

<b>NWS Form E-5</b> (04-2006) (PRES. BY NWS Instruction 10-924)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION</b> <b>NATIONAL WEATHER SERVICE</b>	HYDROLOGIC SERVICE AREA (HSA) <b>Columbia, SC</b>
		REPORT FOR: MONTH                      YEAR <b>Jan.</b> <b>2019</b>
<b>MONTHLY REPORT OF HYDROLOGIC CONDITIONS</b>		SIGNATURE <b>Leonard Vaughan</b>
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		DATE <b>02/06/2019</b>

*When no flooding occurs, include miscellaneous river conditions below the small box, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924).*

An X inside this box indicates that no flooding occurred within this hydrologic service area.

## River Conditions for January 2019

### Summary

Unlike much of late fall and early winter, precipitation during the month of January was near normal across the Midlands and Central Savannah River Area. Temperatures were 2 to 4 degrees above normal for the month. January precipitation totals indicate that between 3 and 5 inches fell across the area. The heaviest precipitation fell across the Upstate and western Midlands with lesser amounts toward the coast. Although precipitation was near normal for the month, area rivers remained high from a very wet late Fall into early winter, producing several river flood events during the month.

### Precipitation

The total precipitation at Columbia Metro Airport was 3.01 inches. The total precipitation at Augusta Bush Field was 4.40 inches. Precipitation records for Columbia began in 1878. Precipitation records for Augusta began in 1871.

Here are a few reports from NWS Coop Stations:

Bamberg (BAMS1) – 5.12 inches  
Lake Greenwood (CHPS1) – 5.05 inches  
Waynesboro (WYNG1) – 4.92 inches  
Holly Hill 1 SW (HHLS1) – 4.82 inches  
Johnston 4 SW (JOHS1) – 4.39 inches

Here are a few reports from the CoCoRaHS (Community, Collaborative, Rain, Hail and Snow Network) observers:

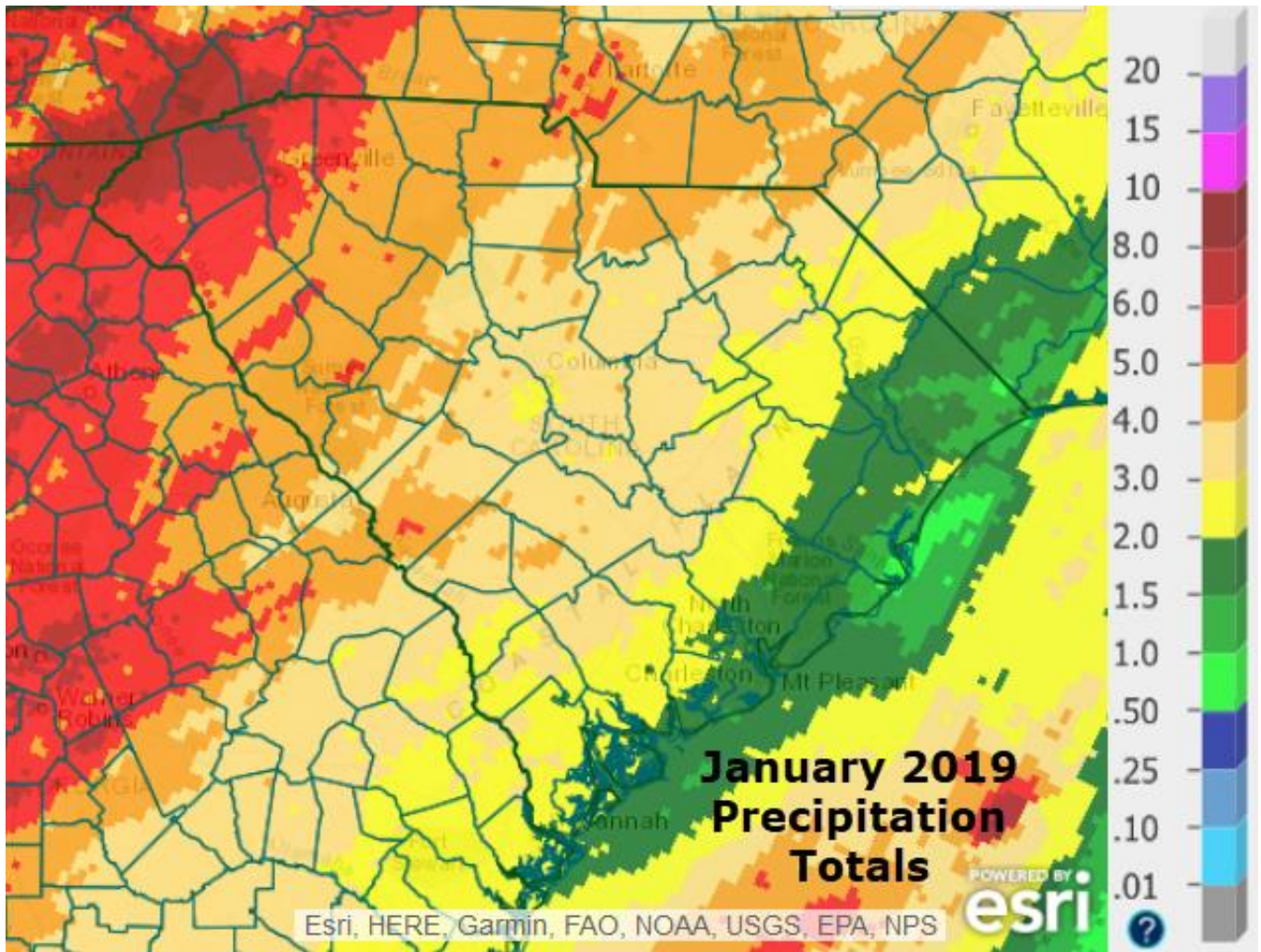
South Carolina:

