

Beaufort County Stormwater



Extent of Service Plan (EOS)

June 8, 2016

Executive Summary:

The purpose of this document is to establish an extent of service to identify stormwater infrastructure that will be maintained at the County expense in general and the Stormwater and Public Works Departments in particular.

Beaufort County established a Stormwater Utility in 2001 for the purpose of:

“.. managing, acquiring, constructing, protecting, operating, maintaining, enhancing, controlling, and regulating the use of stormwater drainage systems in the County” 2015 Stormwater Ordinance.

To accomplish this, the County in cooperation with the County’s municipalities developed a Storm Water Management Program (SWMP) in 2006. In 2015, the County was issued a Municipal Separate Stormsewer System (MS4) permit from the South Carolina Department for Health and Environmental Control (DHEC). The MS4 permit prompted a need to revise the SWMP and increase funding levels. As part of the adoption of a five year plan and Utility fee rate increase, the County has committed to expand the Extent of Service provided to the Community.

Beaufort County’s SWMP is administered by the Beaufort County Stormwater Utility (**BCSWU**) and is funded by the Stormwater Utility Fee. Operations and Maintenance of the County’s Stormwater Infrastructure is performed by the Beaufort County Public Works Department Stormwater Operations and Maintenance Section (**PWO**). Regulatory functions associated with the MS4 program are performed by the Beaufort County Stormwater Department (**BCSWD**). The BCSWU functions are performed by staff within the BCSWD. For clarity, the BCSWU is the funding source for the BCSWS and BCSWD.

PWO will inventory and provide operational and maintenance service that are:

- In unincorporated Beaufort County and
- Outside of the State road right-of-way. South Carolina Department of Transportation (SCDOT) will be responsible for maintenance of all of the elements inside the State road right-of-way. Outfalls associated with State road right-of-way will receive County service when it is determined that the outfall serves both right-of-way and properties of BCSWU customers.
- Not on commercial property
- Not inside gated communities or other communities not accepted for maintenance.

Introduction:

Beaufort County is over 923 square miles of which nearly 50% is marsh and open water. Precipitation falls on all of it from time to time resulting in stormwater runoff from the upland. All of this runoff eventually ends up in ponds, wetlands, marshes or tidal creeks which are all waters of the State. As areas are developed, the amount of area covered in impervious surfaces (roofs, asphalt, concrete, etc) increase, directly contributing to an increase in both volume and rate of runoff. Much of this runoff is conveyed through a variety of man-made structures designed to carry runoff away from developed areas to prevent flooding. The increased volume and rate can cause adverse effects to receiving waters by leading to increased erosion, dilution of salinity in tidal creeks and habitat degradation. Stormwater runoff picks up pollutants from a variety of sources and carries them to the receiving waters, thereby contaminating them. The

most common impairment in Beaufort County is bacteria, resulting in the closure of shellfish harvesting areas.

It is this infrastructure network, the water it conveys, and the impact this water has immediately downstream that has to be managed to prevent flooding, water pollution, environmental degradation, and preserve public health and safety.

The Beaufort County Council created the Stormwater Utility(and Stormwater Department and Stormwater Operations and Maintenance Section, formerly Infrastructure Section) to effectively and efficiently manage stormwater runoff 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.” (Ordinance 2015/24)

From an operations and maintenance standpoint, it is necessary to define the extent of the stormwater infrastructure system in order to:

- Inventory and map the system for management and regulatory purposes
- Allocate sufficient resources and manpower to manage the system
- Avoid duplication of effort with other jurisdictions, agencies, and departments

BCSWD defines its area of responsibility according to the various categories of property types in unincorporated county. Please see Table 1 for details.

Additionally, BCSWD will make efforts to collaborate with citizens to resolve drainage issues in areas directly impacted (i.e. downstream) by stormwater off public property, in some cases doing work on private property based on a quantitative and qualitative evaluation. In these situations, approval must be given in writing by both the property owner and the Stormwater Manager.

Definitions:

Best Management Practice (BMP): means that combination of conservation measures, structures, vegetation or management practices, that reduces or avoids adverse impacts of development on adjoining site’s land, water, or waterways and water bodies.

Illegal Connection: any unauthorized, man-made conveyance connecting a discharge directly to a municipal separate storm sewer.

Illicit Discharge: a discharge to the County drainage system that is not entirely composed of stormwater, unless the permit is authorized under a NPDES permit or is related to fire fighting activities.

Drainage System: conveyance or system conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels or storm drains, owned or operated by a municipality or other public body, designed or used for collecting or conveying storm water runoff and is not a combined sewer or part of a Publicly Owned Treatment Works.

Outfall: point where a municipal separate storm sewer discharges to waters of the State.

Outfall System: stormwater conveyance system leading from roads or other public property to the outfall point

Stormwater: stormwater runoff, snow melt runoff, and surface runoff and drainage.

Waters of the State: any and all rivers, streams, creeks, branches, lakes, reservoirs, ponds, drainage systems, springs, wells, wetlands, marshes, wet weather streams, and all other bodies of surface and subsurface water, including any water which is subject to the ebb and flow of ocean tides, natural or artificial, lying within or forming a part of the boundaries of the State which are not entirely confined and retained completely upon the property of a single individual, partnership, or corporation.

