



MEMORANDUM

To: Mayor and Members of the City Council

From: Montrè Freeman, City Manager
Dwan Bell, Public Utilities Director
Alicia Steward, Finance Director
Jon Hawley, Grants Administrator

Date: October 6, 2023

Re: Consideration - Memorandum of Understanding, No-Cost Resiliency Planning Services

BACKGROUND:

Earlier this year, the NC Division of Coastal Management invited Elizabeth City and other localities to participate in the Resilient Coastal Communities Program (RCCP). The RCCP is a special initiative for the communities of North Carolina's 20 coastal counties, and it is funded by the state and the National Fish and Wildlife Foundation. The RCCP is intended to generate projects to enhance communities' resiliency, and then create pathways to fund those projects.

The RCCP is divided into four phases: Phase 1, Community Engagement and Vulnerability Assessment; Phase 2, Planning and Project Prioritization; Phase 3, Engineering and Design; and Phase 4, Project Implementation. To help communities complete Phases 1 and 2 – and position them for Phases 3 and 4 – the Division is offering no-cost technical assistance through third-party consultants vetted and selected by the state.

To initiate the City's RCCP activities, the state has offered us the services of Weston and Sampson (WSE), a multi-disciplinary engineering firm with extensive experience in resilience planning. Following initial conversations with WSE's team, City staff are proposing to enter into a no-cost "Memorandum of Understanding" (MOU) to define the project's scope and the City's expectations.

ANALYSIS:

Enclosed is the proposed MOU, as well as WSE's application to provide RCCP services; it will be partnering with the Berkley Group to support some planning activities. WSE's application includes background on both companies. In short, WSE was founded in 1916 and has some 750 employees in offices across the East Coast, including in Apex, NC,

which is where most of our project team will be based; Berkley is a Virginia-based local government consulting firm. Their application also details numerous other communities where WSE has performed successful resiliency projects.

WSE's Memorandum of Understanding is tailored to meet the requirements of Phases 1 and 2 of the RCCP, as well as local priorities identified by City staff. The main deliverables of the MOU will be a "Risk and Vulnerability Assessment" and then a Resilience Strategy; the latter shall include prioritized projects that may be further funded in Phases 3 and 4.

To complete Phase 1 (Community Engagement and Vulnerability Assessment) activities, the MOU proposes to:

- Develop a "Community Action Team" (CAT) of local stakeholders to oversee WSE, provide assistance and input, and provide public engagement
- Review existing plans, policies, ordinances, and programs; review existing risk assessments and project proposals; identify gaps in planning or data
- Define community's vision and goals
- Develop a community engagement strategy, inclusive of community meetings; special consideration/effort will be made to reach marginalized populations
- Conduct a Risk and Vulnerability Assessment, with focus on assessing critical assets identified by the CAT and the community

For Phase 2 (Planning and Project Prioritization), the MOU proposes to:

- Based on Phase 1 research, compile and review previously identified projects with the CAT
- Based on community and CAT input, re-evaluate and prioritize five projects, including at least one nature-based solution; provide benefit-cost analyses
- Compile all research, community engagement, project development and other activities into a final "Resilience Strategy."

As the Council is aware, the City has several stormwater- and resiliency-related projects underway or completed, including a regional "Vulnerability and Risk Assessment" funded by NC Emergency Management. The regional VRA includes Pasquotank and Camden Counties, and is focused specifically on surface transportation assets (i.e., roads and bridges). City staff have emphasized to WSE that they should build off this VRA and focus on critical, non-road assets within Elizabeth City, such as our utility infrastructure. The intent of all parties is to build upon prior planning efforts, not repeat them. If/when WSE recommends projects prioritized in other studies or assessments, that will only strengthen our case for those projects' funding in Phases 3 and 4.

STAFF RECOMMENDATION:

By motion, approve the Memorandum of Understanding with Weston and Sampson, and authorize City staff to support implementation of the City's Phase 1 and 2 activities under the Resilient Coastal Communities Program.