SC-AK-14 Aiken 7.8 SSE – 5.89 inches  
SC-AK-59 New Ellenton 2.7 NE – 5.36 inches  
SC-LN-4 Lancaster 2.0 NNW – 4.56 inches  
SC-DF-5 Pageland 9.0 WNW – 4.39 inches  
SC-ED-13 Trenton 6.5 SSW – 4.38 inches

Georgia:

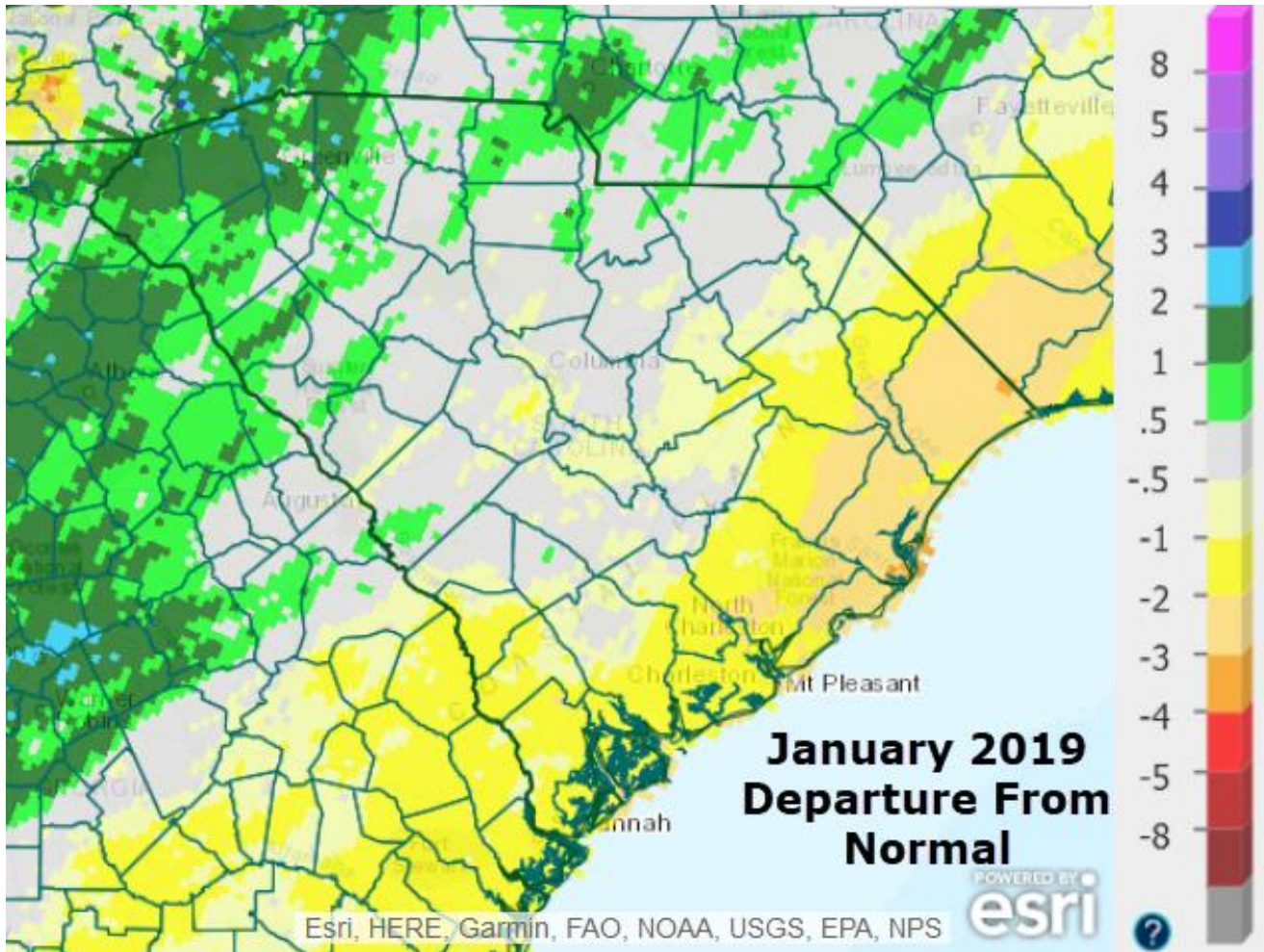
GA-MD-5 Thomson 2.6 S – 5.17 inches  
GA-LC-2 Tignall 10.2 NNE – 4.59 inches  
GA-CU-7 Grovetown 3.4 NE – 4.58 inches  
GA-CU-9 Appling 2.0 E – 4.54 inches  
GA-BK-9 S. Augusta 4.1 S – 4.34 inches

