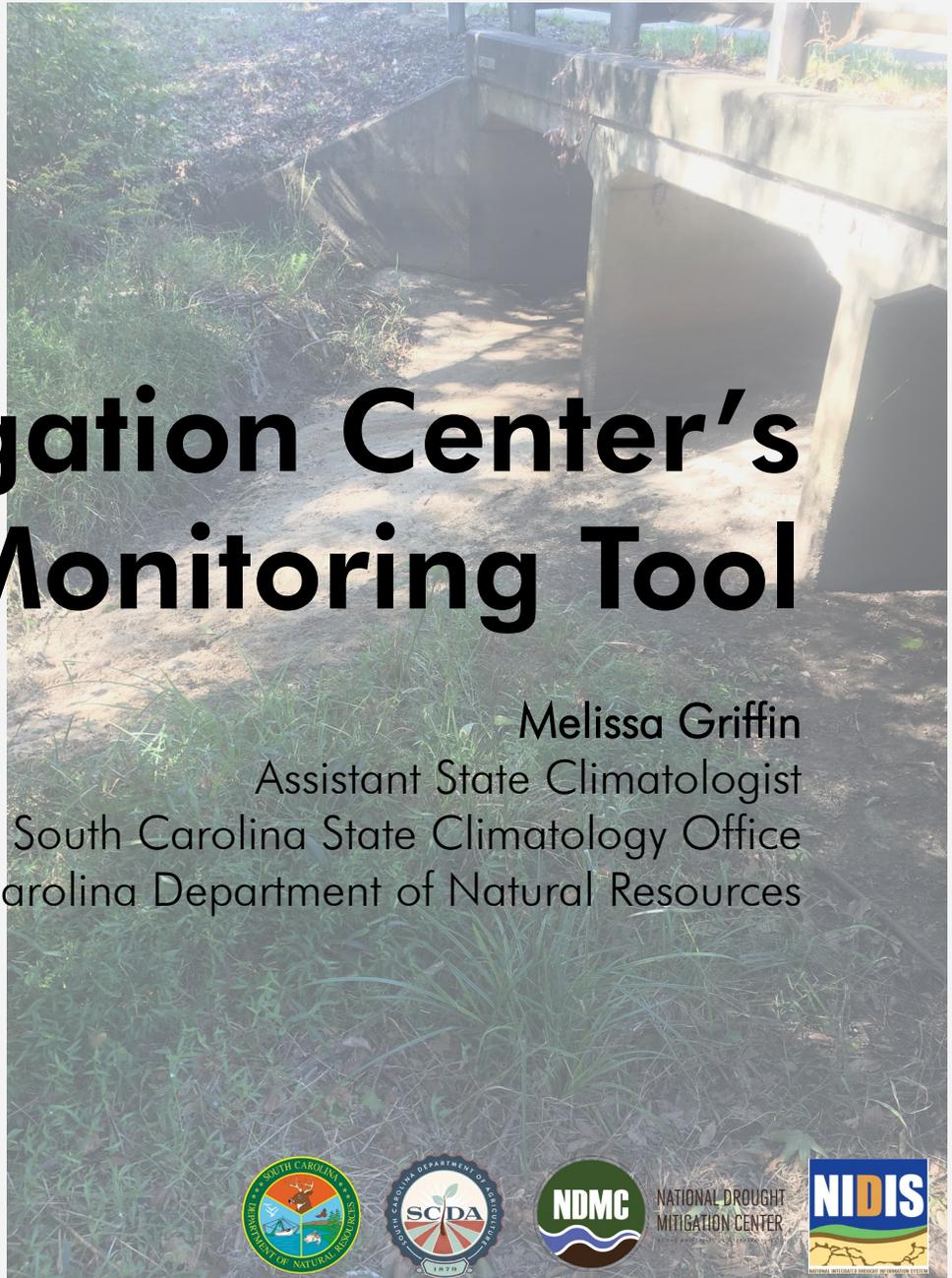
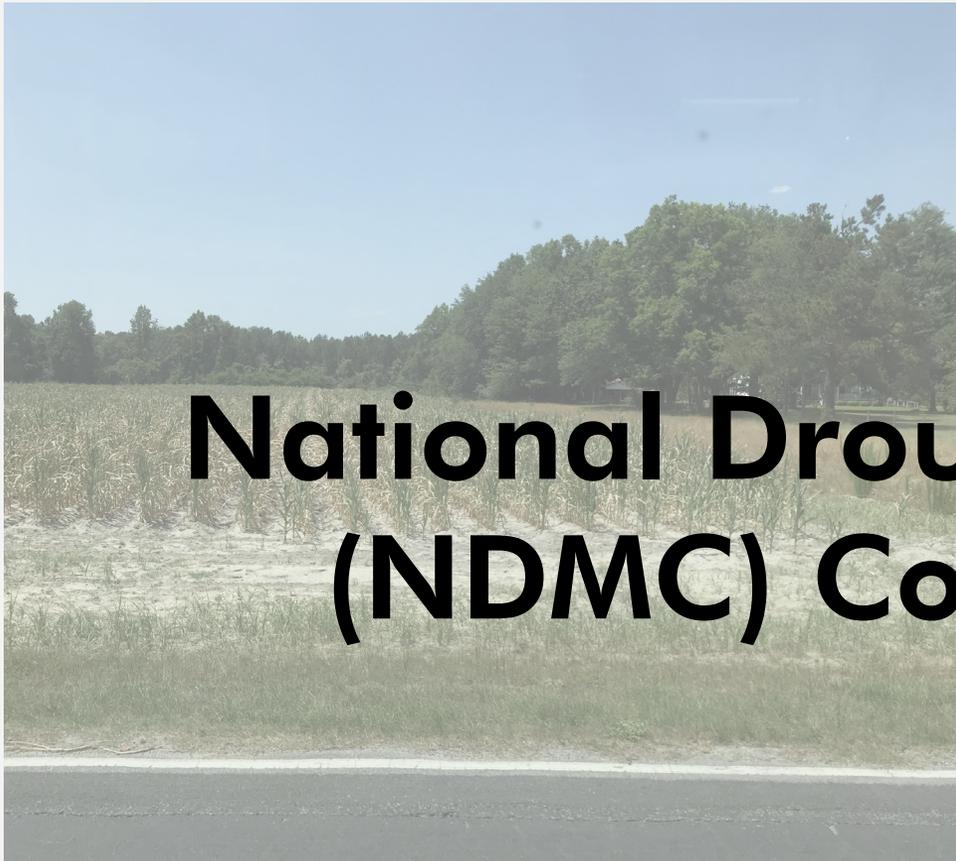
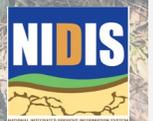


