





WaterSC Fall Session 2026

September 17, 2026

Agenda

- Welcome and Updates
  - Myra Reece
- Current Drought Development and Status
  - Dr. Hope Mizzell
- Drought Impacts – Real Life Examples
  - Hydrology Impacts – Alexis Modzelesky
  - Private Well Impacts - Greg Withycombe
  - Groundwater Impacts – Leigh Anne Monroe
- Facilitated Discussion
- Harmful Algal Blooms Program
  - Emily Bores
- Next Steps
- Adjourn



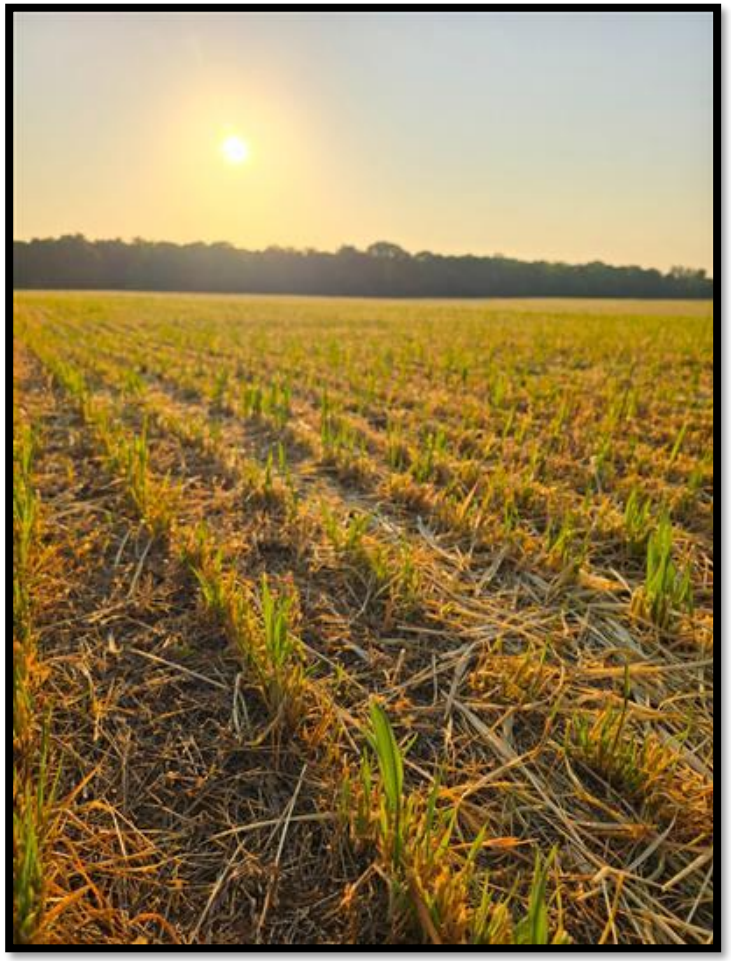
Welcome and Updates

Drought Development and Status

South Carolina Drought: Current Conditions, Impacts, and the Forecast Ahead







Hope Mizzell, Ph.D.
South Carolina State Climatologist



July 6, 2026
Location: JCO Farms- Allendale, SC
Submitted By: - Joe Oswald





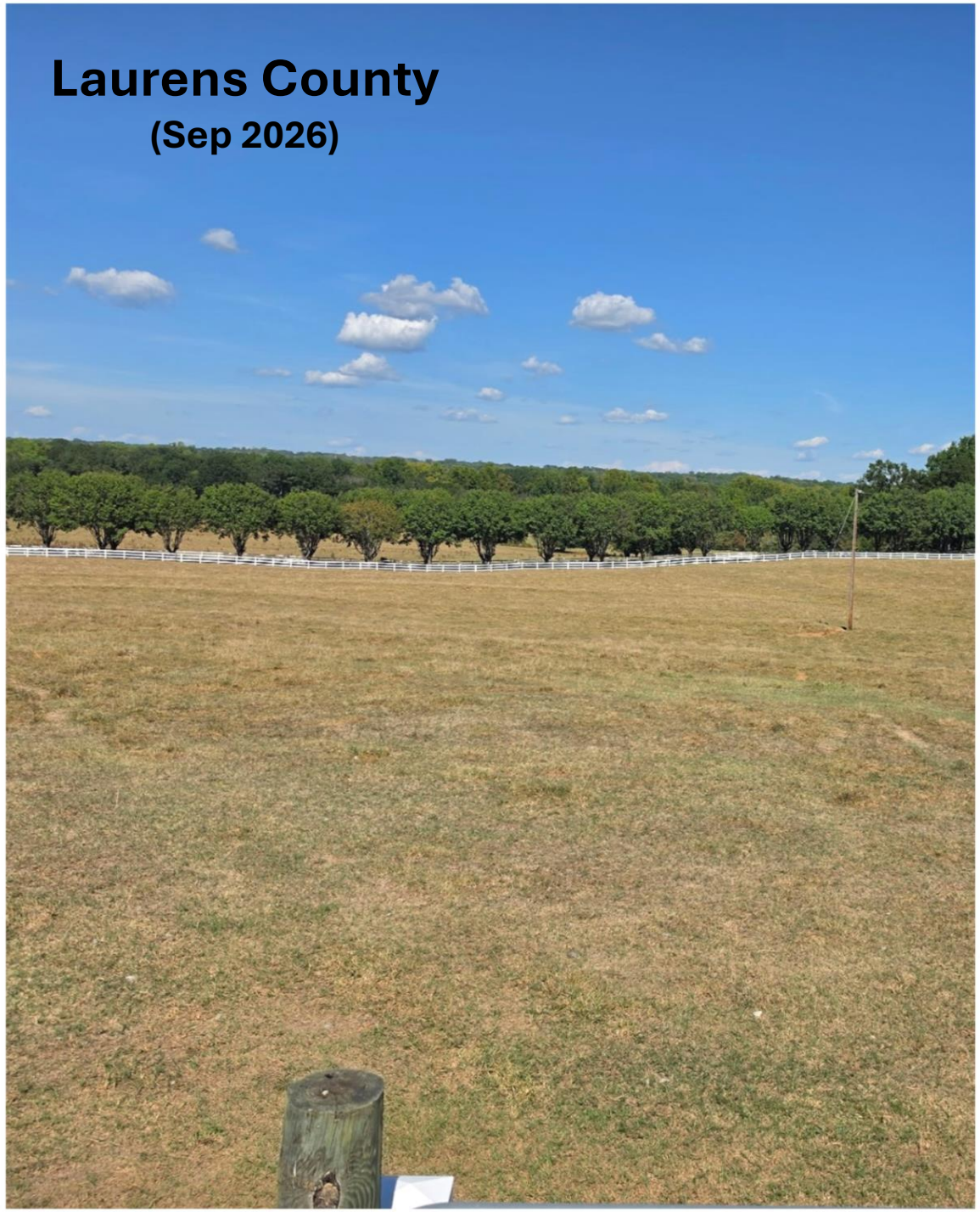




JULY 25, 2026

Location: Sumter 1.1 SSW
Submitted By: - CMOR: Mike Majority


Lake Hartwell
(Sep 2026)


Laurens County
(Sep 2026)

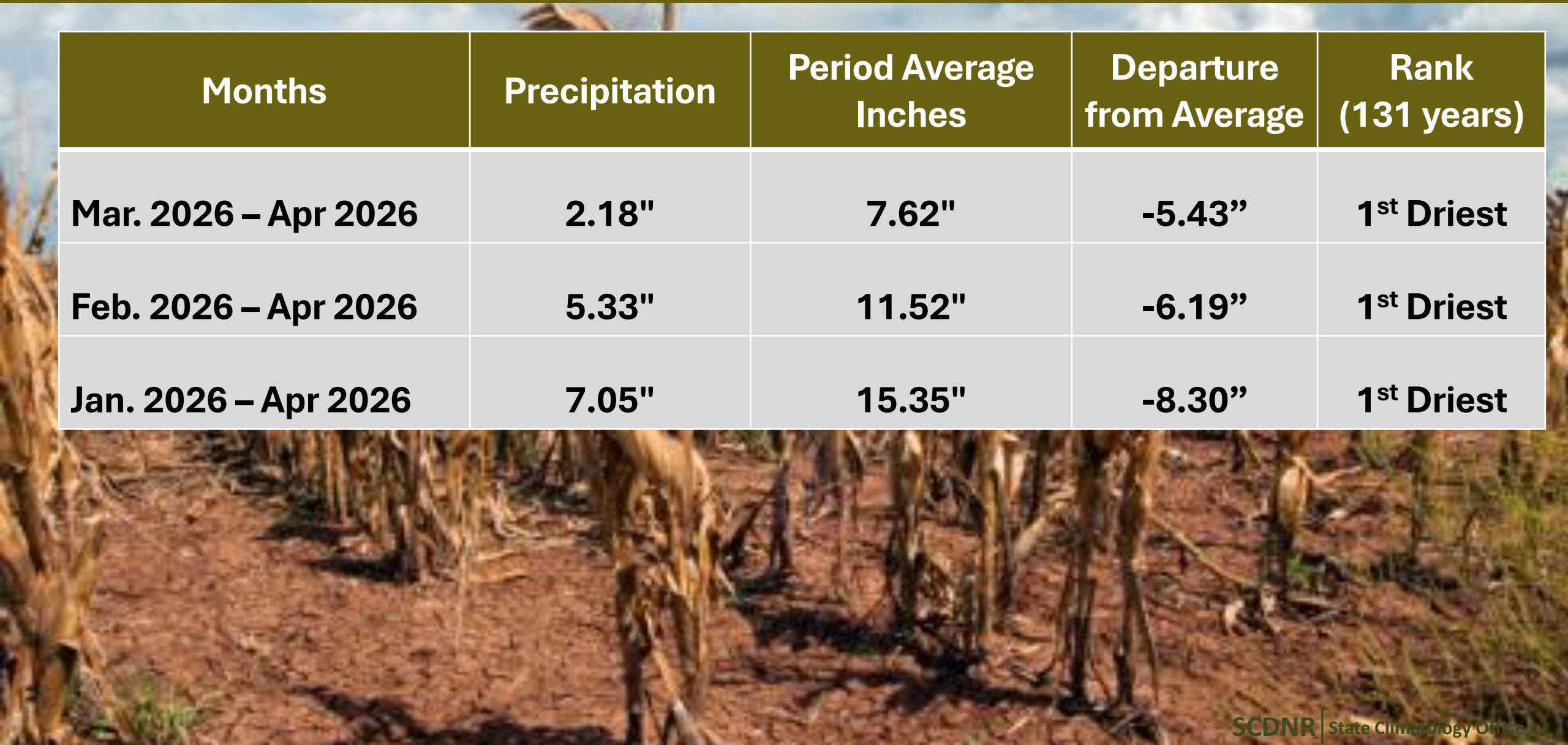
Lake Jocassee (Sep 2026)





Statewide Driest on Record (131 Years)

Months	Precipitation	Period Average Inches	Departure from Average	Rank (131 years)
Mar. 2026 – Apr 2026	2.18"	7.62"	-5.43”	1st Driest
Feb. 2026 – Apr 2026	5.33"	11.52"	-6.19”	1st Driest
Jan. 2026 – Apr 2026	7.05"	15.35"	-8.30”	1st Driest



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Dec. 2025 – Apr 2026	9.50”	19.00"	-9.50”	1st Driest

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Dec. 2025 – Apr 2026	9.50”	19.00"	-9.50”	1st Driest
Nov. 2025 – Apr 2026	10.05”	21.60"	-11.55”	1st Driest

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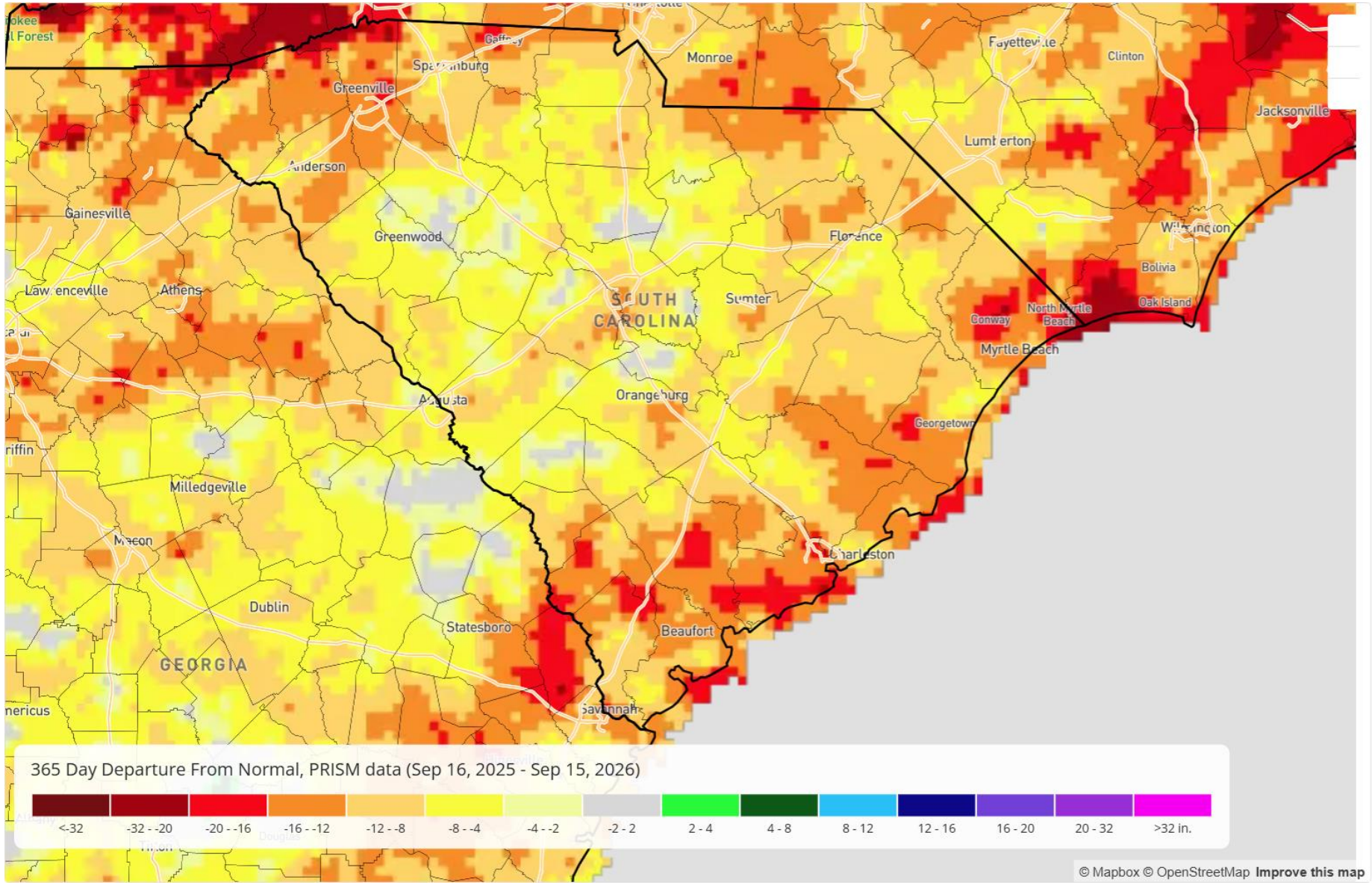
Dec. 2025 – Apr 2026	9.50”	19.00"	-9.50”	1st Driest
Nov. 2025 – Apr 2026	10.05”	21.60"	-11.55”	1st Driest
Oct. 2025 – Apr 2026	14.68”	24.63"	-9.95”	1st Driest
Sept. 2025- Apr 2026	16.33”	28.83"	-12.50	1st Driest

Statewide Driest on Record (131 Years)

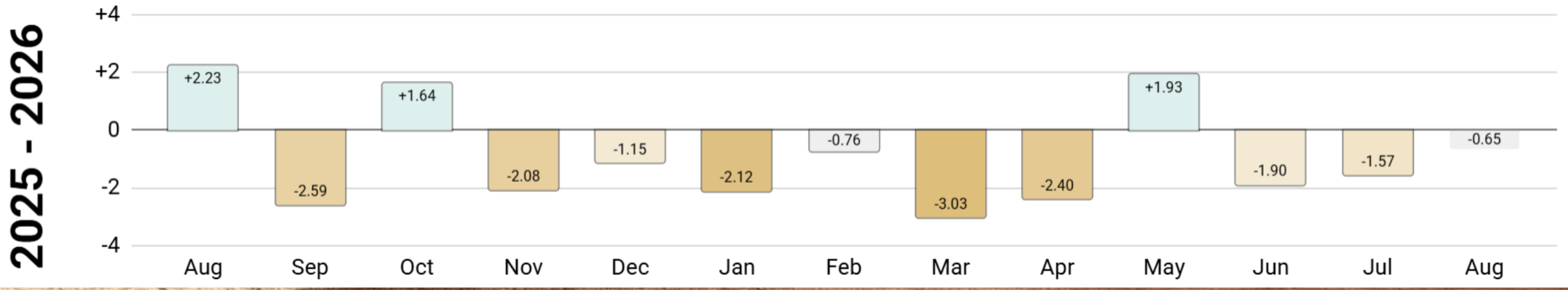
Months	Precipitation	Period Average Inches	Departure from Average	Rank (131 years)
Sep. 2025 – May 2026	21.84”	32.41”	-10.57”	5th Driest
Sep. 2025 – June 2026	24.62”	37.09”	-12.47”	2nd Driest
Sep. 2025 – July 2026	28.59”	42.63	-14.04”	3rd Driest
Sep. 2025 – Aug. 2026	33.22”	47.91”	-14.69”	1st Driest

365 Day Precipitation Departure From Normal (9/16/25 – 9/15/26)



SC Statewide Precipitation Departures from Normal







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Hot and Dry Summer (June - August)

*Data is preliminary until final quality control and review by NCEI

Station	Precipitation Rank	Temperature Rank	Period of Record
Charleston Airport	10 Driest	3rd Warmest	97 years
Columbia Airport	7th Driest	6th Warmest	79 years
Greenville	3rd Driest	8th Warmest (Tied)	127 years
South Carolina Statewide Average	8th Driest	4th Warmest (Tied)	131 years



Charleston Airport Summer Temperatures (97 Year POR)

Average High Temperatures (°F) Season to Date (Jun 1st - Aug 31st)

Year(s)	Avg High Temp (°F)	Rank
2016	93.1	1
2011	92.9	2
2026	**92.5**	**3**
1998	91.8	T-4
1954	91.8	T-4

Average Mean Temperatures (°F) Season to Date (Jun 1st - Aug 31st)

Year(s)	Avg Mean Temp (°F)	Rank
2016	84.1	1
2011	83.4	2
2026	**83.2**	**3**
2010	83.1	4
2014	82.7	5



