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AGENDA NATURAL RESOURCES COMMITTEE

Monday, August 6, 2012

3:00 p.m.

Executive Conference Room
Administration Building

Committee Members:

Paul Sommerville, Chairman
Brian Flewelling, Vice-Chairman
Steven Baer
Gerald Dawson
William McBride
Jerry Stewart
Laura Von Harten

Staff Support: Tony Criscitiello

1. CALL TO ORDER – 3:00 P.M.
2. DRAFT INTERGOVERNMENTAL AGREEMENT FOR STORMWATER UTILITY BETWEEN BEAUFORT COUNTY AND CITY OF BEAUFORT ([backup](#))
3. WATER QUALITY LAB MEMORANDUM OF UNDERSTANDING WITH THE UNIVERSITY OF SOUTH CAROLINA BEAUFORT ([backup](#))
4. JOINT MONITORING MEMORANDUM OF UNDERSTANDING FOR SALINITY STUDY ([backup](#))
5. EXECUTIVE SESSION
 - A. Discussion of negotiations incident to proposed contractual arrangements and proposed purchase of property
6. ADJOURNMENT



BEAUFORT COUNTY STORMWATER UTILITY
120 Shanklin Road
Beaufort, South Carolina 29906
Voice (843) 255-2801 Facsimile (843) 255-9478



TO: Councilman Paul Sommerville, Chairman, Natural Resources Committee

VIA: Gary Kubic, County Administrator
Bryan Hill, Deputy County Administrator
David Starkey, Chief Financial Officer
Rob McFee, P.E., Director of Engineering & Infrastructure
Robert Klink, P.E. County Engineer

FROM: Dan Ahern, P.E., Stormwater Manager

SUBJ: **Draft IGA for Stormwater Utility between Beaufort County and the City of Beaufort**

DATE: July 18, 2012

BACKGROUND. The existing 10-year Intergovernmental Agreements (IGAs) between the municipalities and the county concerning operation of the Beaufort County Stormwater (SW) Utility ended in September 2011. New agreements were signed with Town of Hilton Head Island and Bluffton last year. The Town of Port Royal and City of Beaufort chose to extend the old agreement for one year. The Town of Port Royal's new agreement was signed June 26, 2012

The City of Beaufort is now proposing a new agreement based on agreements signed by the Towns of Hilton Head Island and Bluffton. They, like Town of Port Royal have one notable difference between this agreement and the agreements signed last year. The City of Beaufort has proposed clarifying wording (same as Town of Port Royal) in Article 6 that addresses their concerns on redevelopment. They have also agreed to utilize Beaufort County Utility Best Management Practice (BMP) Manual which will meet the concerns that the Utility had about meeting State designated water uses.

The wording incorporated into this agreement is as follows:

1. City of Beaufort will be using the Utility's BMP manual to meet their stormwater standards
2. The Utility's goal effective/equivalent impervious surface (10% /5%) requirements will be applied to new development
3. On redevelopment with stormwater draining to unimpaired waters, no additional stormwater runoff volume will be allowed from the redevelopment
4. On redevelopment with stormwater draining to impaired waters that is a factor in the impairment, necessary volume reductions will be required up to the goal (10%/5%) effective impervious surface requirements

This clarified wording addresses the City of Beaufort's interest in encouraging in-fill and redevelopment while protecting water uses. It also allows developers and engineers to have one technical document to use in selecting and sizing appropriate stormwater practices. It is the only notable reduction and other changes are minor changes to link to approval process dates.

The Stormwater Utility board reviewed this draft agreement and recommended approval on July 12, 2012. This agreement was presented to the City Council workshop on July 17, 2012 and final vote is scheduled for August 14, 2012 Council Meeting.

RECOMMENDATION

The Natural Resources Committee recommend for approval by County Council, the proposed Stormwater Utility IGA with the City of Beaufort.

Attachments

Draft Intergovernmental agreement with the City of Beaufort

A STORMWATER MANAGEMENT AND UTILITY AGREEMENT

BETWEEN BEAUFORT COUNTY, SOUTH CAROLINA, AND

CITY OF BEAUFORT, SOUTH CAROLINA

DATED: _____

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WHEREAS, this Agreement is made on this ___ day of _____, 2012, by and between Beaufort County, South Carolina, and the City of Beaufort, South Carolina, for the purpose of establishing the terms and conditions of the participation by the City in a county-wide stormwater utility, which utility shall be operated by the County.

ARTICLE 1 - TITLE AND PURPOSE

1.00 *Title:* This intergovernmental agreement between Beaufort County, South Carolina, and the City of Beaufort, South Carolina, shall be known as the “Stormwater Management and Utility Agreement Between Beaufort County, South Carolina, and the City of Beaufort, South Carolina.”

1.01 *Purpose:* This Agreement is made for the purpose of defining the roles, responsibilities and financial relationship between the County and the City with respect to the establishment, administration and operation of the Beaufort County Stormwater Utility, which includes the following:

- (a) Establishment of rates;
- (b) Use of revenue;
- (c) Acquisition of existing stormwater infrastructure;
- (d) Construction of new stormwater infrastructure;
- (e) Maintenance of stormwater infrastructure;
- (f) Operation of stormwater infrastructure;
- (g) Regulation and use of stormwater infrastructure; and,
- (h) Enhancement of water quality.

1.02 *References to County Ordinances:* This Agreement hereby incorporates by reference Beaufort County, South Carolina, Ordinances 2005-33, 2008-29, and 2009-21 regarding the establishment of a Stormwater Utility. In the case of any conflict between the provisions of the Ordinances and this Agreement, the provisions of this Agreement shall control.

ARTICLE 2 - DEFINITIONS

2.00 *Definitions:* When used in this “Stormwater Management and Utility Agreement between Beaufort County, South Carolina, and the City of Beaufort, South Carolina,” the following words shall have the meanings set forth in this Article 2:

2.01 *Agreement:* This Stormwater Management and Utility Agreement between Beaufort County, South Carolina, and the City of Beaufort, South Carolina.

2.02 *County:* Beaufort County, South Carolina.

2.03 *County Wide Stormwater Management Study:* The study conducted by the County to determine the drainage infrastructure and maintenance needs within the various watersheds within the County. This became the Beaufort County Stormwater Master Plan dated February 20, 2006.

2.04 *Cost of Service Analysis and Rate Study:* The study conducted by the County which was adopted by County Council on August 22, 2005 to determine an equitable and appropriate rate structure for Stormwater Utility User Fees within all areas of the County, so that fees charged by the Stormwater Utility will be in compliance with provisions of S. C. Code Ann. 48-14-120(C)(Supp. 2010), and S. C. Regs. 72-310 (Supp. 2010).