# National Drought Mitigation Center's (NDMC) Condition Monitoring Tool

Melissa Griffin  
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South Carolina State Climatology Office  
South Carolina Department of Natural Resources



NATIONAL DROUGHT  
MITIGATION CENTER



CLIMATOLOGICAL DATA FOR JULY, 1911.

DISTRICT No. 2, SOUTH ATLANTIC AND EAST GULF STATES.

CHARLES F. VON HERRMANN, District Editor.

The precipitation for the month was very irregularly distributed, and despite the frequency of rains drought continued to prevail in many portions of the Carolinas and Virginia, causing for a few days the complete exhaustion of the water supply at a few cities in western North Carolina. In Georgia the rainfall was normal, while in the western portion of the district a moderate excess in precipitation occurred. In all portions of the district the month was characterized by the frequency of light local showers entirely convectional in character. Except in Florida, where showers fell on every day of the month, a general period of fair weather prevailed from about the 26th to 30th. The total rainfall was less than 1 inch at only 7 stations, and exceeded 10 inches at 10 out of 357 stations reporting. Thunderstorms were numerous, but with one or two exceptions were unusually mild in character.

**“... despite the frequency of rains drought continued to prevail in many portions of the Carolinas and Virginia, causing for a few days the complete exhaustion of the water supply at a few cities in western North Carolina...”**

WEATHER SUMMARY

This month brought no relief to the drought-stricken western third of the State, and the overall crop estimate for the State at the end of October was 2 per cent less than a month earlier due mostly to corn harvests revealing an even lower yield than earlier estimates. Pecan yields also proved to be lower than earlier estimates. Pastures were of little value in the western third of the State throughout the month, and, with the exception of the coastal section, were little better elsewhere until after the hurricane rain. Fall seeding of grain was forced to wait for rain even in the face of short harvests of corn and hay. The fall production of snapbeans, cabbage, and cucumbers appeared to be only about one-third of average due to lower acreage and poor yields as a result of unfavorable weather. Water supplies improved appreciably in only a small portion of the State as indicated in the following report from the U. S. Geological Survey: "Streamflow in much of the State continued deficient and was at or below previous minimum discharges. Some improvement in streamflow began about the middle of the month owing to decreased demands of vegetation. Several towns and cities continued or put restrictions on water use. Streams in the area affected by hurricane Hazel showed improvement in runoff, but owing to the dry condition of the swamps only moderate stages were recorded. Black River near Gable, which had no flow for more than 2 months, started flowing about 4 days after the hurricane and on the last day of the month the flow was declining. Storage in major reservoirs showed no improvement and continued below average with one major power reservoir having only 20 percent of usable capacity on October 31."