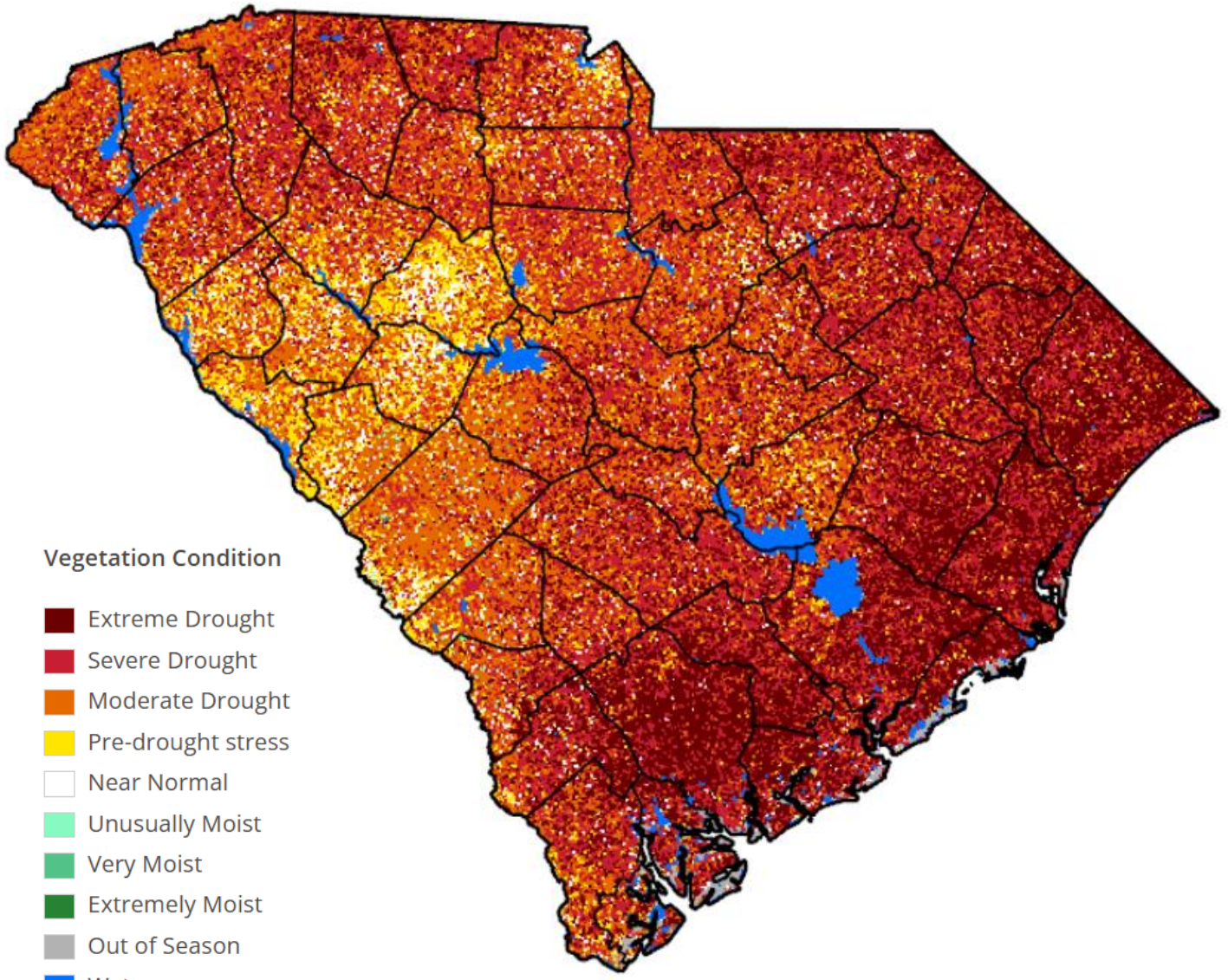
Post and Courier



Vegetation Drought Response Index 9/13/2026







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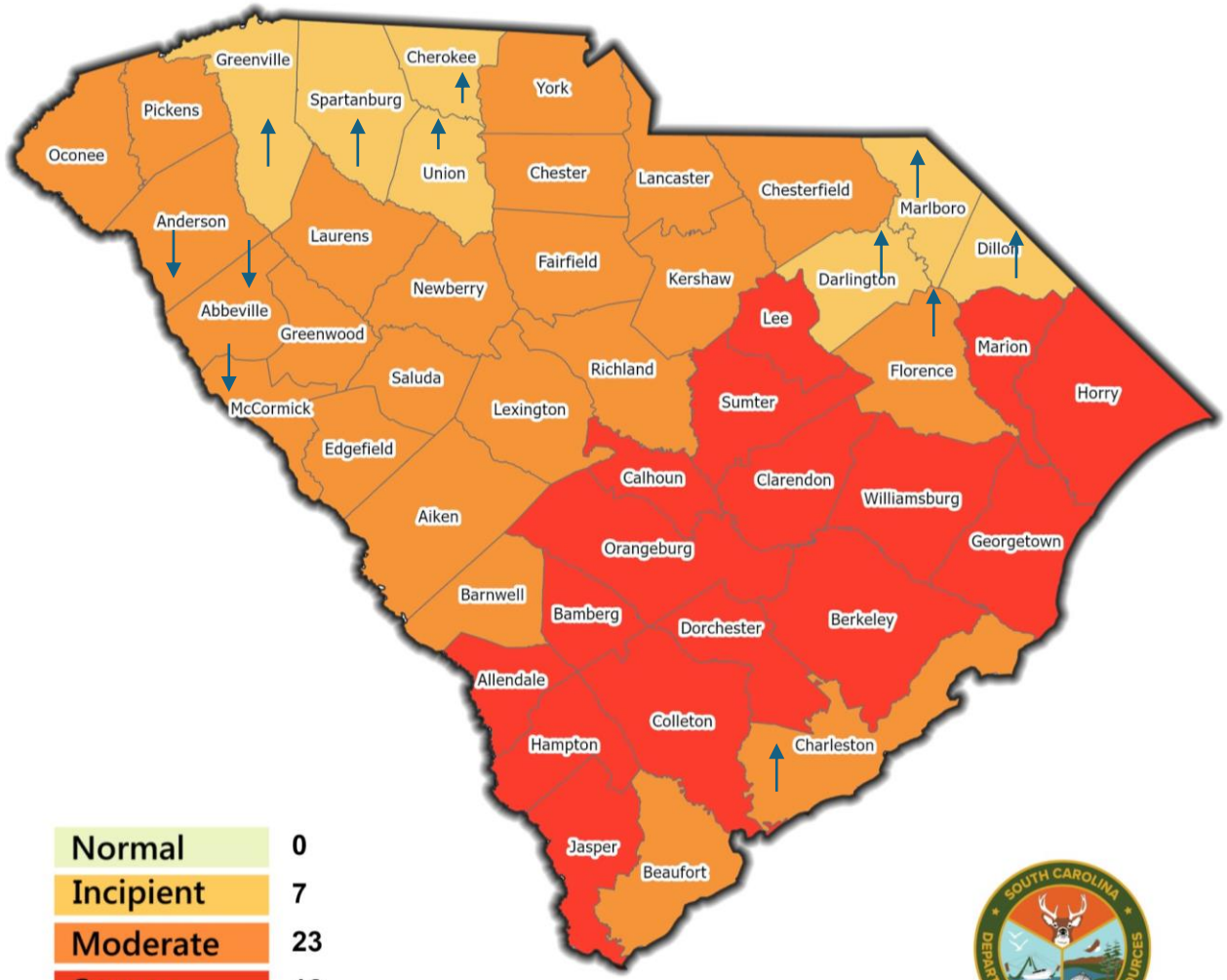
Last Drought Committee Meeting 9/8/2026

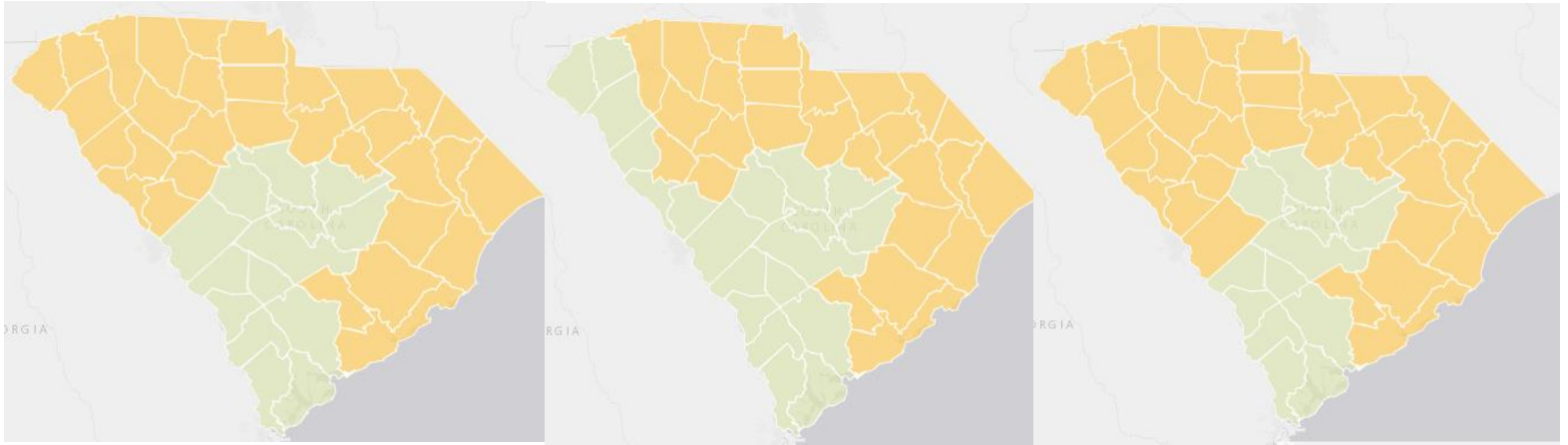


Normal	0
Incipient	7
Moderate	23
Severe	16
Extreme	0

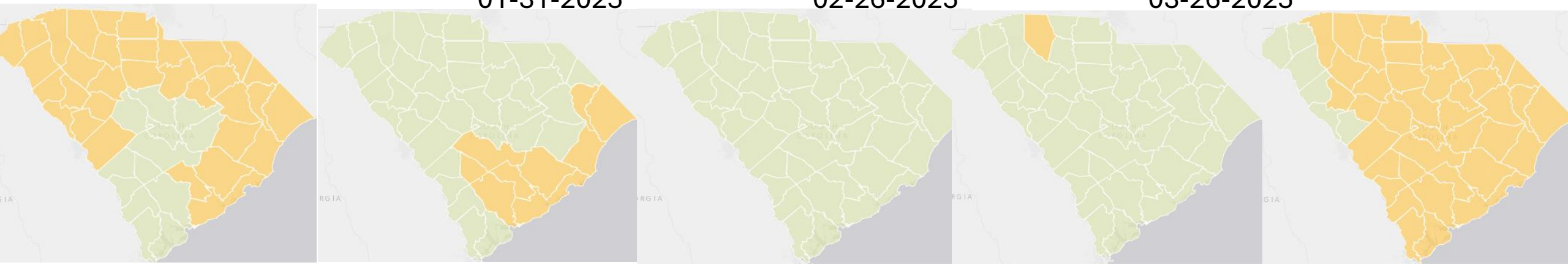
Number of counties in each category.

SC Department of Natural Resources
State Climate Office

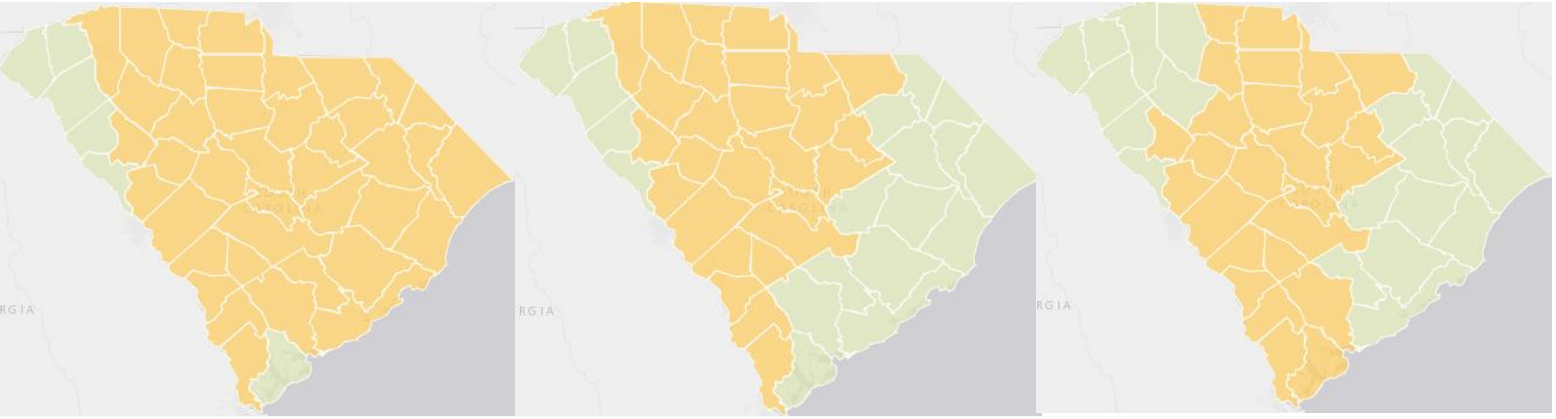
2025 Drought Response Committee Meetings



01-31-2025 02-26-2025 03-26-2025



04-30-2025 05-22-2025 06-24-2025 08-04-2025 09-24-2025



0-07-2025 10-28-2025 12-10-2025

Normal

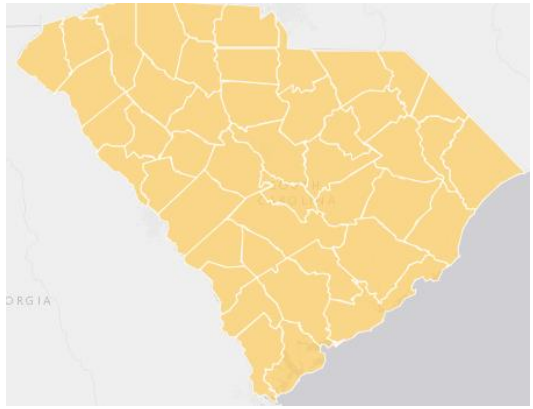
Incipient

Moderate

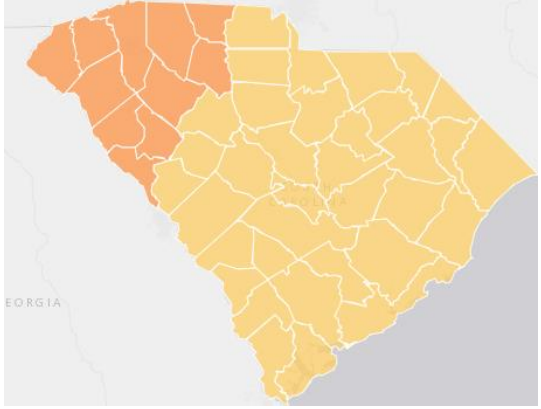
Severe

Extreme

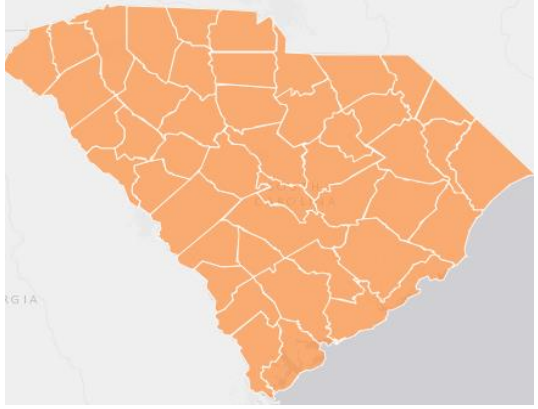
2026 Drought Response Committee Meetings



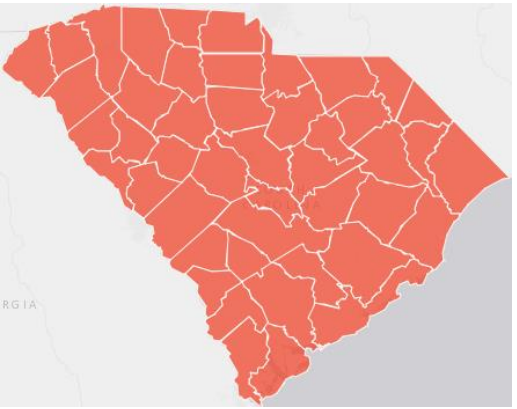
01-28-2026



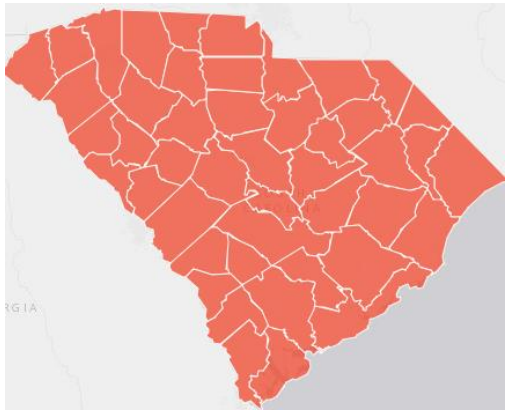
03-05-2026



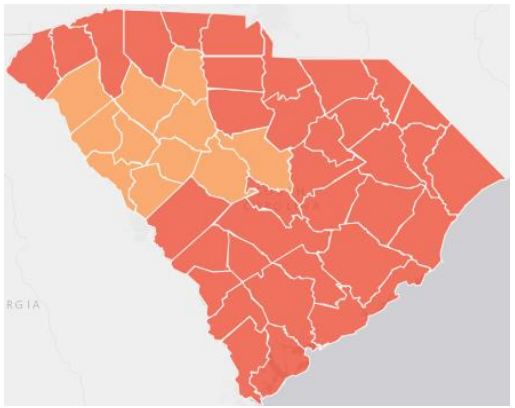
04-09-2026



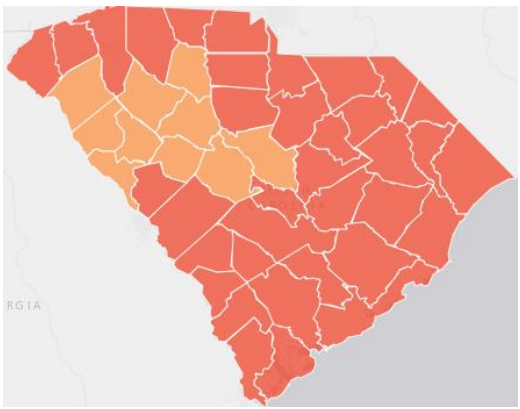
04-30-2026



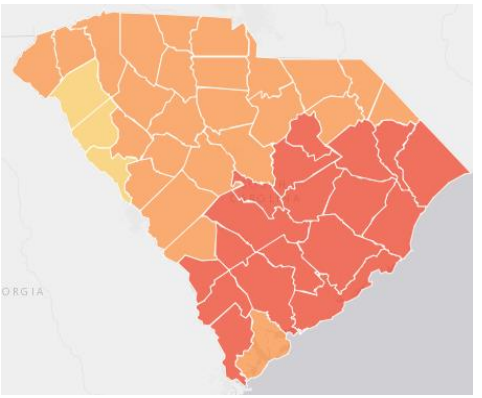
05-21-2026



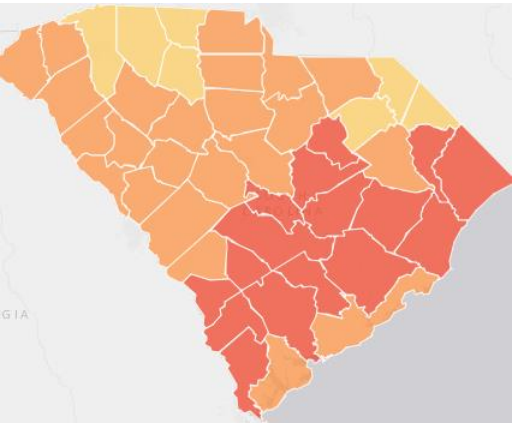
06-11-2026



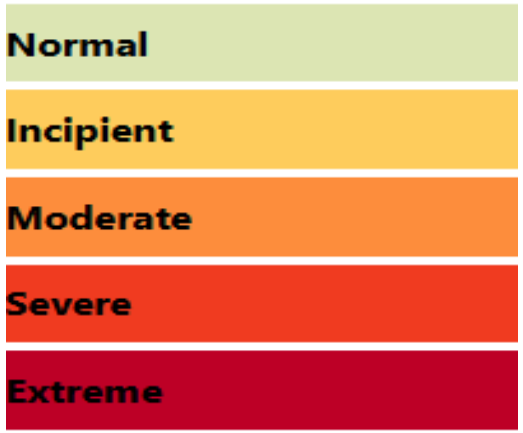
07-08-2026



08-06-2026



09-08-2026 - Current



Weekly Drought Briefing for the Governor

South Carolina Drought Briefing – Sept. 11, 2026

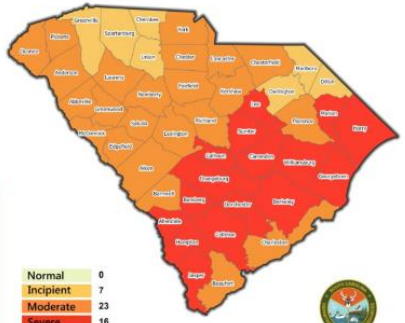
South Carolina Drought Response Committee

The South Carolina Drought Response Committee (DRC) met on **September 8, 2026**, to assess statewide drought conditions. **The DRC voted to improve drought status for Charleston, Cherokee, Darlington, Dillon, Florence, Greenville, Marlboro, Spartanburg, and Union Counties. Drought status upgraded for Abbeville, Anderson, and McCormick Co.** There was no change in drought status for all other counties. See attached press release.

Next Drought Response Committee Meeting: October 13, 2026, at 10AM
To join by computer:
teams.microsoft.com
Meeting ID: 287 823 595 205 471
Passcode: s3oR7gR2

For additional information, please contact drought@dnr.sc.gov or visit scdrought.com.

Drought Status: 09-08-2026



Normal	0
Incipient	7
Moderate	23
Severe	16
Extreme	0

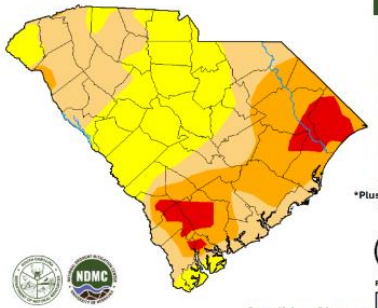
Number of counties in each category.

SC Department of Natural Resources State Climate Office

U.S Drought Monitor Update for South Carolina

Assessment Period Ending September 8, 2026

This week's USDM Author, **Curtis Riganti (NDMC),** with input from local, state, and federal partners based in South Carolina.



Statewide Coverage By Category

Category	Categorical Coverage This Week	Change Since Last Week
D0: Abnormally Dry	34.61%	-2.72%
D1: Moderate Drought	34.05%	+3.37%
D2: Severe Drought	24.16%	+0.86%
D3: Extreme Drought	7.19%	-0.40%
D4: Exceptional Drought	0.00%	0.00%

***Plus sign** on "Change Since Last Week" indicates the expansion of the catego area, and the **minus sign** indicates the reduction of the category area.

Precipitation | Soil Moisture | Streamflows | Reservoir Levels | Wildfire Risk

Condition Change: Improvement | Mixture of Improvement & Worsening Conditions | Worsening Conditions | No Change

South Carolina Drought Briefing – Sept. 11, 2026

Drought Executive Summary

Water Resources

Based on data from SCDES Ending Sept. 10, 2026

- Streamflow conditions improved or declined depending on the amount and coverage of rainfall
- Groundwater and reservoir levels declined across portions of the state.
- 18 water systems are requiring mandatory water conservation.
- 50 water systems are requesting voluntary water conservation measures.

