

Charleston County
Resilience and Sustainability Advisory Committee (RSAC)
Meeting Minutes
December 12, 2023

ATTENDEES

RSAC: Scott Runyon, Stewart Weinberg, Scott Curtis, Kyle James, Sally Brooks

Absent: Joe Boykin, Doug Jones, Adrian Cain, Jen Jones, and Diamond Curry

County Staff: Arielle Gerstein, Karen Burney-Green, Walter Smalls, Sheetal Verma⁺

Fernleaf: Aashka Patel

SSG: Erica Heath, Amber Nicol, Maggie Calmes

Civix: Jared Genova

CALL TO ORDER

Stewart Weinberg called the Charleston County RSAC meeting to order at 9:33 a.m.

ADMINISTRATIVE OFFICERS' REMARKS

- Approved meeting minutes at 9:31 a.m. from October 26, 2023.
 - Motion to approve introduced by Stewart Weinberg. Motion was approved unanimously.

Topics Discussed

Karen Green updated RSAC on the previous Resilience presentation made during the Charleston County Council Meeting, which gained a positive reception.

Presentations:

- **Fernleaf Presentation**
Aashka Patel
 - Multi-Threat Vulnerability Assessment: many elements have a deep, special focus.
 - One key goal is to develop information with RSAC, the county staff, and the staff workgroup to devise a plan that is actionable.
 - The County-Wide Vulnerability Assessment will be progressing towards Preliminary Strategies and Actions.
 - One significant update is that they are finalizing a plan to involve a small group of community leaders in the project.
 - We are currently in the Vulnerability Assessment Phase and will remain in this stage until February (2024).
 - Vulnerability Assessments:
 - Property-Based Assessments

- Utilizing concepts of vulnerability and risks (with a focus on flooding and wildfires).
 - Extreme Heat Assessment
 - Key Takeaways on Flooding Conditions Evaluated
 - Better flood data now available
 - Multiple sources, varying extents
 - Decision relevance of scenarios will vary.
 - Flooding Assessments (Current & Future)
 - FEMA National Flood Hazard Layer (NFHL)
 - NOAA High Tide Flooding
 - USGS CoSMoS Compound Flooding (New)
 - Woodwell Research Center (NEW)
 - 8 conditions
 - 2 SLR thresholds
 - 4 recurrence intervals
 - All mechanisms of flooding
 - 48 asset-threat individual assessments
 - Assets + Threats + Localized Input = Vulnerability and Risk
 - Assessment results are available in multiple forms.
 - Preliminary Assessment Workshop: Staff Work Group
 - Become familiar with information gleaned by assessments.
 - Discuss the consequences and impact of the selected vulnerabilities.
 - 3 stations provided for guided conversations:
 - Theme 1: 20-Year Recurrence Interval Flooding
 - Theme 2: County-owned Critical Services & Infrastructure
 - Theme 3: Residential Vulnerability
 - Acceladapt is a web-based platform that provides all of this information in an interactive way that proved successful in utility during the Work Group.
 - There will be a training on this tool for the County staff next year.
- **Fernleaf Community Engagement Update**
Aashka Patel
- Guiding Principles
 - Meaningful Community Involvement in Resilience Planning
 - Community Involvement Approach
 - Who: 4-6 Community Leaders
 - How: 4 hands-on workshops as a focus group
 - Why: Get early feedback to align assessment with lived experiences
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- **SSG/Civix Sustainability Update: Climate Action Priorities + Revised Criteria/Scoring**
Jared Genova
- Prioritization Criteria + Considerations
 - County Authority (1)
 - Staffing + Capacity (2)
 - **Potential GHG Reduction Impact (3)**
 - *Point of entry for all the actions.*