2.05 *Stormwater Utility User Fee; Single Family Unit Rate (SFU).* The single-family unit fee

rate 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.

2.06 *NPDES:* The National Pollutant Discharge Elimination System stormwater regulatory program established by the United States Environmental Protection Agency to address pollutants in stormwater discharged to waters of the United States. Phase II of this regulatory program impacts communities under 100,000 in population, small construction sites between one acre and five acres, and industrial sites owned and operated within communities under 100,000 population.

2.07 *Public Stormwater:* Stormwater runoff which is conveyed through a public drainage easement or public road right of way, and/or which some portion is generated from a public road right of way.

2.08 *Stormwater Infrastructure:* Real property, interests in real property, improvements to real property such as ditches, drains, pipes, culverts, catch basins, pumps, or the like, or any combination of them, used or useful in the collection and disbursement of storm and surface water, or the control of flooding. As used herein, Stormwater Infrastructure does not include drainage systems or facilities that are not publicly owned, and which do not carry public stormwater.

2.09 *Stormwater Management:* Control of storm and surface water, erosion, stormwater quality protection and flooding through the use of Stormwater Infrastructure, and the creation and enforcement of development standards related to storm and surface water.

2.09 *Stormwater Management Plan:* The plan developed by the County that addresses

planning, design and construction of capital improvements to the Stormwater Infrastructure; acquisition of real property or interests in real property for the purposes of Stormwater Management; maintenance and repair of Stormwater Infrastructure; regulation of the use of Stormwater Infrastructure; acquisition of equipment and other assets; regulation of impacts including any that may be mandated under the NPDES Phase II regulations, contracting with engineering, financial, legal, construction and other professionals for services in support of the Stormwater Utility, emergency preparedness related to storms and hurricanes, acquisition or construction of Stormwater Infrastructure, or any other functions required, useful or prudent for a program of Stormwater Management.

2.10 *Stormwater Utility User Fees:* Stormwater Utility User 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, as pursuant to the provisions of Beaufort County Ordinance 2005-33.

2.11 *Stormwater Utility:* The administrative organization created for the purposes of planning, designing, overseeing, funding, building, and maintaining Stormwater Infrastructure, either directly or through cooperative arrangements with other governmental bodies; and for administering and managing Stormwater Management throughout Beaufort County.

2.12 *City:* The City of Beaufort, South Carolina.

ARTICLE 3 - TERM OF THIS AGREEMENT

3.00 *Term of This Agreement:* The term and duration of this Agreement shall be as follows in this Article 3.

3.01 *Initial Term of this Agreement:* The Initial Term of this Agreement shall be for a period of ten (10) years, commencing on the date of the execution hereof.

3.02 *Periodic Review of this Agreement:* The Stormwater Implementation Committee shall conduct periodic review of this Agreement to determine if it remains current and with the state of the art stormwater management and practices applicable to coastal areas. The Stormwater Implementation Committee shall provide recommendations to the municipalities and the County for updates to the agreement if necessary.

3.03 *Extension of this Agreement:* The term of this Agreement may be extended at any time by the mutual agreement of the parties hereto, or upon the expiration of the initial ten (10) year term set forth in Article 3.01 above.

3.04 *Termination of this Agreement:* This Agreement may be terminated by either party hereto, by delivering written notice of the termination to the other party. Termination under this Article shall only be effective on the final day of any given County fiscal year. The written notice of termination shall be provided by the party terminating the Agreement no less than one hundred eighty days prior to the date the termination will be effective.

3.05 *Effect of Termination:* Upon termination of this Agreement under any provision of this Article 3, or otherwise, all rights and obligations of any party hereto, specifically including but not limited to the right of the County to charge Stormwater Utility User Fees to property owners in the City, shall immediately end.

3.06 *Conveyance of Assets:* Upon termination of this Agreement under any provision of this Article 3, the County shall convey to the City all of its right, title and interest in any Stormwater Infrastructure, including any stormwater easements, within the municipal limits of the City. However, this shall not include Stormwater Infrastructure on County owned parcels or County road rights of way within the limits of the City.

3.07 *Rebate of User Fees:* Upon termination of this Agreement under any provision of this Article 3, the County shall return to the City any collected but unspent or unobligated Stormwater Utility User Fees collected from within the City Limits.

ARTICLE 4 – FINANCE AND FUNDING

4.00 *Financial and Funding Relationship:* The City shall provide the County with its Stormwater Utility User Fee collection Rate for its fiscal year prior to August 15 each year of this Agreement. This will be in the form of a letter to the County Administrator from the City Manager. The City shall also provide to the County an annual report of its stormwater fee expenditures for each fiscal year. This report shall be delivered by September 1 each year this Agreement is in effect.

4.01 *Use of Revenue:* In accordance with the provisions of S. C. Code Ann. 48-14-120(C) (Supp. 2010), and S. C. Regs. 72-310 (Supp. 2010), all Stormwater Utility User Fees collected within the City, less an administrative fee, shall be returned to the City. The administrative fee is to be calculated as a fixed dollar amount for each single family unit (SFU) billed by the Stormwater Utility. The Utility shall define its administrative costs each year during the annual budget process. For fiscal year 2012 the fee shall be \$2.80 per Single Family

Unit (SFU) base rate applied to the fee paying lands within the limits of the City. After Fiscal Year 2012, the Stormwater Implementation Committee shall conduct annual reviews of the Utility's administrative budget and recommend to the municipalities and the County any changes to the amount billed per SFU along with its recommendation to the Stormwater Implementation Committee and the Utility shall provide the City an itemized proposal and a written explanation for adjustment to for the administrative services and deliverables to be provided in the coming fiscal year. This proposal shall be submitted to the City by March 1 of each calendar year. The City shall provide a written recommendation of acceptance or rejection to the County Stormwater Utility by April 15 of the same year. Once agreed upon, the fee shall serve as the basis for the annual administrative fee to be calculated per City SFU, and included in each entity's annual budget.