Agriculture

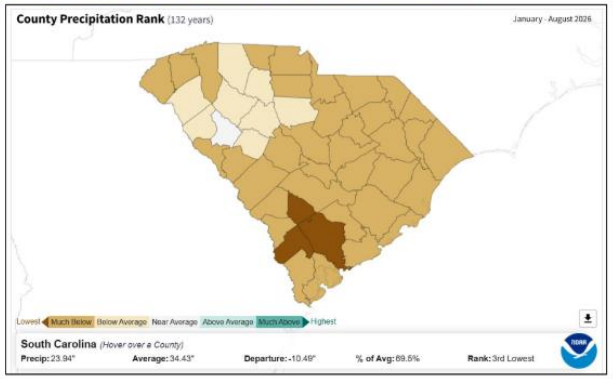
Based on USDA FSA Reports Ending Sept. 8, 2026

- Conditions vary across the state. Some areas deteriorating again with lack of widespread rain.
- Crops and pastures are showing signs of stress from last week's excessive heat.

South Carolina Statewide Average

Period	Precipitation	Rank (out of 132)
January-August 1954	22.22"	1
January-August 1911	22.68"	2
January-August 2026	23.94"	3
January-August 2007	24.20"	4
January-August 1925	24.51"	5

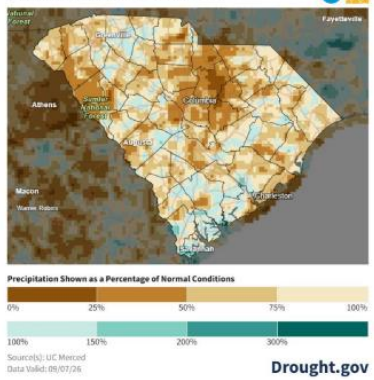
January – August 2026 : County Precipitation Rank



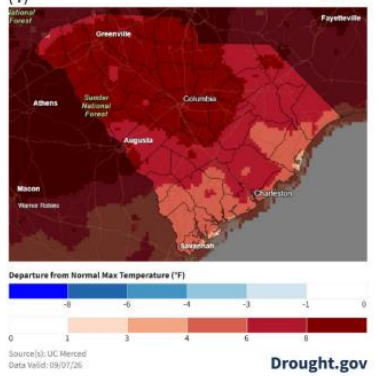
South Carolina Drought Briefing – Sept. 11, 2026

Rainfall and Temperature Statistics

30-Day Percent of Normal Precipitation



7-Day Departure from Normal Maximum Temperature (°F)



Key Point

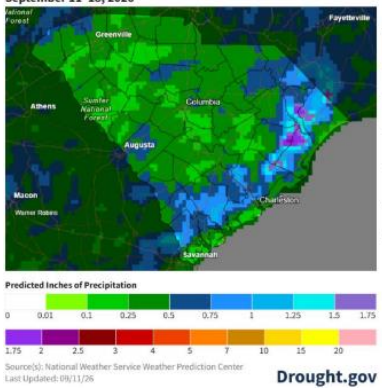
- Mostly dry conditions with limited areas receiving beneficial rain over the past two weeks.

Key Points

- Maximum temperatures were in the 90s to just above 100 over the past 7 days.
- Temperatures were much above normal for this time of year across the state.

7-Day Rainfall Forecast

7-Day Quantitative Precipitation Forecast for September 11-18, 2026



Rainfall Forecast Confidence

	Potential	Amount	Coverage
Very High			
High			
Medium	✓		
Low		✓	✓
Very Low			

The **current forecast** calls for 0.25 to 2 inches of rain over the next seven days.

This information is based on forecast and outlook guidance from the National Weather Service. For more information, visit: weather.gov

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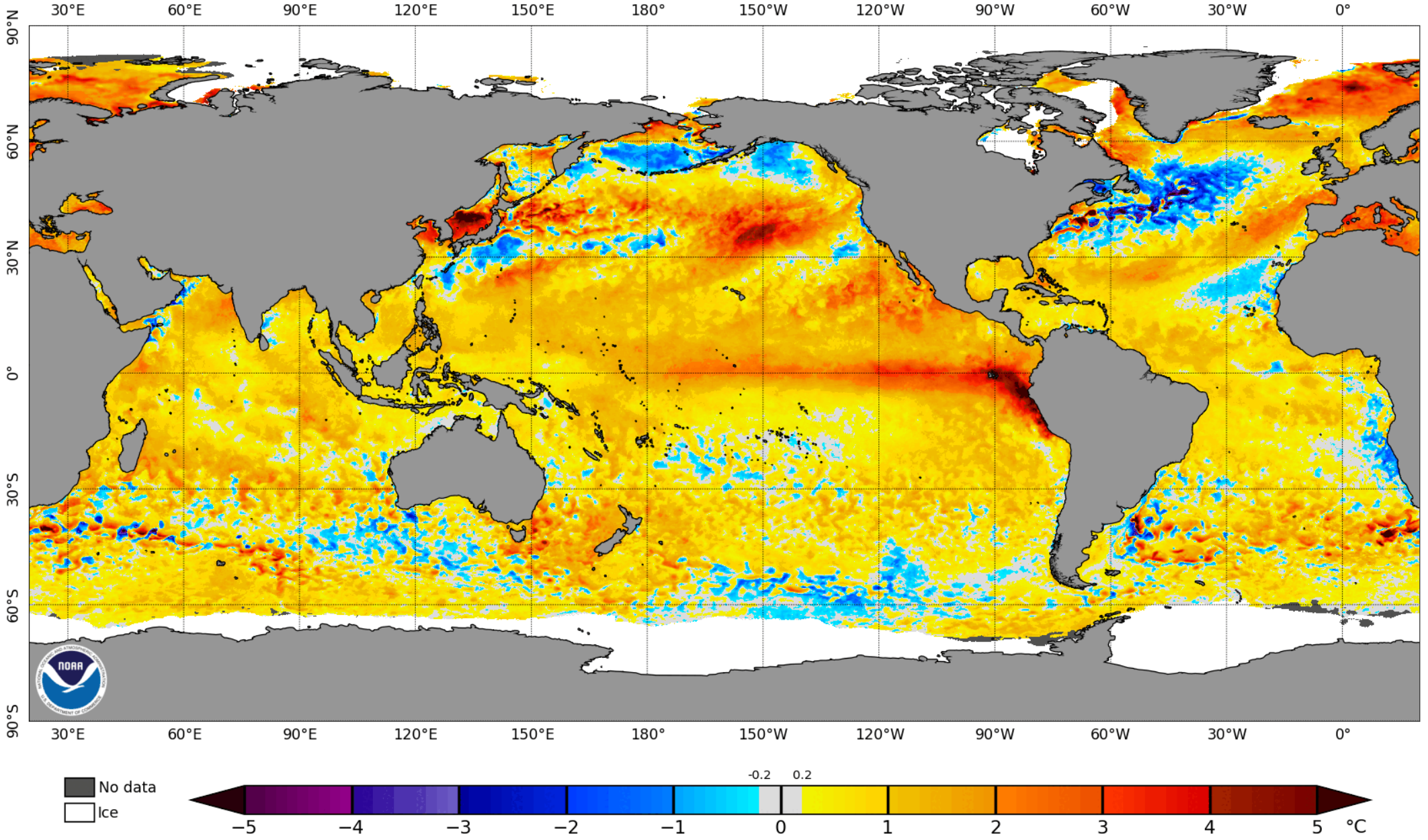
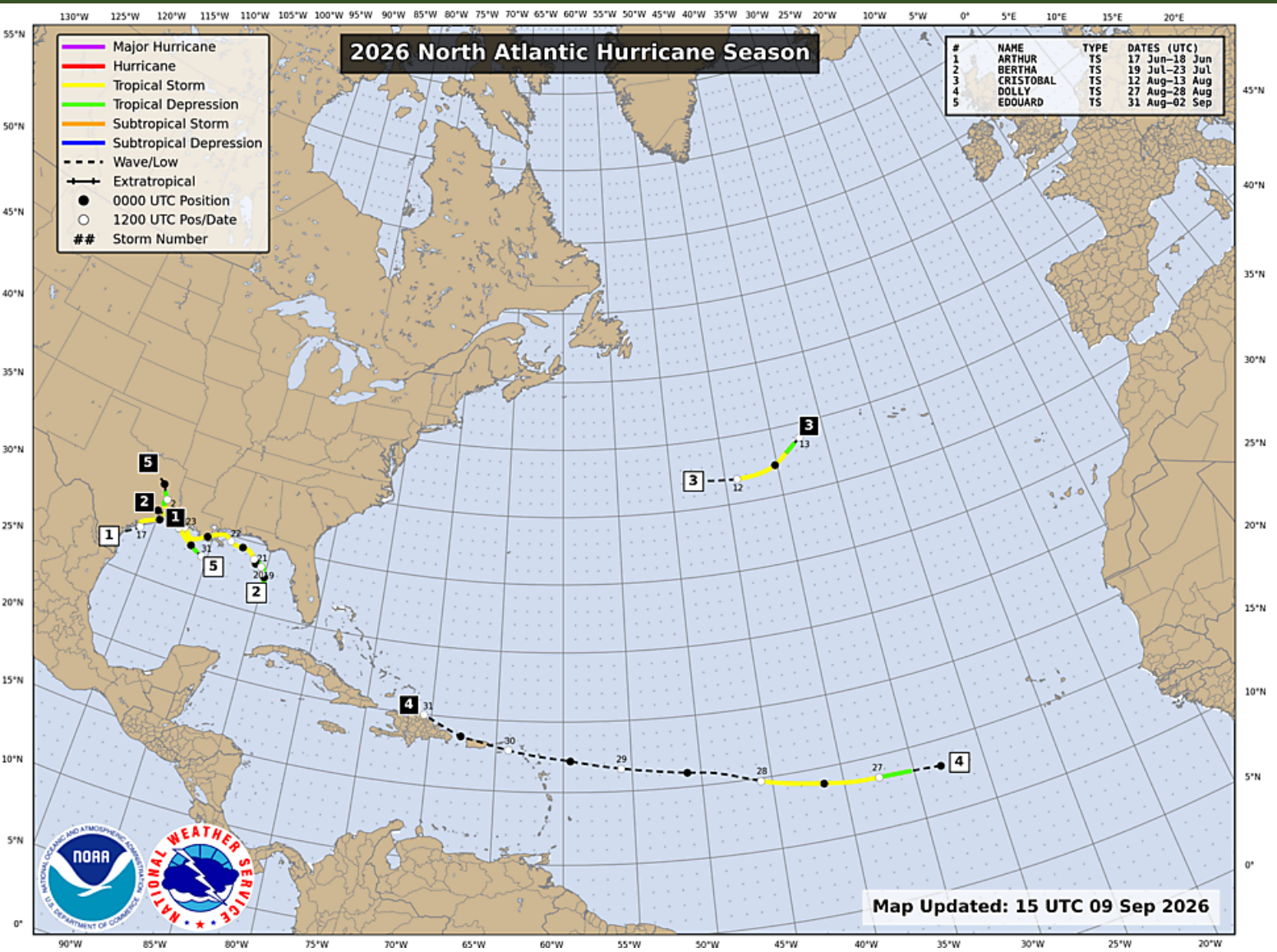
NOAA Coral Reef Watch Daily 5km SST Anomalies (v3.1) 16 Jun 2026



The 2026 Atlantic Hurricane Season So Far



	Name	Peak Intensity	Date
1	Arthur	Tropical Storm	June 17 (11 a.m. to 11 p.m.)
2	Bertha	Tropical Storm	July 19 to July 23
3	Cristobal	Tropical Storm	August 12 to August 13
4	Dolly	Tropical Storm	August 27 to August 28
5	Edouard	Tropical Storm	August 31 to September 2
6	Fay		
7	Gonzalo		
8	Hanna		
9	Isaias		
10	Josephine		
11	Kyle		
12	Leah		
13	Marco		
14	Nana		
15	Omar		
16	Paulette		
17	Rene		
18	Sally		
19	Teddy		
20	Vicky		

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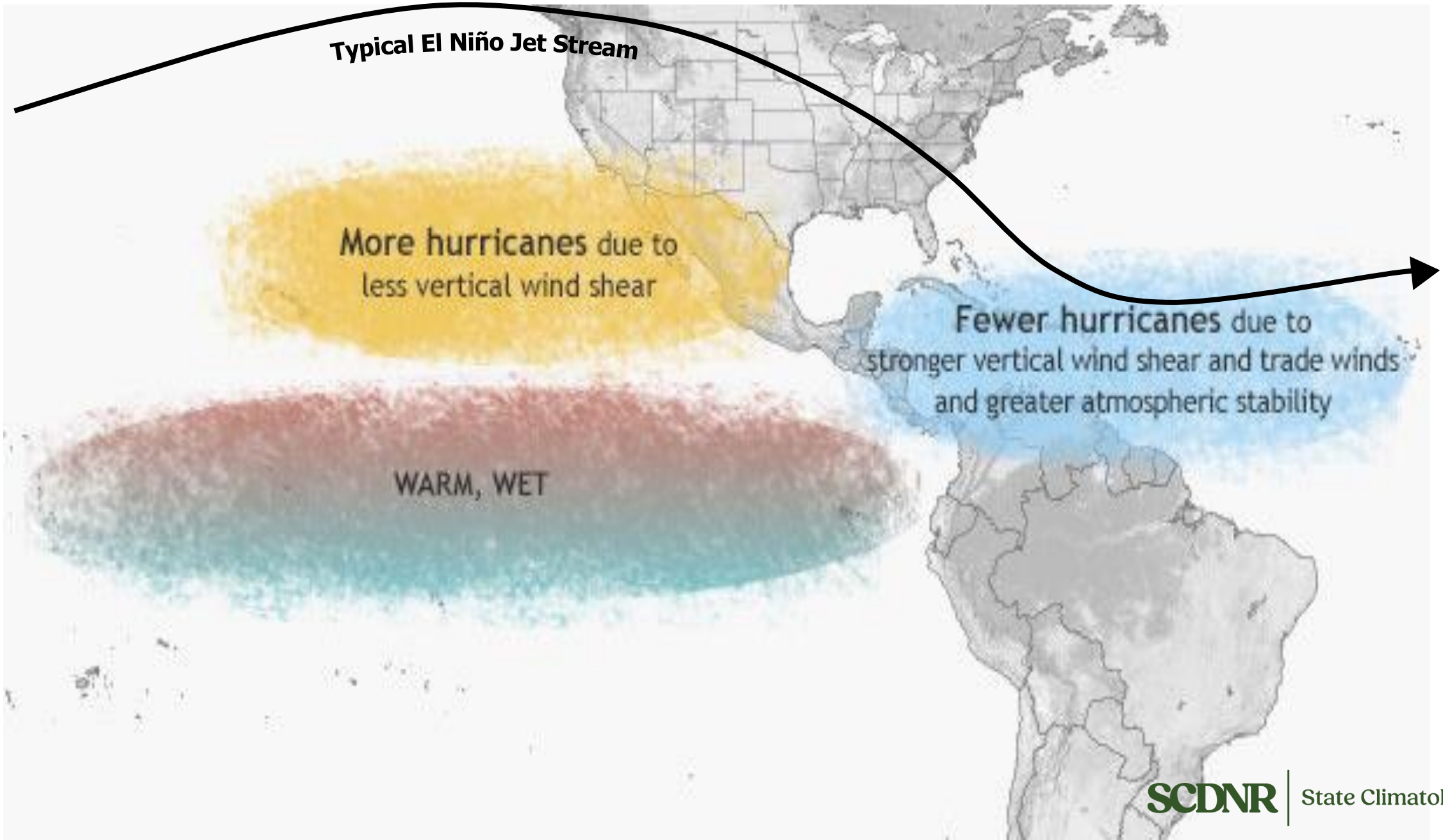
2026: Record-Setting For Lack of Hurricanes

Latest-First Atlantic Hurricanes 1960 To Present (Satellite Observation Era)

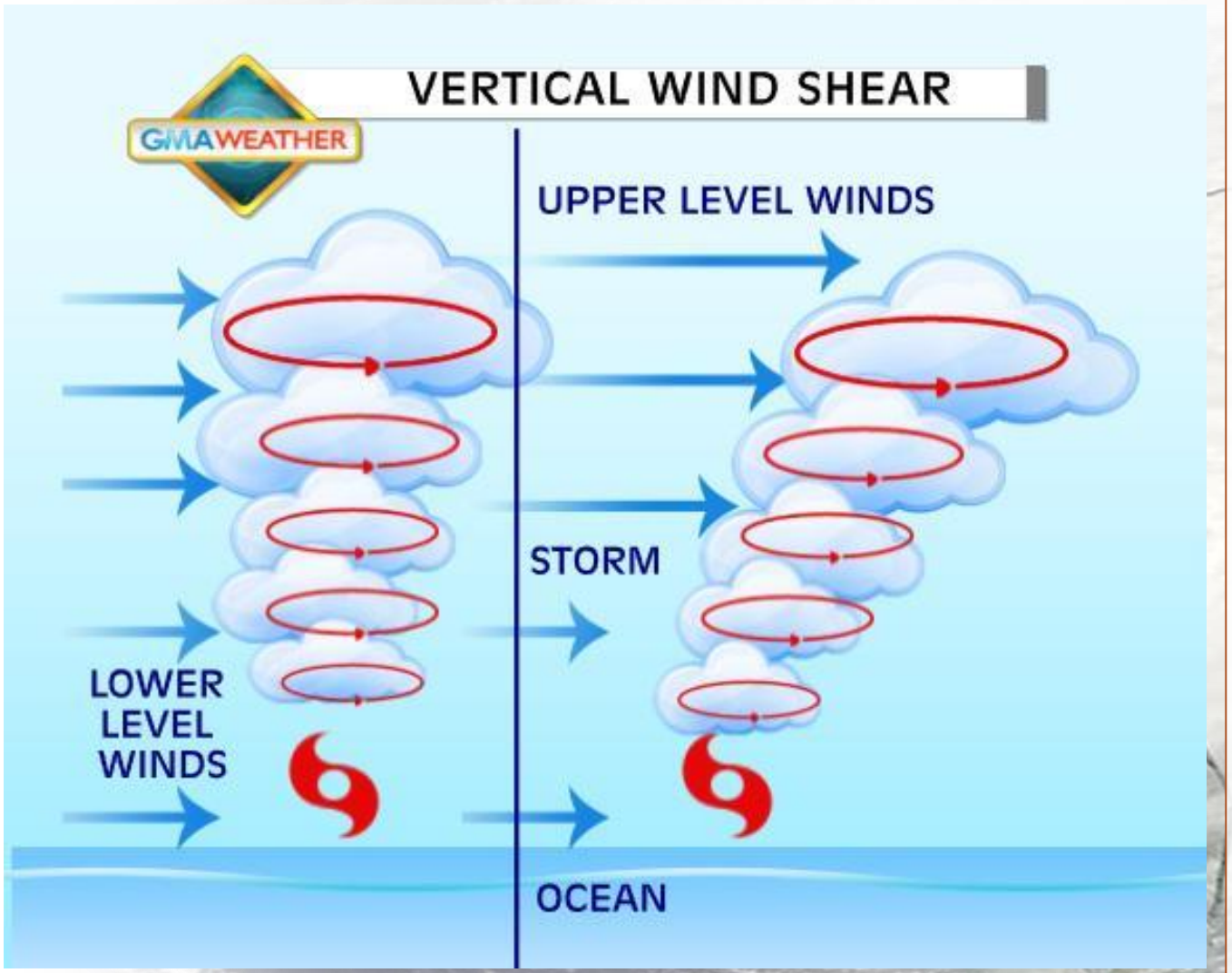
Rank	Storm Name	Date	Day Of Year	Time of Day Upgraded (UTC)
1	Gustav	September 11, 2002	254	1200
1	Humberto	September 11, 2013	254	1200
1*	Diana	September 10, 1984	254	1200
2	Erin	September 9, 2001	252	0000
3	Debby	September 2, 1988	246	1800

2026: No hurricanes to date as of September 11 (254th Day of Year)

