

NWS Form E-5 (04-2006) (PRES. BY NWS Instruction 10-924)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) Columbia, SC
MONTHLY REPORT OF HYDROLOGIC CONDITIONS		REPORT FOR: MONTH YEAR Apr. 2019
TO: Hydrologic Information Center, W/OS31 NOAA's National Weather Service 1325 East West Highway Silver Spring, MD 20910-3283		SIGNATURE Leonard Vaughan DATE 05/08/2019
<i>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).</i>		

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

River Conditions for April 2019

Summary

After precipitation across the area averaged below normal for February and March, it rebounded to slightly above normal for April. Temperatures continued their trend of around or just above normal for the month. Most of the area received between 3 and 5 inches of precipitation, although there were a few higher amounts across the northern Midlands and along the Columbia County Richmond County border in the CSRA.

Precipitation

The total precipitation at Columbia Metro Airport was 2.86 inches. The total precipitation at Augusta Bush Field was 3.01 inches. Precipitation records for Columbia began in 1878. Precipitation records for Augusta began in 1871.

Here are a few reports from NWS Coop Stations:

Holly Hill 1 SW (HHLS) – 4.67 inches

Chesterfield 3 E (CTFS1) – 4.65 inches

Wagener 1 SW (WGRS1) – 4.64 inches

Cheraw Water Plant (CEWS1) – 4.40 inches

Pelion 0.8 NW (PLNS1) – 4.31 inches

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

South Carolina:

SC-LN-2 Fort Mill 3.5 ENE – 5.82 inches

SC-OR-17 Orangeburg 3.2 NW – 5.13 inches

SC-CD-6 Manning 1.9 SSE – 4.83 inches

SC-OR-11 Neeses 7.0 SE – 4.69 inches

SC-AK-39 N. Augusta 1.5 WSW – 4.67 inches

Georgia:

GA-CU-21 Martinez 3.0 NE – 4.64 inches

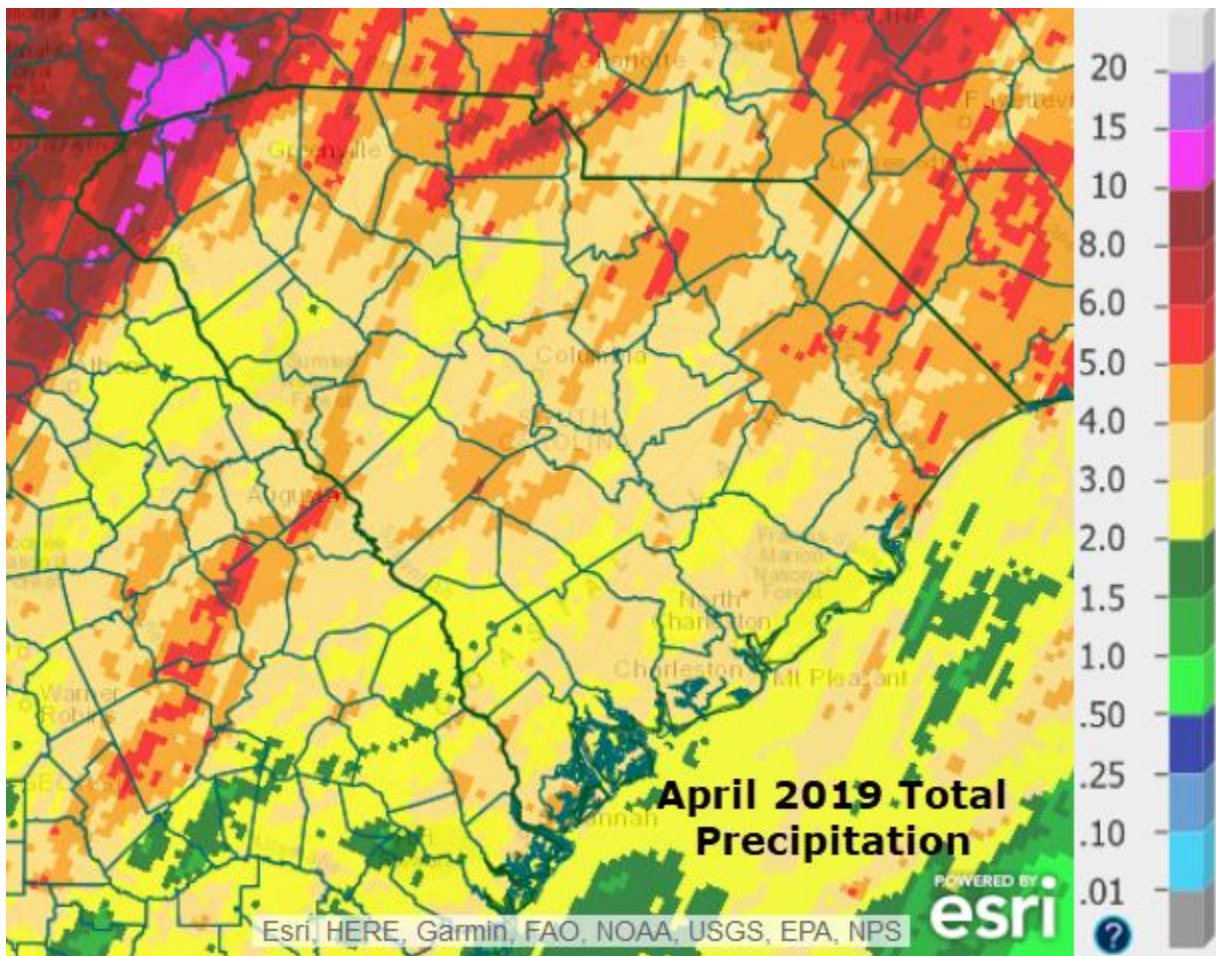
GA-RC-12 Augusta 4.2 W – 4.63 inches

GA-MD-1 Thomson 2.5 S – 3.98 inches

GA-BK-9 S. Augusta 4.1 S – 3.62 inches

