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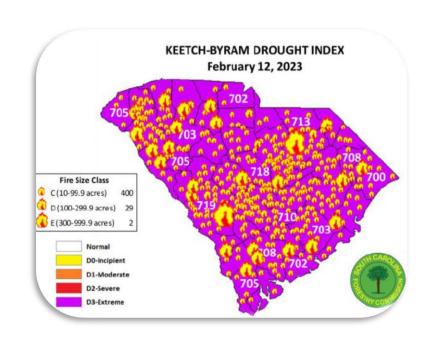
Drought / Water Shortage Tabletop Exercise (9/27/17)



Gathered 80 participants from 40 organizations

Purpose: Review plans and procedures that govern state-, basin-, and local-level responses to drought and water shortages







- ☐ Identified needs for improved information-sharing across agencies and clear communications to the public.
- Need better methods to deliver clear and consistent messages before, during and after drought.



Home Page

- 5 Main Tabs:
 - Conditions
 - Resources
 - Impacts
 - Committee
 - Planning

Drought Resources

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



Pinnacle Mountain Fire in fall of 2016 resulted in a loss of 10,623 acres. Image Credit: U.S. Army National Guard Staff Sgt. Roberto Di Giovine via Flickr CC BY 2.0

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.



Low lake levels impact energy production, recreation, and wildlife. Image Credit: Mike Burton via Flickr CC BY-ND 2.0

Drought Response Committee

The SC Drought Response Committee issues drought status updates and may recommend water use restrictions when conditions escalate to severe or extreme drought.



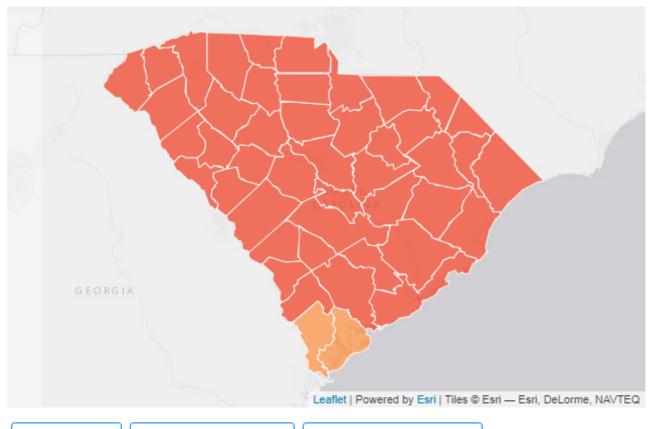
The SC Drought Response Committee's role is to ensure safety and well-being of South Carolinians during drought conditions. Image Credit: Janet Tarbox via

<u>Legislation and Plans</u>

South Carolina's drought response encompasses multiple documents, legislation, and plans. Learn more about the State's drought response program and procedures to manage drought.



South Carolina Drought and Water Shortage Tabletop Exercise at the South Carolina Emergency Center on September 27, 2017, in West Columbia, SC.



Drought Status Report 🔀

Table View 🖽

Save Map as Image

Archived Status: 09-05-2007 ©

Normal

Incipient

Moderate

Severe

Last Drought Response Meeting: 05-29-2018

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Incipient

O

Moderate

J

44

Extreme

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Number of Counties in Each Category

Archived Drought Status





Other Drought Indicators

There are numerous sources of information for assessing drought for different environmental factors and industries.

Precipitation

Percent of Normal Rainfall (NOAA) ②

Last 30 Days Last 60 Days

- <u>Current Precipitation Accumulation</u> SE Regional Climate Center
- Current Temperature Maps SE Regional Climate Center
- Current Soil Moisture Percentile Ranking

Water Resources

- South Carolina Groundwater Data Monitoring SCDNR
- South Carolina Groundwater Network USGS
- Real-Time Streamflow Conditions USGS
- Savannah River Lake Levels USACE
- Duration Graphs for Lakes and Streams USGS

Forestry

- Current Fire Weather SC Forestry Commission
- Wildland Fire Assessment System USDA Forest Service
- National Keethc-Byram Soil Moisture Drought Index USDA Forest Service
- Departure from Average Greenness National Interagency Fire Center

Forecasts

- Weather Prediction Center Quantitative Precipitation Forecasts (Day 1 to Day 7)
- Climate Prediction Center Outlooks:

6 to 10 Day Outlooks

8-14 Day Outlooks

US Seasonal Drought Outlook

Three Month Outlook

Water Conservation Adds Up!