**"... Pastures were of little value in the western third of the state..."**

**"... Streamflow in much of the State continued deficient and was at or below previous minimum discharges..."**

**"... Black River near Gable, which had no flow for more than 2 months..."**

**"... one major power reservoir having only 20 percent of usable capacity..."**

**Tracking drought impacts can help decision makers figure out where to focus efforts to reduce vulnerability to the next drought.**



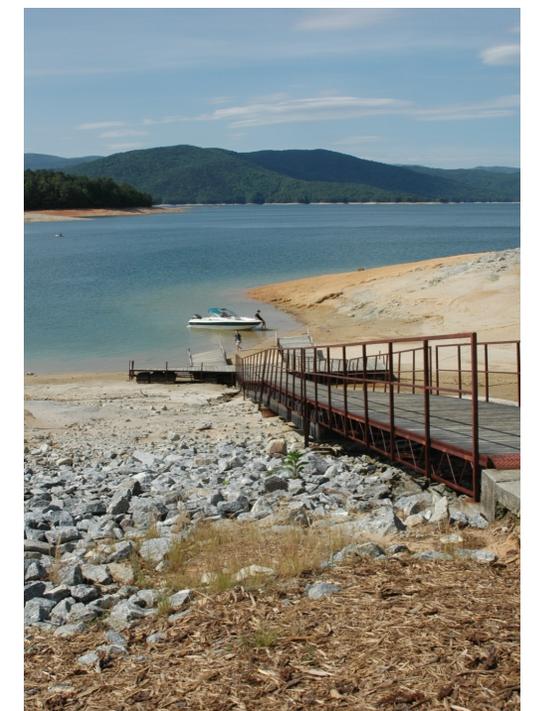
Rocks Pond Marina, Lake Marion, 11-07



Deep Hole Swamp, Florence County, August 2008



Memorial Bridge - Lake Hartwell (2008)  
Photo: Doug Young



Devil's Fork, Lake Jocassee (2011)  
Photo by Charles Sowell

SHORTER

Time (Duration)

LONGER



Usually defined by below normal precipitation over a period

- Number of days without precipitation
- Departure from monthly, seasonal or annual precipitation totals

- More fires and more intense fires
- Burn bans
- Poor air quality



Primarily short-term droughts, this type of drought has characteristics of both meteorological and hydrological droughts

- Increases in evaporation and transpiration
- Topsoil and subsurface moisture deficits

- Decreased crop production and livestock weights
- Reduced yields, pastures, forage



This type of drought tends to lag the occurrence of agricultural and meteorological droughts.

- Low lake, reservoir, and river levels
- Reduced streamflow values

- Voluntary or mandatory conservation
- Water quality changes and issues

# NDMC Drought Condition and Impact Reporting Tool

- Aids in the early detection of drought,
- Details of its intensification, when a region is coming out of drought conditions,
- Effects of heavy precipitation events.

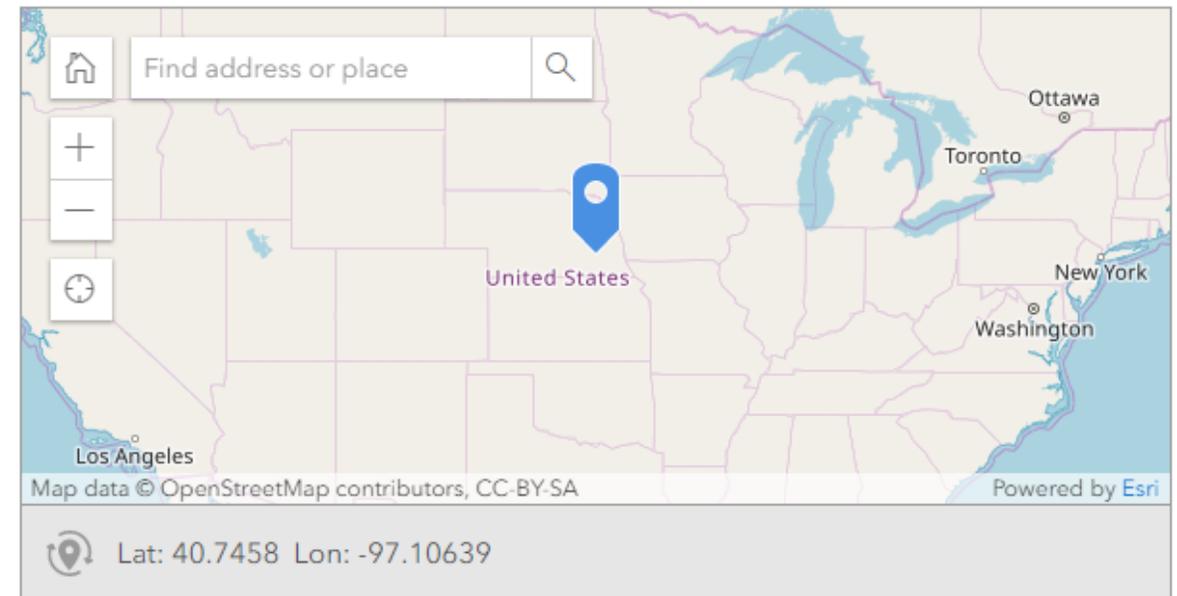
## Drought Condition & Impact Reporting

### Introduction

Report drought-related conditions and impacts within the U.S. This is a nation-wide service provided by the National Drought Mitigation Center, based at the University of Nebraska, in partnership with the National Integrated Drought Information System. Information submitted by this form appears on [this map](#).

