



**Certified Public Manager Project Paper**

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**Analysis of the SCOR Strategic Statewide Resilience and Risk Reduction Plan  
and Watershed Planning Method and the Best Practices for Effective  
Educational and Communication Strategies to Engage the Local Community**

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## **INTRODUCTION**

The South Carolina Office of Resilience (SCOR) is a new state agency created in 2020 by the Disaster Relief and Resilience Act. (SC Code of Laws Ann. §48-62-20, et seq.) To coordinate and strengthen efforts to reduce losses from future disasters, the General Assembly directed SCOR to develop, implement, and maintain the state's first ever Strategic Statewide Resilience and Risk Reduction Plan (SC Code of Laws Ann. §48-62-30). SCOR defines resilience as the ability of communities, economies, and ecosystems to anticipate, absorb, recover, and thrive when presented with environmental change and natural hazards. (SCOR (2023) Strategic Statewide Resilience and Risk Reduction Plan pg. ii, hereinafter cited as SCOR Plan)

SCOR published the Resilience Plan in 2023. As statutorily authorized, the Resilience Plan provides a framework to guide state investment in flood mitigation projects and the adoption of programs and policies to protect people and property throughout the state following the boundaries of the State's 8 major watersheds. (SC Code of Laws §48-62-30) The Resilience Plan includes a strategy for providing resources, technical assistance, and other support to local communities for flood risk reduction and resilience activities. (SCOR Plan, pg. 458) The next steps are to coordinate statewide resilience and disaster risk reduction activities through collaboration and engagement with federal, state, and local governmental agencies, stakeholders, and nongovernmental entities, and seek out available funding sources to implement the Resilience Plan.

## **RESEARCH PROJECT ANALYSIS STATEMENT**

SCOR is not a regulatory agency, nor does it have enforcement authority over the Resilience Plan's recommendations. (SC Code of Laws §48-62-10, et seq.) Therefore, a vital

component to the Resilience Plan's statewide success is for the voluntary acceptance of its recommendations by those communities it seeks to serve. Currently, SCOR is implementing the Resilience Plan and its resilience and risk reduction planning processes in a pilot project focused on the communities in the Salkehatchie Watershed. Through the project, SCOR and its agency collaborator, The Sea Grant Consortium, and a non-profit organization, SC Beach Advocates, will seek direct engagement with 10 communities within the Salkehatchie Watershed utilizing the Resilience Plan's structure and strategies to identify resilience needs, conduct risk assessments, ferret out vulnerabilities, and develop 10 localized resilience and risk reduction plans.

The 10 resilience plans will be developed in-concert with one another, thereby creating a comprehensive watershed plan that communicates cohesively up and down the region. This paper seeks to identify and recommend best practices and strategies for effective community engagement to be used in this pilot project, so as to increase the likelihood that the resulting resilience and risk reduction plans will be accepted, and their recommended policies understood, welcomed, and readily implemented.

### **WATERSHED BASED RESILIENCE AND RISK REDUCTION PLANNING**

As noted in Governor Henry McMaster's introductory letter to the Resilience Plan, South Carolina is facing many new challenges. Challenges that range from changes in the intensity of our rainfall events, to sea levels rising, and increased risks to our cultural and ecological resources from environmental changes and natural hazards. (SCOR Plan, Gov. Intro Letter)

These challenges make it abundantly clear that South Carolina must plan holistically, and take into account South Carolina's past, present, and future conditions. In anticipating these increased hazards, the importance of planning at the watershed level cannot be overstated.

SCOR's mandatory directive from both the General Assembly and Governor Henry McMaster, was to use and build upon the extensive work of the South Carolina Floodwater Commission. (S.C. Code of Laws Ann. §48-62-30; SCOR Plan. Governor Intro Letter) The South Carolina Floodwater Commission (SCFWC) found that reducing flood-risk and increasing statewide resilience required planning on a geographic scale, from local communities to statewide implementation. (SCFWC 2019, pg. 20) The SCFWC recognized that the 8 major watershed systems in South Carolina (the Saluda, Broad, Catawba, Pee Dee, Santee, Edisto, Salkehatchie, and Savannah River) drain through the state, with water flowing down from the highlands to the Atlantic Ocean. (SCFWC 2019, pg. 20)