Memorandum of Understanding

Between

Weston & Sampson

and

Elizabeth City

This Memorandum of Understanding (MOU) sets the terms and understanding between the **locality** and the **consultant** to participate in Phases I and II of the North Carolina Resilient Coastal Communities Program (RCCP).

Background

Making informed decisions to work towards more resilient communities requires careful, thorough planning efforts using sound, locally relevant data. The North Carolina Division of Coastal Management's Resilient Coastal Communities Program aims to address this need through technical and financial assistance to advance coastal resilience efforts throughout the 20 coastal counties in North Carolina. The RCCP is designed to help overcome barriers in coastal resilience and adaptation planning, boost local government capacity, and support a proactive, sustainable, and equitable approach to coastal resilience planning and project implementation. Vendors will lead the completion of program steps and requirements in close coordination with participating communities.

Program Objectives:

- Address barriers to coastal resilience in North Carolina at the local level, such as limited capacity, economic constraints, and social inequities;
- Assist communities with risk and vulnerability assessments and developing a portfolio of planned and prioritized projects;
- Advance coastal resilience projects to "shovel-ready" status; and
- Link communities to funding streams for project implementation.

Purpose

This MOU outlines the scope of work set forth by the NC Division of Coastal Management (DCM) so that both partners understand and agree to the steps of the program included in Phases I and II and the deliverables to be produced at the end of the process.

The broad program objectives outlined above will be accomplished by undertaking the following specific steps:

Phase 1: Community Engagement and Risk/Vulnerability Assessment

In Phase 1, The Vendor will develop a Community Action Team, a stakeholder engagement strategy, and conduct a risk and vulnerability assessment focused on disadvantaged populations, critical assets, and natural infrastructure for each community. Work that has recently been completed by the Towns or Counties does not need to be repeated.

➤ **Step 1: Develop a Community Action Team**

Create a Community Action Team (CAT) of key, knowledgeable stakeholders to work actively with vendors through Phases 1 and 2 of the programs.

- A. Develop a CAT Framework / Schedule
- B. Develop CAT Facilitation Plans
- C. Coordinate with Communities and Identify CAT members.
- D. Schedule CAT meetings
- E. Develop materials for CAT meetings
- F. Facilitate CAT meetings
- G. Develop CAT meeting summaries and distribute them to meeting participants
- H. Summarize the process for developing CATs for the Resiliency Strategy Document

Weston & Sampson will support the locality in convening, coordinating, and facilitating the Community Action Team (CAT). The consultant team will propose a schedule and workplan for how best to involve this team in the development of the local Resilience Strategy. The CAT will be tied in at crucial points such as Vision and Goal Setting, Review of the Vulnerability Assessment, and Identification and Prioritization of Actions. The consultant team proposes that several of the times that the CAT convene are integrated with planned community engagement events for the project. This will provide an opportunity for CAT members to interact with residents and stakeholders and will help avoid redundancy in events to respect the time commitment of the CAT and the public.

Weston & Sampson proposes the following meetings or engagement with the CAT:

- CAT Meeting 1: Virtual Meet & Greet/Project Kick-off Meeting (CAT)

- CAT Engagement Activity 1: Survey – Critical and Natural Resource Assets to include in the Vulnerability Assessment
- CAT Meeting 2: Virtual Pre-Meeting prior to Community Gathering for Vision and Goal Setting Community Gathering Process (CAT and Public See Step 4A, *Community Engagement and Events*)
- CAT Meeting 3: In-Person Pre-Meeting prior to Action Identification Interactive Community Workshop to Identify Actions (CAT and Public See Step 4A, *Community Engagement and Events*)
- CAT Engagement Activity 2: CAT review and comment on the action list and prioritization for the Resilience Strategy
- CAT Engagement 3: CAT participates in In-Person Pop-Up Tabling Event Displaying to Celebrate and Present Final Resilience Strategy (CAT and Public See Step 4A, *Community Engagement and Events*)
- CAT Meeting 4 (Optional): Present final Resilience Strategy.