(Please see the precipitation maps below).



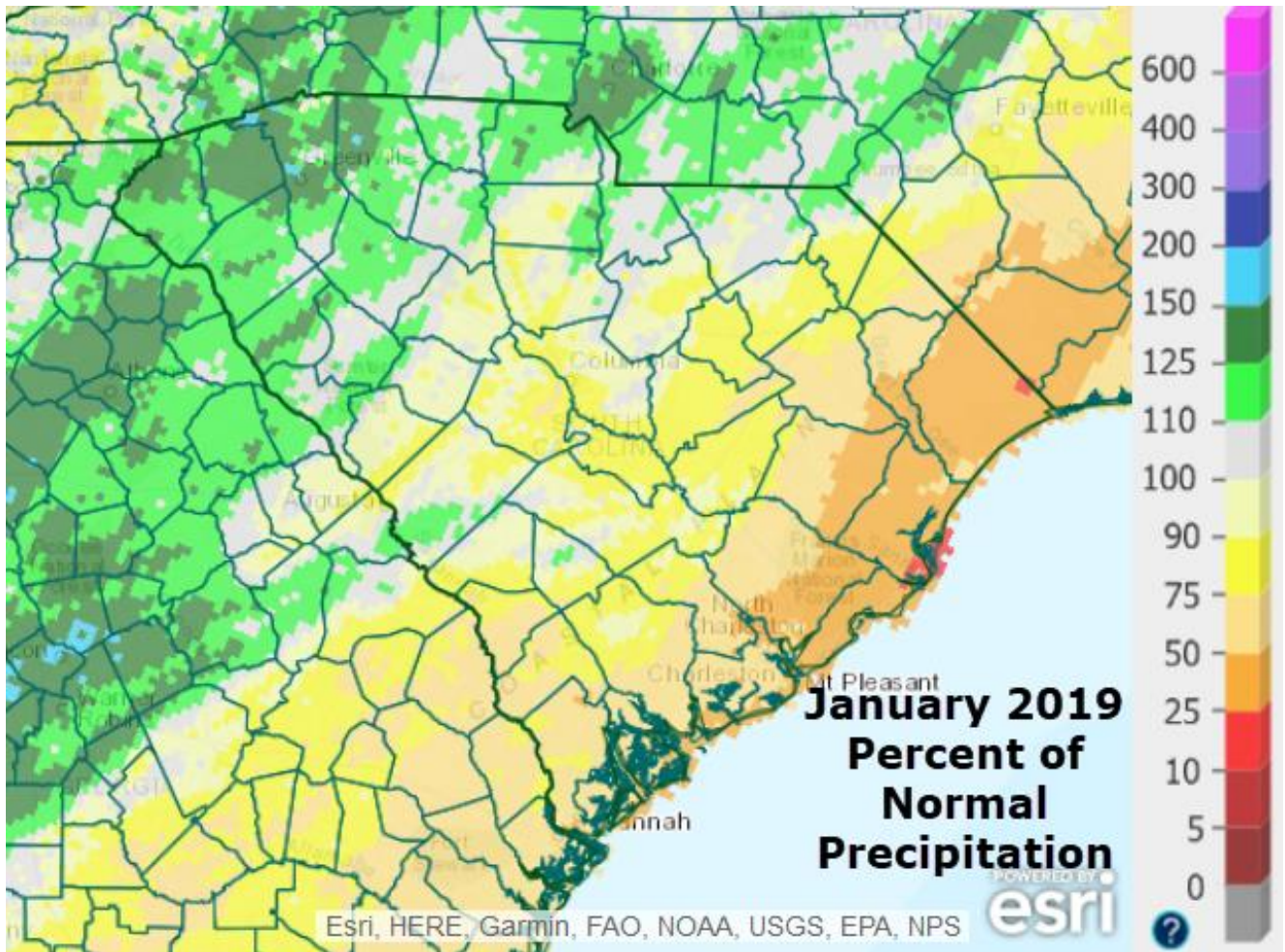
## January 2019 Total Precipitation (inches)

