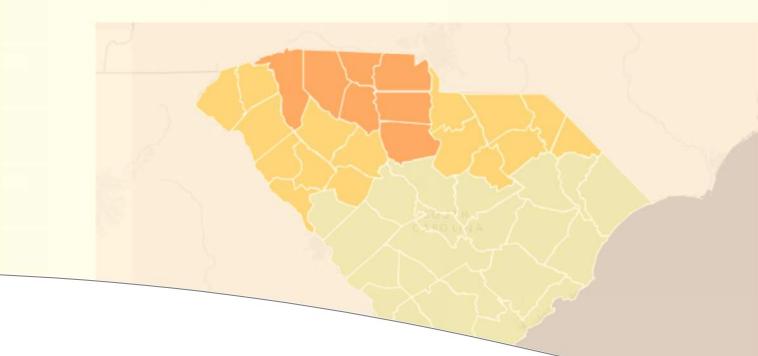
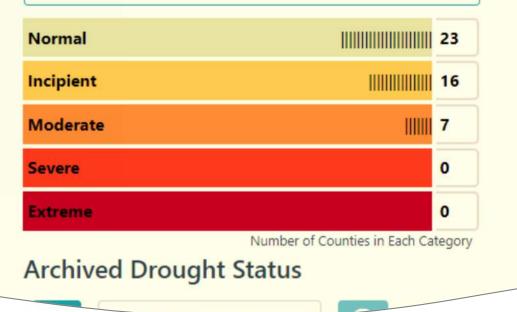
#### **Drought Conditions in South Carolina**



#### Current Status as of 11-30-2023 @

Last Drought Response Meeting: 11-30-2023



### Review of Existing Drought Management Plans

Agenda Item 7

## **Typical Drought Ordinance**

Moderate Drought Phase Goal of 15% Overall Reduction in Water Use

✓ Request voluntary conservation measures

Severe Drought Phase Goal of 20% Overall Reduction in Water Use

 Request more stringent voluntary conservation measures enact some mandatory restrictions

Extreme Drought Phase Goal of 25% Overall Reduction in Water Use

Enact additional mandatory restrictions, impose excessive use rate schedule

### **Common Drought Plan Triggers**

- Aquifer levels dropping below certain thresholds
- Well run-times exceeding certain thresholds for a designated number of days
- Average daily demand above certain thresholds
- Reservoirs below certain thresholds for a designated number of days
- When the Palmer Drought Severity Index reaches a certain thresholds
- Water system storage falls below certain thresholds
- A combination of triggers

#### Summary of Drought Plans in the LSS basins (see handout)

Water Supplier	Year	DMA	Water Source	Drought Indicator / Trigger Types <sup>1</sup>	Alternative Water Supply Agreements	Customers
City of Aiken <sup>5</sup>	2003	West	Surface Water, Spring, and Groundwater - Shiloh Spring and Shaws Creek (Masons Branch Reservoir)	Reservoir Valve 1 or 2 discharge required to maintain flow in Shaws Creek. Aquifer levels falling 5, 10, or 12 feet below historic static level. Average daily use greater than 15.5, 16.5, or 17.5 MGD for 5 consecutive days.	Cooperative Agreement with the City of New Ellenton	16,100 customers
City of Barnwell	2003	West	<b>Groundwater</b> - 5 wells	Aquifer levels less than 5%, 10%, or 15% normal level.	None	2,121 active taps
Bamberg Board of Public Works	2003	Southern	<b>Groundwater</b> - 8 wells	Average daily flow greater than 1.5, 1.75, or 2.0 MGD for 5 consecutive days.	None	1,850 customers
Bath Water and Sewer District	2003	West	<b>Groundwater</b> - 2 wells	Static water level in wells below 25%, 50%, or 75% of normal.	Emergency Assistance Agreements with Valley Public Service Authority and Burnettown Water Works.	300-321 customers
Beech Island Water District	2003	West	<b>Groundwater</b> - 6 wells	Aquifer levels less than 85%, 75%, or 65% of normal.	Sell water to Valley Public Service Authority until such time as they can provide their own.	2,900 customers
Beaufort-Jasper Water & Sewer Authority (BJWSA) - Main System	2003	West	<b>Surface Water and Groundwater</b> - Savannah River and 4 auxiliary wells	Both raw water reservoirs at 66% capacity for 14 consecutive days, 50% capacity for 14 consecutive days, or below 50% capacity for 21 consecutive days. Daily Savannah River streamflow less than 4,000 cfs river levels are below 3.0 feet MSL, streamflow less than 3,500 cfs and river levels are below 1.5 feet MSL, or streamflow less than 3,000 cfs and river levels are below 0.5 feet MSL. Aquifer pumping levels at all auxiliary wells exceed 60, 70, or 80 feet below the top of the well casing elevation. System-wide elevated & ground storage falls below 50%, 35%, or 25% of total tank capacity and unable to recover above these levels in 24 hours. Average daily production for any consecutive 15 day period exceeds 85% of total system capacity, for any consecutive 7 days exceeds 95% of total system capacity, or for any consecutive 3 days exceeds 100% of total system capacity.	None	Over 23,000 taps (98% of BJWSA's customer base)
BJWSA - Hardeeville System	2003	West	<b>Groundwater</b> - 2 wells	Aquifer pumping level at Well #2 exceeds 45 feet below the top of the well casing elevation; Well #2 exceeds 55 feet and Well #3 exceeds 75 feet below the top of the well casing elevation; or Well #2 exceeds 65 feet and Well #3 exceeds 85 below the top of the well casing elevation. Pumping volume at both wells for any consecutive 30 day period exceeds 10%, 15%, or 20% of the monthly permitted withdrawal amount.	None	Approximately 1,100 taps

Most of the drought plans were prepared and submitted to the SC State Climate Office in 2003 and have not been updated in approximately 20 years. All the information listed is as of the date of plan submittal. Some water suppliers in the full table may have updated their plans but have not submitted them to the State Climate Office.

# **USACE Savannah River Drought Management Plan**

- The Savannah River Basin Drought Contingency Plan was developed to address the operation of the three USACE impoundments on the Savannah River during droughts.
- During drought, releases from Lake Thurmond are altered in accordance with the plan, thereby affecting water availability in the Lower Savannah basin.

Trigger Level	Time of Year	Drought Response		
1	lan 4 Dec 24	IF BR index >10%, Target 4200 cfs (weekly average) release at Thurmond Dam		
	Jan 1 - Dec 31	IF BR index <10%, Target 4000 cfs (weekly average) release at Thurmond Dam		
2	Feb 1 - Oct 31	IF BR index >10%, Target 4000 cfs (weekly average) release at Thurmond Dam		
	Feb 1 - Oct 31	IF BR index <10%, Target 3800 cfs (daily average) release at Thurmond Dam		
	Nov 1 - Jan 31	Target 3600 cfs (daily average) release at Thurmond Dam		
3	Feb 1 - Oct 31	Target 3800 cfs (daily average) release at Thurmond Dam		
	Nov 1 - Jan 31			
	(Feb 1 - Feb 28) w/NMFS approval	Target 3100 cfs (daily average) release at Thurmond Dam		
4	Feb 1 - Oct 31	Target 3600 cfs (daily average) release at Thurmond Dam		
	Nov 1 - Jan 31			
	(Feb 1 – Feb 28) w/NMFS approval	Target 3100 cfs (daily average) release at Thurmond Dam		