### Where are you?\*

Please position the marker on the map to ensure that your report appears in the right location. You can enter the city or county into the search window on the map, or, depending on your browser and settings, you may be able to drag the map to reposition it or click on the compass icon to share your exact location. Please note that the option to select a county and state below helps us double-check location information but does not position your report correctly on the map.



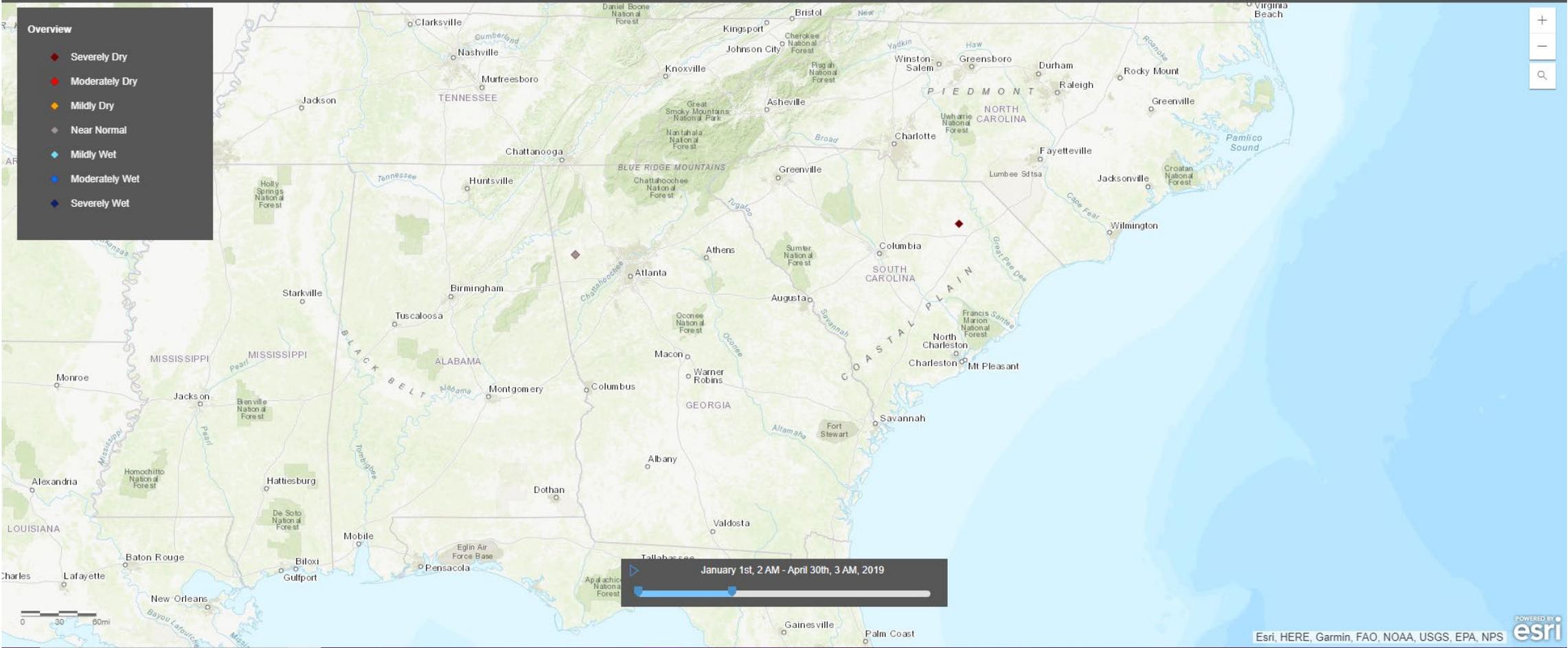
# Survey 2019

- Overview
- Overview-Clustered
- Crop Production
- Livestock Production
- Water Supply
- Wildlife/Fish Habitat
- Recreation and Tourism
- Business and Industry
- Public Health
- Fire
- Photos

## Overview Share

**Overview**

- Severely Dry
- Moderately Dry
- Mildly Dry
- Near Normal
- Mildly Wet
- Moderately Wet
- Severely Wet

