

2022 SCAC Awards Program

This application is for:

Barrett Lawrimore Memorial Regional Cooperation Award

Project Title

Southern Lowcountry Stormwater Design Manual

County/Counties

Beaufort

Staff Contact

Katie Herrera

Job Title

Stormwater Manager

E-mail Address

kherrera@bcgov.net

Phone Number

8432552813

Mailing Address

120 Shanklin Road
Beaufort, SC, 29906

Please provide a summary of your entry (no more than 100 words) to be used in a handout for the awards competition and included in press releases/publications. You may either type the summary in the text box or upload it as an attachment below.

The Southern Lowcountry (SoLoCo) Stormwater Design Manual was initiated by Beaufort County in coordination with five other municipalities to treat stormwater design in a watershed-based approach. As water knows no jurisdictional boundaries, the SoLoCo manual represents a unified, collaborative approach to stormwater design standards. By implementing better site design principles and requiring green infrastructure (GI) and Low impact development (LID) practices, the Lowcountry of South Carolina ensures not only water quality and quantity reductions are met, but also keeps the coastal region and its infrastructure resilient.

Presentations may include more than one speaker; however, each speaker should be aware that the 10-minute time limit is strictly enforced. Please list the name, title, and e-mail address of each speaker:

Name	Title	Email
Katie Herrera	Stormwater manager	kherrera@bcgov.net

To submit these attachments online, please upload Microsoft Word or PDF documents below.



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Beaufort County Southern Lowcountry Storm...



LTR of Support - Barrett Lawrimore - Jasper ...



Letter of Support Barret Lawrimore.docx.doc



Letter of Support Barret Lawrimore.pdf

Please check boxes for attachments you will submit as part of your application

A concise Project Description to explain the purpose and significance of the entry (up to eight pages). Please follow the prescribed naming convention for your Project Description file.

Any additional materials needed to support your application (up to five pages).

Barrett Lawrimore Memorial Regional Cooperation Award applications must include letters of support from the chief administrative officers for each participating political subdivision.

Beaufort County Southern Lowcountry Stormwater Design Manual

Implementing new stormwater standards through regional collaborative effort

Small Summary based on previous winners/applicants:

The Southern Lowcountry (SoLoCo) Stormwater Design Manual was initiated by Beaufort County in coordination with five other municipalities to treat stormwater design in a watershed-based approach. As water knows no jurisdictional boundaries, the SoLoCo manual represents a unified, collaborative approach to stormwater design standards. By implementing better site design principles and requiring green infrastructure (GI) and Low impact development (LID) practices, the Lowcountry of South Carolina ensures not only water quality and quantity reductions are met, but also keeps the coastal region and its infrastructure resilient.

Abstract:

In 2018, Beaufort County initiated efforts with 5 municipal partners to create a regional stormwater design manual. The purpose of creating a regional design manual was to take a watershed-based approach to stormwater management. As water knows no political boundary, if all development in a region was required to meet the same standards based on watershed goals, and not jurisdictional boundaries, water quality and water quantity standards would be a collaborative effort. A consultant was brought on board, and through the work of a technical subcommittee made up of the participating jurisdictions, the Southern Lowcountry (SoLoCo) Stormwater Design Manual was created. The SoLoCo manual requires the use of green infrastructure, low impact development, and better site design standards to achieve water quality and water quantity requirements in the Lowcountry. Requiring such standards in the Lowcountry is a move to keep our region more resilient as weather and local flooding issues continue to evolve. Since the final document was created in March of 2020, two of the six participating jurisdictions have implemented the manual. Beaufort County began implementing the manual in February 2021. Since implementation, 28 projects have come in for review under the new standards, and 6 have received permits for construction.

Need for the Program:

Beaufort County has adopted stormwater design standards since the 1990's. As knowledge within the Stormwater design community improves, Beaufort County has made amendments and changes to requirements within its manual. Beaufort County has 5 separate jurisdictions within its boundaries, is bordered by two different Counties, and is at the end of the Salkehatchie watershed. Previous Beaufort County Stormwater Design Manuals had been referenced as design standards for other jurisdictions, but each were ultimately implementing different standards for stormwater design. Beaufort County, along with two other jurisdictions within its borders, became designated Municipal Separate Stormsewer Systems (MS4's) in late 2017. This meant Beaufort County was now required to meet certain standards set forth by the Clean Water Act. The waters of the Lowcountry are used recreationally by boaters, kayakers, paddleboarders, and recreational fishing, and commercially for crabs and shellfish. Water quality improvements are required to be made by the MS4 permit. One identified way is by creating design standards for the development community. If all development is required to meet pollutant reduction controls and minimize the amount of water volume coming off a developed site, the intention of making water quality improvements per the permit would be met. If the design requirements

developers are held to differ per jurisdiction, the ultimate downstream receiving water bodies would be impacted differently depending on the upstream development. If the goal is to meet the recreational and commercial standards set forth by the EPA, then implementing standardized stormwater design requirements regionally would meet these requirements.