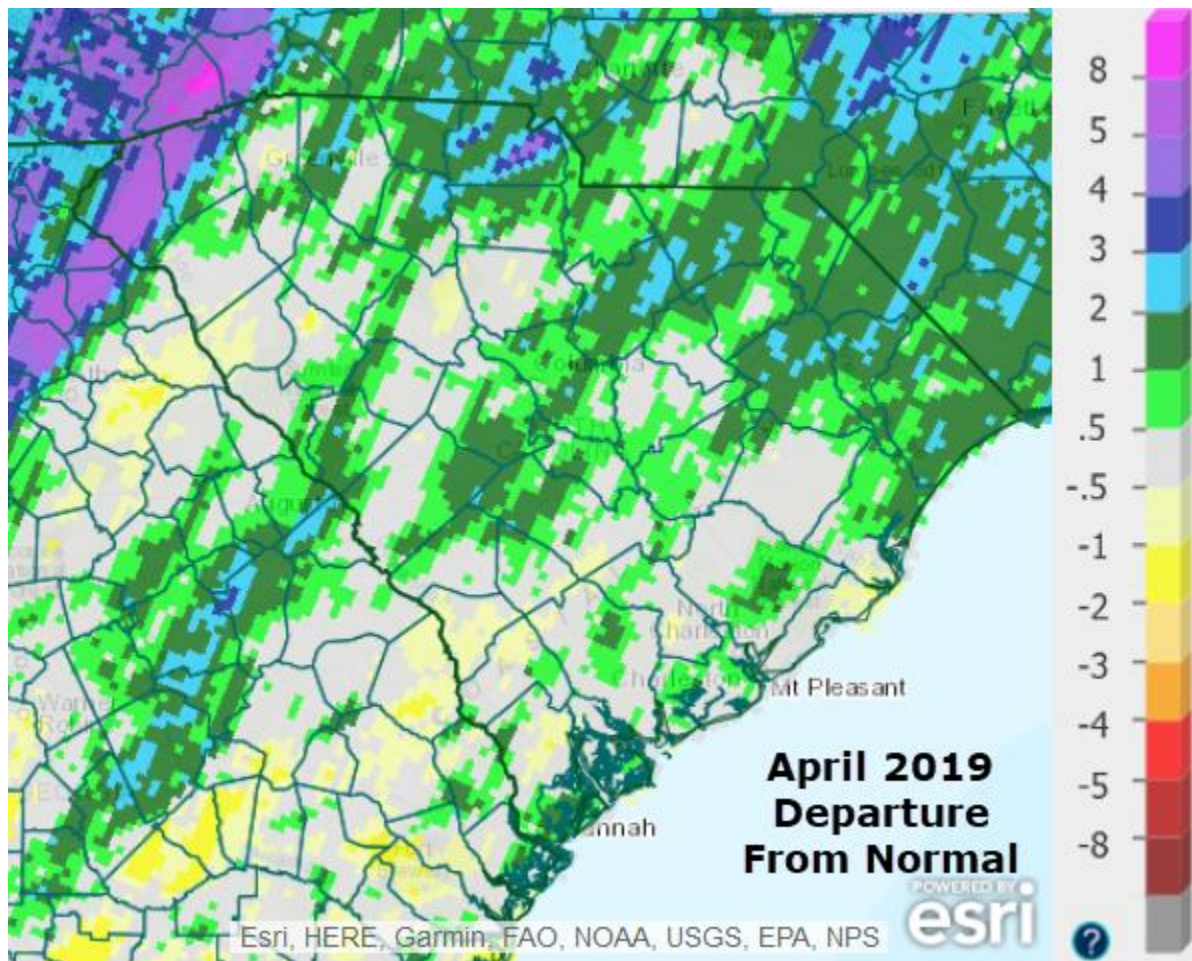
GA-LC-2 Tignall 10.2 NE – 2.45 inches

(Please see the precipitation maps below).



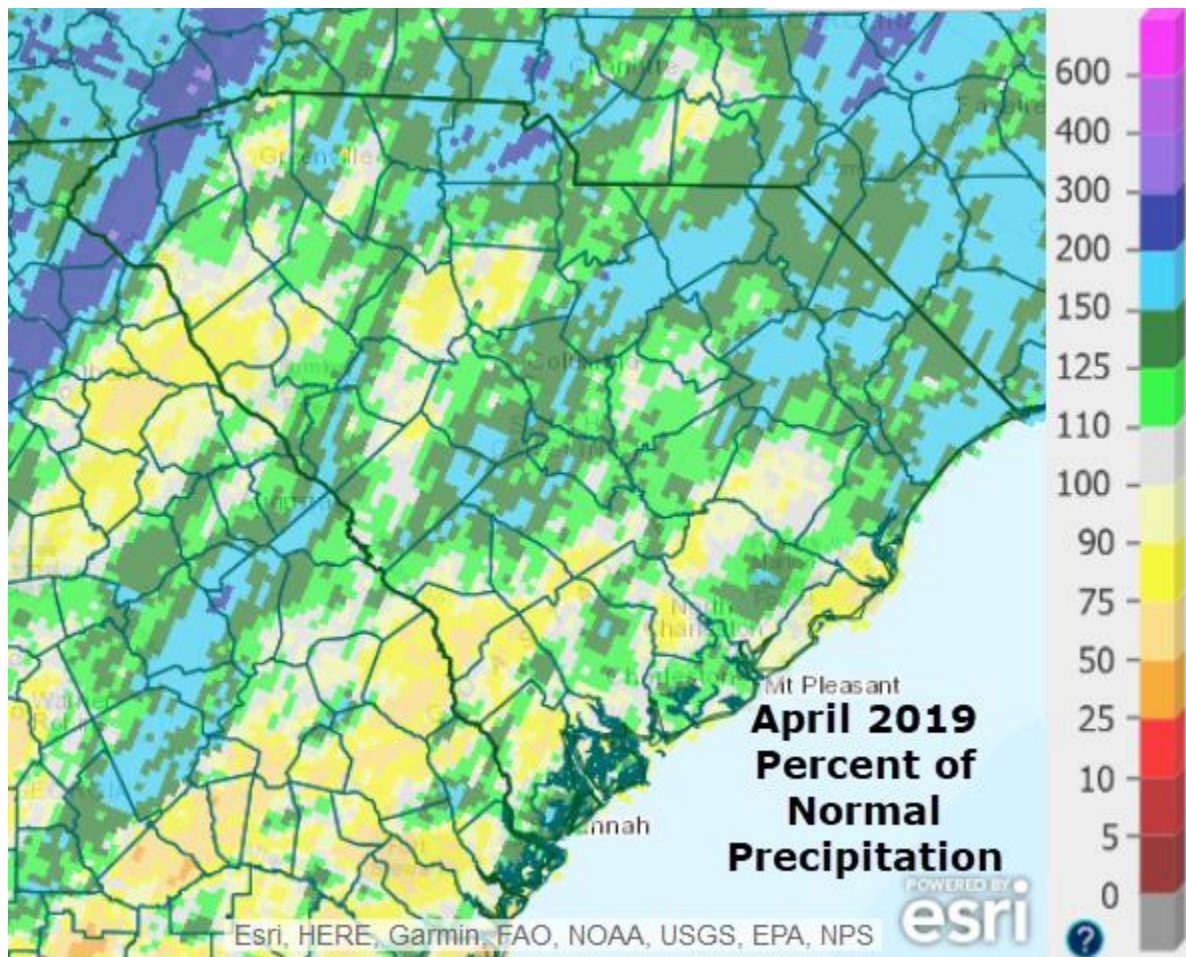
April 2019 Total Precipitation (inches)