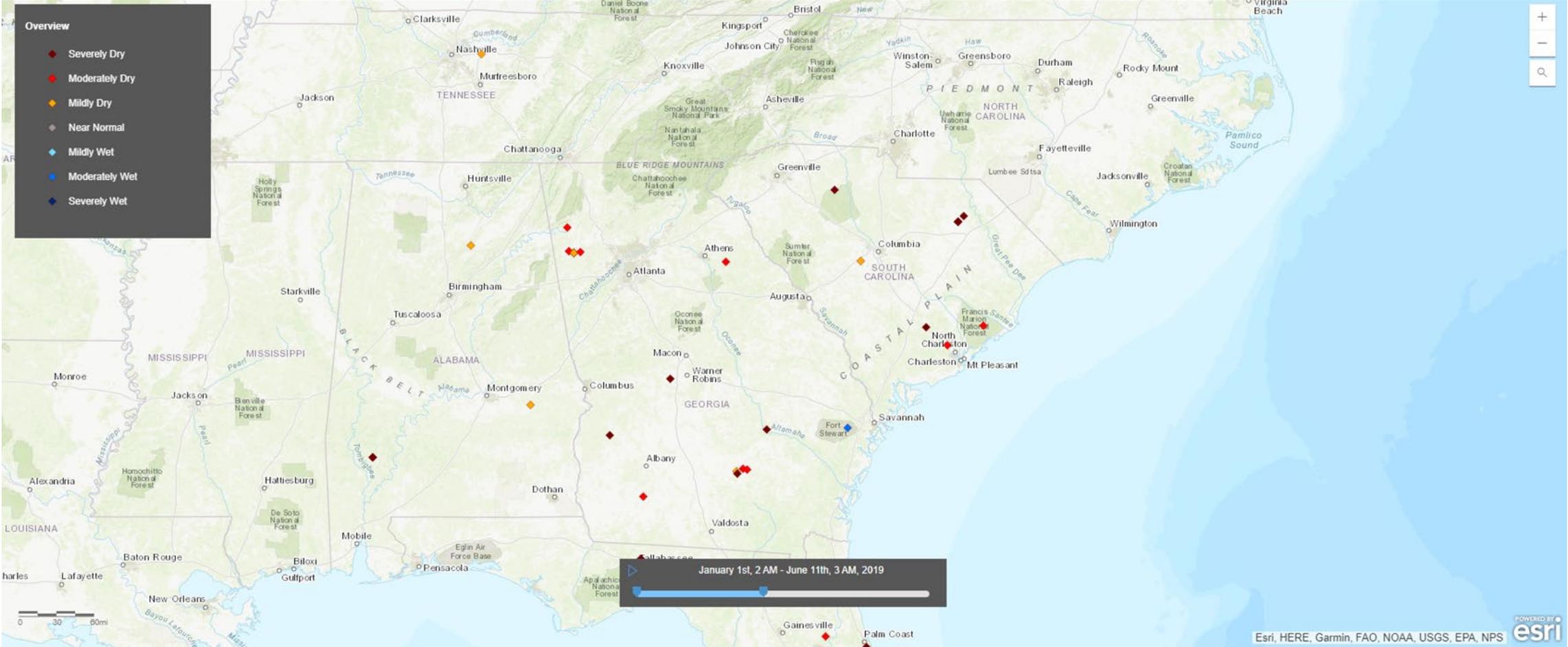


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## Overview

Share



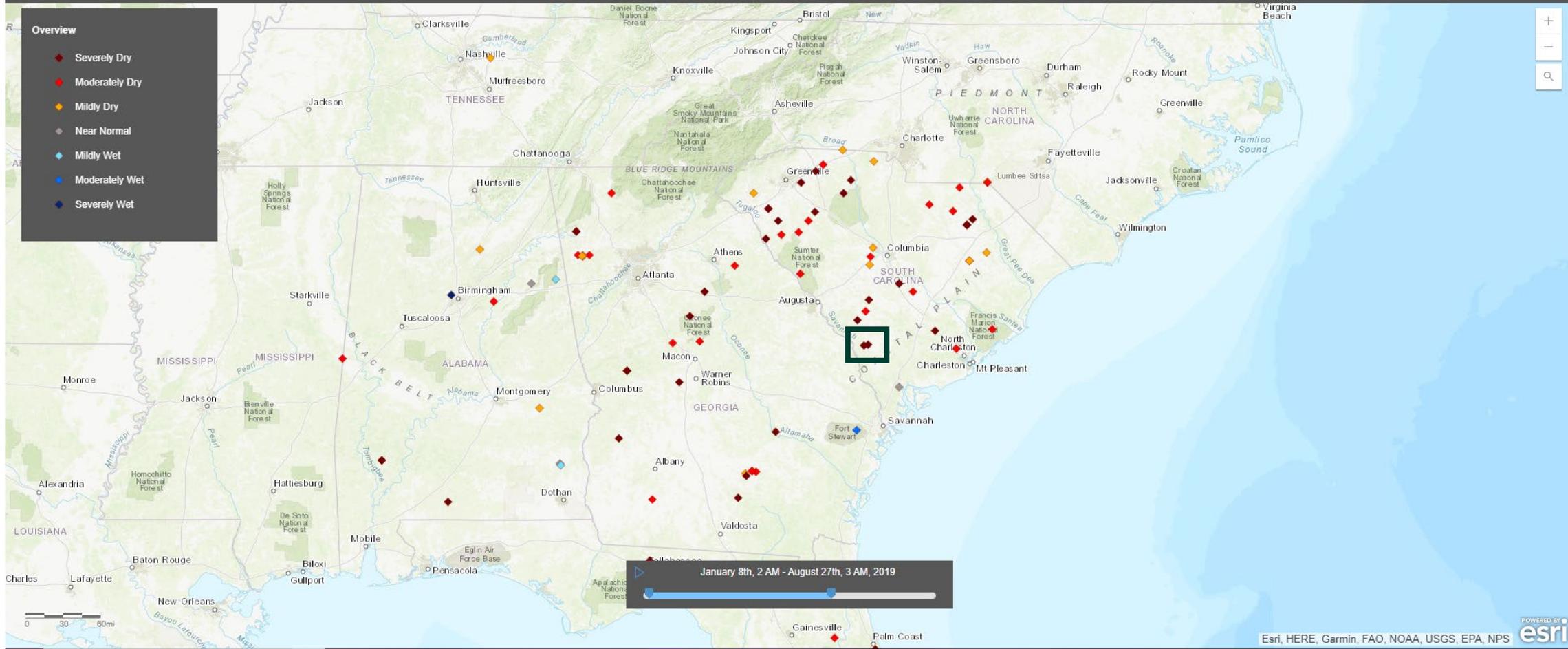
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  - Severely Wet