The consultant team also proposes that key deliverables be digitally shared with the CAT so that they may review them. These deliverables include the draft vulnerability assessment and draft priority action list. Weston & Sampson will incorporate appropriate comments with the direction and consent of the locality.

Deliverables: CAT schedule and workplan, PDF of kick-off meeting materials, responses to comments from CAT on vulnerability assessment and priority action list. *Other deliverables related to CAT involvement are detailed under Step 4 – Community Engagement Strategy.*

➤ **Step 2: Review Existing Local Plans & Efforts**

Draw from existing resources and augment them as necessary to fulfill the requirements of this program. Previously completed work may count as credit towards completion of program requirements.

- A. Review existing plans, ordinances, policies, and programs
- B. Develop an inventory of relevant resources
- C. Compile information on critical assets, natural resources, social vulnerability, risk assessments, and resiliency-related projects
- D. Review the communities' current Hazard Mitigation Plan for relevant data
- E. Identify and document additional data and resources necessary to complete the community's Risk and Vulnerability Assessment

Deliverables: Inventory of local and regional plans related to development of the Resilience Strategy (Items A,B), data call/request for missing information (Item E), summarized findings

document organized by the following sections critical assets, natural resources, social vulnerability, risk assessments, and resiliency-related projects (no more than 5 page summary total) (Item C).

➤ **Step 3: Set Vision and Goals**

Develop a community-specific vision and goals for this program to ensure these values and priorities are considered during the entirety of the process.

- A. Review Community Plans and Hazard Mitigation Plan for Resiliency Vision and Goal statements
- B. Identify example Resiliency Vision and Goal statements
- C. Develop Community-Specific Visions and Goals with CATs

Deliverables: List of relevant vision and goal statements from other local or regional planning documents (Item A), up to five compiled example vision and goal statements from previous Phase 1 and 2 of the RCCP (Item B), 1-page summary of vision and goals for Elizabeth City RCCP resilience strategy informed by community and CAT engagement (Item C).

Assumptions:

➤ **Step 4: Develop a Community Engagement Strategy**

Develop a strategy for engaging key community stakeholders and the public during the risk and vulnerability assessment and program development process.

- A. Develop a Community Engagement Strategy
- B. Identify audiences/stakeholders, including vulnerable populations
- C. Develop a community engagement schedule
- D. Identify tools, techniques, and strategies for informing and engaging the communities, including a targeted approach for reaching vulnerable populations.

Deliverables: Document containing community engagement strategy/workplan (Item A), target audiences (Item B), and schedule (Item C). List of "equitable engagement" modifiers that will be used to reach harder to reach and priority populations (Item D).

Assumptions: This Step does not include deliverables for actual engagement events. Weston & Sampson added in a "Step 4A" which includes proposed events and "Step 4B" for project promotion.

➤ **Step 4A: Community Engagement and Events**

A. Vision and Goal Setting Community Gathering

The consultant team (Weston & Sampson and Berkley Group) will support the locality in hosting a community gathering to develop a vision and goals for the Resilience Strategy. The consultant team proposes using interactive tools like

Slido and Google Jamboard that have polling features and drawing or mark-up features that can be used on maps or images.

B. Action Identification Interactive Workshop

The consultant team (Weston & Sampson and Berkley Group) will host a workshop with residents and stakeholders to develop actions for the Resilience Strategy. This workshop will encourage participants to think about barriers and opportunities to preparing for climate impacts.

C. Pop-Up Tabling Event Displaying Final Resilience Strategy

After the consultant team, locality, and CAT finalize development of the Resilience Strategy, the team proposes hosting a pop-up tabling event at a popular location or pre-planned community event. This is a successful way to "meet residents where they are at". The consultant team will develop posters and other graphical materials that stakeholders can read through to see the results of the process.