Source: Advanced Hydrologic Prediction Service, NWS



## January 2019 Precipitation Departure from Normal (inches)

Source: Advanced Hydrologic Prediction Service, NWS



## January 2019 Percent of Normal Precipitation

Source: Advanced Hydrologic Prediction Service, NWS

January 2019 precipitation at observation sites was as follows:

Station	Rainfall	Normal	Departure From Normal
Augusta (AGS)	4.40	3.91	+0.49
Augusta (DNL)	3.61	4.21	-0.60
Columbia (CAE)	3.01	3.58	-0.57
Columbia (CUB)	2.44	3.63	-1.19
Orangeburg (CUB)	3.68	3.98	-0.30

### **River/Flood Conditions**

Minor to moderate flooding occurred on many of the area rivers during January. This was a continuation of the steady precipitation events from December into early January. Additionally, area reservoirs were trying to reach their projected levels during their winter drawdown period. Most of the flood events were in the minor category, but moderate flooding occurred on the Saluda River at Chappells, Lake Wateree and the Congaree River at Carolina Eastman.

Along the Saluda River at Chappells, there were multiple minor flood events with one moderate flood event. The moderate flood event occurred when the river crested at 20.03 feet on the evening of the 5<sup>th</sup>. Flood stage is 14.0 feet. Stevens Creek at Modoc experienced one minor flood event when it crested at 23.70 feet on the early morning hours of the 5<sup>th</sup>. The Congaree River at Carolina Eastman remained in minor flood stage for about half of the month. However, during the period when it reached moderate flood the river crested at 121.80 feet

on the afternoon of the 6<sup>th</sup>. Flood stage is 115.0 feet and moderate flood stage is 119.0 feet. The Congaree River at the Congaree National Park-Gadsden remained at or above flood stage for about half of January. This was due to rainfall along with the combination of upstream reservoirs releases. The river crested at 17.49 feet on the early morning hours of the 7<sup>th</sup>. Flood stage is 15.0 feet. The Great Pee Dee River at Cheraw experienced 4 large flow increases during the month. Two of these pushed the river above the flood stage of 30.0 feet. The river crested at 32.25 feet on the late evening hours of the 6<sup>th</sup> and 31.56 feet on the evening hours of the 26<sup>th</sup>. The pool height of Lake Wateree remained above the flood level of 100.0 feet from the beginning through the first 10 days of the month. The lake level crested in the moderate flood category on the morning of the 6<sup>th</sup> at 102.10 feet. Downstream from Lake Wateree on the Wateree River, the river level at Camden spent much of the month above the Advisory criteria of 16.0 feet. Flood stage at Camden is 27.0 feet. This was due to spilling over the dam at Lake Wateree and generation throughout the month to lower lake levels. The river crested at 26.06 feet on the afternoon of the 6<sup>th</sup>.