- (a) The administrative fee shall be used by the County to defray the County's administrative costs in managing the Stormwater Utility.
- (b) The City shall use Stormwater Utility User Fees to provide Stormwater Management within the City, including, but not limited to:
 - (i) The acquisition, design, construction, and maintenance of Stormwater Infrastructure, or repayment of bonded indebtedness issued to fund construction of Stormwater Infrastructure, in so far as the law and covenants of the bonds allow, or for repayment to the City for general fund or other funds spent by the City to fund Stormwater Management activities;
 - (ii) Acquisition of Stormwater Infrastructure, including any easements

or other interests in real property which shall be held in the name of the City;

(iii) Maintenance of Stormwater Infrastructure by the City and its contractor(s,) or by direct services of the Stormwater Utility. Charges for services by the Stormwater Utility; shall be negotiated and approved by the County and the City, as is provided in Articles 4.03, 4.05(a), 5.05, and 5.07 below; The City shall have the right of non exclusive use of direct maintenance services, and there shall be no minimum dollar amount required to be spent annually by the City on any services provided by the Stormwater Utility;

(iv) Plan review and site inspections related to compliance with stormwater ordinances and standards for development within the City as set forth in Articles 4.05, 4.06 and 4.07 below;

(v) NPDES Phase II permit compliance;

(vi) Payment of bond indebtedness or repayment of funds borrowed from the general fund or any other fund; for the purpose of funding stormwater management projects or activities; and,

(vii) Any other services related to Stormwater Management.

4.02 *Further Agreements Authorized:* The City and the County may negotiate and enter into agreements to share costs and responsibilities related to NPDES permit compliance. Such agreements and cost allocations shall be reflected in each entities annual budget and must be

authorized by the City Council and County Council.

4.03 *Cost of Services:* If the City chooses to utilize the direct services of the Stormwater Utility, however described, they shall be accounted for at the County's actual cost of the equipment, materials, and personnel utilized in the delivery of the services.

4.04 *Setting of Stormwater Utility User Fee Rate (SFU's):* The City shall be responsible each year for setting the Stormwater Utility User Fee Rate to be assessed on parcels within the City. The Stormwater Utility User Fee rate shall be set in accordance with S. C. Code Ann. 48-14-120(C) (Supp. 2010), and S. C. Regs. 72-310(G) (Supp. 2010), or any other applicable law or regulation.

4.05 *Plan Review and Site Inspection:* For all activities that constitute development within City limits, the City will provide review of plans and site inspections to ensure compliance with applicable laws, ordinances and regulations related to storm and surface water, erosion control and flooding

4.06 *Coordination of Services:* The City shall identify a representative of its staff to serve as the contact person and coordinator for Stormwater Management Services, including services provided by the County within the City, long range planning and water quality initiatives such as the NPDES Phase II requirements compliance, notification of problems, facilitating emergency access within any planned or future Planned Unit Developments within the City, and advising the County on site-specific conditions within the City.

ARTICLE 5 – ADMINISTRATION OF STORMWATER UTILITY

5.00 *Stormwater Utility:* The County has established a Stormwater Utility that administers funds and conducts a Stormwater Management program throughout the County.

5.01 *Stormwater Management Plan:* The County shall have the responsibility to develop and maintain a Stormwater Management Plan to be administered by the Stormwater Utility.

5.02 *Relationship of Plan to Agreement:* The Stormwater Management Plan developed and maintained by the Stormwater Utility shall incorporate the obligations of the County and City under this Agreement. In the case of any conflict between the provisions of the Stormwater Management Plan and this Agreement, the provisions of this Agreement shall control.

5.03 *Stormwater Utility User Fees:* The Stormwater Utility shall bill and collect parcel based Stormwater Utility User Fees from property owners, tenants, or other appropriate parties, pursuant to its authority and subject to any intergovernmental agreements, including this Agreement, and may also apply for, acquire and use any other funding from any public or private source in support of the Stormwater Management Plan as allowed by law.

5.04 *County Responsibilities:* The County, through the Stormwater Utility, shall have the following responsibilities:

- (a) *Collection and Distribution of Fees:* Stormwater Utility User Fees within the City limits shall be charged and collected by the County in accordance with the provisions of Article 4.0 of this Agreement; the Stormwater Utility User Fees shall be collected in accordance with S. C. Code Ann. 48-14-120(C) (Supp. 2010), and S. C. Regs. 72-310(G) (Supp. 2010), or any other applicable law or regulation, and shall not include provisions for relief from the payment of the

Stormwater Utility User Fees; the County shall distribute the City's Stormwater Utility User Fees less the County administrative costs as defined in Article 4.01, in the same manner as ad valorem taxes are distributed for each year this Agreement is in effect;

(b) *Provision of Services:* Provision of the services required under this Agreement.

(c) *Budgeting and Expenditure:* Setting the budget for the Stormwater Utility, and spending the revenues in accordance with any applicable ordinances or agreements, including this Agreement;

(d) *Administrative Activities:* Managing all administrative activities of the Stormwater Utility, including but not limited to, fee assessment, collection and distribution, maintenance of accounting records, maintenance of stormwater data, implementation of the master plan, acquisition of easements, coordination with other agencies, reporting to the stormwater utility board;

(e) *Accounting:* Maintaining an accounting of revenues and expenditures on a jurisdictional or geographic basis, as may be set or described under any applicable ordinance or agreement, including this Agreement, the County shall provide the City with an itemized annual accounting of all Stormwater Utility User Fees within the City limits in the form of a budget report, including but not limited to: how parcel fees were determined, calculated, and assessed; total fees collected; total Administrative costs retained by the County; total fees in arrears, on which parcels and the status of the collection attempt(s) on such parcels; fee

credits applied for; fee credits paid; and fees that required adjustment since the last billing. This budget report shall be parcel based and provided to the City annually prior to February 15 throughout the term of this agreement as an electronic document compatible with the most current version of Microsoft Office. The County shall also maintain an annual accounting of all administrative costs associated with operating the Utility. Either the City or County, at the sole expense of the requesting jurisdiction, may request a professional audit of any of the budget reports;

(f) *Operation and Maintenance:* At the direction and approval of the City, provide for the operation and maintenance of Stormwater Infrastructure within the City; and,

5.05 *Delivery of Services:* The County shall coordinate the delivery of services hereunder through the City Manager or his designee, via a Job Order Process as agreed to by the City and County. All delivery of County services upon parcels within the City limits shall be approved in writing by the City before any work is performed or any funds may be returned to the County, and all delivery of stormwater infrastructure services within County Rights of Ways shall be coordinated with the City.

5.06 *Coordination with Other Jurisdictions:* From time to time a need for coordination between all incorporated jurisdictions within the County and the County may occur, and it shall be the responsibility of the County to facilitate such coordination. The County will work with designated representatives from all jurisdictions within the County to ensure effective communication regarding issues impacting the Stormwater Infrastructure and the Stormwater

Management Plan.