The basis for this statewide watershed planning directive is founded upon the fact that water, streams, rivers, and floods do not follow - and are not confined to - artificial jurisdictional governance boundaries. (SCFWC 2019, pg. 24) Public and private alterations to the physical environment interact with the increased severe weather events resulting in significant negative impacts to the natural hydrologic flow of water. Flooding brings significant negative consequences for the health and safety of the citizens of our state, and results in economic devastation impacting both man-made and natural structures. These resulting catastrophic conditions impact communities both up and down-stream. The SCFWC found it illogical for a highly resourced jurisdiction to invest in expensive quality planning programs, when upstream lay an under-resourced jurisdiction without the ability to acquire the same expensive quality planning programs; therefore, the SCFWC found that planning must and should be implemented on a watershed scale. (SCFWC 2019, pg. citation) As recommended by the SCFWC and statutorily required by the General Assembly, SCOR follows this watershed geographic scale as its foundational principle for statewide resilience planning. (SC Code of Laws, Ann. §48-62-30)

Additionally, SCFWC found that by shifting resilience planning from localized political boundaries to the regional watershed level, local governments and communities would be encouraged to collaborate and cooperate with one another in the creation of effective resilience and risk reduction planning programs. Resilience and mitigation projects could span economic interests across jurisdictions and assist building capacity for all communities. By engendering a shared camaraderie up and downstream, the conditions would be favorable for the creation of cohesive and consistent planning, resulting in greater risk mitigation and protections. (SCFWC, 2019, pg. 21)

The SCFWC Summary stated: “Hurricane Joaquin and the Historic Flood of 2015, Hurricane Matthew in 2016, Hurricane/Tropical Storm Irma in 2017, and Hurricane Florence in 2018, collectively resulted in 37 deaths and 1,634 homes destroyed or experiencing major damage, some repeatedly. Over 146,017 homes received moderate to minor damage. Flooding resulted in the breach or failure of 81 regulated dams throughout the state. Combined FEMA payments to individuals exceeded \$150 million and the total cost of infrastructure repairs is estimated at \$680 million, with an estimated total loss of \$320 million in tourism dollars.” (SCFWC. 2019 pg. 6) The French microbiologist and chemist, Louis Pasteur’s often quoted idea that “luck favors the prepared. . .” is well heeded by SCOR in the research, development, and publication of the Statewide Resilience and Risk Reduction Plan. The importance of planning is clearly needed before the dark times of a natural disaster’s impact.

## **STRATEGIES FOR EFFECTIVE COMMUNITY ENGAGEMENT**

SCOR is to coordinate statewide resilience and disaster recovery efforts, including coordination with Federal, state, and local governmental agencies, stakeholders, and nongovernmental entities, and to provide resources, technical assistance and other support for

resilience and risk reduction measures. (SC Code of Laws, Ann. §48-62-30) Per the statutory directive, SCOR has secured federal funding from the National Fish and Wildlife Foundation (NFWF) to replicate the comprehensive planning process used to develop SCOR's Resilience Plan. Through the NFWF Pilot Project, SCOR and its agency partner, The Sea Grant Consortium, and the non-profit organization, SC Beach Advocates, will provide technical and scientific expertise to 10 chosen communities to complete 10 place-based community risk and vulnerability assessments. SCOR and partners will identify and effectively engage the community stakeholders needed to inform the technical expertise. These community engagements and scientific studies will result in a portfolio of resilience policies, programs, and shovel-ready projects that are intended to communicate cohesively throughout the watershed. These identified solutions will then be implemented by expanding local government capacity for funding by leveraging local, regional, state, and Federal partnerships.

The NFWF pilot project's resilience planning process will be documented in a Resilience Planning Handbook (Handbook) that will include best practices, standardized technical and scientific metrics, and community engagement guidelines, so that the Handbook can be used to replicate the resilience planning process across other watersheds. When all 8 watershed planning processes are completed, there will be created in South Carolina a statewide watershed-based resilience and risk reduction existence that will provide greater safety, security, and protections for the people, economies, and ecologies across the state. Through these and other efforts, SCOR is meeting her statutory mandate to protect the people and property of South Carolina from the damage and destruction of extreme weather events, tackling head-on, those challenges faced in the next inevitable natural disaster.

The effectiveness of the Salkehatchie Watershed resilience plans for the 10 selected communities, will depend in large part upon the effectiveness of the community engagement process. As stated previously, SCOR is not a regulatory agency; therefore, the adoption and execution of the Salkehatchie Watershed Resilience Plans is dependent upon the voluntary acceptance by the local governments, which necessitates support from their community constituents. Constituent support is the appropriate and desired outcome of this process because it is those targeted people that these plans ultimately seek to engage, serve, and protect. Fundamentally, there can be no “Plan” without community action.