El Niño and Tropical Activity

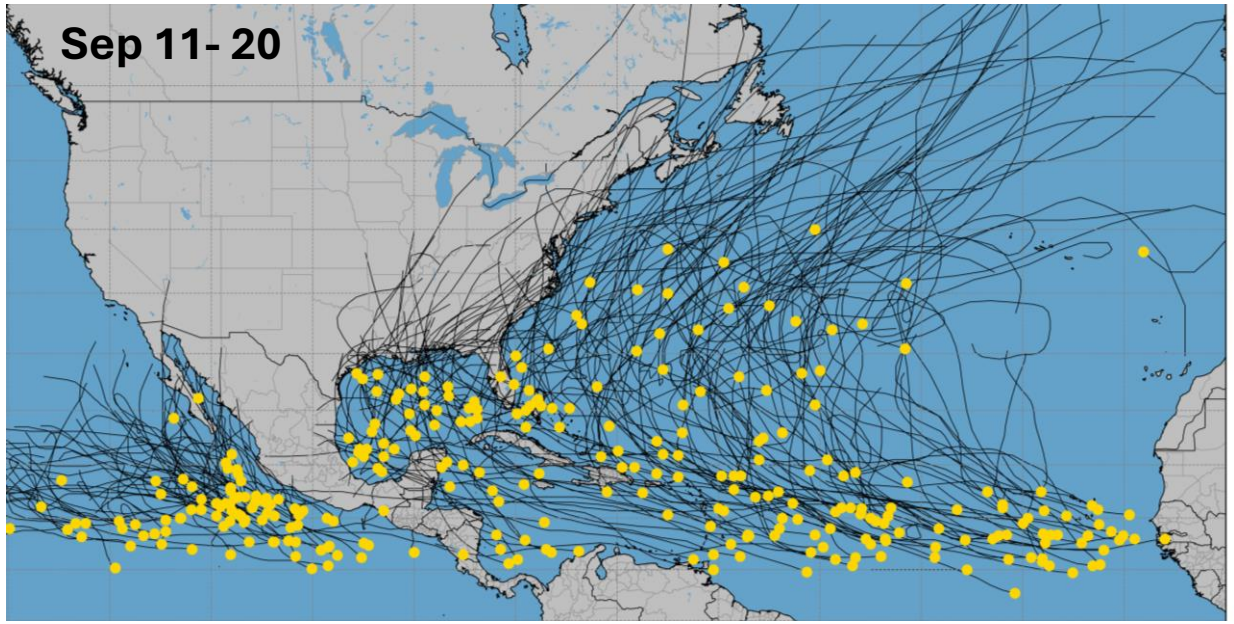


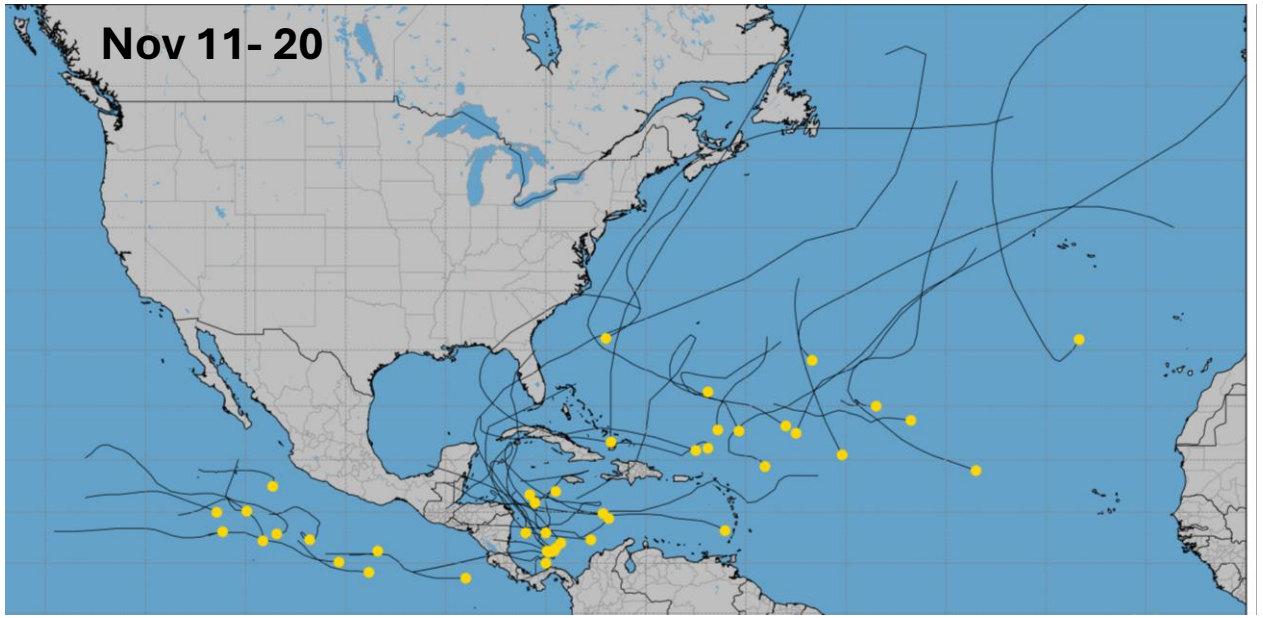
Factors Driving Forecast

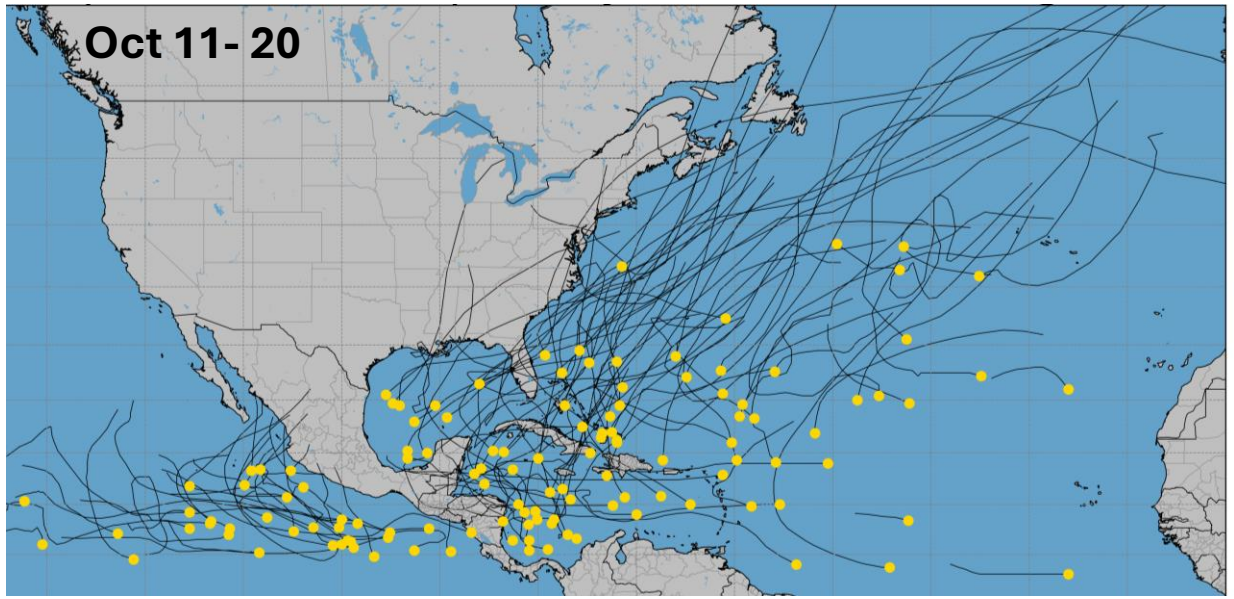


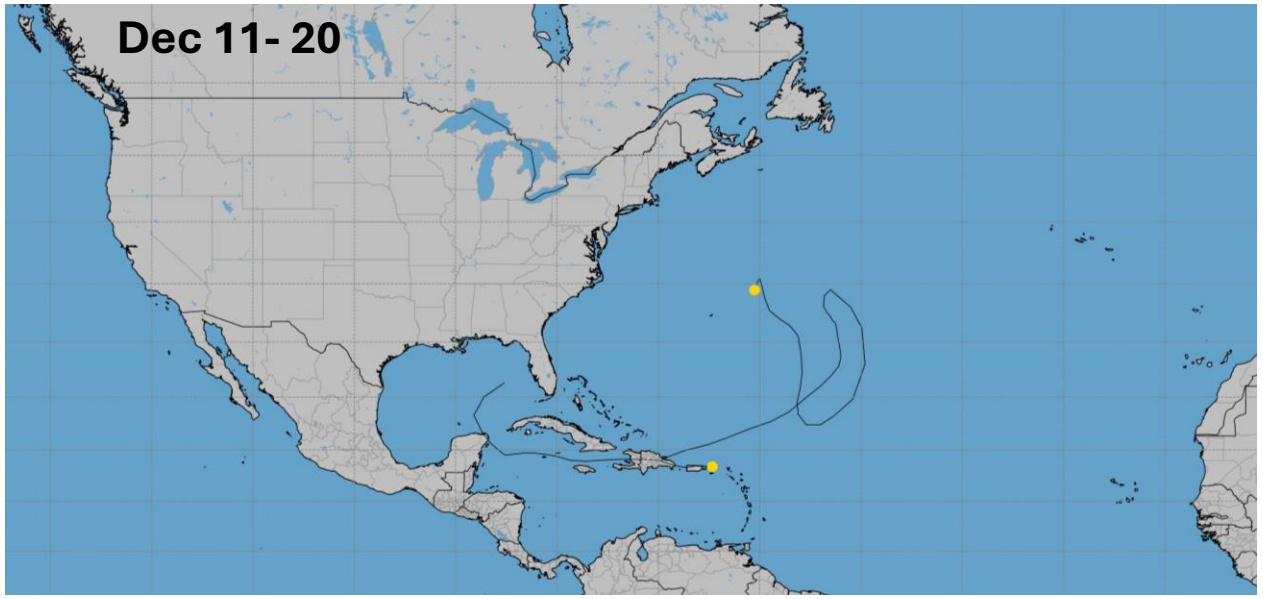
- Wind shear is the change in speed or direction of wind over a short distance.
- Wind shear occurring at different heights in the atmosphere is vertical wind shear.
- Hurricanes need to develop vertically.
- When wind shear is increased, there is a greater chance the storm will dissipate because the storm is pushed or spread over a larger area.

Tropical and Subtropical Cyclone Origin and Tracks

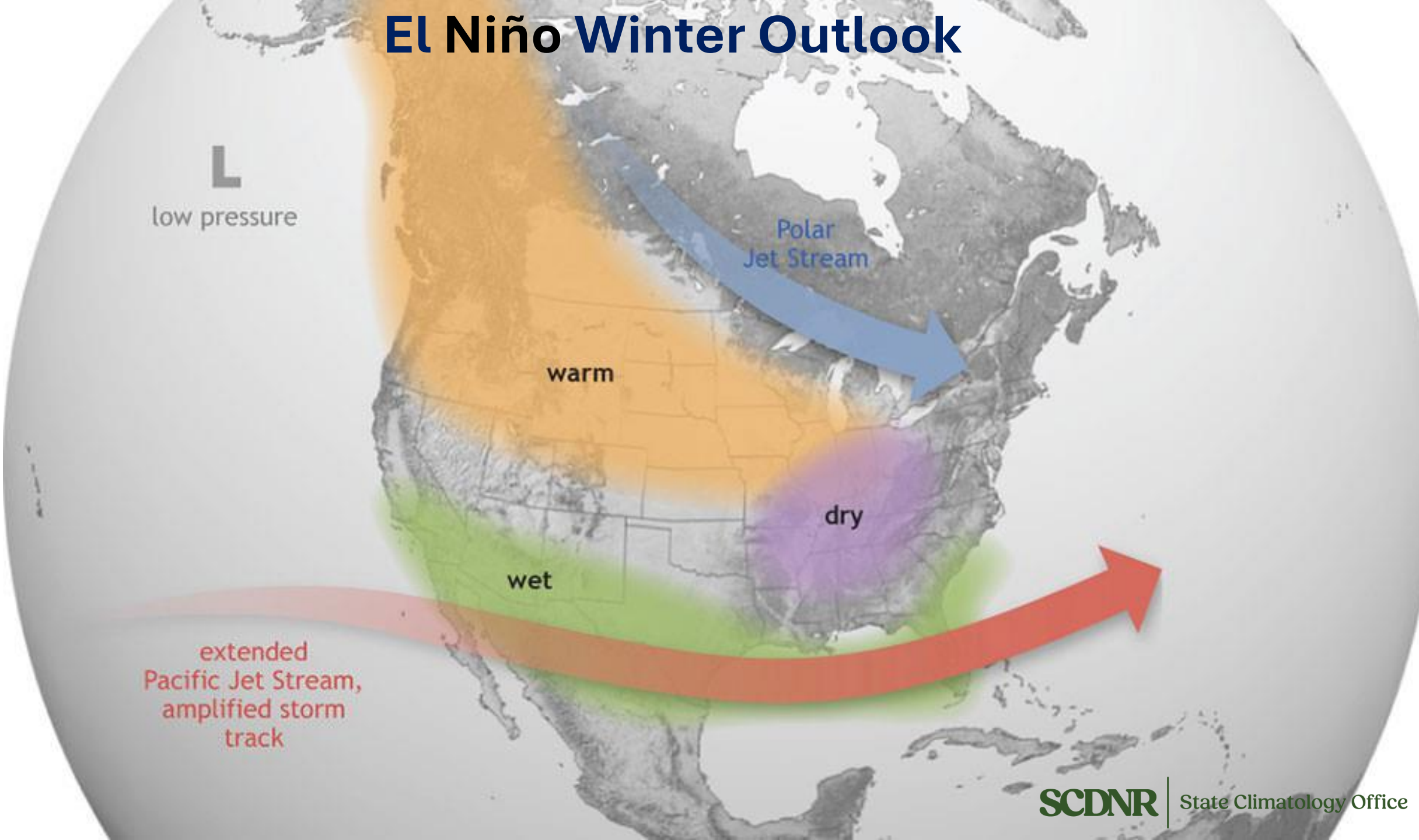








El Niño Winter Outlook



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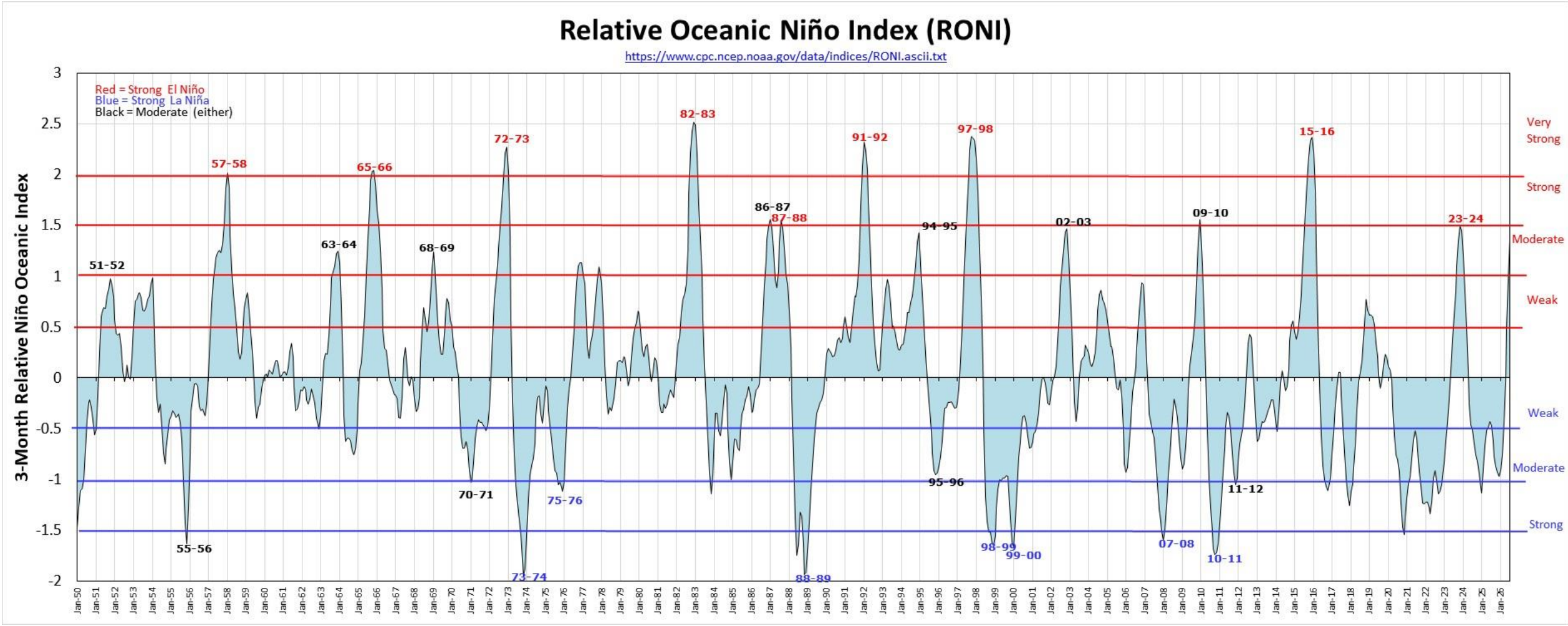
Relative Oceanic Niño Index

Measures El Niño and La Niña events by comparing sea surface temperature anomalies in the Niño 3.4 region to the average tropical ocean temperature

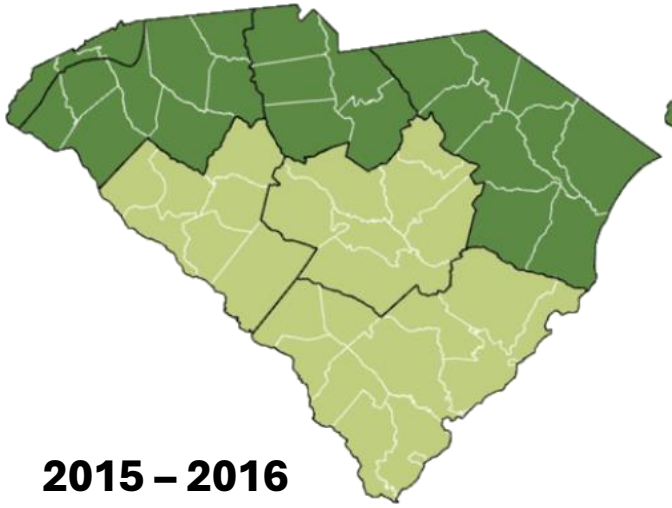


1957 – 1958 (Strong) | **1965 – 1966 (Strong)** | **1972 – 1973 (Strong)** | **1982 – 1983 (Very Strong)** | **1991 – 1992 (Very Strong)** | **1997 – 1998 (Very Strong)** | **2015 – 2016 (Very Strong)**

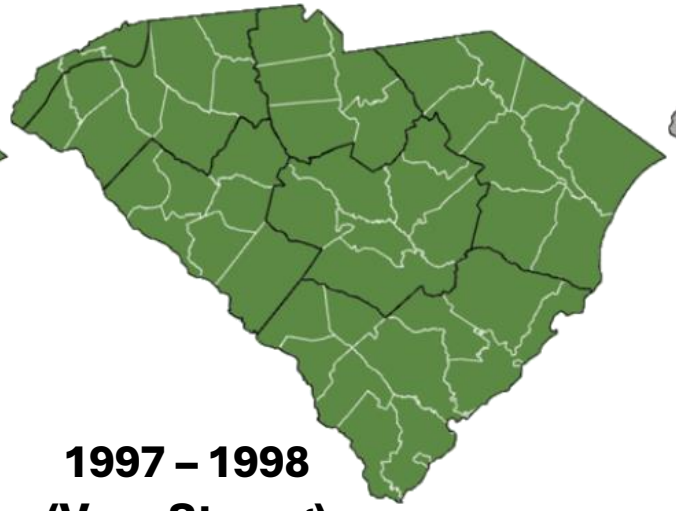
PRECIPITATION TRENDS DURING STRONG AND VERY STRONG EL NIÑO WINTERS (December – February)

SCDNR | State Climatology Office

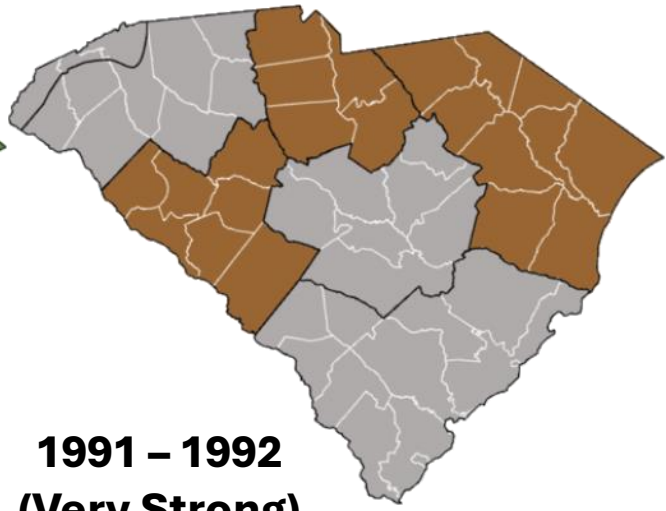
- Above
- Slightly Above
- Normal
- Slightly Below
- Below



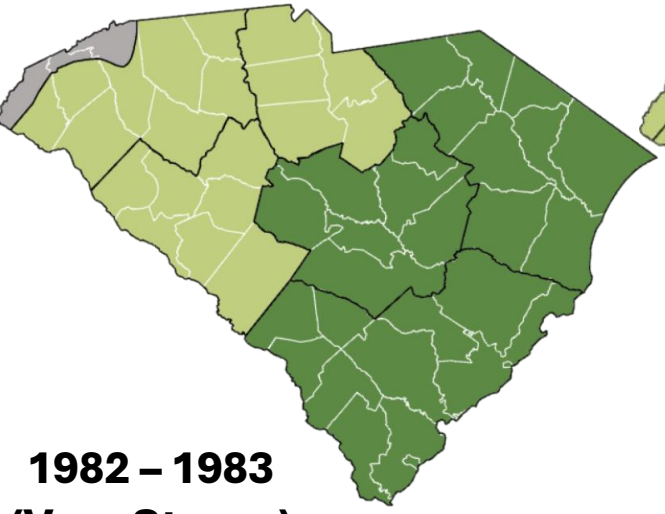
2015 – 2016
(Very Strong)