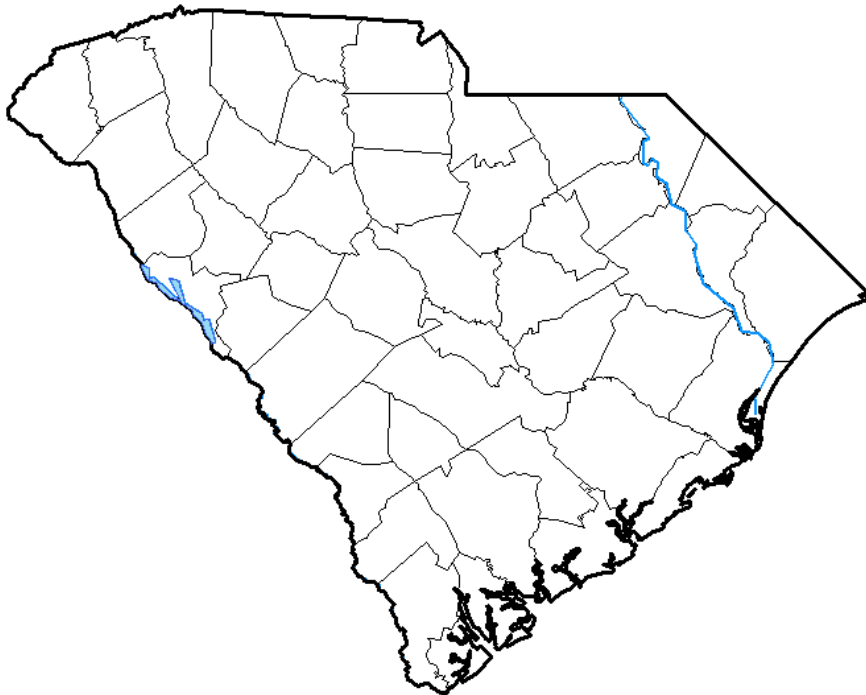
## **Drought Conditions**

The above average precipitation from the late Fall into early winter combined with the near normal precipitation during January kept the region free from any category of drought.






(Please see the maps below).

**U.S. Drought Monitor**  
**South Carolina**

**January 29, 2019**  
(Released Thursday, Jan. 31, 2019)  
Valid 7 a.m. EST



***Intensity:***

-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
-  D3 Extreme Drought
-  D4 Exceptional Drought

*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.*

***Author:***

Brian Fuchs  
National Drought Mitigation Center

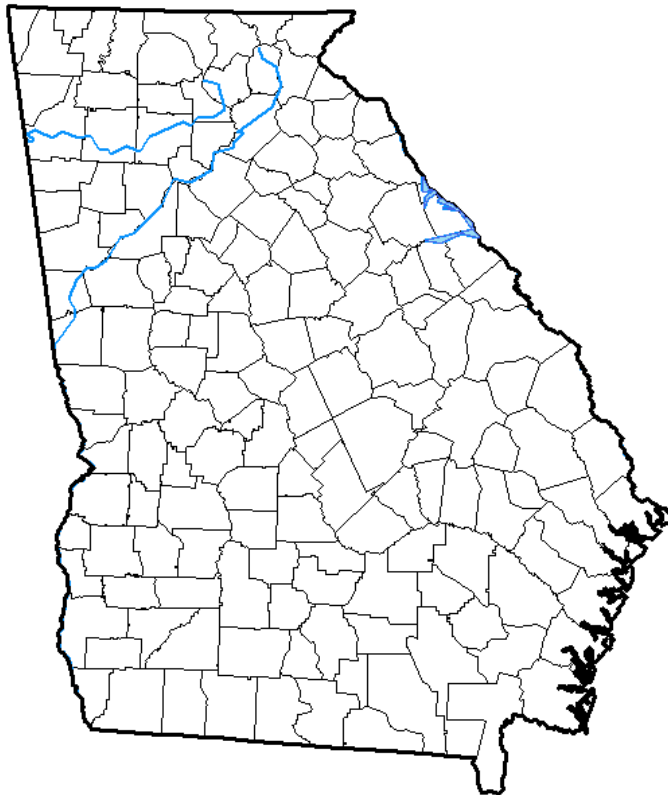


<http://droughtmonitor.unl.edu/>






**U.S. Drought Monitor**  
**Georgia**

**January 29, 2019**  
(Released Thursday, Jan. 31, 2019)  
Valid 7 a.m. EST



***Intensity:***

-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
-  D3 Extreme Drought
-  D4 Exceptional Drought