5.07 *Qualifications and Extents of Service:* Stormwater infrastructure in public road Rights of Ways, whether State, County or Municipal, shall be maintained by the road owner, as these areas are exempt from Stormwater Utility User Fees per Section 99-109 (b) of County Ordinance 2005-33. The City shall retain the right to determine the qualifications for, extent of, and level of service required to maintain the Stormwater Infrastructure within the limits of the City, with the exception of County and State road Rights of Way, which shall be designed and maintained in accordance with their current standards.

5.08 *Fee Credits:* The City shall be notified of and will have the authority to review and comment on all County stormwater fee credit applications requested upon parcels within the City limits prior to such adjustments being made.

5.09 *Easements:* The City and County will allow mutual blanket encroachments upon each other's existing easements, but only to enable the City and/or County to perform stormwater utility related work within the limits of the City.

ARTICLE 6: STORMWATER ORDINANCES AND DEVELOPMENT STANDARDS

6.00 *Applicable Standards:* The current hydrologic and hydraulic engineering and design standards ordinances of the City of Beaufort shall prevail in the design, construction, operation and maintenance of any portion of the Stormwater Infrastructure within the City, unless superseded in the future by the creation of new hydrologic and hydraulic engineering and design standards of the City, County, or State, as may be required for specific work performed

in the City, County, or State rights of way except as noted in the City's Stormwater Ordinance. The City has designated that those areas reserved for higher density, walkable, urban development and areas where the city is actively encouraging redevelopment may be subject to different standards than those in auto-oriented and/or greenfield contexts. Regardless, the City agrees that future stormwater volumes in these areas will not exceed those that exist prior to the development or redevelopment of said properties unless is it scientifically documented that specific stormwater pollutants are generated and draining from the site and are causing site specific degradation of water quality in the receiving stream. In such a case, a development/redevelopment Area will be required to correct the stormwater discharge pollutant loads to a level that no longer degrades water quality in the receiving stream.

6.01 *State or Federal Laws or Regulations:* The City and the County shall at all times comply with any applicable State or Federal Laws or regulations relating to Stormwater Management, Stormwater Infrastructure, erosion control or pollution.

6.02 *Regulatory Obligations of the City:* The City shall adopt and enforce ordinances and development standards as necessary to comply with State and Federal standards regarding stormwater management, erosion and sedimentation, pollution control, and flooding. Minimum water quality controls in jurisdictions shall be protective enough to reach and maintain state designated water uses.

6.03 *Plan Review and Site Inspection:* The City shall be responsible for the review and approval of all development plans within the City, to ensure that all applicable regulations pertaining to construction site erosion, sedimentation, and pollution control as well to post-construction stormwater quantity and quality control are met. The City shall be responsible for

providing inspections during construction of all city owned stormwater systems. The City will continue its practice of review of privately owned stormwater systems upon completion to ensure that construction conform to the approved development stormwater plan.

ARTICLE 7 – NPDES MS4 PHASE II PERMIT COMPLIANCE

7.00 *NPDES Compliance:* Should the City be designated by the State of South Carolina for compliance with the NPDES program, the City shall be responsible for the development of the NPDES MS4 Phase II permit application, the development of Best Management Practices required by the permit, and the implementation of the program of Best Management Practices set forth in the permit.

7.01 *Roles and Responsibilities:* The City and County shall hold separate NPDES MS4 Phase II permits and shall each be responsible for maintaining compliance with their respective permit requirements.

7.02 *Coordination of Activities:* It is expected that some aspects of NPDES MS4 Phase II requirements will lend themselves to coordination and cooperation between the City and the County. In such instances, coordination between the City and the County shall be on the basis of a specific Minimum Control Measure (MCM) and shall be established by a separate written agreement that specifies the objectives, product deliverables, schedules, funding distribution, and the roles and responsibilities of each party in addressing these measures.

7.03 *Annual Reporting:* The City and County will each be responsible for preparing an annual report documenting the activities undertaken in support of NPDES MS4 Phase II permit requirements during the previous year and submitting the report to the South Carolina

Department of Health and Environmental Control.

7.04 *Permit Related Costs:* All costs related to the NPDES MS4 Phase II permit shall be borne by the permit holder. In instances where the City and County coordinate to meet permit requirements, costs may be shared on a basis that is detailed in a separate written agreement.

ARTICLE 8 – DATA ACQUISITION AND MANAGEMENT

8.00 *Roles and Responsibilities:* The City and County shall each be responsible for acquiring and maintaining data sets that are relevant to Stormwater Management in their respective jurisdictions.

8.01 *Cost Sharing:* Cost sharing agreements for data acquisition may be made between the City and County on a project-specific basis. The terms and details of any cost sharing agreement shall be detailed in a separate written agreement between the City and County.

8.02 *Data Sharing:* The City and County shall share acquired data at the request of the other. In such instances the City and County will agree to abide by each entity's current data distribution policy.

8.03 *Data Types:* Types of data that the City and County will acquire, maintain, and may share include but are not limited to, GIS data, aerial photography, LIDAR data, water quality monitoring data, stream gage data, financial and accounting data.

ARTICLE 9 – OTHER AGREEMENTS

9.00 *Scope and cost sharing:* From time to time various projects may be shared in scope and/or cost between the County and the City, or the County and multiple Municipalities

within the County via Memos of Understanding, Contracts, and/or Joint Resolutions.

9.01 *Agreement Recommendations:* The Stormwater Implementation Committee shall be the vehicle whereby agreements of project scope and cost sharing between the County and multiple Municipalities within the County are reviewed and recommended to the Municipalities and County. It is understood that the Stormwater Implementation Committee shall have no authority to financially commit the Town or County to any project of any type and only will provide technical recommendations for such projects. For agreements solely between the City and the County, the Stormwater Implementation Committee Review is not required.

9.02 *Agreement approvals:* Other agreements between the County and the City must be approved by the City Council and the County Council or their designees.

ARTICLE 10 - MISCELLANEOUS

10.00 *Provisions Applicable to This Agreement:* The following general provisions are applicable to this Agreement:

10.01 *Binding Effect:* This Agreement shall inure to the benefit of and shall be binding upon the City and County and their respective successors and assigns, if any are permitted hereunder.

10.02 *Amendment, Changes and Modifications:* Except as otherwise provided herein, this Agreement may not be effectively amended, changed, modified or altered without the written consent of the City and the County.

10.03 *Severability:* In the event that any provision of this Agreement shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render

unenforceable any other provision hereof.