For a community plan to be accepted and supported, the plan must be seen as fair, not arbitrary, nor based on favoritism, or exclusionary practices. (Land Use Planning and Development Regulation Law, Hornbook Series, §2.10 pg. 28) The resilience planning process mirrors that of a comprehensive community planning process and must begin with a factual basis found in the community, that addresses the community needs through accurate assessments and information gathering. The solutions that are developed must include the community in the process from the beginning, through implementation, and then be accurately assessed by the community, for the desired resilience and risk reduction results. This progression ensures a transparent process, with uniform fair treatment across the area, that will engender buy-in and support.

Initiatives or edicts from outside the community that are based on top-down source material and metrics that do not begin with or involve the community will not tell the whole resilience story; they will be suspect and are destined to fail. Engagement of the community is fundamentally important in the resilience planning process to ensure that all the necessary information and bottom-up data is collected, so that the problems (and the solutions) are truly

and accurately informed by all perspectives. An effective community engagement process will seek to know who the people are and strive to understand their lived experiences. Through this community engagement effort, the scientific and technical interventions brought to address the problems will be informed and data gaps filled. True resilience planning is community-driven and built through engagement with boots on the ground.

In addition to the above information, a list of community engagement best practices were researched and derived from the following sources: Floodwater Commission Stakeholder Engagement Task Force, November 8, 2019; Applying Community Engagement to Disaster Planning: Developing the Vision and Design for the Los Angeles County Community Disaster Resilience Initiative, AJPB, July 2013; and Stakeholder Engagement Best Practice Guide [simplystakeholders.com](http://simplystakeholders.com).

Community engagement best practices include the following:

1. Identifying goals for community outreach.
2. Define and list the project community stakeholders.
3. Define and list the essential community stakeholders, without whom the project is more vulnerable.
4. Develop a clear communication message.
5. Review lists and communication message with government and other community leaders to ensure stakeholder inclusivity and accuracy.
6. Develop questions aimed at understanding communities experiences, needs, and priorities.
7. Listen and record all data.
8. Develop and implement a stakeholder participation process that spans the life of the project, including after-action reviews.
9. Identify and designate who is responsible for responding to community questions to ensure timely and responsive engagement and consistency.
10. Track community interactions and document phone records, attendance, and feedback surveys from trainings.



11. Schedule routine periodic community updates and reports coupled with detailed educational materials, tools, maps, and resources.
12. Understand and define what successful engagement looks like.

Once the planning goals are outlined, next steps are defining and listing project stakeholders and identifying who the key members are or should be. The definition of a stakeholder is “any person or organization that is either actively involved in, affected by, or can influence a project. (SCSWC. 2019, pg. 352) It is by harnessing the collective power of those people or organizations that effective community engagement can begin. Planners will, of course, include in the stakeholder lists the known elected and formal leaders in the community. But, planners must also make the effort to find and include informal community leaders as well.

Informal leaders are those people who are trusted and influential, not by their title or positions, but because their opinions carry weight due to the respect they have garnered from others in the community. Informal leaders are driven by purpose and not by any type of personal gain. They are motivated and rewarded by the knowledge that their support for a project will reap benefits for the community writ large. (The Power and Purpose of Informal Community Leaders, Anne Colby, Encore.org 2018) It is these types of leaders that have the power to sway community acceptance of the planning project, are extremely valuable, and can make the difference between the acceptance or demise for any new resilience plans and initiatives.

A similar resilience project was reviewed for its engagement practices: Restorative Landscape Plan for Reidsville and Collins, Georgia. (Reidsville/Collins Restorative Landscape Plan – Existing Conditions Report, October 2023, anthropocenealliance.org) The Reidsville/Collins community engagement process included setting goals for the outreach events, sponsoring meetings in the field where hazards were experienced, and allowing for face-to-face

exchanges between the hired scientists/engineers and the community. Community engagement was augmented with listening and learning sessions that were regularly scheduled to discuss project updates, possible solutions, and alternative proposals. Educational materials, resources, and maps were shared during the engagement activities. (Reidsville/Collins Restorative Landscape Plan – Existing Conditions Report, October 2023, [anthropocenealliance.org](http://anthropocenealliance.org))

A clear communication message is needed to help build awareness in the community and encourage support. The messaging should be transparent, factual, and easily understood, using plain language to state the purpose and goals of the plan. The message should include the list of opportunities for public participation to encourage collaboration and spur increased inclusion. Through a clear message and a transparent engagement process, trust in the planning process can begin.