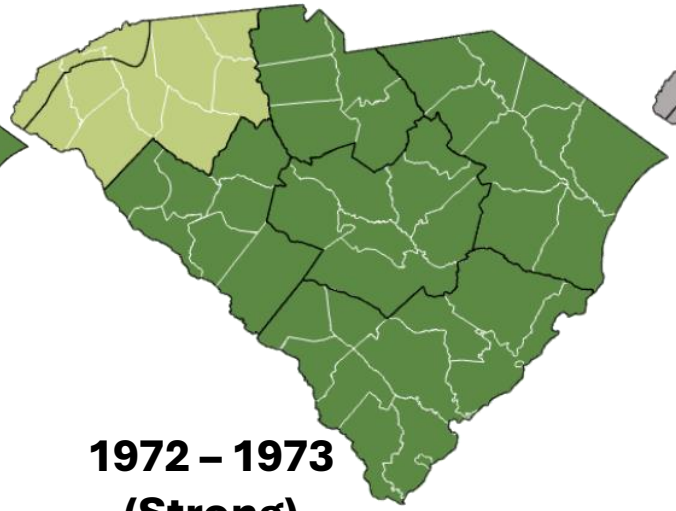
1997 – 1998
(Very Strong)



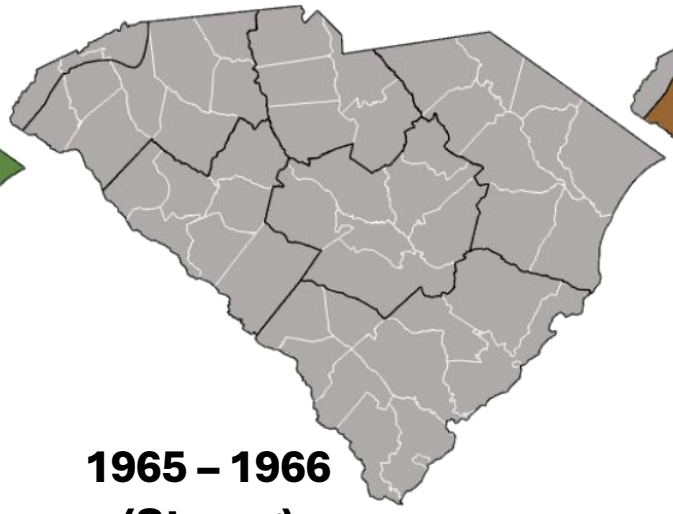
1991 – 1992
(Very Strong)



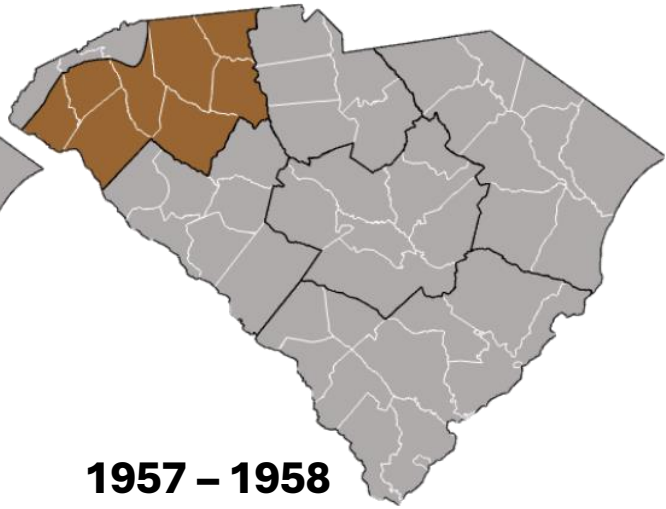
1982 – 1983
(Very Strong)



1972 – 1973
(Strong)



1965 – 1966
(Strong)

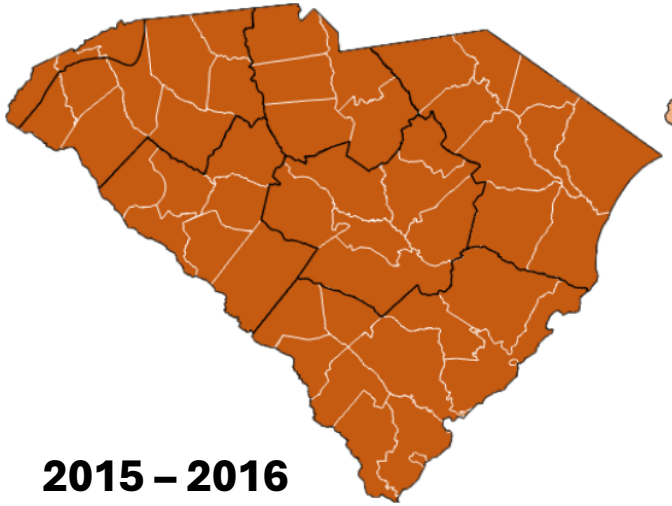


1957 – 1958
(Strong)

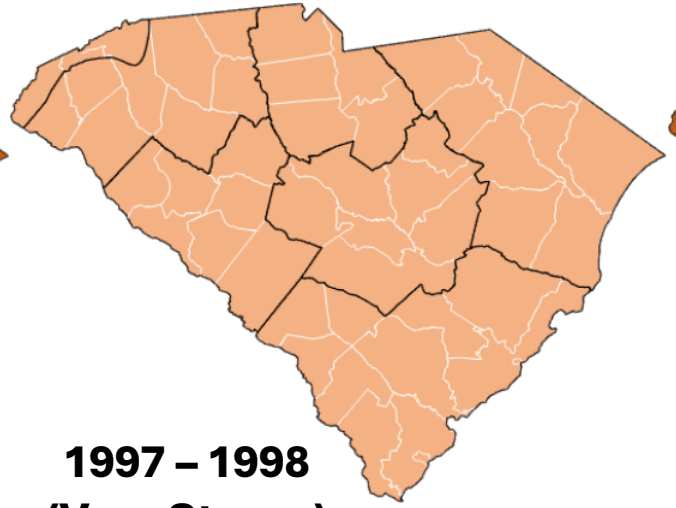
AVERAGE TEMPERATURE TRENDS DURING STRONG AND VERY STRONG EL NIÑO WINTERS (December- February)

SCDNR | State Climatology Office

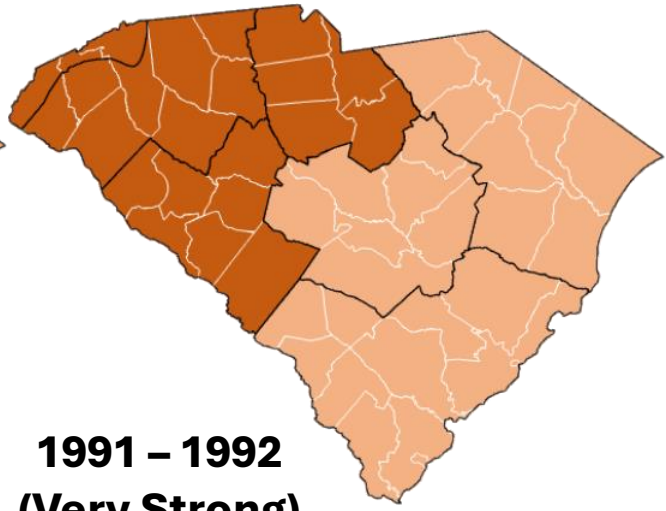
- Above
- Slightly Above
- Normal
- Slightly Below
- Below



2015 – 2016
(Very Strong)



1997 – 1998
(Very Strong)



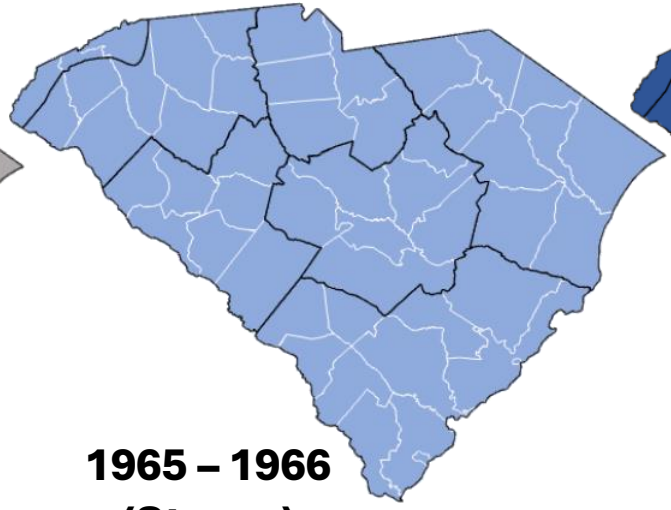
1991 – 1992
(Very Strong)



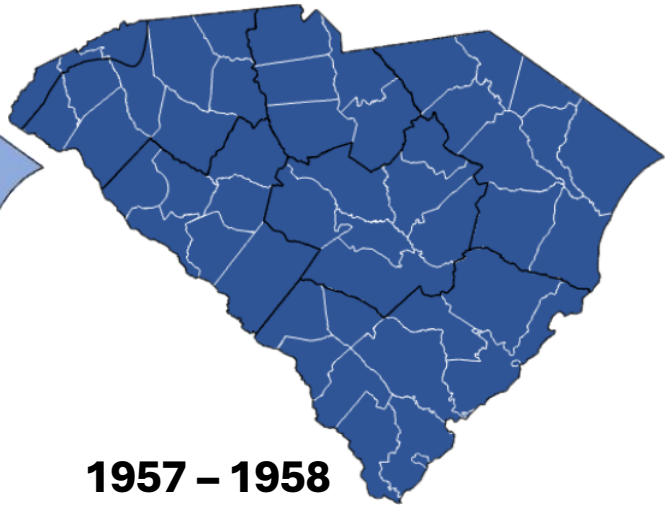
1982 – 1983
(Very Strong)



1972 – 1973
(Strong)

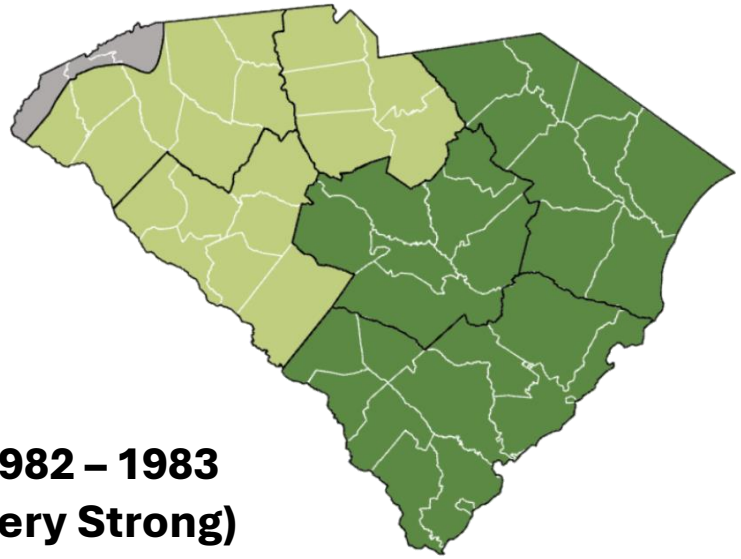


1965 – 1966
(Strong)

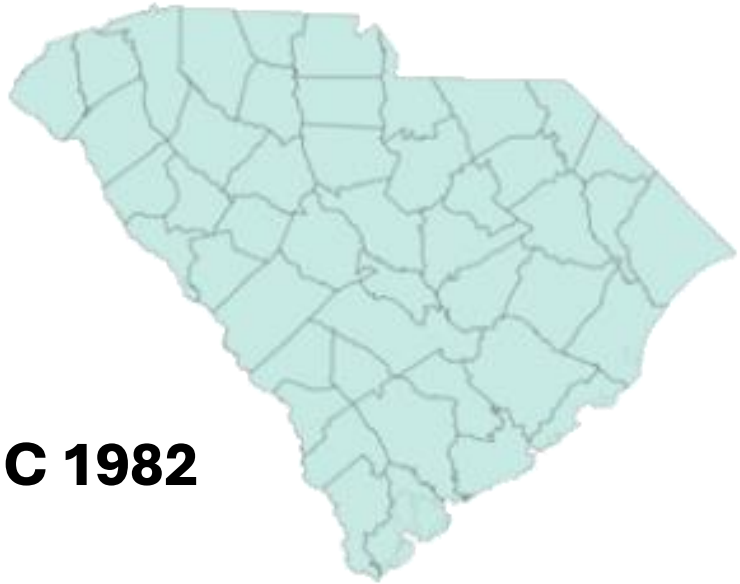


1957 – 1958
(Strong)

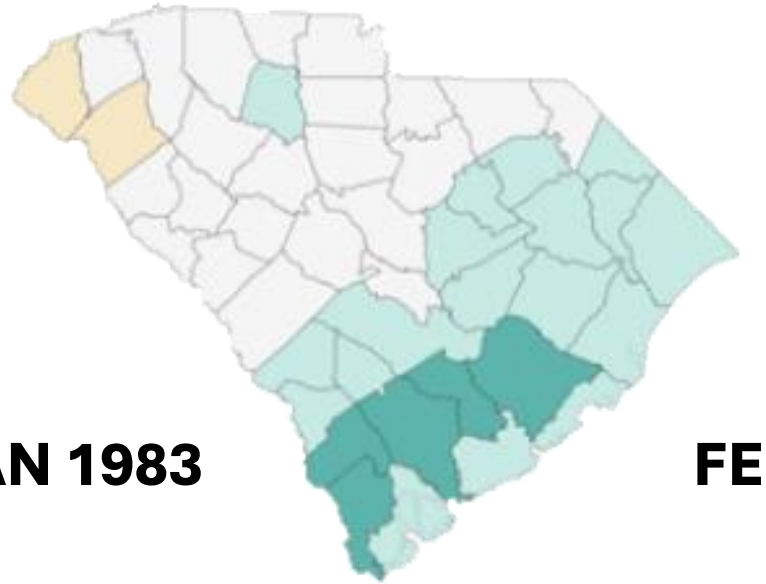
1982-1983
(Very Strong)



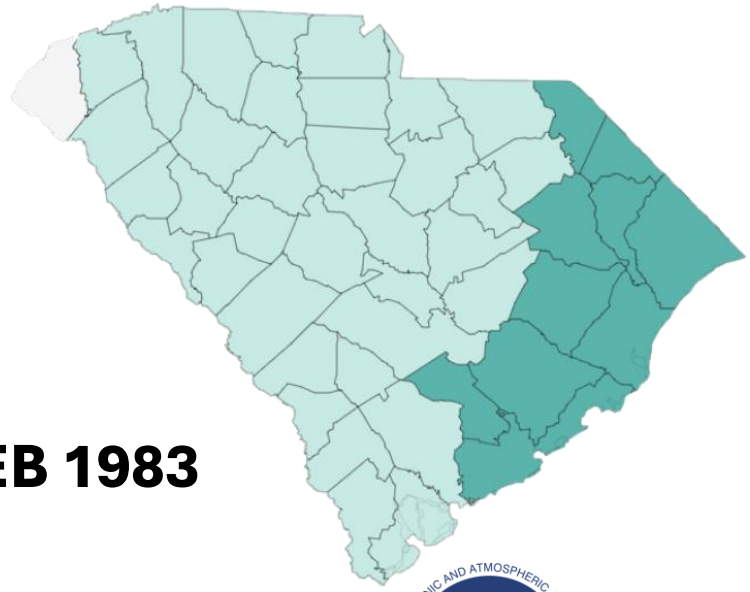
1982 – 1983
(Very Strong)



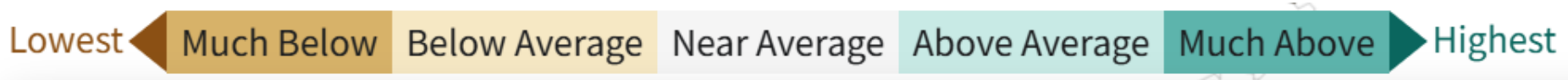
DEC 1982



JAN 1983

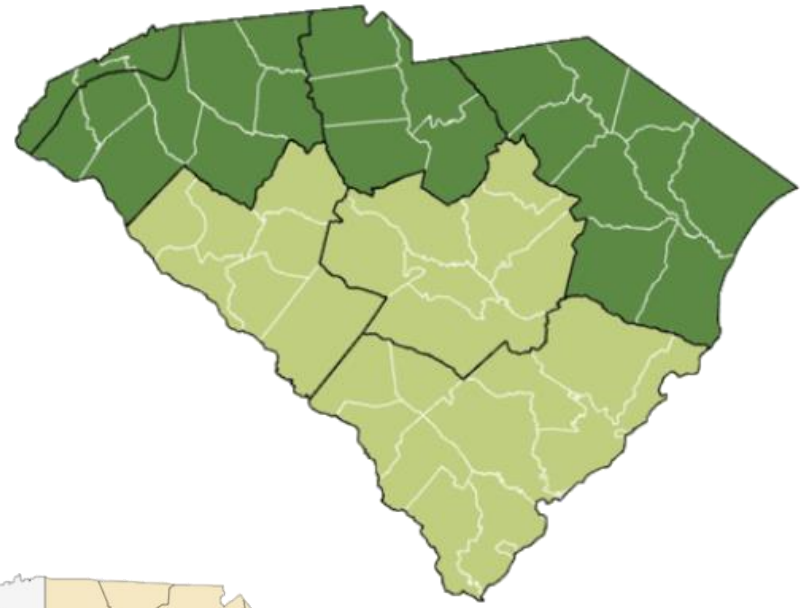


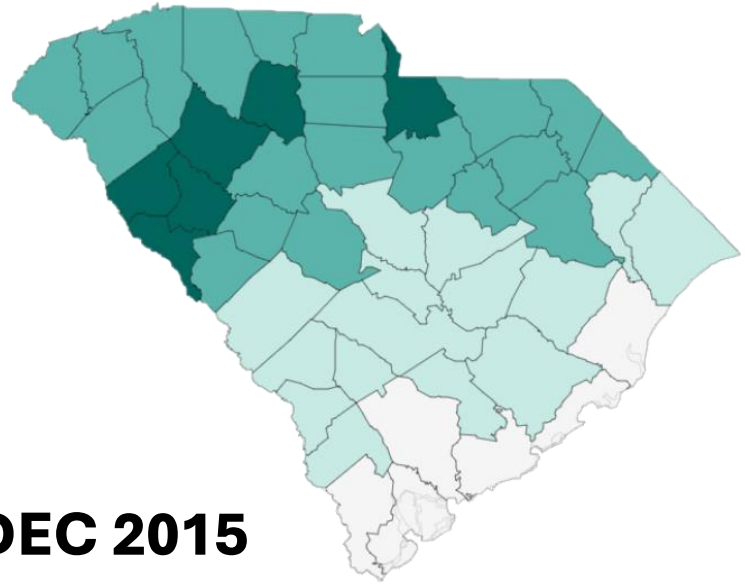
FEB 1983



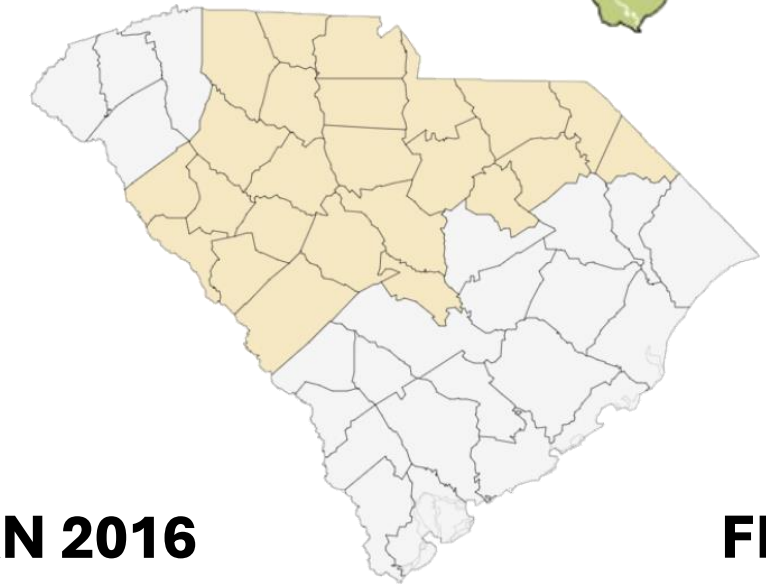
Data is preliminary until final quality control and review.

2015 – 2016 (Very Strong)

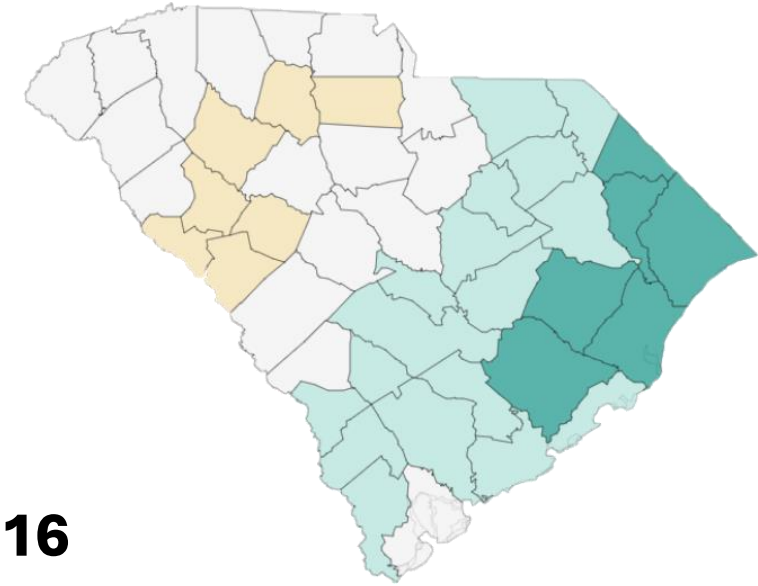




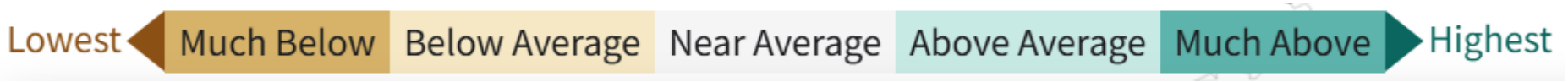
DEC 2015



JAN 2016



FEB 2016



Data is preliminary until final quality control and review.