Source: Advanced Hydrologic Prediction Service, NWS



April 2019 Precipitation Departure from Normal (inches)

Source: Advanced Hydrologic Prediction Service, NWS



April 2019 Percent of Normal Precipitation

Source: Advanced Hydrologic Prediction Service, NWS

April 2019 precipitation at observation sites was as follows:

Station	Rainfall	Normal	Departure From Normal
Augusta (AGS)	3.01	2.84	+0.17
Augusta (DNL)	5.28	2.95	+2.33
Columbia (CAE)	2.86	2.62	+0.24
Columbia (CUB)	3.14	2.69	+0.45
Orangeburg (CUB)	3.69	2.85	+0.78

River/Flood Conditions

Minor flooding occurred along the Congaree River and Great Pee Dee River during the middle of April. A slow moving cold front that passed across the area on the 13th was followed by an area of low pressure that moved northwest of the area on the 14th. This produced some locally heavy rainfall across the Appalachian Mountains and across portions of the western Carolinas. Rainfall amounts ranged from 1 to 3 inches. A second rain-maker for the area occurred on the 19th and 20th as a vigorous weather system moved across the Southeast. Rainfall amounts of 1 to 3 inches fell across the Appalachian Mountains.

Along the Great Pee Dee River, minor flooding occurred at Cheraw. At Cheraw, the river reached the flood stage of 30.0 feet on the morning of the 14th. The river crested at 33.04 feet on the evening of the 14th. Along the Congaree River, minor flooding occurred at Carolina

Eastman and the Congaree NP-Gadsden. At Carolina Eastman, the river reached the flood stage of 115.0 feet on the early morning hours of the 15th. The river crested at 115.42 feet on the morning of the 15th. At the Congaree NP-Gadsden, the river reached the flood stage of 15.0 feet on the early morning hours of the 15th. The river crested at 15.34 feet around noon of the 15th. The river rose again in response to the second rainfall event. Along the Congaree River, minor flooding occurred at Carolina Eastman and the Congaree NP-Gadsden. At Carolina Eastman, the river reached the flood stage of 115.0 feet during the late evening hours on the 21st and crested at the same time. At the Congaree NP-Gadsden, the river reached the flood stage of 15.0 feet during the late morning hours of the 22nd and crested at the same time.

Drought Conditions

Drought has continued to increase in areal coverage and category over the past month. Although rainfall was slightly above normal for April, it was below normal for February and March. Drought category D0 (Abnormally Dry) has developed along and south of I-20 across the area. This also includes portions of the western Midlands and CSRA. A small portion of the southern Midlands and southern CSRA is in D1 (Moderate Drought). This covers southern Burke County in Georgia and southern portions of Barnwell, Bamberg and Orangeburg counties in South Carolina.

(Please see the maps below).