# AUGUST 2019 – ALLENDALE COUNTY



PASTURE & HAY grass is dead, feeding hay cut earlier, but will run out and not have more to bale for winter. Pastures look like parking lot.



COTTON mid August- normally waist high & completely covering rows with no ground showing



COOSAHATCHIE RIVER completely dry. Normally flowing about 1500-2000 gpm.



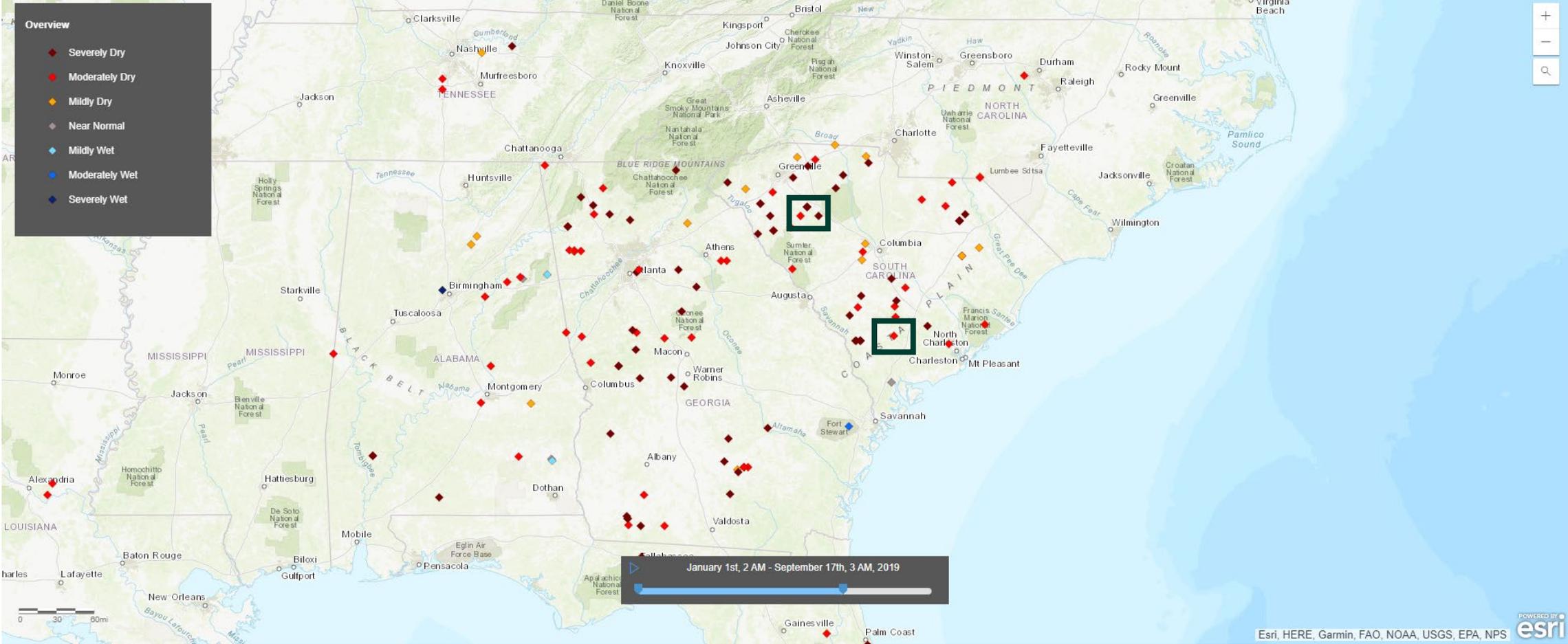
SOYBEANS mid August- normally waist high & completely covering rows with no ground showing between rows.