Deliverables: PDF of meeting materials from Vision and Goal Setting Community Gathering and list of community vision and goals, PDF of actions developed during virtual workshop, photos from pop-up tabling event.

➤ **Step 4B: Project Promotion**

A. Social Media Posts and Website Content

Weston & Sampson will develop (3) social media posts for the locality's social media platforms with project updates and develop (3) website updates for the locality's municipal website, including a short paragraph summary and graphic from the project.

B. ArcGIS Storymap (optional item if cost allows)

Weston & Sampson will develop an ArcGIS Storymap that presents the Resilience Strategy in a digital format that the locality can disseminate easily to residents and stakeholders. The ArcGIS Storymap will include the online GIS map required by the RCCP as a deliverable.

Deliverables: JPEG of (3) social media posts, (3) PDFs of website update content.

➤ **Step 5: Map Critical Assets and Natural Infrastructure**

Map the natural infrastructure and critical assets selected by Community Action Teams to include in the risk assessment.

A. Develop draft mapping of critical assets and natural infrastructure using ArcGIS (including an ArcGIS online map per RCCP Handbook guidance)

B. Coordinate with CATs to select critical assets and natural infrastructure to

include in the Risk and Vulnerability Assessment

Weston & Sampson proposes developing a simple online survey to disseminate to the CAT to develop a list of natural infrastructure and critical assets to include in the risk assessment, in addition to assets identified in the review of existing plans and documents (Item B). Weston & Sampson will develop a draft map of these critical assets, made available online (Item A). The draft map will be shared with the CAT for their review (Item B).

Deliverables: Google Forms Survey for CAT, draft ArcGIS map in PDF format and online.

➤ **Step 6:** *Conduct a Risk and Vulnerability Assessment*

- A. Build upon existing work to complete a qualitative and quantitative risk assessment, with involvement from the Community Action Team and the public.
- B. Identify and review mapping tools available for mapping various assets.
- C. Identify and Map the Hazards (e.g., flooding, storm surge, other locally relevant hazards)
 1. Add the critical assets and natural infrastructure
 2. Map the projected sea level rise
 3. Map the geographic extent of the hazards by extracting from the Hazard Mitigation Plan(s) or creating new maps with updated data
- D. Assess Vulnerability
 1. Build upon the CDC's Social Vulnerability Index in the Hazard Mitigation Plan by ground-truthing data and adding community knowledge
 2. Compile the CDC Social Vulnerability Index and/or create new maps
 3. Consider the vulnerability index thresholds for what is considered low, medium, and high
 4. Develop a vulnerability index to measure exposure, sensitivity, and adaptive capacity for critical assets and natural infrastructure
- E. Estimate Risk
 1. Work with the CATs to determine what levels of risk call for actions
 2. Using available data, quantify risk for critical assets and estimate the cost of damages for selected hazard scenarios
 3. Expand the Hazard Mitigation Plan(s) with additional critical assets and natural infrastructure and current economic data
 4. Review locations of vulnerable populations that may need targeted assistance and potential clusters that allow for neighborhood-scale strategies
- F. Conduct a Public Open House to engage the communities during Phase 1

Deliverables: Map of climate hazards overlaid with critical assets and natural

infrastructure, vulnerability index refined for locality, and estimated risk assessment output.

Phase 2: Planning, Project Identification, and Prioritization

In Phase 2, the Vendor will work with the Towns, CAT, and community members to identify, plan, and prioritize a combination of policy, nonstructural, structural, and hybrid actions, including the use of natural and nature-based solutions (NNBS), organized within a project portfolio. Previously identified as well as new, innovative solutions should be explored and included. Work that has recently been completed by the Towns or Counties does not need to be repeated. Developing this portfolio involves the following key steps:

➤ *Step 1: Identify a Suite of Potential Solutions*

Each community should find the right mix of structural (infrastructure) and nonstructural (policy-related) approaches, including nature-based solutions, to proactively address vulnerabilities. The team will compile these options into a resilience project portfolio.