SC Drought Resources

- Learn about drought
- Water Conservation Tips and infographics
- Drought Photos from the 2007, and 2011 droughts
- Publications from both the SC St Carolinas Integrated Sciences an Assessments (CISA)
- Other resources from CISA, Nati Drought Monitoring Center (NDI National Integrated Drought Information System (NIDIS), and National Centers for Environmer Information (NIDIS)

SC Drought Photos

- 2011 Drought Image Gallery
- 2008 Drought Image Gallery
- 2007 Drought Image Gallery

2011 Drought Pictures



























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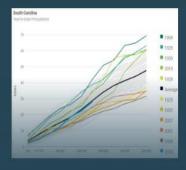


Historical Drought Impacts Timeline

- Highlights some of the major droughts and impacts that South Carolina has experienced in the past 100 years.
- Links to CISA's detailed hydroclimate webpage, "Carolinas Precipitation Patterns and Probabilities: An Atlas of Hydroclimate Extremes"

1930-1935 Agriculture

This prolonged drought diminished soil moisture for several ongoing years. The lack of soil moisture led to decreased crop germination and increased agricultural losses. 1931 and 1933 were record drought years, with the recurrence interval for a returning drought of the same intensity at more than 25 years.



Read More 💌

1925-1927 Agriculture, Water Systems, Business & Industry

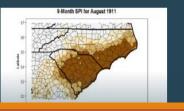
1925 was the most intense drought year on record at the time, with a rainfall deficiency of 18.23 inches. The average annual rainfall for the year 1925 was 36.73 inches, 3.3 inches lower than the previous record from 1911. Every sector from the state was impacted — agriculture struggled, hydroelectric power was limited, and these limits impacted the textile mills and other industry.



Read More 💌

1910-1911 *Water Systems*

Drought conditions prevailed in South Carolina from November 1910 – August 1911. May 1911 presented the most intense drought month during this period. Five stations in the extreme southeastern portion of the state had no



State Agency Members

Committee Member Agency Mr. Ken Rentiers SCDNR, LWC Divisio		VC Division		Local
				ural ders to issue nent.
SC Emergency Management Division			3	
SCDHEC		E	3	
SC Forestry Commission			3	
SC Department of Agriculture			3	es drought,
Ronald E. Mitchum	Charleston	•		
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	SCDNR, SC Emer Division SCDHEC SC Fores SC Depa	SCDNR, LWC Division SC Emergency Management Division SCDHEC SC Forestry Commission SC Department of Agriculture Ronald E. Mitchum Charleston Marion L. Rizer Colleton	SCDNR, LWC Division SC Emergency Management Division SCDHEC SC Forestry Commission SC Department of Agriculture Ronald E. Mitchum Charleston Marion L. Rizer Colleton	SCDNR, LWC Division SC Emergency Management Division SCDHEC SC Forestry Commission SC Department of Agriculture Ronald E. Mitchum Charleston Marion L. Rizer Colleton

South Carolina Drought Planning

The South Carolina Drought Response Program consists of legislation, regulations, and procedures that establish recommended and required response at moderate, severe, and outroms drought plant phases. The South Carolina Drought Response Act and the



South Carolina Drought and Water Shortage Tabletop Exercise

The SC Drought and Water Shortage Tabletop Exercise took place on September 27, 2017, at the South Carolina Emergency Operations Center in West Columbia, SC. The exercise gathered 80 participants, representing federal and state agencies, public water suppliers, county and municipal governments, industry, consulting companies, and nonprofit organizations. The purpose of the exercise was to review plans and procedures that govern state-, basin-, and local-level responses to drought and water shortages.

- <u>Tabletop Exercise 2-pager</u>
- Tabletop Exercise Final Report
- Altman et al. 2016. Drought and Water Shortages: South Carolina's Response Mechanisms, Vulnerabilities, and Needs. South Carolina Journal of Water Resources 4(1): 57–62.

Drought Planning Documents

- SC Drought Response Act
- SC Drought Response Emergency Operations Plan
- SC Drought Regulations
- SC Model Drought Plan and Ordinance
- SC Surface Water Withdrawal, Permitting Use, and Reporting Act
- SC Surface Water Withdrawal, Permitting, and Reporting Regulations

The <u>South Carolina Drought Response Plan</u> is located in Appendix 10 of the State's Emergency Operations Plan (EOP). The Drought Response Plan describes actions when drought conditions have reached a level of severity beyond the scope of the DRC and local communities. The South Carolina Emergency Management Division (EMD) maintains the EOP and leads multi-agency response to hazard events. Upon an activation of the EOP, EMD and the State Emergency Response Team (SERT) assemble in the South Carolina Emergency Operations Center to coordinate the State's response.

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RISA Team

Site Navigation:

<u>Home</u>

SC Drought Response Committee

Current Drought Conditions

Drought Impacts

Drought Planning

Drought Resources

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CISA is one of NOAA's Regional Integrated Sciences and Assessments teams.