Description of the Program:

The SoLoCo Manual, and the standards held within, are the result of 6 jurisdictions working collaboratively to meet the overall goal of achieving fishable, swimmable, and drinkable water standards set forth by the EPA. A Request for Qualifications (RFQ) was sent out by Beaufort County to find a consultant who could take the idea of having regional, collaborative stormwater standards, and make them a reality. Deliverables for the contract included: developing a regional model ordinance, proposing regional design standards, facilitate stakeholder and public review, and delivery of the final stormwater design manual and model ordinance. The County chose the Center for Watershed Protection (CWP) and their Subcontractor McCormick Taylor (McT). The two entities then worked alongside regional partners through a technical subcommittee. Participants of the technical subcommittee included representatives from Beaufort County, Town of Bluffton, City of Hardeeville, City of Beaufort, Jasper County, and the Town of Port Royal. Each participating jurisdiction has different pressures from development. Some are built out entirely, so redevelopment standards were an important component for them. Others have large, untouched areas which could see larger scale developments come in. The goal was to create a manual whose standards were the same based on where within a watershed protection area a development was. Adopting regional standards makes it easier for the development community working within our jurisdictions because requirements are all similar. It is also hoped it would discourage developments from “jurisdictional shopping” so as to meet less stringent requirements for water quality and water quantity control by relocating to an area with less regulation.

Once the consultants were engaged, the technical subcommittee met continuously through the end of 2019, to work on the standards contained within the manual. A draft manual was created and presented to the public for comment in early January 2020. After all public comments were received, the subcommittee began working to address each comment and make amendments as appropriate. Two meetings were held to make any final amendments to the master document, which was presented in its final form to all participating jurisdictions at the end of March 2020. From there, each municipality was tasked with ensuring its individual programs could meet the requirements of the master manual. Beaufort County staff reviewed the manual and its programmatic requirements over the course of 4 months before presenting to the various Boards and Councils for final adoption. The approval process by all responsible County parties took an additional 4 months. Final implementation of the new SoLoCo manual began on February 1st, 2021.

In mid-January of 2021, prior to the final implementation of the new SoLoCo Manual, staff held a series of trainings, both for internal and external users of the Manual. The manual serves as the guiding document for the design community within Beaufort County. The manual also serves as the document members of the staff review team use to ensure compliance is met by all permit applicants. The trainings were held to educate all users of the manual on what would be required on all projects coming for approval within the County after the implementation deadline of February 1st 2021.

Beaufort County implemented the standards of the new manual in a phased approach. Not only did the County need to ensure the end users of the manual were provided enough opportunities to be fully

educated on the design requirements contained within, the manual also needed to be consistent with existing Community Development and Zoning standards within the County. Interdepartmental meetings were held to ensure what was being required in the SoLoCo Manual for stormwater standards was consistent with existing County Ordinances. If there were places with conflicting ordinance requirements, amendments were made to the most restrictive standard.

Staff engaged the design community in the public comment period but also during educational trainings on the new standards. Presently, a recorded training session is made available online to anyone interested in learning more about the specifics of the SoLoCo manual and how to meet Beaufort County Stormwater requirements. Staff also engaged with the various departments within the County's organization who in one way or another may be required to meet the goals or assist in development review the consistency of design to the manual. Internal trainings were also held to ensure other departments were understanding not only of the purpose of the design standards, but also the

Upon implementation of the new manual, only two exceptions for meeting the requirements of the new design standards were given: projects who were a part of a previously approved master plan that adopted water quality and water quantity standards, and projects who previously submitted for approvals prior to February 1st, 2021. In the last year of implementation, a total of 28 projects have come through under the new SoLoCo design standards. Of those projects, a total of 6 have met all requirements of the approval process and have received permits. Of those permitted projects, none have yet to be completed.