Table 1.
Extent of Service- Operations & Maintenance
Unincorporated Beaufort County
(Incorporated Beaufort County- see below)

Category	Inventory	Routine Inspection	Routine. Maintenance	Corrective Maintenance	Retrofitting Improvement
Residential Property					
Within Easement	Y	Y	Y	Y	Y
Outside of Easement	Y	Y	N*	N*	N*
Gated Community	Y	Y	N	N	N
Unaccepted Developments	Y	Y	N*	N*	N*
Private Non Residential					
Commercial Property	Y	Y	N*	N*	N*
Industrial Property	Y	Y	N*	N*	N*
Agricultural Property	Y	Y	N**	N**	N**
Public Property					
County Road ROW	Y	N***	N***	N***	N***
State Road ROW	Y	N	N****	N****	N****
Railroad ROW	Y	Y	N****	N****	N****
State Waters	N	N	N	N	N

* = except in situations where stormwater from a public property (including ROW) is impacting property and an easement obtained has been obtained

** = except where agreements are established

*** = except in residential subdivisions and/or in coordination/support of BCPW Roads and Drainage Sections

**** = where county has installed infrastructure with an encroachment permit

Service in Municipalities (incorporated county) will be only on a reimbursable basis per current intergovernmental agreements (IGA's)

Beaufort County Public Works and Stormwater Department Goals are to:

- Inventory all components of the Drainage System in unincorporated Beaufort County outside of the state DOT right-of-way
- Inspect and assess all components of the drainage system in unincorporated Beaufort County outside of state DOT right-of-way
- Perform routine and corrective maintenance on all components of the drainage system in unincorporated Beaufort County that are publicly-owned and/or operated
- Perform routine and corrective maintenance on all components of the drainage system in unincorporated Beaufort County that are on private property and are within an easement dedicated to Beaufort County and receive drainage directly from public property and/or dedicated easements

Beaufort County Public Works Stormwater Operations and Maintenance Section may:

- Perform retrofitting and/or structural improvements to components of the drainage system that are located on publicly-owned property
- Perform retrofitting and/or structural improvements to components of the drainage system that are on private property, provided the property is within a dedicated easement and/or receive drainage directly from public property and/or dedicated easements
- Inventory components of the drainage system in unincorporated Beaufort County within the County rights-of-way, in coordination with Beaufort County Public Works Roads and Drainage Sections
- Perform work on property within the Beaufort County rights-of-way as directed by the Public Works Director and Stormwater Manager

Beaufort County Public Works Stormwater Maintenance and Operations Section will not:

- Perform work on residential private property that is not within an easement dedicated to Beaufort County and/or does not receive drainage directly from public property and/or dedicated easements
- Perform work in State Waters (beyond the critical line unless approved by DHEC/OCRM)
- Perform work on components of the drainage system that are located on commercial and/or industrial property unless they are within an easement previously dedicated to Beaufort County
- Perform work on public property other than general fund county property in unincorporated Beaufort County
- Perform unreimbursed work on property within the SCDOT right-of-way, except on infrastructure installed by Beaufort County with an encroachment permit.
- Perform unreimbursed work on municipal drainage systems, unless agreed upon as part of a Job Order request prior to work beginning

Operations & Maintenance: Drainage system within the County road Rights-of-Way (ROW)

Maintenance within County ROW, for unpaved roads, normally is the responsibility of the Roads and Drainage Sections. However, the PWO may provide assistance as directed by the Public Works Director.

Maintenance within County ROW on paved roads will be divided as follows:

- Routine moving – Roads and Drainage Sections
- Routine blockage removal – Roads and Drainage Sections
- Routine cleaning of catch basins and pipes – PWO
- Major Corrective maintenance – PWO

Operations & Maintenance: Drainage System outside of the County ROW

For all stormwater infrastructures:

- Outside of the ROW (County and State) and
- Within a dedicated county easement

PWO assumes responsibility for:

- Inventorying
- Routine, periodic inspection
- Inspection in response to citizens' request
- Preventive maintenance
- Corrective maintenance
- Retrofitting and improving (as necessary)

PWO will provide these services from the edge of the County/State ROW to point 25ft downstream of the last man-made structure (i.e. outfall). Inspections may be carried out further downstream, as necessary, to determine downstream impact. It will be State DOT's responsibility to construct necessary outfalls to transfer ROW stormwater to the primary drainage system and transfer easement to county for maintenance. If it is determined by the Stormwater Manager that BCSWU customers contribute to stormwater runoff entering this portion of the drainage system, the County may elect to construct necessary outfalls to transfer ROW stormwater to the primary drainage system and secure easements for maintenance.

Operations & Maintenance: Stormwater Management outside of the Drainage system

Work in and around State Waters

State Waters are outside of the jurisdiction and the regulatory mandate of Beaufort County. State Waters are administered through the SC DHEC/OCRM and are protected by both a 60' local stream buffer (increased from 50' in 2014) and a State Critical Line determination. County work on stormwater infrastructure is exempted from the local buffer, as maintenance to the stormwater system is considered an "activity to restore and enhance stream bank stability, vegetation, water quality and/or aquatic habitat". PWO will not carry out work beyond the State Critical line unless the work is approved by OCRM, except in emergency situations where public safety is endangered.