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Share



## SEPTEMBER 2019 – LAURENS COUNTY



All photos were taken at local Cow-calf Beef farms. Most of Cattle are watered by well water, few herds are using ponds and creeks.



## SEPTEMBER 2019 – COLLETON COUNTY

These are pictures taken of a pond in our yard that was well stocked with fish and other wildlife that is almost completely dry.



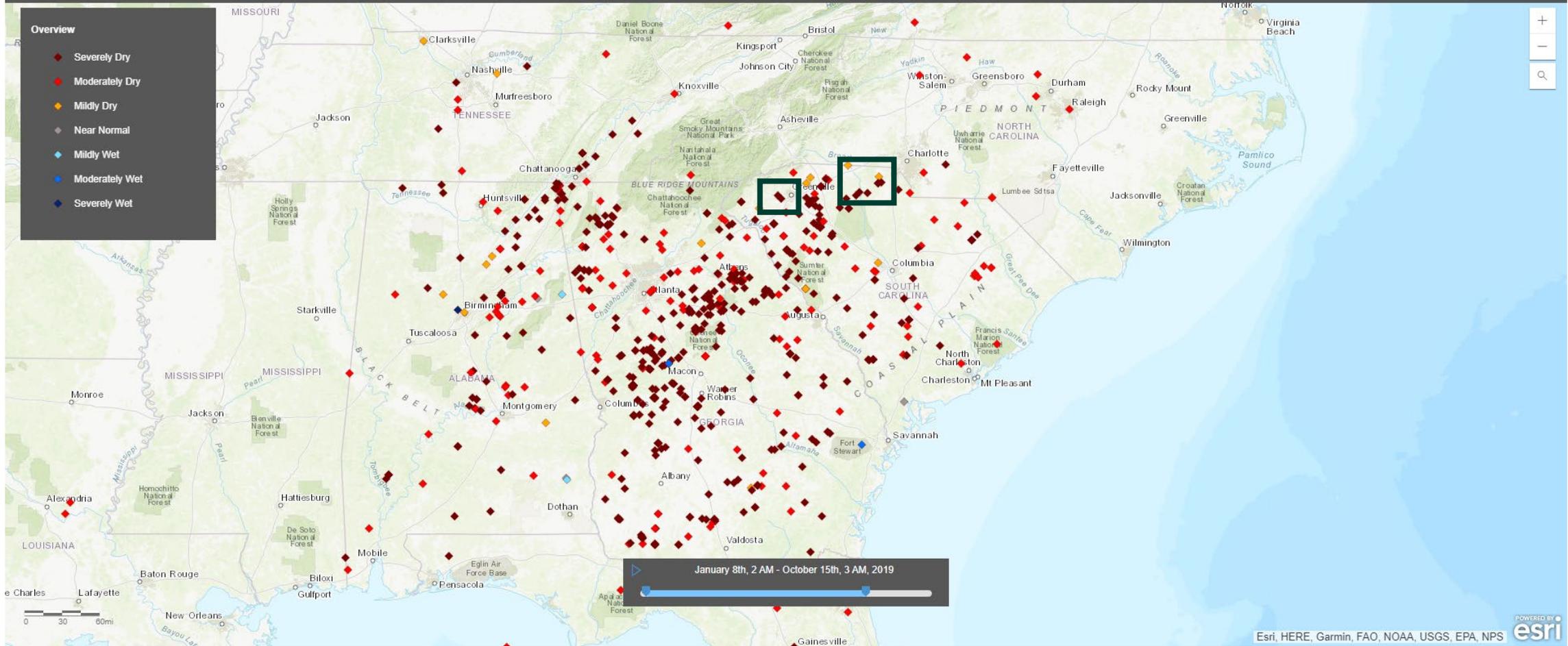
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  - Severely Wet



## OCTOBER 2019 – UNION COUNTY

I have been raising beef cattle on my farm for the past 40 years. I continue to rotate my pastures and have grazing available for the winter. At this time, all of my pastures are now open and being grazed. I will not have enough hay to get my operation through the winter. I am in the process of culling out cows that I do not want to sell, but I will have to with the lack of grazing and use of hay.



## OCTOBER 2019 – PICKENS COUNTY

These cracks are widespread in my front yard. Even when watered, it takes hours for water to soak in. It just stays on top. I am part of a municipal water system.