- A. Review the communities' plans and other local sources for previously identified projects
- B. Meet with the CATs to brainstorm and identify a suite of potential solutions
- C. Capture a suite of innovative solutions that can be used to apply for funding or self-funding
- D. Link various strategies to the Phase I Risk Assessment with those being most vulnerable or most at risk
- E. Engage with the CATs to further define the solutions
- F. Develop a portfolio of resiliency projects and actions

Deliverables: Draft action list for review by the CAT, finalized action list.

➤ *Step 2: Consolidate and Prioritize Projects*

After brainstorming potential adaptation strategies with the community, the team will evaluate and prioritize actions. To do so, complete the following steps:

- A. Evaluate strategies and their feasibility (STAPLEE or other method)
- B. Conduct an informal cost-benefit analysis to review proposed adaptation actions
- C. Describe strategies
- D. Conduct a Public Open House to discuss strategies and priorities
- E. Narrow down potential actions and select priority actions
- F. Identify at least five (5) priority projects per community, including at least one (1) NNBS project
- G. Organize information for each project in the portfolio using the template provided
- H. Include a location map or aerial photo depicting each project site

Deliverables: High-level cost benefit analysis, prioritized action list, project portfolio in template provided by RCCP, map graphic of project locations.

A. RCCP Specifications for GIS.

GIS Data:

GIS data shall be provided in map package format. A Map Package (.mpk) contains a map document (.mxd) and the data referenced by the layers it contains, packaged into one portable file. See Esri's "[Creating a map package](#)" for guidance on creating and sharing a map package. Products must be referenced to the North Carolina State Plane North American Datum 83 US Survey Foot, to include Federal Geographic Data Committee (FGDC) compliant metadata.

One digital copy on USB Flash drive of the work called for in the contract shall be provided for review at the end of the contract period. The digital version shall be labeled with software and version. Each plan, map, and drawing shall be provided as a single digital file. Acceptable digital formats for image files include .gif, .jpg, .bmp, and .tif. Acceptable digital formats for document files include .doc, .docx, .txt, .xls, .xlsx, .ppt, .pptx, and .pdf. CAD or AutoCAD drawings (.dwf, .dxf, and other CAD formats) are not acceptable and should be converted to .pdf for submission.

Reporting

The deliverables outlined above will be reviewed by both parties prior to their submission to the NC Division of Coastal Management. Afterward, DCM staff will review all deliverables to ensure that the program requirements have been met and confer with the vendor if any additional information is required or if any changes are necessary.

(Record any additional reporting or communication agreements between the partners who will evaluate effectiveness and adherence to the agreement and when the evaluation will happen).

Funding

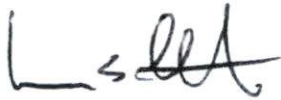
This MOU is not a commitment of funds. Rather, it exists only as an agreed understanding of the scope of work outlined by the RCCP.

Duration

This MOU is at-will and may be modified by mutual consent of authorized officials from **Elizabeth City, Weston & Sampson**. This MOU shall become effective upon signature by the authorized officials from **Elizabeth City and Weston & Sampson** and will remain in effect until modified or terminated by any one of the partners by mutual consent. In the absence of mutual agreement by the authorized officials from **Weston & Sampson and Elizabeth City**, this MOU shall end on **September 30, 2024**.

October 4, 2023

Contact Information



Weston & Sampson
Kevin Hutchens
Regional Manager
2052 Energy Drive Apex, NC 27502
919.812.9304

Hutchens.Chip@wseinc.com

E. Kirk Rivers

Mayor

306 E. Colonial Ave.

Elizabeth City, NC 27909

Email: krivers@elizabethcityncgov