 of the United States Code (33 U.S.C. § 1251 et. seq., hereinafter referred as the Clean Water Act, CWA, or The Act). You are eligible to be authorized to discharge under the terms and conditions of this general permit if you:

1.2.1.1 Own or operate a SMS4 within the permit area described in Section 1.1,

1.2.1.2 Are not a “large” or “medium” MS4 as defined in SC 61-9 122.26(b)(4) or (7), and

1.2.1.3 Submit either a Notice of Intent (NOI) in accordance with Part 2 of this permit or an individual application in accordance with Sections 122.26, 122.33(b)(2) or (3) of SC 61-9, and

1.2.1.3.1 Are located fully or partially within an urbanized area as determined by the latest Decennial Census by the Bureau of Census, or

1.2.1.3.2 Are designated for permit authorization by SCDHEC or EPA pursuant to SC 61-9 (40 CFR) 122.26, 122.32 and 40 CFR §123.35.

1.2.2 The following are types of authorized discharges:

1.2.2.1 *Storm water discharges.* This permit authorizes storm water discharges to waters of the State or waters of the United States from the SMS4s identified in Section 1.2.1, except as excluded in Section 1.3.

1.2.2.2 *Non-storm water discharges*. You are authorized to discharge the following non-storm water sources provided that the Department has not determined these sources to be substantial contributors of pollutants to your SMS4:

a) Water line flushing
b) Landscape irrigation
c) Diverted stream flows
d) Rising ground waters

e) Uncontaminated ground water infiltration (infiltration is defined as water other than wastewater that enters a sewer system, including foundation drains, from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.)
f) Uncontaminated pumped ground water
g) Discharges from potable water sources
h) Foundation drains
i) Air conditioning condensate
j) Irrigation water (not consisting of treated, or untreated, waste water)
k) Springs
l) Water from crawl space pumps
m) Footing drains
n) Lawn watering
o) Individual residential car washing
p) Natural flows from riparian habitats and wetlands
q) Dechlorinated swimming pool discharges
r) Street wash water
s) Discharges or flows from fire fighting activities

1.3 Limitations on Coverage

This permit does not authorize:

1.3.1 Discharges that are mixed with sources of non-storm water unless such non-storm water discharges are:

a) In compliance with a separate NPDES permit, or
b) Determined not to be a substantial contributor of pollutants to waters of the State.

1.3.2 Storm water discharges associated with industrial activity as defined in SC 61-9 122.26(b)(14)(i)-(ix) and (xi).

1.3.3 Storm water discharges associated with construction activity as defined in SC 61-9 122.26(b)(14)(x) or 122.26(b)(15).

1.3.4 Storm water discharges currently covered under another NPDES permit.

1.3.5 Discharges to territorial seas, the contiguous zone, and the oceans unless such discharges are in compliance with the ocean discharge criteria of 40 CFR Part 125, Subpart M. In addition to any other grounds specified herein, authorization to discharge shall be modified or revoked at any time if, on the basis of any new data, the EPA determines that continued discharges from a SMS4 covered under this permit cause unreasonable degradation of the marine environment. SC R. 61-9 122.44(d)(7).

1.3.6 New or expanding point source discharges that would cause or contribute to violations of water quality standards unless the Storm Water Management Plan (SWMP) contains schedules, objectives, and measurable goals accountable to the performance standards specified in this permit

1.3.7 Existing discharges that are causing or contributing to a violation of water quality standards unless the SWMP contains schedules, obligations, and measurable goals accountable to the performance standards specified in this permit.

1.3.8 Discharges of any pollutant into any water for which a Total Maximum Daily Load (TMDL) has been established unless the SWMP contains schedules, obligations, and measurable goals accountable towards achieving the waste load allocation (WLA) of the TMDL. Permitted SMS4 shall comply with any more stringent effluent limitations in the permit, including permit requirements that modify, or are in addition to, the minimum control measures based on an approved TMDL, or equivalent analysis. The Department may include such more stringent limitations based on a TMDL or equivalent analysis that determines such limitations are needed to protect water quality. This permit ensures that water quality-based effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available WLA for the discharge prepared by the State and approved by EPA pursuant to 40 CFR 130.7.

1.3.9 Any violation of specific standards for ground water quality as outlined in SC regulation 61-68 resulting from runoff discharged into the subsurface via storm water controls or storage / detention. .

1.4 Obtaining Authorization

To be authorized to discharge storm water from SMS4, a notice of intent (NOI), shall first be submitted, as follows,

1.4.1 **SMS4 Dischargers already authorized under a South Carolina NPDES permit for Storm Water Discharges From Regulated Municipal Separate Storm Sewer Systems (MS4) on, or before, June 11, 2010 (hereinafter, EXISTING PERMITTEES)** must reapply for coverage under this permit in accordance with 61-9 122.6(a) as requested by the Department. The complete reapplication NOI, signed and dated in accordance with SC 61-9 122.22 shall have been received no later than the expiration date of the prior permit (SC 61-9 122.21(d)(2)).

1.4.2 **SMS4 Dischargers that were waived from coverage under the previous permit by SC DHEC Bureau of Water under 40 CFR § 123.35(h),** that are listed **for Automatic Designation** in Federal Register / Vol. 64, No. 235 / Wednesday, December 8, 1999, or those that are **located within an urbanized area (UA) as defined by the U.S. Bureau of the Census** upon availability of the 2010 decennial census data shall apply for coverage under this permit. Upon Department written notification, the complete NOI, signed and dated in accordance with SC 61-9 122.22, shall be received no later than six months from said notification. (SC 61-9 122.28(b)(2)(iii), 122.30(b), 122.32(f)(1)(ii), 122.32(g)).

1.4.3 **SMS4 Dischargers that must be examined by SC DHEC Bureau of Water for Potential Designation under 40 CFR § 123.35(b)(2),** Federal Register / Vol. 64, No. 235 / Wednesday, December 8, 1999, shall apply for coverage under this permit. Upon Department written notification, the complete NOI, signed and dated in accordance with SC 61-9 122.22, shall be received no later than six months from said notification. (SC 61-9 122.28(b)(2)(iii), 122.30(b), 122.32(f)(1)(ii), 122.32(g)).

1.4.4 **SMS4 Dischargers located within an urbanized area (UA) as defined by the U.S. Bureau of the Census.** Upon availability of new decennial census data, SMS4 captured within the boundaries of an UA in the State will become automatically designated for permitting. The complete NOI, signed and dated in accordance with 61-9 122.22, shall be received no later than six months from the date the automatically designated SMS4 are notified by SC DHEC Bureau of Water. (SC 61-9 122.28(a)(1)(vi), 122.28(b)(iii), 122.30(b), 122.32 (a), (f) & (g), 122.33(c)).

1.4.5 **SMS4 Dischargers designated by SC DHEC Bureau of Water according to 61-9 122.32** are eligible for coverage under this permit. The complete NOI, signed and dated in accordance with 61-9 122.22, shall be received no later than six months from the date the MS4 are notified by SC DHEC Bureau of Water (SC 61-9 122.28(a)(1)(vi), 122.28(b)(iii), 122.30(b), 122.32 (a), (f) & (g), 122.33(c)).

1.4.6 **SMS4 Dischargers designated by SC DHEC Bureau of Water according to 61-9 122.26(a)** may be eligible for coverage under this permit. In the cases where they are eligible, the complete NOI, signed and dated in accordance with 61-9 122.22, shall be received no later than six months from the date the SMS4 are notified by SC DHEC Bureau of Water (SC 61-9 122.26(a)(9)(ii) & (iii), 122.28(b)(iii), 122.30(b), 122.32 (a), (f) & (g), 122.33(c)).

1.4.7 The Department shall not issue coverage under this permit for any of the SMS4 Dischargers listed in Parts 1.4.1 – 6, above, before the NOI is completed to its satisfaction.

1.4.8 For areas annexed into your MS4 area after you received coverage under this general permit, the first annual report submitted after the annexation shall include the updates to your SWMP, as appropriate.

1.4.9 Small MS4 that submit an individual permit application may also be granted coverage under this general permit in lieu of SC DHEC issuing an individual MS4 NPDES permit. Provided, however, that if any Small MS4 demonstrates a basis for declining coverage under the general permit, then SC DHEC shall provide individual permit coverage.

1.4.10 SMS4 who submit a complete NOI in accordance with the requirements of the Department are authorized to discharge storm water from SMS4 under the terms and conditions of this permit from the effective date of permit coverage issued to the SMS4 by the Department. The Department may deny coverage under this permit and require submittal of an application for an individual NPDES permit based on a review of the NOI or other information at any time (SC 61-9 122.28 & 124.52).

1.4.11 Alternative Permits.

1.4.11.1 The Department Requests an MS4 to seek Coverage under either an Individual, or under an Alternative Permit.

The Department may require MS4 to apply for and / or obtain authorization to discharge under either an individual NPDES permit or an alternative NPDES general permit in accordance with S.C. R.61-9 122.28(b)(3), 122.64 and 124.5. Any interested person may petition the Department to take action under this paragraph. If the Department requires a MS4 to apply for an individual NPDES permit under this paragraph, the Department will notify the MS4 in writing that a permit application is required. This notification will include a brief statement of the reasons for this decision and will provide application information. In addition, if the MS4 is an existing discharger authorized under this permit, the notice will set a deadline to file the permit application, and will also include a statement that on the effective date of the individual NPDES permit, or the alternative general permit as it applies to you, coverage under this general permit will be terminated. If a MS4 covered under this permit, failed to submit an individual NPDES permit application as required by the Department, then the applicability of this permit to the MS4 is terminated at the end of the day specified by the Department as the deadline for application submittal. The Department may take appropriate enforcement action for any unauthorized discharge.

1.4.11.2 Permittee Requests Coverage under an either an Individual, or under an Alternative Permit.

A MS4 may request to be excluded from coverage under this general permit by applying for an individual permit. In such a case, the MS4 must submit an individual permit application in accordance with all applicable requirements of S.C. R.61-9.122.26(d)(1) & (2), 122.34, and 122.41 - 44 with reasons supporting the request, to the Department at the address listed in Part 2.3 of this permit. The request may be granted by issuance of an individual permit or authorization of coverage under an alternative general permit, if the MS4 reasons are adequate to support the request. When an individual NPDES permit is issued to a MS4, or a MS4 is authorized to discharge under an alternative NPDES general permit, the authorization to discharge under this permit is terminated on the effective date of the individual permit, or on the date of authorization to discharge under the alternative general permit.

1.5 Maximum Extent Practicable (MEP)

Maximum Extent Practicable (MEP) is the technology-based control standard used in the NPDES municipal storm water program against which SC DHEC Bureau of Water and permittees assess whether or not an adequate level of control has been proposed in the storm water management program (SWMP). This term is defined by §403(p)(3)(B) of the Clean Water Act, by SC Water Pollution Control Permits Regulation 61-9 122.34(a) and by Federal Register / Vol. 63, No.6, p.1574 / Friday. January 9. 1998. This permit:

1.5.1 Requires owners, or operators, to effectively prohibit non-stormwater discharges into their SMS4,

1.5.2 Requires controls to reduce the discharge of pollutants from SMS4 to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods determined appropriate for the control of such pollutants,

1.5.3 Requires, at a minimum, to develop, implement and enforce a SWMP designed to reduce the discharge of pollutants from SMS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act (CWA).

1.5.3.1 SWMP must include the minimum control measures (MCM) in Part 4.2 of this permit. Narrative water quality based effluent limitations (WQBEL) requiring implementation of Best Management Practices (BMP) are included in Part 3 to satisfy technology requirements (including reduction of pollutants to the MEP) and to protect water quality.

1.5.3.2 Implementation of BMP consistent with the provisions of the SWMP and with the requirements and timetables in this permit constitutes compliance with the standard of reducing pollutants to the MEP.

2 Notice of Intent Requirements

2.1 Deadlines for Notification

2.1.1 If you are the owner / operator of a regulated SMS4, either defined under SC 61-9 122.26(b)(16), located in an Urbanized Area (UA), or otherwise designated under 122.32, you shall apply for and obtain coverage under an NPDES permit, or apply for a modification of an existing NPDES permit according to part 1.4 above, unless your SMS4 has been specifically exempted by a waiver granted under SC 61-9 122.32(d) or (e).

2.1.2 *Additional designations after the date of permit issuance.* If your SMS4 is designated by the Department after the effective term of this permit (hereinafter **NEW PERMITTEES),** you are required to submit an NOI and a description of your SWMP as required in parts 1.4.2 – 8.

2.1.3 *Submitting a Late NOI.* You are not prohibited from submitting an NOI after the dates provided in this section. If a late NOI is submitted, your authorization is only for discharges that occur after permit coverage is granted. The Department reserves the right to take appropriate enforcement actions for any unpermitted discharges.

2.2 Contents of the Notice of Intent

The Notice(s) of Intent shall be signed in accordance with Section 122.22 of SC 61-9. In addition to the requirements in part 1.4, applicable to your SMS4, the following information shall be included:

2.2.1 Information on the Permittee:

2.2.1.1 The name of your municipal entity/tribe/state agency/federal agency, mailing address, and telephone number;

2.2.1.2 An indication of whether you are a Federal, State, Tribal, or other public entity;

2.2.2 Information on the SMS4:

2.2.2.1 The Urbanized Area or Core Municipality (if you are not located in an Urbanized Area) where your system is located; the name of your organization, county(ies), city(ies), town(s) or parish(es) where your SMS4 is located, and the latitude and longitude of an approximate center of your SMS4. Maps submitted to the Department should not exceed a "D" size, 24 in. by 36 in. and the scale of the maps should be at least 1 inch equals 1,000 feet but not more than 1 inch equals 2,000 feet. Electronic maps, in a format suitable to the Department, may be submitted in lieu of the size D maps.

2.2.2.2 The name of the waters of the State and an indication of whether any of your receiving waters are on the latest CWA §303(d) list of impaired waters or have Total Maximum Daily Load (TMDL) allocated to them.

2.2.2.3 An indication of whether all or a portion of the SMS4 is located on Indian Country lands.

2.2.2.4 A list of entities such as military bases, large hospitals, prison complexes, universities, sewer districts, highway departments and others that operate a small separate storm sewer system and are located within your SMS4 area. Indicate whether they are an integral part of your SMS4.

2.2.2.5 If you are relying on another entity to satisfy one or more of your permit obligations (see Section 4.4), the identity of that entity(ies) and the element(s) they will be implementing.

2.2.2.6 Information on your chosen BMP and the measurable goals for each of the storm water minimum control measures in Section 4.2 of this permit, your time frame for implementing each of the BMP, and the person or persons responsible for implementing or coordinating your SWMP.

2.3 Where to Submit

You are to submit your NOI, signed in accordance with the signatory requirements of Section 122.22 of SC Regulation 61-9 (see Appendix B of this permit), to the Department at the following address:

SCDHEC Bureau of Water
Storm Water Permitting Section
2600 Bull Street
Columbia, SC 29201

2.4 Co-Permittees Under a Single NOI

You may partner with other MS4 to develop and implement your SWMP. You may also jointly submit an NOI with one or more SMS4. Each SMS4 must obtain authorization under this permit by filling out the NOI form required in part 1.4 of this permit. The description in the SWMP shall clearly indicate which permittees are responsible for implementing each of the control measures.

2.5 Renotification

Permittees authorized to discharge under this NPDES General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems, SCR030000, will be granted coverage under the next general permit upon approval of a new NOI. The re-application NOI must be submitted to the Department no later than **180 days prior to the expiration date of this permit** unless otherwise indicated by the Department. The re-application NOI shall consist of all the requirements stipulated under 2.2 of this part, signed in accordance with Section 122.22 of SC 61-9 and a copy of the most recent "Annual Report" required under Subpart 5.3 including any updates of this Annual Report The Department reserves the right to request additional information to supplement the application requirements.

2.6 Continuation of the Expired Permit

The conditions of this permit, if expired, continue in force under S.C. Code section 1-23-370(b) until the effective date of a new permit (see SC Water Pollution Control Permits Regulation 61-9.124.15), if:

2.6.1 The permittee has submitted a timely application under R.61-9 122.21 which is a complete (under R.61-9 122.21(e)) application for a new permit; and

2.6.2 The Department, through no fault of the permittee does not issue a new permit with an effective date under R.61-9.124.15 on or before the expiration date of the previous permit (for example, when issuance is impracticable due to time or resource constraints); or

2.6.3 The permittee has submitted a timely application under section R.61-9 122.21(d)(2) which is a complete application under R.61-9 122.21(e)(1) for a new permit and makes a timely appeal of the new permit. See Part 2.5, Renotification.

2.6.4 While, and if the expired permit is continued, Annual Reports are due every year on the anniversary date of the expired permit. In the case of NEW PERMITTEES, Annual Reports will be due on the anniversary date of their respective certificate of coverage.

3 SPECIAL CONDITIONS APPLICABLE TO PERMITTED STORM WATER DISCHARGES TO SENSITIVE WATERS

For the purpose of this permit, sensitive waters are waters:

- With a TMDL developed and approved, or established by EPA,
- Included in the most recent SC DHEC Bureau of Water Clean Water Act (CWA) Section 303(d) list approved by EPA,
- That pursuant to SC DHEC Bureau of Water Classifications & Standards (R.61-68) & Classified Waters (R.61-69) regulations are classified as either;
    - Outstanding National Resource Waters (ONRW)
    - Outstanding Resource Waters (ORW)
    - Trout Waters (Natural (TN), Put, Grow, and Take (TPGT) & Put and Take (TPT), or
    - Shellfish Harvesting Waters (SFH), and
- In Source Water Protection Areas (SWPA)

3.1 Determination of receiving water conditions and impacts

3.1.1 Permittees shall determine whether their SMS4 discharges to receiving waters within a TMDL watershed or with a listing in the latest CWA §303(d) list of impaired waters that is associated with a water quality monitoring station (WQMS). Visit: http://www.scdhec.gov/tmdl

3.1.1.1 Permittees shall refer to the most recent CWA §303(d) list approved by EPA to determine WQMS impairment status and to identify the pollutant(s) of concern (POC). This information shall be updated in the SMS4 annual reports subsequent to a SC CWA §303(d) 303(d) list being approved by EPA (2012, 2014 etc.)

3.1.1.2 For all TMDLs, permittees shall determine whether POC have potential to occur in SMS4 storm water discharges. This information shall be included in the annual reports. If intended uses are fully supported for a particular TMDL, no further action on the permittee's part is needed for that TMDL.

3.2 TMDL Monitoring and Assessment

3.2.1 Where a TMDL Wasteload Allocation (WLA) is assigned to point sources, permittees shall review its SWMP requirements for the control of stormwater discharges to WQMS identified in the TMDL. For SMS4 discharges of the pollutant(s) of concern to TMDL waters, permittees shall identify discharges located in the TMDL watershed draining to the impaired WQMS. The SWMP shall include a TMDL Monitoring and Assessment Plan. The Monitoring and Assessment Plan component shall;

3.2.1.1 Be completed and submitted to the SC DHEC Bureau of Water, as follows;

3.2.1.1.1 For EXISTING PERMITTEES, as defined in Part 1.4.1 of this permit, within 12 months of the effective date of permit coverage for existing TMDL.

3.2.1.1.2 For NEW PERMITTEES, as defined in Parts 1.4.2 – 7 & 2.1.2, authorized to discharge storm water from their SMS4 for the first time under this permit (or, for EXISTING PERMITTEES, where additional SMS4 areas annexed under 1.4.8 or SMS4 boundaries have expanded) within 24 months of the effective date of permit coverage for existing TMDL.

3.2.1.1.3 Monitoring and Assessment Plans, applicable to EXISTING and to NEW PERMITTEES under parts 3.2.1.1.1 & 2 above respectively, shall be submitted within 12 months of the EPA-approval or establishment of new TMDL (Effective Date of the TMDL), after the first year of permit coverage.

3.2.1.2 Describe the activities permittees will conduct to address applicable WLA, including at a minimum the following elements:

3.2.1.2.1 **The monitoring plan** to measure the pollutant levels discharged from SMS4 outfalls to waters subject to TMDL shall include:

a. Schedule for conducting monitoring to be initiated as follows;

i. Not more than 18 months from the Effective Date of this permit for existing TMDL in the case of EXISTING PERMITTEES,

ii. Not more than 30 months from the Effective Date of the Certificate of Coverage for existing TMDL, and, for TMDL issued 24 months after the Effective Date of the Certificate of Coverage in the case of NEW PERMITTEES.

iii. The monitoring plan for subsequently issued TMDL shall include a schedule for monitoring activities to be initiated no more than 18 months from the effective date of the TMDL for EXISTING and for NEW PERMITTEES.

b. Requirements to monitor the pollutants of concern, on a frequency necessary to determine statistically significant seasonal pollutant loads baseline, with duration of not less than two years. Minimum frequency and representativeness are stipulated as follows:

i. Samples and measurements taken for the purpose of the TMDL Monitoring Plan shall:

(1) Be representative of the SMS4 discharges,
(2) Be reasonably distributed in time, while maintaining representative sampling,
(3) Not be terminated for the purpose of preventing the analysis results from a permit or water quality violation,
(4) Describe and consider frequency, mass and/or rate of discharge, as appropriate, and,
(5) Be expressed in terms of units or measurements consistent with the requirements contained in the WLA.

ii. The information contained in the TMDL Monitoring Plan shall include:

(1) *Monitoring locations*, appropriate for representative data collection
(2) Explanation of why monitoring is being conducted for selected locations
(3) A Description of whether the *location(s)* are representative and contribute to pollutant loads,
(4) An indication the seasons during which sampling is intended,
(5) The pollutant of concern, or its surrogate(s), as a sampling parameter,
(6) Description of the sampling equipment, and,
(7) A rationale supporting the proposed *monitored location(s)* as reflective of water quality concerns to the MEP.

iii. The TMDL monitoring plan shall focus on the pollutant of concern, or its surrogates, to characterize the quality and quantity of the SMS4 permitted discharges to evaluate the progress toward the WLA and / or Water Quality Standards (WQS) attainment by implementing one, or a combination, of the following strategies to the MEP:

(1) In-stream monitoring, and / or
(2) Outfall monitoring.

Monitoring location(s) should be selected based on one, all, or a combination of the following basis:

(a) % MS4 area draining to the WQMS, at least 25%,
(b) Collection of a representative contributing watershed,
(c) Inclusion of the entire TMDL watershed within the MS4.

iv. Established field and sampling protocols shall be followed when characterizing MS4 discharges, such as:

(1) Guidance for collecting samples under the stormwater permitting program while fulfilling NPDES stormwater sampling needs is provided in the **NPDES Stormwater Sampling Guidance Document** (EPA 833-8-92-001) and it is incorporated by reference herein. It can be found by visiting, http://www.epa.gov/npdes/pubs/owm0093.pdf

(2) Technical assistance and support for MS4 subject to NPDES program regulations for storm water point source discharges can be found in the **Guidance Manual For the Preparation of NPDES Permit Applications for Discharges from Municipal Separate Storm Sewer Systems** (EPA-833-B-92-002) and it is incorporated by reference herein. Visit, http://www.epa.gov/npdes/pubs/owm0246.pdf

v. Permittees may collect composite samples using different protocols than those indicated in Part 3.2.1.2.1.b.ii above with respect to the time duration subject to the approval of SC DHEC.

vi. Where field analysis does not involve analytical methods approved under 40 CFR 136, permittees shall provide a description of the method used including the name of the manufacturer of the test method along with the range and accuracy of the test.

vii. When no analytical method is approved, permittees may use any suitable method but must provide a description of the method.

viii. For each monitoring location selected in Parts 3.2.1.2.1.b.ii(1) & (7) above, samples of storm water discharges shall be collected at a minimum of once per season per year.

ix. Samples collected under 3.2.1.2.1.b.viii for laboratory analysis for all wet weather flows established under Part 3.2.1.2.1.b.ii(1) & (7) viii discharged from the SMS4, shall be analyzed for the POC, or surrogates, in the TMDL.

x. For SMS4 discharges to tidal influenced waters, alternative accepted sampling protocols may be used to collect the samples required in 3.2.1.2.1.b.viii above. A description of the methodology used shall be provided as required by SC-R 61-9 122.26(d)(1)(iv)(D) & (d)(2)(iii). Adherence to 3.2.1.2.1.b.viii (1) – (4) to the MEP is expected. Documentation of any deviation is required.

c. Biological monitoring may be appropriate at some locations to demonstrate the recovery of biological communities after implementation of stormwater control measures. Monitoring locations in receiving waters must be at least both upstream and downstream of major MS4 discharges, with a frequency of at least annual basis for the permit term. Regardless, the monitoring type, representativeness of the location, pollutant(s) of concern and / or parameters to be sampled, description of sampling equipment and sampling frequency of ambient waters should be strategically designed to demonstrate the level of progress made towards meeting the applicable WLA and addressing impairments in the receiving and/or in downstream waters;

d. For each pollutant of concern, permittees shall report on the progress of the characterization of the relative pollutant levels from various SMS4 discharges to TMDL waters. Resulting data shall be included in every annual report following the commencement of monitoring for TMDL pollutant characterization.

3.2.1.2.2 **Assessment of achieving the WLA / WQS** consists of

a. Process and schedule for assessing the monitoring data to prioritize areas of the SMS4 that will be targeted for implementation of BMP,
b. Process and schedule for selection of appropriate BMP that will implement the WLA to the MEP, will protect water quality, and will satisfy the appropriate water quality requirements of the Clean Water Act, and,
c. Updates to TMDL Monitoring and Assessment Plans to be submitted in each annual report.
d. Progress on the TMDL Monitoring and Assessment Plan shall be documented in the Annual Report.

3.3 TMDL Implementation and Analysis

3.3.1 Permittees shall initiate the monitoring described in Section 3.2.1.1 above.

3.3.1.1 Any monitoring data and information generated from the previous year of the monitoring program to satisfy the provisions under Section 3.2 must be made available to SC DHEC upon request.

3.3.2 Permittees shall complete and submit TMDL Implementation Plans for approved TMDL as follows;

3.3.2.1 Within 48 months from the Effective Date of this permit, or 48 months from the new TMDL effective date, for EXISTING PERMITTEES, and,

3.3.2.2 Within 60 months from the Effective Date of the Certificate of Coverage, or 60 months from the new TMDL effective date, for NEW PERMITTEES.

3.3.3 TMDL Implementation Plans submitted to SC DHEC Bureau of Water under 3.3.2 shall describe the following:

3.3.3.1 Assessment of the monitoring data. Where long-term data is available, this assessment should include an analysis of the data to show trends;

3.3.3.2 Prioritization of areas targeted for BMP implementation and underlying rationale;

3.3.3.3 Structural and nonstructural BMP to address the WLA. Permittees should include a brief explanation of why the BMP are selected (e.g., expected load reductions or percent of capture); and,

3.3.4 Schedule for completing BMP implementation as soon as practicable. The schedule shall describe all of the BMP implementation activities that are expected to occur during the current and the next permit term. In addition to the BMP implementation activities that are expected to occur during the current permit cycle, the TMDL Implementation Plan shall include proposed monitoring to be used to evaluate the effectiveness of the BMP and facilitate the iterative revision of the BMP Implementation Plan to achieve progress towards addressing the TMDL's WLA as long as the intended uses are not supported.

3.3.5 Permittees shall implement those elements of the TMDL Implementation Plan that are scheduled to occur within the term of this permit. Schedules and plans herein are part of the re-application process.

3.3.6 Progress on the TMDL Implementation and Analysis shall be documented in the Annual Report.

3.3.7 Should there be no water quality improvement of the discharges from permitted SMS4 resulting from BMP implementation, permittees may be required to implement additional control measures, to make changes to the TMDL implementation plan, or to seek an individual permit, as needed.

3.4 Discharges to Impaired Water Bodies

3.4.1 ***Applicability.*** For SMS4 discharges of the pollutant(s) of concern to impaired waters listed with monitoring stations listed in the 303(d) list, permittees shall:

3.4.1.1 Determine whether storm water discharges from any part of SMS4 covered under this permit contribute directly or indirectly to an impaired water body with monitoring stations listed in accordance with Section 303(d) of the CWA. If your SMS4 has discharges meeting this criterion, you must comply with Section 3.4.1.2; if you do not, Section 3.4 does not apply to your SMS4.

3.4.1.2 If SMS4 have "303(d)" discharges described above, you must also determine whether TMDL have been developed by SCDHEC, and approved by EPA, for listed waterbody(ies). If no TMDL is assigned, your SMS4 must comply with parts 3.1.2 and 3.4.2. If TMDL are in effect, or assigned after submitting the NOI, you must comply with sections 3.1 to 3.3.

3.4.2 ***Water Quality Controls for Discharges to Impaired Water Bodies.*** The SWMP shall include a section describing how BMP implementation will not cause or contribute to violations of water quality standards in water bodies with impaired monitoring stations identified by the SC DHEC Bureau of Water under Section 303(d) of the Federal Clean Water Act or under 40 CFR § 130.7. The SWMP shall specifically identify BMP, control techniques, system design, and engineering methods and such other provisions deemed appropriate for control of the pollutants of concern.

3.5 Discharges to waters classified as Outstanding Resource (ORW), Trout (TN, TPGT & TPT), or Shellfish Harvesting (SFH), pursuant to SC DHEC Bureau of Water Classifications & Standards (R.61-68) Classified Waters (R.61-69).

3.5.1 Determine whether storm water from any part of the SMS4 covered under this permit discharges directly or indirectly to any water classified as Outstanding Resource (ORW), Trout (TN, TPGT & TPT), or Shellfish Harvesting Waters (SFH) pursuant to SC DHEC Bureau of Water Classifications & Standards (R.61-68) Classified Waters (R.61-69), or to Source Water Protection Areas (SWPA), including groundwater protection areas.

3.5.2 If you have discharges meeting any of these criteria, you must comply with Sections 3.4.2 & 3.6 as applicable; if you do not, Section 3.5 does not apply to your SMS4.

3.6 Discharges to Source Water Protection Areas (SWPA)

3.6.1 SWPA, including groundwater protection areas, should be afforded the protection necessary to support its uses through MCM implementation in the SMS4 area.

4 Storm Water Management Programs (SWMP)

4.1 Permit Requirements

4.1.1 You shall develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from your SMS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. The SWMP shall include management practices; control techniques and system, design, and engineering methods; and such other provisions as the Department determines appropriate for the control of such pollutants.

4.1.2 Requirement to Develop SWMP. Permittees must revise and update its written SWMP document and submit the SWMP to SC DHEC Bureau of Water as follow;

4.1.2.1 EXISTING PERMITTEES, identified in Section 1.4.1, will submit their revised SWMP along with an up-to-date NOI, if applicable, six months from the effective date of this permit. Permittees must continue to implement the current SWMP until the revised SWMP is submitted. Existing Sensitive Waters (Part 3) at the time of re-application must be identified in the submittal as required in Part 2.2.2.2.

4.1.2.2 NEW PERMITTEES, identified in Sections 1.4.2 – 1.4.8 & 2.1.2, will submit their NOI as required in the written notification on the SMS4 designation. The SWMP shall be developed as required in Section 4.1.9 below. Existing Sensitive Waters (Part 3) at the time of application must be identified in the submittal as required in Part 2.2.2.2.

4.1.3 Contents of the SWMP document. – At a minimum, the permittee shall include the following information in its SWMP document:

4.1.3.1 Ordinances, or other regulatory mechanisms, providing the legal authority necessary to implement and enforce the requirements of this permit;

4.1.4 Requirement to Develop Adequate Legal Authority to Implement and Enforce SWMP

4.1.4.1 Within *one year from the effective date of this permit* [24 months from the effective date of their certificate of coverage for NEW PERMITTEES identified in Parts 1.4.2 – 1.4.8 & 2.1.2], permittees shall review and revise their relevant ordinances, or adopt any new ordinances or other regulatory mechanisms, that provide them with adequate legal authority to control pollutant discharges into and from their SMS4, and to meet the requirements of this permit.

4.1.4.2 In order to be considered adequate, this legal authority shall, at a minimum, address the following:

a. Authority to Prohibit Illicit Discharges – Prohibit and eliminate illicit connections and discharges to the MS4. Illicit connections include pipes, drains, open channels, or other conveyances that have the potential to allow an illicit discharge to enter the MS4. Illicit discharges include all non-stormwater discharges except those from fire fighting activities, discharges from NPDES permitted industrial sources and discharges not otherwise authorized under Part 1.2.2.2 & 1.3 of this permit.

b. Allowable Non-Stormwater Discharges –Exceptions to the prohibition in Part 1.2.2.1 may include the following, only if they are considered non-significant contributors of pollutants: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)) to separate storm sewers, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water.

c. Authority to Prohibit Spills or Other Releases – Control the discharge of spills, and prohibit dumping or disposal of materials other than stormwater into the MS4.

d. Authority to Require Compliance – Require compliance with conditions in the permittee's ordinances, permits, contracts, or orders (i.e., hold dischargers accountable for their contributions of pollutants and flows).

e. Authority to Require Installation, Implementation, and Maintenance of Control Measures for owners/operators of construction sites, new development and redevelopment (including industrial and commercial activities without an NPDES industrial storm water permit) to minimize the discharge of pollutants to the MEP and to protect water quality.

f. Authority to Receive and Collect Information – Permittee must have the authority to request from operators of construction sites, new or redeveloped land, including industrial and commercial facilities information including, but not limited to, specific requirements to control construction, industrial and post-construction discharges of pollutants in storm water. Should include authority to enforce, penalize, stop work, require compliance, etc. for controlling pollutants from these sources.

g. Authority to Inspect – Permittees must have the authority to enter private property for the purpose of inspecting any facilities, equipment, practices, or operations related to stormwater discharges to determine whether there is compliance with local stormwater control ordinances/standards or requirements in this Permit.

h. Response to Violations – The permittee must have the ability to promptly require that violators cease and desist illicit discharges or discharges of stormwater in violation of any ordinance or standard and/or cleanup and abate such discharges, including the ability to:

1. Effectively require the discharger to abate and clean up their discharge, spill, or pollutant release within *a time frame consistent with the procedures outlined in the SWMP*; or
2. For uncontrolled sources of pollutants that could pose an environmental threat, require abatement within *a time frame consistent with the procedures outlined in the SWMP*; or,
3. Perform the clean up and abatement work and bill the responsible party, if necessary.
4. If a situation persists where pollutant-causing sources or activities are not abated, provide the option to order the cessation of activities until such problems are adequately addressed.
5. When all parties agree that clean-up activities cannot be completed within the timeframe provided, determine a new timeframe and notify SC DHEC.

i. Monetary Penalties – The permittee must have the ability to:

1. Levy citations or administrative fines against responsible parties.
2. Require recovery and remediation costs from responsible parties.

j. Civil/Criminal Penalties – The permittee must have the ability to impose more substantial civil or criminal sanctions (including referral to a city or district attorney) and escalate corrective response, consistent with its enforcement response plan developed pursuant to Part 4.1.4, for persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm.

k. Interagency Agreements – Control of the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements or other similar agreements with other MS4 owners, wherever and whenever such agreements are effective.

4.1.4.3 Permittees shall include as part of its written SWMP document a certification that they have taken the necessary steps to obtain and maintain full legal authority to implement and enforce each of the requirements contained in this permit. This statement must include:

a. Identification of all departments within the permittee's jurisdiction that conduct stormwater-related activities. Identify departments and/or positions (including contact information) responsible for implementing the SWMP.
b. Identification of the local administrative and legal procedures and ordinances available to mandate compliance with stormwater-related ordinances and therefore with the conditions of this permit.
c. A description of how stormwater-related ordinances are implemented and appealed.

d. A description of whether the municipality can issue administrative orders and injunctions, or whether it must go through the court system for enforcement actions.

4.1.5 Enforcement Measures and Tracking

4.1.5.1 Permittee shall implement within *12 months from the effective date of this permit,* and revise as necessary, an enforcement response plan (ERP), which sets out permittee's potential responses to violations and addresses repeat and continuing violations through progressively stricter responses as needed to achieve compliance.

4.1.5.2 **Enforcement Tracking**. Permittees shall track instances of non-compliance either in hard-copy files or electronically.

4.1.5.3 **Recidivism Reduction**. – Permittees must summarize inspection results by consuetudinary violators and include incentives, disincentives, or an increased inspection frequency at the operator's sites.

4.1.6 Requirement to Ensure Adequate Resources to Comply with SMS4 Permit. The owner / operator of a SMS4 authorized to discharge stormwater under this permit must submit the following information in the annual report. Information shall include:

4.1.6.1 The status of implementing the components of the storm water management program that are established as permit conditions;

4.1.6.2 Proposed changes to the storm water management programs that are established as permit conditions;

4.1.6.3 Revisions, if necessary, to the assessment of controls and the fiscal analysis, including a description of staff resources necessary to meet the requirements of this permit;

4.1.6.4 A summary of data, including monitoring data, that is accumulated throughout the reporting year; and,

4.1.6.5 A summary describing the number and nature of enforcement actions, inspections, and public education programs.

4.1.7 Your SWMP shall include the following information for each of the six minimum control measures (MCM) described in Section 4.2 of this permit:

4.1.7.1 Best management practices (BMP) that you or another entity will implement for each of the MCM;

4.1.7.2 Measurable goals for each of the BMP including, as appropriate, the months and years in which you will undertake required actions, including interim milestones and the frequency of the action; and,

4.1.7.3 Person, or persons, responsible for implementing or coordinating the BMP for your SWMP.

4.1.8 NEW PERMITTEES shall develop the SWMP one year from the effective date of their written certificate of coverage, unless otherwise specified.

4.1.9 NEW PERMITTEES shall have the SWMP fully implemented by the expiration date of this permit. However, the construction and post construction runoff control programs must be implemented in the entire regulated SMS4 area within eighteen months of the Effective Date of coverage under this permit (see the **Construction Site Storm Water Runoff Control** and the **Post-Construction Storm Water Management in New Development and Redevelopment,** sections 4.2.4 & 5 of this general permit). **NEW PERMITTEES** must include an implementation schedule in the NOI application. The schedule cannot exceed the permit term.

4.1.10 Modifications to the SWMP document. SC DHEC Bureau of Water may notify permittees of the need to modify the SWMP document to be consistent with the permit, in which case permittees will have 90 days to finalize such changes to the program. Permittees are required to keep the SWMP document up to date during the term of the permit. Where permittees determine that ordinance modifications are needed to address any procedural, protocol, or programmatic change, such changes must be made as soon as practicable, but not later than 360 days.

4.2 Minimum Control Measures (MCM)

The six MCM that shall be included in your SWMP are:

4.2.1 Public Education and Outreach on Storm Water Impacts

4.2.1.1 **Permit requirement**. Within the first year of permit coverage, permittees shall continue to implement, and revise if necessary, a comprehensive stormwater education/outreach program in accordance with items noted below.

4.2.1.1.1 Identify the pollutant(s) of concern (POC) within the municipality's defined watershed area(s).

4.2.1.1.2 Analyze the POC identified in 4.2.1.1.1, above, to be targeted;

4.2.1.1.3 Initiate a planning process that defines the goals and objectives of the program as they relate to at least three high priority community issues with potential to decrease the POC's effect on water quality. Include formative and summative evaluation within the planned goals and objectives. Program goals and objectives must include short-term goals geared to increase awareness of the issue as well as longer-term goals geared to affect behavior change to the maximum extent practicable (MEP).

4.2.1.1.4 Identify and analyze the audience(s) that is believed to have an influence on the POC identified in 4.2.1.1.1 above and that are believed to have influence on the goals and objectives identified in 4.2.1.1.3 above (i.e., Identify the target audience(s)).

4.2.1.1.5 Create an appropriate message(s) in accordance with the program goals and objectives that is designed to invoke a desired response in the targeted audience(s).

4.2.1.1.6 Develop an appropriate education campaign and/or materials as needed to convey any messaging created in accordance with program goals and objectives and based on knowledge of the target audience(s). Campaign items and materials can utilize various media such as printed materials, billboard and mass transit advertisements, websites, social media or other special events.

4.2.1.1.7 Determine methods and process of distribution for campaign materials in accordance with a knowledgebase of the target audience(s) (i.e. what is the best way to reach the audience using their preferred mode(s) of communication).

4.2.1.1.8 To the MEP, utilize quantitative and/or qualitative formative evaluation assessments to guide and/or change the program goals and objectives and/or program activities as needed. Evaluate the effectiveness of the program.

4.2.1.1.9 Utilize public input to the MEP (e.g., the opportunity for public comment, public meetings, or other relevant sources) in the development of this MCM.

4.2.1.1.10 During the permit coverage, the program goals and objectives identified must be implemented to the MEP.

4.2.1.1.11 There will be an assessment of the stormwater education/outreach program annually as specified in Part 5.3 of this permit. The permittee must adjust their educational materials and the delivery of such materials to address any shortcomings found as a result of these assessments.

4.2.2 Public Involvement / Participation

4.2.2.1 **Permit requirement**. Permittees are required to involve the public in the planning and implementation of activities related to the development and implementation of the SWMP. The proposed Public Involvement / Participation MCM should provide, among other things, a forum and a structure by which to encourage, or to allow, the public to participate. There may be specific ways the public might be involved, based on a program particular needs. For instance, you may want stream watch groups to be organized. As such, the proposed program should describe how this will be accomplished, and the time schedule to do so. At a minimum, permittees shall:

4.2.2.1.1 Create opportunities for citizens to participate in the implementation of stormwater controls (e.g., stream clean-ups, storm drain stenciling, volunteer monitoring, and educational activities).

4.2.2.1.2 Ensure the public can easily find information about the permittee's SWMP

4.2.2.1.3 Incorporate written procedures for implementing the **PIP** MCM into the SWMP.

4.2.3 Illicit Discharge Detection and Elimination (IDDE)

4.2.3.1 **Permit requirement**. Permittees shall develop, implement and enforce a program to detect and eliminate illicit discharges into the SMS4.

4.2.3.2 Permittees shall implement a program to detect, investigate and eliminate non-stormwater discharges (see Part 1.2.2) including illegal dumping into its system. Permittees must also procure all necessary legal authority to do this. The IDDE program must include the following:

4.2.3.2.1 **Develop System map**. Develop (if not already completed) a storm sewer system map showing the location of all outfalls, and names and location of all waters of the United States that receive discharges from those outfalls.

4.2.3.2.2 **Identify Priority Areas.** Permittees must identify priority areas (i.e. problem areas) for more detailed screening of their system based on higher likelihood of illicit connections (e.g. areas with older sanitary sewer lines), or by conducting ambient sampling to locate impacted reaches.

Permittees must document the basis for its selection of each priority area and create a list of all priority areas identified in the system no later than 12 months after the effective date of permit coverage. This priority area list must be updated *annually* to reflect changing priorities and be available for review by the permitting authority.

4.2.3.2.3 **Field screening to detect illicit discharges**. Permittees must implement, or continue to revise as applicable, a written dry weather field screening and analytical monitoring procedures to detect and eliminate illicit discharges to the MS4 within one year from the effective date of permit coverage. These procedures must be included as part of the IDDE program, and must be incorporated into the SWMP document. Dry weather field screening may consist, but is not limited to, (1) visual observations; (2) field screening monitoring; and may include (3) analytical monitoring at selected points to the extent necessary to identify and eliminate an illicit discharge in the drainage area of the suspected illicit.

a. ***Conduct Field Screening.*** Conduct dry weather field screening and / or analytical monitoring, when necessary, to identify the source of illicit discharges. At a minimum, permittees must:

   i. Identify all field screening points within the priority areas identified in Part 4.2.3.2 where field screening and analytical monitoring, if warranted, will take place. In addition, where permittees are aware of non-stormwater discharges that occur outside of the priority areas, permittees must identify points, outfalls, or major outfalls to conduct field screening in the drainage area of such non-stormwater discharges;

   ii. Permittees must include the following in the field screening portion of their IDDE program:

      a. The areas and the schedule for conducting the screening, the proposed location of outfalls, or field screening points, should reflect water quality concerns to the MEP and to protect water quality.

      b. A description of which screening methods will be used (i.e. outfall, major outfall, or screening point) and a description as to why it is appropriate for each area,

      c. A description of field screening equipment with their respective methodologies for use.

iii. Conduct all dry weather visual observations and required field screening at each outfall / field screening point. All dry weather screening activities should be conducted after 72-hours of continuous dry conditions following at least 0.10-inch of rainfall.

iv. Document elimination of the illicit discharge.

b. ***Field Screening Assessment.*** Permittees must assess the effectiveness of the Field Screening component of their IDDE program in the third annual report to determine if the level of effort is adequate in attaining the effective prohibition of non-stormwater discharges into the MS4. Where updates are found to be necessary, the permittee must make such changes and include them as part of the renotification required under Part 2.5 of this permit.

c. For non-traditional MS4 permittees, if illicit connections or illicit discharges are observed related to another operator's municipal storm sewer system then the permittee must notify the other operator within a timeframe that is consistent with the procedures found in the permittees SWMP.

d. If another operator notifies the permittee of an illegal connection or illicit discharge to the municipal separate storm sewer system then the permittee must follow the requirements specified in Part 4.2.3

e. Written procedures for implementing this program must be incorporated into the SWMP document.

4.2.3.2.4 **Procedures for tracing the source of an illicit discharge** - Permittees are required to develop written procedures for conducting investigations into the source of all identified illicit discharges, including approaches to requiring such discharges to be eliminated.

4.2.3.2.5 **Minimum Investigation Requirements -** At a minimum, after becoming aware of the illicit discharge, the permittee is required to initiate an investigation(s) to identify and locate the source of any continuous or intermittent non-stormwater discharge within a timeframe that is consistent with the procedures found in the permittees SWMP.

a. Permittees must report immediately the occurrence of any dry weather flows believed to be an immediate threat to human health or the environment to SC DHEC Emergency Response, 1-888-481-0125.

b. Illicit discharges suspected of being sanitary sewage and/or significantly contaminated must be considered a high priority and addressed in a timeframe consistent with the procedures found in the permittees SWMP.

c. Investigations of illicit discharges suspected of being cooling water, wash water, or natural flows may be delayed until after all discharges suspected of having the potential for adversely impact either human health or water quality have been investigated, eliminated and/or resolved.

d. Permittees must track all investigations to document at a minimum the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.