To effectively reach the community members at large, advertisement for engagement opportunities should be conducted across all mediums. A central hub can be established for media information that can be accessed by communities across the watershed. Use of a dedicated website and a scannable QR code will help disseminate the information in a familiar format to a younger generation of community members. Finally, using trusted community partners such as the Chamber of Commerce, Houses of Worship, School Districts, and Tax Bills to disseminate important and/or timely information is also effective. Other areas to advertise information can include Gas Stations, TV and Local Radio Stations, Convenience Stores and at the community landfills. (SCFWC. 2019, pg. 359)

In every engagement opportunity, it is critical to educate the community about resilience measures and the importance of their implementation. For local governments and communities to embrace the benefits of green, nature-based, and other alternative resilience measures, the

community must know and understand how these types of programs or projects work, what benefits they can provide, and how they may be superior and more cost-effective to other traditional risk reduction measures. Education is key. Every opportunity must be seized upon to demonstrate how nature-based resilient systems can absorb and mitigate the health and economic impacts of severe weather events. Education should include how green infrastructure projects (e.g., tree canopies, wetlands preservations or reclamations, native vegetation, and water gardens) can be more aesthetically desirable and just as effective as other measures. The cost-effectiveness of these alternatives should be known when prioritizing all projects. By supplying educational information both before and during engagement events, informed discussions are facilitated, trust is built, and the best solutions identified.

In an example of how ignorance is a barrier to nature-based flooding alternatives, a homeowner was forced to remove his rain garden due to the Homeowners Association fining him and threatening to levy a lien upon the home. (Cox, Toby. “HOA wins battle over rain garden, but homeowners say the fight isn’t over” *The Post and Courier*, March 5, 2024). It was reported that the rain garden reduced nuisance flooding in the homeowner’s yard as well as alleviated flooding in the adjacent neighbor’s yard. It is supremely ironic that the rain garden itself was funded through a local government sponsored nature-based program, the Charleston’s Rainproof Mini-Grant Program, but the garden was literally killed by the Homeowners’ Association. This was despite support from neighbors in the community. It was reported that the homeowner was able to gather an overwhelming number of signatures to force a vote at a future HOA meeting that could overturn the HOA’s Bylaws and allow landscaping features that use native plants and rain gardens to control stormwater runoff.

Through resourced educational events and engaged learning sessions, it is hoped that communities, governments, and other authoritative bodies (including homeowner associations) will gain a factual understanding about the myriad resilient alternatives available that are effective to combat weather challenges and resulting hazards. As communities are educated and information is shared, collaboration opportunities are created, and trust is built into the process.

### **IMPLEMENTATION PLAN**

The action steps to educate, communicate, and effectively engage community stakeholders in the Salkehatchie Watershed Resilience and Risk Reduction Planning Project are recommended as follows:

- Develop community engagement materials following the above stated best practices list.
- Prepare educational materials to introduce and familiarize the community with concepts of nature-based, green, and alternative resilience solutions and include why planning is being done on a watershed scale.
- Review messaging, materials, and communications to ensure that they are transparent, factual, and stated using plain language.
- Confirm that advertisements for engagement sessions are across as many mediums and locations as are available.
- Efforts should be made to identify, not only the obvious and known community stakeholders, but to identify, locate, and engage those trusted informal community leaders.

## **EVALUATION METHOD**

To evaluate the effectiveness of the community engagement process, an after-action interview and survey will be sent to each of the community members that participated at any time during the project. The interview will probe the participants level of engagement (e.g., number of interactions with project), and use a numerical rating system to document their opinions of the materials used, the level of educational value provided, the effectiveness of the meetings held, the value of the scientists/engineers hired, and their overall understanding of the project. Lastly, open-ended questions will be asked to gather suggestions for improvement of the project, what was and was not enjoyable or of value, and ask how the person felt about their interactions with the project.

To determine whether the engagement process successfully found and actively recruited informal leaders in the community, the initial questionnaire will have documented who participated in the process, where they came from, their role or roles in the community, and why they engaged with the project. To gage the informal leader's ability to sway public opinion, the after-action interviews and surveys will be reviewed to determine what initiatives these people supported, and cross checked against those initiatives that were adopted.

## **SUMMARY AND RECOMMENDATIONS**

Effective community engagement can be summarized as a process that is grounded in, and communicates, respect. The best practices listed above, and the other information described herein, outline an engagement process that is respectful of the community's lived experiences, their vulnerabilities, and seeks to understand their priorities for change.

Additionally, an effective engagement process will seek out and locate those individuals who are the informal leaders in the community. These informal leaders ensure that important community facts are known, a community's history is understood, and true engagement occurs.

Finally, when fully implemented, the watershed-based resilience planning process, will result in a handbook that is cohesive and consistent and replicable across the state. As such, SCOR will have addressed her statutory mandate to protect the people and property of South Carolina from the damages and destruction from extreme weather events through a systematic and consistent process resulting in the creation of a more resilient state.