## OCTOBER 2019 – CHEROKEE COUNTY

Bermuda Grass – Drought Damaged



# NDMC Drought Condition Monitoring Observer Reporter (CMOR) Tool

## What has not changed:

NDMC is still following the CoCoRaHS condition monitoring pattern, asking people to rate conditions on a 7-point dry to wet scale.

People click on a sector of interest to get to individual impacts.

People can still upload up to five photos.

## Upload photo

You can upload a photo of up to 10 MB, if you are the photographer or have permission to share the photo. It will be visible on the web. Please be sure to use the description field below for credit and caption information: Who took the photo, what is the location, what is the date, and what is it showing us? By uploading the photo, you agree that it may be used and shared for educational and management purposes.

Press here to choose image file. (<10MB)



## Description and/or caption information

Did you upload a photo? If so please tell us how we should credit the photo, and what it is showing us.

Please provide any other description that will help us understand the drought impact or conditions that you checked, for example: What kind of crops do you grow? What kind of animals do you raise? Do you rely on your own well or are you part of a municipal system?

1000



# NDMC Drought Condition Monitoring Observer Reporter (CMOR) Tool

## New features for 2020:

Experience questions to provide that puts people's answer to "how bad is it" in terms of their experience and USDM categories

An identification code that you can share with trusted "expert" observers such as Extension agents.

### Identification code

Please enter your observer code if one has been provided to you.

How much experience do you have with conditions there?

less than 5 years

5-10 years

10-20 years

20 or more years

How many times in the past have you seen it like this?

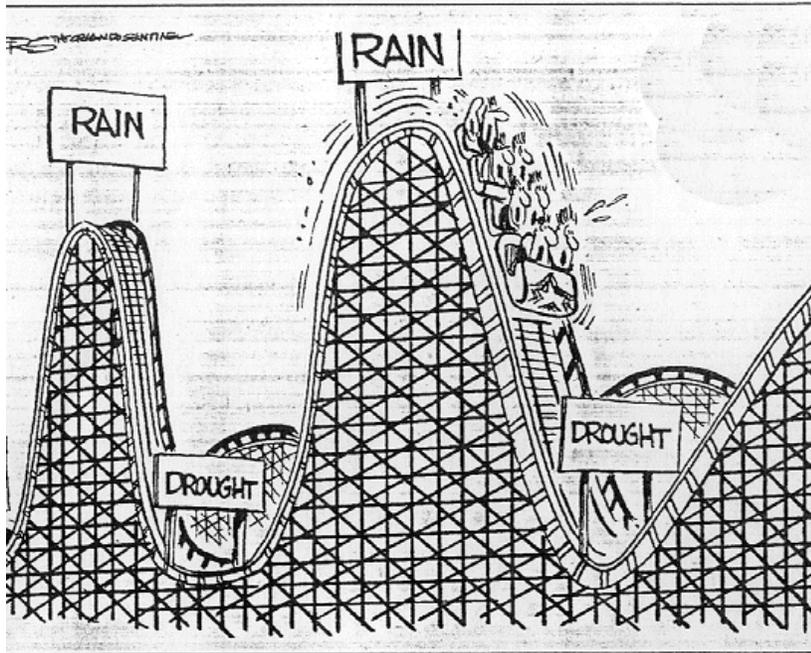
Never

Once

Twice or more

Other





# Contact Information

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South Carolina Department of Natural Resources

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Email: [drought@dnr.sc.gov](mailto:drought@dnr.sc.gov)



NATIONAL DROUGHT MITIGATION CENTER



## DEFINITION

## INDICATORS

## IMPACTS

Meteorological



Usually defined by below normal precipitation over a period, these droughts vary due to the different regional precipitation patterns.

- Number of days without precipitation
- Number of days with precipitation below a certain threshold
- Departure from monthly, seasonal or annual precipitation totals

- More fires and more intense fires
- Burn bans
- Poor air quality
- High fire risks
- Property damage and loss of habitat
- Park or road closures
- Wildlife foraging near people

Agricultural



Primarily short-term droughts, this type of drought has characteristics of both meteorological and hydrological droughts. Impacts to agriculture, including crops, forestry, and livestock.

- Precipitation shortages
- Increases in evaporation and transpiration
- Topsoil and subsurface moisture deficits
- Reduced groundwater and reservoir levels

- Decreased crop production and livestock weights
- Reduced yields, pastures, forage
- Animal and plant stress
- Increased irrigation or hauled water
- Insect infestation
- Sold livestock

Hydrological



This type of drought tends to lag the occurrence of agricultural and meteorological droughts. The impacts can last for years behind the initial onset of the drought.

- Low lake, reservoir, and river levels
- Reduced streamflow values
- Decreased wetlands
- Deficient groundwater levels

- Voluntary or mandatory conservation
- Reduced fishery production and mortality
- Water receding from access
- Water quality changes and issues
- Water rate changes
- Low or dry wells