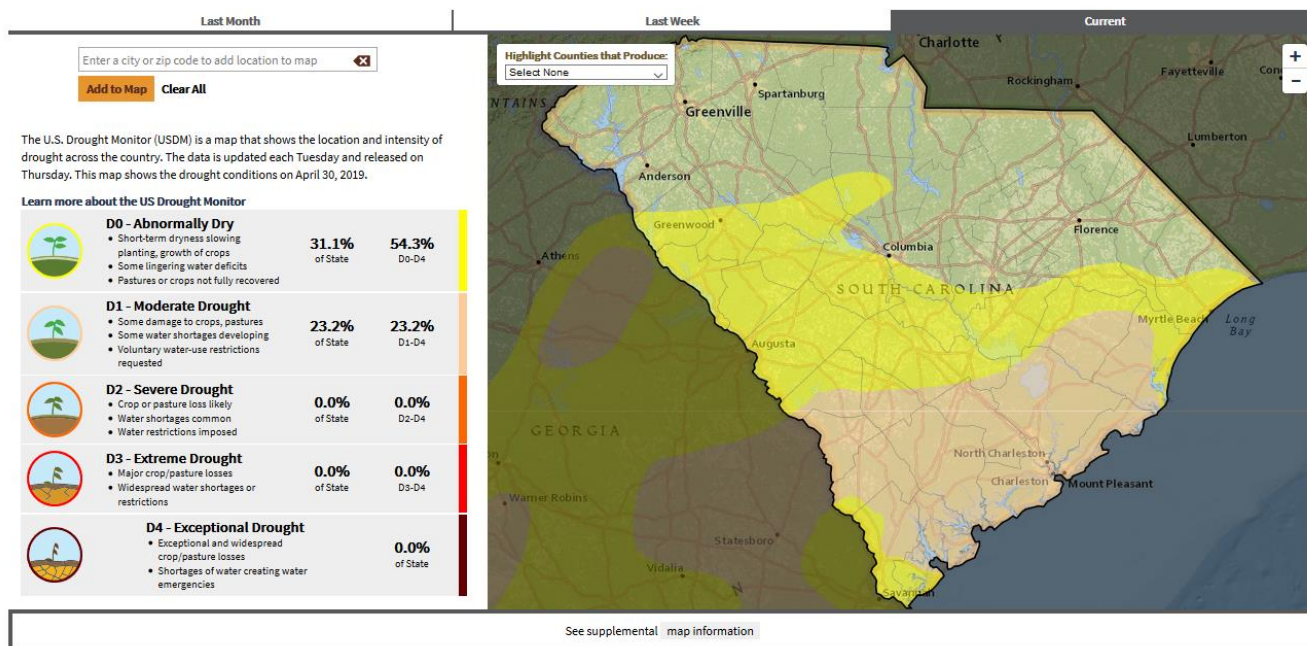
Drought in South Carolina

Residents in drought:
827,000
1,071,000 more in abnormally dry areas.

This is:
19%
of the state's population,
24% more in abnormally dry areas.



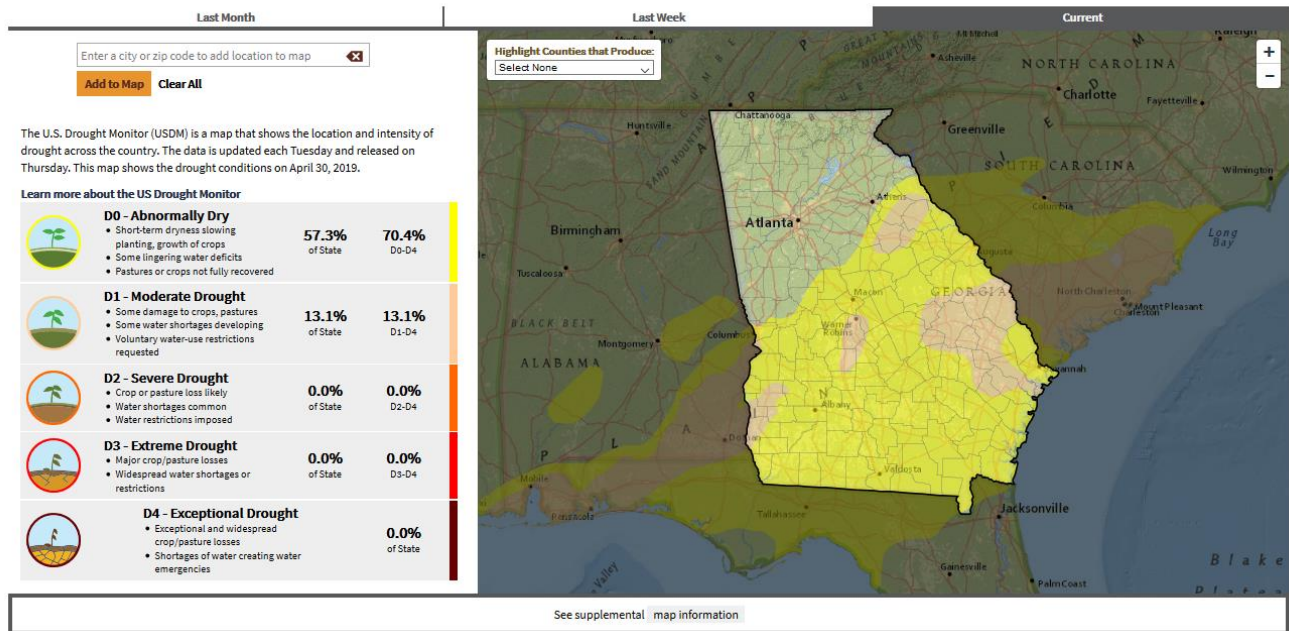
Report Your Drought Impacts



Drought in Georgia

Residents in drought:
481,000
2,593,000 more in abnormally dry areas.