4.2.3.2.6 **Determining the Source of the Illicit Discharge -** Permittees are required to determine and document through their investigations the source of all documented illicit discharges. If the source of the suspected illicit discharge is found to be a suspected non-compliance with an NPDES permit, the appropriate SC DHEC Regional Office must be notified.

a. If an illicit discharge is found, but within six (6) months of the beginning of the investigation neither the source nor the same non-stormwater discharge has been identified/observed, then permittees must maintain written documentation for review by the permitting authority.

b. If the observed discharge is intermittent, permittees must document that a minimum of three (3) separate investigations were made to observe the discharge when it was flowing. If these attempts are unsuccessful, permittees must maintain written documentation for review by the permitting authority. However, since this is an ongoing program, permittees should periodically recheck these suspected intermittent discharges.

4.2.3.2.7 **Corrective Action to Eliminate Illicit Discharges** – Once the source of the illicit discharge has been determined, permittees shall:

a. Notify the responsible party of the problem in a timeframe consistent with the procedures found in the permittees SWMP. ,

b. Require the responsible party to conduct all necessary corrective actions to eliminate the non-stormwater discharge within 30 days. When, and if, elimination will take longer than 30 days, permittees shall require responsible parties to submit a plan with a schedule for elimination

c. Conduct a follow-up investigation and field screening, consistent with Part 4.2.3.4, to verify that the discharge has been eliminated upon being notified that the discharge has been eliminated,

d. Document their follow-up investigations.

e. Follow the SWMP ERP and include the resulting enforcement actions in the subsequent annual report.

4.2.3.2.8 **Public Reporting Mechanism.** Permittees must promote, publicize, and facilitate a reporting mechanism for the public and staff to report illicit discharges and establish and implement citizen request response procedures.

a. Permittees must develop a written spill/dumping response procedure for responding to public notices of illicit discharges, the various responsible agencies and their contacts, and who would be involved in illicit discharge incidence response

b. Permittees must conduct reactive inspections in response to complaints and follow-up inspections as needed to ensure that corrective measures have been implemented by the responsible party to achieve and maintain compliance.

4.2.3.9 **Employee training.** Permittees must implement a training program for all appropriate municipal field staff, which, as part of their normal job responsibilities, may come into contact with, or otherwise observe, an illicit discharge or illicit connection to the storm sewer system.

Permittees must keep track of all training and follow up training provided to address IDDE and to the staff trained in this MCM.

4.2.4 Construction Site Storm Water Runoff Control

You must develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to your SMS4 from construction activities that result in a land disturbance of greater than or equal to one acre.

Construction activity, for the purpose of this SMS4 permit, includes, at a minimum:

- Clearing, grading, and excavating that result in land disturbance of equal to or greater than one acre
- Clearing, grading, and excavating that result in disturbance of less than one acre of total land area that is part of a larger common plan of development or sale (LCP)
- In coastal counties, any land disturbance within one-half (1/2) mile of a receiving water body (but not for single-family homes which are not part of a subdivision development that result in any land disturbance less than five acres).

4.2.4.1 **NEW PERMITEES.** Within eighteen months from the effective date of coverage, first time permittees shall develop, implement, and enforce a program to reduce pollutants in any storm water runoff to their regulated SMS4 from construction activity.

4.2.4.2 **EXISITING PERMITTEES** shall continue developing, implementing, and enforcing a program to reduce pollutants in any storm water runoff to their regulated SMS4 from construction activity.

4.2.4.3 Written procedures for implementing this program, including all components described in this Construction Site Storm Water Runoff Control measure, must be incorporated into the SWMP document.

4.2.4.4 Construction Site Storm Water Runoff Control programs must include the development and implementation of, at a minimum:

4.2.4.4.1 An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law. Describe the mechanism (ordinance or other) you will use to require erosion and sediment controls at construction sites and why you chose that mechanism.

a. **NEW PERMITTEES** need to develop the ordinance or other regulatory mechanism. A plan and a schedule to have this mechanism implemented in full force and effect 18 months from the date of coverage, along with the rationale must be included in the SWMP required with the NOI.

b. **EXISTING PERMITTEES** must include a copy of the relevant sections of the existing ordinance or other regulatory mechanism along with the SWMP.

4.2.4.4.2 Requirements for construction site operators to implement appropriate BMP such as,

a. Erosion and Sediment Controls, and
b. Soil Stabilization Practices

4.2.4.4.3 Requirements for the design, installation and maintenance of effective pollution prevention measures for construction site operators to:

a. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge,

b. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on site to precipitation and to stormwater runoff that may cause adverse impacts to water quality, and,

c. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

d. The following discharges from sites are prohibited:

i. Wastewater from washout of concrete, unless managed by an appropriate control;

ii. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;

iii. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and,

iv. Soaps or solvents used in vehicle and equipment washing.

4.2.4.4.4 Permittees must require each operator of a construction activity to prepare and submit a Stormwater Pollution Prevention Plan (SWP3) prior to the disturbance of land for the SMS4 to review and approve.

4.2.4.5 **Plan Review.** Permittee must implement site plan review procedures that at a minimum meet the following:

a. Make clear to operators of construction activity that they are prohibited from commencing construction activity until they receive of written approval of the plans.

b. Approve SWP3 that complies with the technical requirements of the effective NPDES General Permit for Storm Water Discharges from Construction Activities, SCR100000, **or** establish alternative technical criteria that are equally, or more, protective of water quality. When SMS4 elects to develop alternative technical criteria, a rationale statement must be included in the SWMP documenting how the control measures selected by the SMS4 provide protection of water quality.

c. The SWP3 must include the rationale used for selecting control measures, including how the control measure protects a waterway or stormwater conveyance.

d. Permittees must use qualified individuals, knowledgeable in the technical review of SWP3 to conduct reviews.

e. Document the review of each SWP3 plan using a checklist or similar process.

f. Procedures for SWP3 review, including the review of pre-construction site plans, for construction activity that discharge pollutant(s) of concern to TMDL waters and to waters on the 303(d) List of Impaired Waters must identify potential water quality impacts the permitted discharges may have. The SWP3 shall limit sediment discharges to the MEP, shall protect water quality. Procedures for SWP3 review shall:

    i. Incorporate consideration of potential water quality impacts,

    ii. Include the review of construction site plans,

    iii. For construction projects that disturb less than 25 acres, carefully evaluate all selected BMPs and their ability to control the pollutant(s) of concern.

    iv. For construction projects that disturb 25 acres or more, require a written quantitative and qualitative assessment showing that the selected BMP will control the discharge of the pollutant, or pollutants, of concern from construction and post construction within a TMDL watershed, or to a water on the 303(d) List of Impaired Waters, and,

    v. Require that SWP3 prepared by construction activity applicants for SMS4 review and approval must demonstrate that stormwater discharges will neither cause nor contribute to a violation of water quality standards.

A copy of the most current TMDL / 303(d) List of Impaired Waters can be obtained from:

Water Quality Division
Bureau of Water
SC DHEC
2600 Bull Street
Columbia, SC 29201

The most current TMDL / 303(d) List is available at:

http://www.scdhec.gov/tmdl

4.2.4.6 **Inspections**

a. Permittees must maintain an inventory of all active construction projects. The inventory must be continuously updated as new projects are permitted and projects are completed. The inventory must contain relevant contact information for each project (e.g., name, address, phone, etc.), the size of the project and area of disturbance. Permittees must make the inventory available to SC DHEC upon request. As part of this inventory,

   i. Permittees must track the number of inspections for the inventoried construction sites throughout the reporting period to verify that the sites are inspected at the minimum frequencies required, and,
   ii. Document inspections and enforcement activities for each site in the inventory.

b. Permittees must implement procedures for inspecting construction projects in accordance with the frequency specified in table 4.2.4.6.b on the adjacent page.

Table 4.2.4.6.b Inspection Frequency

Site	**Inspection Frequency**
a. All sites *5 acres* or larger in size	All new approvals must be inspected initially within the first two weeks of commencement of land disturbing activity. All active sites shall be inspected at least monthly during construction. All inactive sites shall be inspected at least bi-monthly
b. All sites one (1) acre or larger that discharge to a tributary listed by the state/tribe as an impaired water for sediment, turbidity, or BIO under the CWA section 303(d)	
c. All sites determined to be a significant threat to water quality*	
d. All other construction sites with one (1) acre or more of soil disturbance not meeting the criteria specified in a, b, or c above	Inspection must occur at least monthly

Site	Inspection Frequency
e. Final Inspection	Inspect all permitted projects to ensure that all graded areas have reached final stabilization and that all temporary control measures are removed and permanent stormwater management BMP are permitted as required
* In evaluating the threat to water quality, the following factors must be considered: soil erosion potential; site slope; project size and type; sensitivity of receiving waterbodies; proximity to receiving waterbodies; non-stormwater discharges; past record of non-compliance by the operators of the construction site; proximity to sensitive water bodies; and, other factors relevant to particular SMS4.	

c. Permittees must adequately inspect all phases of construction. At a minimum, inspections must occur following installation of initial BMPs, during active construction, and after final site stabilization.

d. Permittees must have trained and qualified inspectors. Permittee must also continue to follow, and revise as necessary, written procedures outlining the inspection and enforcement procedures. Inspections of construction sites must, at a minimum:
   i. Check for coverage under SCR100000 by requesting a copy of any application or Notice of Intent (NOI), the stamped approved stormwater pollution prevention plan or other relevant application form during initial inspections.
   ii. Review the applicable stormwater pollution prevention plan and conduct a thorough site inspection to determine if control measures have been selected, installed, implemented, and maintained according to the plan.
   iii. Assess compliance with the permittee's ordinances and permits related to stormwater runoff, including the implementation and maintenance of designated minimum control measures.
   iv. Assess the effectiveness of control measures.
   v. Visually observe and record non-stormwater discharges, potential illicit connections, and potential discharge of pollutants in stormwater runoff.
   vi. Provide a written or electronic inspection report generated from findings in the field.

4.2.4.7 **Enforcement.** Permittee must develop an Enforcement Response Plan (ERP). The ERP must contain a description of how Permittees would use specific type of responses to address various types of violation. The ERP shall include, but is not limited to:

a. Types of response;
   i. Verbal warnings,
   ii. Written notices, and
   iii. Escalated enforcement measures such as citations, fines, stop work orders, etc.
b. Specific strategies for escalating enforcement response, where necessary, to address persistent, repeat or escalating violations.
c. Ensure ERP is reasonably effective in reducing pollutant discharges to the MEP and to protect water quality.

4.2.4.8 **MS4 Staff Training.** Permittee must ensure that all staff, whose primary job duties are related to implementing the construction stormwater program, including permitting, plan review, construction site inspections, and enforcement, is trained to conduct these activities. The training can be conducted by the permittee or outside training can be attended.

4.2.4.9 **Construction Site Operator and Public Involvement**

a. ***Construction Operator Education***. Develop and implement an effective communication process with construction contractors to educate them on areas in which improvements are needed and to enforce any required actions.

b. ***Public Involvement.*** Implement procedures for receipt and consideration of information submitted by the public. Consider coordinating this requirement with the public participation program.

4.2.5 Post-Construction Storm Water Management for New Development and Redevelopment

4.2.5.1 Post-Construction Stormwater Management Program

4.2.5.1.1 Permittees shall implement a program to control stormwater discharges from new development and redeveloped sites that disturb at least one acre (including projects that disturb less than one acre that are part of a larger common plan of development or sale, LCP) that discharge into an SMS4. The program must apply to private and public development sites, including roads.

4.2.5.1.2 The **Post-Construction Stormwater Management Program** shall ensure that controls are in place to meet the performance standards in Part 4.2.5.2 to the MEP and to prevent or minimize water quality impacts.

4.2.5.1.3 Written procedures for implementing this program, including, but not limited to, the components described in Parts 4.2.5.2 – 8, must be incorporated into the SWMP document.

4.2.5.2 Site Performance Standards

4.2.5.2.1 Permittees must establish, implement and enforce a requirement that owners or operators of new development and redeveloped sites discharging to the MS4, which disturb greater than or equal to one acre (including projects that disturb less than one acre that are part of a LCP), design, install, implement, and maintain stormwater control measures that approximate pre-development conditions to the MEP and protect water quality.

4.2.5.2.2 New Development Standards to be used can be either one, combination, or equivalent combination of design strategies, control measures, practices or provisions such as infiltration, evapotranspiration, rain harvesting, and stormwater reuse and recharge that demonstrate the runoff reduction and pollutant removal necessary to approximate pre-development conditions to the MEP and to protect water quality. The first inch of runoff must be addressed. Table

4.2.5.2.2.1, below, contains examples of specific standards that could be adopted. Permittees must describe the site design strategies, control measures and other practices deemed necessary by the MS4 to maintain, or in the case of redevelopment improve, pre-development hydrology in order to meet 4.2.5.2.1 above.

Table 4.2.5.2.2.1 Examples of Site Performance Standards

Basis for Performance Standard	***Description***	***Performance Standard***
Rainfall	*Minimum storm volume to be retained on site.*	*Design, construct, and maintain stormwater management practices that manage rainfall on-site, and prevent the off-site discharge of the precipitation from [insert standards, such as "the first one inch of rainfall from a 24-hour storm preceded by 48 hours of no measurable precipitation"]. Discharge volume reduction can be achieved by canopy interception, soil amendments, evaporation, rainfall harvesting, engineered infiltration, extended filtration and/or evapotranspiration and any combination of the aforementioned practices. This first one inch of rainfall must be 100% managed with no discharge to surface waters, except when the permittee chooses to implement the conditions in Part 4.2.5.2.3 below.*
Rainfall	*Minimum storm size to be retained on site*	*Design, construct, and maintain stormwater management practices that manage rainfall on-site, and prevent the off-site discharge of the precipitation from all rainfall events less than or equal to [insert standards, such as "the 95th percentile rainfall event"]. This objective must be accomplished by the use of practices that infiltrate, evapotranspire and/or harvest and reuse rainwater. The 95th percentile rainfall event is the event whose precipitation total is greater than or equal to 95 percent of all storm events over a given period of record.*
Recharge/Runoff	*Hydrologic Analysis*	*Design, construct, and maintain stormwater management practices that preserve the pre-development runoff conditions following construction. The post-construction rate, volume, duration and temperature of discharges must not exceed the pre-development rates and the pre-development hydrograph for 1, 2, 10, 25, 50 and 100 year storms must be replicated through site design and other appropriate practices. These goals must be accomplished through the use of infiltration, evapotranspiration, and/or rainwater harvesting and reuse practices. Defensible and consistent hydrological assessments and modeling methods must be used and documented.*
Recharge	*Groundwater Recharge Requirements*	*Any "major development" project, which is one that disturbs [insert standards, such as at least one (1) acre of land or creates at least 0.25 acres of new or additional impervious surface], must comply with one of the following two groundwater recharge requirements:* • *Demonstrate through hydrologic and hydraulic analysis that the site and its stormwater management measures maintain 100 percent of the average annual pre-construction groundwater recharge volume for the site; or*

Basis for Performance Standard	*Description*	*Performance Standard*
		• *Demonstrate through hydrologic and hydraulic analysis that the increase of stormwater discharges volume from pre-construction to post-construction for the two-year storm is infiltrated.*
Annual Pollutant Load	*Hydrologic Analysis Loading Calculations*	*Design, construct and maintain stormwater management practices that preserve the pre-development runoff conditions following development. Post construction annual pollutant loads are not allowed to exceed pre-development levels. Whenever and wherever appropriate, runoff volume and peak discharge rates for specific design storms should be taken into account as well. These goals will be accomplished through low impact development practices (LID) including impervious cover limitations and treatment means. Water quality modeling methods used to support establishment of this standard must be defensible and be consistent with the MEP standard, to protect water quality and to satisfy the appropriate water quality requirements of the CWA.*

4.2.5.2.3 **Incentives for Redeveloped Sites.** When considered at the watershed scale, certain types of developed sites can either reduce existing impervious surfaces, or at least create less 'accessory' impervious surfaces. SMS4 may develop a program to allow adjustments to the performance standard for new development or redevelopment sites that qualify.

4.2.5.3 **Site Plan Review**

4.2.5.3.1 To ensure that all applicable new development and redeveloped sites conform to the performance standards required in Section 4.2.5.2, permittees must implement project review, approval, and enforcement procedures

4.2.5.3.2 Permittees must conduct site plan reviews, using the procedures described in Part 4.2.5.3.1, of all new development and redeveloped sites which will disturb greater than or equal to one acre and discharge to the MS4 (including sites that disturb less than one acre that are part of a LCP). The site plan review must specifically address how the project applicant meets the performance standards in Part 4.2.5.2 and how the project will ensure long-term maintenance as required in Part 4.2.5.4.

4.2.5.4 **Long-Term Maintenance of Post-Construction Stormwater Control Measures**

4.2.5.4.1 All structural stormwater control measures installed and implemented to meet the performance standards of Part 4.2.5.2 must be maintained in perpetuity. Permittees must ensure the long-term maintenance of structural stormwater control measures installed

4.2.5.4.2 **Verification of maintenance responsibilities.** Permittees must require that property owners or operators of any new development or redeveloped site subject to the performance standards in Part 4.2.5.2 provide verification of maintenance for the approved structural stormwater control

measures used to comply with the performance standards.

4.2.5.5 **Tracking of Post-Construction Stormwater Control Measures**

4.2.5.5.1 **Inventory of Post-Construction Stormwater Control Measures**. Permittee must maintain an inventory of all post-construction structural stormwater control measures installed and implemented at new development and redeveloped sites, including both public and private sector sites located within the permit area. At a minimum, the inventory shall contain all BMP constructed since the effective date starting with the effective date of this permit.

4.2.5.6 **Inspections and Enforcement**

4.2.5.6.1 **Inspection Frequency.** To ensure that all stormwater control measures are operating correctly and are being maintained as required consistent with its applicable maintenance agreement, Permittees must conduct inspections of each project site covered under Part 4.2.5.2 performance standards, *at least one time during the permit term*. A description of inspection procedures must be included in the SWMP document.

4.2.5.6.2 **Post-Construction Inspection.** Within 30 days of completion of construction of any project required to meet the Section 4.2.5.2 performance standards, SMS4 must conduct a post-construction inspection to verify that BMP have been installed as per approved plans. Permittees must include in its SWMP a mechanism for being notified by construction operators/owners of their completion of active construction so that the post-construction inspection may be conducted.

4.2.5.6.3 **Inspection Reports**. Permittee must document its inspection findings in an inspection report.

Permittees must document and maintain records of inspection findings and enforcement actions and make them available for review by the permitting authority.

4.2.6 <u>Pollution Prevention/Good Housekeeping for Municipal Operations</u>

4.2.6.1 Permittees shall develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations as an integral part of the SWMP.

4.2.6.1.1 **Development of a Municipal Facility and Stormwater Control Inventory** - Permittees must update and maintain an inventory of municipally-owned and stormwater controls that are not covered under a separate general or individual NPDES permit (i.e. industrial, solid waste, etc.). Examples of these types of facilities may include but are limited to composting facilities, equipment storage and maintenance facilities, landscape maintenance on municipal property, material storage yards, public buildings, golf courses, public work yards, recycling facilities, salt storage facilities, municipally owned and/or maintained structural stormwater controls.

4.2.6.1.2 You must also include a list of industrial facilities you own or operate that are subject to SCDHEC NPDES General Permit for Storm Water Discharges Associated with Industrial Activity (SCR000000) or individual NPDES permits for discharges of storm water associated with industrial activity that ultimately discharge to your SMS4. Include the SCDHEC permit number or a copy of the Industrial NOI form for each facility.

4.2.6.1.3 **Documentation -** The list of municipally owned, or operated, facilities and stormwater controls must be maintained and available for review by the permitting authority.

4.2.6.2 **Municipally-owned or operated facility assessment**:

4.2.6.2.1 **Comprehensive Assessment of Pollutant Discharge Potential** –The permittee must develop a comprehensive assessment of all municipally-owned or operated facilities identified in Part 4.2.6.1 at least once during the permit term and include it in the permit reapplication for their potential to discharge pollutants in stormwater.

4.2.6.2.2 **Identification of "High Priority" Facilities** – Based on Part 4.2.6.2.1, the permittee must identify as "high-priority" those facilities that have a high potential to generate stormwater pollutants.

4.2.6.2.3 **Documentation of Comprehensive Assessment Results** – The permittee must document the results of the assessments and maintain copies of all site evaluation checklists used to conduct the comprehensive assessment. The documentation must include the results of the permittee's initial assessment, any identified deficiencies and corrective actions taken.

4.2.6.3 **Facility-Specific Stormwater Management**

4.2.6.3.1 **Facility-specific Stormwater Management Inspections for "High Priority" Facilities:**

Yearly Comprehensive Inspections. Starting no later than 24 months from the effective date of coverage and at least once per year thereafter, a comprehensive inspection of "high priority" facilities (Part 4.2.6.2.2), including all stormwater controls, must be performed by the permittee. Pay specific attention to waste storage areas, dumpsters, vehicle and equipment maintenance/fueling areas, material handling areas, and similar potential pollutant-generating areas. The yearly inspection results must be documented and records maintained by the SMS4. The inspection report must also include any identified deficiencies and the corrective actions taken to fix the deficiencies.

4.2.6.4 **Storm Sewer System Maintenance Activities -MS4 Maintenance**

4.2.6.4.1 **Assessment/prioritization of MS4 catch basins** – Permittees must prioritize their owned and / or operated storm water management systems / structures and implement a maintenance schedule.

4.2.6.4.2 **Municipal activities and operations**

Pollution prevention for municipal O&M activities- Permittees must develop a set of pollution prevention measures that, when applied during municipal O&M activities, will reduce the discharge of pollutants in stormwater. Municipal operation and maintenance activities to be considered include but are not limited to pavement and rights-of-way maintenance, bridge maintenance, cold weather operations, and municipally sponsored events.

4.2.6.4.3 **Maintenance of municipally-owned and/or maintained structural stormwater controls**

Permittees must inspect, and maintain, wherever and whenever necessary, all municipally-owned or maintained structural stormwater controls. The permittee must also maintain all municipally owned green infrastructure practices through regularly scheduled maintenance activities.

4.2.6.5 **Employee Training and Education Requirements.** Permittees must develop an annual employee training program for appropriate employees involved in implementing pollution prevention and good housekeeping practices.

4.2.6.5.1 This annual training must include a general stormwater education component, any new technologies, operations, or responsibilities that arise during the year, and the Permit Requirements that apply to the staff being trained.

4.2.6.5.2 A description of the program must be maintained for review by the permitting authority.

4.2.6.5.3 The permittee must also identify and track all personnel requiring training and records must be maintained.

4.2.6.5.4 Training must begin within the first year from the effective date of permit authorization.

4.2.6.6 **Requirements for Contractors Oversight:**

4.2.6.8.1 Contractors hired by permittees to perform municipal maintenance activities must be contractually required to comply with all of the SMS4 stormwater control measures, good housekeeping practices, and facility-specific stormwater management procedures.

4.2.6.8.2 Permittees must provide oversight of contractor activities to ensure that contractors are using appropriate control measures and procedures.

4.3 Reserved

4.4 Sharing Responsibility.

Implementation of one or more of the minimum measures may be shared with another entity, or the entity may fully take over the measure. You may rely on another entity only if:

4.4.1 The other entity in fact, implements the control measure.

4.4.2 The particular control measure, or component of that measure, is at least as stringent as the corresponding permit requirement.

4.4.3 The other entity agrees to implement the control measure on your behalf. Written acceptance of this obligation is expected. This obligation must be maintained as part of the description of your SWMP. If the other entity agrees to report on the minimum measure, you must supply the other entity with the reporting requirements contained in Section 5.3 of this permit. If the other entity fails to implement the control measure on your behalf, then you remain liable for any discharges due to that failure to implement.

4.5 Reviewing and Updating Storm Water Management Programs (SWMP)

4.5.1 **SWMP Review:** You must do an annual review of your SWMP in conjunction with preparation of the annual report required under Section 5.3

4.5.2 **SWMP Update:** You may change your SWMP during the life of the permit in accordance with the following procedures:

4.5.2.1 Changes adding (but not subtracting or replacing) components, controls, or requirements to the SWMP may be made at any time upon written notification to the Department.

4.5.2.2 Changes replacing an ineffective or unfeasible BMP specifically identified in the SWMP with an alternate BMP may be requested at any time. Unless denied by the Department, changes proposed in accordance with the criteria below shall be deemed approved and may be implemented 60 days from submittal of the request. If request is denied, the Department will send you a written response giving a reason for the decision. Your modification requests must include the following:

4.5.2.2.1 An analysis of why the BMP is ineffective or infeasible (including cost prohibitive),

4.5.2.2.2 Expectations on the effectiveness of the replacement BMP, and

4.5.2.2.3 An analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.

4.5.2.3 Change requests or notifications must be made in writing and signed in accordance with Section 122.22 of SC Regulation 61-9 (see Appendix B of this permit).

4.5.3 **SWMP Updates Required by the Department.**

The Department may require changes to the SWMP as needed to:

4.5.3.1 Address documented impacts on receiving water quality caused, or contributed to, by discharges from the SMS4;

4.5.3.2 Include more stringent requirements necessary to comply with new Federal statutory or regulatory requirements; or

4.5.3.3 Include such other conditions deemed necessary by the Department to comply with the goals and requirements of the Clean Water Act.

4.5.3.4 Changes requested by the Department must be made in writing, set forth the time schedule for you to develop the changes, and offer you the opportunity to propose alternative program changes to meet the objective of the requested modification. All changes required by the Department will be made in accordance with South Carolina Water Pollution Control Permits Regulation 61-9 124.5, 122.62, or as appropriate 122.63.

4.5.4 **Transfer of Operational Authority, or Responsibility for SWMP Implementation**

You must implement the SWMP on all new areas added to your portion of the SMS4 (or for which you become responsible for implementation of storm water quality controls) as expeditiously as practicable, but no later than one year from addition of the new areas. Implementation may be accomplished in a phased manner to allow additional time for controls that cannot be implemented immediately.

4.5.4.1 Within 90 days of a transfer of operational authority, or responsibility for SWMP implementation, you must have a plan for implementing your SWMP on all affected areas. The plan may include schedules for implementation. Information on all new annexed areas and any resulting updates required to the SWMP must be included in the annual report.

4.5.4.2 Only those portions of the SWMP specifically required as permit conditions shall be subject to the modification requirements of South Carolina Water Pollution Control Permits Regulation 61-9.124.5. Addition of components, controls, or requirements by the permittee(s) and replacement of an ineffective or infeasible BMP implementing a required component of the SWMP with an alternate BMP expected to achieve the goals of the original BMP shall be considered minor changes to the SWMP and not modifications to the permit.

5 Monitoring, Record keeping, and Reporting

5.1 Monitoring

5.1.1 You must evaluate program compliance, the appropriateness of identified BMP, and progress toward achieving identified measurable goals. If you discharge to a water body for which a TMDL has been established, you have additional monitoring requirements under Part 3 of this permit.

5.1.2 When you conduct monitoring at your permitted SMS4, you are required to comply with the following:

5.1.2.1 **Representative monitoring**. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

5.1.2.2 **Test Procedures**. Monitoring results must be conducted according to test procedures approved under 40 CFR part 136.

5.1.3 Records of monitoring information shall include:

5.1.3.1 The date, exact place, and time of sampling or measurements;

5.1.3.2 The names(s) of the individual(s) who performed the sampling or measurements;

5.1.3.3 The date(s) analyses were performed;

5.1.3.4 The names of the individuals who performed the analyses;

5.1.3.5 The analytical techniques or methods used; and

5.1.3.6 The results of such analyses.

5.1.4 **Discharge Monitoring Report.** Monitoring results must be reported on a Discharge Monitoring Report (DMR)

5.2 Record Keeping

5.2.1 You must retain records of all monitoring information, including, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of Discharge Monitoring Reports (DMRs), a copy of the NPDES permit, and records of all data used to complete the application (NOI) for this permit, for a period of at least three years from the date of the sample, measurement, report or application, or for the term of this permit, whichever is longer. This period may be extended by request of the Department at any time.

5.2.2 You must submit your records to the Department when specifically asked to do so. You must retain a description of the SWMP required by this permit (including a copy of the permit language) at a location accessible to the Department. You must make your records, including the notice of intent (NOI) or application and the description of the SWMP, available to the public if requested to do so in writing.

5.3 Reporting

Unless a **NEW PERMITTEE** is relying on another entity to satisfy its NPDES permit obligations under SC R. 61-9 122.35(a), annual reports must be submitted to the Department for the first permit term based on the following schedule:

1. The first annual report must be submitted to the Department fourteen months after the effective date of permit coverage.
2. Subsequent annual reports shall be submitted every twelve months from the scheduled date of the first submittal.
3. The last annual report shall be submitted, as part of renotification, 180 days prior to expiration date of the permit, see Part 2.5, **Renotification**.
4. While, and if, the expired permit is continued, Annual Reports will be due on the anniversary date of the **NEW PERMITTEE** certificate of coverage. See Parts 2.6, **Continuation of the Expired Permit**.

Unless an **EXISTING PERMITTEE** is relying on another entity to satisfy its NPDES permit obligations under SC R. 61-9 122.35(a), or unless the Department requires more frequent reports, annual reports must be submitted based on the following schedule:

1. The first report covering years 1 and 2 must be submitted to the Department twenty-seven (27) months after the effective date of the permit**.**
2. The following annual report, covering years 3 and 4 shall be submitted 180 days before the permit expiration date as part of the renotification. See part 2.5, **Renotification**.
3. While, and if the expired permit is continued, Annual Reports are due every year on the anniversary date of the expired permit. See Parts 2.6, **Continuation of the Expired Permit**.

All annual reports shall be sent to the address below unless the Department instructs permittees to submit via alternate mechanisms (i.e. electronic mechanisms):

SCDHEC Bureau of Water
Water Pollution Compliance & Enforcement
2600 Bull Street
Columbia, SC 29201-1708

All annual reports must include:

5.3.1 The status of your compliance with permit conditions, an assessment of the appropriateness of the identified BMP under Part 4, progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, and the measurable goals for each of the minimum control measures;

5.3.2 Results of information collected and analyzed, if any, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP;

5.3.3 A summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule);

5.3.4 Proposed changes to your SWMP, including changes to any BMP or any identified measurable goals that apply to the program elements; and

5.3.5 Notice that you are relying on another entity to satisfy some of your permit obligations (if applicable).

5.3.6 Information requested in the permit including, but not limited to: sections 1.4.7, 3.1.1.1, 3.2.1.1, 3.2.1.2.2, 3.3.6, 4.1.6 and in the additional conditions applicable to NPDES MS4 permits contained in Appendix B of the permit.

6 Standard Permit Conditions

South Carolina regulations require that the Standard Conditions provisioned at §122.41 of SC Regulation 61-9 be applied to all NPDES permits. In addition to complying with those Standard Conditions, there are Additional Conditions details of which are provided in Appendix B, as they are applicable to MS4 storm water discharges.

7 Definitions

All definitions contained in Section 502 of the Act and South Carolina Water Pollution Control Permits Regulation 61-9 122 shall apply to this permit and are incorporated herein by reference. For convenience, simplified explanations of some regulatory/statutory definitions have been provided, but in the event of a conflict, the definition found in the Statute or Regulation takes precedence.

Best Management Practices (BMP) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMP also include treatment requirements, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Coastal Counties are the eight South Carolina counties bordering on the Atlantic Ocean; namely, Beaufort, Berkeley, Charleston, Colleton, Dorchester, Georgetown, Horry and Jasper.

Control Measure, as used in this permit, refers to any BMP or other method used to prevent or reduce the discharge of pollutants to waters of the United States.

CWA or The Act means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et.seq.

Department means the South Carolina Department of Health and Environmental Control.

Discharge, when used without a qualifier, refers to "discharge of a pollutant" as defined at South Carolina Water Pollution Control Permits Regulation 61-9 122.2.

Illicit Connection means any man-made conveyance connecting an illicit discharge directly to a small municipal separate storm sewer.

Illicit Discharge is defined at South Carolina Water Pollution Control Permits Regulation 61-9 122.26(b)(2) and refers to any discharge to a small municipal separate storm sewer that is not entirely composed of storm water, except discharges authorized under an NPDES permit (other than the NPDES permit for discharges from the SMS4) and discharges resulting from fire fighting activities.

Indian Country, as defined in 18 USC 1151, means:

(a) All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation;

(b) All dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state; and,

(c) All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian tribe.

MEP is an abbreviation for "Maximum Extent Practicable," the technology-based discharge standard for Municipal Separate Storm Sewer Systems to reduce pollutants in storm water discharges that was established by CWA §402(p).

MS4 is an abbreviation for "Municipal Separate Storm Sewer System" and is used to refer to either a Large, Medium, or Small Municipal Separate Storm Sewer System (e.g. "the Columbia MS4"). The term is used to refer to either the system operated by a single entity or a group of systems within an area that are operated by multiple entities (e.g., the Greenville County MS4 includes MS4s operated by the city of Greenville, the South Carolina Department of Transportation, Greenville County, and others).

Municipal Separate Storm Sewer is defined at South Carolina Water Pollution Control Permits Regulation 61-9 122.26(b)(8) and means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designed or used for collecting or conveying storm water; (iii) Which is not a combined sewer; and (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at South Carolina Water Pollution Control Permits Regulation 61-9 122.2.

NOI is an abbreviation for “Notice of Intent” to be covered by this permit and is the mechanism used to request coverage under a general permit.

Outfall means a point source as defined by section 122.2 of SC Regulation 61-9 at the point where a municipal separate storm sewer discharges to waters of the State and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the State and are used to convey waters of the State.

Regulated Small Municipal Separate Storm Sewer System is defined by Section 122.32 South Carolina Regulation 61-9 and means: (1) a small municipal storm sewer system that is located in an urbanized area as determined by the latest Decennial Census by the Bureau of Census (If your small MS4 is not located entirely within an urbanized area, only the portion that is within the urbanized area is regulated.); or (2) you are designated by the Department, including where the designation is pursuant to Sections 122.35(b)(3) or (b)(4) of SC Regulation 61-9, or is based upon a petition under Section 122.26(f) of the SC Regulation 61-9. In accordance with Section 122.32(c) of SC Regulation 61-9, the Department may waive the requirements otherwise applicable to you if you meet the criteria of Sections 122.32(d) or (e) of SC Regulation 61-9.

Small Municipal Separate Storm Sewer System (SMS4) is defined at South Carolina Water Pollution Control Permits Regulation 61-9 122.26(b)(16) and refers to all small separate storm sewer systems that are owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or

other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States, but is not defined as "large"' or "medium" municipal separate storm sewer system. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

Storm Water is defined at South Carolina Water Pollution Control Permits Regulation 61-9 122.26(b)(13) and means storm water runoff, snowmelt runoff, and surface runoff and drainage.

Storm Water Management Program (SWMP) refers to a comprehensive storm water management program to manage the quality of storm water discharged from the small municipal separate storm sewer system.

Waters of South Carolina, or Waters of the State means lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the territorial limits of the State, and all other bodies of surface or underground water, natural or artificial, public or private, inland or coastal, fresh or salt, which are wholly or partially within or bordering the State or within its jurisdiction and all waters of the United States within the political boundaries of the State of South Carolina. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the South Carolina. This exclusion applies only to manmade bodies of water which neither were originally created in waters of South Carolina (such as disposal areas in wetlands) nor resulted from the impoundment of waters of South Carolina.

Waters of the United States, or Waters of the U.S. means:

(a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
(b) All interstate waters, including interstate "wetlands";
(c) All other waters such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, wet meadows, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
    (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;
    (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    (3) Which are used or could be used for industrial purposes by industries in interstate commerce;
(d) All impoundments of waters otherwise defined as waters of South Carolina under this definition;
(e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;
(f) The territorial sea; and
(g) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

"You" and "Your" as used in this permit is intended to refer to the permittee, the operator, or the discharger as the context indicates and that party's responsibilities (e.g., the city, the country, the flood control district, the U.S. Air Force, etc.).

Appendix A - Regulated Small MS4s in SC

Reference list (not inclusive of all SMS4 owners or operators subject to SC Water Pollution Control Permits Regulation 61-9 122.32 – 122.36) of Governmental Entities Located Fully or Partially Within an Urbanized Area in the State of South Carolina according to the 2000 Census of Population and Housing, U.S. Bureau of the Census (May be subject to change). Military bases, large hospitals, prison complexes, universities and colleges, sewer districts, and highway departments that own or operate an SMS4 within an urbanized area are also subject to the SC Water Pollution Control Permits Regulation 61-9 122.26(b)(16) and 122.32(a).

URBANIZED AREA (UA)	MUNICIPALITY	POPULATION (IN UA)	DENSITY
Anderson, including Centerville, Homeland Park & Northlake CDPs	Anderson	25,510	1,845
	Anderson County [1]	(40,636) + 9,958	
	Belton *	4,290	1,150
Augusta – SC, including Belvedere, Clearwater, Gloverville & Murphys Estates CDPs	Aiken	24,621	1,559
	Aiken County	40,423	
	Burnettown	2,331	558
	Edgefield County	246	
	North Augusta [2]	17,381 + 5	1,003
Charleston – N. Charleston, including Ladson, a CDP	Berkeley County	43,233	
	Charleston	93,382	847
	Charleston AFB **		
	Charleston County	45,755	
	Dorchester County	40,132	
	Folly Beach	1,760	113
	Goose Creek	28,708	903
	Hanahan	12,708	1,211
	Isle of Palms	4,508	826
	Lincolnville	904	807
	Mount Pleasant	45,582	959
	North Charleston [3]	74,336 + 3,379	1,274
	Sullivan's Island	1,911	574
	Summerville [4]	940 + 20 + 26,782	1,806
	US Navy WS **		
Charlotte – SC, including Lake Wylie & Riverview CDPs	Fort Mill	7,533	1,649
	Tega Cay *	4,044	1,287
	York County [5]	(12,552) + 20,663	
Columbia, including Dentsville, Lake Murray, Oak Grove, Red Bank, Seven Oaks, St. Andrews & Woodfield CDPs	Arcadia Lakes	882	1,316
	Cayce	11,817	1,076
	Elgin *	801	814
	Fort Jackson **		
	Forest Acres	10,558	2,133
	Irmo [6]	4,071 + 6,968	2,719
	Kershaw County *	1,678	
	Lexington *	9,769	1,709
	Lexington County	93,069	
	Pine Ridge	1,195	428
	South Congaree	2,252	697
	Springdale	2,877	712
	West Columbia	13,064	2,064

URBANIZED AREA (UA)	MUNICIPALITY	POPULATION (IN UA)	DENSITY
Florence	Darlington County	3,067	
	Florence	30,126	1,704
	Florence County	33,346	
Greenville, including Arial, Berea, City View, Dunean, Gantt, Golden Grove, Judson, Parker, Piedmont, Powderville, Sans Souci, Taylors, Wade Hampton & Welcome CDPs	Anderson County [1]	(9,958) + 40,636	
	Easley [*]	17,698	1,659
	Greenville [*]	55,789	2,140
	Greer [7*]	(10,966 + 4,867) + 399	1,057
	Liberty [*]	2,697	705
	Pickens [*]	2,970	1,240
	Pickens County	17,454	
	Spartanburg County [8]	(7,415) + 331 + 90,254	
	Travelers Rest [*]	3,693	932
Mauldin – Simpsonville, including Five Forks, a CDP	Fountain Inn [9*]	4,612 + 1,178	1,096
	Greer [7*]	(399) + 10,966 + 4,867	1,057
	Laurens County [*]	386	
	Mauldin [*]	14,978	1,764
	Simpsonville [*]	14,352	2,300
	Spartanburg County [8]	(331) + 7,415 + 90,254	
Myrtle Beach, including Forestbrook, Garden City, Little River, Murrells Inlet, Red Hill & Socastee CDPs	Atlantic Beach [*]	351	2,340
	Briarcliffe Acres *	470	712
	Conway [*]	11,506	884
	Georgetown County	5,233	
	Horry County	68,302	
	Myrtle Beach	22,696	1,351
	North Myrtle Beach [*]	10,001	808
	Surfside Beach	4,425	2,269
Rock Hill, including India Hook, Lesslie & Newport CDPs	Rock Hill	49,344	1,599
	York County [5]	(20,663) + 12,552	
Spartanburg, including Boiling Springs, Inman Mills, Roebuck, Saxon, Southern Shops, Startex & Valley Falls CDPs	Cherokee County [*]	363	
	Cowpens	2,074	978
	Duncan [*]	2,764	824
	Inman [*]	1,884	2,117
	Lyman [*]	2,391	653
	Spartanburg	39,673	2,064
	Spartanburg County [8]	(90,254)	
	Wellford [*]	1,948	1,005
Sumter, including Cane Savannah, Cherryvale, East Sumter, Lakewood, Millwood, Mulberry, Oakland, South Sumter & Stateburg CDPs	Shaw AFB **		
	Sumter	38,579	1,478
	Sumter County	25,561	

( ) Population for counties in two, or more UAs.

([*]) SMS4 owners or operators of Governmental Entities Located Fully or Partially Within an Urbanized Area in the State of South Carolina in addition to those listed on page 68831 of Appendix 6 of the preamble of the Federal Register, Vol. 64, N°. 235, Wednesday, December 8, 1999, according to the 2000 Census of Population and Housing, U.S. Bureau of the Census.

(**) Military bases, large hospitals, prison complexes, universities and colleges, sewer districts, and highway departments that own or operate an SMS4 within an Urbanized Area are also subject to SC Water Pollution Control Permits Regulation 61-9 122.32 – 122.36

([1]) In the Anderson UA, 40,636 people & in the Greenville UA, 9,958 people

([2]) In the Augusta – Richmond County, GA – SC UA, 17,381 people in Aiken County & 5 in Edgefield County

([3]) In the Charleston – North Charleston UA, 74,336 people in Charleston County & 3,379 in Dorchester County

([4]) In the Charleston – North Charleston UA, 940 people in Berkeley County, 20 in Charleston County & 26,782 in Dorchester County

([5]) In the Charlotte, NC – SC UA, 12,552 people & in the Rock Hill UA, 20,663 people

([6]) In the Columbia UA, first number is the population in the Lexington County portion of the municipality, while the second corresponds to the Richland County portion

([7]) In the Greenville UA, 10,966 people in Greenville County & 4,867 in Spartanburg County. In the Mauldin - Simpsonville UA, 399 people in Spartanburg County

([8]) In the Greenville UA, 7,415 people, in the Mauldin – Simpsonville UA, 331 people & in the Spartanburg UA, 90,254 people

([9]) In the Mauldin – Simpsonville UA, 4,612 people in Greenville County & 1,178 in Laurens County

Appendix B – Sections 122.41 and 122.22 of SC Regulation 61-9

Section 122.41

122.41. Conditions applicable to all permits. The following conditions apply to all NPDES permits. Additional conditions applicable to NPDES permits are in section 122.42. All conditions applicable to NPDES permit shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the federal regulations (or the corresponding approved State regulations) must be given in the permit.

(a) Duty to comply. The permittee must comply with all conditions of the permit. Any permit noncompliance constitutes a violation of the Clean Water Act and the Pollution Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. The Department's approval of wastewater facility Plans and Specifications does not relieve the permittee of responsibility to meet permit limits.

(1) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

(2) Failure to comply with permit conditions or the provisions of this regulation may subject the permittee to civil penalties under S.C. Code Section 48-1-330 or criminal sanctions under S.C. Code Section 48-1-320. Sanctions for violations of the Federal Clean Water Act may be imposed in accordance with the provisions of 40 CFR Part 122.41(a)(2) and (3).

(3) A person who violates any provision of this regulation, a term, condition or schedule of compliance contained within a valid NPDES permit, or the State law is subject to the actions defined in the State law.

(b) Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. (But see 122.4(g)(2)).

(c) Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(d) Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

(e) (1) Proper operation and maintenance. The permittee shall at all times properly operate and maintain in good working order and operate as efficiently as possible all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the

terms and conditions of this permit. Proper operation and maintenance includes effective performance based on design facility removals, adequate funding, adequate operator staffing and training and also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

(2) The permittee shall develop and maintain at the facility a complete Operations and Maintenance Manual for the waste treatment facilities and/or land application system. The manual shall be made available for on-site review during normal working hours. The manual shall contain operation and maintenance instructions for all equipment and appurtenances associated with the waste treatment facilities and land application system. The manual shall contain a general description of: the treatment process (es), the operational procedures to meet the requirements of (e)(1) above, and the corrective action to be taken should operating difficulties be encountered.

(3)(i) Except as stated in (ii) below, the permittee shall provide for the performance of daily treatment facility inspections by a certified operator of the appropriate grade as defined in the permit for the facility. The inspections shall include, but should not necessarily be limited to, areas which require visual observation to determine efficient operation and for which immediate corrective measures can be taken using the O & M manual as a guide. All inspections shall be recorded and shall include the date, time, and name of the person making the inspection, corrective measures taken, and routine equipment maintenance, repair, or replacement performed. The permittee shall maintain all records of inspections at the permitted facility as required by the permit, and the records shall be made available for on-site review during normal working hours.

(ii) The Department may make exceptions to operating requirements, if stated in the permit, as follows:

(A) Attendance by the certified operator of the appropriate grade ("the operator") is normally required only on days when treatment or discharge occurs.

(B) For performance of daily inspections, permits may allow a reduced grade of operator for limited time periods under specific circumstances when justified by the permittee in a staffing plan and approved by the Department.