While the County is responsible for implementing the SoLoCo manual within its own jurisdiction, it continues to support the efforts of those jurisdictions who have yet to implement the new standards. The County has presented numerous times to various levels of other jurisdiction's governments in support of the new standards. The County continues to encourage a regional approach to Stormwater management to continue its forward-thinking approach to Stormwater design and Coastal resiliency.

Cost of Program

In its entirety, the cost of hiring a consultant for the project was \$179,554.00. The cost was divided up between the 6 participating municipalities based on population size. Unincorporated Beaufort County made up 58.6% of the cost, Town of Bluffton accounted for 11.3%, Jasper County accounted for 11.1%, City of Beaufort contributed 8%, Town of Port Royal accounted for 7.6%, and finally the City of Hardeeville accounted for 3.4% of the total cost.

Beaufort County also invested \$28,824.05 with it's on call consultant Woolpert to develop two training sessions. The first was a training session for County staff involved with implementing the new standards. The second was a developer specific training on how to use the new manual and its appendices to design within Beaufort County.

Staff time was, and continues to be, a large investment into the SoLoCo manual. While every effort was invested into making the manual the best version it could be, there will continue to be updates made. As our understanding of stormwater management continues to evolve, so will the SoLoCo Manual. As each jurisdiction implements the manual, there may ultimately be some processes that work better than others, and vice versa. The manual was built as the backbone for regional standards, but each

jurisdiction has the flexibility to amend to it to their specific needs if each of the Watershed Protection area design standards stay consistent.

Beaufort County funded this project using revenue from its Stormwater Utility Fee.

The Results/Success of the Program:

To date, the County has reviewed 28 projects for review using the new SoLoCo standards. With a dedicated staff member assigned to review all Stormwater permit applications for compliance with the new regulations, Beaufort County can ensure all questions developers have are answered and that a thorough review is completed. Beaufort County considers the effort invested into creating a new stormwater design manual a success as the standards contained within the manual require site design to ensure resiliency in our coastal community.

All deliverables assigned to the creation and implementation of the SoLoCo manual were met by the contractor. The County has provided training opportunities to educate end users of the manual created. The County continues to work with end users, both intern and external, to stay on top of any needs or updates the manual may need to address. The County continues to foster its partnership within the technical subcommittee and be a resource as needed by the other participating jurisdictions as it relates to implementation. Of the 6 participating jurisdictions, 2 have fully implemented the standards, 1 continues to engage in discussions with senior leadership to implement the standards, and 3 have not implemented thus far.

Worthiness of Award:

Beaufort County set out to achieve a regional stormwater design manual and stormwater ordinance and was successful in doing so. The collaborative effort set the precedence in South Carolina that regional, collaborative efforts can be achieved if all participants are engaged in the beginning and are allowed equal contributions. To the County's knowledge, no such effort has been attempted, and while not all jurisdictions have adopted the standards set forth in the SoLoCo manual, all were equal participants and at the time of their implementation, the manual and ordinance have been created with their efforts.

Through Better Site Design principals, and implementing GI and LID practices, the developments coming into the lowcountry of South Carolina are required to take a more thorough approach to stormwater design. Beaufort County will continue to support all jurisdictions in their efforts to implement the regional standards and make necessary improvements to the manual as our understanding of stormwater and engineering principles expands.

COUNTY COUNCIL OF BEAUFORT COUNTY
OFFICE OF THE COUNTY ADMINISTRATOR
ADMINISTRATION BUILDING
BEAUFORT COUNTY GOVERNMENT ROBERT SMALLS COMPLEX
100 RIBAUT ROAD

CHERYL H. HARRIS
EXECUTIVE ASSISTANT

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ERIC L. GREENWAY
COUNTY ADMINISTRATOR

WHITNEY RICHLAND
DEPUTY COUNTY ADMINISTRATOR

May 16, 2022

South Carolina Association of Counties
PO Box 8207
Columbia, SC 29902-8207

Re: The Barrett Lawrimore Memorial Regional Cooperative Award

TO WHOM IT MAY CONCERN:

In accordance with The Barrett Lawrimore Memorial Regional Cooperation Award criteria, we enthusiastically recommend Beaufort County's application for award.

As prescribed by the Awards Committee, Beaufort County's supporting role was instrumental to the creation of the Southern Lowcountry Stormwater Design (SoLoCo) Manual. Representatives of the technical sub-committee have excelled in the areas of innovation, collaboration, strategic design, effective communication, and superior management. The success of the committee led to a successful manual for the development community, but also for the goals of each entity to follow the Clean Water Acts goals for fishable, swimmable, and drinkable waterways.