10.04 *Execution in Counterparts:* This Agreement may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

10.05 *Applicable Law:* This Agreement shall be governed by and construed in accordance with the laws of the State of South Carolina.

10.06 *Captions:* The captions or headings herein are for convenience only and in no way define, limit or describe the scope or intent of any provisions or sections of this Agreement.

10.08 *Plural/Singular:* Where appropriate, the use of the singular herein shall include and be deemed to be the plural, and the use of the plural herein shall be deemed to include the singular.

10.09 *No Third Party Beneficiaries:* The City and the County hereto affirmatively represent that this Agreement is made solely for the benefit of the parties hereto and their respective successors and assigns and not for the benefit of any third party who is not a signature party hereto. No party other than the signature parties and their respective successors and assigns hereto shall have any enforceable rights hereunder, or have any right to the enforcement hereof, or any claim for damages as a result of any alleged breach hereof.

10.10 *Notices:* All notices, applications, requests, certificates or other communications hereunder shall be sufficiently given and shall be deemed given when delivered in person, or mailed by regular first class mail, postage prepaid (in such case, delivery shall be deemed complete upon mailing), addressed as follows, or to such other place as may be designated in writing by the parties.

To the City: CITY OF BEAUFORT, SOUTH CAROLINA
 Scott Dadson, City Manager
 1911 Boundary Street
 Beaufort, SC 29902

To the County: BEAUFORT COUNTY, SOUTH CAROLINA
 Gary Kubic, Manager
 Post Office Box 1128
 Beaufort, SC, 29902

10.11 *No Waiver:* No failure of either party hereto to exercise any power or right given to such party hereunder, or to insist on strict compliance by any other party to its obligations hereunder, and no custom or practice of the parties at variance with the terms hereof shall constitute a waiver of any party's right to thereafter demand strict compliance with the terms of this Agreement.

10.12 *Further Assurances and Corrective Documents:* The City and the County agree to do, execute, acknowledge, deliver or cause to be done all such further acts as may be reasonably determined to be necessary to carry out this Agreement and give effect to the provisions hereof. The City and the County agree that each shall, upon request, execute and deliver such other or corrective documents as may be reasonably determined to be necessary to carry out this

Agreement and each of the provisions hereof.

In Witness Whereof, The City of Beaufort, South Carolina, and Beaufort County, South Carolina, by and through their duly authorized officers, have set their hands and seals on this ___ day of _____, 2012.

WITNESSES:

THE CITY OF BEAUFORT,
SOUTH CAROLINA

By: _____

Billy Keyserling, Mayor

Attest: _____

Scott Dadson, City Manager

WITNESSES:

CITY OF BEAUFORT, SOUTH CAROLINA

By: _____

W.M. Weston J. Newton, Chairman

Attest: _____

Gary Kubic, Manager



BEAUFORT COUNTY STORMWATER UTILITY
120 Shanklin Road
Beaufort, South Carolina 29906
Voice (843) 255-2801 Facsimile (843) 255-9478



TO: Councilman Paul Sommerville, Chairman, Natural Resources Committee

VIA: Gary Kubic, County Administrator
 Bryan Hill, Deputy Administrator
 David Starkey, Chief Financial Officer
 David Thomas, Purchasing Director
 Rob McFee, P.E., Director of Engineering & Infrastructure
 Robert Klink, P.E., County Engineer
 Monica Spells, Compliance Officer

Dan Ahern
 FROM: Dan Ahern, P.E., Stormwater Manager

SUBJ: **WATER QUALITY LAB MEMORANDUM OF UNDERTSANDING (MOU) WITH THE UNIVERSITY OF SOUTH CAROLINA BEAUFORT**

DATE: July 18, 2012

BACKGROUND: Mr. Gary Kubic, County Administrator, requested the Stormwater Utility to work towards utilizing USCB for the Utility's water quality monitoring needs. The County and USCB already work together on bacterial sampling analysis; in 2012, the Water Quality Lab at USCB started performing bacterial analysis in a subcontracting capacity to the County's monitoring contractor, GEL Engineering in Charleston, SC.

The current \$95,094 contract with GEL Engineering ends November 2012 (previous contracts were for \$123,543 and \$169,535).

USCB will need personnel and equipment to perform the full suite of analyses provided by GEL Engineering. Therefore, we wanted to not only provide USCB with an understanding of how we would proceed in the future, but also seek the input of County Council regarding this effort. Consequently, we drafted a proposed MOU to guide future efforts in transferring the monitoring efforts to USCB.

The MOU between the County and USCB regarding Water Quality Monitoring was presented to the Stormwater Utility Board at their July 12, 2012 meeting; and a resolution supporting the MOU was subsequently passed.

The MOU will commit the County to annual payments of a total of \$105,000 per year and renewable annually. This is an increase of \$90,000 above the current cost for utilizing the Water Quality Lab at USCB. The Town of Bluffton has a similar MOU that has existed for a number of years to support their monitoring needs.

Water Quality Monitoring is funded by Stormwater Utility account 13531-51170.

RECOMMENDATION. That the Natural Resources Committee approve the proposed MOU and recommend County Council Approval.

Attachment
 Draft MOU dated July 3, 2012

STATE OF SOUTH CAROLINA)
)
COUNTY OF BEAUFORT)

MEMORANDUM OF UNDERSTANDING

Draft July 3PM, 2012

This Memorandum of Understanding (the "Memorandum") is entered into by and between Beaufort County (hereinafter referred to as the "County") and the University of South Carolina Beaufort (hereinafter referred to as "USCB") regarding Water Quality Monitoring Services (hereinafter referred to as "monitoring services.")

WHEREAS, USCB operates and manages a laboratory dedicated to assessing the water quality of the Lowcountry; and

WHEREAS, the County, in its pursuit of its mission to protect our water resources, and implement monitoring recommended by the Stormwater Management Plan and restoration initiatives, recognized the inherent value in USCB's offer to partner with the County and provide services in its endeavor to support these monitoring services; and

WHEREAS, the County and USCB, in order to efficiently analyze and monitor the water quality of the Lowcountry, hereby agree to the following terms and conditions;

NOW, THEREFORE, for and in consideration of the mutual promises, undertakings and covenants set forth herein, the receipt and sufficiency of which is acknowledged and affirmed by the County and USCB, the parties hereto agree as follows:

1. Governing Document

It is the intent of the parties that this Memorandum shall supersede any other agreements entered into between the County and USCB regarding providing monitoring services.