This is:
5%
of the state's population,
27% more in abnormally dry areas.

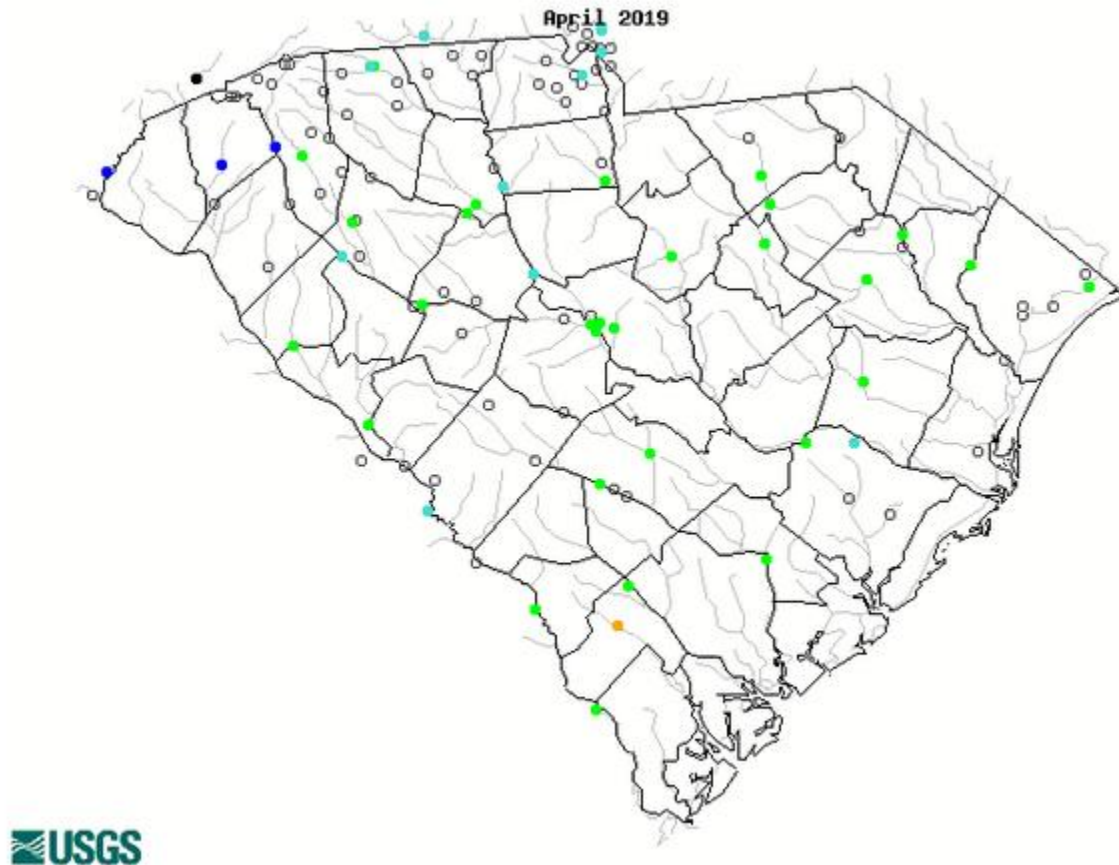


Streamflow Conditions

Monthly average stream flows during April across the Midlands and Central Savannah River Area ranged from Normal to Above Normal across the Broad River, Santee River, Savannah River, Catawba/Wateree River, Lynches River and Edisto River Basins. Above normal rainfall across the Midlands and CSRA combined with even heavier rainfall