As a participant in the collaborative effort, Beaufort County served as project lead to the development of SoLoCo manual, which resulted in a watershed-based approach to stormwater management. It remains uncontested that without the collaboration of the technical sub-committee's level of expertise and dedication to the creation of the manual, the SoLoCo manual would not sustain quality and efficient development within Beaufort and Jasper Counties.

Beaufort County recognizes the constant demonstrations of adaptability, compassion, intellect, foresight, and dependability. This set the tone of a dynamic environment for all participants to work through. The pleasure of working with the organizations that made up the Technical Sub-committee of the SoLoCo manual was felt by all. Overall, it was a positive and enthusiastic experience throughout the course of the effort.

For more information, please contact Katie Herrera at (843) 255.2813 or by email at kherrera@bcgov.net.

Sincerely,



Eric L. Greenway
County Administrator

ELG:ch



OFFICE OF THE JASPER COUNTY ADMINISTRATOR

*Jasper County Clementa C. Pinckney Government Building
358 Third Avenue – Courthouse Square – Post Office Box 1149
Ridgeland, South Carolina 29936 - 843-717-3690 – Fax: 843-726-7800*

Andrew P. Fulghum
County Administrator

afulghum@jaspercountysc.gov

May 6, 2022

VIA Electronic Mail Delivery

Mrs. Katie Herrera
Beaufort County Stormwater
120 Shanklin Rd
Beaufort, SC 29906

Re: Letter of Support – Barrett Lawrimore Award

Dear Mrs. Herrera:

In accordance with the Barrett Lawrimore Award criteria, we enthusiastically recommend Beaufort County's application for award.

Jasper County provided a major supporting role which was instrumental to the accomplishment of creating the Southern Lowcountry Stormwater Design (SoLoCo) Manual. As a representative of the Stormwater Technical sub-committee tasked with working collaboratively on the new manual, we excelled as a group the areas of innovation, collaboration, strategic design, effective communication, and superior management. The success of the committee led to a successful manual for the development community, but also for compliance with the initiatives set forth within the Clean Water Act.

As a participant in the collaborative effort, Jasper County dedicated time throughout the year and a half in the creation of the SoLoCo manual which resulted in a watershed-based approach to stormwater management. It remains uncontested that without the collaboration of the technical sub-committee's level of expertise and dedication to the creation of the manual, the SoLoCo manual would not sustain quality and efficient development within Beaufort and Jasper Counties.

Jasper County is thankful for the consistent displays of adaptability, compassion, intellect, foresightedness, and dependability within the group who accomplished the task. This set the tone of a dynamic environment for all participants to work through. The pleasure of working with the

organizations who made up the technical sub-committee of the SoLoCo manual was felt by all. Overall, it was a positive and enthusiastic experience throughout the course of the effort.

Sincerely,

A handwritten signature in blue ink, appearing to read 'APF', with a long horizontal flourish extending to the right.

Andrew P. Fulghum, ICMA-CM



Council

Joseph DeVito
Mayor

Jerry Ashmore
Mayor Pro Tempore

Mary Beth Heyward
Darryl Owens
Kevin Phillips

Van Willis
Town Manager

T. Alan Beach
Chief of Police

Jeffrey S. Coppinger
Operations

Linda Bridges
Planning

May 5, 2022

Katie Herrera
Beaufort County Stormwater
120 Shanklin Rd
Beaufort, SC 29906

Mrs. Katie Herrera,

In accordance with the Barrett Lawrimore Award criteria, we enthusiastically recommend Beaufort County's application for award.

The Town of Port Royal provided a major supporting role which was instrumental to the accomplishment of creating the Southern Lowcountry Stormwater Design (SoLoCo) Manual. As a representative of the Stormwater Technical sub-committee tasked with working collaboratively on the new manual, we excelled as a group the areas of innovation, collaboration, strategic design, effective communication, and superior management. The success of the committee led to a successful manual for the development community, but also for compliance with the initiatives set forth within the Clean Water Act.

As a participant in the collaborative effort, the Town of Port Royal dedicated time throughout the year and a half it took towards the creation of the SoLoCo manual which resulted in a watershed-based approach to stormwater management. It remains uncontested that without the collaboration of the technical sub-committee's level of expertise and dedication to the creation of the manual, the SoLoCo manual would not sustain quality and efficient development within Beaufort and Jasper Counties.