2. USCB

- a. USCB shall continue to work to attain DHEC certification for all appropriate analytes.
- b. USCB shall continue to operate and manage a Laboratory able to receive and analyze the County's samples, possibly after normal business hours, for the currently sampled fecal results. Results will be made available within 24 – 48 hours unless extenuating circumstances require additional time.
- c. USCB shall continue to work toward developing the capacity to perform the full spectrum of the County's monitoring needs as listed in the attachment 1B. This includes the current 13 stations for 25 parameters on 12 rainfall driven events per year.

- d. USCB shall receive and analyze the County's regularly scheduled samples, as well as special wet weather event project samples, as agreed upon between the parties.
- e. For the purposes of sample delivery and analysis, USCB shall provide 24-hour access to the Laboratory to authorized personnel, including designated County staff, provide such personnel are accompanied by a USCB employee.
- e. USCB will give the County 60 days notification of the expected date of achieving capacity to supply full monitoring services so that the County can transfer services to USCB.
- f. USCB will track monitoring services separately for North (County has additional partners) and South of the Broad River.

3. The County

- a. The County shall, after notification of analytical equipment acquisition by USCB, issue an annual purchase order for \$90,000 to USCB for the Monitoring services outlined in Attachment 1. Payments will be made bi-annually in the amount of \$45,000, beginning immediately after analytical equipment acquisition but no more than two months before transfer of monitoring services.
In the event the amount from the previous year's has not been fully expended by USCB, the subsequent year's disbursement by the County shall be credited that amount. Under no circumstances shall the total fiscal year disbursement exceed \$100,000 unless the Agreement is modified per Paragraph 4.b below.
- b. The County shall also commit to a \$15,000 annual purchase order to assist with ongoing sample collection and processing of scheduled bacterial monitoring.
- c. The County shall provide staff to assist with sample collection and processing of the scheduled bacterial monitoring but not for wet event monitoring.

4. General Requirements of the Agreement

- a. The parties hereto intend that no master/servant, employer/employee, or principal/agent relationship will be created by this Agreement. Nothing contained herein creates any relationship between the County and USCB other than that which is expressly stated herein. The County is interested only in the results to be achieved under this Agreement, and the conduct and control of the agents and

employees of USCB and the methods utilized by USCB in fulfilling its obligations hereunder shall lie solely and exclusively with USCB, and its agents and employees shall not be considered agents or employees of the County for any purpose. No person employed by USCB shall have any benefits, status, or right of employment with the County.

- b. This Agreement shall not be modified unless such modification is made by mutual consent of both parties at any time in writing and signed by both the County and USCB.
- c. USCB may not assign this Agreement to another organization without the prior written approval of the County.

5. Default Remedies

In the event USCB does not remedy such conditions that have been found in violation of this Agreement with 30 days after written notice to do so is given by the County, or if insufficient progress is being made toward the remedy within those 30 days, the County may use a portion, or all, of the allocated funds to remedy the conditions.

6. Term

The term of this Memorandum of Understanding shall be from the date of execution for three (3) years. The Memorandum will be reviewed by the County and USCB annually.

7. Termination for Convenience

- a. In addition to any other rights to termination set forth in this Memorandum, in the event both parties mutually agree to terminate this Agreement prior to the expiration of the Term, the County shall be entitled to a pro-rata refund of the money set out in Paragraph 3 above.
- b. The County shall have the right to terminate this Agreement for convenience upon 60 days written notice to USCB. In the event the County terminates this Agreement for convenience, the County shall pay the Laboratory for services received.

IN WITNESS WHEREOF, the parties hereto have affixed their signature hereto the date first written hereinabove.

COUNTY OF BEAUFORT

UNIVERSITY OF SOUTH CAROLINA

By _____
Gary Kubic
County Administrator

By _____
Thomas A. Coggins
Director
Sponsored Awards Management

Date _____

Date _____

Address:
Beaufort County
PO Drawer 1228
Beaufort, SC 29901

Address:
Sponsored Awards Management
901 Sumter Street, 5th Floor
Columbia, SC 29208

Attachment 1: Scope of Services

SCOPE OF SERVICES

ATTACHMENT 1

The Scope of Services included in the MOU between the Beaufort County and USCB are as follows:

A. Weekly Bacterial Monitoring

- a. Up to 550 samples at \$27 per sample
- b. Water Quality Analyst's salary costs for sample collection assistance

B. Costs associated with Other Monitoring Services, when Transferred

- a. Up to 12 wet weather sampling events a year
- b. Up to 13 stations sampled
- c. Samples collected would be analyzed for 25 parameters listed below:
 - i. Ammonia-nitrogen (NH₃)
 - ii. Biochemical Oxygen Demand (BOD₅)
 - iii. Cadmium (total)
 - iv. Chlorophyll-a
 - v. Chromium (total)
 - vi. Conductivity
 - vii. Copper (total)
 - viii. Dissolved Oxygen (DO)
 - ix. Fecal Coliform
 - x. Iron (total)
 - xi. Lead (total)
 - xii. Manganese (total)
 - xiii. Mercury (total)
 - xiv. Nickel (total)
 - xv. Nitrate
 - xvi. Nitrite
 - xvii. pH
 - xviii. Phosphorus (total)
 - xix. Salinity
 - xx. Temperature
 - xxi. Total Kheldahl Nitrogen (TKN)
 - xxii. Total Organic Carbon (TOC)

xxiii. Total Suspended Solids (TSS)

xxiv. Turbidity

xxv. Zinc (total)

- d. USCB staff would attend monitoring coordination meetings, and Stormwater Utility meetings as appropriate.
- e. USCB staff would be engaged in data reduction, data interpretation, and data reporting. Annual reports will be prepared

C. USCB staff would provide input into County's future water quality monitoring strategy and be responsive to unforeseen water quality needs that may occur.



BEAUFORT COUNTY STORMWATER UTILITY
120 Shanklin Road
Beaufort, South Carolina 29906
Voice (843) 255-2801 Facsimile (843) 255-9478



TO: Councilman Paul Sommerville, Chairman, Natural Resources Committee

VIA: Gary Kubic, County Administrator
 Bryan Hill, Deputy Administrator
 David Starkey, Chief Financial Officer
 David Thomas, Purchasing Director
 Rob McFee, P.E., Director of Engineering & Infrastructure.
 Robert Klink, P.E., County Engineer
 Monica Spells, Compliance Officer

Dan Ahern

[Signatures]

[Signature]

FROM: Dan Ahern, P.E., Stormwater Manager

SUBJ: JOINT MONITORING MEMORANDUM OF UNDERSTANDING (MOU) FOR SALINITY STUDY

DATE: July 19, 2012

BACKGROUND. Mr. Gary Kubic, County Administrator, requested the Stormwater Utility to develop a joint project between University of South Carolina Beaufort (USCB), SCDNR Waddell Mariculture Center, and the Utility. We had a number of meetings with our partners and decided the project that would provide the most helpful information to the Utility and County would be a project to measure salinity changes from stormwater runoff in our watersheds targeted for restoration. Since part of the work would be in the May River, the Town of Bluffton is participating in this project.