Thank You

Contact Information

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Frank Strait, Severe Weather Liaison
StraitF@dnr.sc.gov, 803-734-0039

Submit Drought Impact Photos to:

Drought@dnr.sc.gov



Drought Impacts and Real-Life Examples

SC DES







Hydrologic Drought Conditions

Alexis Modzelesky

September 17, 2026

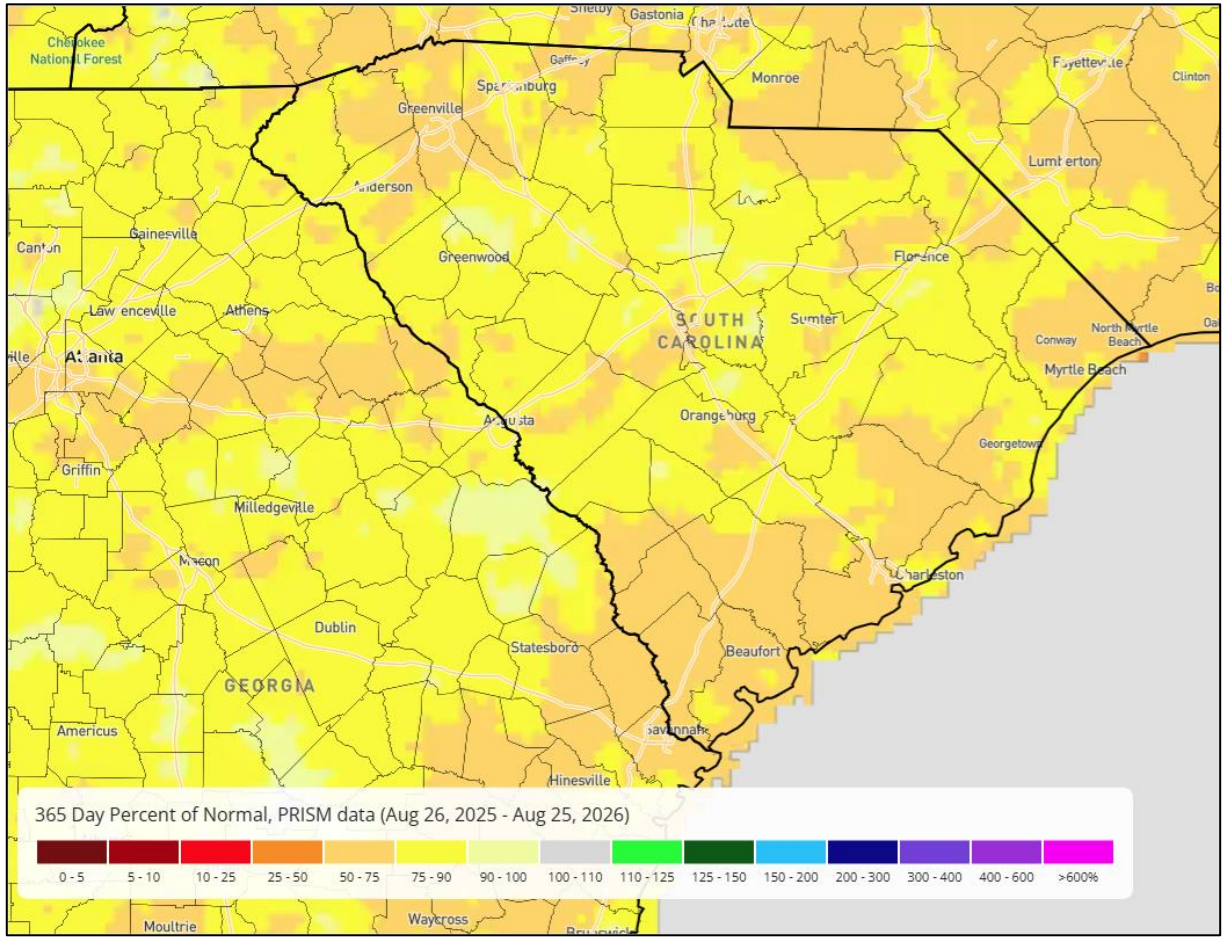
Topic Overview

- Rainfall Overview
- Hydrologic Drought Indicators
- Progression of Hydrologic Drought

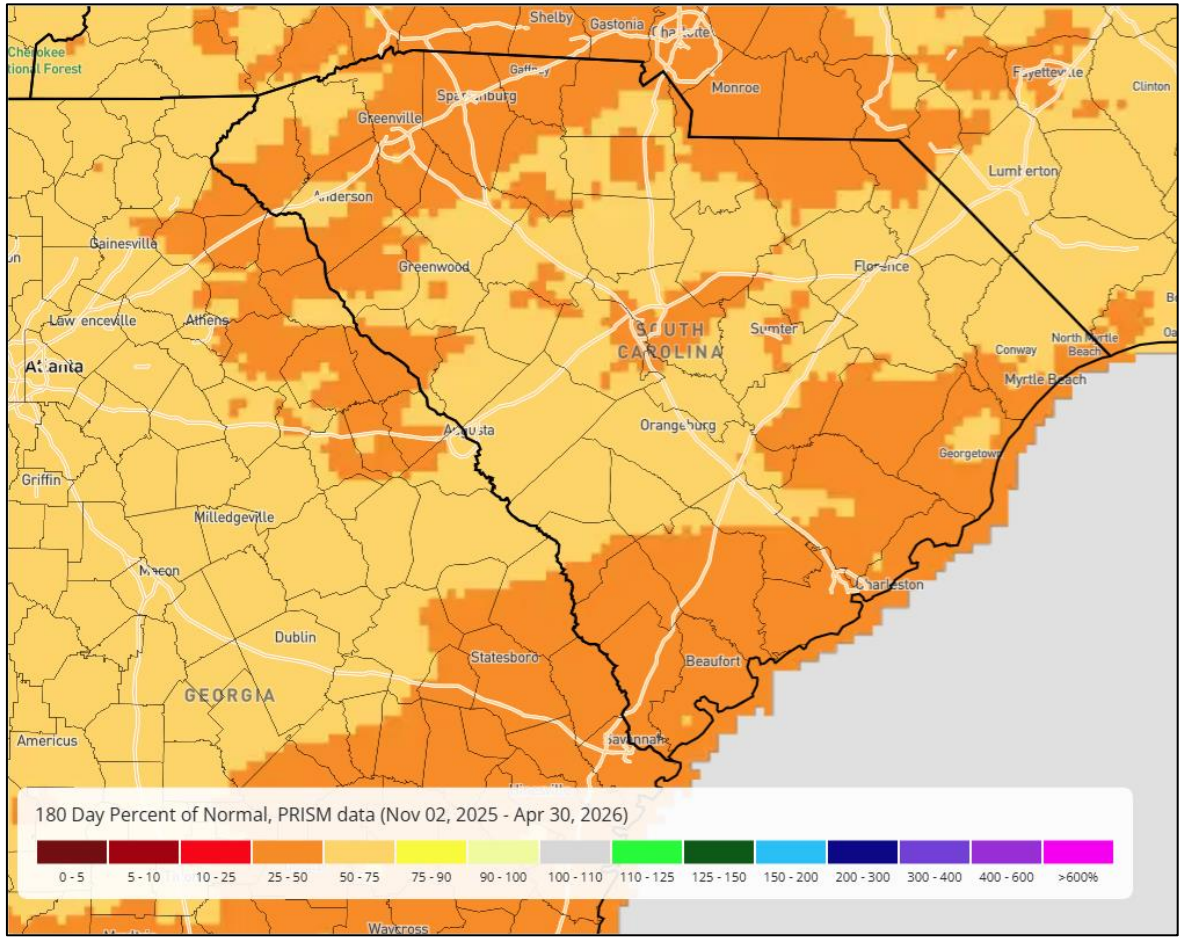


Rainfall Updates

365-Day Departure from Normal (Aug 26, 2025 – Aug 25, 2026)



120-Day Departure from Normal (Nov 2, 2025 – Apr 30, 2026)



waterSC

* Source - Southern Regional Climate Center

SC Historical Rainfall Rankings

August 2025 - July 2026 South Carolina Statewide Precipitation

State	Value	Period: 1901-2000			Rank 131 Years
		Period Average	Departure from Average	Percent of Average	
South Carolina	36.38"	47.89"	-11.51"	76.0%	4

November 2025 - April 2026 South Carolina Statewide Precipitation

State	Value	Period: 1901-2000			Rank 131 Years
		Period Average	Departure from Average	Percent of Average	
South Carolina	10.04"	21.60"	-11.56"	46.5%	1

April

Date	Precipitation	1901-2000 Average: 3.34"		Rank (out of 132)
		Departure from Average	Percent of Average	
April 2026	0.94"	-2.40"	28.1%	3

* Source - NOAA National Centers for Environmental information, Climate at a Glance: Statewide Time Series, published August 2026, retrieved on August 28, 2026 from https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/statewide/time-series

Hydrologic Drought Indicators

Hydrologic Drought Indicators

Streamflow

- 28 sites from USGS network
- First hydrologic indicator to respond to dry conditions
- Regulatory method –14-day average flows compared to percentages of monthly 5th percentile flow
- Also review 14-day and 28-day average percentiles

Groundwater

- 22 sites from SCDES and USGS networks
- Response to dry conditions lags surface water response
- Drought conditions determined by comparing current water level to monthly median percentiles

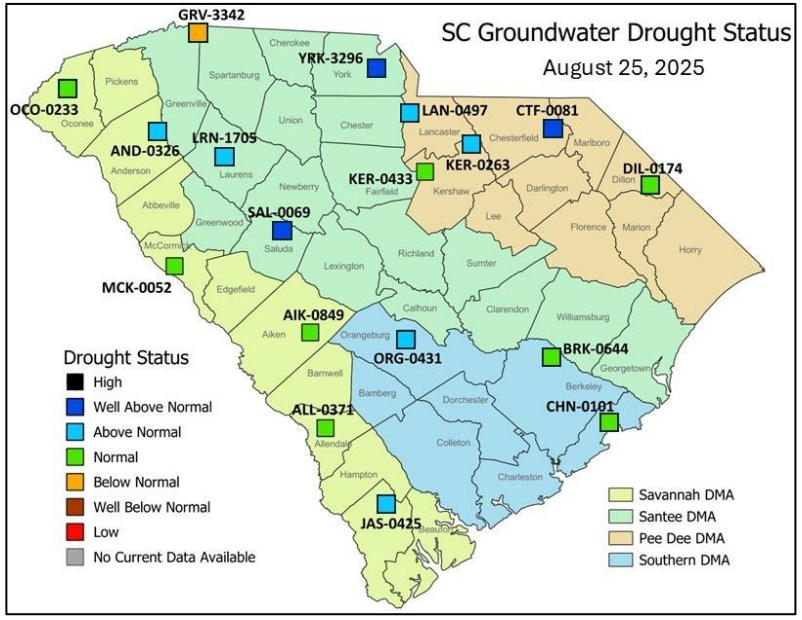
Lake Levels

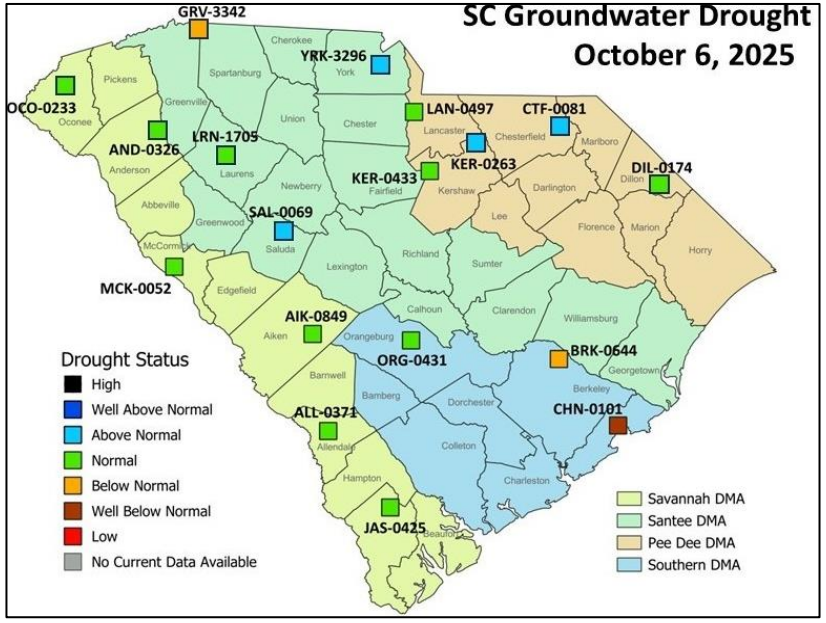
- 10 major lakes
- Response to dry conditions dependent on inflows
  - Individual reservoir's low inflow protocol (LIP) or drought response plan has a role as well
- No defined method to relate level to a drought status for the DRC

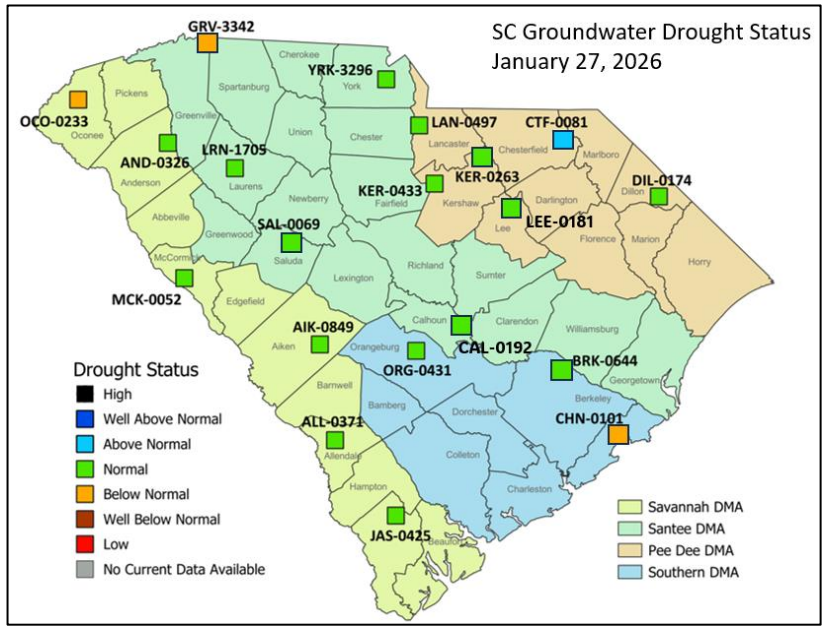
There are numerous other drought indicators – Rainfall metrics, PDSI, Drought Monitor, Crop Moisture Index, Keetch-Bynum (wildfire index), etc.

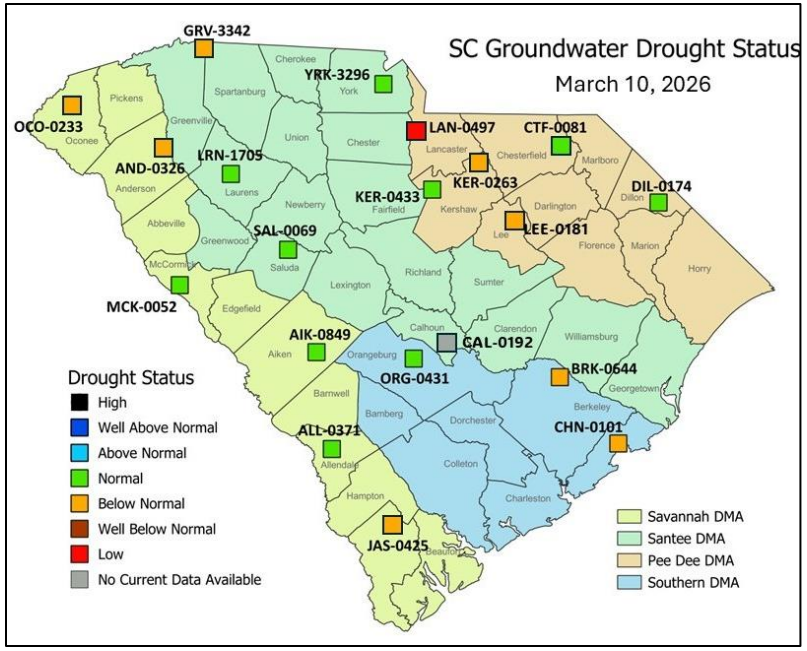
Drought Status Updates

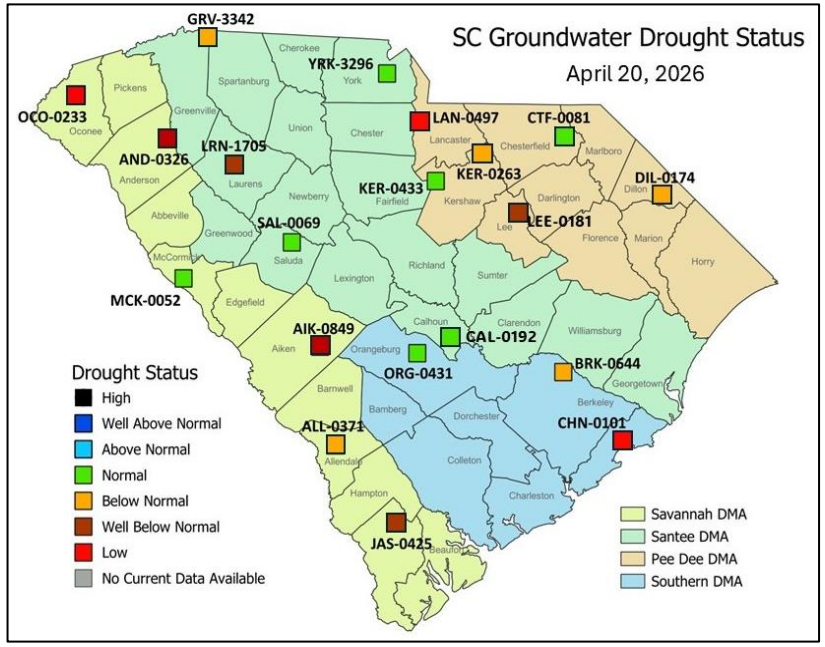
SC DES

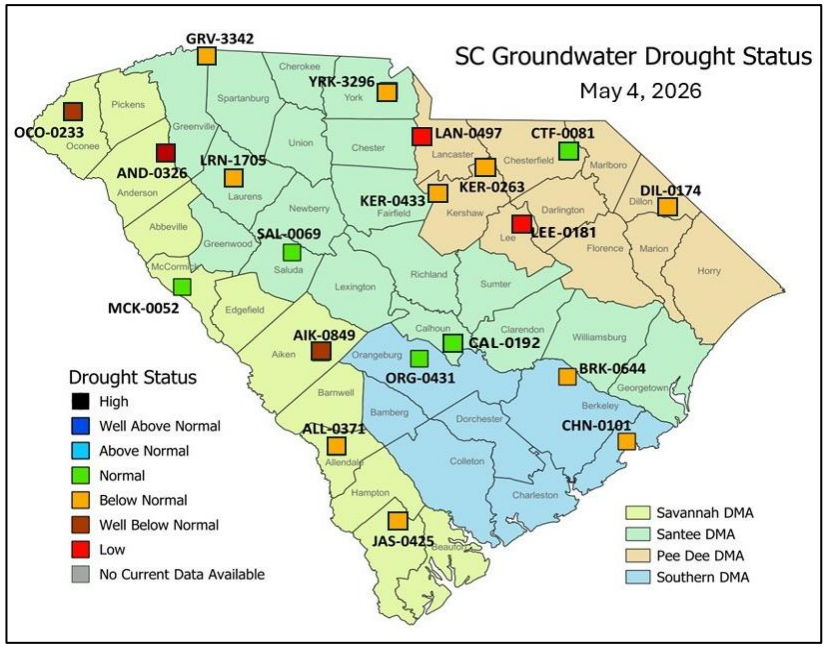

SC Groundwater Drought Status
August 25, 2025
GRV-3342
YRK-3296
OCO-0233
LAN-0497
CTF-0081
AND-0326
LRN-1705
KER-0263
KER-0433
DIL-0174
SAL-0069
MCK-0052
AIK-0849
ORG-0431
BRK-0644
ALL-0371
CHN-0101
JAS-0425
Drought Status
High
Well Above Normal
Above Normal
Normal
Below Normal
Well Below Normal
Low
No Current Data Available
Savannah DMA
Santee DMA
Pee Dee DMA
Southern DMA