(C) Reduced inspection frequency, but in no case less than weekly, may be suitable when specified in the permit, if there is complete telemetry of operating data and there is either a simple treatment system with a low potential for toxicity but requiring pumps or other electrical functions or the ability to stop the discharge for an appropriate period when necessary.

(D) In other circumstances where the permittee demonstrates the capability to evaluate the facility in an alternative manner equivalent to the inspection requirements in subparagraph 3(i).

(E) Any exceptions allowed under (A), (B), (C), and (D) above may be subject to compliance with the permit conditions.

(4) (i) Purpose. This regulation establishes rules for governing the operation and maintenance of wastewater sewer systems, including gravity or pressure interceptor sewers. It is the purpose of this rule to establish standards for the management of sewer systems to prevent and/or minimize system failures that would lead to public health or environmental impacts.

(ii) Authority and applicability. Under Section 48-1-30 of the Code of Laws of South Carolina (1976 as amended), the Department is authorized to adopt such rules and regulations as may be necessary to implement the Pollution Control Act. This regulation applies to all sewer systems that have been or would be subject to a DHEC construction permit under Regulation 61-67 and whose owner owns or operates the wastewater treatment system to which the sewer discharges and which discharges under NPDES. Nothing in this regulation supersedes a more stringent requirement that may be imposed by sewer system owners that manage wastewater from satellite systems. This regulation (122.41(e)(4)) is effective when published in the State Register.

(iii) General requirements. The requirements to properly operate and maintain sewer systems are the responsibility of the system owner. General Standards. The sewer system owner must:

(A) Properly manage, operate, and maintain at all times all parts of its sewer system(s), to include maintaining contractual operation agreements to provide services, if appropriate;

(B) Provide adequate capacity to convey base flows and peak flows for all parts of the sewer system or, if capital improvements are necessary to meet this standard, develop a schedule of short and long term improvements;

(C) Take all reasonable steps to stop and mitigate the impact of releases of wastewater to the environment; and

(D) Notify the Department within 30 days of a proposed change in ownership of a sewer system.

(iv) [Reserved.]

(f) Permit actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(g) Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.

(h) Duty to provide information. The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

(i) Inspection and entry. The permittee shall allow the Department, or an authorized representative (including an authorized contractor acting as a representative of the Department), upon presentation of credentials and other documents as may be required by law, to:

(1) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and Pollution Control Act, any substances or parameters at any location.

(j) Monitoring and records.

(1) (i) (A)Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(B) Samples shall be reasonably distributed in time, while maintaining representative sampling.

(C) No analysis, which is otherwise valid, shall be terminated for the purpose of preventing the analysis from showing a permit or water quality violation.

(ii) Flow Measurements.

(A) Where primary flow meters are required, appropriate flow measurement devices and methods consistent with accepted scientific practices shall be present and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of not greater than 10 percent from the true discharge rates throughout the range of expected discharge volumes. The primary flow device, where required, must be accessible to the use of a continuous flow recorder.

(B) Where permits require an estimate of flow, the permittee shall maintain at the permitted facility a record of the method(s) used in "estimating" the discharge flow (e.g., pump curves, production charts, water use records) for the outfall(s) designated on limits pages to monitor flow by an estimate.

(C) Records of any necessary calibrations must be kept.

(iii) The Department may designate a single, particular day of the month on which any group of parameters listed in the permit must be sampled. When this requirement is imposed in a permit, the Department may waive or alter compliance with the permit requirement for a specific sampling event for extenuating circumstances.

(iv) The Department may require that a permittee monitor parameters in the stream receiving his permitted discharge as necessary to evaluate the need for and to establish limits and conditions and to insure compliance with water quality standards (i.e., R.61-68).

(2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by R.61-9.503 or R.61-9.504); the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

(3) Records of monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;

(ii) The individual(s) who performed the sampling or measurements;

(iii) The date(s) analyses were performed;

(iv) The individual(s) who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

(4) Analyses for required monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless other test procedures have been specified in the permit or, in the case of sludge use or disposal, unless otherwise specified in R.61-9.503 or R.61-9.504.

(5) The PCA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $25,000 or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment provided by the Clean Water Act is also by imprisonment of not more than 4 years.

(k) Signatory requirement.

(1) All applications, reports, or information submitted to the Department shall be signed and certified (See section 122.22).

(2) The PCA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $25,000 per violation, or by imprisonment for not more than two years per violation, or by both.

(l) Reporting requirements.

(1) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b); or

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under section 122.42(a)(l).

(iii) The alteration or addition results in a significant change in the permittee's sewage sludge or industrial sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan (included in the NPDES permit directly or by reference);

(2) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(3) Transfers. This permit is not transferable to any person except after notice to the Department. The Department may require modification or revocation and reissuance of the permit to change the name of permittee and incorporate such other requirements as may be necessary under the Pollution Control Act and the Clean Water Act. (See section 122.61; in some cases, modification or revocation and reissuance is mandatory.)

(4) Monitoring reports. Monitoring results shall be reported at the intervals specified in the permit.

(i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.

(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in R.61-9.503 or R.61-9.504, or as specified in the permit,

the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.

(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.

(5) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(6) Twenty-four hour reporting.

(i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(ii) The following shall be included as information which must be reported within 24 hours under this paragraph.

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See section 122.44(g)).

(B) Any upset which exceeds any effluent limitation in the permit.

(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours (See section 122.44(g)).

(iii) The Department may waive the written report on a case-by-case basis for reports under paragraph (l)(6)(i) of this section if the oral report has been received within 24 hours.

(7) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (l)(4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l)(6) of this section.

(8) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

(m) Bypass.

(1) Definitions.

(i) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

(ii) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(2) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraph (m)(3) and (m)(4) of this section.

(3) Notice.

(i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass.

(ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour notice).

(4) Prohibition of bypass

(i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(C) The permittee submitted notices as required under paragraph (m)(3) of this section.

(ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section.

(n) Upset.

(1) Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. A upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

(2) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(3) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;

(ii) The permitted facility was at the time being properly operated; and

(iii) The permittee submitted notice of the upset as required in paragraph (l)(6)(ii)(B) of this section (24 hour notice).

(iv) The permittee complied with any remedial measures required under paragraph (d) of this section.

(4) Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

(o) Misrepresentation of Information.

(1) Any person making application for a NPDES discharge permit or filing any record, report, or other document pursuant to a regulation of the Department, shall certify that all information contained in such document is true. All application facts certified to by the applicant shall be considered valid conditions of the permit issued pursuant to the application.

(2) Any person who knowingly makes any false statement, representation, or certification in any application, record, report, or other documents filed with the Department pursuant to the State law, and the rules and regulations pursuant to that law, shall be deemed to have violated a permit condition and shall be subject to the penalties provided for pursuant to 48-1-320 or 48-1-330.

Additional conditions applicable to NPDES MS4 permits

Requiring an individual permit. The Department may require any person authorized by a general permit to apply for and obtain an individual NPDES permit. An applicant, any affected state, or interstate agency, the Regional Administrator, or any other interested person may petition the Department to take action under this paragraph. The petition shall indicate specific reasons why an individual permit is requested and the interest in or relationship of the petitioner to the applicant. Cases where an individual NPDES permit may be required include the following:

(A) The discharger is not in compliance with the conditions of the general NPDES permit;
(B) A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
(C) Effluent limitation guidelines are promulgated for point sources covered by the general NPDES permit, Land Application permit;
(D) A Water Quality Management plan containing requirements applicable to such point sources is approved;
(E) Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary;
(F) Standards have been promulgated for the discharges covered by the general NPDES permit; or
(G) The discharge(s) is a significant contributor of pollutants. In making this determination, the Department may consider the following factors:
    (1) The location of the discharge with respect to waters of the State;
    (2) The size of the discharge;
    (3) The quantity and nature of the pollutants discharged to waters of the State; and
    (4) Other relevant factors.

Any MS4 owner or operator authorized by this general permit may request to be excluded from coverage under this general permit by applying for an individual permit. The owner or operator shall submit an application, with reasons supporting the request, to the Department no later than 90 days after the publication of the general permit in the State Register. The request shall be processed in accordance with R.61-9.124. The request shall be granted by issuing of an individual permit if the reasons cited by the owner or operator are adequate to support the request.

When an individual NPDES permit is issued to a MS4 owner or operator otherwise subject to a general NPDES, permit, the applicability of the general permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit.

A source excluded from a general permit solely because it already has an individual permit may request that the individual permit be revoked, and be covered under the general permit. Upon revocation of the individual permit, the general permit shall apply to the source.

Small Municipal Separate Storm Sewer System The owner / operator of a small municipal separate storm sewer system (SMS4) authorized to discharge stormwater under this permit must submit the following information in the annual report. Information shall include:

(1) The status of implementing the components of the storm water management program that are established as permit conditions;
(2) Proposed changes to the storm water management programs that are established as permit conditions;
(3) Revisions, if necessary, to the assessment of controls and the fiscal analysis, including a description of staff resources necessary to meet the requirements of this permit;
(4) A summary of data, including monitoring data, that is accumulated throughout the reporting year;
(5) Annual expenditures and proposed budget, including legal restrictions in the use of such funds, for year following each annual report;
(6) A summary describing the number and nature of enforcement actions, inspections, and public education programs; and,
(7) Identification of water quality improvements or degradation.

Storm Water Discharges.
The reauthorized permit coverage for storm water discharges composed entirely of storm water issued pursuant to section 122.26(e)(9) of this regulation shall require compliance with the conditions of the permit based on 122.34(e) for existing TMDL at the time of permit coverage as expeditiously as practicable, but in no event later than three years after the date of issuance of the permit.

A proposed monitoring program for representative data collection for the term of the permit that describes the location of outfalls or field screening points to be sampled (or the location of instream stations), why the location is representative, the frequency of sampling, parameters to be sampled, and a description of sampling equipment in compliance with 122.34(e) is appropriate for new permittees authorized pursuant to section 122.26(e)(9).

Water Quality Standards and State requirements: In addition to effluent limitations guidelines or standards under sections 301, 304, 306, 307, and 318, and 405 of CWA conditions in this permit are necessary to achieve water quality standards established under section 303 of the CWA, including State narrative criteria for water quality.

Limitations control all pollutants or pollutant parameters which the Department determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality.

Wherever and whenever it is determined that discharges covered under this permit cause, have the reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a State water quality standard, this permit contains procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, the sensitivity of the species, and the increased flow of discharges composed entirely of storm water in the receiving water.

Where SC DHEC Bureau of Water has determined that a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentration of a State numeric criteria within a State water quality standard for an individual pollutant, this permit contain effluent limits for that pollutant of concern.

Where the Department has not established a water quality criterion for a specific chemical pollutant that is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion within an applicable State water quality standard, this permit establishes effluent limitations on an indicator parameter (surrogate) indicated for the pollutant of concern, provided it is identified in a TMDL for which pollutants are intended to be controlled. This permit requires all effluent and ambient monitoring necessary to show that during the term of the permit the limit on the indicator parameter continues to attain and maintain applicable water quality standards.

For water quality-based effluent limits WQBEL, compliance with this permit shall ensure that the level of water quality to be achieved by limits on permitted point sources established is derived from, and complies with all applicable water quality standards; and that effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available wasteload allocation WLA for the discharge prepared by the State and approved by EPA pursuant to 40 CFR 130.7.

Best management practices (BMP) to control or abate the discharge of pollutants are appropriate controls under section 402(p)(3)(B) of the CWA to reduce the discharge of pollutants for discharges from MS4.

Interim effluent limitations, standards or conditions are at least as stringent as the final limitations, or conditions in the previous permit. In no event may this permit contain a less stringent effluent limitation that would result in a violation of a water quality standard under section 303 of the CWA applicable to such waters. In the event this section conflicts with the provisions of the Clean Water Act, the CWA will apply.

Discharges to territorial seas, the contiguous zone, and the oceans are not authorized for coverage under this permit unless such discharges incorporate, and are in compliance with, the ocean discharge criteria of 40 CFR Part 125, Subpart M, CWA 403(c) criteria for ocean discharges.

Qualifying State, Tribal, or Local programs.

A qualifying local program is a local storm water management program that imposes, at a minimum, the relevant requirements of SC Water Pollution Control Permits Regulation 61-9 122.34(b). For storm water discharges associated with small construction activity identified in section 122.26(b)(15), this permit include conditions that incorporate qualifying State, Tribal, or local erosion and sediment control program requirements by reference. All MS4 **Construction Site Storm Water Runoff Control & Post-Construction Storm Water Management in New Development and Redevelopment or Permanent / Long Term Storm Water Pollution Control Measures** MCM include:

(1) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;

(2) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

(3) Requirements for construction site operators to develop and implement a storm water pollution prevention

plan. (A storm water pollution prevention plan includes site descriptions, descriptions of appropriate control measures, copies of approved State, Tribal or local requirements, maintenance procedures, inspection procedures, and identification of non-storm water discharges); and

(4) Requirements to submit a site plan for review that incorporates consideration of potential water quality impacts.

For storm water discharges from construction activity identified in section 122.26(b)(14)(x), this permit also include conditions that incorporate qualifying State, Tribal, or local erosion and sediment control program requirements by reference. In addition to the elements listed above, additional requirements necessary to achieve the applicable technology-based standards of "best available technology" and "best conventional technology" have been included based on the best professional judgment of the permit writer.

In the event this permit, or any section herein, conflicts with any provision contained in SC Water Pollution Control Permit Regulation 61-9, SC R.61-9 will apply. In the event any applicable section of SC R-61-9 conflicts with the provisions of the Clean Water Act, the CWA will apply.

Section 122.22

122.22. Signatories to permit applications and reports.

(a) Applications. All permit applications shall be signed as follows:

(1) For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or

(ii) The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(3) For a municipality, State, Federal, or other public agency or public facility: By either a principal executive officer, mayor, or other duly authorized employee or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(i) The chief executive officer of the agency, or

(ii) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator, Region IV, EPA).

(b) All reports required by permits, and other information requested by the Department, shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a) of this section;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,

(3) The written authorization is submitted to the Department.

(c) Changes to authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

(d) Certification. Any person signing a document under paragraph (a) or (b) of this section shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

2010 Urbanized Areas and Clusters

Legend

- 2012 303(d) Impaired Stations
- 2010 Urbanzied Cluster
- 2010 Urbanized Area
- 2010 Incorporated Places
- Approved TMDL Watersheds

Small Municipal Separate Storm Sewer Systems (SMS4) Notice of Intent (NOI) for authorization to discharge Storm Water from Regulated SMS4 under SC NPDES Phase II General Permit (SCR030000)

Prepared For:

Beaufort County, SC

Prepared By:

Applied Technology & Management, Inc.

Date: October 2014

South Carolina Department of Health and Environmental Control
Bureau of Water
2600 Bull Street
Columbia, South Carolina 29201-1708

Small Municipal Separate Storm Sewer Systems (SMS4) Notice of Intent (NOI) Template for authorization to discharge Storm Water from Regulated SMS4 under SC NPDES Phase II General Permit (SCR030000)

FOR OFFICE USE ONLY	
DATE RECEIVED	
DATE REVIEW COMPLETE	
REVIEWED BY	

PURPOSE

The purpose of the SMS4 Notice of Intent (NOI) is for a Regulated Small Municipal Separate Storm Sewer System located partly, or wholly, in the State of South Carolina to seek authorization to discharge stormwater runoff under SC Phase II NPDES General Permit for Storm Water Discharges from Regulated Small Municipal Separate Storm Sewer Systems, SCR030000

INSTRUCTIONS

The following information must be provided to the Bureau of Water, Stormwater Permitting Section as application material. Application questions are intended to highlight the SWMP requirements under the SMS4 permit. Each element not currently performed must be implemented by the date required in the permit.

NOTE: The proposed stormwater quality management program should provide a forum and a structure by which to encourage, or to allow, the public to participate. There may be specific ways the public might be involved, based on a program's particular needs. For instance, you may want stream watch groups to be organized. As such, the proposed program should describe how this will be accomplished, and the time schedule. Each SWMP will be reviewed by the Department to ensure it is the functional equivalent of the permit under which the SMS4 is seeking coverage.

This application is divided into five Parts (I thru V) and seven subsequent Sections (1 thru 7). Each must be completed in their entirety. Attached at the end this SMS4 NOI, there are three tables listed as addenda to sections 1 thru 6 to list BMP Measurable Goals and Implementation Milestones for each MCM. Complete each addendum, providing more details on the goals and milestones for each BMP outlined in this NOI as required in the permit and attach them to this NOI.

In Table 1, you must list by name and description the Best Management Practices (BMP) that will be implemented in each area (based on a set of priorities identified in the area). In Table 2, provide the administrative information to complete those identified BMP as explained below. In Table 3, provide more details on the goals and milestones for each BMP outlined in this NOI as required in the permit. Timely submission of this properly completed NOI template satisfies the requirements of SC Water Pollution Control Permits Regulation 61-9 122.1(b), 122.6(1), 122.21(c), (d) & (e), 122.22(a)(3), (b), (c) & (d), 122.26(a)(9) &(f)(5), 122.28(b)(2)(ii), (iii) & (iv), 122.33, 122.34(d) & (e) and 124.52(c) as appropriate

ADMINISTRATIVE INFORMATION	
Primary Contact and Position/Title	The person in your organization serving as the primary contact.
Other Department and Roles	Other departments within your organization involved in the project and how their role is identified.
Other Government Entity and Roles	Identification of other government entities responsible for implementing one or more of the BMP. Include a copy of the interlocutory agreement, or contract, or proposed agreement with execution schedule.
Other Institutions and Roles	Identification of partnerships with another MS4 operator or institution (e.g., Chamber of Commerce, environmental interest organizations, civic groups) to achieve the BMP.
Equipment Needs (if applicable)	What are these needs?
Target Groups (if applicable)	Specific kinds of groups that will be targeted, such as service industries (i.e., carpet cleaning), civic groups, schools, and church groups, etc.

PART 1
ADMINISTRATIVE INFORMATION

Name of municipal entity / tribe / state agency / federal agency / or public institution that owns / operates a small MS4:

Beaufort County	**N/A**
MS4	NPDES Small MS4 Permit Coverage Number
Gary Kubic	**County Administrator**
Responsible Elected Official or Officer	Title

100 Ribaut Road	**Beaufort**	**SC**	**29902**
Street Address	City	State	Zip Code

Indicate whether the SMS4 is a:
- ☒ Municipal Entity
- ☐ Tribe
- ☐ State Agency
- ☐ Federal Agency
- ☐ Other Public Institution: _____.

PROGRAM CONTACT	TECHNICAL CONTACT
Eric Larson	**Michael Klink**
Name	Name
elarson@bcgov.net	**mklink@appliedtm.com**
Email Address	Email Address
(843) 255-2805	**(843) 298-2369**
Phone Number	Phone Number

☒ Attach an organizational chart that shows the different departments involved in stormwater management.

☐ Indicate whether or not the SMS4 is relying on another entity to satisfy one or more of its permit obligations. If checked, the entities and the elements being implemented must be listed below with copy of all written documentation required under Section 4.4 attached to this NOI.

_____

_

☐ Indicate whether or not the SMS4 is a co-permittee partnering with other SMS4 to develop and implement the SWMP. If checked, SMS4 may jointly submit an NOI with one or more SMS4 in it. Each SMS4 in the NOI must obtain authorization to discharge under SCR030000. The SWMP description must clearly indicate the joint permittees responsibility. Each and every element being implemented must be discussed in the written documentation pertinent to Section 2.4 attached to this SMS4 NOI.

PART II
SMS4 INFORMATION

ITEM A
MS4 SYSTEM

Urbanized Area (UA), or Core Municipality (if the SMS4 is not located in an UA)	**Beaufort County, SC**
Latitude and Longitude of the center of the SMS4	**32º 14' 50" N, 80º 50' 19"W**
Jurisdiction in square miles within current corporate boundaries:	**≈ 71 sq miles (Black Outline)**
Area of additional urban growth boundary:	**≈ 51 sq miles (Magenta Outline)**

The permit will be used to regulate the:

☐ Entire Jurisdiction

☒ UA portions, as follows (Counties only):

Unincorporated Area	**≈ 596 sq miles**
Total Area:	Unincorporated, Urbanized Area **≈ 71 sq miles (Black Outline)**

ITEM B
STORM DRAINAGE INFRASTRUCTURE

Give figures for the following features of stormwater drainage infrastructure. For a county government, indicate whether the figures represent the entire county or only the urbanized area. Figures for length and number of culverts and catch basins may be rough estimates. **Figures represent the entire County**

Entire Jurisdiction	**≈ 732 sq miles (Beaufort County)**	Urbanized Area(s)	**≈ 71 sq miles**	COUNTIES ONLY
Storm Sewers	**≈ 528,000 Feet**	Open Ditches	**≈ 10,560,000 Feet**	
Culverts	**Included in Storm Sewers**	Catch Basins	**≈ 12,000**	

Retention and / or Detention Basins **≈ 1,000**

ITEM C
STATE THE FOLLOWING, INCLUDE ITEMS IN A COPY OF THE SMS4 MOST CURRENT MAP AS POSSIBLE

Zoned areas for commercial or industrial activity	See Map 1	State vocational, technical, college or universities	5, See Map 1
Actual areas of commercial or industrial activity	See Map 1	Federal vocational, technical, college or universities	N/A
Other municipally owned/operated industrial activities	See Map 1	City Roads	See Map 1
Municipal or County Wastewater Treatment Plants	4, See Map 1	County Roads	See Map 1
Vehicle Fleet Maintenance Centers	1, See Map 1	Perennial and intermittent streams	See Map 2
Power Plants	N/A	Topography or Drainage Patterns	See Map 2
Airports	2, See Map 1	Landfills (Garbage Convenience Stations)	N/A (12)
Military Installations	2, See Map 1	Indian Country lands, if any	N/A
		Drainage Pipe and Structures	See Map 3

ITEM D IDENTIFYING IMPAIRED STREAMS AND ALL SENSITIVE WATER BODIES		

Identify water bodies (located throughout the SMS4 jurisdiction, or extending one mile beyond the SMS4 service boundaries if cost effective) listed in Part 3 of the permit. Impairments, indicating the nature of pollution (cause) and their sources should be listed below. Visit: http://www.scdhec.gov/tmdl

STREAM NAME	WQMS	Impairment(s)
See attached list of water bodies on the 2012 303(d) List for Beaufort County		

ITEM E HAS THE STATE OR EPA ISSUED A TDML FOR ANY STREAMS LOCATED THROUGHOUT THE SMS4 JURISDICTION OR EXTENDING ONE MILE BEYOND THE SMS4 SERVICE BOUNDARY?	

Yes ☒ No ☐ If yes, list stream, WQMS, and parameter(s) of concern, visit: http://www.scdhec.gov/tmdl:

STREAM	WQMS and PARAMETERS OF CONCERN
Okatie River (2012 303(d) List)	**Shellfish Sites: 18-07, 18-08, 18-16, 18-17; Fecal Coliform**

PART III EXISTING LEGAL AUTHORITY TO CONTROL STORMMWATER DISCHARGES TO MS4		

Review ordinances applicable to the control of pollution that might enter the SMS4. Extract the portions of the ordinances that apply to the control of the storm sewer system and attach a copy of those portions to this NOI. Ordinances dealing with stormwater issues might be found, for example, in conjunction with litter control, prohibition of dumping, clean up of spills, grading/building permits, sewer connection ordinances, erosion and sediment practices, subdivision regulations or other land use/development ordinances. Ensure that all legal authority necessary to enable the SMS4 to carry out all provisions of the permit are obtained.

The portions of the existing ordinance that relate to stormwater are attached to the permit (Part II - Chapter 99; Part II Chapter 106, Article XIII - Division 4; and Part II – Chapter 106, Article VII – Division 3). Beaufort County is proposing to create a stand-alone document of the stormwater ordinance as part of their MS4 Program.

PART IV PROPOSED STORMWATER MANAGEMENT PROGRAM		

This NOI requires SMS4 seeking coverage to provide a description of existing and planned activities as well as Best Management Practices (BMP) for a SWMP. The following sections correspond to the six minimum control measures MCM to be included in the SWMP required in part 4.2 of the permit. If another MS4 will be responsible for implementing any or all portions of any or all following six minimum measures, attach the inter local agreement (ILA) and the proposed schedule of implementation. The NOI must be completed by answering all pertinent questions for the six MCM.

See the attached six MCMs.

PART V
SIGNATURE OF RESPONSIBLE CORPORATE OFFICER

This NOI must be signed as follows: For a municipality, state, federal, other public agency, and/or co-permittees by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes one of the following:

i. The chief executive officer of the agency.

ii. A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

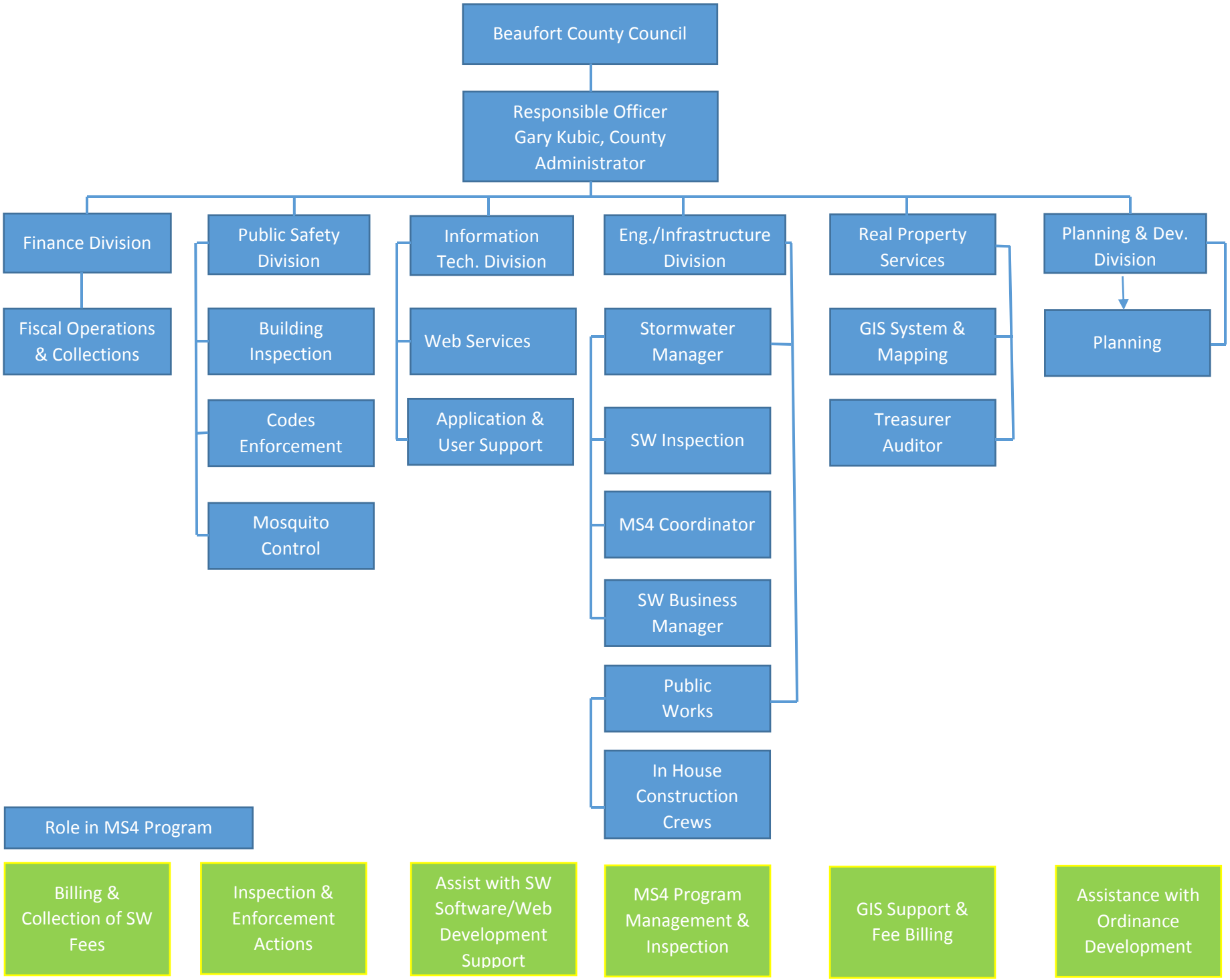
"*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*"

	County Administrator	
Signature	Title/MS4	Date

Part I

Administrative Information

Beaufort County Stormwater Management Organization Chart


Beaufort County Council
Responsible Officer
Gary Kubic, County
Administrator
Finance Division
Fiscal Operations
& Collections
Public Safety
Division
Building
Inspection
Codes
Enforcement
Mosquito
Control
Information
Tech. Division
Web Services
Application &
User Support
Eng./Infrastructure
Division
Stormwater
Manager
SW Inspection
MS4 Coordinator
SW Business
Manager
Public
Works
In House
Construction
Crews
Real Property
Services
GIS System &
Mapping
Treasurer
Auditor
Planning & Dev.
Division
Planning
Role in MS4 Program
Billing &
Collection of SW
Fees
Inspection &
Enforcement
Actions
Assist with SW
Software/Web
Development
Support
MS4 Program
Management &
Inspection
GIS Support &
Fee Billing
Assistance with
Ordinance
Development

Part II

SMS4 Information

Beaufort County Stormwater Management
Supporting Maps

N
W E
S

Coosaw River
Morgan River
Chechessee River
Broad River
Beaufort River
Okatee River
Port Royal Sound
Skull Creek
Atlantic Ocean
May River
Calibogue Sound
Cooper River
170
21
278

0 1.25 2.5 5 7.5 10 Miles

Legend

- Waste Water Treatment Plants (4)
- Garbage Convenience Centers (12)
- Detention Center (1)
- Mosquito Control (1)
- Construction Debris (1)
- Education (5)
- Military (2)
- Airports (2)

Public Works

- Fuel Station (1)
- North (1)
- South (1)

- Beaufort County County Limits
- MS4 Jurisdiction Urbanized Area
- MS4 Additional Urban Growth Area
- County Owned Parcels

Zoned Areas

- Industrial
- Commercial

Road Types

- Municipal
- Town
- County
- State
- Interstate

Beaufort County MS4 Map 1

October 2014

DISCLAIMER: This map is for reference and discussion purposes only. Data provided are derived from multiple sources with varying levels of accuracy. The information shown hereon is not intended for site specific use or design.

APPLIED TECHNOLOGY & MANAGEMENT, INC.

N
W E
S

Coosaw River
Morgan River
21
170
Chechessee River
Broad River
Beaufort River
Okatee River
Port Royal Sound
Skull Creek
278
May River
Calibogue Sound
Cooper River
Atlantic Ocean

Legend

- Beaufort County County Limits
- MS4 Jurisdiction Urbanized Area
- MS4 Additional Urban Growth Area
- County Owned Parcels

ELEVATION

- < 5 ft
- 10 ft
- 15 ft
- 20 ft
- 25 ft
- 30 ft
- > 35 ft

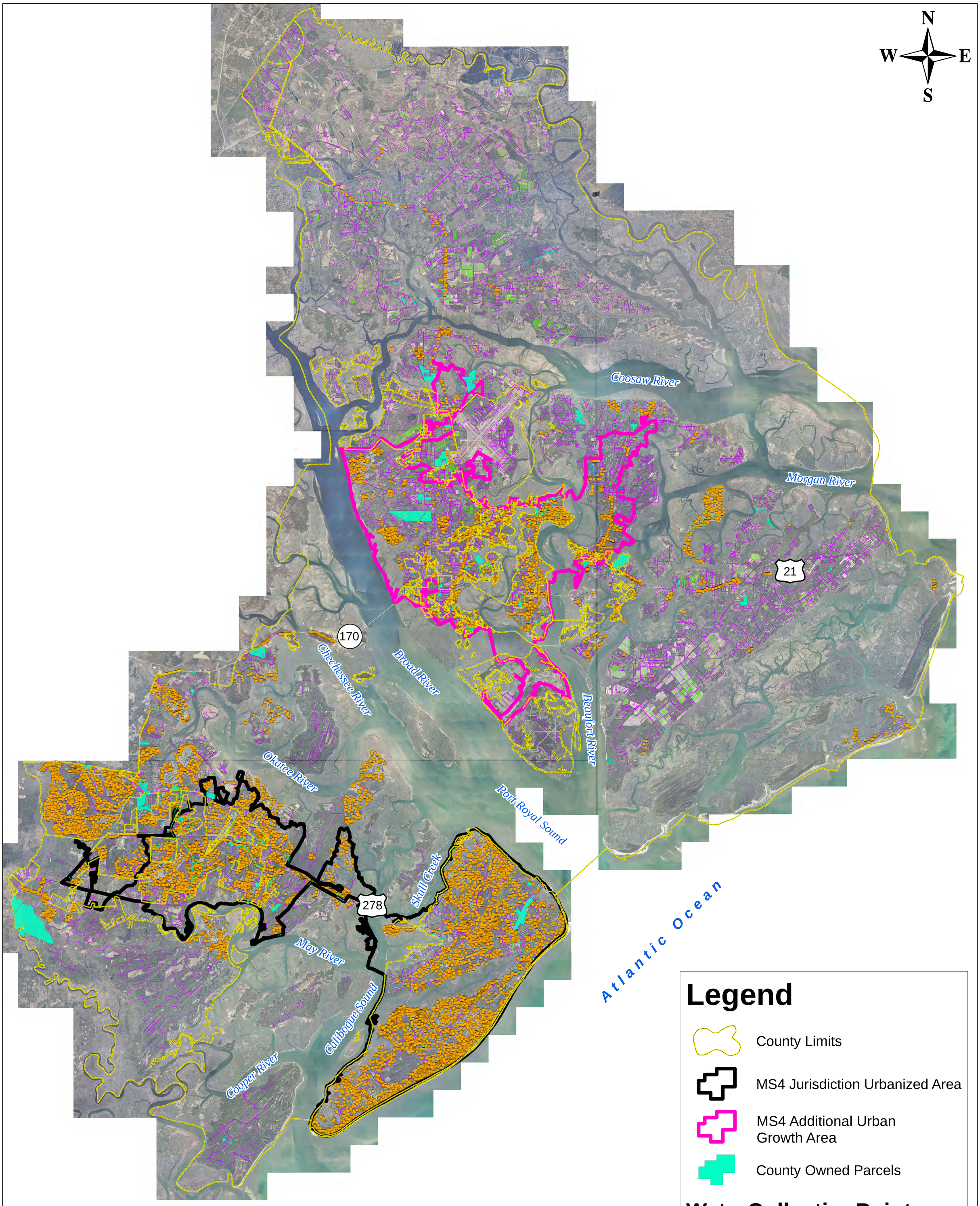
0 1.25 2.5 5 7.5 10 Miles

Beaufort County MS4 Map 2

October 2014

DISCLAIMER: This map is for reference and discussion purposes only. Data provided are derived from multiple sources with varying levels of accuracy. The information shown hereon is not intended for site specific use or design.

APPLIED TECHNOLOGY & MANAGEMENT, INC.



Beaufort County MS4 Map 3

October 2014

DISCLAIMER: This map is for reference and discussion purposes only. Data provided are derived from multiple sources with varying levels of accuracy. The information shown hereon is not intended for site specific use or design.

APPLIED TECHNOLOGY & MANAGEMENT, INC.

Water Bodies Located in Beaufort County on the 2012 303(d) List

BASIN	HUC_12	COUNTY	STATION	DESCRIPTION	USE	CAUSE
SALKEHATCHIE	030502070704	BEAUFORT	CSTL-098	COMBAHEE RVR AT US 17 10 MI ESE YEMASSEE	AL	DO
SALKEHATCHIE	030502070704	BEAUFORT	CSTL-098	COMBAHEE RVR AT US 17 10 MI ESE YEMASSEE	FISH	HG
SALKEHATCHIE	030502070706	Beaufort	MD-252	COMBAHEE RVR OFF FIELDS POINT LANDING OFF END OF S-15-161	AL	TURB
SALKEHATCHIE	030502071101	BEAUFORT	RO-02005	COOSAW RVR NEAR MOUTH OF BULL RVR	AL	CU
SALKEHATCHIE	030502071101	BEAUFORT	RO-02005	COOSAW RVR NEAR MOUTH OF BULL RVR	AL	TURB
SALKEHATCHIE	030502071101	BEAUFORT	RO-036037	WIMBEE CK 0.7 MI SE OF MOUTH OF S WIMBEE CK	AL	TURB
SALKEHATCHIE	030502071101	Beaufort	RO-09367	BULL RIVER WHERE WILLIMAN CREEK AND WIMBEE CREEK MEET WITH THE BULL RIVER BETWEEN CHISOLM AND BUZZARD ISLANDS CLOSE TO THE CHISOLM ISLAND SIDE OF BULL RIVER.	AL	TURB
SALKEHATCHIE	030502071101	BEAUFORT	RT-01643	TRIBUTARY TO BULL RIVER, 7.5 M NE OF BEAUFORT	AL	TURB
SALKEHATCHIE	030502071102	Beaufort	16A-33	LUCY POINT CREEK APPROX. 0.75 MI NE OF CONFL ROCK SPRINGS CK	SHELLFISH	FCB
SALKEHATCHIE	030502071102	BEAUFORT	RT-02015	TIDAL CK NEAR CONFL OF COOSAW AND BULL RVRS CHISOLM ISL	AL	CU
SALKEHATCHIE	030502071102	BEAUFORT	RT-02015	TIDAL CK NEAR CONFL OF COOSAW AND BULL RVRS CHISOLM ISL	AL	TURB
SALKEHATCHIE	030502071103	BEAUFORT	16A-18	EDDING CREEK AT SHRIMP DOCK	SHELLFISH	FCB
SALKEHATCHIE	030502071103	Beaufort	16A-19	ROCK SPRINGS CREEK,UPPER REACHES	SHELLFISH	FCB
SALKEHATCHIE	030502071103	Beaufort	16A-23	EDDING CR AT SMALL TRIBUTARY BETWEEN STATIONS 9 AND 18	SHELLFISH	FCB
SALKEHATCHIE	030502071103	Beaufort	16A-25	JENKINS CREEK AT SMALL UNNAMED TRIBUTARY NORTH SIDE OF WARSAW ISLAND	SHELLFISH	FCB
SALKEHATCHIE	030502071103	Beaufort	16A-27	COFFIN CREEK MOUTH AT MORGAN RIVER	SHELLFISH	FCB
SALKEHATCHIE	030502071103	BEAUFORT	16A-28	COFFIN CREEK, HEADWATERS AT SHRIMP DOCKS	SHELLFISH	FCB
SALKEHATCHIE	030502071103	BEAUFORT	16A-30	JENKINS CREEK, 500FT. NORTH OF STORMWATER AT DAWTAW ISLAND GOLF COURSE,	SHELLFISH	FCB
SALKEHATCHIE	030502071103	Beaufort	16A-36	JENKINS CREEK APPROX. 1.0 MI SE CONFL WARSAW FLATS	SHELLFISH	FCB
SALKEHATCHIE	030502071103	Beaufort	16A-37	JENKINS CREEK AT POLOWANA ISLAND	SHELLFISH	FCB
SALKEHATCHIE	030502071103	Beaufort	16A-38	PINE ISLAND CREEK NEAR CONFL VILLAGE CREEK	SHELLFISH	FCB
SALKEHATCHIE	030502071103	BEAUFORT	RT-02027	TRIB TO SPARROW NEST CK NEAR DATHA ISLAND	AL	CU
SALKEHATCHIE	030502071103	BEAUFORT	RT-032033	COFFIN CK 0.7 MI SE OF CONFL W/ MORGAN RVR	AL	TURB
SALKEHATCHIE	030502071104	Beaufort	MD-281	PARROT CREEK AND COOSAW RIVER MARKER #1 SHELLFISH 14-10	AL	TURB
SALKEHATCHIE	030502071104	BEAUFORT	RO-01163	SAINT HELENA SOUND, 7 M SW OF EDISTO BEACH	AL	TURB
SALKEHATCHIE	030502071104	BEAUFORT	RO-02001	COOSAW RVR NEAR MOUTH OF COMBAHEE RVR	AL	TURB
SALKEHATCHIE	030502080501	Beaufort	15-19	BATTERY CREEK 1000 FEET BELOW RABBIT ISLAND	SHELLFISH	FCB
SALKEHATCHIE	030502080501	Beaufort	15-25	BATTERY CREEK - DOWLINGWOOD TRIBUTARY (C6-97)	SHELLFISH	FCB
SALKEHATCHIE	030502080503	Beaufort	15-20	CAPERS CR SSG AT PENN COMMUNITY SRVCS RETREAT CTR	SHELLFISH	FCB
SALKEHATCHIE	030502080601	BEAUFORT	MD-007	POCOTALIGO RVR AT US 17 AT POCOTALIGO	REC	FC
SALKEHATCHIE	030502080601	BEAUFORT	MD-007	POCOTALIGO RVR AT US 17 AT POCOTALIGO	AL	TURB
SALKEHATCHIE	030502080602	Beaufort	14-14	HUSPAH CREEK AT RAILROAD TRESTLE	SHELLFISH	FCB
SALKEHATCHIE	030502080602	Beaufort	14-18	HUSPAH CREEK AT BULL POINT - WHALE BRANCH POG	SHELLFISH	FCB
SALKEHATCHIE	030502080605	Beaufort	17-16A	HABERSHAM CREEK ABOVE STATION #16, FIRST SPLIT	SHELLFISH	FCB
SALKEHATCHIE	030502080606	Beaufort	18-09	CHECHESSEE CREEK FIRST UNNAMED TRIBUTARY FROM COLLETON RIVER	SHELLFISH	FCB
SALKEHATCHIE	030502080606	BEAUFORT	RO-01125	COLLETON RIVER AT MOUTH OF CALLAWASSIE CREEK, 4.5 M N OF BLUFFTON	AL	DO
SALKEHATCHIE	030502080607	Beaufort	18-10	CHECHESSEE CREEK SECOND BRIDGE TO CALLAWASSIE ISLAND	SHELLFISH	FCB
SALKEHATCHIE	030502080607	Beaufort	18-11	CHECHESSEE CREEK FIRST BRIDGE TO CALLAWASSIE ISLAND	SHELLFISH	FCB
SALKEHATCHIE	030502080607	BEAUFORT	RO-01146	CHECHESEE RIVER, 6.5 M WEST OF PORT ROYAL	AL	DO
SALKEHATCHIE	030502080607	BEAUFORT	RO-036032	CHECHESSEE RVR 1.4 MI SE CONFL W/ COLLETON RVR	AL	DO
SALKEHATCHIE	030502080608	BEAUFORT	RO-036034	PORT ROYAL SOUND 1.8 MI SW OF TIP OF PARRIS ISLAND	AL	CU
SALKEHATCHIE	030502100101	Beaufort	RT-10115	JOHNSON CK WEST OF HARBOR ISLAND 1.75MI SW OF WEST END OF US 21 BRIDGE OVER JOHNSON CK	AL	TURB
SAVANNAH	030502080608	BEAUFORT	20-27	FISH HAUL CREEK AT PORT ROYAL SOUND	SHELLFISH	FCB
SAVANNAH	030601100202	BEAUFORT	RT-06021	NEW RIVER 3.4 MI SSE OF SC 170 BRIDGE OVER NEW RIVER	REC	FC
SAVANNAH	030601100301	Beaufort	19-19	MAY RIVER AT FIRST DOCK IN HEADWATERS PAST BLUFF	SHELLFISH	FCB
SAVANNAH	030601100301	Beaufort	19-19A	UNNAMED TRIBUTARY NEAR SW CORNER OF CASCIOGNE BLUFF	SHELLFISH	FCB
SAVANNAH	030601100301	Beaufort	19-19B	BEND IN MAY RIVER NEAREST HIGH BLUFF OF PALMETTO BLUFF	SHELLFISH	FCB
SAVANNAH	030601100301	Beaufort	19-19C	FIRST UNNAMED TRIBUTARY LEADING FROM GASCIOGNE BLUFF	SHELLFISH	FCB
SAVANNAH	030601100302	Beaufort	20-16	CREEK BEHIND LYNN SMITH'S OYSTER PLANT AT BROAD CREEK	SHELLFISH	FCB

Supporting Documentation of Water Bodies Located in Beaufort County SMS4 Jurisdiction with an Approved TMDL

Appendix B: SC Waters With an Approved TMDL

BASIN	12-DIGIT HUC	DESCRIPTION	STATION	COUNTY	USE	CAUSE	USE SUPPORT	TMDL*	DHEC_TECH REPORT	APPROVAL DATE
PEEDEE	030402040506	LITTLE PEE DEE RVR BELOW JCT WITH MAPLE SWP	PD-030A	DILLON	REC	FC	Fully Supported	InTMDL	029-05	9/11/05
PEEDEE	030402040701	CHINNERS SWAMP AT GUNTERS ISLAND RD OFF S-26-99	PD-352	HORRY	REC	FC	Not Supported	InTMDL	029-05	9/11/05
PEEDEE	030402040803	WHITE OAK CK AT S-34-31	PD-037	MARION	REC	FC	Not Supported	InTMDL	029-05	9/11/05
PEEDEE	030402050302	NASTY BR AT S-43-251 7.5 MI SW OF SUMTER	PD-239	SUMTER	REC	FC	Not Supported	InTMDL	029-05	9/11/05
PEEDEE	030402050401	TURKEY CREEK	PD-040	SUMTER	REC	FC	Not Supported	InTMDL	029-05	9/11/05
PEEDEE	030402050401	TURKEY CK AT LIBERTY ST IN SUMTER ABOVE SANTEE PRINT WORKS	PD-098	SUMTER	REC	FC	Not Supported	InTMDL	029-05	9/11/05
PEEDEE	030402020202	HANGING ROCK CK AT S-29-764 1.6 MI S OF KERSHAW	PD-328	LANCASTER	REC	FC	Not Supported	InTMDL	06-03	8/6/03
PEEDEE	030402020202	LICK CK AT S-29-13 ABOVE KERSHAW PT	PD-329	LANCASTER	REC	FC	Not Supported	InTMDL	06-03	8/6/03
PEEDEE	030402020405	SPARROW SWAMP AT S-16-697 2.5 E OF LAMAR	PD-072	DARLINGTON	REC	FC	Not Supported	InTMDL	9S20-11	9/6/11
SALKEHATCHIE	030502080401	SANDERS BR AT S-25-50	CSTL-011	HAMPTON	AL	DO	Fully Supported	InTMDL	007-98	8/19/98
SALKEHATCHIE	030502080404	COOSAWHATCHIE RVR AT S-25-27 2.5 MI SW CUMMINGS	CSTL-109	HAMPTON	AL	DO	Not Supporting	InTMDL	007-98	8/19/98
SALKEHATCHIE	030502070103	LAKE EDGAR BROWN IN FOREBAY NEAR DAM	CL-064	BARNWELL	AL	PH	Not Supported	InTMDL	011-01	9/21/01
SALKEHATCHIE	030502070103	LAKE EDGAR BROWN IN FOREBAY NEAR DAM	CL-064	BARNWELL	AL	TP	Not Supported	InTMDL	011-01	9/21/01
SALKEHATCHIE	030502080606	OKATIE RIVER AT INDIGO PLANTATION	18-07	BEAUFORT	SHELLFISH	FC	Fully Supported	InTMDL	012D-19	12/9/10
SALKEHATCHIE	030502080606	OKATIE RIVER AT DOCK WITHOUT HOUSE	18-08	BEAUFORT	SHELLFISH	FC	Not Supported	InTMDL	012D-19	12/9/10
SALKEHATCHIE	030502080606	OKATIE RV AT CONFLUENCE OF PINKNEY COLONY TRIBU. (C10-97)	18-16	BEAUFORT	SHELLFISH	FC	Not Supported	InTMDL	012D-19	12/9/10
SALKEHATCHIE	030502080606	OKATIE RV AT CONFLUENCE OF CHERRY POINT TRIBU. (C6-97)	18-17	BEAUFORT	SHELLFISH	FC	Fully Supported	InTMDL	012D-19	12/9/10
SALKEHATCHIE	030502080502	BEAUFORT RVR AB BEAUFORT AT CHANNEL MARKER 231	MD-001	BEAUFORT	AL	DO	Not Supporting	InTMDL	014-06	4/14/06
SALKEHATCHIE	030502080502	BEAUFORT RVR AT DRAWBRDG ON US 21	MD-002	BEAUFORT	AL	DO	Not Supported	InTMDL	014-06	4/14/06
SALKEHATCHIE	030502080502	BEAUFORT RVR BL BEAUFORT AT CHANNEL MARKER 244	MD-003	BEAUFORT	AL	DO	Not Supported	InTMDL	014-06	4/14/06
SALKEHATCHIE	030502080502	BEAUFORT RVR NEAR SPANISH POINT	RO-02003	BEAUFORT	AL	DO	Not Supported	InTMDL	014-06	4/14/06
SALKEHATCHIE	030502080502	BEAUFORT RVR AB BEAUFORT AT CHANNEL MARKER 231	RO-07338	BEAUFORT	AL	DO	Fully Supporting	InTMDL	014-06	4/14/06
SALKEHATCHIE	030502080502	FACTORY CK 0.7 MI E WHITE HALL LANDING	RT-032039	BEAUFORT	AL	DO	Not Supported	WnTMDL	014-06	4/14/06

Part III

Existing Legal Authority to Control Stormwater Discharges to MS4

Chapter 99 - STORMWATER MANAGEMENT UTILITY

FOOTNOTE(S):

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Editor's note— Section 20 of Ord. No. 2005/33 (), adopted Aug. 22, 2005, repealed ch. 99 which contained §§ 99-1—99-155 and derived from Ord. No. 2001-22, adopted Aug. 27, 2001; Ord. No. 2001-23, adopted Sept. 10, 2001 and Ord. No. 2002-3, adopted Feb. 11, 2002. Sections 1—8, 10—17 of said ordinance enacted new provisions to read as herein set out.