We are proceeding with funding the first year of this project with two agreements. One will be to SCDNR for \$18,808 and a second to USCB for \$8,192. Funding is from Utility funds in account 13531-51170.

We wanted to not only formalize for partners how we are proceeding, but also make County Council aware of this effort. Therefore we drafted a proposed MOU to guide this effort.

The MOU was presented to the Stormwater Utility Board at their July 12, 2012 meeting and they passed a resolution supporting this MOU on joint salinity monitoring in the May and Okatie Rivers and Battery Creek.

RECOMMENDATION. That the Natural Resources Committee approve the proposed MOU and recommend County Council Approval.

Attachment
 Draft MOU
 Beaufort County Salinity Study

STATE OF SOUTH CAROLINA)
)
COUNTY OF BEAUFORT)

MEMORANDUM OF UNDERSTANDING

Draft July 18, 2012

This Intergovernmental Agreement ("Agreement") is being entered into by the Town of Bluffton (hereinafter referred to as the "Town"); Beaufort County, South Carolina (hereinafter referred to as the "County"); South Carolina Department of Natural Resources (hereinafter referred to as the "SCDNR") and University of South Carolina Beaufort (hereinafter referred to as "USCB") together called "parties) to define and implement environmental initiatives related to the protection of Beaufort County Watersheds and other outstanding natural resources.

WHEREAS, the Town and County realize that the protection of the watersheds and other outstanding natural resources are of utmost importance to our community; and

WHEREAS, the SCDNR and USCB offer significant scientific expertise and facilities in helping the county understand the sensitivity of tidal headwaters;

WHEREAS, the Parties understand that the development of a partnership for the better understanding of the watersheds and other outstanding natural resources is of the utmost importance; and

WHEREAS, the Town and County have existing agreement, dated December 14, 2009 on protecting Southern Beaufort County Watersheds;

WHEREAS, the Town has adopted the May River Watershed Action Plan aimed at restoring shellfish harvesting in the May River;

WHEREAS, the County has adopted a watershed restoration program including the May and Okatie Rivers and Battery Creek (in Northern Beaufort County) and wishes to support SCDNR and USCB on this partnership;

NOW, THEREFORE, for and in consideration of mutual promises, undertakings, and covenants set forth herein, the receipt and sufficiency of which is acknowledged and affirmed by the Parties hereto agree as follows:

1. **Formulate a Joint Project to assess the relationship between rainfall and salinity range in priority watersheds.** It is the intent of the parties that this agreement will act as an umbrella for annual work plans that will assess the relationship to see if there is a way to prioritize our tidal headwaters as to their runoff volume sensitivity:
 - a. Coordinate monitoring in three priority watersheds
 - i. May River
 - ii. Okatie River
 - iii. Battery Creek

- b. Develop annual monitoring plans that all parties will help develop;
 - c. Coordinate activities to track impact of proposed restoration projects.;
 - d. Determine if there is a way to determine volume sensitive sections within each watershed;
 - e. Coordinate monitoring activities to reflect ongoing studies;
 - f. Share research being conducted by USCB and SCDNR; and
 - g. Leverage efforts from all parties.
2. **Funding.** The County will provide funding to SCDNR and USCB in amounts determined annually in work plans, to support this partnership.
3. **Term.** The term of this Intergovernmental Agreement shall be from October 1, 2012. Amendments to the Agreement may be made by the mutual consent of all Parties.

IN WITNESS WHEREOF, the Parties hereto have affixed their signatures hereto the date first written hereinabove.

BEAUFORT COUNTY

By _____

Date _____

Address:
 P.O. Drawer 1228
 Beaufort, SC 29901-1228

TOWN OF BLUFFTON

By _____

Date _____

Address:
 Post Office Box 386
 Bluffton, SC 29910

UNIVERSITY OF SOUTH CAROLINA

By _____

Date _____

Address:
 Sponsored Awards Management
 901 Sumter Street, 5th Floor
 Columbia, SC 29208

**SOUTH CAROLINA DEPT.
 OF NATURAL RESOURCES**

By _____

Date _____

Address
 SCDNR Marine Resources Division
 217 Fort Johnson Road
 Charleston, SC 29412

**Proposal
For a**

BEAUFORT COUNTY SALINITY STUDY

Proposed by:

**South Carolina Department of Natural Resources
Marine Resources Division
217 Ft. Johnson Rd.
Charleston, SC 29412**

and

**University of South Carolina – Beaufort
Sponsored Awards Management
901 Sumter Street, 5th Floor
Columbia, SC 29208**

Submitted to:

**Beaufort County
P.O. Drawer 1228
Beaufort, SC 29901**

BEAUFORT COUNTY SALINITY STUDY

Introduction: Beaufort County and the Town of Bluffton are concerned about stormwater runoff and the impacts on receiving water bodies. They have conducted a number of studies to assess these impacts, particularly as it relates to pollutant concentrations, especially bacterial concentrations. Beaufort County has also implemented stormwater standards to mitigate these impacts. Beaufort County, in collaboration with the Town of Bluffton, is now working toward adding additional Best Management Practices (BMPs) to ensure that water quality is maintained and shellfish bed closures are minimized or reduced from current conditions. Primary efforts are focused on three watersheds over the next five years. The watersheds of interest to the County are Battery Creek, Okatie River and May River. The Town of Bluffton's efforts are focused only on the May River. Each of these systems has restricted shellfish harvesting in a portion of their upper waterways. One of the key factors missing from their studies to date is an understanding of the relationship between rainfall and the volume of freshwater runoff entering these tidal creek systems, as well as how that water translates downstream.

Ultimate Goal of Beaufort County and Town of Bluffton: Define appropriate measurement criteria for volume sensitive waters. Define the extent of volume sensitive waters for selected watersheds, with an ultimate goal of being able to define the area of volume sensitive waters for all watersheds in Beaufort County. Identify potential biological effects of major rain events in volume sensitive waters (not covered in this proposal).