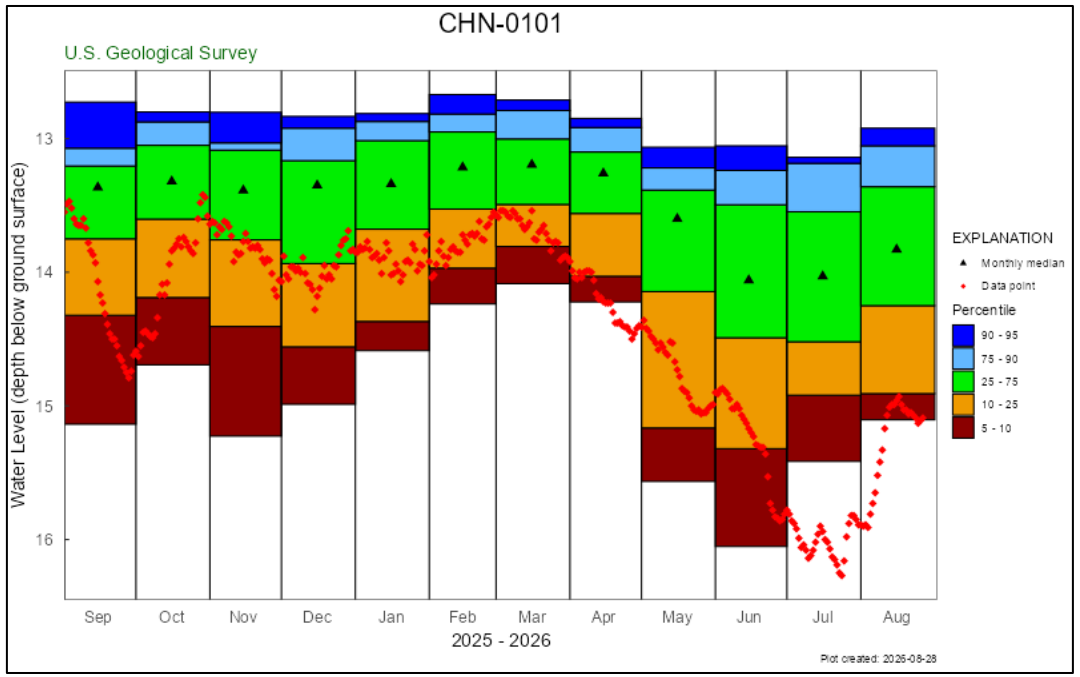

SC Groundwater Drought
October 6, 2025
GRV-3342
YRK-3296
OCO-0233
LAN-0497
CTF-0081
AND-0326
LRN-1705
KER-0263
KER-0433
DIL-0174
SAL-0069
MCK-0052
AIK-0849
ORG-0431
BRK-0644
ALL-0371
CHN-0101
JAS-0425
Drought Status
High
Well Above Normal
Above Normal
Normal
Below Normal
Well Below Normal
Low
No Current Data Available
Savannah DMA
Santee DMA
Pee Dee DMA
Southern DMA

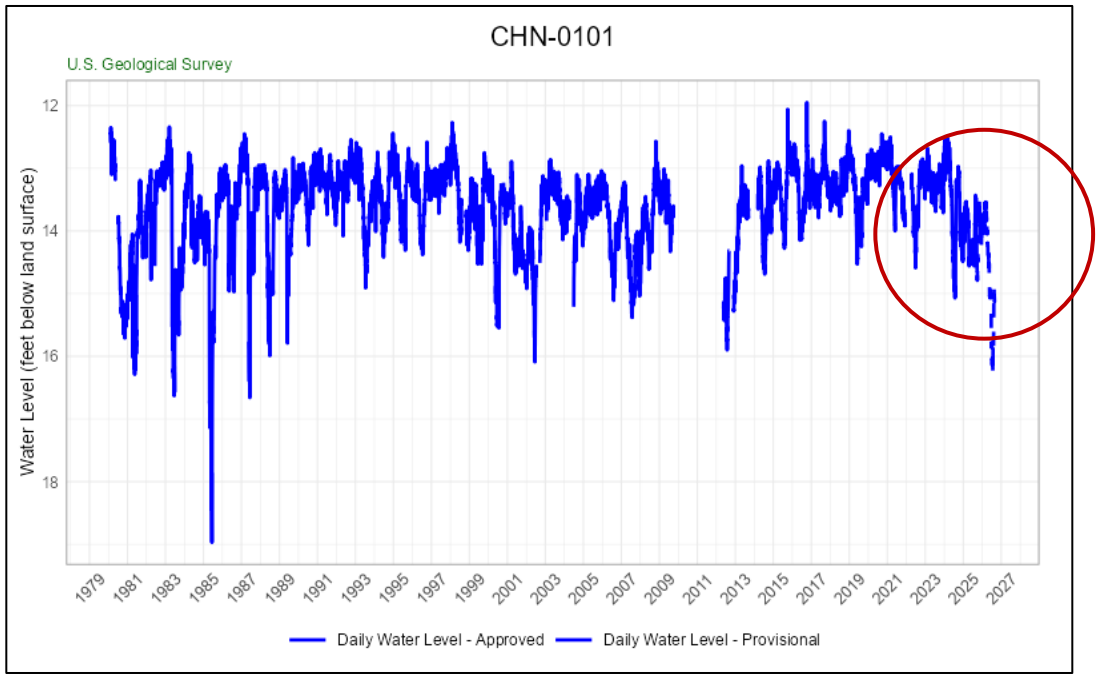

SC Groundwater Drought Status
January 27, 2026
GRV-3342
YRK-3296
OCO-0233
LAN-0497
CTF-0081
AND-0326
LRN-1705
KER-0263
KER-0433
DIL-0174
LEE-0181
SAL-0069
MCK-0052
AIK-0849
CAL-0192
ORG-0431
BRK-0644
ALL-0371
CHN-0101
JAS-0425
Drought Status
High
Well Above Normal
Above Normal
Normal
Below Normal
Well Below Normal
Low
No Current Data Available
Savannah DMA
Santee DMA
Pee Dee DMA
Southern DMA

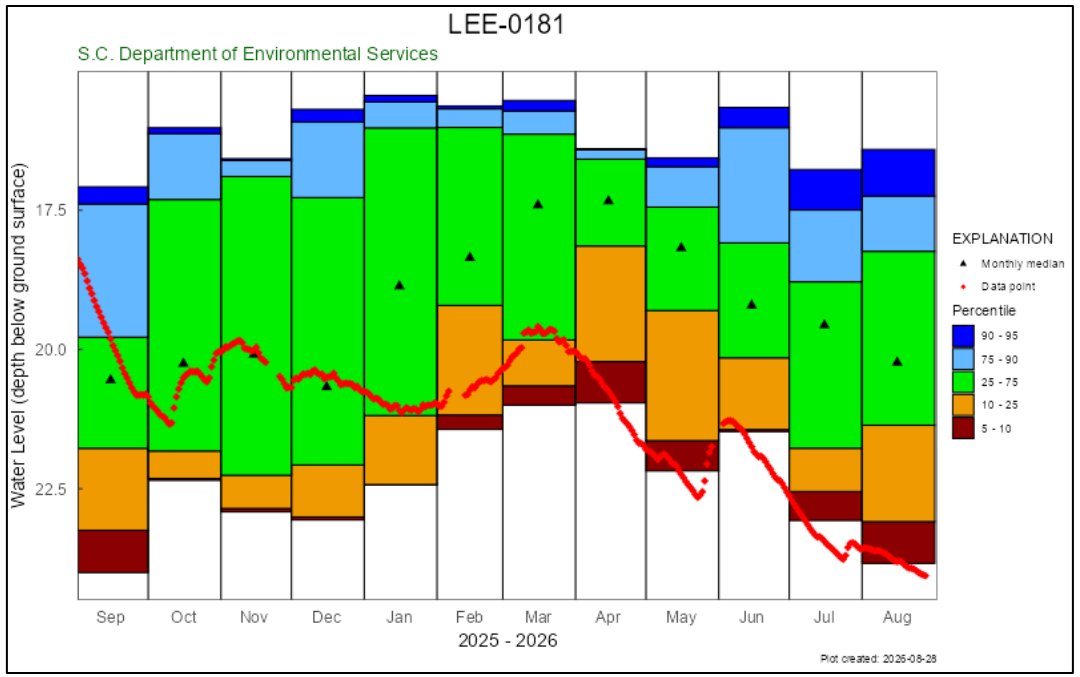

SC Groundwater Drought Status
March 10, 2026
GRV-3342
YRK-3296
OCO-0233
LAN-0497
CTF-0081
AND-0326
LRN-1705
KER-0263
KER-0433
DIL-0174
LEE-0181
SAL-0069
MCK-0052
AIK-0849
CAL-0192
ORG-0431
BRK-0644
ALL-0371
CHN-0101
JAS-0425
Drought Status
High
Well Above Normal
Above Normal
Normal
Below Normal
Well Below Normal
Low
No Current Data Available
Savannah DMA
Santee DMA
Pee Dee DMA
Southern DMA

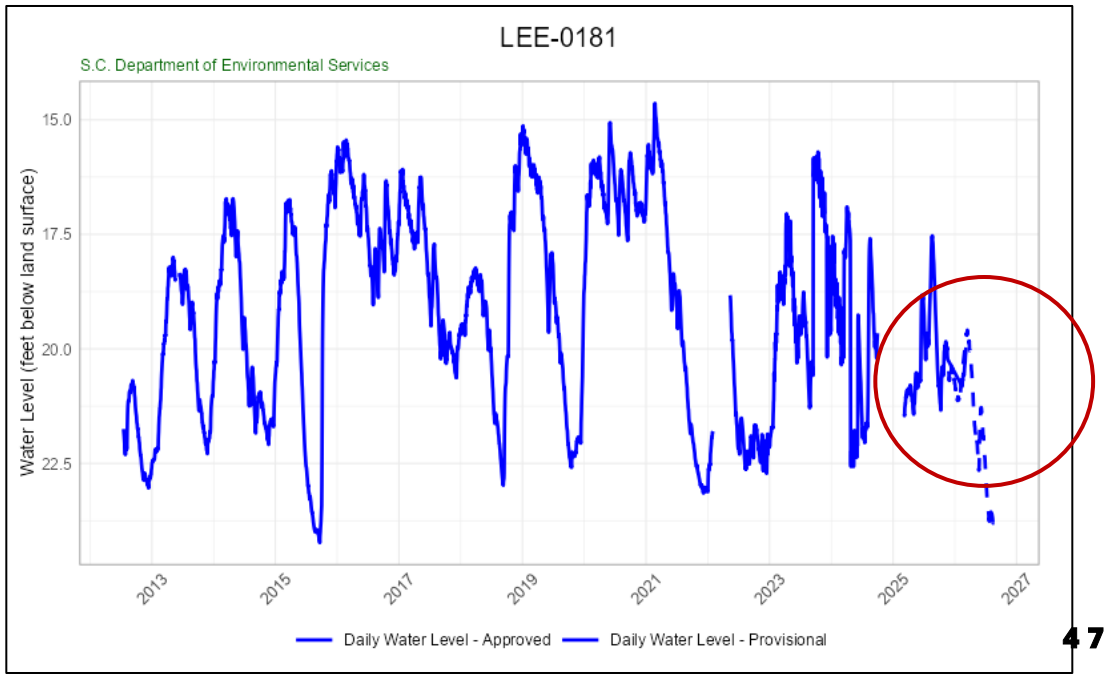

SC Groundwater Drought Status
April 20, 2026
GRV-3342
YRK-3296
OCO-0233
LAN-0497
CTF-0081
AND-0326
LRN-1705
KER-0263
KER-0433
DIL-0174
LEE-0181
SAL-0069
MCK-0052
AIK-0849
CAL-0192
ORG-0431
BRK-0644
ALL-0371
CHN-0101
JAS-0425
Drought Status
High
Well Above Normal
Above Normal
Normal
Below Normal
Well Below Normal
Low
No Current Data Available
Savannah DMA
Santee DMA
Pee Dee DMA
Southern DMA

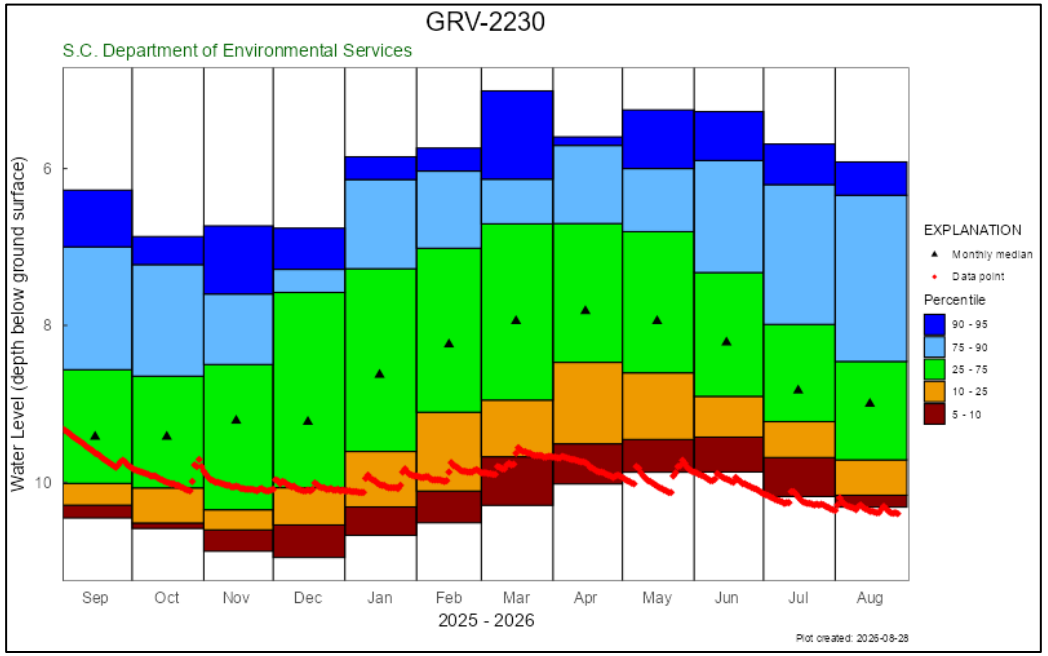

SC Groundwater Drought Status
May 4, 2026
GRV-3342
YRK-3296
OCO-0233
LAN-0497
CTF-0081
AND-0326
LRN-1705
KER-0263
KER-0433
DIL-0174
LEE-0181
SAL-0069
MCK-0052
AIK-0849
CAL-0192
ORG-0431
BRK-0644
ALL-0371
CHN-0101
JAS-0425
Drought Status
High
Well Above Normal
Above Normal
Normal
Below Normal
Well Below Normal
Low
No Current Data Available
Savannah DMA
Santee DMA
Pee Dee DMA
Southern DMA

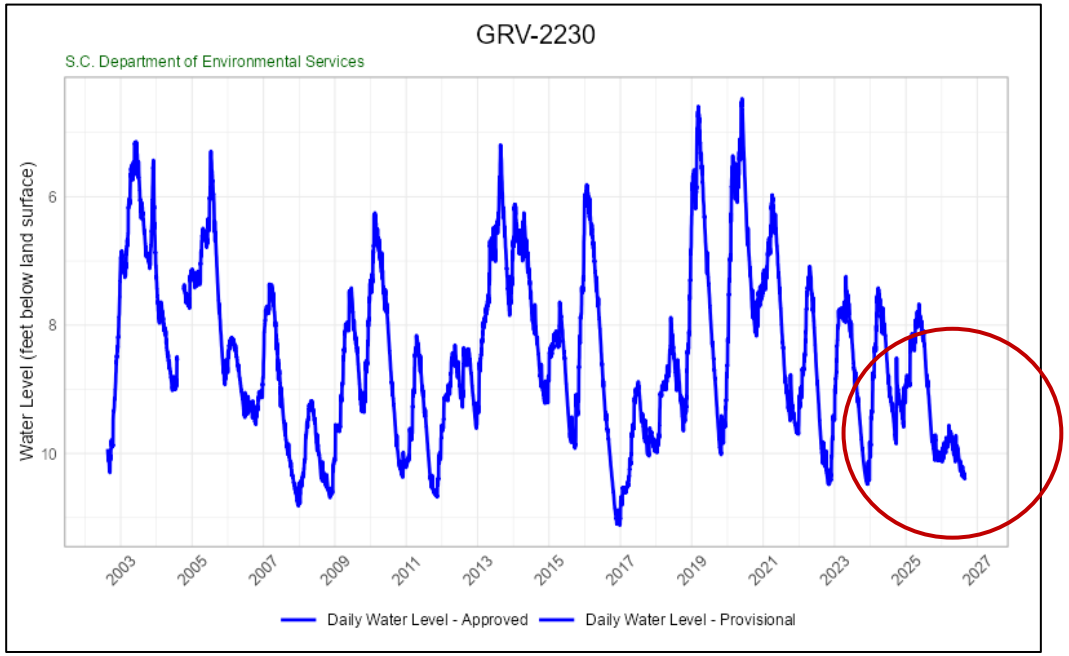

CHN-0101
U.S. Geological Survey
Water Level (depth below ground surface)
13
14
15
16
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
2025 - 2026
EXPLANATION
Monthly median
Data point
Percentile
90 - 95
75 - 90
25 - 75
10 - 25
5 - 10
Plot created: 2026-08-28

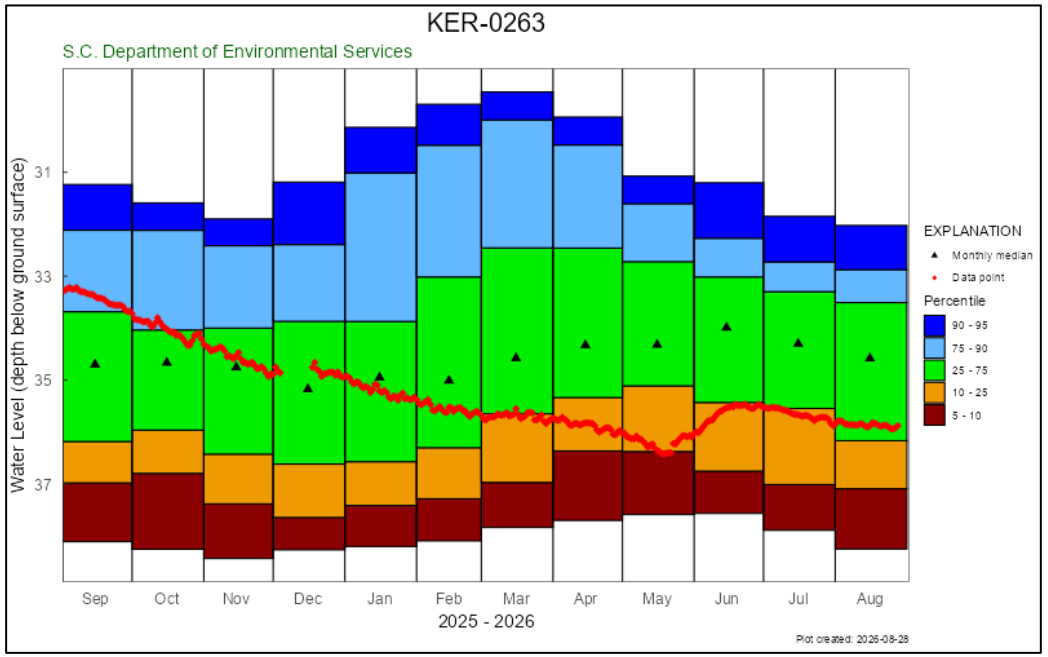

CHN-0101
U.S. Geological Survey
Water Level (feet below land surface)
12
14
16
18
1979
1981
1983
1985
1987
1989
1991
1993
1995
1997
1999
2001
2003
2005
2007
2009
2011
2013
2015
2017
2019
2021
2023
2025
2027
Daily Water Level - Approved
Daily Water Level - Provisional

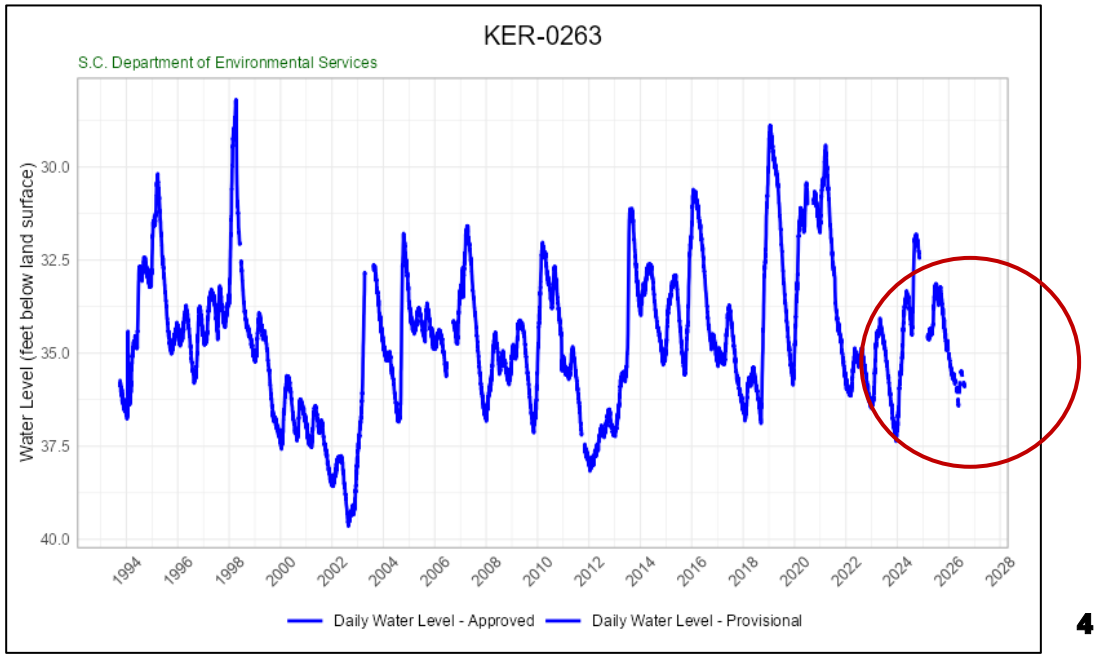

LEE-0181
S.C. Department of Environmental Services
Water Level (depth below ground surface)
17.5
20.0
22.5
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
2025 - 2026
EXPLANATION
Monthly median
Data point
Percentile
90 - 95
75 - 90
25 - 75
10 - 25
5 - 10
Plot created: 2026-08-28

