

Drought Monitoring and Response in South Carolina

Why: To carefully and closely monitor, conserve, and manage the State's water resources in the best interests of all South Carolinians.

Who: Drought Response Committee (DRC) and Department of Natural Resources (SCDNR)- State Climatology Office (SCO)

Statewide members

- Forestry Commission
- Department of Agriculture
- Emergency Management Division
- Department of Health and Environmental Control
- Department of Natural Resources

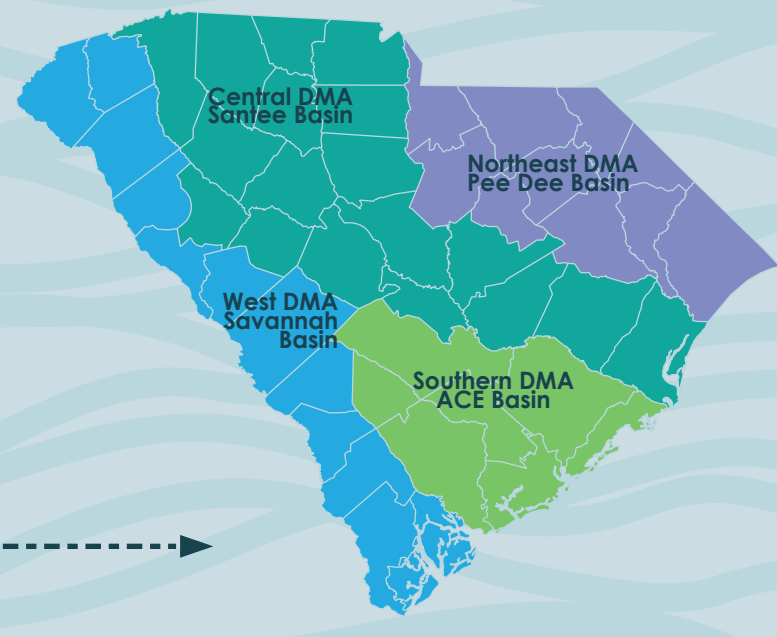
Local members

- Water Utilities
- Local Governments
- Power Generation Facilities
- Soil and Water Conservation Districts

When and Where:

The State Climatology Office routinely monitors climatic conditions in the State.

The Drought Response Committee meets when needed to evaluate conditions and impacts within four Drought Management Areas. (DMA)



How: South Carolina uses multiple indicators and indices to monitor drought and determine drought severity levels.

- Percent of Normal Rainfall**
- Cumulative dryness or wetness compared to long-term averages
 - Crop Moisture Index**
- Short-term (up to 4 weeks) dryness or wetness during the agricultural growing season
 - Palmer Drought Severity Index**
- Prolonged (month, years) abnormally dry or wet conditions
 - Streamflow levels**
 - Lake and reservoir levels**
 - Groundwater levels**
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- Water Resources**
- Keetch-Byram Drought Index**
- Daily measure of forest fire threat
 - US Drought Monitor for SC**
- General areas of drought, labeled by intensity on a weekly basis

Conditions and Response:

Increasingly severe conditions occur as a drought progresses. Each drought level initiates a range of responses.

	Incipient	Moderate	Severe	Extreme
Conditions	<ul style="list-style-type: none"> • Drier than normal • Soil moisture declines • Water demand increases 	<ul style="list-style-type: none"> • Water levels decrease • Crops and plants wither • Irrigation increases 	<ul style="list-style-type: none"> • Water levels continue to drop • Number of wildfires increases • Poor grazing and agricultural conditions 	<ul style="list-style-type: none"> • Widespread impacts to agriculture, forestry, water utilities, and water dependent businesses
Response	<p>Water utilities review drought plans and ordinances.</p>		<p>Water utilities implement drought plans and ordinances. DRC may recommend voluntary or mandatory water conservation.</p>	
	<p><i>As drought conditions and impacts become more severe, response actions increase accordingly.</i></p> <p style="text-align: center;">→</p>		<ul style="list-style-type: none"> • State agencies increase monitoring and communications. • Citizens may see local notices for burn bans, boat ramp closings, and water use restrictions. • The Governor may request voluntary or mandatory water conservation. • The Governor may assist with managing impacts, including requesting disaster declarations by the US Dept. of Agriculture and activating the National Guard to assist with wildfire suppression. 	

- Water systems and citizens are without, or losing access to, water.
- Public safety, health, and welfare are threatened.
- The State Emergency Response Team (SERT) is activated to lead state-level response to the water shortage emergency.

Sources

South Carolina Drought Response Act (2000) Code of Laws of South Carolina, 1976, § 49-23-10 et seq., as amended.

Regulations for the South Carolina Drought Response Act (2002) Code of State Regulations of South Carolina, 2000, § 121-11 et seq., as amended.

SC Drought Response Plan (2017)

To view current drought status and conditions in South Carolina, visit: scdrought.com/current.html



<http://www.scdrought.com>



<http://www.dnr.sc.gov/climate/sco>



<https://www.cisa.sc.edu>