Purpose of This Effort: To assess the relationship between rainfall, water level, and salinity range throughout the upper portions of these watersheds in order to better define what portion of the watersheds should be considered volume sensitive.

Participants: This effort is a cooperative program involving Beaufort County, the Town of Bluffton, the SC Department of Natural Resources, Marine Resources Division (SCDNR-MRD) and University of South Carolina-Beaufort (USCB). The SCDNR Waddell Mariculture Center, which is part of the Marine Resources Division, is located in Beaufort County and has a wide range of expertise and facilities to assist Beaufort County. In particular, Waddell staff will participate in this project by collecting the rainfall, salinity and temperature data for a number of the systems. This local staffing capability will be complemented by staff from the Marine Resources Research Institute (MRRRI) in Charleston. USCB is currently conducting a research project investigating spawning aggregations of Sciaenids using passive acoustics (i.e., the act of listening to underwater sounds). This effort has collected environmental sampling at 30 stations throughout the May River. This monitoring provides a leveraging opportunity to expand to more continuous salinity and temperature data collections. The Town of Bluffton will also be involved in the project given their existing efforts which will provide some historical data that can be analyzed as well as rainfall data for the May River watershed. The National Oceanic and Atmospheric Administration's (NOAA) Hollings Marine Laboratory will also participate in the modeling of stormwater runoff.

Study Design: The proposed study outlined here will monitor the salinity, temperature, depth, and rainfall within several watersheds. The identified watersheds include the (1) upper Okatie River (Waddell monitored), (2) Burton/Grober branch of Battery Creek (Waddell monitored), (3) County complex branch of Battery Creek (Waddell monitored), and (4) upper May River (USCB monitored). After the data from the first year are analyzed, expansion of the sampling effort to other important drainage systems within the county or additional new studies may be proposed.

Each system will be monitored for a period of time to capture a range of rainfall events. The time period is expected to be at least three months with review of the range of rainfall events captured during the initial 3 month period. In addition, an analysis of May River and EMPACT (an EPA-funded Charleston Harbor tidal creek study) will then identify the appropriate number and ranges of events to capture within each system. Sampling sites in each creek system will be established from the headwaters to a downstream location that should extend into what should be considered volume "insensitive" waters. The downstream location will be identified based on previous data such as shellfish bed harvesting classification change, an indication that the system is no longer volume sensitive. Six sites will be equally distributed down the system (dependent on available deployment locations). At each site, a salinity/temperature data logger will be installed near the bottom of the water column. In addition, a depth sensor will be installed to monitor tidal stage at a minimum of one location. A rain gauge will be installed at a central location during the period each watershed is sampled. If one rain gauge is already established in the system, the second gauge will be placed at the other end of the system, when possible. Due to the limited funding, only the May River and one other watershed will be sampled simultaneously. Once a sufficient data set has been obtained in a watershed, the instrumentation will be retrieved and re-deployed in the next watershed (except for the May River).

Data analysis will include relating rainfall to salinity range or another measure of salinity variance and comparing the six sites to see how the precipitation-induced freshet translates downstream with respect to duration and extent of salinity change attributable to that rainfall event. The six sites in each system will provide us with a fine scale distribution of the salinity change thereby providing information for the determination of volume sensitivity. The stormwater runoff will be modeled by Anne Blair of the NOAA Hollings Marine Laboratory using a modified NRCS method to provide an estimate of the expected runoff due to varying soil conditions.

Data analysis will be conducted on existing data sets, if appropriate, from previous studies in the May River, Okatie River, and Charleston Harbor EMPACT creeks. Analysis of the mined data sets will be similar to the analysis of the new data and will be compared to the results of the proposed studies.

SCDNR Responsibilities: The SCDNR-MRD will be responsible for sampling the (1) upper Okatie River, (2) Burton/Grober branch of Battery Creek, (3) County complex branch of Battery Creek. Sampling in each system will be a minimum of 3 months. Waddell staff will monitor the rainfall, salinity, temperature, and depth in each systems for a minimum of 3 months (as outlined above) using a series of HOBO recording devices. Six sites will be located in each of the systems based on existing shellfish monitoring sites and access to record salinity and temperature at 30 min intervals on a continuous basis. One of the sites will also be monitored for tidal height, and a centralized location in each drainage system will be monitored continuously for rainfall. Sampling locations will generally be visited by staff at two-week intervals to download data. Figures 1-3 indicate the rough locations of sampling devices in the three systems that the sampling units will be moved between.

USCB Responsibilities and Feasibility: USCB will be responsible for sampling the May River in association with their existing efforts. They will measure rainfall levels at station 19-19 and temperature/salinity at 11 stations (red dots) using HOBO recording devices. Six of the sites in the upper May River will have continuous deployment of salinity/temperature gauges for the required time period. The other sites may be monitored less frequently. At three stations, water level will be measured. Sites will be located in this system based on existing shellfish and fish acoustic monitoring sites and access (Figure 4).

Currently, USCB has 11 salinity/temperature HOBO loggers and 3 water level HOBO loggers that are being used for a fish acoustics project and collecting data at the stations indicated (Figure 4). Thus, these data will be available for the current research on stormwater runoff. This equipment totals \$10,980.



Figure 1. Approximate locations for the Okatie River sampling sites. The shellfish monitoring stations are designated.



Figure 2. Approximate locations for the county complex branch of Battery Creek sampling sites. The shellfish monitoring stations are designated.



Figure 3. Approximate locations for the Burton/Grober branch of Battery Creek sampling sites. The shellfish monitoring stations are designated.



Figure 4. Approximate locations for the May River sampling sites. The shellfish monitoring stations are designated with numbers.

SCDNR Budget

Category	Base Rate	Beaufort County		DNR Match	
		#@mo	Total	#/mo	Total
Personnel		2@1.5	8,508	1@1	5,064
Fringe (35%)			2,978		1,772
Indirect (12.05)			0		1635
Vehicle	0.505	744 mi	376		
Supplies			4,947		2,391
SCDNR Grand Total			16,808		10,862

Budget Justification: SCDNR will purchase one rain gauge, two salinity/temperature sensors, and software to download data. County will purchase remaining 4 salinity/temperature sensor, depth sensor, and data shuttle device.

USCB Budget

	Beaufort County
SALARIES with Fringe	
Personnel	5,192
TOTAL	5,192
SUPPLIES	
Supplies	3,000
TOTAL	3,000
Total Direct Costs	8192
TOTAL FUNDS REQUESTED	8,192

Budget Justification: Supplies include fuel for boat and gear for deployment of loggers.