- County Readiness (4)
 - Community Readiness (5)
 - County Policies + Programs (6)
 - Cost (7)
 - Existing Resources (8)
 - Funding Opportunities (9)
 - Co-Benefits (10)
 - Equity (11)
 - Co-Benefits and Equity are of particular focus based on their importance in delivering any kind of government program. These topics will be discussed further in the coming weeks and months to develop a greater elaboration for the draft plan.
 - SECAT Feedback: Scoring prioritization was the focus of the roundtable discussion.
 - Jared reminded everyone that all of the information is available in the RSAC Workbook, and any questions and suggestions can be added there as well for review.
- **Sustainability Engagement Update**
Arielle Gerstein
- 320 responses to the questionnaire
 - Current community engagement scheduled to close on December 15, 2023.
 - There will be more engagement in the future for input on the plan once a draft has been completed.
 - The focus, at this time, is to give council the information they need to make an informed decision on the plan.
- **Administrative Update**
Arielle Gerstein
- Jen Jones will be moving to California and will no longer be serving on the RSAC; council will have to appoint a new member, but RSAC will have to wait until January 30th.
- **Fernleaf Resilience Presentation Questions:**
- Scott Curtis: What's the special resolution on these models?
 - Aashka: It varies, but it is a gridded data set with depth information. The spatial resolution is on aspect, and combined with USGS, there is nested modeling for different mechanisms of flooding, which has its own level of resolution and level of assumptions. (Aashka will provide an update with more information on the individual sets of data and their respective spatial resolution).
 - Stewart: Are specific properties identified in your report?
 - Aashka explained that they stick to the census block group scale patterns of vulnerability that the Acceladapt tool would allow county staff members to focus on property level evaluations. Although they assess every property, they try to avoid identifying privately owned properties in the report, which also helps in managing the length of the report being that there are 150,000 or so properties.
 - Stewart mentioned that new home buyers are encouraged to review this type of data, and if there is newer data, the buyer may want to see those figures as well. This could ultimately impact residential prices and taxes.
 - Scott asked if pluvial flooding is the wildcard in the assessments as we don't know as much about rainfall flooding as we do riverine and storm surge flooding. He shared

that this corresponds to the conversation on climate change as we're likely to see increased rainfall with it, which may lead to increased flooding in the interior areas of the County. He also appreciated the inclusion of rising sea levels in the models.

- Aashka shared that the Woodwell Research Center incorporated slightly higher rainfall in the assumptions based on the median value gleaned from more intense flooding. USGS, in contrast, takes into account changes in rainfall intensity as well as different atmospheric factors. They use global models and adapt them to the county level. Fernleaf will be providing USGS with more information, and they will eventually provide the level of rainfall changes that are depicted in their future scenarios.
- Kyle asked if Aceladapt allows them to model out adaptation strategies.
- Aashka provided that Aceladapt doesn't quite work to that capacity. It's more of a desktop-based exercise. They can take information, for example, from the City of Charleston where strategies led to decreased flooding and translate them to reduced vulnerability percentages that can be used in the exercise, but basically that is the extent of Aceladapt at this point.
- Kyle asked if Fernleaf will be including any data sets pertaining to road and connectivity along with their property-based assessments or if they have already done so.
- Aashka shared that they have already done this analysis. They used open street map data sets for roads, which has a few standardized attributes that made it easy to conduct a connectivity analysis. With open source data, the connectivity analysis shows roads that are exposed and their exposure for each of the eight flooding conditions that have been assessed separately. Fire stations were used as a proxy for connectivity and accessibility of emergency services to two different properties, and there was an evaluation of pockets or neighborhoods that are isolated regardless of whether they're exposed or not. Through a GIS analysis, they can determine neighborhoods or areas that could become inaccessible to emergency services. These are the different types of data sets and information that were taken into account in the connectivity analysis. Aashka said she could discuss this more in the next meeting or update.
- Kyle made a recommendation for road closure data to also be reviewed, which shows roads being closed specifically for flooding or people who are trapped in flooding incidents. He clarified that this is 911 Center Charleston County Consolidated dispatch data. He shared that the same information is being reviewed in their long-range transportation plan.
- Aashka and Karen both agreed that this could be valuable information and will work on connecting with them.
- DCA Smalls suggested Public Works information as well.
- Karen agreed to look into this as well. She explained there was a project being worked on with Waze through flood mapping to show this type of information; she's going to pick back up on the project in the future.

