

## WHAT

80 participants met to review the plans and procedures that govern state-, basin-, and local-level responses to drought and water shortages.

## WHY

1) Identify and understand the strengths and breaking points in the [SC Drought Response Act](#), [SC Drought Regulations](#), [SC Emergency Response Plan Drought Annex](#), and local drought plans and procedures

2) Improve awareness of local, state, and federal players in South Carolina's drought response

3) Identify key mission areas for each State Emergency Support Function

4) Collect ideas and strategies for future exercises

## WHEN

September 27, 2017

## WHERE

South Carolina Emergency Operations Center  
West Columbia, SC

## ORGANIZERS



**SCEMD**



**CISA**  
A NOAA RIBA TEAM

Additional information and materials are available on the [CISA](#) and [SC DNR State Climatology Office](#) websites.

Acknowledgement: CISA's funding and support for the exercise came from the National Oceanic and Atmospheric Administration (NOAA) [Climate Program Office](#).

# SOUTH CAROLINA DROUGHT & WATER SHORTAGE TABLETOP EXERCISE

## About South Carolina Drought Response

Drought is a complex natural hazard that can cover large territories and last for months or years. Drought can have severe effects on water resources and water-dependent sectors. The South Carolina State Climatology Office, Department of Natural Resources, and Drought Response Committee routinely monitor conditions, evaluate impacts, and provide information to the public so that water managers and users can respond effectively.

The SC Drought Response Act and Regulations guide state actions during different stages of drought. The Drought Annex of the State's Emergency Operations Plan can be activated when drought threatens public health, safety, or welfare. The tabletop exercise allowed different agencies and water managers to walk through and discuss the effectiveness of drought response plans and procedures.



### KEY NEEDS & ACTION ITEMS IDENTIFIED AT THE EXERCISE

#### 1) PLANS AND PROCEDURES

**Identified Need:** Better coordinated and timely drought response

**Proposed Action Items:**

- » Fill Drought Response Committee vacancies
- » Review and update state and local plans and ordinances, including the Drought Response Act, Drought Regulations, and Drought Annex of the Emergency Operations Plan

#### 2) COMMUNICATIONS

**Identified Need:** Improved information sharing across agencies and with the public

**Proposed Action Items:**

- » Formalize processes to promote information sharing, enhance awareness of regional and local issues, and facilitate better working relationships across different agencies
- » Develop clear, consistent water conservation messaging for different stages of drought

#### 3) EDUCATION & AWARENESS

**Identified Need:** Greater agency familiarity with the Drought Response Program and their role in drought response and mitigation

**Proposed Action Items:**

- » Develop education and training modules for Emergency Managers and others to learn more about drought
- » Conduct future exercises at the regional and watershed level

#### 4) DATA & INFORMATION

**Identified Need:** More information to build common understanding of drought risks

**Proposed Action Items:**

- » Identify and develop information that could enhance drought response and planning, such as - rainfall, weather and climate monitoring tools; water system intakes and interconnections; sector-specific impacts; resources for response and mitigation

## What did participants learn?

*"It is important that we understand the consequences of drought so we can interface as effectively as possible with our core partners in the state."*

*"One of the biggest benefits of the exercise was to get this diverse of a group in one room to discuss the Drought Response Plan."*

*"More focus needs to be put on how [the public] should behave when drought occurs, and how we message the desired behavior."*



**About the Exercise:** Participants walked through a series of drought scenarios, rehearsing actions that occur at increasingly severe stages of drought and the activation of the Emergency Operations Plan.

CONDITIONS & IMPACTS	RESPONSE
<b>MODERATE DROUGHT</b>	
<ul style="list-style-type: none"> <li>» Declining water levels</li> <li>» Withering crops, need for irrigation increases</li> </ul>	<ul style="list-style-type: none"> <li>» State agencies, local water systems, and reservoir managers monitor conditions</li> <li>» Water conservation measures may be requested</li> </ul>
<b>SEVERE DROUGHT</b>	
<ul style="list-style-type: none"> <li>» Surface and ground water levels continue to drop</li> <li>» Increasing number of wildfires and risks</li> <li>» Poor grazing and agricultural conditions</li> </ul>	<ul style="list-style-type: none"> <li>» State agencies increase monitoring and communications</li> <li>» Affected sectors (agriculture, forestry, industry) may request assistance to reduce or manage impacts</li> <li>» Water systems may require water conservation</li> </ul>
<b>EXTREME DROUGHT</b>	
<ul style="list-style-type: none"> <li>» Widespread impacts to agriculture, forestry, water systems, and water-dependent businesses</li> </ul>	<ul style="list-style-type: none"> <li>» South Carolina Forestry Commission may request that the Governor activate the National Guard to assist with fire suppression</li> <li>» Depending on local response, Governor may issue a press release requesting voluntary conservation</li> <li>» More water systems require water conservation</li> </ul>
<b>EXTREME DROUGHT INTENSIFIED</b>	
<ul style="list-style-type: none"> <li>» Safety, health, and welfare are threatened</li> </ul>	<ul style="list-style-type: none"> <li>» Drought Response Committee recommends State measures, to include evaluation of non-essential water uses to curtail and request for public statements from the Governor's office regarding voluntary and/or mandatory water restrictions</li> </ul>
<b>EMERGENCY OPERATIONS</b>	
<ul style="list-style-type: none"> <li>» Water systems and citizens are without, or losing, access to water</li> </ul>	<ul style="list-style-type: none"> <li>» The State Emergency Response Team (SERT) is activated, to lead state-level response to the water shortage emergency</li> </ul>



## Attendee Organizations

- » American Red Cross
- » Barnwell County
- » Beaufort-Jasper Water & Sewer Authority
- » Belton Honea Path Water Authority
- » Carolinas Integrated Sciences & Assessments
- » Charleston Water System
- » City of Rock Hill
- » Domtar Paper
- » Duke Energy
- » Friends of the Edisto
- » Gilbert-Summit Rural Water District
- » Grand Strand Water & Sewer Authority
- » Greenville Water
- » Greer Commission of Public Works
- » Joint Municipal Water & Sewer Commission
- » Mount Pleasant Waterworks
- » National Weather Service, Charleston
- » National Weather Service, Columbia
- » USDA Natural Resource Conservation Service
- » Office of Governor Henry McMaster
- » Orangeburg Department of Public Works
- » Powdersville Water
- » Santee Cooper
- » SC Department of Agriculture
- » SC Department of Natural Resources
- » SC Department of Public Safety
- » SC Department of Social Services
- » SC Department of Transportation
- » SC Department of Health & Environmental Control
- » SC Emergency Management Division
- » SC Forestry Commission
- » SC National Guard
- » SC Office of Regulatory Staff
- » SC Rural Water Association
- » SC Water Resources Center at Clemson University
- » SJWD Water District
- » Spartanburg Water
- » State Fire Marshal's Office
- » Town of Batesburg-Leesville
- » Twilley, Fondren & Associates, LLC
- » US Army Corps of Engineers