The Town of Port Royal is thankful for the consistent displays of adaptability, compassion, intellect, foresightedness, and dependability within the group who

accomplished the task. This set the tone of a dynamic environment for all participants to work through. The pleasure of working with the organizations who made up the technical sub-committee of the SoLoCo manual was felt by all. Overall, it was a positive and enthusiastic experience throughout the course of the effort.

For more information, please contact me at 843-986-2200, or vwillis@portroyal.org.

Sincerely,

A handwritten signature in black ink, appearing to read 'Van Willis', with a large, sweeping flourish underneath.

Van Willis
Town Manager

Lisa Sulka

Mayor

Larry Toomer

Mayor Pro Tempore

Stephen Steese

Town Manager

Katie Herrera

Beaufort County Stormwater

120 Shanklin Rd

Beaufort, SC 29906



Council Members

Fred Hamilton

Dan Wood

Bridgette Frazier

Kimberly Gammon

Town Clerk

April 19, 2022

Mrs. Katie Herrera,

In accordance with the Barrett Lawrimore Award criteria, the Town of Bluffton enthusiastically recommends Beaufort County's application for this award. As a partner in the two year long, regional effort, which spanned two counties and five municipalities, Town staff appreciated the County's participation as we all worked side by side to craft a novel, model watershed-based stormwater ordinance and design manual.

As prescribed by the award committee, Beaufort County Stormwater staff was instrumental to creating the model Southern Lowcountry Post-Construction Stormwater Ordinance and Southern Lowcountry Stormwater Design (SoLoCo) Manual. The County's representatives to the technical sub-committee excelled in the areas of innovation, collaboration, and communication. The Town recognizes that without the technical sub-committee's collaboration, level of expertise and dedication to the creation of the ordinance and manual, the final products would not sustain quality and efficient development within Beaufort and Jasper Counties. Ultimately, all project partners envisioned a unified approach to managing stormwater efficiently and effectively to meet the Clean Water Act's goals for fishable, swimmable, drinkable waterways.

The Town of Bluffton is thankful for the County's consistent displays of adaptability, intellect, foresightedness, and dependability. This set the tone for a dynamic and productive work environment for the duration of this project.

For more information, please contact me at Town of Bluffton.

Sincerely,

Kimberly Washok-Jones, M.S., CEPSCI Director of Projects & Watershed Resilience

William A. Prokop
CITY MANAGER
843-525-7070
FAX 843-525-7013



CITY OF BEAUFORT
1911 Boundary Street
BEAUFORT, SOUTH CAROLINA 29902

COUNCIL MEMBERS:
Stephen D. Murray III, Mayor
Mike McFee, Mayor Pro Tem
Philip Cromer
Neil Lipsitz
Mitch Mitchell

May 6, 2022

Katie Herrera
Beaufort County Stormwater
120 Shanklin Rd
Beaufort, SC 29906

Mrs. Katie Herrera,

In accordance with the Barrett Lawrimore Award criteria, we enthusiastically recommend Beaufort County's application for award.

The City of Beaufort provided a major supporting role which was instrumental to the accomplishment of creating the Southern Lowcountry Stormwater Design (SoLoCo) Manual. As a representative of the Stormwater Technical sub-committee tasked with working collaboratively on the new manual, we excelled as a group the areas of innovation, collaboration, strategic design, effective communication, and superior management. The success of the committee led to a successful manual for the development community, but also for compliance with the initiatives set forth within the Clean Water Act.

As a participant in the collaborative effort, the City of Beaufort dedicated time throughout the year and a half it took towards the creation of the SoLoCo manual which resulted in a watershed-based approach to stormwater management. It remains uncontested that without the collaboration of the technical sub-committee's level of expertise and dedication to the creation of the manual, the SoLoCo manual would not sustain quality and efficient development within Beaufort and Jasper Counties.

The City of Beaufort is thankful for the consistent displays of adaptability, compassion, intellect, foresightedness, and dependability within the group who accomplished the task. This set the tone of a dynamic environment for all participants to work through. The pleasure of working with the organizations who made up the technical sub-committee of the SoLoCo manual was felt by all. Overall, it was a positive and enthusiastic experience throughout the course of the effort.

For more information, please contact me at rbertholf@cityofbeaufort.org.

Sincerely,

Reece Bertholf
Deputy City Manager