ARTICLE I. - IN GENERAL

ARTICLE II. - STORMWATER MANAGEMENT UTILITY

Sec. 99-101. - Findings of fact.

The County Council of Beaufort County, South Carolina, makes the following findings of fact:

(a) The professional engineering and financial analyses conducted on behalf of and submitted to the county properly assesses and defines the stormwater management problems, needs, goals, program priorities, costs of service, need for interlocal cooperation, and funding opportunities of the county.

(b) Given the problems, needs, goals, program priorities, costs of service, needs for interlocal cooperation, and funding opportunities identified in the professional engineering and financial analyses submitted to the county, it is appropriate to authorize the establishment of a separate enterprise accounting unit which shall be dedicated specifically to the management, construction, maintenance, protection, control, regulation, use, and enhancement of stormwater systems and programs in Beaufort County in concert with other water resource management programs.

(c) Stormwater management is applicable and needed throughout the unincorporated portions of Beaufort County, but interlocal cooperation between the county and the incorporated cities and towns within the county is also essential to the efficient provision of stormwater programs, services, systems, and facilities. Intense urban development in some portions of the county has radically altered the natural hydrology of the area and the hydraulics of stormwater systems, with many natural elements having been replaced or augmented by man-made facilities. Other areas of the county remain very rural in character, with natural stormwater systems predominating except along roads where ditches and culverts have been installed. As a result, the specific program, service, system, and facility demands differ from area to area in the county. While the county manages, operates, and improves stormwater programs, services, systems and facilities in the rural as well as urban areas, the need for improved stormwater management is greatest in the urban areas and nearby, including areas within incorporated cities and towns. Therefore, a stormwater utility service area subject to stormwater service fees should encompass, in so far as possible through interlocal

agreements, the entirety of Beaufort County and the stormwater management utility service fee rate structure should reflect the amount of impervious area on individual properties and the runoff impact from water quantity and water quality.

(d) The stormwater needs in Beaufort County include but are not limited to protecting the public health, safety, and welfare. Provision of stormwater management programs, services, systems, and facilities therefore renders and/or results in both service and benefit to individual properties, property owners, citizens, and residents of the county and to properties, property owners, citizens, and residents of the county concurrently in a variety of ways as identified in the professional engineering and financial analyses.

(e) The service and benefit rendered or resulting from the provision of stormwater management programs, services, systems, and facilities may differ over time depending on many factors and considerations, including but not limited to location, demands and impacts imposed on the stormwater programs, systems, and facilities, and risk exposure. It is not practical to allocate the cost of the county's stormwater management programs, services, systems, and facilities in direct and precise relationship to the services or benefits rendered to or received by individual properties or persons over a brief span of time, but it is both practical and equitable to allocate the cost of stormwater management among properties and persons in proportion to the long-term demands they impose on the county's stormwater programs, services, systems, and facilities which render or result in services and benefits.

(f) Beaufort County presently owns and operates stormwater management systems and facilities that have been developed, installed, and acquired through various mechanisms over many years. The future usefulness and value of the existing stormwater systems and facilities owned and operated by Beaufort County, and of future additions and improvements thereto, rests on the ability of the county to effectively manage, construct, protect, operate, maintain, control, regulate, use, and enhance the stormwater systems and facilities in the county, in concert with the management of other water resources in the county and in cooperation with the incorporated cities and towns. In order to do so, the county must have adequate and stable funding for its stormwater management program operating and capital investment needs.

(g) The county council finds, concludes, and determines that a stormwater management utility provides the most practical and appropriate means of properly delivering stormwater management services and benefits throughout the county, and the most equitable means to fund stormwater services in the county through stormwater service fees and other mechanisms as described in the professional engineering and financial analyses prepared for the county.

(h) The county council finds, concludes, and determines that a schedule of stormwater utility service fees be levied upon and collected from the owners of all lots, parcels of real estate, and buildings that discharge stormwater or subsurface waters, directly or indirectly, to the county stormwater management system and that the proceeds of such charges so derived be used for the stormwater management system.

(i) The county council finds that adjustments and credits against stormwater utility service fees are an appropriate means to grant properties providing stormwater management program services that would otherwise be provided by the county and will afford Beaufort County cost savings. These

reductions will be developed by the Beaufort County engineer and will be reviewed on an annual basis to allow for any modifications to practices required by Beaufort County.

The county council finds that the total impervious area on each property is the most important factor influencing the cost of stormwater management in Beaufort County and, the runoff impact from water quantity and water quality. In determining the basis for a stormwater management utility fee, the county council finds that it is appropriate to remove the amount of land area on each property that is designated as river or marsh as these areas are vital portions of the county's stormwater management program.

(Ord. No. 2005/33, § 1, 8-22-2005 ())

Sec. 99-102. - Establishment of a stormwater management utility and a utility enterprise fund.

There is hereby established within the Public Works Department of Beaufort County a stormwater management utility for the purpose of conducting the county's stormwater management program. The county administrator shall establish and maintain a stormwater management utility enterprise fund in the county budget and accounting system, which shall be and remain separate from other funds. All revenues of the utility shall be placed into the stormwater management utility enterprise fund and all expenses of the utility shall be paid from the fund, except that other revenues, receipts, and resources not accounted for in the stormwater management utility enterprise fund may be applied to stormwater management programs, services, systems, and facilities as deemed appropriate by the Beaufort County Council. The county administrator may designate within the stormwater management utility enterprise fund such sub-units as necessary for the purpose of accounting for the geographical generation of revenues and allocation of expenditures pursuant to interlocal governmental agreements with the cities and towns of Beaufort County.

(Ord. No. 2005/33, § 2, 8-22-2005 ())

Sec. 99-103. - Purpose and responsibility of the utility.

The Beaufort County Stormwater Management Utility is established for the purpose of managing, acquiring, constructing, protecting, operating, maintaining, enhancing, controlling, and regulating the use of stormwater drainage systems in the county. The utility shall, on behalf of the county and the citizens of the county: administer the stormwater management program; perform studies and analyses as required; collect service fees; system development fees, in-lieu of construction fees and other funding as allowed by law, and obtain and administer grants and loans as authorized by the county council; prepare capital improvement plans and designs; perform routine maintenance and remedial repair of the stormwater systems; acquire, construct, and improve stormwater systems; acquire necessary lands, easements, rights-of-way, rights-of-entry and use, and other means of access to properties to perform its duties; regulate the on-site control, conveyance, and discharge of stormwater from properties; obtain federal and state permits required to carry out its purpose; enter into operating agreements with other agencies; educate and inform the public about stormwater management; and perform, without limitation except by law, any stormwater management functions and activities necessary to ensure the public safety, protect private and public properties and habitat, and enhance the natural environment and waters of the county.

(Ord. No. 2005/33, § 3, 8-22-2005 ())

Sec. 99-104. - Limitation of scope of responsibility.

The purpose and responsibility of the stormwater management utility shall be limited by the following legal and practical considerations.

(a)

Beaufort County owns or has legal access for purposes of operation, maintenance, and improvement only to those stormwater systems and facilities which:

(1) Are located within public streets, other rights-of-way, and easements;

(2) Are subject to easements, rights-of-entry, rights-of-access, rights-of-use, or other permanent provisions for adequate access for operation, maintenance, monitoring, and/or improvement of systems and facilities; or

(3) Are located on public lands to which the county has adequate access for operation, maintenance, and/or improvement of systems and facilities.

(b) Operation, maintenance, and/or improvement of stormwater systems and facilities which are located on private property or public property not owned by Beaufort County and for which there has been no public dedication of such systems and facilities for operation, maintenance, monitoring, and/or improvement of the systems and facilities shall be and remain the legal responsibility of the property owner, except as that responsibility may be otherwise affected by the laws of the State of South Carolina and the United States of America.

(c) It is the express intent of this article to protect the public health, safety, and welfare of all properties and persons in general, but not to create any special duty or relationship with any individual person or to any specific property within or outside the boundaries of the county. Beaufort County expressly reserves the right to assert all available immunities and defenses in any action seeking to impose monetary damages upon the county, its officers, employees and agents arising out of any alleged failure or breach of duty or relationship as may now exist or hereafter be created.

(d) To the extent any permit, plan approval, inspection or similar act is required by the county as a condition precedent to any activity or change upon property not owned by the county, pursuant to this or any other regulatory ordinance, regulation, or rule of the county or under federal or state law, the issuance of such permit, plan approval, or inspection shall not be deemed to constitute a warranty, express or implied, nor shall it afford the basis for any action, including any action based on failure to permit or negligent issuance of a permit, seeking the imposition of money damages against the county, its officers, employees, or agents.

(Ord. No. 2005/33, § 4, 8-22-2005 ())

Sec. 99-105. - Boundaries and jurisdiction.

The boundaries and jurisdiction of the stormwater management utility shall encompass all those portions of unincorporated Beaufort County, as they may exist from time to time and such additional areas lying inside the corporate limits of those cities and towns in Beaufort County as shall be subject to interlocal agreements for stormwater management as approved by county council and participating municipal councils.

(Ord. No. 2005/33, § 5, 8-22-2005 ())

Sec. 99-106. - Definitions.

Unless the context specifically indicates otherwise, the meaning of words and terms used in this article shall be as set forth in S.C. Code § 48-14-20, and 26 S.C. Code Regulation 72-301, mutatis mutandis.

Abatement. Any action deemed necessary by the county or its officers or agents to remedy, correct, control, or eliminate a condition within, associated with, or impacting a stormwater drainage system or the water quality of receiving waters shall be deemed an abatement action.

Adjustments. Adjustments shall mean a change in the amount of a stormwater service fee predicated upon the determination reached by the Beaufort County engineer and referenced to the Adjustments and Credit Manual.

Customers of the stormwater management utility. Customers of the stormwater management utility shall be broadly defined to include all persons, properties, and entities served by and/or benefiting, directly and indirectly, from the utility's acquisition, management, construction, improvement, operation, maintenance, extension, and enhancement of the stormwater management programs, services, systems, and facilities in the county, and by its control and regulation of public and private stormwater systems, facilities, and activities related thereto.

Developed land. Developed land shall mean property altered from its natural state by construction or installation of improvements such as buildings, structures, or other impervious surfaces, or by other alteration of the property that results in a meaningful change in the hydrology of the property during and following rainfall events.

Exemption. Exemption shall mean not applying to or removing the application of the stormwater management utility service fee from a property. No permanent exemption shall be granted based on taxable or non-taxable status or economic status of the property owner.

Hydrologic response. The hydrologic response of a property is the manner whereby stormwater collects, remains, infiltrates, and is conveyed from a property. It is dependent on several factors including but not limited to the size and overall intensity of development of each property, its impervious area, shape, topographic, vegetative, and geologic conditions, antecedent moisture conditions, and groundwater conditions and the nature of precipitation events. Extremely large undeveloped properties naturally attenuate but do not eliminate entirely the discharge of stormwater during and following rainfall events.

Impervious surfaces. Impervious surfaces shall be a consideration in the determination of the development intensity factor. Impervious surfaces are those areas that prevent or impede the infiltration of stormwater into the soil as it entered in natural conditions prior to development. Common impervious surfaces include, but are not limited to, rooftops, sidewalks, walkways, patio areas, driveways, parking lots, storage areas, compacted gravel and soil surfaces, awnings and other fabric or plastic coverings, and other surfaces that prevent or impede the natural infiltration of stormwater runoff that existed prior to development.

Nonresidential properties. Properties developed for uses other than permanent residential dwelling units and designated by the assigned land use code in the Beaufort County tax data system.

Other developed lands. Other developed lands shall mean, but not be limited to, mobile home parks, commercial and office buildings, public buildings and structures, industrial and manufacturing buildings, storage buildings and storage areas covered with impervious surfaces, parking lots, parks, recreation properties, public and private schools and universities, research facilities and stations, hospitals and convalescent centers, airports, agricultural uses covered by impervious surfaces, water and wastewater

treatment plants, and lands in other uses which alter the hydrology of the property from that which would exist in a natural state. Properties that are used for other than single family residential use shall be deemed other developed lands for the purpose of calculating stormwater service fees.

Residential dwelling classifications. The following categories will identify the appropriate dwelling unit classifications to be utilized in applying the stormwater utility fee structure to the designations contained in the Beaufort County tax data system:

Single-family

Apartments

Townhouses

Condominiums

Mobile home parks

Mobile home lots

River areas. River areas shall be those areas of Beaufort County that have been delineated as rivers on the most current digital mapping on file in the Beaufort County Engineering Department. Where applicable, these areas shall be deducted from a property's total land area in determining its stormwater service fee.

Stormwater management programs, services, systems and facilities. Stormwater management programs, services, systems and facilities are those administrative, engineering, operational, regulatory, and capital improvement activities and functions performed in the course of managing the stormwater systems of the county, plus all other activities and functions necessary to support the provision of such programs and services. Stormwater management systems and facilities are those natural and man-made channels, swales, ditches, swamps, rivers, streams, creeks, branches, reservoirs, ponds, drainage ways, inlets, catch basins, pipes, head walls, storm sewers, lakes, and other physical works, properties, and improvements which transfer, control, convey or otherwise influence the movement of stormwater runoff and its discharge to and impact upon receiving waters.

Stormwater service fees. Stormwater service fees shall mean the service fee imposed pursuant to this article for the purpose of funding costs related to stormwater programs, services, systems, and facilities. These fees will be calculated based upon the residential category for a parcel and/or the nonresidential parcel's impervious area and/or the vacant/undeveloped land category.

Stormwater service fee; single-family unit (SFU). The single-family unit shall be defined as the impervious area measurements obtained from a statistically representative sample of all detached single-family structures within Beaufort County. The representative value will be 4,906 square feet.

Stormwater service fee categories. The appropriate categories for determining SFUs will be as follows:

	SFU Calculation (SFUs equal)
Single-family <2,521 square feet	Dwelling units x 0.5
Single-family	Dwelling units x 1

Single-family >7,266 square feet	Dwelling units x 1.5
Apartments	Dwelling units x 0.39
Townhouses	Dwelling units x 0.60
Condominiums	Dwelling units x 0.27
Mobile home parks	Dwelling units x 0.36
Mobile home lots	Dwelling units x 0.59
Nonresidential	Impervious area ° 4,906 sq. ft.
Residential/nonresidential vacant	Parcel area × SFU corrected factor

Vacant/undeveloped land. All parcels containing no impervious area and not being defined as exempt will have the corrected SFUs calculated for the following property classification system (PCS) codes:

PCS 29

PCS 33

PCS 91

PCS 92

PCS 99 ()

PCS 81

PCS 82 ()

PCS 83

PCS 84

PCS 89

PCS 74 ()

PCS 76

Appropriate residential PCS category

(Ord. No. 2005/33, § 6, 8-22-2005 ())

Sec. 99-107. - Requirements for on-site stormwater systems: enforcement, methods and inspections.

(a) All property owners and developers of real property to be developed within the unincorporated portions of Beaufort County shall provide, manage, maintain, and operate on-site stormwater systems and facilities sufficient to collect, convey, detain, control, and discharge stormwater in a safe manner

consistent with all county development regulations and the laws of the State of South Carolina and the United States of America, except in cases when the property is located within an incorporated city or town subject to an interlocal governmental agreement with the county for stormwater management and the city or town has regulations that are more stringent than the county, in which case the city's or town's development regulations shall apply. Any failure to meet this obligation shall constitute a nuisance and be subject to an abatement action filed by the county in a court of competent jurisdiction. In the event a public nuisance is found by the court to exist, which the owner fails to properly abate within such reasonable time as allowed by the court, the county may enter upon the property and cause such work as is reasonably necessary to be performed, with the actual cost thereof charged to the owner in the same manner as a stormwater service fee as provided for in this article.

(b) In the event that the county shall file an action pursuant to subsection 99-107 ()(a), from the date of filing such action the county shall have all rights of judgment and collection through a court of competent jurisdiction as may be perfected by action.

(c) The county shall have the right, pursuant to the authority of this article, for its designated officers and employees to enter upon private property and public property owned by other than the county, upon reasonable notice to the owner thereof, to inspect the property and conduct surveys and engineering tests thereon in order to assure compliance with any order or judgment entered pursuant to this section.

(Ord. No. 2005/33, § 7, 8-22-2005 ())

Sec. 99-108. - General funding policy.

(a) It shall be the policy of Beaufort County that funding for the stormwater management utility program, services, systems, and facilities shall be equitably derived through methods which have a demonstrable relationship to the varied demands and impacts imposed on the stormwater program, services, systems, and facilities by individual properties or persons and/or the level of service rendered by or resulting from the provision of stormwater programs, systems and facilities. Stormwater service fee rates shall be structured so as to be fair and reasonable, and the resultant service fees shall bear a substantial relationship to the cost of providing services and facilities throughout the county. Similarly situated properties shall be charged similar rentals, rates, fees, or licenses. Service fee rates shall be structured to be consistent in their application and shall be coordinated with the use of any other funding methods employed for stormwater management within the county, whether wholly or partially within the unincorporated portions of the county or within the cities and towns. Plan review and inspection fees, special fees for services, fees in-lieu of regulatory requirements, impact fees, system development fees, special assessments, general obligation and revenue bonding, and other funding methods and mechanisms available to the county may be used in concert with stormwater service fees and shall be coordinated with such fees in their application to ensure a fair and reasonable service fee rate structure and overall allocation of the cost of services and facilities.

(b) The cost of stormwater management programs, systems, and facilities subject to stormwater service fees may include operating, capital investment, and non-operating expenses, prudent operational and emergency reserve expenses, and stormwater quality as well as stormwater quantity management programs, needs, and requirements.

(c) To the extent practicable, adjustments to the stormwater service fees will be calculated by the Beaufort County engineer in accordance with the standards and procedures adopted by the engineer's office.

(d) The stormwater service fee rate may be determined and modified from time to time by the Beaufort County Council so that the total revenue generated by said fees and any other sources of revenues or other resources allocated to stormwater management by the county council to the stormwater management utility shall be sufficient to meet the cost of stormwater management services, systems, and facilities, including, but not limited to, the payment of principle and interest on debt obligations, operating expense, capital outlays, nonoperating expense, provisions for prudent reserves, and other costs as deemed appropriate by the county council. Each jurisdiction may have a different fee predicated upon the individual jurisdiction's revenue needs. The following stormwater service fee rates shall apply:

Jurisdiction	Annual Stormwater Service Fee ($/SFU/year)
City of Beaufort	$65.00
Town of Bluffton	98.00
Town of Hilton Head Island	108.70
Town of Port Royal	50.00
Unincorporated Beaufort County	50.00

(Ord. No. 2005/33, § 8, 8-22-2005 () ; Ord. No. 2008/29, 8-11-2008 () ; Ord. No. 2011/2, 1-24-2011 ())

Sec. 99-109. - Exemptions and credits applicable to stormwater service fees.

Except as provided in this section, no public or private property shall be exempt from stormwater utility service fees. No exemption, credit, offset, or other reduction in stormwater service fees shall be granted based on the age, tax, or economic status, race, or religion of the customer, or other condition unrelated to the stormwater management utility's cost of providing stormwater programs, services, systems, and facilities. A stormwater management utility service fee credit manual shall be prepared by the county engineer specifying the design and performance standards of on-site stormwater services, systems, facilities, and activities that qualify for application of a service fee credit, and how such credits shall be calculated.

(a) *Credits.* The following types of credits against stormwater service fees shall be available:

(1) Freshwater wetlands. All properties except those classified as detached single-family dwelling units may receive a credit against the stormwater service fee applicable to the property based on granting and dedicating a perpetual conservation easement on those portions of the property that are classified as freshwater wetlands and as detailed in the stormwater management utility service fee credit manual. The conservation easement shall remove that portion of the subject property from any future development. Once this credit has been granted to a particular property, that portion of the property will be treated similar to the river and

marsh areas and shall be deducted from the property's total land area in computing its stormwater service fee. This credit shall remain in effect as long as the conditions of the conservation easement are met.

(2) Those properties that apply for consideration of an adjustment shall satisfy the requirements established by the Beaufort County engineer and approved reduced stormwater service fee.

(b) *Exemptions.* The following exemptions from the stormwater service fees shall be allowed:

(1) Improved public road rights-of-way that have been conveyed to and accepted for maintenance by the state department of transportation and are available for use in common for vehicular transportation by the general public.

(2) Improved public road rights-of-way that have been conveyed to and accepted for maintenance by Beaufort County and are available for use in common for vehicular transportation by the general public.

(3) Improved private roadways that are shown as a separate parcel of land on the most current Beaufort County tax maps and are used by more than one property owner to access their property.

(4) Railroad tracks shall be exempt from stormwater service fees. However, railroad stations, maintenance buildings, or other developed land used for railroad purposes shall not be exempt from stormwater service fees.

(5) Condominium boat slips shall be exempt from stormwater service fees.

(Ord. No. 2005/33, § 10, 8-22-2005 ())

Sec. 99-110. - Stormwater service fee billing, delinquencies and collections.

(a) *Method of billing.* A stormwater service fee bill may be attached as a separate line item to the county's property tax billing or may be sent through the United States mail or by alternative means, notifying the customer of the amount of the bill, the date the fee is due (January 15), and the date when past due (March 17 - see Title 12, Section 45-180 of the South Carolina State Code). The stormwater service fee bill may be billed and collected along with other fees, including but not limited to the Beaufort County property tax billing, other Beaufort County utility bills, or assessments as deemed most effective and efficient by the Beaufort County Council. Failure to receive a bill is not justification for non-payment. Regardless of the party to whom the bill is initially directed, the owner of each parcel of land shall be ultimately obligated to pay such fees and any associated fines or penalties, including, but not limited to, interest on delinquent service fees. If a customer is under-billed or if no bill is sent for a particular property, Beaufort County may retroactively bill for a period of up to one-year, but shall not assess penalties for any delinquency during that previous unbilled period.

(b) *Declaration of delinquency.* A stormwater service fee shall be declared delinquent if not paid within 60 days of the date of billing or upon the date (March 17) of delinquency of the annual property tax billing if the stormwater service fee is placed upon the annual property tax billing or enclosed with or attached to the annual property tax billing.

(Ord. No. 2005/33, § 11, 8-22-2005 ())

Sec. 99-111. - Appeals.

Any customer who believes the provisions of this article have been applied in error may appeal in the following manner and sequence.

(a) An appeal of a stormwater service fee must be filed in writing with the Beaufort County public works director or his/her designee within 30 days of the fee being mailed or delivered to the property owner and stating the reasons for the appeal. In the case of stormwater service fee appeals, the appeal shall include a survey prepared by a registered land surveyor or professional engineer containing information on the impervious surface area and any other feature or conditions that influence the development of the property and its hydrologic response to rainfall events.

(b) Using information provided by the appellant, the county public works director (or his or her designee) shall conduct a technical review of the conditions on the property and respond to the appeal in writing within 30 days. In response to an appeal, the county public works director may adjust the stormwater service fee applicable to the property in conformance with the general purposes and intent of this article.

(c) A decision of the county public works director that is adverse to an appellant may be further appealed to the county administrator or his designee within 30 days of the adverse decision. The appellant, stating the grounds for further appeal, shall deliver notice of the appeal to the county administrator or his designee. The county administrator or his designee shall issue a written decision on the appeal within 30 days. All decisions by the county administrator or his designee shall be served on the customer personally or by registered or certified mail, sent to the billing address of the customer. All decisions of the county administrator or his designee shall be final.

(d) The appeal process contained in this section shall be a condition precedent to an aggrieved customer seeking judicial relief. Any decisions of the county administrator or his designee may be reviewed upon application for writ of certiorari before a court of competent jurisdiction, filed within 30 days of the date of the service of the decision.

(Ord. No. 2005/33, § 12, 8-22-2005 ())

Sec. 99-112. - No suspension of due date.

No provision of this article allowing for an administrative appeal shall be deemed to suspend the due date of the service fee with payment in full. Any adjustment in the service fee for the person pursuing an appeal shall be made by refund of the amount due.

(Ord. No. 2005/33, § 13, 8-22-2005 ())

Sec. 99-113. - Enforcement and penalties.

Any person who violates any provision of this article may be subject to a civil penalty of not more than $1,000.00, or such additional maximum amount as may become authorized by state law, provided the owner or other person deemed to be in violation has been notified of a violation. Notice shall be deemed achieved when sent by regular United States mail to the last known address reflected on the county tax records, or such other address as has been provided by the person to the county. Each day of a continuing violation may be deemed a separate violation. If payment is not received or equitable settlement reached within 30 days after demand for payment is made, a civil action may be filed on behalf of the county in the circuit court to recover the full amount of the penalty. This provision on penalties shall be in addition to and not in lieu of other provisions on penalties, civil or criminal, remedies and enforcement that may otherwise apply.

(Ord. No. 2005/33, § 14, 8-22-2005 ())

Sec. 99-114. - Investment and reinvestment of funds and borrowing.

Funds generated for the stormwater management utility from service fees, fees, rentals, rates, bond issues, other borrowing, grants, loans, and other sources shall be utilized only for those purposes for which the utility has been established as specified in this article, including but not limited to: regulation; planning; acquisition of interests in land, including easements; design and construction of facilities; maintenance of the stormwater system; billing and administration; water quantity and water quality management, including monitoring, surveillance, private maintenance inspection, construction inspection; public information and education, and other activities which are reasonably required. such funds shall be invested and reinvested pursuant to the same procedures and practices established by Title 12, Section 45-70 of the South Carolina State Code for investment and reinvestment of funds. County council may use any form of borrowing authorized by the laws of the State of South Carolina to fund capital acquisitions or expenditures for the stormwater management utility. County council, in its discretion and pursuant to standard budgetary procedures, may supplement such funds with amounts from the general fund.

(Ord. No. 2005/33, § 15, 8-22-2005 ())

Sec. 99-115. - Initial study priorities for the stormwater management utility.

During the first three-year period of the county stormwater management utility, the utility shall perform adequate studies throughout the area served by the utility to determine the following:

(1) Baseline study of water quality in the receiving waters;

(2) Identification of pollutants carried by stormwater runoff into the receiving waters;

(3) Recommended mitigation efforts to address pollutants carried by stormwater runoff into the receiving waters;

(4) Inventory of the existing drainage system;

(5) Recommended maintenance practices and standards of the existing drainage system;

(6) Identification of capital improvements to the system to include construction or installation of appropriate BMPs.

The proposed five-year spending plan shall be appropriately revised to reflect this priority and timetable for completion.

(Ord. No. 2005/33, § 16, 8-22-2005 ())

Sec. 99-116. - Stormwater utility management board.

(1) *Purpose.* In compliance with and under authority of Beaufort County Ordinance 2001/23, the Beaufort County Council hereby establishes the stormwater management utility board (hereinafter referred to as the "SWU board") to advise the council as follows:

(a) To determine appropriate levels of public stormwater management services for residential, commercial, industrial and governmental entities within Beaufort County;

(b) To recommend appropriate funding levels for provision of services in the aforementioned sectors;

(c) To advise the staff of the stormwater management utility on master planning efforts and cost of service/rate studies; and

(d) To support and promote sound stormwater management practices that mitigates non-point source pollution and enhances area drainage within Beaufort County.

Municipal councils are encouraged to organize similar boards to advise them on stormwater management programs and priorities within their boundaries.

In keeping with discussions held during the formation of the stormwater utility, it is anticipated that the municipalities will appoint staff professionals as their representative on the advisory board.

(2) *Stormwater districts.* Stormwater districts are hereby established as follows:

District 1 - City of Beaufort

District 2 - Town of Port Royal

District 3 - Town of Hilton Head Island

District 4 - Town of Bluffton

District 5 - Unincorporated Sheldon Township

District 6 - Unincorporated Port Royal Island

District 7 - Unincorporated Lady's Island

District 8 - Unincorporated St. Helena Island Islands East

District 9 - Unincorporated Bluffton Township and Daufuskie Island

(3) *Membership.*

(a) The SWU board is formed in accordance with Beaufort County Ordinance 92-28 and shall consist of a total of seven voting representatives from each of the following districts as noted below:

No. of Reps.	Stormwater District	Area
1	5	Unincorporated Sheldon Township
1	6	Unincorporated Port Royal Island
1	7	Unincorporated Lady's Island
1	8	Unincorporated St. Helena Island Islands East
2	9	Unincorporated Bluffton Township and Daufuskie Island
1	—	"At large"

All members of the SWU board will be appointed by county council and shall be residents of those districts or "at large" members from unincorporated Beaufort County.

(b) The SWU board shall also consist of one nonvoting (ex officio) representative from the following districts:

Stormwater District	Municipality
1	City of Beaufort
2	Town of Port Royal
3	Town of Hilton Head Island
4	Town of Bluffton

All ex officio members from municipalities shall be appointed by their respective municipal councils for four-year terms.

(c) All citizen members shall be appointed for a term of four years. The terms shall be staggered with one or two members appointed each year.

(d) While no other eligibility criteria is established, it is recommended that members possess experience in one or more of the following areas: Stormwater management (drainage and water quality) issues, strategic planning, budget and finance issues or established professional qualifications in engineering, construction, civil engineering, architectural experience, commercial contractor or similar professions.

(4) *Officers.*

(a) *Officers.* Selection of officers and their duties as follows:

1. *Chairperson and vice-chair.* At an annual organizational meeting, the members of the SWU board shall elect a chairperson and vice-chairperson from among its members. The chair's and vice-chair's terms shall be for one year with eligibility for reelection. The chair shall be in charge of all procedures before the SWU board, may administer oaths, may compel the attendance of witnesses, and shall take such action as shall be necessary to preserve order and the integrity of all proceedings before the SWU board. In the absence of the chair, the vice-chair shall act as chairperson.

2. *Secretary.* The county professional staff member shall appoint a secretary for the SWU board. The secretary shall keep minutes of all proceedings. The minutes shall contain a summary of all proceedings before the SWU board, which include the vote of all members upon every question, and its recommendations, resolutions, findings and determinations, and shall be attested to by the secretary. The minutes shall be approved by a majority of the SWU board members voting. In addition, the secretary shall maintain a public record of SWU board meetings, hearings, proceedings, and correspondence.

3. *Staff.* The public works director shall be the SWU board's professional staff.

(b) *Quorum and voting.* Four SWU board members shall constitute a quorum of the SWU board necessary to take action and transact business. All actions shall require a simple majority of the number of SWU board members present.

(c) *Removal from office.* The county council, by a simple majority vote, shall terminate the appointment of any member of the SWU board and appoint a new member for the following reasons:

1. Absent from more than one-third of the SWU board meetings per annum, whether excused or unexcused;
2. Is no longer a resident of the county;
3. Is convicted of a felony; or
4. Violated conflict of interest rules according to the county-adopted template ordinance.

Moreover, a member shall be removed automatically for failing to attend any three consecutive regular meetings.

(d) *Vacancy.* Whenever a vacancy occurs on the SWU board, the county council shall appoint a new member within 60 days of the vacancy, subject to the provisions of this section. A new member shall serve out the former member's term.

(e) *Compensation.* The SWU board members shall serve without compensation, but may be reimbursed for such travel, mileage and/or per diem expenses as may be authorized by the SWU board-approved budget.

(5) *Responsibilities and duties.*

(a) Review and recommend to the county council for approval, a comprehensive Beaufort County Stormwater Management Master Plan and appropriate utility rate study which is in accordance with the South Carolina Stormwater Management and Sediment Reduction Act; and

(b) Review and comment to the county administrator on the annual stormwater management utility enterprise fund budget; and

(c) Cooperate with the South Carolina Department of Health and Environmental Control (DHEC), Office of Coastal Resource Management (OCRM), the Oversight Committee of the Special Area Management Plan (SAMP), the Beaufort County Clean Water Task Force as well as other public and private agencies having programs directed toward stormwater management programs; and

(d) Review and make recommendations concerning development of a multiyear stormwater management capital improvement project (CIP) plan; and

(e) Review and advise on proposed stormwater management plans and procurement procedures; and

(f) Provide review and recommendations on studies conducted and/or funded by the utility; and

(g) Review and advise on actions and programs to comply with regulatory requirements, including permits issued under the State of South Carolina National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Regulated Small Municipal Separate Storm Sewer Systems (MS4).

(6) *Meetings.* Meetings of the SWU board shall be held as established by the SWU board on a monthly basis and a calendar will be prepared giving the date, time and location of such meetings. Additionally, meetings may be called by the chairperson or at the request of four SWU board members. The location of all SWU board meetings shall be held in a public building in a place accessible to the public. The following shall apply to the conduct of all meetings:

(a) *Meeting records.* The SWU board shall keep a record of meetings, resolutions, findings, and determinations. The SWU board may provide for transcription of such hearings and proceedings, or portions of hearings and proceedings, as may be deemed necessary.

(b) *Open to public.* All meetings and public hearings of the SWU board shall be open to the public.

(c) *Recommendations or decisions.* All recommendations shall be by show of hands of all members present. A tie vote or failure to take action shall constitute a denial recommendation. All recommendations shall be accompanied by a written summary of the action and recommendations.

(d) *Notice and agenda.* The SWU board must give written public notice of regular meetings at the beginning of each calendar year. The SWU board must post regular meeting agendas at the meeting place 24 hours before any meeting. Notices and agenda for call, special or rescheduled meetings must be posted at least 24 hours before such meetings. The SWU board must notify any persons, organizations and news media that request such notification of meetings.

(Ord. No. 2005/33, § 17, 8-22-2005 () ; Ord. No. 2009/21, §§ I—VI, 5-26-2009 ())

DIVISION 3. - NATURAL RESOURCE PROTECTION STANDARDS

Sec. 106-1841. - Scope.

This division contains performance standards and mitigation requirements for the various types of protected natural resources found in the county. Only certain uses are permitted in protected resource areas. Table 106-1876 () lists use permissions for each type of resource.

(Ord. No. 99-12, § 1 (div. 05.200), 4-26-1999)

Sec. 106-1842. - Tidal wetlands.

Water dependent facilities shall be the only use permitted in tidal wetland areas according to the following additional standards:

(1) All proposals for this use shall require the approval of a special use permit.

(2) An environmental impact assessment shall be submitted by the applicant that indicates the design: (i) minimizes the impact on the wetlands, and (ii) is such that there is the maximum sharing of the facility to avoid having every property in the area seek a similar request. This may mean shared facilities for the entire development or facilities that can serve several adjoining properties.

(3) Approval by the Army Corps of Engineers and OCRM shall be required.

(Ord. No. 99-12, § 1 (05.210), 4-26-1999)

Sec. 106-1843. - Nontidal wetlands.

(a) Farm ponds of less than three acres shall not be considered wetlands by the county and may be filled, provided their stormwater capacity is preserved at another location on the same stream, subject to Army Corps of Engineers' and/or OCRM approval.

(b) Where structures are necessary to a permitted use and cannot be located outside the wetland, the structure shall be located on piles. Where needed, access shall be provided on structures such as boardwalks.

(c) Cases may exist where protection is not a reasonable alternative and mitigation is an acceptable solution. Mitigation is permitted only under the following conditions:

(1) In the U, CR, CS, LI, IP and RD districts, the use intensity is so high that retained wetlands of less than one acre have increased potential to become degraded habitats or, if the retention of the wetland would be isolated, difficult to adequately provide proper water levels to preserve existing vegetation, subject to invasive, nonnative species, would have a greatly reduced habitat value, or serve no significant stormwater or water quality benefit, and subject to the following requirements when such areas are to be filled or severely disturbed:

a. A mitigation plan has been approved, designating the area in which the site is located as a mitigation area; or

b.

Mitigation will actually provide larger, more easily protected and managed on-site wetland areas. This permits consolidating many small wetlands into a single wetland management unit. If the county and SCDHEC/OCRM develop a mitigation bank or the U.S. Army Corps of Engineers and other agencies establish a fee-based mitigation program, the county in consultation with SCDHEC/OCRM will permit off-site mitigation when the county finds that the mitigation meets all other standards of this chapter and the site cannot be developed to permitted development intensities without the mitigation, or would be an undesirable development without the off-site mitigation; and

c. The wetlands to be mitigated are not, and cannot, easily become part of an interconnected area that provides drainage and flood storage; and

d. The wetland area to be filled is not more than one acre or 20 percent of the mitigation area, whichever is less.

(2) In all districts where, due to parcel shape and interaction with topography, reshaping the wetland boundary is necessary to provide a reasonable building site, minor filling is permitted provided that:

a. Less than ten percent of the wetland area or less than two acres, whichever is less, is disturbed; and

b. High quality wetland areas and wetlands containing rookeries are avoided.

(3) In all districts where the wetlands are less than one-quarter acre and not connected to a stream or drainage corridor.

(4) All fill and mitigation shall meet this chapter's requirements or U.S. Army Corps of Engineers' permit requirements, whichever are more stringent. In either case, a permit shall be required.

(5) The current drainage pattern shall be submitted for all subdivisions or land developments containing a wetland. The stormwater management system shall ensure an adequate flow of water to maintain the wetland. OCRM shall sign off on the adequacy of the drainage before a final plat is approved.

(Ord. No. 99-12, § 1 (05.220), 4-26-1999)

Sec. 106-1844. - Beach-dune.

(a) *Applicability.* The standards of this section shall apply to site design and development in the beach-dune area.

(b) *Preservation of sand dunes.* No primary dune shall be leveled, breached, altered, or undermined in any way, nor shall vegetation on the primary dune be disturbed or destroyed, with the exception of construction of boardwalks or similar beach accesses. Such pedestrian accesses shall be designed and oriented to have minimal effect on the natural features or vegetation of the dune. The county may require shared accesses by elevated walkways.

(c) *Public beach access required.* Public beach access shall be provided by the developer for any development including more than 1,000 feet of beach frontage, according to subsection (d) of this section.

(d)

Option to purchase beach access. Upon filing of a preliminary application for an oceanfront development plan with the department, the county shall have an option to purchase reasonable beach access as deemed necessary for the benefit of the public. The county's option to purchase beach access shall run from the date of first submission of plans to the department to the date of the second regular county council meeting following the proposed permit issue date of the DRT, but in no case shall the option period be more than 90 days from the date of first submission of plans. The department shall review all proposed oceanfront development as to the need for public beach access and shall recommend to the county council what action it feels the county should take with regards to public beach access areas in the best interest of the general public. The county council shall notify the developer of its intentions on the option by the end of the specified option period and shall, if electing to purchase the beach access area, have a period of 30 days and one extension period of 30 days from the end of the option period to negotiate the terms of the purchase with the developer. The county council may require an appraisal of the required beach access area by a board of at least three independent appraisers in order to establish the basis for a purchase offer to the developer for the beach access area.

(e) *Beach development setbacks.* No development shall be undertaken except in compliance with this section. Furthermore, the requirements of this section shall be included as covenants and restrictions for all subdivision development that contains beach-dune areas located on the seaward side only of the barrier islands (i.e., Bay Point, Capers, Daufuskie, Fripp, Harbor, Hilton Head, Hunting, Pritchards and St. Phillips Islands).

(1) No building or other structure shall be located or constructed in such a manner as to destroy, undermine, or alter any primary sand dune or disturb primary dune vegetation.

(2) At a minimum, no structure, septic tank, or tile field shall be constructed within 50 feet landward of the OCRM baseline, except for beach cabanas of 144 square feet or less in size. No cabana with a permanent roof shall be permitted seaward of the baseline. Shore perpendicular beach boardwalks shall also be permitted per section 106-1911 ()(b) Beach-dune; however, no further encroachment towards the sea shall be permitted.

(f) *Additional studies/reports.* A beach protection plan shall be submitted as part of the required environmental impact assessment and will indicate how the developer plans to preserve sand dunes and shore vegetation.

(g) *Barrier island beach-dune lighting standard.*

The Beaufort County Council finds that the barrier island beaches of Beaufort County serve as nesting habitat for endangered and threatened sea turtles. Coastal development threatens the long-term survival of turtle hatchlings since evidence directly implicating lighting on barrier island beaches and reduced sea turtle nesting has been documented by numerous studies (Witherington 1992b). Artificial lighting near the nesting of sea turtles resulted in dramatic decreases in nesting attempts by sea turtles, including habitat loss, disorientation and eventual death (Raymond 1984a, Witherington and Martin 1996). The Endangered Species Act of 1973 prohibits all killing, harming and harassment of six species of sea turtles (including the Loggerhead). Therefore all lighting for parcels abutting barrier island beaches and dunes shall adhere to the following standards: Existing development abutting barrier island beaches and dunes shall be required to retrofit all lighting fixtures to conform to the following standards by May 1, 2002, in order to ensure that no light is visible from the barrier island beaches or dunes.

(1)

Pole lighting shall be bollard louver lighting five feet tall or less that blocks the light source from view and contains illumination within an area of three to less than 73 degrees on the seaward side of the pole (refer to Figure 106-1743 for types of luminaries). Outdoor lighting shall be held to the minimum necessary and, where possible, shall be low pressure sodium for security and convenience.

(2) Bollard lighting shall be used in parking lots and shall be positioned so that no light is visible from the barrier island beaches or dunes.

(3) Lights mounted on walls, steps and balconies shall be fitted with louvers or hoods and at a height from the floor of three feet or less in order that the lights illuminate only the balcony and will not be visible from the barrier island beach or dunes.

(4) Tinted or filmed glass or solar screens and drapes shall be used in windows facing the barrier island beaches or dunes during the period indicated by subparagraph (g)(7).

(5) All lighting illuminating buildings or associated grounds for decorative or recreational purposes shall be shielded or screened such that it is not visible from any barrier island beaches or dune during the period of May 1 to October 31 of every year.

(6) Additional landscaping shall be required when necessary mitigate impacts from development on nesting areas.

(7) This section shall be in effect from dusk to dawn during the sea turtle nesting and hatchling period of May 1 to October 31 of every year.

(8) All other lighting must be shielded so that it is not visible from any barrier island beaches or dunes during the period of May 1 to October 31 of every year.