In accordance with the Clean Water Act, no work shall be done in Waters of the United States without a permit from the Army Corps of Engineers. Streams are outside of the County's jurisdiction; however work to mitigate the effects of increased runoff from impervious on receiving water may be necessary from time to time. PWO will do no work within stream

channel without the appropriate USACE/OCRM permit and or approval, except for emergency situations where public safety is endangered.

Private Property

Inspections on Private Property

Beaufort Code, Sec. 99-107(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”.

Beaufort Code, Sec. 106 Community Development Code, Article 5, Division 5.12.40

“ The county has the right to enter, enforce maintenance and/or cause maintenance of any stormwater management facility, either privately or publicly owned”.

The County has the right to inspect any part of stormwater infrastructure system, regardless of ownership, and has a regulatory obligation under the Stormwater Ordinance and Community Development Code to do so. The purpose of these inspections is to ensure the all elements of the stormwater infrastructure system are functioning as designed and do not pose a risk to public health and/or safety.

In situations where inspections have determined that part of the system has not been maintained and/or becomes a danger to public safety or public health, Beaufort County shall notify the responsible party specified in the inspection and maintenance agreement by registered or certified mail.

Maintenance on Private Property

Beaufort Code, Sec.99-104 (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. ”

PWO may address issues that occur on private property caused by direct runoff from adjacent County-owned property, (i.e. public streets, rights-of-way, and easements). All other maintenance work on private property for which there has been no public dedication for operations and maintenance (i.e. easement) will only be conducted with the approval of the property owner, the Stormwater Manager, and County Administrator.

In situations where property owners have failed to correct a violation of the design standards or maintenance requirements on a BMP by performing the necessary work to place the facility or practice in proper working condition, Beaufort County may perform the corrective maintenance and assess the owner(s) of the facility for the cost of repair work.

Prescriptive Easements

There exist many ditches and other stormwater infrastructure within the County that PWO has performed routine maintenance for many years. However, the County does not have a legally recorded easement for the system. In these cases, the County commonly states that they may have a “prescriptive easement”. According to State law, the County can file a claim to an easement in court due to the historic, ongoing maintenance provided by the County. If granted, the County would obtain the easement via “prescriptive rights”.

Where the County has ~~prescriptive easements~~ historically maintained a system, the County will continue to maintain the system as if the easement was in place. In the event a property owner denies the County the right to access and maintain the system and/or unwilling to grant an easement when requested by the County, the County may elect to abandon any rights to an easement and will no longer maintain the stormwater system.

Dedication of Private Stormwater Infrastructure to the County

Privately owned and operated stormwater infrastructure systems on private property may be considered by the County for acceptance into the Public stormwater infrastructure system if:

- 1) A significant nexus can be made between the proper functioning of the system and the potential for harm to the Public’s health, safety, and welfare, meaning lack of function could harm health, cause loss of life, or damage improvements on the property, and
- 2) The system serves six (6) or more properties OR the County or State contributes to the system via ROW runoff or other public properties; and
- 3) The properties owners adjacent and/or having the infrastructure on their property convey easement for access and maintenance to the County.

Evaluation of dedication requests will be conducted by the Stormwater Manager. Appeals on decisions can be made to the County Administrator.

Illicit Discharge Detection & Elimination

In 2015, the County was issued a Municipal Separate Stormsewer System (MS4) permit from the South Carolina Department for Health and Environmental Control (DHEC). Minimum Control Measure 3 (MCM3) of the permit pertains to Illicit Discharge Detection & Elimination. County standards and operating procedures are found in the Beaufort County Stormwater Best Management Practices Manual (BMP Manual.)

BCSWD will report any observed illicit discharge not within the County's jurisdiction to the respective municipal jurisdiction and/or Regional DHEC office.

Extent of Service for Other SWMP Programs

BCSWD will continue to provide other services relevant to implementing the County's stormwater management plan and enhance the natural environment and waters of the County, including:

- Public education about stormwater issues
- Public participation opportunities to allow citizen input on stormwater management decisions
- Water quality monitoring programs
- Capital improvement projects necessary to maintain the drainage system and mitigate the negative effects of stormwater runoff and;
- Any other activities necessary to protect the public good from negative effects of stormwater runoff, as determined by the Stormwater Manager, recommended by the Stormwater Management Utility Board, and approved by the County Administrator and/or the County Council.

These projects and activities may be done by the Beaufort County Public Works Stormwater Operations and Maintenance Section alone or in partnership / agreement with the BCSWU, other public agencies, or private parties.

Extent of Service Decision Tree June 8, 2016

Note:
 1. Drainage issues within SCDOT rights-of-way are the responsibility of SCDOT, except where Beaufort County installed infrastructure with an encroachment permit
 2. Must have DHEC/OCRM permit to do work past critical line.
 3. Must have U.S. Army Corps of Engineers permit to do work in a wetland.