*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.*

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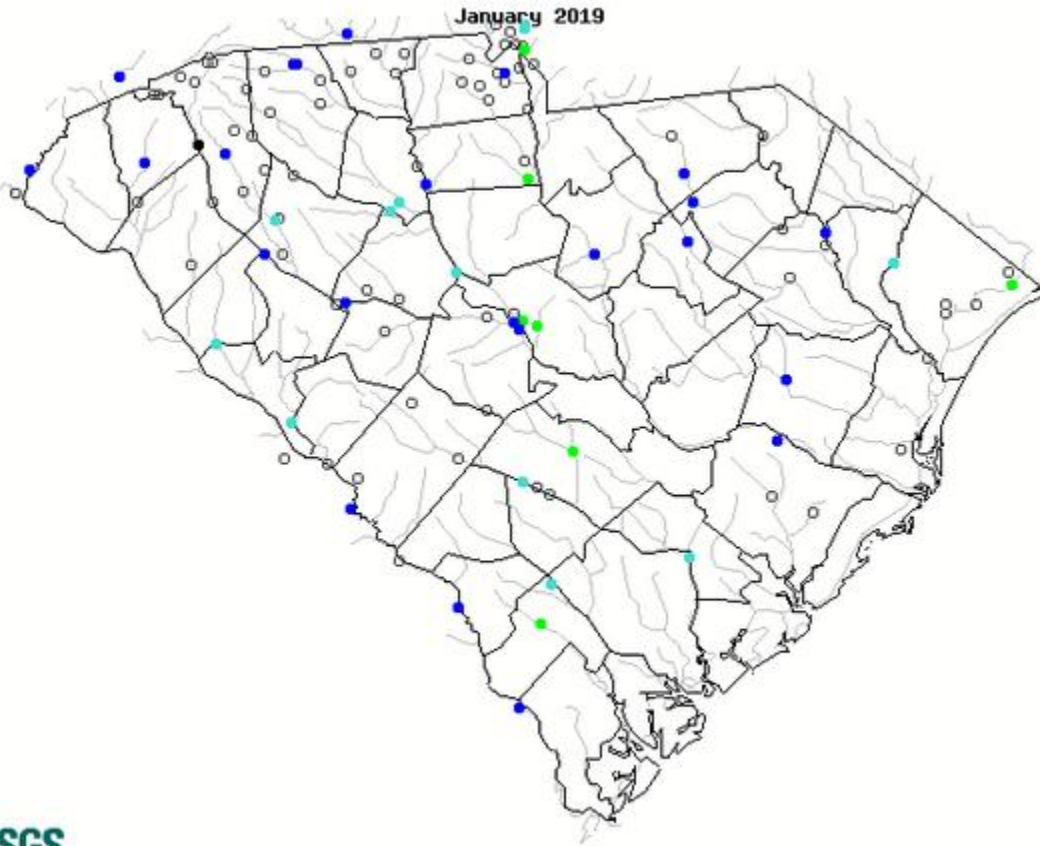


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## **Streamflow Conditions**