(Ord. No. 99-12, § 1 (05.230), 4-26-1999; Ord. No. 2001-15, 6-11-2001; Ord. No. 2005/7, 2-28-2005 ())

Cross reference— Public beaches, § 90-61 et seq.

Sec. 106-1845. - River buffer.

The river buffer extends inland 50 feet from all tidal waters and wetlands beginning at the OCRM critical line. The following standards are required for all development affecting the river buffer:

(1) *Drainage.* The county engineer shall require BMPs according to the latest version of the county manual for stormwater BMPs in the design of drainage and detention basins. Additional special engineering may be required where the county engineer requires it to protect the nearby waters or wetlands. All drainage shall be diverted away from the OCRM critical line, and through a county-approved stormwater system employing BMPs. The lots adjoining the river buffer shall be designed and engineered to prevent direct discharge from impervious surfaces across the river buffer. All discharges shall be diverted into the development's stormwater system and treated as required by this chapter. Existing agricultural uses are exempt from this subsection, but are strongly urged to utilize BMPs. New agricultural uses shall comply.

(2) *Bulkheads, rip-rap and erosion control devices.* All bulkheads, rip-rap or other erosion control devices in the river buffer are limited uses, subject to the required standards below.

a. A permit to construct the bulkhead, rip-rap or erosion control device must have been issued by OCRM.

b. Application for a permit for the installation of a bulkhead, rip-rap or other erosion control device more than 48 inches in total vertical height from the existing ground elevation must submit design plans, including certification from a South Carolina registered professional engineer as to the adequacy of the design standards included to prevent collapse or other failure.

c. The provisions of subsection 106-1846 ()(b), tree protection and specimen trees, must be met.

d. Any disturbance of shoreline within the river buffer landward of the SC critical line shall require submission of a revegetation plan. A principal objective of the plan is to preserve and replace as much of the on-site preconstruction native vegetation to the extent possible. Other acceptable landscaping plants are found in the SC DHEC publication entitled "Backyard Buffers", publication CR-003206 (11/00). Such plantings shall be in the quantities set forth in Table 106-1680 ()(e) for a maritime forest on a disturbed area prorated acre basis, i.e., a one-tenth of an acre disturbance requires one-tenth of the bufferyard planting, unless soil conditions are unfavorable to establish this type of forestation, in which case a revegetation plan more suitable for the type of soil conditions will be accepted.

e. Revegetation of areas landward of the critical line, having sloping topography in excess of 1:3 slope, shall also include slope stabilization measures in compliance with SCDOT standards, as set forth in section 205, Embankment Construction, of the SCDOT Standard Specifications for Highway Construction, Edition of 2000.

f. Landscaping and construction design plans will be submitted to the zoning development administrator (ZDA), who shall issue a development permit for construction and land disturbance if these criteria are satisfied. Inspection of the construction and landscaping shall be done by the Beaufort County Building Inspection Department as provided for building permits.

(3) *View corridor.* The landowner may provide a view corridor through the river buffer. The following standards shall apply:

a. Such a view corridor shall not extend for more than 75 feet or one-third of the lot width, whichever is less.

b. The view corridor shall generally involve only pruning to provide views. However, a landowner may submit a selective clearing and selective landscaping program for the view corridor. This shall only be approved by the DRT if the net result provides both ample screening of the shoreline and filtering of runoff from lawns on the lots.

(4) *Setbacks.* The following setbacks from the OCRM critical line shall apply to all new development:

a. Single-family detached and duplex buildings shall be set back 50 feet.

b. All other residential buildings shall be set back 100 feet.

c. Nonresidential buildings, parking lots, and drives shall be set back 100 feet.

d. Tile fields or septic tanks are prohibited in the river buffer, and shall not be placed within 100 feet of the OCRM critical line.

e. Agricultural uses and golf courses shall be set back 150 feet.

(5)

Waiver. Where existing conforming or nonconforming lots are so small that a single-family house cannot be built to meet the required critical line setbacks, the DRT may grant a waiver with strict adherence to following standards:

a. The test of whether a waiver can be granted shall be based on the average size of homes within five lots on either side of the proposed house. If there are no homes within this area, a floor area ratio on the lot of three-tenths or maximum building footprint (liveable area) of 15 percent of the total lot, whichever is less, shall guide the need for a waiver.

b. New homes shall be designed so that they do not encroach into the critical line setback area. Applicants for waivers shall prove to the DRT that design alternatives such as adding a second or third story, adjusting house dimensions, reducing overall house size, etc., would still render the noncritical line setback area as unbuildable.

c. The DRT shall be empowered to reduce the street or front yard setback by 30 percent in order to avoid the need for a waiver. In developments that are largely unbuilt, with lots still in common ownership, the county shall require the developer to revise covenants to grant reduced street setbacks. The street setback reduction shall be the minimum possible.

d. The critical line setback shall not be reduced to less than a 35-foot setback, except in areas where homes already existing on nearby lots are located closer than 35 feet. In those cases, the average critical line setback of adjoining lots shall be used, provided that in no case shall a setback of less than 20 feet be granted, unless the setback is to preserve a specimen tree, historic resource, or to prevent a lot from becoming unbuildable with comparable houses as described in subsection (4)a of this section.

e. If the house and lot do not drain to a stormwater management system that uses BMPs pursuant to subsection (1) of this section, the DRT shall require the individual landowner to provide the necessary stormwater management on the lot.

f. The DRT shall also be empowered to grant a waiver in order to protect specimen trees and historic resources or to prevent a lot from becoming unbuildable with comparable houses as described in a., above. In such cases, the DRT shall approve a building envelope that will optimize the protection of all resources.

(6) *Buffer disturbance.* There shall be no disturbance of the river buffer, except as allowed for bulkheads, rip-rap and erosion control devices, view corridors, and other allowable disturbances authorized under article VII, division 4, outlined in this ordinance. A buffer disturbance violation shall require a revegetation plan prepared by a landscape designer or landscape architect to be submitted for review and approval by the natural resource planner. The plant back requirements shall minimally meet those requirements outlined in subsection (2)d., above. Removal of trees shall require plant back inch for inch of trees removed. If it is determined by the natural resource planner that all tree inches cannot be planted back on site due to site constraints, the remaining tree inches shall be subject to a general forestation fee.

(Ord. No. 99-12, § 1 (05.250), 4-26-1999; Ord. No. 99-21, 8-23-1999; Ord. No. 2000-6, 2-14-2000; Ord. No. 2002-34, 12-9-2002 () ; Ord. No. 2009-42, 12-12-2009 () ; Ord. No. 2011/35, 10-24-2011 ())

Sec. 106-1846. - Forests.

(a) *Standards for cutting over large area.* In residential developments, forests may be cut over a greater area than permitted in table 106-1782 () only if mitigation is provided and the following standards are met:

(1) The mitigation shall be required due to unique conditions on the site that make it impossible to meet the protection standards due to site size, shape, utilities, or other elements that are unique to the property.

(2) A tree survey (see subsection (c) of this section) of the site's forest is conducted. The best forests, in terms of percentage of climax vegetation, tree size, tree health, and habitat value, shall be preserved.

(3) The protection level given forests shall not be less than 80 percent of that required in table 106-1782 (). Thus, a forest with a protection level of 40 percent could be reduced to 32 percent.

(4) The land on which the mitigation is to occur may be on site where adequate land is available to achieve the required mitigation level. The land on which mitigation is to occur may be off site, if within an approved mitigation bank area only in the urban district where existing lots are too small to permit preservation. All land used for mitigation shall be preserved as permanent open space.

(5) Mitigation shall include planting 1.25 acres of new woodland of comparable species for every one acre of disturbed mature or young forest for which mitigation is required.

(6) The plant material in the mitigation area shall be determined based on a tree survey of the disturbed area in total inches dbh. The mitigation shall be 1.25 times the total inches of dbh and consist of similar species of trees. All trees shall be a minimum of 2.5 inches caliper.

(7) The plant species used in mitigation shall be similar in percentage to those destroyed.

(b) *Tree protection and specimen trees.* In areas of forest that are not protected per section 106-1782 (), or areas that are not classified as forests, all trees shall be protected as indicated in this subsection. Prior to any clearing or development approval, except bona fide forestry management, the applicant shall provide a tree survey (see subsection (c) of this section) of the areas in which building or construction activities are planned. Areas that are to be preserved as protected forest need not be surveyed. A tree survey shall be made of all trees greater than eight inches dbh and all specimen trees (see appendix E). If feasible, all trees greater than eight inches and all specimen trees shall be preserved through careful site planning. Furthermore, on any individual single-family residential lot, where an existing dwelling unit is already present, a homeowner may remove any type of tree excluding specimen live oak (*Quercus virginiana*) trees in any zoning district. For purposes of this section, a specimen live oak (*Quercus virginiana*) tree shall be classified as a live oak (*Quercus virginiana*) tree greater than 12 inches dbh. The Beaufort County Codes Enforcement Officers shall be required through permitting to inspect to insure compliance. Nothing in this section shall be construed to allow the removal of trees from a required buffer.

(1) All trees covered by this subsection shall be protected unless the landowner can demonstrate that:

a. The site plan has used clustering to the maximum extent allowed to preserve trees.

b. The trees sought to be cut cannot be saved by modifying setbacks or construction envelopes in accordance with article XIV (Modulation of Standards).

c.

The trees are in the rights-of-way of roads and small adjustments of individual lots cannot be made to the site plan to save the trees without losing lots or floor area.

(2) Conspicuous barrier fencing must be erected around a tree or group of trees to be preserved and protected from encroachment prior to site work or construction commencing and remaining in place until the certificate of compliance is issued (see section 106-1648 ()). The tree protection zone shall be a circle with a radius of one foot for every one inch of dbh or five feet, whichever is greater. The DRT may approve an alternate tree protection zone, if it can be determined by a certified forester that a specific design or protection will not injure any tree under consideration. In no case shall the circle of protection be less than one half of the total diameter required by the formula in this subsection (b)(2).

(3) Excluding single-family homeowners as set forth in subsection 106-1846 ()(b) above, tree removal shall be accomplished upon written certification only by a certified arborist or forester, stating that tagged trees are diseased and can be removed. The priority for preservation shall be healthy trees, as follows:

a. Highest priority: specimen trees over 24 inches dbh.

b. High priority: other trees over 24 inches dbh and specimen tree species over 12 inches dbh.

c. Medium priority: any tree over eight inches dbh and any specimen tree not meeting the requirements of the higher priorities.

d. Low priority: all other trees.

(4) Where individual trees over 24 inches dbh or specimen trees over 16 inches dbh are to be cut, the developer shall plant sufficient trees having a caliper in excess of 2.5 inches each so as to exceed the dbh of the tree or total trees lost. Such trees shall be of the same species as those cut unless the DRT requires other species to enhance the diversity to that similar to the native forest areas. All mitigation trees shall be planted within the disturbed area of the site.

(5) The saving of existing non-specimen trees is encouraged and may be utilized in some cases to meet the requirements of subsection (4) above pertaining to replacement of trees that are approved for removal. Existing trees used for mitigation must be located within the disturbed area of the site.

(6) Easements and rights-of-way. Removal of specimen trees during the construction or maintenance of easements or rights-of-way for water, sanitary sewer, electricity, telephone, natural gas, cable, storm drainage, telephone, or other service lines, shall be exempt from the requirements of this section provided that the applicable company or agency has executed an agreement with the county that:

a. Recognizes the need to minimize trimming of hardwood overstory trees that do not significantly interfere with the intended purpose of construction or maintenance;

b. Establishes, to the extent practicable, design guidelines for construction and maintenance which identifies the saving of hardwood overstory trees as a factor to be considered in the design process;

c.

Establishes guidelines to avoid topping, or severe pruning of trees whenever reasonably practicable, and where it is unavoidable, to do so in the manner which is most aesthetically and ecologically acceptable to the county;

d. Provides for a consultation process with the planning department, including, when necessary, review by a certified arborist approved by the county, prior to the commencement of major construction or maintenance or the removal of any hardwood tree over 16 inches DBH;

e. Provides for submittal of annual line clearing plans to the planning department for review;

f. Provides that a breach of such agreement constitutes a violation of this subsection and thus a loss of exemption from the tree protection provisions of this article; and

g. Provides that appeals of administrative decisions made pursuant to such agreement shall be to the ZBOA in accordance with the procedures set forth in section 106-787 ()

(7) Where the DRT determines that the required replacement of trees is not feasible or not desirable due to the size and shape of property and/or structures, crowding of the trees to where thinning will be required, other design limitations, or other viable site constraints, such reduction shall be subject to a general forestation fee. This fee shall be the actual and verified cost of the required tree replacement eliminated per tree reduced and shall be paid to the county treasurer before final approval is given for the development plan. The funds collected through this forestation fee shall be used by the county to plant trees and other landscaping in highway medians, along roads, to provide plants for affordable housing projects or on other public properties as deemed appropriate.

(8) Trees that are used as rookeries (even in nonwetland areas) shall not be cut.

(c) *Tree surveys.* Detailed tree surveys shall be required for any land development that is not exempt from the standards of this chapter. Tree surveys shall be required in all nonforested areas as indicated in subsection (b) of this section and consist of the following:

(1) Tree surveys shall include all trees eight inches dbh and larger, and dogwoods (*Cornus spp.)*, magnolias (*Magnolia spp.)* and redbuds (*Cercis canadensis)* 4 inches dbh and larger.

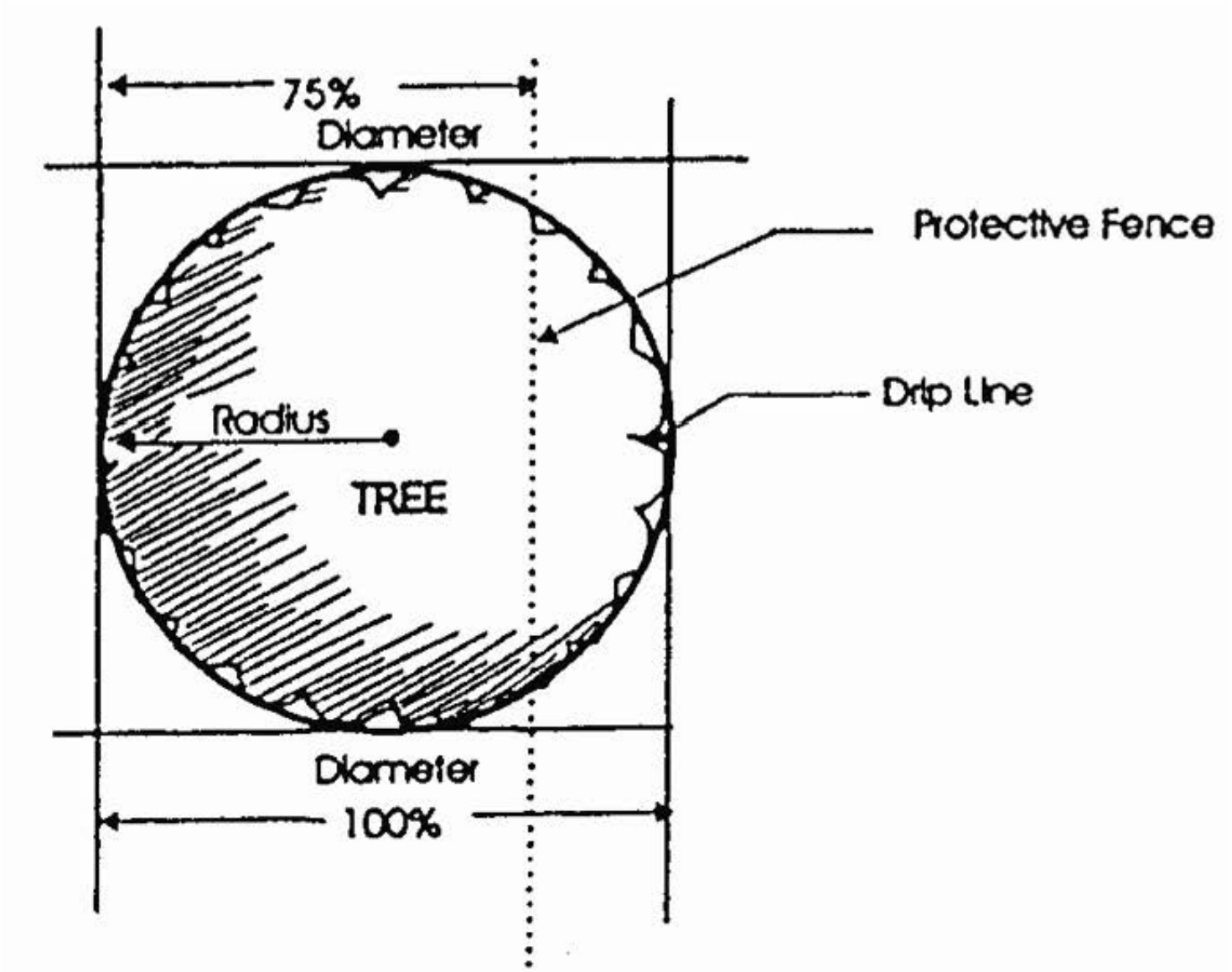
(2) In all forested areas, tree surveys shall first identify areas of forest by the various categories of forest listed in table 106-1782 (), and any endangered species area. A detailed tree survey locating individual trees shall be required only where areas of the forest are to be cut.

(3) The tree survey shall be conducted for 75 feet on either side of the tree protection line. This will permit accurate determination of the actual area of protection. The tree survey shall provide size and drip line for all trees in the area where cutting will occur. The actual protection line shall be drawn so that only trees having more than 75 percent of the diameter of their canopy outside the protection fence line may be counted as preserved (see figure 106-1846 ()(c)).

(4) The tree survey may be conducted by a certified arborist, forester, wetland scientist, botanist or registered landscape architect or surveyor. All tree surveys shall be certified by a registered land surveyor. Each tree surveyed shall be referenced in the required report, including the type, size, and condition of the tree, and submitted as part of the application for development.

(5)

A tree survey shall be less than five years old beginning from the application submission date for which the survey pertains. The ZDA or DRT shall require that a new tree survey be undertaken, at the applicant's expense, when it has been determined that a tree survey is invalid.



(https://www.municode.com/Api/CD/StaticCodeContent?productId=10400&fileName=106-1846-c.png)
Figure 106-1846(c) TREE PROTECTION LINE

(Ord. No. 99-12, § 1 (05.260), 4-26-1999; Ord. No. 99-21, 8-23-1999; Ord. No. 2000-11, 2-28-2000; Ord. No. 2000-26, 6-12-2000; Ord. No. 2001-5, 3-12-2001; Ord. No. 2007/9, 2-12-2007 ( ))

Sec. 106-1847. - Endangered species.

(a) The protection needs of endangered species are, in part, dependent on the type of species.

(b) The county shall maintain endangered species maps of the areas identified as having endangered species. Applicants shall refer to these maps and united states fish and wildlife service (USFWS) data to determine whether there are endangered species on a proposed development site. All endangered species areas shall be given 100-percent protection. In addition, secondary protection areas may be established. No development shall take place in these areas.

(c)

Any site or development that contains an endangered species area or affects a nearby property containing endangered species shall require an endangered species protection plan for approval by USFWS, prior to approval of a plat of subdivision or land development plan by the DRT. The actual species location, primary protection area, and secondary protection areas shall be protected as an endangered species area in the site capacity analysis calculations, beginning with table 106-1814 ()

(Ord. No. 99-12, § 1 (05.270), 4-26-1999)

Sec. 106-1848. - Flood hazard area.

(a) *Applicability.* All standards in this section shall apply to site design and development undertaken within the flood hazard area.

(b) *Flood hazard design standards.* Flood hazard design standards shall be as follows:

(1) All requirements of the county building codes related to construction in flood hazard areas shall be met.

(2) Engineering plans and specifications shall be submitted showing that adequate design has been incorporated to ensure to the maximum extent possible that:

a. Water supply systems will be constructed to preclude infiltration by floodwaters;

b. Wastewater disposal systems, including septic tanks, will be constructed to preclude infiltration by floodwaters; and

c. Types and construction of fill materials used for building foundations are such so as to minimize settlement, slope erosion, siltation and facilities drainage of potential surrounding floodwaters.

(c) *Indication of flood hazard areas.* The 100-year flood elevation, as shown on official county floodplain maps, shall clearly delineate the flood hazard area on the preliminary and final plat. The line shall be determined by field measurement of the elevation on the site.

(d) *Protective deed restrictions required.* Covenant or deed restrictions shall be placed in the deeds to all lots of a development lying within a flood hazard area stipulating to the owner that:

(1) Construction on lots within what is defined and designated as "Coastal High Hazard Areas: Velocity Zones" shall be elevated and securely anchored to well-anchored piles or columns and shall have the level of the bottom of the lowest horizontal support member one foot or more above the level of the 100-year flood. Space below the level of the first floor level shall be free of obstruction or covered by breakaway facade material capable of producing free obstruction for the impact of abnormally high tides or wind-driven water. Residential structures on existing lots shall have a maximum floor area of 2,200 square feet per lot. A larger home may be built only by acquiring additional lots. In new developments, a maximum floor area ratio of one-tenth shall be required.

(2) All other requirements of the county building codes related to construction in flood hazard areas must be met.

(e) *Disclosure statement required.* On all plats of subdivision and land development plans for which lots, sites, or structures are to be sold or leased, the following statement shall be clearly affixed to the plats or plans and readily visible:

"The areas indicated on this plat/plan as flood hazard areas have been identified as having at least a one percent chance of being flooded in any given year by rising tidal waters associated with extreme wind and storm surge. Local regulations require that certain flood hazard protective measures be incorporated in the design and construction of structures in these designated areas."

Reference shall be made to the development covenants and restrictions of this development and requirements of the county building codes department. In addition, some agencies may require mandatory purchase of flood insurance as a prerequisite to mortgage financing in these designated flood hazard areas.

(Ord. No. 99-12, § 1 (05.280), 4-26-1999)

Cross reference— Floods, ch. 78.

DIVISION 4. - STORMWATER MANAGEMENT STANDARDS

Sec. 106-2856. - Purpose.

(a) All development and redevelopment, including highways, shall use site planning, design, construction, and maintenance strategies for the property to maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume and duration of flow.

(b) All development and redevelopment shall provide adequate drainage, peak rate, volume and stormwater pollution control in conformance with this division.

(c) All development and redevelopment shall provide adequate stormwater runoff water treatment and volume control in accordance with the latest version of the county's manual for stormwater Best Management Practices (BMPs).

(d) To the maximum extent technically feasible, no development or redevelopment shall cause postdevelopment stormwater rates, quality or volume to increase above predevelopment levels or to cause an adverse increase in the surface runoff reaching adjacent or surrounding property or receiving waters. Surface runoff rate and volume shall be dissipated by detention or retention on the development parcel, percolation into the soil, evaporation, transpiration, reuse or by transport by natural or manmade drainageway or conduit (protected by legal easement) to a county-approved point of discharge.

(e) Where private drainage systems and easements have been previously approved as private facilities, prior to the effective date of the ordinance from which this chapter derives, as well as all new development and redevelopment, and have not been accepted by the county, such facilities shall not become county responsibility, and are to be so noted on any plat of subdivision or land development plan, as well as in the respective covenants and agreements which control or follow the property.

(f) Additionally, the county has the right to enter, enforce maintenance and/or cause maintenance of any stormwater management facility, either privately or publicly owned.

(g) As the requirements set forth above and elsewhere in Division 4 will require stormwater management to become a vital aspect of all development and redevelopment projects within the county, planning for stormwater management, in accordance with this division, shall commence at the time of initial project inception and presentation to the development review team (DRT). Review of stormwater management for development and redevelopment projects will be undertaken during all phases of the development review process.

(Ord. No. 99-12, § 1 (14.310), 4-26-1999; Ord. No. 2009/40, 10-26-2009 ())

Sec. 106-2857. - Exemptions from site runoff control and drainage planning/design.

(a) Exemptions from site runoff control and drainage planning/design are as follows:

(1)

Any maintenance, alteration, renewal use or improvement to an existing drainage structure as approved by the county engineer which does not create adverse environmental or water quality impacts and does not increase the temperature, rate, quality, or volume or location of stormwater runoff discharge;

(2) Developments where adequate drainage exists for four or fewer residential dwelling units that are not part of a phase of a larger development, not involving a main drainage canal, however, homes in these areas will meet on-site requirements under this exemption;

(3) Site work on existing one-acre sites or less where impervious area is increased by less than two percent;

(4) Site work on existing one-acre sites or less where impervious area is increased by less than two percent, and any earthwork that does not increase runoff and/or eliminate detention/retention facilities and/or stormwater storage or alter stormwater flow rates or discharge location(s);

(5) Agricultural activity not involving relocation of drainage canals; or

(6) Work by agencies or property owners required to mitigate emergency flooding conditions. If possible, emergency work should be approved by the duly appointed officials in charge of emergency preparedness or emergency relief. Property owners performing emergency work will be responsible for any damage or injury to persons or property caused by their unauthorized actions. Property owners will restore the site of the emergency work to its approximate pre-emergency condition within a period of 60 days following the end of the emergency period.

(b) Golf courses are required to comply with the latest version of the county's manual for stormwater BMPs and all site runoff volume and water quality control and drainage planning and design requirements; however, both golf courses and private lagoons shall be exempt from the flood control requirements of section 106-2859 () subject to clear demonstration by the design engineer that no damaging flooding will occur during the 100-year/24-hour storm and that all other safety concerns are addressed.

(Ord. No. 99-12, § 1 (14.315), 4-26-1999; Ord. No. 2009/40, 10-26-2009 () ; Ord. No. 2011/17, 6-13-2011 ())

Sec. 106-2858. - Drainage easements.

(a) *Purpose; required.* Drainage easements are utilized to provide for the protection and legal maintenance of drainage systems not within a right-of-way. Drainage easements shall be required in subdivisions over any portion of a drainage system not within a right-of-way and necessary for the functioning of the system. Drainage easements for all facilities must be shown on construction drawings and approved by the county engineer. The easements shall be designated prior to issuance of a development permit and recorded in public records. The minimum allowable width of drainage easements shall be as follows:

TABLE 106-2858 (). DRAINAGE EASEMENTS

Drainage Systems	Minimum Easement Width
Closed drainage systems	(diameter + 4 feet + 2D)*
Open drainage systems	

Bottom width 20 feet or less	15 feet + BW + 2SD (30 feet minimum)**
Bottom width 20 feet to 40 feet	30 feet + BW + 2SD**
Bottom width greater than 40 feet	40 feet + BW + 2SD**
*Where:	
D = Depth from grade to pipe invert (20-foot minimum)	
**Where:	
BW = Bottom width	
S = Side slope	
D = Depth of opening	
Note: The minimum required width of drainage easements may be increased if deemed necessary by the county engineer, only for justifiable reasons.	

(b) *Location of drainage easements.* Location of drainage easements shall be as follows:

(1) *Platted subdivisions (greater than ten acres).* Drainage easements which are required within a platted subdivision shall be clearly identified on the face of the plat and included in the dedication of rights-of-way and easements. Retention/detention ponds within platted subdivisions shall be protected and platted as a separate tract of land dedicated to the entity responsible for its maintenance. If it is desired to place all or a portion of a detention/retention pond on a buildable lot, not more than 50 percent of the buildable lot can be used for this purpose, and the detention/retention pond shall be clearly marked on the recordable survey or plat of the lot indicating the location of the 25-year and 100-year storm. Additionally detention/retention ponds may be placed within the open space as permitted by this chapter. Public drainage facilities, which are located within a private subdivision, shall be granted a drainage easement by conveyance recorded in the official record books of the county.

(2) *Unplatted land.* Developments may contain drainage systems which traverse property not included in the plat. These may be adjacent lands which were not platted, future phases of the development to be platted at a later date, or may be part of an overall master plan. The drainage systems must be provided with an easement granted by conveyance recorded in the official record books of the county.

(3) *Off-site.* Developments may require off-site drainage improvements in order to ensure the proper functioning of the on-site system. Such off-site improvements shall be provided with a drainage easement granted by conveyance and recorded in the official record books of the county.

(Ord. No. 99-12, § 1 (14.320), 4-26-1999)

Sec. 106-2859. - Flood control design criteria.

(a) *Minimum standards.* The minimum standard for the design of stormwater facilities shall be as follows:

TABLE 106-2859 (). FLOOD CONTROL DESIGN STORM FACILITIES (MINIMUM)

Facility	Design Storm
Retention/detention ponds (with positive outfall)	25-year/24-hour
Retention/detention ponds (landlocked, w/o positive outfall)	100-year/24-hour total retention
Collector, local streets and closed drainage systems	25-year/24-hour hydraulic gradient line 1.0 feet below gutter line
Roadside swales	25-year/24-hour
Canals, major ditches	25-year/24-hour
Bridges	100-year

As an alternative to providing for the 100-year/24-hour storm, if the design engineer can clearly demonstrate that the 100-year/24-hour storm causes no flooding that is damaging within the subdivision upstream and/or downstream of the subdivision, the county engineer, at his discretion, may approve such a drainage system if it meets the intent of this chapter.

(b) *Hydrologic models.* The two accepted hydrological methods for computing surface runoff are the rational method and USDA SCS TR-55. Other methods approved by the county engineer are allowable. The rational method may only be utilized for developments up to 50 acres. TR-55 or other approved method can be used to model developments of any size. Proposed development design shall consider the hydrological features within the total watershed including the development site, upstream and downstream areas.

(c) Compliance with this section does not supersede compliance with section 106-2860 (), general planning and design requirements.

(Ord. No. 99-12, § 1 (14.330), 4-26-1999; Ord. No. 2009/40, 10-26-2009 ())

Cross reference— Floods, ch. 78.

Sec. 106-2860. - General planning and design requirements.

(a) *Standards.* General planning and design requirements for stormwater management are as follows:

(1)

Stormwater discharges from development including streets, parking areas, rooftops, and lawn surfaces may adversely impact water quality in county streams, lakes and tidal water bodies. Therefore, all proposed development and redevelopment shall comply with the stormwater volume and pollution control requirements in the latest version of the county's manual for stormwater BMPs.

(2) Priority wetlands or other significant wetlands identified on the official county conservation district maps, or the federal National Wetlands Inventory, U.S. Department of Commerce, should not be adversely impacted by the construction of detention ponds in or near them, which deprives them of required runoff or lowers their normal water table elevations. Adjacent detention ponds that benefit retention of normal wetland water table elevations are acceptable. If the retention or detention pond's proposed location is near a priority wetland, the applicant must provide data showing that impacts will not be detrimental to the wetland hydrology.

(3) Detention and retention ponds shall be designed with relatively flat side slopes along the shoreline, and with meandering shorelines where possible to increase the length of shoreline, thus offering more space for the growth of littoral vegetation for pollution control purposes.

(4) Detention and retention ponds shall be designed to provide at a minimum one foot of vertical detention storage volume for runoff above the proposed design elevation. Major drainage canals shall not be used for storage where this may impact the storm hydrology upstream and downstream. Use of rectangular weir outlets will be allowed only where this weir will provide better outlet control needed for a given situation than that provided by a V-notched weir. V-shaped or V-notched weir outlets are recommended to achieve detention storage. Use of innovative outlet structures, such as pipe/culvert combinations, perforated riser pipe, or special graduated opening outlet control boxes, is encouraged as ways of reproducing predevelopment runoff conditions. Initial concepts for the design of the stormwater management system (including methods for stormwater retention) shall be submitted with the first submittal of a project to the DRT. Subsequent more detailed design data for storage volume and detention outlet and retention requirements shall be submitted and approved by the county engineer prior to final plan approval, with the design of the stormwater pollution control components to be based on the latest version of the county's manual for stormwater BMPs.

(5) Where cleared site conditions exist around detention or retention areas, the banks shall be sloped to the proposed dry weather water surface elevation and planted for stabilization purposes. Where slopes are not practical or desired, other methods of bank stabilization will be used and noted on plans submitted for final approval.

(b) *Direct stormwater discharge.* Planning and design requirements for direct stormwater discharge are as follows:

(1) Channeling runoff directly into natural water bodies from swales, pipes, curbs, lined channels, hoses, impervious surfaces, rooftops or similar methods shall not be approved for new development or redevelopment unless the county engineer has approved a stormwater pollution control plan which does not allow stormwater runoff to exceed predevelopment levels and complies with the latest version of the county's manual for stormwater BMPs.

(2)

Where specific site hardships require a modification to allow direct discharge into tidal areas without adequate stormwater pollution controls, prior approval by OCRM, DHEC, county engineer, corps of engineers (COE) and water resources commission approval is required. Granting of a modification by the county engineer will be based upon unique site hardships and the use of best available technology to reduce the water quality impacts of stormwater discharges.

(3) Dredging, clearing, deepening, widening, straightening, stabilizing or otherwise altering natural water bodies or canals may be permitted by the county engineer only when a positive benefit can be demonstrated. Such approval by the county does not obviate the need for state or federal agency approvals where applicable.

(4) Vegetative strips shall be retained or created along the banks or edges of all freshwater wetlands as part of the required setback distance. The following minimum setbacks shall be established (unless already established by OCRM Charleston, S.C. District, whichever is greater) for construction from the edge of all wetlands:

a. Single-family residential: 20 feet.

b. Multifamily residential: 50 feet.

c. Commercial or industrial: 50 feet.

d. Impervious parking areas: 30 feet.

Vegetative strips are areas completely pervious to the ground in nature and are intended to prevent polluted runoff from entering fragile wetland systems. For this purpose, they shall be a minimum of 15 feet in width and contain living plant material including but not limited to trees, shrubs, vines, ferns, mosses, flowers, grasses, herbs and ground cover. Slatted lawn furniture, accessories and decks are permitted in the vegetative strips.

A modification may be granted by the county engineer if the specific project design provides for the drainage or channeling of runoff away from natural watercourses, marshes, wetlands or tidal areas and if such runoff is filtered through a vegetated strip. Vegetative strips shall be retained or created in a natural vegetated or grassed condition to allow for periodic flooding, provide drainage access to the water body, and to act as filter to trap sediment and other stormwater pollution.

(5) No new stormwater discharge shall be permitted onto any beaches/shorelines.

(6) Final landscape designs and plantings shall not adversely impact the stormwater runoff, volume and quality controls and drainage concepts approved as part of the development permit approval process. Landscape design and plantings should enhance opportunities for percolation, retention, detention, filtration and plant absorption of site-generated stormwater runoff. Irrigation systems must first make use of all available surface runoff or other retained or detained stormwater as the water supply source. No groundwater wells or use of potable water for irrigation of any kind will be permitted in developments or redevelopments unless it can be demonstrated that alternative sources of irrigation water will not exceed predevelopment conditions and must be approved by the County Engineer. In addition, no irrigation system shall be placed within 50 feet of a natural creek, marsh or estuary where soils and/or grade will allow such irrigation water to flow or migrate to such a natural creek, marsh or estuary.

(7)

The developer shall provide adequate outfall ditches, pipes and easements downstream from his proposed discharge if adequate public or private drainage facilities do not exist to carry the proposed discharge. If the outfall ditches, pipes and easements required for adequate drainage are larger than those needed to carry the additional proposed discharge from the development sought by the applicant, the county may bear those incremental costs which are greater than those properly allocable to the development. The county shall have the authority, however, to condition use of such expanded system by subsequent users on contributions by such users for allocable portions of the cost borne by the county.

(c) *Water surface elevations.* Planning and design requirements for water surface elevations are as follows:

(1) No developer will be permitted to construct, establish, maintain or alter the surface water elevation of any water body or wetland in such a way as to adversely affect the natural drainage from any upstream or to any downstream areas of the drainage basin on a permanent basis.

(2) The county engineer shall review and approve any water surface elevations proposed for lagoons or water bodies. The developer will submit sufficient groundwater and topographic elevation data around the proposed water body site to assist in establishing the water surface elevations and seasonal groundwater levels.

(3) It may be required as a condition of drainage plan approval that adjustments be made to existing or approved water surface elevations if upstream or downstream areas require such adjustments to provide required drainage flows. The county may assist the developer in negotiating with the affected parties on an equitable distribution of cost under such conditions and, if necessary, initiate condemnation proceedings if the county council so deems appropriate and the developer pays all costs associated with any condemnation proceedings.

(Ord. No. 99-12, § 1 (14.340), 4-26-1999; Ord. No. 2009/40, 10-26-2009 ())

Sec. 106-2861. - Retention/detention facilities.

(a) *Design criteria for developments.* Retention/detention facility design criteria for developments are as follows:

(1) *Peak attenuation.* The peak discharge as computed from the design storm for postdevelopment shall not exceed the peak discharge for the design storm for predevelopment or existing conditions.

(2) *Total retention.* Developments which are unable to secure a positive outfall for discharge shall retain all runoff resulting from the design storm as computed for the developed condition. As an alternate, the design engineer can comply with section 106-2859 ()

(3) *Water quality control.* All proposed development and redevelopment shall comply with the latest version of the county's manual for stormwater BMPs.

(4) *Total volume control.* Facility design criteria will control and retain total volume by retention and other methods so stormwater runoff levels will not exceed predevelopment levels. On-site volume controls, where applicable, will be applied as stated in section 106-2865 ()

(b) *Design criteria for redeveloped sites.* Redevelopment which has no increase or a net decrease in impervious area yet lacks evidence of a functioning retention/detention facility will be required by the county engineer to retrofit the site to current county standards for peak attenuation and stormwater volume and water quality controls.

(c) *Design based on soils.* Design based on soils is as follows:

(1) The design of stormwater management facilities should be based upon soil conditions. In areas where soils have been classified under the Soil Conservation Service (SCS) Hydrologic Soil Classification System as type A or B (pervious), the overall stormwater management strategy should be that of on-site retention and infiltration into the ground or other BMPs as outlined in the BMP Manual. Information documenting the permeability of these soils as well as the groundwater table elevations shall be provided as part of the design of the stormwater management system.

(2) In areas where the soils have been classified under the SCS Hydrologic Soils Classification as types C and D (impervious) or A/D, B/D, and C/D (high groundwater table areas), the overall stormwater management system shall make use of retention/detention basins or other BMPs as outlined in the BMP Manual to attenuate peak and retain excess volume from the contributory drainage area and to settle solids washed off or eroded therefrom. Information documenting the permeability of these soils as well as the groundwater table elevations shall be provided as part of the design of the stormwater management system.

(3) Other standards are as follows:

a. Detention ponds shall be designed to attenuate peak outflows to predevelopment rates and to comply with the water quality control requirements in the latest version of the county's manual for stormwater BMPs.

b. Retention ponds are intended to attenuate postdevelopment stormwater volume and shall be designed to provide retention of runoff volume over and above the runoff volume which existed prior to development. Stored stormwater will be used in reuse systems and other volume reduction measures, and will comply with the water quantity and quality control requirements in the latest version of the county's manual for stormwater BMPs.

c. Exfiltration systems intended to attenuate postdevelopment peak outflows shall be designed to store and exfiltrate over the duration of the storm the difference in runoff volume between predevelopment and postdevelopment. Exfiltration systems shall be designed with a safety factor 1.5 (design using 75 percent of the permeability rate or 75 percent of the time for drawdown), and to comply with the water quality control requirements in the latest version of the county's manual for stormwater BMPs.

(d) *Outfall.* Unless otherwise approved by the county engineer, outfall structures shall be as simple as possible and shall employ fixed control elevations (i.e., no valves, removable weirs, etc.). Design criteria are as follows:

(1) Detention ponds shall be required to have an outfall structure to limit peak off-site discharges to predevelopment rates. To achieve water quality control, the location of the structure and the shape of the pond shall be designed to comply with the water quality control requirements in the latest version of the county's manual for stormwater BMPs.

(2) Retention ponds may be required to provide outfall structures where deemed necessary by the county engineer and as may be needed to prevent flooding during storm events above the design standard. In all cases retention ponds shall be designed considering the event of a possible overflow. A path for such overflow shall be determined, and no structures in the development can be situated such that flood damage can occur either on site or off site.

(3) Exfiltration systems may be required to connect to an outfall system as deemed necessary by the county engineer. In all cases, exfiltration systems shall be designed considering the event of a system surcharge. A pathway for excess runoff shall be determined and structures in the development shall be situated such that no flood damage shall occur either on-site or off-site.

(Ord. No. 99-12, § 1 (14.350), 4-26-1999; Ord. No. 2009/40, 10-26-2009 () ; Ord. No. 2011/17, 6-13-2011 ())

Sec. 106-2862. - Open drainage systems ditches and ponds.

(a) *Access easement.* An access easement shall be provided to all drainage ponds and ditches.

(b) *Maintenance access.* Maintenance access shall be built and protected by drainage easements, as follows:

TABLE 106-2862 ()(b). DITCH AND CANAL MINIMUM ACCESS

Ditch or Canal Width	Minimum Unobstructed Access
20 feet or less	15 feet, one side
20 to 40 feet	15 feet, both sides
Greater than 40 feet	20 feet, both sides
Ponds, with fencing	20 feet around pond
Ponds, without fencing	15 feet around pond
The cross slopes of maintenance berms shall be 15:1	

(c) *Grading.* Areas adjacent to open drainageways and ponds shall be graded to preclude the entrance of stormwater except at planned locations.

(d) *Side slopes without fencing.* Maximum side slopes permitted without fencing shall be allowed as follows:

TABLE 106-2862 ()(d) MAXIMUM SIDE SLOPES WITHOUT FENCING

Open Drainageways	Side Slopes
Swale, ditch, or canal	3:1
Ponds (normally dry)	3:1
Ponds (normally wet)	4:1 (to 3 feet below the normal water level) 2:1 (from 3 feet to pond bottom)
Minimum bottom width for ditches or canals shall be two feet.	

(e) *Slope protection.* The disturbed areas in and around the ponds and ditches shall be revegetated as follows:

(1) Side slopes and berms: sod or hydroseed with maintenance bond.

(2) Bottom (dry ponds): grass seeded.

(f) *Fencing requirements if necessary for safety.* The following fencing recommendations are not required; however, the design engineer shall carefully take into account the following fencing criteria and determine or render a professional opinion as to the necessity of fencing as discussed:

(1) Canals will not be approved which, along easements or rights-of-way, do not meet the provisions of subsection (d) of this section.

(2) Ponds, which present a hazard, should have a six-foot chainlink fence or other accessproof fence to prevent entry to the facilities. Fences will be required for retention/detention areas where one or more of the following conditions exist:

a. Rapid stage changes that would make escape practically impossible for small children.

b. Dry bottom ponds where side slopes are steeper than 4:1 and the design high water elevation exceeds two feet.

c. Wet bottom ponds where the side slopes are steeper than 4:1 (to three feet below the normal water level and 2:1 to pond bottom).

(g) *Freeboard.* Open drainageways and ponds shall have a one-foot minimum freeboard above design high water elevation except retention ponds with positive outfall depending upon the design of the outfall structure.

(h) *Berms constructed on fill.* Where fill berms are proposed, calculations supporting the stability of the fill berms are to be submitted by the design engineer. Where excess seepage may be expected through the berm, a clay core may be required.

(Ord. No. 99-12, § 1 (14.360), 4-26-1999)

Sec. 106-2863. - Roadway drainage planning and design standards.

Good roadway drainage design consists of the proper selection of grades, cross slopes, curb types, inlet location, etc., to remove the design storm rainfall from the pavement in a cost effective manner while preserving the safety, traffic capacity and integrity of the highway and street system. These factors are generally considered to be satisfied, provided that excessive spreads of the water are removed from the vehicular traveled way and that siltation at pavement low points is not allowed to occur. All proposed development shall comply with the following standards:

(1) *Roadway grade.* The minimum allowable centerline grade for all streets shall be 0.5 percent, unless otherwise approved by the county engineer only under extenuating circumstances.

(2) *Minimum centerline elevation.* Minimum centerline elevation shall be 7.5 feet NGVD. (NGVD is very close to MSL; however it is a more accurate measurement.)

(3) *Minimum cross slope.* Minimum cross slope for all streets shall be one-quarter inch per foot. All streets shall drain from the road centerline to curb and gutter or drainage ditches. Inverted crown roads shall not be permitted for roads intended for county acceptance and/or maintenance.

(4) *Drainage structures.* All drainage structures, unless specifically detailed in these guidelines, shall conform to the latest edition of the SCDOT standards or designed in conformance with good engineering practices and shall require approval by the county engineer.

(5) *Design criteria for underdrains.* All new streets shall be designed to provide a minimum clearance of one foot between the bottom of the base and the estimated seasonal high water table, or the artificial water table induced by an underdrain system. The following requirements and limitations apply to the design of underdrains:

a. The underdrain trench bottom should not be placed below the seasonal low water table elevation.

b. The distance between the bottom of the underdrain trench and the bottom of the roadway base shall not be less than 24 inches.

c. The bottom of the base course of underdrains shall be placed more than 24 inches below the seasonal high water table elevation.

d. The developer's design engineer shall provide the following design certification:

This is to certify that the underdrain design for _____ road, extending from station _____ to station _____ has been designed such that the separation between the bottom of the base and the artificially induced wet season water table is no less than one foot for the entire width of pavement.

e. The installation shall be inspected by the project design engineer who shall then certify that the underdrain installation procedures and materials are in accordance with the approved plans.

f. The stormwater facilities shall be designed to accommodate expected flow contributed by the underdrain system.

g. The county shall inspect the underdrain system for compliance prior to the issuance of final approval.

(6) *Roadside swales.* Swale drainage will be permitted only when the wet season water table is a minimum of one foot below the invert of the swale. Where roadside swales are required, a positive outfall for the drainage may be required depending on the soil classification and topography. Roadside swales used for water quality control shall comply with the latest version of the county's manual for stormwater BMPs.

