Keeping Drought Plans Relevant and Useful:

South Carolina Drought Tabletop Exercises

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Motivation

South Carolina Emergency Management Division (EMD) does tabletop planning exercises for different hazards, such as hurricanes.

So, why not for drought?



Purpose

2017

- 1. Identify and understand the strengths and breaking points of the SC drought response Act, supporting regulations, and SC Emergency Response Plan Drought Annex, and local drought plans and procedures.
- 2. Improve awareness of local, state, and federal players in SC drought response
- 3. Identify key mission areas for each State Emergency Support Functions
- 4. Collect ideas and strategies for future exercises

2019

Enhance south Carolina's drought response and preparedness and State's capacity to address water shortage emergencies to drought by:

- 1. Simulating the SC drought monitoring and response process.
- 2. Identifying gaps in existing processes and prioritize follow-up actions.
- 3. Increase awareness of participants' roles and responsibilities for drought response and planning within their agencies and organizations.



Participants:

2017

80 participants40 organizations represented

2019

92 participants48 organizations represented



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Methods

- Create a plausible, multiyear drought that gradually intensified that affected 1. multiple sectors.
- Include multiple time points to discuss how impacts evolve during this 2. drought, what sectors are affected when, when different sectors respond, and how management may shift
- 3. Have this example drought reach such an extreme point that the SC Emergency Operations Plan is activated, so that SC EMD becomes involved



- Moderate Drought Statewide, July-August 2021 1.
- Severe Drought Statewide, December 2021 2.
- 3. Extreme Drought Statewide, July-August 2022
- Extreme Drought Intensifies, January 2023 4.
- 5. Activation of the Emergency Operations Plan, February-April 2023

Methods:

Focus during each time point in the drought:

- 1. Communication
- 2. Organizational Resources and Capacity



All Time Points and Drought Stages What, and how, is your organization communicating with the public? What would help your organization more effectively respond to and prepare for drought? Time Point 1: Moderate Drought Statewide (July-August 2021) Does your organization have a plan for monitoring, responding to, and preparing for drought? Are drought response plans and ordinances up-to-date and current? Time Point 2: Severe Drought Statewide (December 2021) How do inconsistencies at different levels (state, local, or basin) affect response and • communications? Are local ordinances and plans consistent with other drought plans in neighboring areas? Time Point 3: Extreme Drought Statewide (July-August 2022) How do inconsistencies at different levels (state, local, or basin) affect response and communications? Are local ordinances and plans consistent with other drought plans in neighboring areas? ٠ As the DRC begins to evaluate conditions to determine if State action is needed, are existing plans and procedures effectively guiding the transition from local to state-level response? Time Point 4: Extreme Drought Intensified (January 2023) What resources, information, or additional capacity does the DRC need to assess nonessential water use and curtail certain uses? How will appeals to the Administrative Law Judge affect the timeliness of conservation and ٠ response efforts?

• When exactly, and for how long, will the Emergency Operations Plan and State Emergency Response Team (SERT) be activated?

Time Point 5: Emergency Operations Plan is Activated (February-April 2023)

- Are the necessary resources, expertise, and capacity available?
- What tasks or actions are not listed in the EOP, but should be included?
- How will South Carolina coordinate with other states?

Outcomes: 2017

Key Needs and Action Items Identified

1. Plans and Procedures

Identified needs: Better coordinated and timely drought response

Proposed Action Items:

- Fill Drought Response Committee Vacancies
- Review and update state and local plans and ordinances

2. <u>Communication</u>

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Identified needs: Improved information sharing across agencies and with the public

Proposed Action Items:

- Formalize processes to promote information sharing
- Develop clear, consistent water conservation messaging for different stages of drought

3. Education and Awareness

Identified needs: Greater agency familiarity with Drought Response Program and their role with response and mitigation

Proposed Action Items:

- Develop education and training modules for emergency managers and other sectors
- Conduct future exercises at the regional and watershed level

4. Data & Information

Identified needs: more information to build common understanding of drought risks

Proposed Action Items:

• Identify and develop information that could enhance drought response and planning

Outcomes into Action: 2017

South Carolina Drought SC State Climate Office



Conditions Resources Impacts Committee Planning

Drought in South Carolina



Current Status



Latest Drought Committee Meeting: 07-13-2022

Drought Conditions >>> Find out more about current drought conditions, how drought status is determined in South Carolina, and view archived drought condition reports.

The Drought Response Committee is continuously monitoring conditions across the state. The committee will reconvene in August to reevaluate the county-level drought classifications.

Drought Resources

Learn about drought, drought types, ways to measure drought in a climatological context and how South Carolina monitors and assesses drought.

Drought Impacts

Drought impacts spread to all water-sensitive sectors. Learn more about how droughts can affect communities and ecosystems and what can be done to reduce these impacts.



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Outcomes: 2019

Key Recommendations

- 1. Drought Response Committee Representation and involvement
 - Fill vacancies and increase communication between them and those they represent
- 2. Plans and Procedures
 - Update and improve both the state- and local-level plans and procedures
- 3. Data and Information
 - Increase information collection on drought impacts and associated costs, and develop better ways to monitor drought conditions and water supplies
- 4. Communication
 - Continue to use clear communication through existing channels while also finding new channels of communication
- 5. Education and Awareness
 - Collect and publicize "lessons learned" about drought response from different water utilities across the state



Outcomes into Action: 2019

Key Recommendation: Drought response of water utilities across the state

Local Drought Planning Guide (in development)

Purpose:

- Fulfill the recommendation from above
- Provide updated guidance to local water suppliers in our state when creating or updating their plan

Sections:

- Risk assessment
- Monitoring and triggers
- Creating the plan

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- Communication and Partnerships
- Mitigation and Management strategies

Different case studies of water suppliers around the state discuss their successes with these sections.

Case studies are diverse, in terms of geography and water system size.



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