- Fernleaf Community Engagement Update Questions:

- Stewart asked if the hands-on meetings will be held in the actual communities themselves.

- Karen explained that the goal is ideally to have the meetings/conversations within the respective communities. A meeting is expected to be held with Community Lattice to understand the full scope.
- Aashka added that the community leaders will be spread out across communities so that will be a consideration as well as they try to spread out the burden of travel and encourage more participation in this way.
- Karen will collect any further questions from members of the committee to discuss with Aashka and Community Lattice and will provide updates at a future meeting.

- SSG/Civix Sustainability Questions:

- Stewart suggested that in the future that equity be listed higher from 11 to a higher number as the current arrangement makes it appear less important.
- Jared agreed to this change as scoring/weight of the different categories will be up for discussion and worked on in the future.
- Jared posed the following questions to the RSAC Committee:
 - How can we incorporate Charleston County-specific, local equity priorities into potential actions?
 - What other considerations should we keep in mind while narrowing down criteria and potential actions?
- Stewart shared that weatherization is an important topic along with demonstrations of how much money could be saved through these measures. He also thinks addressing homes in marginalized areas that are repeatedly flooded and finding ways to alleviate the flooding is critical, which links back to resilience and probably stormwater management.
- Jared believed these were great points as it could highlight connections between resilience and sustainability measures and how they can support each other, especially when considering ways to alleviate flooding.
- Kyle recommended that SSG/Civix lean on the feedback from those communities specifically rather than guessing at what is needed. He suggested that it would be better to ask them what they need and then provide options.
- Jared shared that over the past two months, they have had more than 300 survey responses, and they're looking forward to reviewing them to make sure they have a solid understanding of the feedback for their actions. He also encouraged everyone to review the workbook and respond to the prompts as the documented feedback would be very helpful.
- Kyle reiterated a comment from the last meeting, which he has included in the workbook. He suggested that the cost and effectiveness be highlighted through an initial, multilevel evaluation screening. He also recommended that they consider using a more discrete scale instead of the current categorization approach, which may falsely bias a lot of projects that are on the edge. He did acknowledge that a lot of the strategies will cover big scales of impacts and costs.
- Jared noted these suggestions.

- Closing Questions:

- Kyle informed Erica that one of the charts in the slide show hadn't been corrected, but Amber did correct it in the Google Doc.

- Eric shared that she would share this with her team, but that the workbook is the official record.
- Kyle asked how important it might be at this time to replace Jen Jones and if they would be able to/ need to meet the quorum.
- Karen and Arielle confirmed that RSAC would still be able to meet the quorum despite the vacancy based on the number of other members in the group.

RECOMMENDATIONS MADE

Arielle suggested that future meetings be extended from one hour to an hour and a half (9:30 a.m. – 11:00 a.m.) to accommodate the amount of information that must be discussed. She also recommended that additional meetings, which she would schedule, be held as they work towards preparing information for council and develop drafts of the intended plan.

Karen seconded these recommendations, and a group consensus was.

Next Meeting

The next meeting is scheduled for February 2024.

CHAIR'S REMARKS

No remarks were offered as this time.

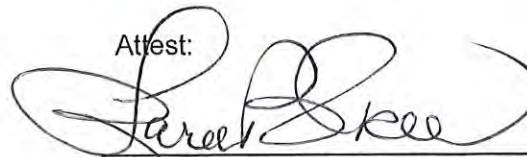
ADJOURNMENT

The Chair, Stewart Weinberg, adjourned the meeting at 10:43a.m.

Sheetal Verma[†]

Ratified by the Charleston County
Resilience and Sustainability Advisory Committee
this 12th day of December, 2023.


Chair

Attest:

Administrative Officer - Resilience


Administrative Officer - Sustainability