(7) *Curbs and gutters.* All roadway drainage not considered suitable for swale and/or ditch type drainage shall be designed as one of the following:

a. Mountable curb and gutter section: maximum 600 feet run between inlets.

b. Standard curb and gutter section: maximum 1,200 feet run between inlets.

c. Any modification to the runs in subsection (7)a or b of this section must be substantiated with calculations.

d. The width of curb and gutter shall be a minimum of 18 inches and shall be either standard or mountable (subdivisions only) curb and gutter, depending upon flow to be handled.

e. There shall be stabilized subgrade beneath all curbs and gutter for one foot beyond the back of curb.

f. No new water valve boxes, meters, portions of manholes, or other appurtenances of any kind relating to any underground utilities shall be located in any portion of a curb and gutter section.

g. The minimum allowable flow line grade of curbs and gutter shall be 0.5 percent, except in intersections where flatter grades shall be allowable. The tolerance for ponded water in curb construction is one-fourth inch maximum; if exceeded, the section of curb shall be removed and reconstructed to grade.

h. Plastering shall not be permitted on the face of the curb. Joints shall be sawed, unless an alternate method is used, at intervals of ten feet, except where shorter intervals are required for closures, but in no case less than four feet.

i. After concrete has set sufficiently, but in no case later than three days after construction, the curbs shall be backfilled.

j. All cross-street valley gutters shall be constructed of concrete.

(8) *Runoff determination.* The peak rates of runoff for which the pavement drainage system must be designed shall be determined by the rational method. The time of concentration, individual drainage areas and rainfall intensity amount shall be submitted as part of the drainage plans. A separate rational runoff coefficient (C) shall be determined for the specific contributing area to each inlet/catchbasin within the proposed storm sewer system. A composite C value shall be computed for each contributing area based on an individual C value of 0.9 for the estimated impervious portion of the actual area and an individual C value of 0.2 for the remaining pervious (grassed) portion of the actual area.

(9) *Stormwater spread into traveled lane.* Inlets shall be spaced at all low points, intersections and along continuous grades so as to prevent the spread of water from exceeding tolerable limits. The acceptable tolerable limits for collector roadways is defined as approximately one-half the traveled lane width. Acceptable tolerable limits for interior subdivision roadway are defined as a maximum of one inch above the crown of the road.

(10)*Low point inlets.* All inlets at low points (sumps) shall be designed to intercept 100 percent of the design flow without exceeding the allowable spread of water onto the traveled lanes as defined in subsection (9) of this section. On collector roadways, in order to prevent siltation and to provide for a safety factor against clogging of single inlet in a sump location, it is required to consider constructing multiple inlets at all sump locations or provide for other safety factors against clogging. Preferably two inlets should be constructed on each side of the roadway. Open bottom inlets are encourage in effective recharge areas.

(Ord. No. 99-12, § 1 (14.370), 4-26-1999)

Sec. 106-2864. - Storm sewer design standards.

(a) *Generally.* Storm sewer design standards shall be as follows:

(1) *Design discharge.* Storm sewer system design is to be based upon a 25-year frequency event. The system shall be designed to handle the flows from the contributory area within the proposed subdivision. Then, the system shall be analyzed a second time to ensure that any off-site flows can also be accommodated. This second analysis shall consider the relative timing of the on-site and off-site flows in determining the adequacy of the designed system.

(2) *Minimum pipe size.* The minimum size of pipe to be used in storm sewer systems is 15 inches or equivalent elliptical. Unless otherwise approved by the county engineer, designs shall be based upon six-inch increments in sizes above 18 inches.

(3) *Pipe grade.* All storm sewers shall be designed and constructed to produce a minimum velocity of 2.0 () fps when flowing full, unless site conditions do not allow. No storm sewer system or portion thereof will be designed to produce velocities in excess of ten fps.

(4) *Pipe clearance.* Unless otherwise authorized by the county engineer, the minimum clearance for all storm pipes shall be as follows:

a. From bottom of roadway base to outside crown of pipe: 1.0 foot.

b. Utility crossing, outside edge to outside edge: 0.5 foot.

(5) *Roadway cross pipes.* All pipes crossing arterials and collectors shall be reinforced concrete pipe.

(6) *Interference manholes.* Interference manholes shall be used only when there is no reasonable alternative design. Where it is necessary to allow a sanitary line or other utility to pass through a manhole, inlet or junction box, the utility shall be ductile iron or another suitable material. A minimum of one foot vertical clearance shall be required between the bottom of the manhole and face of utility pipe. Interference manholes shall be oversized to accommodate the decreased maneuverability inside the structure and flow retardant.

(7) *Maximum lengths of pipe.* The following maximum runs of pipe shall be used when spacing access structures of any types:

TABLE 106-2864 ()(a)(7). PIPE SIZE AND RUN

Pipe Size (inches)	Maximum Run of Pipe (feet)
15	300
18	300
24 to 36	400
42 and larger	500

(8)

Design tailwater. All storm sewer systems shall be designed taking into consideration the tailwater of the receiving facility. When the detention pond is the receiving facility, the design tailwater level can be estimated from the information generated by routing through the pond the hydrograph resulting from a 25-year frequency storm of duration equal to that used in designing the pond. Then the design tailwater level can be assumed to be the 25-year pond level corresponding to the time at which peak inflow occurs from the storm sewer into the pond. In lieu of the detailed analysis, however, a simpler design tailwater estimate can be obtained by averaging the established 25-year design high water elevation for the pond and the pond bottom elevation for dry bottom ponds or the normal water elevation for wet bottom ponds.

(9) *Hydraulic gradient line computations.* The hydraulic gradient line for the storm sewer system shall be computed taking into consideration the design tailwater on the system and the energy losses associated with entrance into and exit from the system, friction through the system, and turbulence in the individual manholes/catchbasins/junctions with the system. The energy losses associated with the turbulence in the individual manholes are minor for an open channel or gravity storm sewer system and can typically be overcome by adjusting (increasing) the upstream pipe invert elevations in a manhole by a small amount. However, manholes can be significant for a pressure or surcharged storm sewer system and must be accounted for in establishing a reasonable hydraulic gradient line. Acceptable head loss coefficients (K) for various types of surcharged manholes/catch basins/junctions shall be used.

(b) *Culvert design.* Culvert design standards are as follows:

(1) *Minimum size.* Minimum size shall be as follows:

a. *Pipe.* The minimum size of pipes to be used for culvert installations under roadways shall be 18 inches. The minimum size of pipes to be used for driveway crossings shall be 12 inches or equivalent elliptical.

b. *Box.* Unless otherwise approved by the county engineer, box culverts shall be three feet by three feet minimum. Unless otherwise approved by the county engineer, increments of one foot in height or width should be used above this minimum.

(2) *Maximum pipe grade.* The maximum slope allowable shall be a slope that produces ten fps velocity within the culvert barrel. Erosion protection and/or energy dissipaters shall be required to properly control entrance and outlet velocities.

(3) *Maximum lengths of structure.* The maximum length of a culvert conveyance structure without access shall be as allowed in table 106-2864 ()(a)(7). Note: For box culverts use 500 feet maximum.

(4) *Design tailwater.* All culvert installation shall be designed taking into consideration the tailwater of the receiving facility.

(5) *Allowable headwater.* The allowable headwater of a culvert installation should be set by the designer for an economical installation. When endwalls are used, the headwater should not exceed the top of the endwall at the entrance. If the top of the endwall is inundated, special protection of the roadway embankment and/or ditch slope may be necessary for erosion protection.

(6) *Design procedure.* The determination of the required size of a culvert installation can be accomplished by mathematical analysis or by the use of design nomographs.

(c) *Material specifications.* Material specifications for storm sewers are as follow:

(1) *Pipe.* Reinforced concrete pipe shall conform to the latest edition of the SCDOT Standard Specifications for Highway Construction. Corrugated aluminum pipe shall conform to AASHTO M-196, M-197, and federal spec. WW 442-C. Corrugated polyethylene pipe shall conform to AASHTO M-252, M-294, type S. All pipe shall have a minimum cover so as not to pose structural damage to pipe and as per the manufacturer's technical specifications and recommendation.

(2) *Inlets, manholes and junction boxes.* All materials used in the construction of inlets, manholes and junction boxes shall conform to the latest editions of the SCDOT Standard Specifications for Highway Construction.

(3) *Underdrains/exfiltration systems.* All materials used in the construction of underdrains shall conform to the latest edition of the SCDOT Standard Specifications for Highway Construction. The following is a list of underdrain materials acceptable for use in the county:

a. *Perforated corrugated tubing.* Corrugated, polyethylene tubing perforated throughout and meeting the requirements of AASHTO M-252 or M-294.

b. *Perforated PVC pipe.* Polyvinyl chloride pipe conforming to the requirements of ASTM D-3033. The perforations shall meet the requirements of ASTM C-508.

c. *Exfiltration pipe.* The following is a list of pipe materials acceptable for use in exfiltration systems:

1. Aluminum pipe perforated 360°, meeting the requirements of AASHTO M-196.

2. Perforated class III reinforced concrete pipe with perforations meeting the requirements of ASTM C-444.

3. Polyvinyl chloride pipe perforated 360°, meeting the requirements of ASTM D-3033.

d. *Coarse aggregate.* Clean stone containing no friable materials and a gradation equivalent to size number 56 or 57.

(4) *Drainage structures.* All materials used in the construction of drainage structures shall conform to the latest editions of the SCDOT Standard Specifications for Highway Construction. Riprap is not an acceptable material for drainage structure, but can be used for erosion control.

(5) *Fencing.* Unless otherwise approved by the county engineer, all fencing shall be six-foot chainlink or accessproof fence with a minimum 15-foot-wide double gate opening conforming to the SCDOT specifications.

(6) *Sod, seed, hydroseed and mulch.* All sod, seed, hydroseed and mulch materials and installation shall conform to the latest edition of the SCDOT Standard Specifications for Highway Construction. See article VI of this chapter.

(7) *Modification of specifications.* The materials specifications can be modified by the county engineer based on new and/or proven technology.

(Ord. No. 99-12, § 1 (14.380), 4-26-1999)

Sec. 106-2865. - On-site single-family lot, best management practices (BMP).

(a) Where stormwater runoff is not addressed in an approved community runoff volume control system, construction of new or single-family homes that are renovated in excess of 50 percent of their taxable appraised value, will need to employ and utilize on-site stormwater runoff volume control BMPs.

(b) The actual BMPs to be utilized can be either determined from stormwater utility's on-lot volume program (attachment in BMP manual and Web-based program) or other volume practices as described in Beaufort County Best Management Practice Manual. Both manual and Web-based program will be available on the county's Web site.

(c) Required practices will be sized based on impervious surface on the property and can be reduced by employing practices that reduce impervious surface like:

(1) Pervious driveways.

(2) Pervious walkways.

(3) Smaller roof surface.

(d) In no case will the imposition of stormwater volume controls for lots of record result in the lots becoming unbuildable. The zoning administration shall be empowered to make this determination at his or her discretion without recourse to the zoning board of appeals for hardship.

(Ord. No. 2011/17, 6-13-2011 ())

Part IV

Proposed Stormwater Management Program

SECTION 1
PUBLIC EDUCATION AND OUTREACH ON STORM WATER IMPACTS

1. Are (or will, within the first year of permit coverage,) the goals and objectives of the program based on at least three high priority, community-wide issues (e.g. reduction of the POC in discharges from the MS4, promoting pervious techniques used in the MS4) defined?

Yes ☒
No ☐

Improvement of Water Quality in Estuaries & Rivers, Reduction in SW Pollutant Loading, SW volume reduction

2. Are (or will, within the first year of permit coverage) the pollutant(s) of concern identified and the audience(s) targeted?

Yes ☒
No ☐

If no, explain

3. Have (or will, during permit coverage,) appropriate message(s) based on targeted residential issues and on targeted industrial/commercial issues and / or from issues deemed more appropriate to the MS4 been created?

Yes ☒
No ☐

If no, explain

4. Have (or will, during permit coverage,) appropriate educational materials (e.g. the materials can utilize various media such as printed materials, billboard and mass transit advertisements, signage at select locations, radio advertisements, television advertisements, websites) been developed?

Yes ☒
No ☐

If no, explain

5. Is (or will during permit coverage) public input (e.g., the opportunity for public comment, or public meetings) being utilized in the development of the SWMP?

Yes ☒
No ☐

If no, explain

Complete Tables 1, 2, and 3 (BMP Measurable Goals and Milestones) in the addendum of this NOI. Identify and outline measurable goals and milestones. Attach completed Section 1 tables to this NOI.

ADDENDUM
TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)
BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES
These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION ONE

TABLE 1: BMP MEASURABLE GOALS AND IMPLEMENTATION MILESTONES

	Name	DESCRIPTION
A.	Identify Target Pollutants & Audience Messages	Identify target pollutants in MS4 areas. Identify audiences and messages to educate to reduce discharge of target pollutants.
B.	Brochures	Create and distribute target audience based brochures on SW management & pollution protection
C.	Website	Create a standalone SW Website that provided all audiences with quick access to SW pollution prevention information. Update current “SW Kiosks”
D.	Event Participation	Trained staff will attend local events (e.g. Water Festival), will have a display station for face to face contact with public on SW quality goals and objectives and will have information for distribution
E.	School SW Programs	Develop various school curriculum for Elementary, Middle and High School level science programs that can be presented by teachers and/or County SW staff
F.	Community Surveys	Conduct Community wide surveys to gauge the public’s knowledge of Stormwater issues
G.	Public Input	Provide opportunities via website or public meetings to citizen input on Stormwater issues

TABLE 2: ADMINISTRATIVE INFORMATION	
PRIMARY CONTACT	POSITION OR TITLE
Eric Larson, PE	Stormwater Manager

OTHER DEPARTMENT	ROLE

BEST MANAGEMENT PRACTICES (BMPs) MEASURABLE GOALS AND IMPLEMENTATION MILESTONES (Continued)	
GOVERNMENT ENTITY	ROLE
Beaufort County SW Utility	Primary Responsible Party

OTHER INSTITUTION	ROLE
Beaufort County Soil & Conservation District	Primary provider of Public Education services as a contractor to the County

EQUIPMENT NEEDS (IF APPLICABLE)
Portable Display Booth

GROUP	TARGET DESCRIPTION
Beaufort County SW Utility	Create a SW Education Booth for use at public events and in school programs
Beaufort County Soil & Conservation District	Enviroscape Educational Unit materials

ADDENDUM
TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)
BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES
These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION ONE

TABLE 3: BEST MANAGEMENT PRACTICES

The purpose of this addendum is to record the measurable goals for each BMP, and the dates (month and year) by which interim actions are to be accomplished. Space is given for four BMPs for each of the six minimum measures.

Measurable goals are BMP design objectives, or goals that will quantify the progress of implementing the actions or performance of a BMP. They are ways to measure activities or effects of a BMP. For each of the six minimum measures and for each BMP, define the measurable goal you will use to monitor effectiveness of this BMP.

For each BMP, establish milestones for implementation. These tables are set up for once/year milestones. You may change the milestone dates to time frames less than one year. Also, certain BMPs - e.g., an ordinance - should be put in place within one year.

BMP A	MEASURABLE GOALS AND MILESTONES
Goals	Identify Target Pollutants & Audience Messages
Milestone Year 1	Using available data from existing water quality sampling program (provided by USCB) determine target pollutants for each area of the MS4. Develop target audiences to reach with stormwater pollution messages and educational materials.
Milestone Year 2	Begin to identify possible causes and sources of pollutants.
Milestone Year 3	Continue to identify possible causes and sources of pollutants and develop target audiences to reach with stormwater pollution messages and educational materials
Milestone Year 4	Continue to identify possible causes and sources of pollutants and develop target audiences to reach with stormwater pollution messages and educational materials
Milestone Year 5	Continue to identify possible causes and sources of pollutants and develop target audiences to reach with stormwater pollution messages and educational materials – Review and assess success of program and modify as needed

BMP B	MEASURABLE GOALS AND MILESTONES
Goals	Distribution of SW Pollution Prevention Brochures to the public
Milestone Year 1	Create SW Pollution Prevention target audience brochures (e.g. general public, sportsmen, etc.). Develop a portable SW display booth
Milestone Year 2	Participate as a partner when possible at public events (festivals, etc.), set up booth and man, distribute audience specific brochures- Goal to reach 1,000 people with SW education
Milestone Year 3	Continue year 2 goals, add more events participation as opportunities become available, Goal – to reach 2,000 people per year
Milestone Year 4	Continue program Goal – Reach 4,000 people per year
Milestone Year 5	Continue program Goal – Reach 5,000 people per year – Assess BMP results and adjust program as necessary

BMP C	MEASURABLE GOALS AND MILESTONES
Goals	Create and interactive Website, with standalone citizen report and complaint link and continue use the existing stormwater educational kiosks
Milestone Year 1	Create standalone Stormwater Information and Education Website, with links to other programs (both public and private) that promote water quality and preservation practices
Milestone Year 2	Update Website based on customer input, availability of new information and input from both the development and environmental community
Milestone Year 3	Update Website based on customer input, availability of new information and input from both the development and environmental community
Milestone Year 4	Update Website based on customer input, availability of new information and input from both the development and environmental community
Milestone Year 5	Update Website based on customer input, availability of new information and input from both the development and environmental community

BMP D	MEASURABLE GOALS AND MILESTONES
Goals	Event Participation
Milestone Year 1	Create a portable SW display and train staff to man the display for major local events. Goal – Have ready for 2015 Beaufort Water Festival.
Milestone Year 2	Identify local events where the SW display can be set up and manned Goal - Participate in three or more events
Milestone Year 3	Gain input on the effectiveness of the SW display program, adjust as needed and modify. Goal – Participate in five or more events
Milestone Year 4	Continue program and update information as needed Goal – Participate in six or more events, become

	"regulars" at major events.
Milestone Year 5	Continue program and update information as needed Goal – Participate in six or more events, become "regulars" at major events.

BMP E	**MEASURABLE GOALS AND MILESTONES**
Goals	School Stormwater Programs
Milestone Year 1	Working with local groups **and** Beaufort County Schools, develop three educational units for use in local school science programs (7th Grade) – Goal – Complete final programs in first year.
Milestone Year 2	Train County staff, and if possible science teachers, in use of the educational unit and "test" educational unit in trial schools, adjust program as necessary – Goal – by end of year two have program ready for release to all 7th grade classes
Milestone Year 3	Implement educational unit program in middle schools – Goal – five participating 7th grade classes
Milestone Year 4	Implement educational unit program in middle schools – Goal – five participating middle schools and adjust program to reach elementary schools (4th grade)
Milestone Year 5	Implement educational unit program in five additional middle schools and trial elementary school program in two 4th grade classes. Begin planning to expand program to high school level classes.

BMP F	**MEASURABLE GOALS AND MILESTONES**
Goals	Community Surveys
Milestone Year 1	Develop a community wide stormwater public knowledge on line survey to integrate into SW website
Milestone Year 2	Implement, via website, first stormwater public knowledge survey, gather and correlate results to create measurable baseline data to gauge the public's knowledge of stormwater issues
Milestone Year 3	None
Milestone Year 4	Implement second stormwater public knowledge survey, gather and correlate results to compare to measurable baseline data to gauge the public's increase in knowledge of stormwater issues
Milestone Year 5	Assess two survey results and adjust survey program based upon survey results

BMP G	**MEASURABLE GOALS AND MILESTONES**
Goals	Public Input Opportunities
Milestone Year 1	Develop a program for conducting public meetings in various areas of the County to discuss the County Stormwater Management Program and to receive public input on stormwater related issues
Milestone Year 2	Conduct first public meeting in a selected area of the County. Compare results to input received from surveys
Milestone Year 3	Conduct second public meeting in a selected area of the County. Compare results to input received from surveys
Milestone Year 4	Conduct third public meeting in a selected area of the County. Compare results to input received from surveys
Milestone Year 5	Conduct fourth public meeting in a selected area of the County. Compare results to input received from surveys – review program and adjust as may be necessary

SECTION 2 PUBLIC INVOLVEMENT AND PUBLIC PARTICIPATION

1. Have (or will, within the first year of permit coverage,) the public been invited to participate in the development and implementation of all parts of the community's SWMP?

Yes ☒ No ☐ | If no, explain

2. Are (or will, during the permit term) opportunities created for citizens to participate in the implementation of stormwater controls (e.g., stream clean-ups, storm drain stenciling, volunteer monitoring, and educational activities)?

Yes ☒ No ☐ | If no, explain

3. Has the permittee (or will, during the permit term,) ensured that the public can easily find information about the SMS4 SWMP? If available in the web, provide link

Yes ☒ No ☐ | If no, explain

4. Are (or will) written procedures for implementing the **Public Involvement / Participation** MCM incorporated into the SWMP?

Yes ☒ No ☐ | If no, explain

Complete Tables 1, 2, and 3 (BMP Measurable Goals and Milestones) in the addendum of this NOI. Identify and outline measurable goals and milestones. Attach completed Section 2 tables to this NOI.

ADDENDUM

TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)

BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES

These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION TWO

TABLE 1: BMP MEASURABLE GOALS AND IMPLEMENTATION MILESTONES

	Name	DESCRIPTION
A.	Storm Drain Stenciling	Update the previous Stormwater Drain medallion program
B.	Public Meetings/Citizen Panels	Set up formal advertised meetings in various areas of the County to that the County can present SW information and gain citizen input and can raise concerns and/or problems
C.	Community Clean Ups	Set up formal community clean up days for cleaning trash and debris for roadsides, ditches, etc. in the watershed areas
D.	Volunteer Speakers	Create a Speakers Bureau of trained County staff who can provide SW Pollution Prevention talks to service clubs, churches and other groups that may be in need of speakers.

TABLE 2: ADMINISTRATIVE INFORMATION

PRIMARY CONTACT	POSITION OR TITLE
Eric Larson, PE	Stormwater Manager

OTHER DEPARTMENT	ROLE
Beaufort County Soil & Conservation District	Primary provider of Public Involvement services as a contractor to the County

BEST MANAGEMENT PRACTICES (BMPs) MEASURABLE GOALS AND IMPLEMENTATION MILESTONES (Continued)	
GOVERNMENT ENTITY	ROLE
Beaufort County SW Utility	Primary responsible party

OTHER INSTITUTION	ROLE
Beaufort County Soil & Conservation District	Primary provider of Public Involvement services as a contractor to the County

EQUIPMENT NEEDS (IF APPLICABLE)
Storm drain markings

GROUP	TARGET DESCRIPTION
Beaufort County SW Utility	Identify speakers, provide equipment for cleanup days, organize, promote and conduct area public meetings
Beaufort County Soil & Conservation District	Develop speaker's information, identify speakers, train speakers. Organize cleanup day programs
Beaufort County Soil & Conservation District	Organize and promote marker installation events

ADDENDUM
TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)
BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES
These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION TWO

TABLE 3: BEST MANAGEMENT PRACTICES

The purpose of this addendum is to record the measurable goals for each BMP, and the dates (month and year) by which interim actions are to be accomplished. Space is given for four BMPs for each of the six minimum measures.

Measurable goals are BMP design objectives, or goals that will quantify the progress of implementing the actions or performance of a BMP. They are ways to measure activities or effects of a BMP. For each of the six minimum measures and for each BMP, define the measurable goal you will use to monitor effectiveness of this BMP.

For each BMP, establish milestones for implementation. These tables are set up for once/year milestones. You may change the milestone dates to time frames less than one year. Also, certain BMPs - e.g., an ordinance - should be put in place within one year.

BMP A	**MEASURABLE GOALS AND MILESTONES**
Goals	Storm Drain Marker Program
Milestone Year 1	Order 1,500 storm drain markers (or stencil) to be placed on all stormwater boxes that flow to receiving streams or wetlands. Identify all stormwater structures that need marking via the County GIS/Mosquito control program stormwater structure data base
Milestone Year 2	Identify groups (e.g. Boy & Girl Scouts, Service clubs, etc.) that can provide volunteers to place markers on SW structures. Goal – Complete 25% of SW structures in the County
Milestone Year 3	Continue program and cover another 25% of SW structures
Milestone Year 4	Continue program and cover another 25% of SW structures
Milestone Year 5	Complete remaining 25% of SW structures

BMP B	MEASURABLE GOALS AND MILESTONES
Goals	Public Meeting Citizen Participation Panels
Milestone Year 1	Establish and document procedures for advertising Citizen Input meeting, conduction such meeting, areas to be targeted, program for such event Goal – Conduct first event
Milestone Year 2	Conduct four additional SW Citizen Input meetings in various areas of the County
Milestone Year 3	Conduct four additional SW Citizen Input meetings in various areas of the County
Milestone Year 4	Conduct four additional SW Citizen Input meetings in various areas of the County. Evaluate effectiveness of the program, adjust program as may be needed.
Milestone Year 5	Conduct four additional SW Citizen Input Meetings in various areas of the County.

BMP C	MEASURABLE GOALS AND MILESTONES
Goals	Community Clean Up Days
Milestone Year 1	Create and document a Community Cleanup program, identify liabilities and responsibilities, insurance requirement, areas to be targeted, traffic and pedestrian protection procedures, collection and disposal of bags, etc. Goal – Written program in year one.
Milestone Year 2	Organize teams in targeted areas, advertise and promote cleanup days, provide on-site program management, arrange for collection and disposal, etc. Goal – two cleanup program trials, assess results and modify program as may be necessary.
Milestone Year 3	Continue to identify cleanup areas, organize teams and advertise programs Goal – Four cleanup programs
Milestone Year 4	Continue to identify cleanup areas, organize teams and advertise programs Goal – Four cleanup programs
Milestone Year 5	Continue to identify cleanup areas, organize teams and advertise programs Goal – Four cleanup programs

BMP D	MEASURABLE GOALS AND MILESTONES
Goals	Volunteer Speakers
Milestone Year 1	Develop 15 min. SW Education PowerPoint presentation, develop speaker's outline, identify speakers, trial two speaking events, gauge results and modify program as needed.
Milestone Year 2	Continue to recruit speakers and create a "Speakers Bureau". Link request for a speaker to the Website, advertise to service groups, churches, etc. availability of speakers. Goal – 3 speaking engagements
Milestone Year 3	Continue program, evaluate and update as needed. Recruit speakers – Goal 6 speaking engagements
Milestone Year 4	Continue program, evaluate and update as needed. Recruit speakers – Goal 9 speaking engagements
Milestone Year 5	Continue program, evaluate and update as needed. Recruit speakers – Goal 12 speaking engagement's

SECTION 3
ILLICIT DISCHARGE DETECTION AND ELIMINATION

The following are common sources of illicit discharges to an MS4:

- Sanitary Wastewater
- Car wash wastewaters
- Radiator flushing disposal
- Spills from roadway accidents
- Carpet cleaning wastewaters
- Effluent from septic tanks
- Improper oil disposal
- Laundry Wastewaters/gray water
- Improper disposal of auto and household toxics

STORM SEWER SYSTEM MAP

Does the MS4 currently have a storm sewer system map completed for the entire regulated municipal separate storm sewer system? The map must depict, at a minimum: city streets, topography or drainage patterns, streams, and outfalls (points where the city or county-operated MS4 discharges into the streams or adjacent MS4s).

Yes ☒ No ☐ If no, explain

Beaufort County has a working map that has storm structures identified. The map requires update to require all parameters mentioned above.

PRIORITY AREAS, FIELD SCREENING, TRACING AND ELIMINATION OF ILLICIT DISCHARGES

Has (or will, within the first year of permit coverage,) the MS4 identified priority areas documenting its basis for the selection?

Yes ☒ No ☐ If no, explain

Not currently in place, this will be completed within 12 months of the effective date of coverage.

Does the MS4 currently have (or will have) written field screening and analytical protocol to detect and eliminate illicit discharges to the MS4 within one year from the effective date of coverage?

Yes ☒ No ☐ If no, explain

Not currently in place, this will be completed within 12 months of the effective date of coverage.

Does the MS4 currently have procedures for tracing the source of an illicit discharge?

Yes ☐ No ☒ If no, explain

Beaufort County will develop a procedure for tracing the source of an illicit discharge along with determining a written field screening and analytical protocol to detect and eliminate illicit discharge within 12 months from the effective date of coverage.

INSPECTION/SCREENING AND ENFORCEMENT PROCEDURES

1. Does the MS4 presently have personnel and procedures in place for inspection and/or screening for non-stormwater discharges? If yes, please describe and indicated percentage of system inspected and/or screened.

Yes ☐ No ☒

2. Does the MS4 presently have procedures and personnel in place for enforcement of violations of the illicit discharge ordinance? If yes, please describe.

Yes ☐
No ☒

3. How are enforcement actions documented?

Enforcement actions are not currently documented. This will be determined within 24 months from the effective date of coverage.

4. Has the MS4 defined "hot spots" for non-stormwater discharge screening and inspections? If yes, please describe and provide a map

of illicit discharge screening priority areas.

Yes ☐ No ☒

PUBLIC INPUT AND COMPLAINTS

1. Does the MS4 presently have procedures in place to receive and consider information and complaints about non-stormwater discharges that are submitted by the public? If so, provide brief description: responsible departments, personnel, steps followed.

Yes ☐
No ☒

Refer to Section 1 in regards to input of complaints.

EDUCATION

1. Has the MS4 educated the public and businesses including, but not limited to, auto parts supply, auto repair shop and restaurants, regarding ways to detect, prevent and eliminate illicit discharges? If yes, briefly describe the educational materials, including media used (e.g., written brochures, public service announcements, etc.), the topic(s) covered, intended target audience(s), and the distribution method.

Yes ☐
No ☒

Please refer to Sections 1 and 2 of this form for more details.

ILLICIT DISCHARGE ORDINANCES

1. Does the MS4 currently have an ordinance or regulatory mechanism that prohibits non-stormwater discharges into the storm sewer system? If yes, please attach a copy of the ordinance and give page number(s) of this section of ordinance. If No, proceed to the next section (inspections and enforcement).

Yes ☐ No ☒ _____ Page Number _____ Ordinance Section Number

2. Does the ordinance or regulatory mechanism clearly define non-stormwater discharges, either through a written description of a non-stormwater discharge or through a listing of unallowable or allowable non-stormwater discharges?

N/A

Yes ☐ No ☐ If no, explain

3. Does the ordinance or regulatory mechanism allow right-of-entry on private property for inspection of suspected discharges?

N/A

Yes ☐ No ☐ If no, explain

4. Does the ordinance or regulatory mechanism prohibit dumping?

N/A

Yes ☐ No ☐ If no, explain

5. Does the ordinance or regulatory mechanism give the MS4 owner/operator the authority to eliminate non-stormwater discharges in the event of violations? If yes, please note page number and paragraph number.

N/A

Yes ☐ No ☐ _____ Page Number _____ Paragraph Number

6. What is maximum penalty in ordinance or regulatory? Please note maximum penalty, page number and paragraph number.

N/A

Yes ☐ No ☐ _____ Max. Penalty _____ Page Number _____ Paragraph Number

7. Does the MS4 have ordinance or other regulatory mechanism that prohibits contamination of stormwater runoff from "hot spots" including industrial and commercial properties, restaurants, auto repair shops, auto supply shops, and large commercial parking areas?

N/A

Yes ☐ No ☐ If no, explain

Complete Tables 1, 2, and 3 (BMP Measurable Goals and Milestones) in the addendum of this NOI. Identify and outline measurable goals and milestones. Attach completed Section 1 tables to this NOI.

ADDENDUM

TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)

BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES

These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION THREE

TABLE 1: BMP MEASURABLE GOALS AND IMPLEMENTATION MILESTONES

	Name	DESCRIPTION
A.	Adequate Legal Authorities	Develop an ordinance, or other regulatory mechanism, adequate legal authorities to meet the objectives of the Illicit Discharge Stormwater Management Program. Establish the authority to request information such as stormwater plans, inspection reports, monitoring results, and other information deemed necessary to evaluate compliance with the Illicit Discharge Stormwater Management Program. Establish the authority to enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to stormwater illicit discharges to determine whether there is compliance of the Illicit Discharge Stormwater Management Program. Establish the authority to issue violations to determined establishments and/or owners when illicit discharges and/or non-storm water discharges are determined.
B.	Develop Outfall Inventory Map	Develop procedures for field data collection activities and administration tasks for new development. Implement inventory collection of County owned stormwater structures and outfalls. Complete overall inventory map and continue to update map as construction plans are approved and developments are constructed.
C.	Outfall Screening for Illicit Discharges	Determine a list of significant illicit discharges. Develop and implement procedures for conducting outfall screening with scheduled visits of all outfalls to locate the problem, determine the source of the problem, remove/correct the illicit discharge, organize data collected, and report illicit discharges determined.
D.	Prioritize Other Potential Illicit Discharges and Non-storm Water Discharges	Determine a list of other potential illicit discharges, non-storm water discharges and incidental non-storm water discharges. Prioritize and establish procedures to evaluate the list of other potential illicit discharges and non-storm water discharges.
E.	Education on Illicit Discharges	Establish education and training to staff and the public on illicit discharges.
F.	Enforcement	Track the issuance of notices of violation and enforcement actions. This mechanism shall include the ability to identify chronic violators for initiation of actions to reduce noncompliance.
G.	Monitoring Plan	Measure pollutant levels discharged from identified outfalls to water bodies subject to TMDL.

TABLE 2: ADMINISTRATIVE INFORMATION

PRIMARY CONTACT	POSITION OR TITLE
Eric Larson, PE	Stormwater Manager

OTHER DEPARTMENT	ROLE
Code Enforcement	Provide enforcement assistance

BEST MANAGEMENT PRACTICES (BMPs) MEASURABLE GOALS AND IMPLEMENTATION MILESTONES (Continued)

GOVERNMENT ENTITY	ROLE

Beaufort County SW Utility	Primary responsible party

OTHER INSTITUTION	ROLE
Beaufort County Soil & Conservation District	Training Assistance

EQUIPMENT NEEDS (IF APPLICABLE)
Sampling Equipment

GROUP	TARGET DESCRIPTION
Beaufort County Stormwater Utility	Equipment necessary for sampling
USCB	Lab services

ADDENDUM
TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)
BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES
These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION THREE

TABLE 3: BEST MANAGEMENT PRACTICES

The purpose of this addendum is to record the measurable goals for each BMP, and the dates (month and year) by which interim actions are to be accomplished. Space is given for four BMPs for each of the six minimum measures.

Measurable goals are BMP design objectives, or goals that will quantify the progress of implementing the actions or performance of a BMP. They are ways to measure activities or effects of a BMP. For each of the six minimum measures and for each BMP, define the measurable goal you will use to monitor effectiveness of this BMP.

For each BMP, establish milestones for implementation. These tables are set up for once/year milestones. You may change the milestone dates to time frames less than one year. Also, certain BMPs - e.g., an ordinance - should be put in place within one year.

BMP A	MEASURABLE GOALS AND MILESTONES
Goals	Develop an ordinance, or other regulatory mechanism, adequate legal authorities to meet the objectives of the Illicit Discharge Stormwater Management Program. Establish the authority to request information such as stormwater plans, inspection reports, monitoring results, and other information deemed necessary to evaluate compliance with the Illicit Discharge Stormwater Management Program. Establish the authority to enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to stormwater illicit discharges to determine whether there is compliance of the Illicit Discharge Stormwater Management Program. Establish the authority to issue violations to determined establishments and/or owners when illicit discharges and/or non-storm water discharges are determined.
Milestone Year 1	Begin development of ordinance setting forth the illicit discharge program, requiring implementation and continued maintenance of outfall inventory data collection. The ordinance will include all necessary authorities for determining illicit discharges and non-storm water discharges, outfall screening, authority to enter public or private property with outfalls, trace illicit discharges to source, and enforcement.
Milestone Year 2	Complete development of ordinance setting forth the illicit discharge program, requiring implementation and continued maintenance of outfall inventory data collection.
Milestone Year 3	Implement ordinance setting forth the illicit discharge program, requiring implementation and continued

	maintenance of outfall inventory data collection.
Milestone Year 4	Continue implementation of ordinance setting forth the illicit discharge program, requiring implementation and continued maintenance of outfall inventory data collection.
Milestone Year 5	Review and reassess ordinance setting forth the illicit discharge program, requiring implementation and continued maintenance of outfall inventory data collection.
BMP B	MEASURABLE GOALS AND MILESTONES
Goals	Develop procedures for field data collection activities and administration tasks for new development. Implement inventory collection of County owned stormwater structures and outfalls. Complete overall inventory map and continue to update map as construction plans are approved and developments are constructed.
Milestone Year 1	Develop procedures for field data collection activities and administration tasks for data collection of new development.
Milestone Year 2	Implement inventory of 25% of County owned outfalls.
Milestone Year 3	Implement inventory of another 25% of County owned outfalls.
Milestone Year 4	Implement inventory of another 25% of County owned outfalls. Continue to update map as new development and/or changes occur.
Milestone Year 5	Complete inventory map by implementing inventory of remaining 25% of County owned outfalls.
BMP C	MEASURABLE GOALS AND MILESTONES
Goals	Determine a list of significant illicit discharges. Develop and implement procedures for conducting outfall screening with scheduled visits of all outfalls to locate the problem, determine the source of the problem, remove/correct the illicit discharge, organize data collected, and report illicit discharges determined.
Milestone Year 1	Determine list of significant illicit discharges. Determine procedures for conducting outfall screening with scheduled visits of all outfalls. Report illicit discharges in annual report.
Milestone Year 2	Implement conducting outfall screening and determine source of illicit discharge.
Milestone Year 3	Continue to implement conducting outfall screening and determine source of illicit discharge.
Milestone Year 4	Continue to implement conducting outfall screening and determine source of illicit discharge.
Milestone Year 5	(60 months) Conduct outfall screening with a schedule to visit all outfalls during the permit term. Maintain records of all data collected.
BMP D	**MEASURABLE GOALS AND MILESTONES**
Goals	Determine a list of other potential illicit discharges, non-storm water discharges and incidental non-storm water discharges. Prioritize and establish procedures to evaluate the list of other potential illicit discharges and non-storm water discharges.
Milestone Year 1	Establish procedures for determining list of other potential illicit discharges, non-storm water discharges and incidental non-storm water discharges.
Milestone Year 2	Implement procedures for determining list of other potential illicit discharges, non-storm water discharges and incidental non-storm water discharges.
Milestone Year 3	Prioritize investigations for the other potential illicit discharges, non-storm water discharges, and incidental non-storm water discharges.
Milestone Year 4	Begin investigating for other potential illicit discharges, non-storm water discharges, and incidental non-storm water discharges.
Milestone Year 5	Continue investigating for other potential illicit discharges, non-storm water discharges, and incidental non-storm water discharges.
BMP E	**MEASURABLE GOALS AND MILESTONES**
Goals	Establish education and training to the public on illicit discharges.

Milestone Year 1	Determine necessary education and training that can be offered to the public.
Milestone Year 2	Continue education and training to the public.
Milestone Year 3	Continue education and training to the public.
Milestone Year 4	Continue education and training to the public.
Milestone Year 5	Continue education and training to the public.
BMP F	**MEASURABLE GOALS AND MILESTONES**
Goals	Track the issuance of notices of violation and enforcement actions. This mechanism shall include the ability to identify chronic violators for initiation of actions to reduce noncompliance.
Milestone Year 1	Determine procedures for issuing violations and enforcement actions and develop database for tracking illicit discharge locations and violators.
Milestone Year 2	Begin to track issuance of notices of violations and enforcement actions.
Milestone Year 3	Continue to track issuance of notices of violations and enforcement actions.
Milestone Year 4	Continue to track issuance of notices of violations and enforcement actions.
Milestone Year 5	Review and reassess procedures and database.
BMP G	**MEASURABLE GOALS AND MILESTONES**
Goals	Measure pollutant levels discharged from identified outfalls to water bodies subject to TMDL.
Milestone Year 1	Identify discharges of concern located in the TMDL watershed draining to impaired WQMS.
Milestone Year 2	Develop a TMDL Monitoring and Assessment Plan for discharges of concern located in the TMDL watershed draining to impaired WQMS.
Milestone Year 3	Determine a schedule for implementing the developed TMDL Monitoring and Assessment Plan. Develop procedures for implementation of water quality monitoring and monitoring database and implement procedures (30 months).
Milestone Year 4	Continue to implement monitoring schedule and database. Report data and findings of water quality monitoring to DHEC.
Milestone Year 5	Continue to implement monitoring schedule and database. Report data and findings of water quality monitoring to DHEC.

SECTION 4
CONSTRUCTION SITE RUNOFF PROGRAM

CONSTRUCTION SITE RUNOFF ORDINANCES

1. Do the current ordinances/regulations for the municipal stormwater management program comply with Local, State and Federal public notice requirements? If yes, describe how the public is notified.

Yes ☐
No ☒

2. Do you currently have an erosion prevention and sediment control - or similar - ordinance or regulatory mechanism? If yes, include a copy and reference the page number(s). If No, proceed to the next set of questions below about construction site plans review.

Yes ☒ No ☐ **Sec. 106 – 2856 (c) Page 2-26 in the BC BMP Manual & Sec. 106 – 2929 a. (17)** Page Number

3. Does the ordinance or regulatory mechanism require that site operators implement erosion prevention, sediment control, soil stabilization practices and other controls for land disturbance activities?

Yes ☒ No ☐ If no, explain

4. Does the ordinance/regulatory mechanism require (explicitly or implicitly) that controls be implemented for any land disturbances greater than or equal to one acre, or less than one acre if part of a large common plan of development or sale that would disturb one acre or more? If yes, note the page number and paragraph number where this is defined.

Yes ☒ No ☐ **Sec. 106-2929** Page Number **a. (17)** Paragraph Number

5. Does the ordinance or regulatory mechanism contain or reference technical standards for erosion and sediment control? If yes, note the page number and paragraph number where this is defined.

Yes ☐ No ☒ Page Number Paragraph Number

Ordinance states (Sec. 106-2929 a. (17)) in accordance with State and/or Federal laws concerning erosion control, not specific to a set of technical standards.

6. Do those technical standards meet with or exceed the current SC DHEC construction general permit sections 3.5 and 4.4?

N/A

Yes ☐ No ☐

7. Do technical standards require that construction activities maintain temporary water quality buffers during construction?

N/A

Yes ☐ No ☐

8. Does the ordinance or regulatory mechanism clearly define the criteria - primarily who must submit - for submitting erosion and sediment control information or plans? If yes, note page number and paragraph number

Yes ☒ No ☐ **Sec. 106 – 2856 (c) Page 2-26 in the BC BMP Manual** Page Number Paragraph Number

9. Does the ordinance or regulatory mechanism require approval by the local government prior to commencement of land disturbance activities? If yes, note page number and paragraph number.

Yes ☒ No ☐ **Sec. 106-2929** Page Number **a. (17)** Paragraph Number

10. Does the ordinance or regulatory mechanism require re-submittal of erosion and sediment control information or plans if site plans or conditions change during land disturbance activities? If yes, note page number and paragraph number.

Yes ☐ No ☒ Page Number Paragraph Number

11. Does the ordinance or regulatory mechanism allow right-of-entry for government officials onto construction sites for inspections? If yes, note page number and paragraph number.

Yes ☒ No ☐ **Sec. 99-107** Page Number **(c)** Paragraph Number

12. Does the ordinance or regulatory mechanism give the MS4 owner/operator the authority to STOP WORK in the event of non-compliance violations? If yes, note page number and paragraph number.

Yes ☒ No ☐ **Sec. 106 – 2856 (c) Page 2-26 in the BC** Page Number Paragraph Number

BMP Manual _____ _____

13. Does the ordinance or regulatory mechanism give the MS4 owner/operator the authority to effectively prohibit the discharge of pollutants in wash waters, from washouts, in stormwater runoff and from leaks and spills? If yes, note page number and paragraph number.

Yes ☐ No ☒ _____ Page Number _____ Paragraph Number

CONSTRUCTION SITE PLANS REVIEW

1. Does the MS4 presently have in place a technical review process with approval conditioned to meeting all requirements contained in parts 4.2.4 & 5 of the permit (i.e. engineering department, planning department, zoning board) that evaluates new development and redevelopment construction for construction site runoff?

Yes ☒ No ☐ If no, explain

2. Does the technical review process require an erosion prevention and sediment control plan to protect water quality with appropriate BMP rationale?

Yes ☒ No ☐ If no, explain

3. Does the review process include a requirement for pre-construction meeting between the MS4 and site developer, for priority construction sites, including at a minimum those construction activities discharging directly into, or immediately upstream of, waters the state recognizes as impaired or high quality?

Yes ☐ No ☒ If no, explain

A pre-construction meeting is required with the Zoning and Planning Department, the County does not currently discuss the above construction activities discharges.

4. If there is a review process, provide a brief narrative or a flow chart of the process, describing the process steps, responsible personnel qualifications (by department, title and contact person), and criteria used for evaluation of information or plans that are submitted.

Yes ☒ No ☐ If no, explain

The review process starts with the Zoning Department with Hillary Austin, Zoning Administrator. Ms. Austin distributes engineering related items such as stormwater construction plans and calculations to the Stormwater Engineering Department with Eric Larson, Stormwater Manager who coordinates with the professional engineer of record for questions and comments on the submitted design.

RESPONDING TO PUBLIC INPUT AND COMPLAINTS

1. Does the MS4 presently have procedures in place for receipt and consideration of information and complaints submitted by the public?

Yes ☒ No ☐

If Yes, please provide a brief narrative of the receipt process and procedures, describing process steps, responsible departments, and personnel (by title). If available, provide information on complaint tracking, documentation, etc:

Before development and permit approval, the public input and complaints are received by the Planning and Zoning Department from the public calling the number on the public notice. There is not a procedure in place for complaints during construction. After construction, complaints are differed to the Stormwater Utility Department which will resolve the problem by involving the necessary department, Engineering and/or Public Works. A website (Citizengram) has been created for the public to notify the County of concerns in the area.

ENFORCEMENT AND INSPECTION PROCEDURES

1. Does the MS4 presently have personnel and procedures in place for construction site runoff inspection?

Yes ☐ No ☒ If no, explain

The BC BMP Manual, which is required to be followed per the ordinance states that an erosion control form for new development is required for new development to be completed by a professional (engineer, land surveyor or landscape architect). Beaufort County personnel and procedures are not in place currently to review and enforce form to be completed by property owners and/or conduct site inspections.