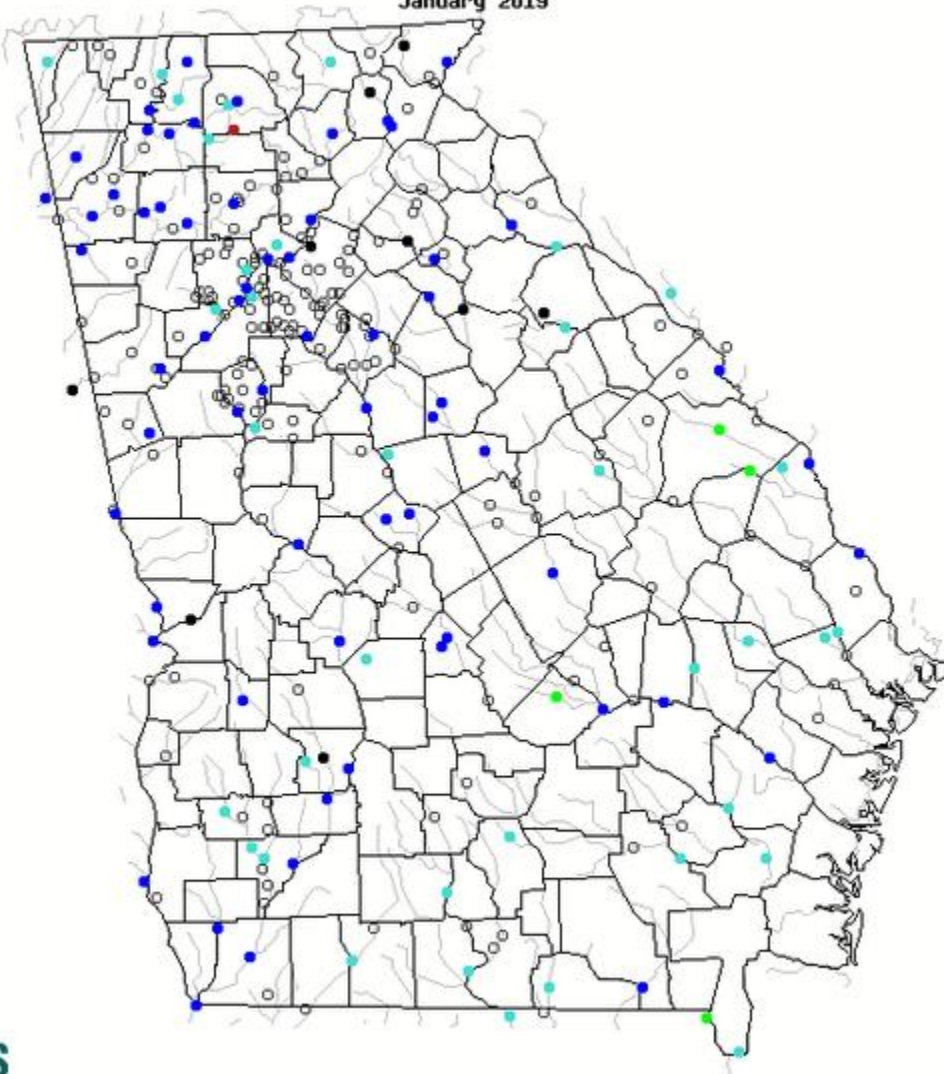
Monthly average stream flows during January across the Midlands and Central Savannah River Area ranged from above normal to much above normal across the Santee, Savannah, Catawba-Wateree, Lynches and Edisto River Basins. Flows continued at or above normal for this time of year across the area.

# Stream Flow Compared to Historical Stream Flow for the Month



Explanation - Percentile classes							
●	●	●	●	●	●	●	○
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

January 2019



Explanation - Percentile classes							
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked

## **Temperatures**

January 2019 temperatures were above normal for the month. Temperatures averaged from 2 to 4 degrees above normal across the region.

The monthly average temperature at Columbia (CAE) was 47.0 degrees. This value was 2.2 degrees above the normal of 44.8 degrees. The highest temperature during the month was 75 degrees reached on the 1<sup>st</sup>. The lowest temperature was 22 degrees that occurred on the 26<sup>th</sup> and 30<sup>th</sup>.

The average temperature for the month at Augusta (AGS) was 49.1 degrees. This value was 3.7 degrees above the normal of 45.4 degrees. The highest temperature during the month was 76 degrees reached on the 1<sup>st</sup>. The lowest temperature was 23 degrees that occurred on the 26<sup>th</sup> and 30<sup>th</sup>.

The average temperature for the month at Orangeburg (OGB) was 48.4 degrees. This value was 2.5 degrees above the normal of 45.9 degrees. The highest temperature during the month was 74 degrees reached on the 1<sup>st</sup>. The lowest temperature was 26 degrees that occurred on the 22<sup>nd</sup> and 31<sup>st</sup>.

## Hydrological Products

The following products were issued during January 2019.

DGT	Drought Statements	0
ESF	Hydrologic Outlooks	0
FFA	Flash Flood Watches	0
FFS	Flash Flood Statements	0
FFW	Flash Flood Warnings	0
FLS	Flood Statements	119
FLW	Flood Warnings	13
FLS	Areal Flood Advisories	0