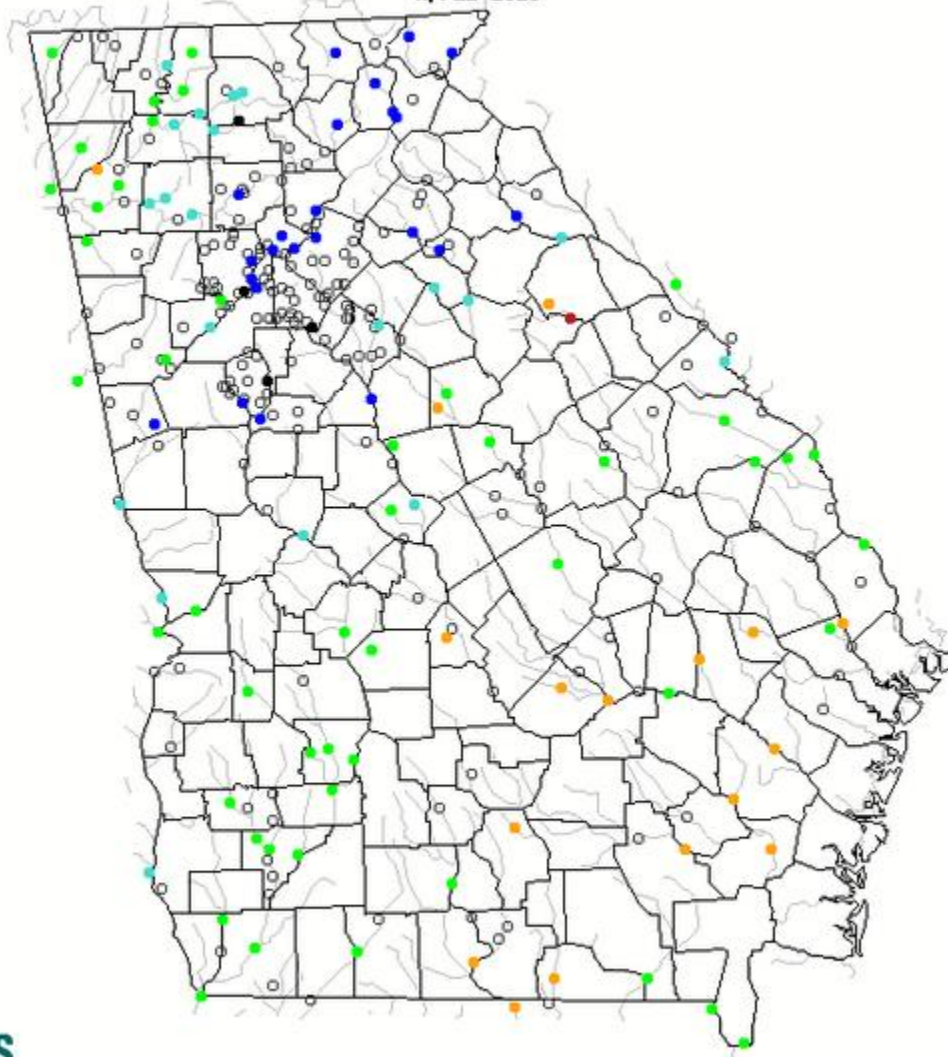
across the headwaters produced flows at or above normal for this time of year across the area.

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		

April 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

April 2019 temperatures were above normal for the month. Temperatures averaged from 1 to 3 degrees above normal across the region.

The monthly average temperature at Columbia (CAE) was 65.3 degrees. This value was 1.9 degrees above the normal of 63.4 degrees. The highest temperature during the month was 89 degrees reached on the 24th. The lowest temperature was 32 degrees that occurred on the 3rd.

The average temperature for the month at Augusta (AGS) was 66.0 degrees. This value was 3.3 degrees above the normal of 62.7 degrees. The highest temperature during the month was 90 degrees reached on the 29th. The lowest temperature was 34 degrees that occurred on the 3rd.

The average temperature for the month at Orangeburg (OGB) was 64.9 degrees. This value was 1.4 degrees above the normal of 63.5 degrees. The highest temperature during the month was 87 degrees reached on the 24th, 29th and 30th. The lowest temperature was 34 degrees that occurred on the 3rd.

Hydrological Products

The following products were issued during April 2019.

DGT	Drought Statements	0
ESF	Hydrologic Outlooks	1
FFA	Flash Flood Watches	0
FFS	Flash Flood Statements	0
FFW	Flash Flood Warnings	0
FLS	Flood Statements	11
FLW	Flood Warnings	3
FLS	Areal Flood Advisories	3