2. Does the program provide for monthly inspection of priority sites?

Yes ☐ No ☒ If no, explain

Same explanation as above.

3. Does the MS4 presently have procedures and personnel in place for enforcement to the maximum extend for violations of construction site requirements?

Yes ☐ No ☒ If no, explain

Same explanation as above.

4. Does the MS4 use a STOP WORK order to enforce non-compliance with construction site policies and requirements?

Yes ☒ No ☐ If no, explain

5. How are enforcement actions documented?

The building department enforcement action is by a stop work form.

The engineering department enforcement action is by an enforcement letter.

TRAINING AND EDUCATION

1. Does the MS4 presently make construction site runoff control training/information available to the public, developers, engineers, and contractors? (Clemson University periodically provides training through its Certified Erosion Prevention & Sediment Control Inspection (CEPSCI) course. Local governments are encouraged to refer developers and contractors to these classes.)

Yes ☒ No ☐ If no, explain

2. Has MS4 staff completed states approved training, such as the Clemson CEPSCI program? Enter the number either way

Yes ☒ If yes, how many? No ☐

7 County staff

Complete Tables 1, 2, and 3 (BMP Measurable Goals and Milestones) in the addendum of this NOI. Identify and outline measurable goals and milestones. Attach completed Section 1 tables to this NOI.

ADDENDUM

TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)

BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES

These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION FOUR

TABLE 1: BMP MEASURABLE GOALS AND IMPLEMENTATION MILESTONES

	Name	DESCRIPTION
A.	Revise Stormwater Management Ordinance/ Adequate Legal Authority	Revise stormwater management ordinance, or other regulatory mechanism, to adequate and clearly state the legal authorities to meet the objectives of the construction site runoff requirements for the Stormwater Management Program. Establish the legal authority to review designs and proposals for new development

		and redevelopment to determine whether adequate stormwater runoff control measures will be installed, implemented, and maintained during construction. Establish the authority to request information such as stormwater plans, inspection reports, monitoring results, and other information deemed necessary to evaluate compliance with the Construction Site Runoff Stormwater Management Program. Establish the authority to enter private and public property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to construction sites with devices to control erosion and sediment control and other waste at site.
B.	Erosion and Sediment and Other Waste at the Site Control Requirements	Determine requirements for the implementation of appropriate BMPs on a construction site to control erosion and sediment and other waste at the site.
C.	Revise Plan Review Procedures	Develop plan review procedures to determine if the construction site is in compliance with erosion control requirements determined by the County. Set requirements and procedures for a pre-construction meeting and tracking of current construction activities for the County and the public.
D.	Revise Site Inspection Procedures and Penalties	To ensure that all erosion control measures meet the County's performance standards to control erosion and sediment and other waste at site. The County shall develop and implement a written inspection program for construction site controls installed pursuant to the County's construction site runoff control program. Document and maintain records of inspections, findings and enforcement actions and make them available for review by the permitting authority.
E.	Receipt of Public Inquires	Develop procedures for receiving and consideration of public inquires, concerns, and information submitted regarding local construction activities.

TABLE 2: ADMINISTRATIVE INFORMATION	
PRIMARY CONTACT	POSITION OR TITLE
Eric Larson, PE	Stormwater Manager

OTHER DEPARTMENT	ROLE
Zoning and Planning	Ordinance development
Legal	Ordinance development
Building and Code Enforcement	Ordinance development and enforcement

BEST MANAGEMENT PRACTICES (BMPs) MEASURABLE GOALS AND IMPLEMENTATION MILESTONES (Continued)	
GOVERNMENT ENTITY	ROLE
Beaufort County SW Utility	Primary responsible party

OTHER INSTITUTION	ROLE
Beaufort County Soil & Conservation District	Training assistance

EQUIPMENT NEEDS (IF APPLICABLE)
N/A

GROUP	TARGET DESCRIPTION
N/A	N/A

ADDENDUM
TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)
BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES
These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION FOUR

TABLE 3: BEST MANAGEMENT PRACTICES

The purpose of this addendum is to record the measurable goals for each BMP, and the dates (month and year) by which interim actions are to be accomplished. Space is given for four BMPs for each of the six minimum measures.

Measurable goals are BMP design objectives, or goals that will quantify the progress of implementing the actions or performance of a BMP. They are ways to measure activities or effects of a BMP. For each of the six minimum measures and for each BMP, define the measurable goal you will use to monitor effectiveness of this BMP.

For each BMP, establish milestones for implementation. These tables are set up for once/year milestones. You may change the milestone dates to time frames less than one year. Also, certain BMPs - e.g., an ordinance - should be put in place within one year.

BMP A	MEASURABLE GOALS AND MILESTONES
Goals	Revise stormwater management ordinance, or other regulatory mechanism, to adequate and clearly state the legal authorities to meet the objectives of the construction site runoff requirements for the Stormwater Management Program. Establish the authority to review designs and proposals for new development and redevelopment to determine whether adequate stormwater runoff control measures will be installed, implemented, and maintained during construction. Establish the authority to request information such as stormwater plans, inspection reports, monitoring results, and other information deemed necessary to evaluate compliance with the Construction Site Runoff Stormwater Management Program. Establish the authority to enter private and public property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to construction sites with devices to control erosion and sediment control and other waste at site.
Milestone Year 1	Begin development of ordinance setting forth construction site runoff criteria, requiring implementation and continued maintenance of pre-construction BMPs until close out of project. The ordinance will include all necessary authorities for design review and approval, inspection, and monitoring.
Milestone Year 2	Complete development of ordinance setting forth construction site runoff criteria, requiring implementation and continued maintenance of pre-construction BMPs until close out of project.
Milestone Year 3	Implement ordinance setting forth construction site runoff criteria, requiring implementation and continued maintenance of pre-construction BMPs until close out of project.
Milestone Year 4	Continue implementation of ordinance setting forth construction site runoff criteria, requiring implementation and continued maintenance of pre-construction BMPs until close out of project.
Milestone Year 5	Review and reassess ordinance setting forth construction site runoff criteria, requiring implementation and continued maintenance of pre-construction BMPs until close out of project.

BMP B	MEASURABLE GOALS AND MILESTONES
Goals	Determine requirements for the implementation of appropriate BMPs on a construction site to control erosion and sediment and other waste at the site.
Milestone Year 1	Begin establishing standards for construction site runoff control.
Milestone Year 2	Complete the development of standards for construction site runoff control.
Milestone Year 3	Implement construction site runoff control standards.
Milestone Year 4	Continue to implement construction site runoff control standards.
Milestone Year 5	Review and reassess construction site runoff control standards.

BMP C	MEASURABLE GOALS AND MILESTONES
Goals	Develop plan review procedures to determine if the construction site is in compliance with erosion control

	requirements determined by the County. Set requirements and procedures for a pre-construction meeting and tracking of current construction activities for the County and the public.
Milestone Year 1	Begin to develop plan review procedures and requirements for construction site compliance, pre-construction meetings, and tracking of current construction activities for erosion and sediment control.
Milestone Year 2	Complete plan review procedures and requirements for construction site compliance, pre-construction meetings, and tracking of current construction activities for erosion and sediment control.
Milestone Year 3	Educate County staff of construction site runoff control standards and plan requirements.
Milestone Year 4	Implement procedures and requirements for construction site compliance, pre-construction meetings, and tracking of current construction activities for erosion and sediment control.
Milestone Year 5	Review and reassess procedures and requirements.

BMP D	**MEASURABLE GOALS AND MILESTONES**
Goals	To ensure that all erosion control measures meet the County's performance standards to control erosion and sediment and other waste at site. The County shall develop and implement a written inspection program for construction site controls installed pursuant to the County's construction site runoff control program. Document and maintain records of inspections, findings and enforcement actions and make them available for review by the permitting authority.
Milestone Year 1	Begin to develop a stormwater ordinance that references a written inspection program; including issuing infractions, development of a database for tracking and inspecting pre-construction control devices, and a draft written inspection program.
Milestone Year 2	Complete stormwater ordinance and written inspection program.
Milestone Year 3	Implement the stormwater ordinance and inspection program, including to update the database with inspection records, findings and enforcement actions.
Milestone Year 4	Continue to implement the stormwater ordinance and inspection program, including to update the database with inspection records, findings and enforcement actions.
Milestone Year 5	Review and reassess the ordinance and inspection program.

BMP E	**MEASURABLE GOALS AND MILESTONES**
Goals	Develop procedures for receiving and consideration of public inquires, concerns, and information submitted regarding local construction activities.
Milestone Year 1	Begin to develop procedures for receiving and distributing to key staff for consideration of public inquires, concerns, and information submitted regarding local construction activities.
Milestone Year 2	Complete procedures for receiving and distributing to key staff for consideration of public inquires, concerns, and information submitted regarding local construction activities.
Milestone Year 3	Implement procedures for receiving and distributing to key staff for consideration of public inquires, concerns, and information submitted regarding local construction activities.
Milestone Year 4	Continue to implement procedures for receiving and distributing to key staff for consideration of public inquires, concerns, and information submitted regarding local construction activities.
Milestone Year 5	Review and reassess procedures for receiving and distributing to key staff for consideration of public inquires, concerns, and information submitted regarding local construction activities.

SECTION 5
POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT OR PERMANENT / LONG TERM STORM WATER POLLUTION CONTROL MEASURES

POST-CONSTRUCTION STORMWATER MANAGEMENT PROGRAM

1. Will the Post-Construction Stormwater Management Program require that controls are in place to meet the site performance standards in Part 4.2.5.2 to the MEP and to protect water quality?

Yes ☒ No ☐ If no, explain

2. Does the MS4 currently have in place mechanisms or strategies to address permanent stormwater runoff management from new development or redevelopment projects that result in land disturbance of one acre or more? For example, land use planning requirements, zoning directives, site-based local controls such as riparian buffer zone protection; storage or detention of stormwater prior to release to streams; practices to cause stormwater to percolate the soil rather than runoff immediately; vegetative practices.

Yes ☒ No ☐

If Yes, please provide a brief narrative of - and/or references to - the structural and non-structural strategies, describing strategies implemented, Best Management Practices allowed, technical guidance, responsible departments, and personnel (by title).

Under Division II.106.XIII.4 of the County's Code of Ordinances, all development and redevelopment shall provide adequate drainage, peak rate, volume and stormwater pollution control to match predevelopment conditions as deemed feasible by the stormwater administrator (Eric Larson, Stormwater Manager). Fulfilment of these requirements is to be based on the latest version of the county's manual for stormwater BMPs.

SITE PERFORMANCE STANDARDS

1. Has the permittee established, implemented and enforced a requirement that owners or operators of new development and redeveloped sites discharging to the MS4, which disturb greater than or equal to one acre (including projects that disturb less than one acre that are part of a larger common plan of development or sale), design, install, implement, and maintain stormwater control measures that maintain pre-development conditions and protect water quality to the MEP?

Yes ☒ No ☐ **Sec. 106- 2856** Page Number **(d)** Paragraph Number

PERMANENT STORMWATER CONTROLS SITE MANAGEMENT ORDINANCE

1. Do you currently have an ordinance or regulatory mechanism that addresses permanent stormwater runoff management from new development and redevelopment projects? If yes, reference the page number in your ordinance. If No, proceed to the next section on permanent stormwater management plans review.

Yes ☒ No ☐ **Sec. 106- 2856** Page Number **(d)** Paragraph Number

2. Does the ordinance or regulatory mechanism require controls to mitigate pollutants in stormwater runoff? If yes, note page number and paragraph number.

Yes ☒ No ☐ **Sec. 106 – 2856** Page Number **(c)** Paragraph Number

3. Does the ordinance or regulatory mechanism require (explicitly or implicitly) that controls be implemented for any new development or redevelopment projects greater than or equal to one acre, including projects less than one acre that are part of a large common plan of development or sale, that discharge into your small MS4? If yes, note page number and paragraph number.

Yes ☒ No ☐ **Sec. 106- 2857** Page Number **(a) (2) & (3)** Paragraph Number

4. Does the ordinance or regulatory mechanism contain or reference technical standards for water quality controls (e.g., design of detention basins)? If yes, note page number and paragraph number.

Yes ☒ No ☐ **Sec. 106- 2861** Page Number **(a) (3)** Paragraph Number

5. Does the ordinance or regulatory mechanism clearly define the criteria for submittal -who must submit - of permanent stormwater management design information or plans? If yes, note page number and paragraph number.

Yes ☒ No ☐ **Sec. 106- 2929** Page Number **(f) (1)** Paragraph Number

6. Does the ordinance or regulatory mechanism require approval prior to construction of permanent stormwater management controls? If yes, note page number and paragraph number.

Yes ☒ No ☐ **Sec. 106-2929** Page Number **a. (17)** Paragraph Number

7. Does the ordinance or regulatory mechanism require re-submittal of permanent stormwater management design information or plans if site plans change after the initial design has been approved? If yes, please note page number and paragraph number.

Yes ☐ No ☒ _____ Page Number _____ Paragraph Number

8. Does the ordinance or regulatory mechanism give the MS4 owner/operator the authority to penalize the owner of permanent stormwater management controls for violations? If yes, note page number and paragraph number.

Yes ☐ No ☒ _____ Page Number _____ Paragraph Number

9. Does the ordinance or regulatory mechanism allow the MS4 right-of-entry on property where permanent stormwater management controls are installed for inspections? If yes, please note page number and paragraph number.

Yes ☒ No ☐ **Sec. 106- 2856** Page Number **(f)** Paragraph Number

10. Does the ordinance or regulatory mechanism require that permanent stormwater management controls have adequate and long-term operation and maintenance? If yes, please note page number and paragraph number. If no, how does the MS4 owner/operator maintain permanent stormwater management controls?

Yes ☒
No ☐

Sec. 106 – 2856 (c) Page 2-26 in the BC BMP Manual

11. Does the ordinance or regulatory mechanism require establishment and maintenance of water quality buffers in areas of new development and redevelopment?

Yes ☒ No ☐ If no, explain

Sec. 106- 1845 (4) (d.)

PERMANENT STORMWATER MANAGEMENT PLANS REVIEW

1. Does the MS4 presently have in place a technical review process (i.e. engineering department, planning department, zoning board) that evaluates new development and redevelopment with regard to the impact that permanent stormwater runoff will have on receiving streams? Plan review must specifically address site performance standards and ensure long term maintenance.

Yes ☒ No ☐

If Yes, provide a brief narrative or a flow chart of the review process, describing the process steps, responsible personnel (by department, title and contact person), and criteria used for evaluation of information or plans that are submitted.

The review process starts with the Zoning Department with Hillary Austin, Zoning Administrator. Ms. Austin distributes engineering related items such as stormwater construction plans and calculations to the Stormwater Engineering Department with Eric Larson, Stormwater Manager who coordinates with the professional engineer of record for questions and comments on the submitted design.

2. Does the MS4 presently have in place a requirement for submittal of 'as-built' certifications at project completion to ensure that site performance standards and long term maintenance requirements are met?.

Yes ☐ No ☒ If no, explain

There are no long-term maintenance requirements at this time. This will become a part of the new stormwater management program.

3. Does the MS4 presently include measures for effective water quality protection in its watersheds?

Yes ☒ No ☐ If no, explain

4. Does the MS4 track Post-Construction Stormwater Control measures?.

Yes ☐ No ☒ If no, explain

Many post-construction control measures have been inventoried by the County but are not required to be tracked. This will become a part of the new stormwater management program.

5. Does the MS4 conduct inspection of permanent storm water controls and document all findings and enforcement actions?

Yes ☐ No ☒ If no, explain

The County has established permission to inspect SCMs but does not do so regularly. This will become a part of the new stormwater management program.

Complete Tables 1, 2, and 3 (BMP Measurable Goals and Milestones) in the addendum of this NOI. Identify and outline measurable goals and milestones. Attach completed Section 1 tables to this NOI.

ADDENDUM

TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)

BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES

These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION FIVE

TABLE 1: BMP MEASURABLE GOALS AND IMPLEMENTATION MILESTONES

	Name	DESCRIPTION
A.	Adequate legal authorities	Maintain through an ordinance, or other regulatory mechanism, adequate legal authorities to meet the objectives of the Post-Construction Site Runoff Controls program. Establish the authority to review designs and proposals for new development and redevelopment to determine whether adequate stormwater control measures will be installed, implemented, and maintained. Establish the authority to request information such as stormwater plans, inspection reports, monitoring results, and other information deemed necessary to evaluate compliance with the Post-Construction Stormwater Management Program. Establish the authority to enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to stormwater discharges to determine whether there is compliance the Post-Construction Stormwater Management Program.
B.	Determine BMPs	Review and revise (as necessary) the current Beaufort County Stormwater Manual to include the latest BMPs (non-structural, structural, infiltration, and vegetation).
C.	Plan reviews	Conduct site plan reviews of all new development and redeveloped sites that disturb greater than or equal to one acre (including sites that disturb less than one acre that are part of a larger common plan of development or sale). The site plan review shall address how the project applicant meets the performance standards and how the project will ensure long-term maintenance.
D.	Provide a mechanism to require long-term operation and maintenance of structural BMPs	Implement or require an operation and maintenance plan for the long-term operation of the structural BMPs required by the program. The operation and maintenance plan shall require the owner of each structural BMP to perform and maintain a record of annual inspections of each structural BMP. Annual inspection of permitted structural BMPs shall be performed by a qualified professional.
E.	Inspections of Structural Stormwater Control Measures	To ensure that all stormwater control measures meet the County's performance standards and are being maintained pursuant to the maintenance agreement, the County shall develop and implement a written inspection program for structural stormwater controls installed pursuant to the County's post-construction program. Document and maintain records of inspections, findings and enforcement actions and make them available for review by the permitting authority.
F.	Enforcement	Track the issuance of notices of violation and enforcement actions. This mechanism shall include the ability to identify chronic violators for initiation of actions to reduce noncompliance.

TABLE 2: ADMINISTRATIVE INFORMATION	
PRIMARY CONTACT	POSITION OR TITLE
Eric Larson, PE	Stormwater Manager

OTHER DEPARTMENT	ROLE
Planning and Zoning	Ordinance assistance
Legal	Ordinance assistance
Building and Code Enforcement	Ordinance assistance and enforcement

BEST MANAGEMENT PRACTICES (BMPs) MEASURABLE GOALS AND IMPLEMENTATION MILESTONES (Continued)	
GOVERNMENT ENTITY	ROLE
Beaufort County SW Utility	Primary responsible party

OTHER INSTITUTION	ROLE
Beaufort County Soil & Conservation District	Training assistance

EQUIPMENT NEEDS (IF APPLICABLE)
N/A

GROUP	TARGET DESCRIPTION
N/A	N/A

ADDENDUM
TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)
BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES
These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION FIVE

TABLE 3: BEST MANAGEMENT PRACTICES

The purpose of this addendum is to record the measurable goals for each BMP, and the dates (month and year) by which interim actions are to be accomplished. Space is given for four BMPs for each of the six minimum measures.

Measurable goals are BMP design objectives, or goals that will quantify the progress of implementing the actions or performance of a BMP. They are ways to measure activities or effects of a BMP. For each of the six minimum measures and for each BMP, define the measurable goal you will use to monitor effectiveness of this BMP.

For each BMP, establish milestones for implementation. These tables are set up for once/year milestones. You may change the milestone dates to time frames less than one year. Also, certain BMPs - e.g., an ordinance - should be put in place within one year.

BMP A	MEASURABLE GOALS AND MILESTONES
Goals	Maintain through an ordinance, or other regulatory mechanism, adequate legal authorities to meet the objectives of the Post-Construction Site Runoff Controls program. The County shall have the authority to review designs and proposals for new development and redevelopment to determine whether adequate stormwater control measures will be installed, implemented, and maintained. The County shall have the authority to request information such as stormwater plans, inspection reports,

	monitoring results, and other information deemed necessary to evaluate compliance with the Post-Construction Stormwater Management Program. The County shall have the authority to enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to stormwater discharges to determine whether there is compliance the Post-Construction Stormwater Management Program.
Milestone Year 1	Begin to develop ordinance setting forth design criteria, requiring implementation and continued maintenance of post-construction BMPs. The ordinance will include all necessary authorities for design review and approval, inspection, and monitoring.
Milestone Year 2	Complete development of ordinance setting forth design criteria, requiring implementation and continued maintenance of post-construction BMPs.
Milestone Year 3	Implement ordinance setting forth design criteria, requiring implementation and continued maintenance of post-construction BMPs.
Milestone Year 4	Continue implementation of ordinance setting forth design criteria, requiring implementation and continued maintenance of post-construction BMPs.
Milestone Year 5	Review and reassess ordinance setting forth design criteria, requiring implementation and continued maintenance of post-construction BMPs.

BMP B	MEASURABLE GOALS AND MILESTONES
Goals	Review and revise (as necessary) the current Beaufort County Stormwater BMP Manual to include the latest BMPs (non-structural, structural, infiltration, and vegetation).
Milestone Year 1	Begin to review and revise (as necessary) the Beaufort County Stormwater BMP Manual.
Milestone Year 2	Complete review and updates of the Beaufort County Stormwater BMP Manual as necessary to implement desired BMPs.
Milestone Year 3	Implement the Beaufort County Stormwater BMP Manual.
Milestone Year 4	Continue to implement the Beaufort County Stormwater BMP Manual.
Milestone Year 5	Review and reassess the Beaufort County Stormwater BMP Manual.

BMP C	MEASURABLE GOALS AND MILESTONES
Goals	The County shall conduct site plan reviews of all new development and redeveloped sites that disturb greater than or equal to one acre (including sites that disturb less than one acre that are part of a larger common plan of development). The site plan review shall address how the project applicant meets the performance standards and how the project will ensure long-term maintenance.
Milestone Year 1	Begin to redefine plans review process and procedures in conjunction with developing the stormwater ordinance, including review and clearly stating criteria for stormwater treatment and design standards.
Milestone Year 2	Complete plans review process and procedures in conjunction with developing the stormwater ordinance.
Milestone Year 3	Implement plans review process and procedures.
Milestone Year 4	Continue to implement the plans review process and procedures.
Milestone Year 5	Review and reassess the plans review process and procedures.

BMP D	**MEASURABLE GOALS AND MILESTONES**
Goals	The County shall implement or require an operation and maintenance plan for the long-term operation of the structural BMPs required by the program. The operation and maintenance plan shall require the owner of each structural BMP to perform and maintain a record of annual inspections of each structural BMP. Annual inspection of permitted structural BMPs shall be performed by a qualified professional.
Milestone Year 1	Begin to develop procedures to require an operation and maintenance plan for the long-term operation of the structural BMPs required by the program.
Milestone Year 2	Complete procedures to require an operation and maintenance plan for the long-term operation of the structural BMPs required by the program. Make available stormwater control measure (SCM) maintenance plan templates.
Milestone Year 3	Educate SCM operators of maintenance plan requirements. Begin to obtain maintenance plan for each

	SCM and enter appropriate data into SCM database (see BMPs E and F).
Milestone Year 4	Continue to implement maintenance plan for each SCM and enter appropriate data into SCM database.
Milestone Year 5	Complete maintenance plan for all current SCMs and enter appropriate data into SCM database.

BMP E	**MEASURABLE GOALS AND MILESTONES**
Goals	To ensure that all stormwater control measures meet the County's performance standards and are being maintained pursuant to the maintenance agreement, the County shall develop and implement a written inspection program for structural stormwater controls installed pursuant to the County's post-construction program. The County shall document and maintain records of inspections, findings and enforcement actions and make them available for review by the permitting authority.
Milestone Year 1	Begin to create a draft of the written inspection program and start to develop stormwater ordinance that references the written inspection program. Begin to setup database for tracking and inspecting post-construction stormwater control measures.
Milestone Year 2	Complete the written inspection program and stormwater ordinance that references the written inspection program. Complete the setup of a database for tracking and inspecting post-construction stormwater control measures.
Milestone Year 3	Implement routine inspections.
Milestone Year 4	Continue to implement routine inspections.
Milestone Year 5	Complete inspection of every post-construction SCM and documented inspections, findings and enforcement actions in the database.
BMP F	MEASURABLE GOALS AND MILESTONES
Goals	Track the issuance of notices of violation and enforcement actions. This mechanism shall include the ability to identify chronic violators for initiation of actions to reduce noncompliance.
Milestone Year 1	Begin to develop procedures and database for tracking post-construction stormwater control measures violations.
Milestone Year 2	Complete procedures and database for tracking post-construction stormwater control measures violations.
Milestone Year 3	Identify and input SCMs violations in database.
Milestone Year 4	Continue to identify and input SCMs violations in database.
Milestone Year 5	Complete inventory of county-wide inspections of current SCMs and corresponding violation(s).

SECTION 6
POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

MUNICIPAL FACILITIES AND STORMWATER CONTROL INVENTORY

1. Has the MS4 owner/operator obtained a SC Industrial Stormwater General Permit coverage or a no-exposure waiver for all qualifying municipal industrial activities? If yes, please give permit numbers or copy of the No-Exposure Certification form.

Yes ☐ No ☒ _____ _____ _____ Permit Numbers(s)

List municipally-owned or operated facilities that have a notable potential for contaminating runoff: for example - vehicle maintenance garages; waste transfer operations; golf courses; salt or other materials storage; landfill. If more than one facility for a given type of operation; give the number of such facilities. Indicate if any of these are covered by an NPDES permit. Is there a documented pollution prevention plan in place for these facilities?

FACILITY OR TYPE OF OPERATION	NUMBER	IS ACTIVITY COVERED BY NPDES PERMIT?	IS A POLLUTION PREVENTION PLAN IN EFFECT?
Mosquito Control Facility	**1**	Yes ☒ No ☐	Yes ☒ No ☐
Detention Facility	**1**	Yes ☐ No ☒	Yes ☐ No ☒
Public Works (North and South)	**2**	Yes ☐ No ☒	Yes ☐ No ☒
Garbage Convenience Stations	**12**	Yes ☐ No ☒	Yes ☐ No ☒
Airports	**2**	Yes ☒ No ☐	Yes ☒ No ☐

In addition to considering industrial-type operations, you must also consider municipal infrastructure, and related maintenance activities, maintenance schedules and long-term inspection procedures for structural controls and the proper disposal of waste from storm sewers/catch basins, etc. Also included in this program area is discharge of pollutants from roads and parking lots. See Part 4.2.6.1

MUNICIPAL OPERATIONS POLLUTION PREVENTION

1. Does the MS4's operations and maintenance program have policies and procedures in place that address pollution prevention? If yes, please describe procedures. Consider the following in your response: Municipally owned or operated facility assessment (4.2.6.2), Facility specific stormwater management SOP and facility stormwater controls (4.2.6.3), Storm sewer system maintenance activities-MS4 Maintenance (4.2.6.4), Flood management projects, (4.2.6.5), Pesticide, herbicide and fertilizer application and management in landscape maintenance (4.2.6.6). You may want to incorporate maintenance activities, maintenance schedules; long term inspection procedures for structural and non-structural stormwater controls to reduce floatables and other pollutants; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways; controls for reducing or eliminating pollutants from municipal parking lots, maintenance and storage yards, fleet or maintenance areas with outdoor storage areas, salt/sand storage areas, snow disposal areas, waste transfer stations; disposal of waste removed from storm sewers and the areas listed above; and assessment of impacts on water quality from all of the above.

Yes ☐
No ☒

If no, explain **There is not yet a formalized operation and maintenance program for pollution prevention activities. One will be developed as part of the new stormwater management plan.**

STAFF EDUCATION AND TRAINING

1. Does the MS4's current operation and maintenance program provide annual training for staff on preventing and reducing stormwater pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and stormwater system maintenance?

Yes ☐

No ☒ If no, explain

There is not yet a formalized operation and maintenance program for pollution prevention activities. One will be developed as part of the new stormwater management plan.

2. Are training activities documented? If yes, please describe training and method of record-keeping.

Yes	☐	
No	☒	If no, explain **Training activities are not currently documented, but will be in accordance with measurable goals described below.**

REQUIREMENTS FOR CONTRACTORS OVERSIGHT

1. Are contractors hired by the permittee to perform municipal maintenance activities required to comply with all municipal operations control measures?

Yes ☐ No ☒ If no, explain

County operations control measures are not currently documented but will be under the new stormwater management plan.

2. Are oversight procedures documented? If yes, please describe SOP.

Yes	☐
No	☒

Complete Tables 1, 2, and 3 (BMP Measurable Goals and Milestones) in the addendum of this NOI. Identify and outline measurable goals and milestones. Attach completed Section 1 tables to this NOI.

ADDENDUM

TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)

BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES

These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION SIX

TABLE 1: BMP MEASURABLE GOALS AND IMPLEMENTATION MILESTONES

	Name	DESCRIPTION
A.	SPCC Plans	Develop spill prevention and control plans for County facilities.
B.	Training programs	Provide training program for grounds maintenance, landscaping crews, and roadway and drainage staff.
C.	Parking Lot and Street Cleaning	Prioritize and improve street and parking lot cleaning practices to reduce the amount of debris and solids in runoff.
D.	Asset Management	Asset management of facilities and high priority areas.

TABLE 2: ADMINISTRATIVE INFORMATION

PRIMARY CONTACT	POSITION OR TITLE
Eric Larson, PE	Stormwater Manager

OTHER DEPARTMENT	ROLE
Public Works (includes solid waste)	SPCC implementation
Mosquito Control	SPCC implementation
Airports	SPCC implementation
GOVERNMENT ENTITY	**ROLE**
Beaufort County SW Utility	Primary responsible party
Sheriff	SPCC Detention Facility implementation

OTHER INSTITUTION	ROLE
N/A	N/A

EQUIPMENT NEEDS (IF APPLICABLE)
SPCC Plans

GROUP	TARGET DESCRIPTION
County facility staff	Staff at County facilities subject to stormwater good housekeeping measures.

ADDENDUM
TO SMALL MS4 NPDES PERMIT NOTICE OF INTENT (SMS4-NOI)
BEST MANAGEMENT PRACTICES (BMP) MEASURABLE GOALS AND MILESTONES
These tables must be completed and attached for each of Sections 1 thru 6 of this Notice of Intent (NOI)

SECTION SIX

TABLE 3: BEST MANAGEMENT PRACTICES

The purpose of this addendum is to record the measurable goals for each BMP, and the dates (month and year) by which interim actions are to be accomplished. Space is given for four BMPs for each of the six minimum measures.

Measurable goals are BMP design objectives, or goals that will quantify the progress of implementing the actions or performance of a BMP. They are ways to measure activities or effects of a BMP. For each of the six minimum measures and for each BMP, define the measurable goal you will use to monitor effectiveness of this BMP.

For each BMP, establish milestones for implementation. These tables are set up for once/year milestones. You may change the milestone dates to time frames less than one year. Also, certain BMPs - e.g., an ordinance - should be put in place within one year.

BMP A	MEASURABLE GOALS AND MILESTONES
Goals	SPCC Plans
Milestone Year 1	Identify list of facilities and determine high priority areas.
Milestone Year 2	Evaluate all county-owned or operated facilities to determine whether an SPCC or separate stormwater permit is necessary. Evaluate new facilities as they are obtained.
Milestone Year 3	Develop a SWPP that may be used for the identified facilities. Conduct first annual inspections.
Milestone Year 4	Continue to conduct annual inspections of facilities and high priority areas.
Milestone Year 5	Continue to conduct annual inspections of facilities and high priority areas.

BMP B	MEASURABLE GOALS AND MILESTONES
Goals	Provide training program for grounds maintenance, landscaping crews, and roadway and drainage staff.
Milestone Year 1	
Milestone Year 2	Develop procedures for training program for grounds maintenance, landscaping crews, and roadway and drainage staff.
Milestone Year 3	Develop a pollution prevention workshop for all municipal employees responsible for grounds maintenance, landscaping crews, and roadway and drainage staff.
Milestone Year 4	Implement annual workshop for new employees and crew managers.
Milestone Year 5	Review and reassess procedures and training.

BMP C	MEASURABLE GOALS AND MILESTONES
Goals	Parking Lot and Street Cleaning
Milestone Year 1	Inventory and prioritize roads for cleaning.
Milestone Year 2	Quantify debris collected from street sweeping.
Milestone Year 3	Achieve a determined percentage reduction in solids levels in runoff.
Milestone Year 4	Continue to achieve and measure determined percentage reduction in solids level in runoff.
Milestone Year 5	Continue to achieve and measure determined percentage reduction in solids level in runoff.

BMP D	MEASURABLE GOALS AND MILESTONES
Goals	Asset management of facilities and high priority areas.
Milestone Year 1	Develop procedures for asset management of facilities and high priority areas.
Milestone Year 2	Identify high priority areas, 25% of stormwater management system.
Milestone Year 3	Identify high priority areas, another 25% of stormwater management system.
Milestone Year 4	Identify high priority areas, another 25% of stormwater management system.
Milestone Year 5	Complete identification of high priority areas, remaining 25% of stormwater management system.

RESOLUTION 2014 /

A RESOLUTION AUTHORIZING THE BEAUFORT COUNTY ADMINISTRATOR AND BEAUFORT COUNTY STORM WATER UTILITY STAFF TO PREPARE AND SUBMIT AN APPLICATION FOR NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES FROM REGULATED SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

WHEREAS, the Beaufort County Stormwater Utility was created in 2001 with the mission to address the stormwater needs of the County while protecting its water resources; and

WHEREAS, the United States Environmental Protection Agency (hereinafter, "EPA") promulgated the Clean Water Act, 33 U.S.C. Section 1251 *et. seq*., in 1972 (hereinafter, "CWA"), amended by the Water Quality Act, P.L. 100-4 and subsequent regulations of 1987, creating the National Pollutant Discharge Elimination System (hereinafter, "NPDES"); and

WHEREAS, the State of South Carolina Department of Health and Environmental Control (hereinafter, "DHEC") promulgated the South Carolina Pollution Control Act, S.C. Code Sections 48-1-10 *et. seq*., in 1976 in response to the CWA, creating the NPDES General Permit for Storm Water Discharges from Regulated Small Municipal Separate Storm Sewer Systems (hereinafter, "MSM4"); and

WHEREAS, DHEC Bureau of Water has promulgated the NPDES General Permit for Storm Water Discharges from Regulated Small Municipal Separate Storm Sewer Systems (MSM4), SCR030000; and

WHEREAS, on June 4, 2014, in accordance with the South Carolina Water Pollution Control Permits Regulations 61-9 Section 122.32 (a)(1), DHEC designated Beaufort County, South Carolina as a small MS4 for permitting; and

WHEREAS, S.C.R. 61-9 requires the owners and operators of MS4 obtain a NPDES permit and develop and implement a program to minimize the discharge of pollutants through and from the MS4 into waters of the United States; and

WHEREAS, the MS4 is required to submit a Notice of Intent (hereinafter, "NOI") to be covered by General permit SCR030000 and a Stormwater Management Program (hereinafter, "SWMP") to DHEC within 180 days from the date of notice; and

WHEREAS, the Beaufort County and the Stormwater Utility intend to comply with the regulations of the EPA and DHEC and submit the NOI and SWMP on or before December 2, 2014; and

NOW, THEREFORE, BE IT RESOLVED by Beaufort County Council, duly assembled, hereby authorizes the County Administrator and Stormwater Utility Staff to prepare and submit the same to the South Carolina Department of Health and Environmental Control Bureau of Water.

Adopted this _____ day of November, 2014.

COUNTY COUNCIL OF BEAUFORT COUNTY

BY:_____
D. Paul Sommerville, Chairman

APPROVED AS TO FORM:

_____
Joshua A. Gruber
Deputy County Administrator/County Attorney

Stormwater Webcast:
Retrofitting Existing Stormwater Ponds & Basins
By the Center for Watershed Protection

November 12, 2014 Time: 1:00 – 3:00pm

Bluffton Town Hall
20 Bridge Street
Bluffton, SC 29910

Credits: 2 PDHs (equivalent to 0.2 CEUs)

- *Speakers: Greg Hoffmann, P.E.,Program Director, Practices, Center for Watershed Protection, Inc. (Ellicott City, MD)*
- *Joe Battiata, P.E., Senior Water Resources Engineer, Center for Watershed Protection, Inc. (Richmond, VA)*
- *Matthew Meyers, Project Manager, Fairfax County Department of Public Works and Environmental Services, Stormwater Planning Division (Fairfax, VA)*

Many communities seek solutions to improve water quality, green the community, and comply with permit conditions and numerical standards in TMDLs. One of the most efficient means to achieve multiple benefits is to retrofit a community's existing stormwater infrastructure, consisting of older detention basins and ponds, among other practices. This webcast will highlight a systematic and effective way to inventory existing practices, develop concept plans, prioritize retrofits based on pollutant removal, cost and other factors, and construct the retrofits.

Please RSVP to Beaufort Conservation District by Friday, November 7th.
shelby.berry@sc.nacdnet.net or call 842-522-8100.

Brought to you by Neighbors for Clean Water,
Beaufort County Stormwater Implementation Committee (SWIC)
& Beaufort County Stormwater Utility

*There is no charge, but we need participants to sign up
to accommodate seating for everyone.*

COUNTY COUNCIL OF BEAUFORT COUNTY
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Multi-Government Center • 100 Ribaut Road, Room 115
Post Office Drawer 1228, Beaufort SC 29901-1228
Phone: (843) 255-2140 • FAX: (843) 255-9432

TO: Natural Resources Committee of Beaufort County Council

FROM: Anthony Criscitiello, Beaufort County Planning Director

DATE: November 3, 2014

SUBJECT: **Testing the Draft Beaufort County Community Development Code**

At the June 9, 2014 Beaufort County Council Meeting, Council gave first reading to the draft Beaufort County Community Development Code. At that same meeting Council voted to allocate $35,000 to hire a consultant firm to test the draft code with actual development scenarios to determine whether the standards in the draft code would produce the projected outcomes. The results of these tested projects will be presented at the November 3 Committee meeting.

The Planning Department engaged the services of J.K. Tiller and Associates and Carolina Engineering Consultants, Inc. to test five projects:

1. **Mint Farm Subdivision (Burton):** This is a 66 acre site located directly south of Battery Creek High School and was developed as a 168 lot single-family subdivision. This site was tested using the Neighborhood Scale Traditional Community Plan Option to determine whether the site could be developed more efficiently using this new option in the draft code.

2. **Heyward Point Subdivision:** This 605 acre site is located along Callawassie Road in Southern Beaufort County and was developed as a 147 lot gated community under the existing ZDSO. This site was tested using the standards in T2 Rural to determine whether a similar development could be created under the draft code.

3. **Magnolia Park Apartments (Burton):** This is a 7.15 acre site on Laurel Bay Road that was developed as a 56 unit Low Income Tax Credit housing development. The project utilized the County's affordable housing density bonus which allowed the project to have a residential density up to 8 dwelling units per acre. This project was tested using the multi-family standards in C3 Neighborhood Mixed-Use which allow for greater density, but limit the size and scale of the development.

4. **Harrell Tract (Bluffton) Conventional Commercial Development:** This is a 9.79 acre site on U.S. 278 in Bluffton. It is the location of Golden Corral, Advanced Auto Parts and Wild Wings Café which add up to approximately 24,000 square feet in building space. This project was tested using the standards in C5 Regional Center Mixed Use and the Commercial Oriented Community Standards in Article 2.

5. **Harrell Tract (Bluffton) Commercial Redevelopment TCP:** This same project was tested using the Commercial Redevelopment Traditional Community Plan option.

In addition to the above five projects, Witmer Jones Keefer, a Bluffton based land planning firm, did an analysis of Celedon, a 100 unit, 48 acre traditional neighborhood development on Lady's Island. Celedon was originally approved under the Planned Community option in the Lady's Island Community Preservation District which required 40% open space. This project was tested using the Traditional Community Plan option in the draft code.

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TO: Natural Resources Committee of Beaufort County Council

FROM: Anthony Criscitiello, Beaufort County Planning Director

DATE: November 3, 2014

SUBJECT: **Proposed Revisions to the Draft Community Development Code**

The following revisions are being recommended to the Draft Beaufort County Community Development Code before the ordinance goes before County Council for second reading. These revisions come from three sources. The first set of revisions was requested by the Natural Resources Committee. The second set of revisions came from testing the code. The third set came from the Planning Staff after additional reviews and comments on the draft code.

Recommended Changes from the Natural Resources Committee

Article 3: Section 3.2.70.F: T3 Edge Driveway Width

The Natural Resources Committee expressed concerns that the 10 foot maximum width requirement in T3 was too restrictive. Staff researched this issue and determined that the language was vague and that it was not the intent to restrict the width for the entire length of the driveway, but to limit the width at the curb cut and within the required parking setback. Limiting the width of driveways is consistent with the other goals of the T3 districts in that it aids in creating a safe, walkable street that is not dominated by driveways. The following language is proposed for the T3 districts.

"12' maximum driveway width at the curb cut and within front or side street setback."

Article 5: Section 5.3.40 Architectural Styles - Windows

The natural resources committee requested that language in the architectural standards requiring shutters to be operable be removed. Staff is recommending that the language be revised to "encourage" rather than require operable shutters in the three architectural styles – Lowcountry Vernacular, Village Revival, and Main Street Classical. The following is the proposed revision:

"Shutters, when used, ~~shall~~ are encouraged to be sized equal to half the width of the window; ~~shall~~ have shutter dogs; and Hinges; and ~~shall~~ be the height of the window."

Recommended Changes from Testing the Code

Article 2: Section 2.8.30.B Set-Aside Civic Space Requirement

During the testing of the code it was determined that proportioning the amount of civic space to the number of dwelling units works well for low and moderate density projects. However, when the gross residential density exceeds 4 dwelling units per acre, the civic space requirement exceeds 20% which is the amount of total open space required to be set aside for most conventional developments. This presents a challenge for multi-family developments which are balancing other requirements such as stormwater, natural resources protection and buffers which place demands on the total developable area of a site. Staff recommends capping the total amount of civic space at 15% of the total site area.

B. ***Civic Space.*** *Development in all zones shall set aside the minimum amounts of civic space identified in Table 2.8.40.B (Civic Space Set-Aside Requirement).*

Table 2.8.40.B: Civic Space Set Aside Requirement	
Type of Development[1]	**Set-Aside Requirement**
Residential	0.05 acres per dwelling unit up to 15% of Base Site Area (Section 6.1.40.G).
Non-residential	0.25 acres per 25,000 square feet.

[1]The minimum acreage of civic space for mixed-use developments shall be the sum of its residential and non-residential civic space set-aside requirements.

Article 3: Section 3.3.30.B: Building Placement

This revision also comes from testing the development of a multi-family community in C3 Neighborhood Mixed-Use. The recommendation is to reduce the setback of multi-family buildings on internal streets that are created as part of the development from 30 feet to 15 feet. This allows for greater site planning flexibility and creates a more walkable environment within the development. The note would read as follows:

"The minimum front setback for mansion apartments in a multi-family community on internal streets is 15 feet."

Article 2: Section 2.9.90: Table 2.9.90.E Public Frontage Types

When Witmer Jones Keefer was analyzing whether the Traditional Community Plan (TCP) would be a good tool to aid in the development of the Celedon community, they determined that the Thoroughfare standards required that all rear alley be paved. They requested that Table 2.9.90.E be revised to allow unpaved rear alleys, which are present in some the County's existing traditional neighborhood developments such as Habersham and the Village in Port Royal. The following revision is recommended:

"(RL) For Rear Lane: *The Rear Lane Frontage is located to the rear of lots. It consists of a paved or compacted gravel surface and ~~compacted gravel or~~ a similar material placed on the outer edges. Lanes are typically not landscaped.*

Article 3: Section 3.2.80.C: T3 Hamlet Neighborhood Building Placement

The following revision also comes from the analysis of Celedon. The revision would reduce the minimum lot width in T3 Hamlet Neighborhood from 75 feet to 65 feet while maintaining the minimum lot size of 7,500 square feet. This change would allow for greater flexibility in laying out lots.

C. Building Placement		
Setback (Distance from ROW/Property Line)		
Front	25' min., 35' max.	A
Side Street	15' min, 25'max.	B
Side:		
Side, Main Building	10' min, 15'max.	C
Side, Ancillary Building	5' min.	
Rear	15' min.	D
Lot Size (7,500 SF Minimum)		
Width	~~75'~~ 65' min.	E
Depth	100' min.	F

Additional Staff Recommended Changes

Article 2: Section 2.8.40.B3e Accessory Structure Standards

This revision would provide additional examples of accessory structure examples for civic and open space that are exempt from the building form standards in Article 3. The purpose is to provide greater clarity on the types of structures typical of passive and active parks that are exempt from these standards.

*"e. **Accessory Structure Standards.** All accessory structures within parks and open spaces, including, but not limited to, rest rooms, open-air pavilions, gazebos, wildlife viewing platforms, boardwalks, observation towers, picnic shelters and outdoor theaters, shall not be subject to the physical requirements of the building form standards in Article 3 (Specific to Zones). They shall be designed and furnished to be consistent with the character of the zone in which they are located. Such consistency may require accessory structures to maintain building setbacks, frontage, massing, disposition and character similar to adjacent development as determined by the Director."*

Article 2: Section 2.9.90: Table 2.9.90.E Public Frontage Types

Currently in Table 2.9.90.E none of the public frontage types are permitted in any of the conventional districts. Staff believes that this was an oversight and is not consistent with the other tables in the Division 2.9. Staff recommends that Table 2.9.90.E be revised to permit the following public frontage types in the following conventional districts:

Public Frontage Type	Zone
(HW) Highway	C3, SI
(RD) Road	C3, SI
(ST) Street	C3, C4, C5
(DR) Drive	C3, C4, C5
(AV) Avenue	C4, C5
(CS) Commercial Street or Avenue	T4, C4, C5
(BV) Boulevard	C4, C5
(RA) Rear Alley	C3, C4, C5
(RL) Rear Lane	C3, C4, C5

Article 3: Section 3.1.60: Consolidated Use Table

This revision would change "Parks, Playground, Outdoor Recreation Areas" in T1 from Special Use to Permitted Use. This revision is being proposed because many of the County's rural and critical lands are being zoned T1. This would avoid the County needing to go before the Zoning Board of Appeals each time an improvement is made to a park.

Table 3.1.60. Consolidated Use Table (continued)

Land Use Type	T1 N	T2R	T2 RL	T2 RN	T2 RNO	T2 RC	T3E	T3 HN	T3 N	T3 NO	T4 HC	T4 VC	T4 HCO	T4 NC	C3	C4	C5	SI
RECREATION, EDUCATION, SAFETY, PUBLIC ASSEMBLY																		
1. Park, Playground, Outdoor Recreation Areas	~~S~~ P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Article 3: Section 3.2.100.D: T4 Hamlet Center Building Placement

The following revision reduces the site yard setback for principle structures in the T4 Hamlet Center District from 10 feet to 5 feet. This will create greater site planning flexibility and achieve the density of development intended for this district.

D. Building Placement		
Setback (Distance from ROW/Property Line		
Front	10' min., 25' max.	A
Side Street	10' min., 20' max.	B
Side:		
Side, Main Building	~~10'~~ 5' min.	C
Side, Ancillary Building	5' min.	
Rear	5' min.	D

Article 3: Section 3.2.110.D: T4 Neighborhood Center Building Form

This revision would waive the 2 story minimum height requirement in T4 Neighborhood Center on Lady's Island. This was requested by the Lady's Island Community Preservation Committee and the Joint Review Committee. The proposed revision is to add a note to this section that would read as follows:

"On Lady's Island, one-story buildings are permitted; multi-story buildings are recommended."

Article 4: Section 4.2.20 Table 4.2.20.A: Table of Permitted Accessory Uses

This revision would allow Food Sales (Indoor) as an accessory use in T2 Rural. Small country stores are permitted in T2 Rural and often these establishments sell carry out foot items such as sandwiches and chicken. This revision would make this possible.

Table 4.2.20A: Table of Permitted Accessory Uses

Accessory Use/ Structure Type	Additional Requirements	T1 N	T2R T2RL	T2 RN	T2 RNO	T2 RC	T3E	T3 HN	T3 N	T4 HC	T4 VC	T4 HCO	T4 NC	C3	C4	C5	SI
Food Sales (Indoor)	4.2.60	--	P	--	P	P	--	--	--	P	P	P	P	--	P	P	P

Article 4: Section 4.2.20.E1a(3): Standards for Freestanding Accessory Buildings/Structures

This proposed revision is in response to concerns made by David Tedder that the new code has placed some inadvertent restrictions on some accessory structures.

" Except for fences, walls, swimming pools, hot tubs, and air conditioning compressor units, no accessory structures shall be located within five feet of a principal structure or any other accessory structure."

Article 5: Section 5.11.90.D: Forests – Penalty for Clear Cutting Prior to Development

This revision provides language that is currently in the ZDSO which provides a 1-year waiting period before development can occur after land is cleared for forestry activities. Staff is recommending that, in the draft Community Development Code, this waiting period be increased to 2 years to further deter clear cutting activities.

"Penalty for Clear Cutting Prior to Development. *If a property owner clear cuts all or any portion of his or her property under the claim of good faith forestry practice, and then seeks a development permit for any portion of the property within two years of the clear cut, a rebutable presumption shall arise that the clear cut was done in anticipation of future development and the permit denied. Any person seeking to rebut the presumption shall have the burden of proving their claim by clear and convincing evidence to the Zoning Board of Appeals."*

Article 10: Section 10.1.60 - F Definitions

The proposed language is the same as the current ZDSO and provides clarification of forest types.

"Forest, Maritime. ~~*This forest type*~~ *An indigenous forest community within close proximity to tidally influenced salt marshes and/or open water, also known as the South Atlantic Inland Maritime Forest,*

which is characterized by a canopy dominated by live oak, swamp laurel oak, southern magnolia, and cabbage palm.

~~***Forest, Mixed Upland.*** *This forest type is characterized as being southern mixed hardwood, beech-magnolia hammock, or mesic oak-hickory communities.*~~

Forest, Mixed Upland, Young. *An area or stand of trees whose total combined canopy covers an area of one acre or more composed of canopies of trees having a DBH of less than 18 inches covering at least 60 percent of the area. This forest type is characterized as being southern mixed hardwood, beech-magnolia hammock, mesic oak-hickory, pine flatwoods (southeastern coastal plain subxeric longleaf pine), spruce-pine-mixed hardwood, and pine-saw palmetto flatwood communities. Pine plantations are not included.*

Forest, Mixed Upland, Mature. *An area or stand of trees whose total combined canopy covers an area of one acre or more composed of canopies of trees having a DBH of at least 18 inches or greater covering at least 75 percent of the area. Also, any stand or grove of trees consisting of eight or more individual trees having a DBH of at least 18 inches whose combined canopies cover at least 50 percent of the area encompassed by the grove. This forest type is characterized as being southern mixed hardwood, beech-magnolia hammock, mesic oak-hickory, pine flatwoods (southeastern coastal plain subxeric longleaf pine), spruce-pine-mixed hardwood, and pine-saw palmetto flatwood communities. Pine plantations are not included."*

Map Change

The Planning Department received a request from several of the residents of Myrtle Island in the Bluffton Area to maintain a zoning designation that is similar to their current zoning – Rural Residential. Planning Staff recommends changing the proposed zoning of Myrtle Island from T3 Edge to T2 Rural Neighborhood which is consistent with the current zoning.

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TO: Natural Resources Committee of Beaufort County Council

FROM: Anthony Criscitiello, Beaufort County Planning Director

DATE: November 3, 2014

SUBJECT: **Planning Staff response to Homebuilders Association Comments on the Draft Beaufort County Community Development Code**

The Beaufort County Planning Staff carefully reviewed two memos that were submitted to the Natural Resources Committee commenting on the draft Community Development Code – one from the Hilton Head Area Homebuilders Association and the other by the National Homebuilders Association. Below is a summary of the concerns addressed by the Homebuilders Associations and our responses.

Hilton Head Area Homebuilders Association Comments

Item 1: Lack of provision for Planned Use Developments (PUDs)

As an alternative to removing PUD provisions immediately from the planning and development process, the HBA suggests that a temporary provision for PUDs be added to the proposed CDC. Upon review at six or nine months, with evidence showing no need for a PUD process, the HBA will support removing the PUD provision. If, in fact, we find that PUDs are no longer necessary and the CDC is able to fulfill all development and planning needs, adding a temporary provision will do nothing but strengthen the CDC process.

Planning Staff Response: This issue was addressed when the Planning Commission reviewed the draft Code in May 2014. The Planning Commission recommended forwarding the code to the Natural Resources Committee without a Planned Unit Development provision. Staff supports the position of the Planning Commission

Item 2: Table 5.11.60, Increasing River Buffer Setbacks for a single family home

The HBA strongly encourages Beaufort County Councilmembers to review Table 5.11.60.A: River Buffer Setbacks, as well as proposed CDC section 5.12.30 Stormwater Standards and approve an amendment to revise the table for Single Family Duplex Setback for T1, T2, Conventional and CP Districts to reflect a River Buffer Setback of 50 feet.

Planning Staff Response: While the depth of the river buffer (50 ft.) has not changed for most single-family homes, the building setback was increased 10 ft to allow for earth moving and construction activities to occur without disturbing the buffer, as is currently often the case. The Community Development Code permits this "transitional buffer" to be used recreationally. River buffer setbacks have been decreased for single-family homes in T3 and T4. This issue was addressed when the Planning Commission reviewed the draft Code in May 2014. The Planning Commission did not recommend making any changes to the river buffer setbacks. Staff supports the position of the Planning Commission

Item 3: Section 2.2.30.A2 Terminated Vistas Suggested Measures

The HBA simply suggests that Stop Signs be added as one of the written measures offered in CDC Section 2.2.30.A2.

Planning Staff Response: The requirement for "terminated vistas" applies only to internal streets in new developments. On internal low density residential streets, having a straight, unimpeded stretch of road greater than 1,200 feet encourages speeding. On higher density residential and commercial areas, the block pattern is required to be smaller, making it much easier to meet this requirement. Where site constraints

create a situation where it is difficult to meet this requirement, other solutions, such as street chicanes, off-sets, neck-downs, and roundabouts can be applied to meet this requirement without radically altering the layout of streets. It is staff's opinion that this requirement is beneficial to quality development and is not overly onerous. This issue was addressed when the Planning Commission reviewed the draft Code in May 2014. The Planning Commission did not recommend making any changes to this section. Staff supports the position of the Planning Commission

Item 4: Section 2.2.30.D External Connectivity and Future Road Connections

The HBA suggests that instead of requiring a developer/landowner to plat and construct future road connections at the initial development stage, the proposed CDC Section 2.2.30.D require a developer/landowner to 'reserve' areas of future interconnectivity for a certain period of time or until later review.

Planning Staff Response: The proposed language puts into the code what is already done in practice in the existing code. The ZDSO currently requires connectivity between nonresidential developments. If adjacent to vacant land that will likely be developed non-residentially, the developer must construct a stub out to the property line. This does not have to be a platted ROW, but is intended to link parking areas. The current practice is to also encourage interconnectivity for residential developments. In these cases, an access easement (not considered open space) is recorded to the adjoining property where a future connection is feasible. This issue was addressed when the Planning Commission reviewed the draft Code in May 2014. The Planning Commission did not recommend making any changes to this section. Staff supports the position of the Planning Commission

Other Items: Garage Locations, 10 Foot Driveways, Fences in Easements, etc.

The HBA suggests Beaufort County Councilmembers look closely at these, and possibly other, overly restricting land design and use measures, and seek input from landowners, builders, architects and others who might have alternative suggestions. The HBA is more than willing to provide professional input from those within its industry.

Planning Staff Response: Several of these issues have been addressed by staff. The Community Development Code draft reviewed by the Natural Resources Committee at their June 2, 2014 meeting addressed the issue of fences in easements. The list of recommended changes being brought forward for the November 3 Natural Resources Committee Meeting address the issue of driveway widths in the T3 districts. The location of garages is only restricted in the T3 and T4 transect zones, which are located in areas of the County where mixed-use walkable communities are being encouraged. This impacts only a small fraction of development within Beaufort County. One of the main goals of the draft Community Development Code is to recognize the diversity of Beaufort County's built environment and treat rural, suburban, and urban areas differently.

National Homebuilders Association Comments

2.2.30 (E) Dead End Streets and Cul-De-Sacs

This section indicates that dead end streets and cul-de-sacs are only allowable through administrative modulation. The decision to allow or disallow these types of streets needs to be made before the design process begins, otherwise, this type of change will require a significant redesign, based on the prescriptive nature of the development code. I would recommend allowing dead end streets and cul-de-sacs for a certain percentage of streets as long as they meet the design standards put forth in this section. –

Planning Staff Response: The draft Community Development Code has a modulation provision that allows cul-de-sacs in instances where certain site features make connectivity impossible or where no other block structure is practicable, in the case of an odd shaped lot that does not allow internal connectivity.

2.2.40 Block Design

This entire section is too prescriptive and does not leave enough flexibility to implement good design on constrained sites. For example, if a designer wished the streets to follow the natural contours of the land in

order to implement stormwater BMPs and limit soil disturbance they would not be able to do that and still follow the grid pattern required by this development code. In fact, many of the land development practices suggested by the ICC National Green Building Standard would not be feasible under this code. Again, a code that is too prescriptive does not leave room for innovation or new design techniques.

Planning Staff Response: The standards for block sizes vary depending on the type of development and the district in which the development is located. A single family subdivision located in a conventional zone has a maximum block perimeter length of 2,400 feet (0.45 miles). An area zoned T4 Neighborhood Center, because it is intended to be located at the center of a walkable community, has a maximum block perimeter length of 1,600 feet. Within rural areas, there are no restrictions on block length. In addition, where site conditions place constraints on meeting the block size standards, there is a modulation provision in Section 7.2.30 that allows the maximum length to be exceeded by up to 20%.

2.2.50 (C) Lot Lines

The block and street design requirements, combined with the lot line requirements do not allow a builder to orient the home so that it takes advantage of solar heat.

Planning Staff Response: The language in Section 2.2.50 is very similar to the current language in Beaufort County's Zoning and Development Standards Ordinance and allows for a lot of flexibility to adjust lot lines to accommodate for site terrain, protecting natural features, integrating open space, creating a more efficient lot design. There is plenty of flexibility to allow for southern exposure.

Table 2.3.60 (B) Required Allocation Mix of Transect Zones

The minimum and maximum percentages presented in this table may be difficult to achieve and may cause some administrative issues. For the Neighborhood Scale TCP, T2 Rural, the maximum percentage should be 40%. If the minimum requirement for the other zones totals 60%, a developer could never reach 50% max for any of the zones. Similarly, for the infill scale TCP, the maximum percentage for T3 Hamlet should be 75%. Due to the minimums in this table, leaving the maximum at 70% could leave you with a 5% gap in certain situations.

Planning Staff Response: For the Neighborhood-Scale Traditional Community Plan there are five districts available and only three that have a minimum requirement. Staff believes that there is enough flexibility to the TCP that minimum and maximum percentages of districts required do not place unnecessary hardships on developers. The purpose of the TCP is to promote a diversity of lot sizes and building types.

2.10.30 Establishment of TDR Sending and Receiving Areas

As this currently reads, it appears that receiving areas are all within the boundary of Port Royal Island. Are there no other unincorporated areas that could be included as receiving areas? Also, are there no areas of the county, other than the airport overlay, that could be sending areas? This is a great program that can further the goals of the AICUZ program and county conservation efforts and focuses density in the most appropriate areas. The county should make sure they are using the program to its full potential.

Planning Staff Response: Planning Staff agrees that the success of the Transfer of Development Rights program is dependent on, among other things, having adequate receiving areas to create demand to purchase development rights. The sending and receiving areas for Beaufort County's TDR Program are being analyzed as part of the Joint Land Use Study currently underway with MCAS Beaufort.

Table 5.1.12.30.C Stormwater BMP Type Standards

I recommend you add vegetative permeable paving systems to the list of acceptable BMPs. These systems are very effective for use on fire lanes, driveways, and parking areas. They offer multiple environmental benefits including stormwater management and active cooling through transpiration.

Planning Staff Response: Vegetative permeable paving is covered under the "pervious paving systems" BMP in Table 5.12.30.C.

ADD-ONS

The document(s) herein were provided to Council for information and/or discussion after release of the official agenda and backup items.

Topic:	Testing of the Draft Community Development Code
Date Submitted:	November 3, 2014
Submitted By:	J. K. Tiller Associates
Venue:	Natural Resources Committee

Beaufort County Community Development Code

Testing the Draft Code

Natural Resources Committee

November 3, 2014

J. K. Tiller

November 3, 2014

Natural Resources Committee

Tested Projects

- Celedon – Lady's Island
- Magnolia Park Apartments – Laurel Bay Road
- Mint Farms Subdivision – Burton
- Heyward Point Plantation – Okatie
- Harrell Tract - Bluffton

PLAN SUMMARY

847,285 SF OPEN SPACE

2,117,152 SF PROPERTY AREA

40.02% OPEN SPACE

CONCEPTUAL PLAN

FOR

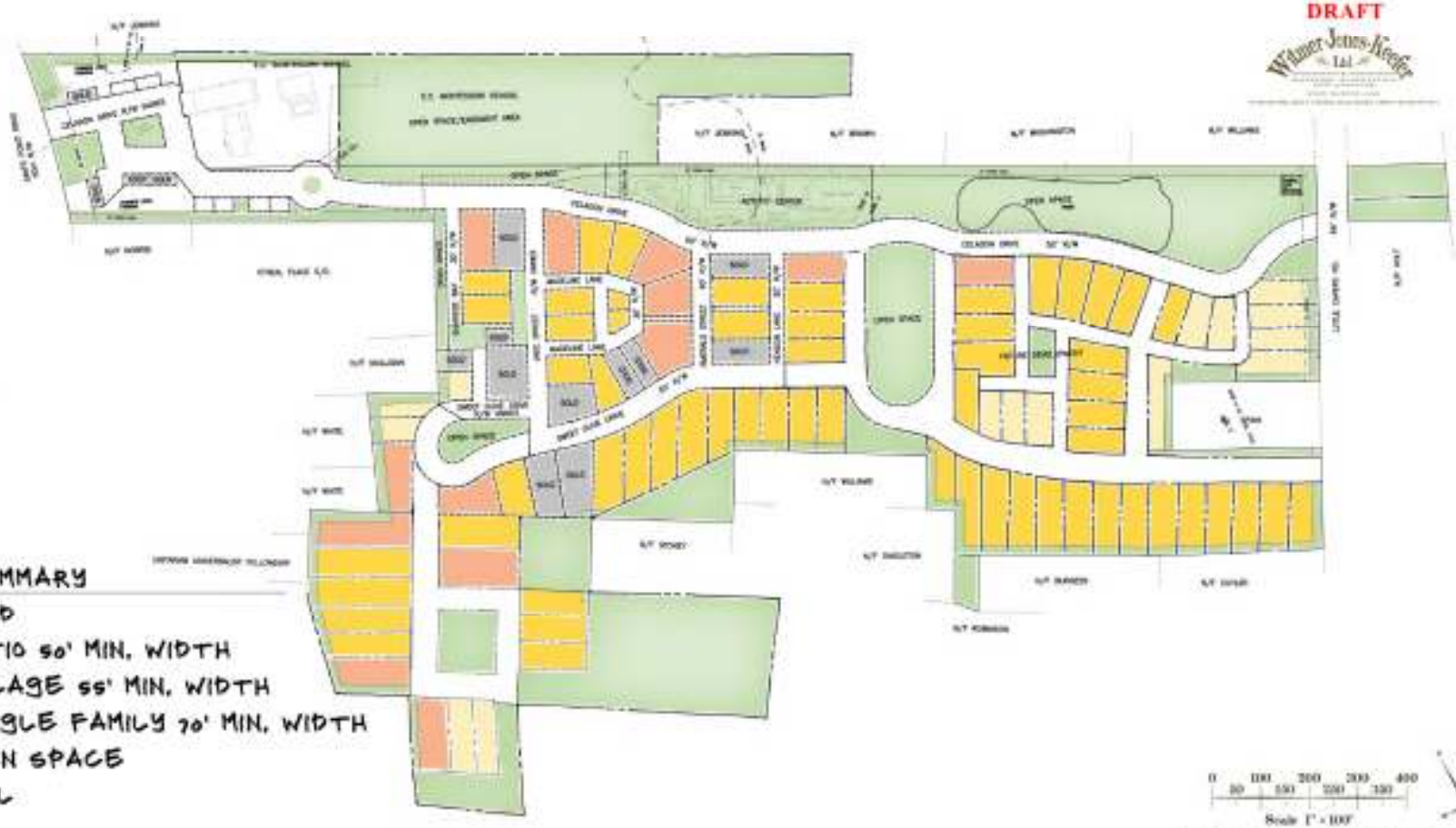
CELADON

BY RIGHT

August 18, 2014

DRAFT

Wagner Jones-Kreeger Ltd.



AREA SUMMARY

15 SOLD

15 PATIO 50' MIN. WIDTH

59 VILLAGE 55' MIN. WIDTH

12 SINGLE FAMILY 70' MIN. WIDTH

OPEN SPACE

101 TOTAL

0 100 200 300 400

50 150 250 350

Scale 1" = 100'

CELADON

WITH
COMMUNITY DEVELOPMENT CODE
TCP-NS

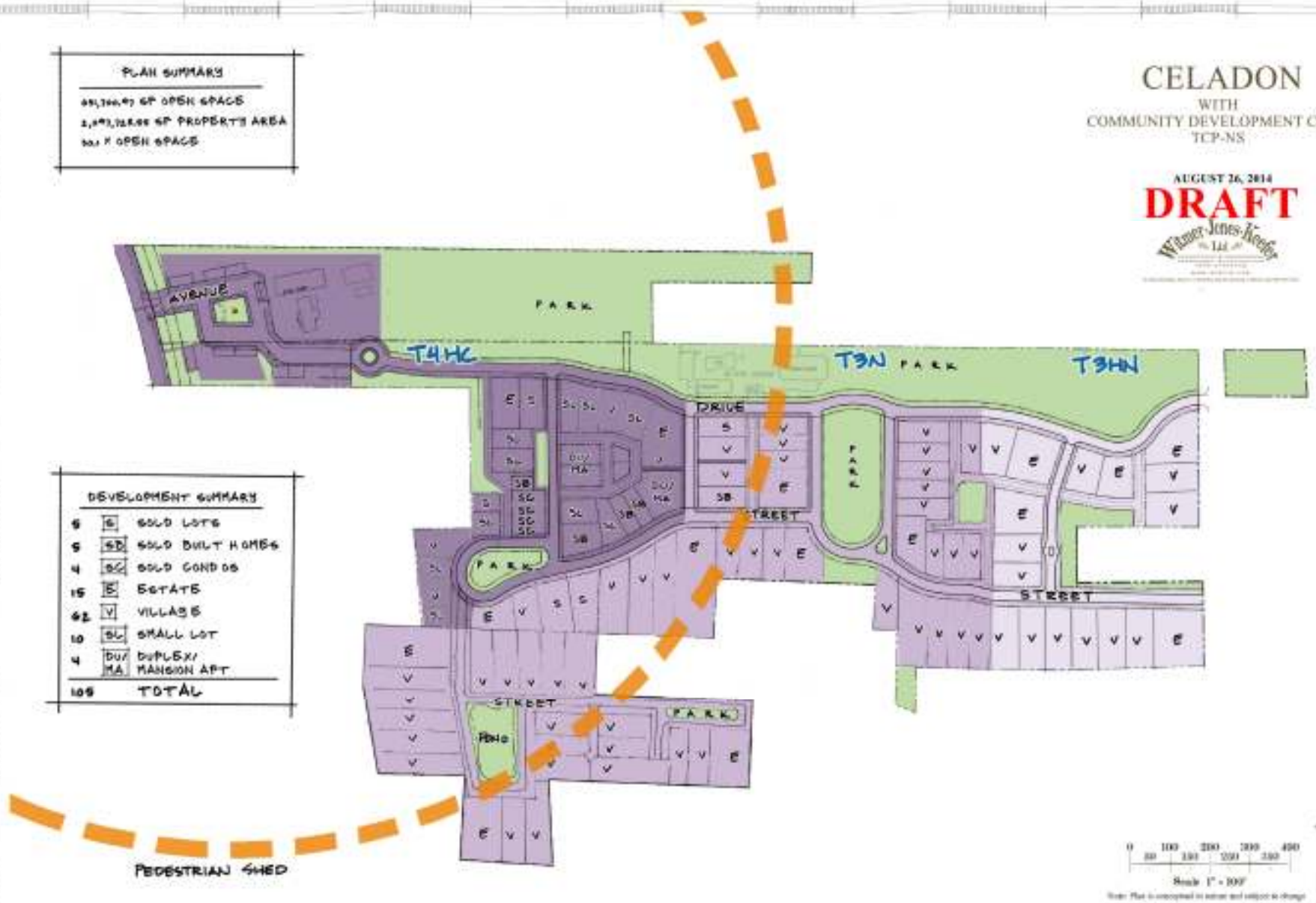
AUGUST 26, 2014

DRAFT

Wilmer Jones Keeley Ltd

PLAN SUMMARY
651,300.47 SF OPEN SPACE
2,893,128.88 SF PROPERTY AREA
22.5 % OPEN SPACE

DEVELOPMENT SUMMARY		
6	S	SOLD LOTS
5	SB	SOLD BUILT HOMES
4	SC	SOLD CONDOS
15	E	ESTATE
62	V	VILLAGE
10	SC	SMALL LOT
4	DU/MA	DUPLEX/ MANSION APT
106		TOTAL



0 100 200 300 400

Scale 1" = 200'

Note: Plan is conceptual in nature and subject to change

DEVELOPMENT SUMMARY

TOTAL ACRES	+/- 7.15 ACRES
TOTAL UNITS	56 UNITS ACTUAL 70 UNITS ALLOWED
NATURAL RESOURCES	UPLAND FOREST YOUNG
AMENITIES	BASKETBALL COURT TOT LOT CLUBHOUSE/ POOL
ZONING	
MAX. DENSITY/UNITS	10 DU/AC. / 70 DU MAX. (WITH AFFORDABLE HSG. DENSITY BONUS)
MIN. OPEN SPACE	40%
NATURAL RESOURCE REQUIRED TO BE SAVED	UPLAND FOREST (YOUNG) 20% – 1.43 AC
PERIMETER BUFFER REQ.	THOROUGHFARE: 100 FT N. PROP. LINE: 100 FT E. & W. PROP. LINE: 50 FT.
SETBACKS (MIN.)	FRONT: 25 FT SIDE: 12 FT REAR: 30 FT
BUILDING SPACING	30 FT MIN.
BUILDING TYPE	NONE
MAX. BLOCK SIZE	NONE

PREPARED FOR:
BEAUFORT COUNTY COUNCIL

PREPARED BY:
J. K. TILLER ASSOCIATES, INC.
LAND PLANNING LANDSCAPE ARCHITECTURE
THE PINCKNEY COLONY ROAD SUITE 101 BLUFFTON, SC 29909

Magnolia Park Apartments
Existing Conditions
BLUFFTON, SOUTH CAROLINA
October 20, 2014

NORTH

GRAPHIC SCALE
0 50' 100' 150'

JKT Job Number: 201410-01

DEVELOPMENT SUMMARY

TOTAL ACRES	+/- 7.15 ACRES
TOTAL UNITS	72 UNITS ACTUAL 114 UNITS ALLOWED
NATURAL RESOURCES AMENITIES	UPLAND FOREST YOUNG CLUBHOUSE/ POOL TOT LOT LOOPED NATURE TRAIL
ZONING MAX. DENSITY/UNITS	16 DU/AC. / 114 DU MAX.
CIVIC SPACE NATURAL RESOURCE REQUIRED TO BE SAVED	1.46 AC (23%) UPLAND FOREST (YOUNG) 20% = 1.43 AC
PERIMETER BUFFER REQ.	THOROUGHFARE: 50 FT N. PROP. LINE: 20 FT E. & W. PROP. LINE: 10 FT
SETBACKS (MIN.)	FRONT: 30 FT SIDE: 10 FT REAR: 50 FT
BUILDING SPACING	20 FT MIN.
BUILDING TYPE	MANSION APARTMENT
MAX. BLOCK SIZE	1000' BLOCK FACE 2400' PERIMETER

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THE FORGERY COLONY ROAD SUITE 101 BLUFFTON, SC 29909

Magnolia Park Mansion Apartments
Community Code Test (C3)
BLUFFTON, SOUTH CAROLINA
October 27, 2014

NORTH

GRAPHIC SCALE
0 50' 100' 150'

[JKT Job Number: 201410-01]

DEVELOPMENT SUMMARY

TOTAL ACRES	+/- 66 ACRES
TOTAL UNITS	168 S/F UNITS ACTUAL 171 S/F UNITS ALLOWED
OPEN SPACE / NATURAL RESOURCES	NON-TIDAL WETLANDS 3.36 AC UPLAND FOREST MATURE 11.12 AC UPLAND FOREST YOUNG 17.08 AC
ZONING	
MAX. DENSITY/UNITS	2.6 DU/AC / 171 DU MAX.
MIN. OPEN SPACE	35% (23.1 AC)
NATURAL RESOURCE REQUIRED TO BE SAVED	NON-TIDAL WETLANDS 80% = 2.69 AC UPLAND FOREST (MATURE) 45% = 5.00 AC UPLAND FOREST (YOUNG) 20% = 3.42 AC TOTAL REQUIRED 11.11 AC
SETBACKS WETLANDS	SINGLE FAMILY: 20 FT ROADS: 30 FT
PERIMETER BUFFER REQ.	ALL SIDES: 25 FT
MIN. LOT SIZE	8,000 SF
MIN. LOT WIDTH	50 FT
SETBACKS (MIN.)	FRONT: 30 FT SIDE: 10 FT REAR: 40 FT
BUILDING TYPE	NONE
MAX. BLOCK SIZE	NONE

PREPARED FOR:
BEAUFORT COUNTY

PREPARED BY:
J. K. TILLER ASSOCIATES, INC.
LAND PLANNING LANDSCAPE ARCHITECTURE
TEN PINCKNEY COLONY ROAD SUITE 101 BLUFFTON, SC 29909
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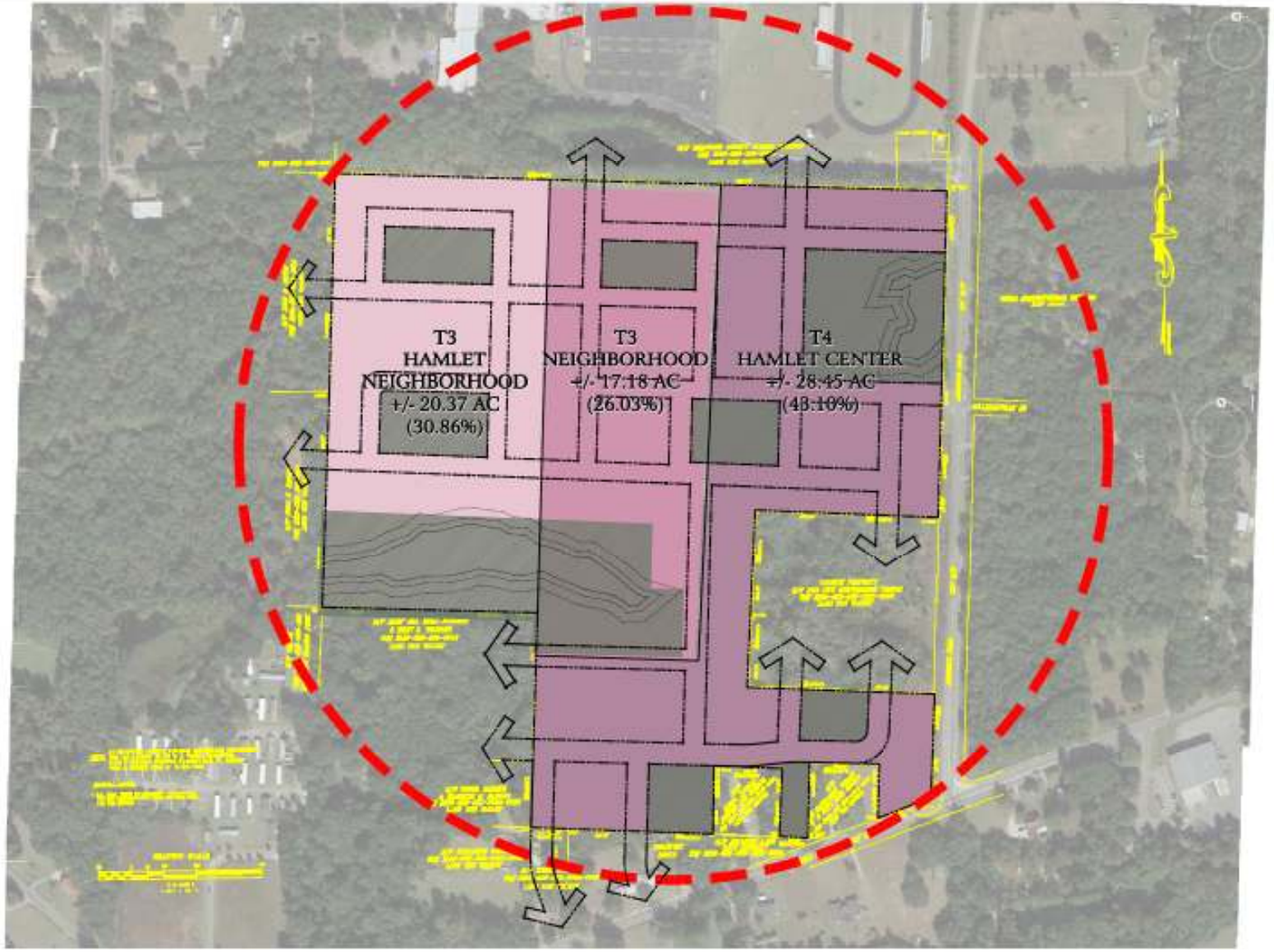
Mint Farm
Existing Conditions
BEAUFORT COUNTY, SOUTH CAROLINA
OCTOBER 27, 2014

NORTH

GRAPHIC SCALE
0 200' 400' 600'

JKT Job Number: 201410-01



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Mint Farm
Regulating Plan & Pedestrian Shed
BEAUFORT COUNTY, SOUTH CAROLINA
SEPTEMBER 25, 2014

NORTH

GRAPHIC SCALE
0 200' 400' 600'

JKT Job Number: 201410-01

DEVELOPMENT SUMMARY

TOTAL ACRES	+/- 66 ACRES
TOTAL UNITS	231 S/F UNITS ACTUAL 231 S/F UNITS ALLOWED
OPEN SPACE / NATURAL RESOURCES	NON-TIDAL WETLANDS 3.36 AC UPLAND FOREST MATURE 11.12 AC (T4 = 4.78 AC) (T3 = 6.34 AC) UPLAND FOREST YOUNG 17.08 AC (T4 = 7.34 AC) (T3 = 9.74 AC)
ZONING: NEIGHBORHOOD-SCALE TCP (T4-HC, T3-N, T3-HN)	
MAX. DENSITY/UNITS	3.5 DU/AC / 231 DU MAX.
MIN. CIVIC SPACE	.05 AC/DU (11.55 AC) (11.55 AC PROVIDED)
NATURAL RESOURCE REQUIRED TO BE SAVED	NON-TIDAL WETLANDS 100% = 2.82 AC UPLAND FOREST (MATURE) T4: 20% = (.95 AC) T3: 45% = (2.85 AC) UPLAND FOREST (YOUNG) T4: 10% = (.73 AC) T3: 20% = (1.94 AC) TOTAL REQUIRED 9.29 AC
SETBACKS WETLANDS	SINGLE FAMILY: 20 FT ROADS: 50 FT
PERIMETER BUFFER REQ.	ALL SIDES: NONE
SETBACKS (MIN.)	See Standards for Building Type
BUILDING TYPES	T4-HC: Carriage, Small Lot, Cottage Court, Duplex, Townhouse, Mansion Apartment, Apartment House T3-N: Carriage, Estate, Village, Cottage Court, Duplex, Mansion Apartment T3-HN: Carriage, Estate, Village, Duplex
MAX. BLOCK SIZE	See Transect Standards (Plan Meets Standard)

PREPARED FOR:
BEAUFORT COUNTY

PREPARED BY:
J. K. TILLER ASSOCIATES, INC.

Mint Farm
Traditional Community Plan
BEAUFORT COUNTY, SOUTH CAROLINA
OCTOBER 27, 2014

NORTH

GRAPHIC SCALE
0 200' 400' 600'

DEVELOPMENT SUMMARY

TOTAL ACRES	+/- 605.88 ACRES	
TOTAL UNITS	147 S/F UNITS ACTUAL 205 S/F UNITS ALLOWED	
OPEN SPACE / NATURAL RESOURCES	ALTAMAHA PRESERVE	100.07 AC
	AMENITIES	19.57 AC
	LAKES	44.08 AC
	FOREST & TRAILS	174.74 AC
	TOTAL	338.46 AC
	NON-TIDAL WETLANDS	29.82 AC
	MARITIME FOREST	15.65 AC
	UPLAND FOREST MATURE	265.55 AC
	UPLAND FOREST YOUNG	104.70 AC
	TOTAL	415.72 AC

ZONING (Based on Current ZDSO)

MAX. DENSITY/UNITS	.34 DU/AC / 205 DU MAX.
MIN. OPEN SPACE	40% (242 AC)
NATURAL RESOURCE REQUIRED TO BE SAVED	NON-TIDAL WETLANDS 100% = 29.82 AC MARITIME FOREST 70% = 10.96 AC UPLAND FOREST (MATURE) 55% = 146.05 AC UPLAND FOREST (YOUNG) 25% = 26.18 AC TOTAL REQUIRED 213.01 AC
SETBACKS WETLANDS	SINGLE FAMILY: 20 FT ROADS: 30 FT
SETBACKS RIVER BUFFER	SINGLE FAMILY: 50 FT NON-RESIDENTAL BLDGS: 100 FT
PERIMETER BUFFER REQ.	ALL SIDES: 25 FT
MIN. LOT SIZE	1 AC
MIN. LOT WIDTH	150 FT
SETBACKS (MIN.)	FRONT: 50 FT SIDE: 18 FT REAR: 50 FT

PREPARED FOR:
BEAUFORT COUNTY

PREPARED BY:
J. K. TILLER ASSOCIATES, INC.
LAND PLANNING LANDSCAPE ARCHITECTURE
788 PINCREST COLONY ROAD SUITE 101 BEAUFORT, SC 29906

Heyward Point
Existing Conditions
BEAUFORT COUNTY, SOUTH CAROLINA
OCTOBER 27, 2014

GRAPHIC SCALE
NORTH 0 500' 1000' 1500'

JKT Job Number: 201410-01

DEVELOPMENT SUMMARY

TOTAL ACRES	+/- 605.88 ACRES
TOTAL UNITS	205 LOTS
NATURAL RESOURCES REQUIRED TO BE SAVED	NON-TIDAL WETLANDS: 100% = 29.82 ACRES MARITIME FOREST: 70% = 10.96 ACRES UPLAND FOREST (MATURE): 55% = 166.05 ACRES UPLAND FOREST (YOUNG) 25% = 26.18 AC TOTAL 213.01 AC
ZONING (T2 RURAL) MAX. DENSITY/UNITS	.34 DU/AC - 205 DU MAX.
MIN. OPEN SPACE	40% (242 AC) INCLUDING CIVIC SPACE AT .05 AC/DU
OPEN SPACE PROVIDED:	260.87 ACRES
CIVIC SPACE PROVIDED:	13.20 ACRES
SETBACKS WETLANDS	SINGLE FAMILY: 20 FT ROADS: 50 FT
SETBACKS RIVER BUFFER	SINGLE FAMILY: 60 FT NON-RESIDENTAL BLDGS: 100 FT
PERIMETER BUFFER REQ.	20 FEET ALONG CALLAWASSI DR.
MIN. LOT SIZE	.5 ACRES
MIN. LOT WIDTH	N/A
SETBACKS (MIN.)	FRONT: 50 FT SIDE: 20 FT REAR: 50 FT
BUILDING TYPE	N/A
MAX. BLOCK SIZE	N/A

PREPARED FOR:
BEAUFORT COUNTY

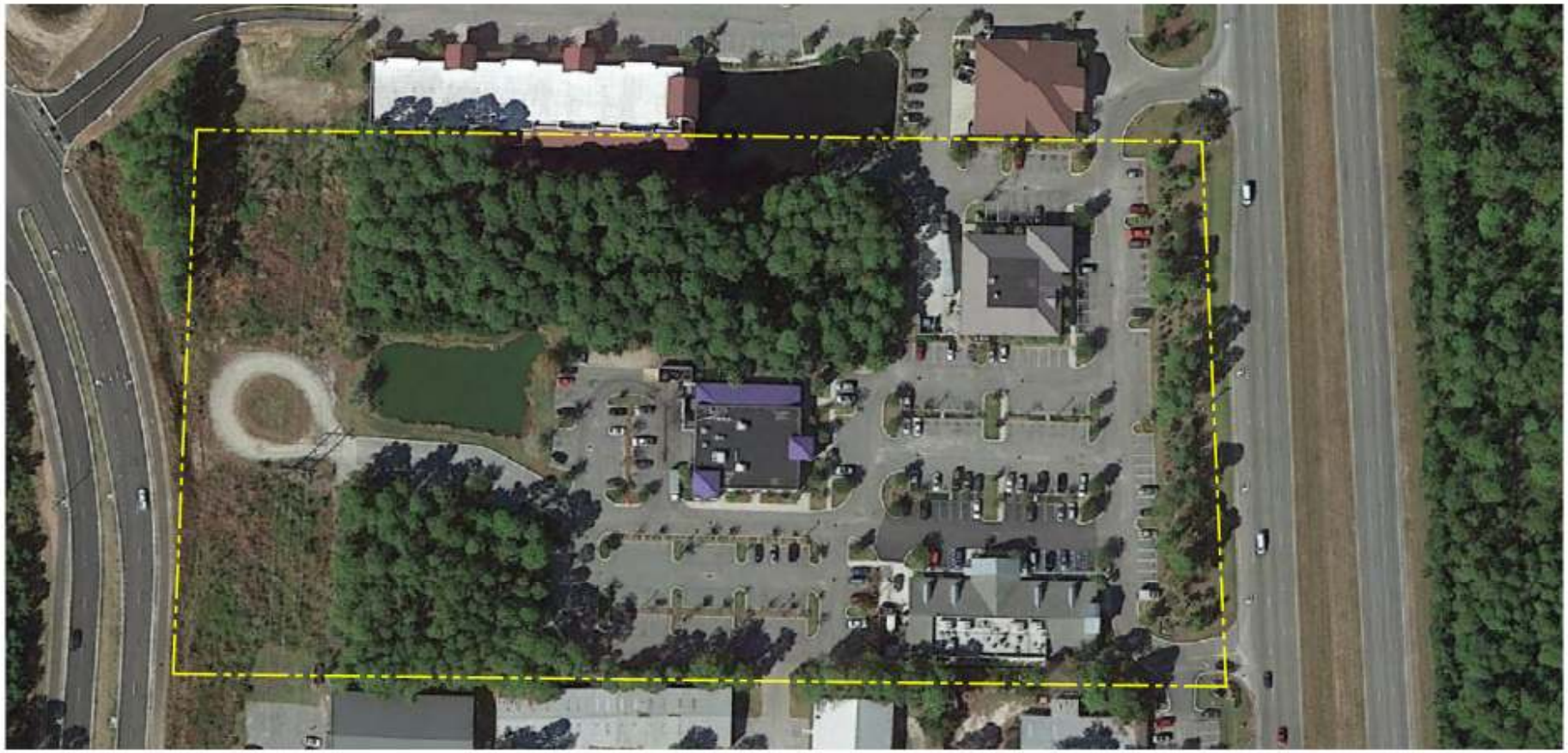
PREPARED BY:
J. K. TILLER ASSOCIATES, INC.
LAND PLANNING LANDSCAPE ARCHITECTURE
[illegible] BLUFFTON, SC 29909

Heyward Point
T2 RURAL PLAN
BEAUFORT COUNTY, SOUTH CAROLINA
OCTOBER 27, 2014

NORTH

GRAPHIC SCALE
0 500' 1000' 1500'

JKT Job Number 201410-01



DEVELOPMENT SUMMARY

TOTAL ACRES	+/- 9.79 ACRES	ZONING			
TOTAL UNITS	34,000 SF COMMERCIAL IN 3 BLDGS	MAX. DENSITY/UNITS	MAX. FAR - .31 AC	SETBACKS (MIN.)	FRONT: 25 FT SIDE: 20 FT REAR: 20 FT
NATURAL RESOURCES	NON-TIDAL WETLANDS 3.36 AC UPLAND FOREST MATURE 11.12 AC UPLAND FOREST YOUNG 17.08 AC	MIN. OPEN SPACE	20% (1.96 AC)	BUILDING TYPE	NONE
		NATURAL RESOURCE REQUIRED TO BE SAVED	NON-TIDAL WETLANDS 60% = 1.69 AC	MAX. BLOCK SIZE	NONE
		SETBACKS WETLANDS	BUILDINGS: 50 FT ROADS/ PARKING: 30 FT	LANDSCAPING	FOUNDATION BUFFER: 8 FT MIN. TREE ISLANDS: 1/8 SPACES
		PERIMETER BUFFER REQ.	FRONT: 50 FT SIDE: 10 FT (NATURAL) 15 FT (PLANTED)	PARKING	GEN. RETAIL: 4/1000 SF TRETAURANT: 12/1,000 SF

PREPARED FOR:
BEAUFORT COUNTY COUNCIL

PREPARED BY:
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Harrell Tract
Existing Conditions
BLUFFTON, SOUTH CAROLINA
October 27, 2014

NORTH

GRAPHIC SCALE
0 60' 120' 180'

JKT Job Number: 201410-01

DEVELOPMENT SUMMARY

TOTAL ACRES	+/- 9.79 ACRES	ZONING					
TOTAL UNITS	34,000 SF COMMERCIAL IN 3 BLDGS	MAX. DENSITY/UNITS	MAX. FAR - .31 AC			SETBACKS (MIN.)	FRONT: 25 FT SIDE: 20 FT REAR: 20 FT
NATURAL RESOURCES	NON-TIDAL WETLANDS 3.36 AC UPLAND FOREST MATURE 11.12 AC UPLAND FOREST YOUNG 17.08 AC	MIN. OPEN SPACE	20% (1.96 AC)			BUILDING TYPE	NONE
		NATURAL RESOURCE REQUIRED TO BE SAVED	NON-TIDAL WETLANDS 60% = 1.69 AC			MAX. BLOCK SIZE	NONE
		SETBACKS WETLANDS	BUILDINGS: 50 FT ROADS/ PARKING: 30 FT			LANDSCAPING	FOUNDATION BUFFER: 8 FT MIN. TREE ISLANDS: 1/8 SPACES
		PERIMETER BUFFER REQ.	FRONT: 50 FT SIDE: 10 FT (NATURAL) 15 FT (PLANTED)			PARKING	GEN. RETAIL: 4/1000 SF TRETAURANT: 12/1,000 SF

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BEAUFORT COUNTY COUNCIL

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Harrell Tract
Existing Conditions
BLUFFTON, SOUTH CAROLINA
October 27, 2014

NORTH

GRAPHIC SCALE
0 60' 120' 180'

JKT Job Number: 201410-01