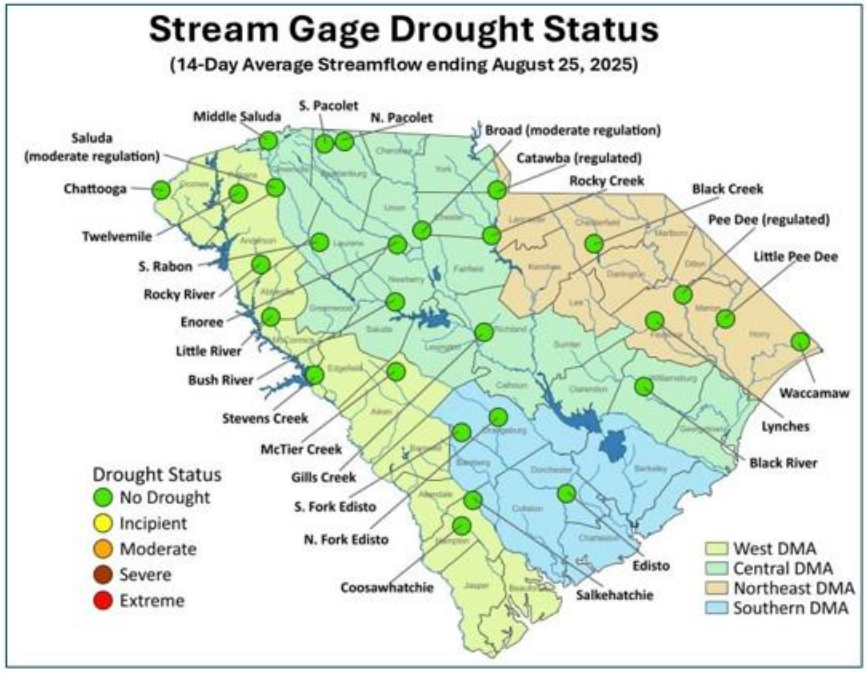

LEE-0181
S.C. Department of Environmental Services
Water Level (feet below land surface)
15.0
17.5
20.0
22.5
2013
2015
2017
2019
2021
2023
2025
2027
Daily Water Level - Approved
Daily Water Level - Provisional

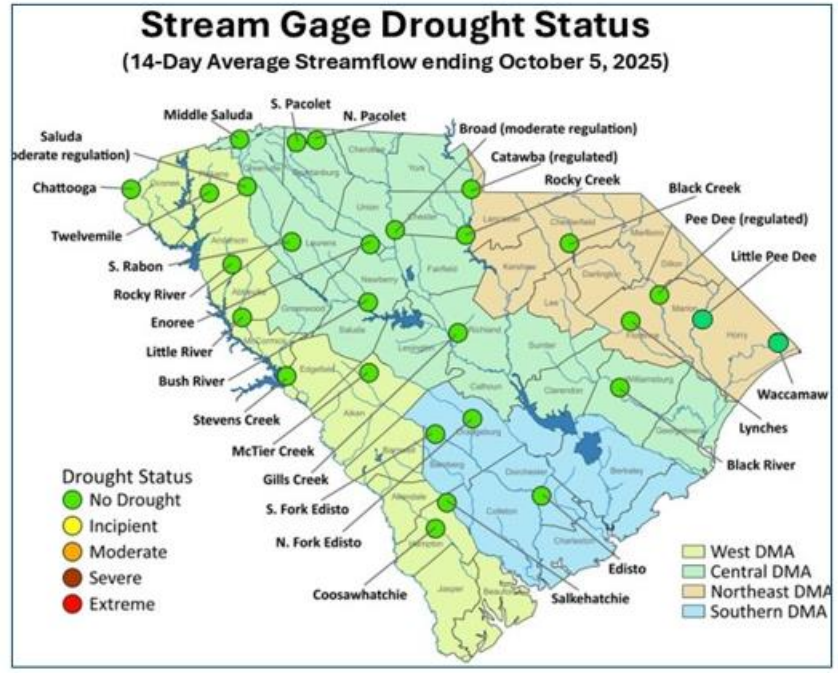

GRV-2230
S.C. Department of Environmental Services
Water Level (depth below ground surface)
6
8
10
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
2025 - 2026
EXPLANATION
Monthly median
Data point
Percentile
90 - 95
75 - 90
25 - 75
10 - 25
5 - 10
Plot created: 2026-08-28

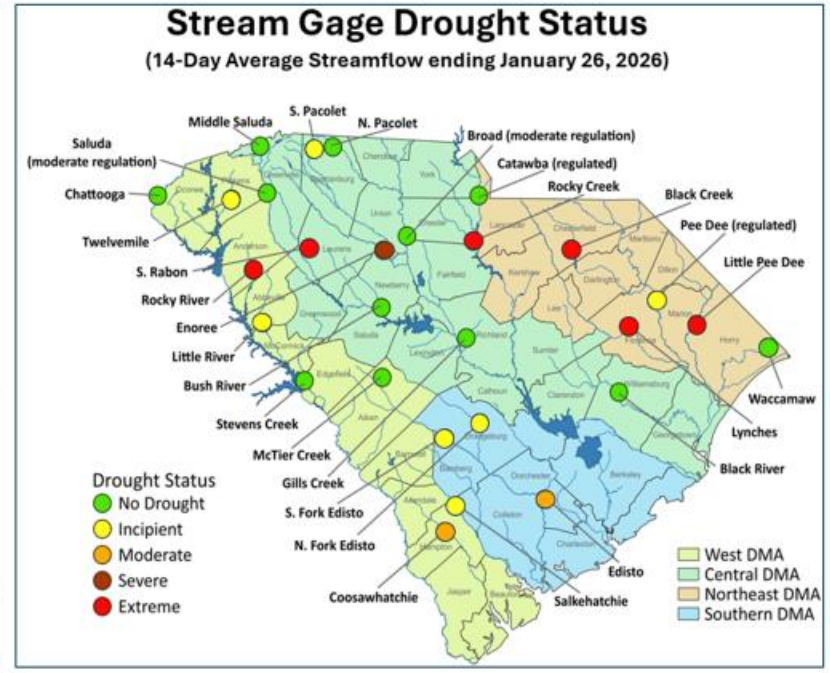

GRV-2230
S.C. Department of Environmental Services
Water Level (feet below land surface)
6
8
10
2003
2005
2007
2009
2011
2013
2015
2017
2019
2021
2023
2025
2027
Daily Water Level - Approved
Daily Water Level - Provisional

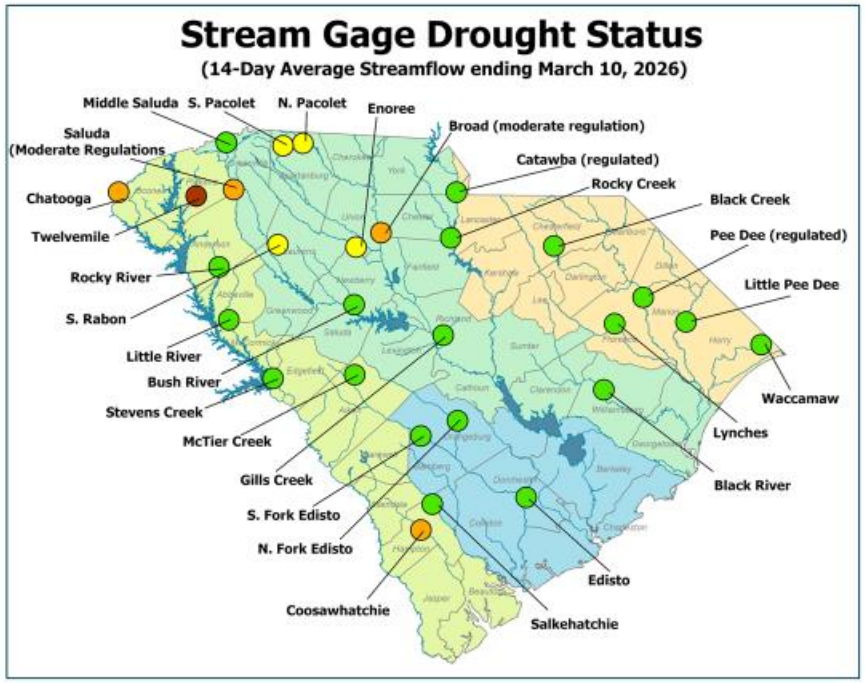

KER-0263
S.C. Department of Environmental Services
Water Level (depth below ground surface)
31
33
35
37
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
2025 - 2026
EXPLANATION
Monthly median
Data point
Percentile
90 - 95
75 - 90
25 - 75
10 - 25
5 - 10
Plot created: 2026-08-28

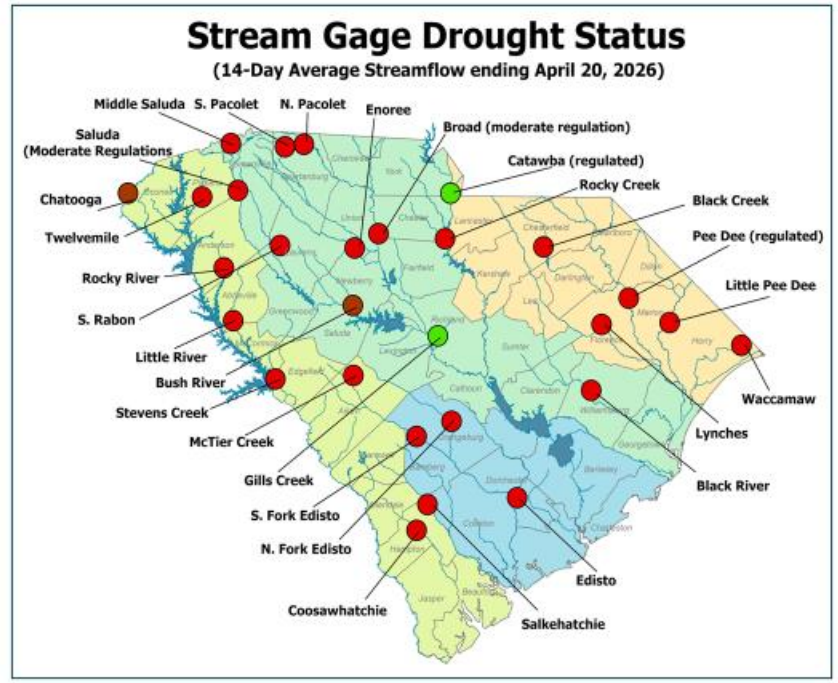

KER-0263
S.C. Department of Environmental Services
Water Level (feet below land surface)
30.0
32.5
35.0
37.5
40.0
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
2020
2022
2024
2026
2028
Daily Water Level - Approved
Daily Water Level - Provisional

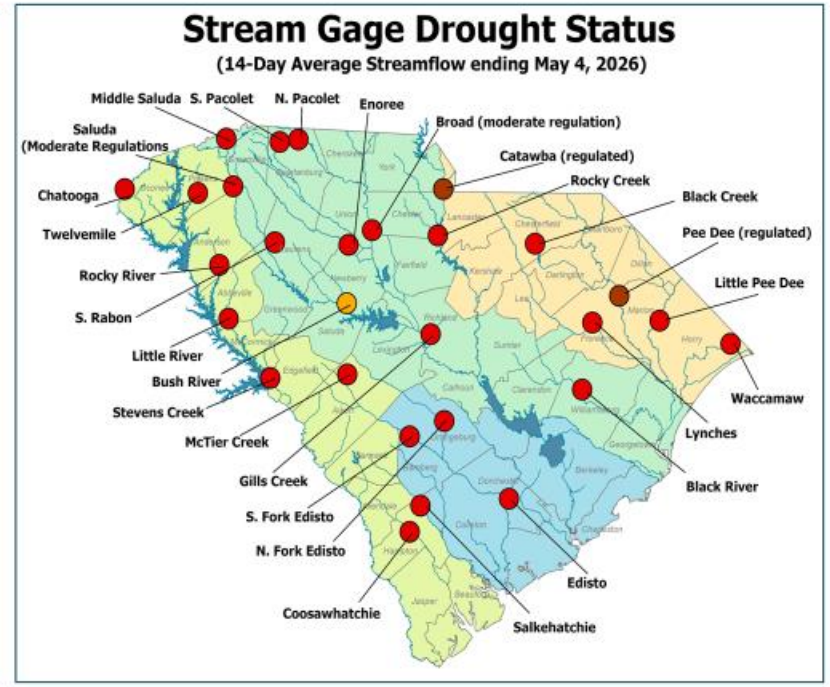

Stream Gage Drought Status
(14-Day Average Streamflow ending August 25, 2025)
Middle Saluda
S. Pacolet
N. Pacolet
Broad (moderate regulation)
Saluda (moderate regulation)
Catawba (regulated)
Rocky Creek
Black Creek
Chattooga
Pee Dee (regulated)
Twelvemile
Little Pee Dee
S. Rabon
Rocky River
Enoree
Waccamaw
Little River
Lynches
Bush River
Black River
Stevens Creek
McTier Creek
Gills Creek
S. Fork Edisto
N. Fork Edisto
Edisto
Coosawhatchie
Salkehatchie
Drought Status
No Drought
Incipient
Moderate
Severe
Extreme
West DMA
Central DMA
Northeast DMA
Southern DMA

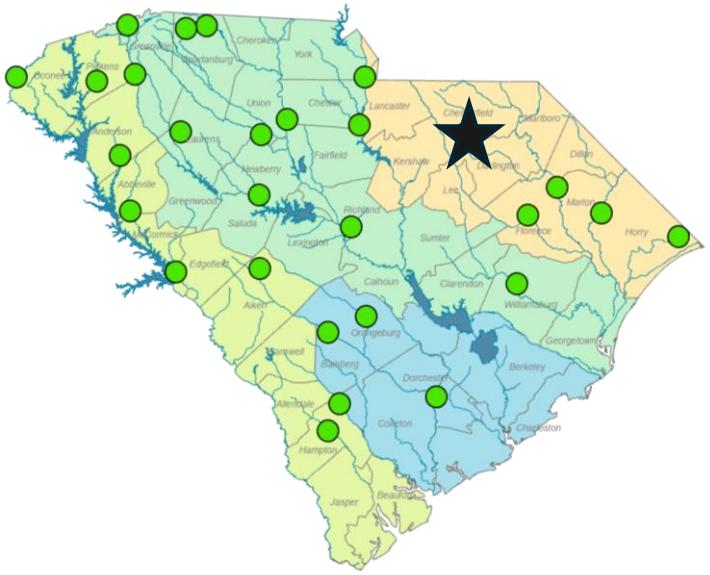

Stream Gage Drought Status
(14-Day Average Streamflow ending October 5, 2025)
Middle Saluda
S. Pacolet
N. Pacolet
Broad (moderate regulation)
Catawba (regulated)
Rocky Creek
Black Creek
Chattooga
Pee Dee (regulated)
Twelvemile
Little Pee Dee
S. Rabon
Rocky River
Enoree
Waccamaw
Little River
Lynches
Bush River
Black River
Stevens Creek
McTier Creek
Gills Creek
S. Fork Edisto
N. Fork Edisto
Edisto
Coosawhatchie
Salkehatchie
Drought Status
No Drought
Incipient
Moderate
Severe
Extreme
West DMA
Central DMA
Northeast DMA
Southern DMA


Stream Gage Drought Status
(14-Day Average Streamflow ending January 26, 2026)
Middle Saluda
S. Pacolet
N. Pacolet
Broad (moderate regulation)
Saluda (moderate regulation)
Catawba (regulated)
Rocky Creek
Black Creek
Chattooga
Pee Dee (regulated)
Twelvemile
Little Pee Dee
S. Rabon
Rocky River
Enoree
Waccamaw
Little River
Lynches
Bush River
Black River
Stevens Creek
McTier Creek
Gills Creek
S. Fork Edisto
N. Fork Edisto
Edisto
Coosawhatchie
Salkehatchie
Drought Status
No Drought
Incipient
Moderate
Severe
Extreme
West DMA
Central DMA
Northeast DMA
Southern DMA


Stream Gage Drought Status
(14-Day Average Streamflow ending March 10, 2026)
Middle Saluda
S. Pacolet
N. Pacolet
Enoree
Broad (moderate regulation)
Saluda (Moderate Regulations
Catawba (regulated)
Rocky Creek
Black Creek
Chatooga
Pee Dee (regulated)
Twelvemile
Little Pee Dee
Rocky River
S. Rabon
Waccamaw
Little River
Lynches
Bush River
Black River
Stevens Creek
McTier Creek
Gills Creek
S. Fork Edisto
N. Fork Edisto
Edisto
Coosawhatchie
Salkehatchie


Stream Gage Drought Status
(14-Day Average Streamflow ending April 20, 2026)
Middle Saluda
S. Pacolet
N. Pacolet
Enoree
Broad (moderate regulation)
Saluda (Moderate Regulations
Catawba (regulated)
Rocky Creek
Black Creek
Chatooga
Pee Dee (regulated)
Twelvemile
Little Pee Dee
Rocky River
S. Rabon
Waccamaw
Little River
Lynches
Bush River
Black River
Stevens Creek
McTier Creek
Gills Creek
S. Fork Edisto
N. Fork Edisto
Edisto
Coosawhatchie
Salkehatchie

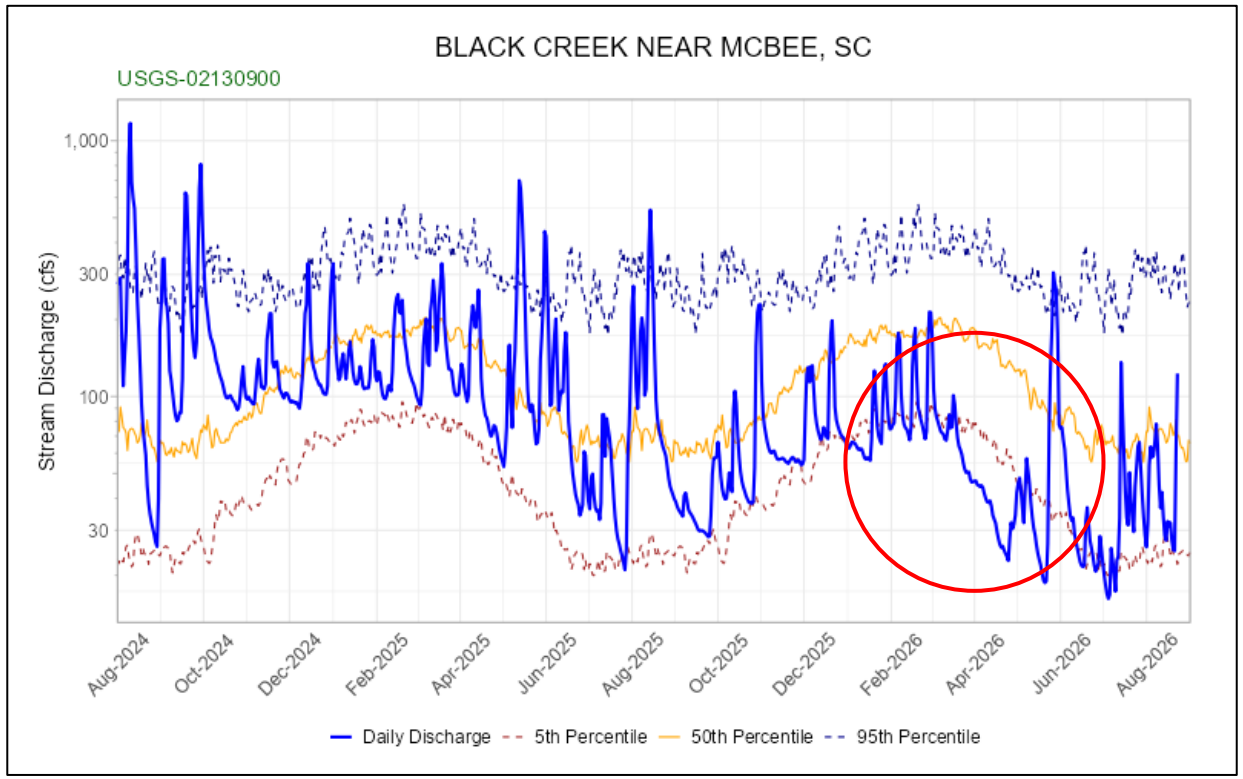

Stream Gage Drought Status
(14-Day Average Streamflow ending May 4, 2026)
Middle Saluda
S. Pacolet
N. Pacolet
Enoree
Broad (moderate regulation)
Saluda (Moderate Regulations
Catawba (regulated)
Rocky Creek
Black Creek
Chatooga
Pee Dee (regulated)
Twelvemile
Little Pee Dee
Rocky River
S. Rabon
Waccamaw
Little River
Lynches
Bush River
Black River
Stevens Creek
McTier Creek
Gills Creek
S. Fork Edisto
N. Fork Edisto
Edisto
Coosawhatchie
Salkehatchie

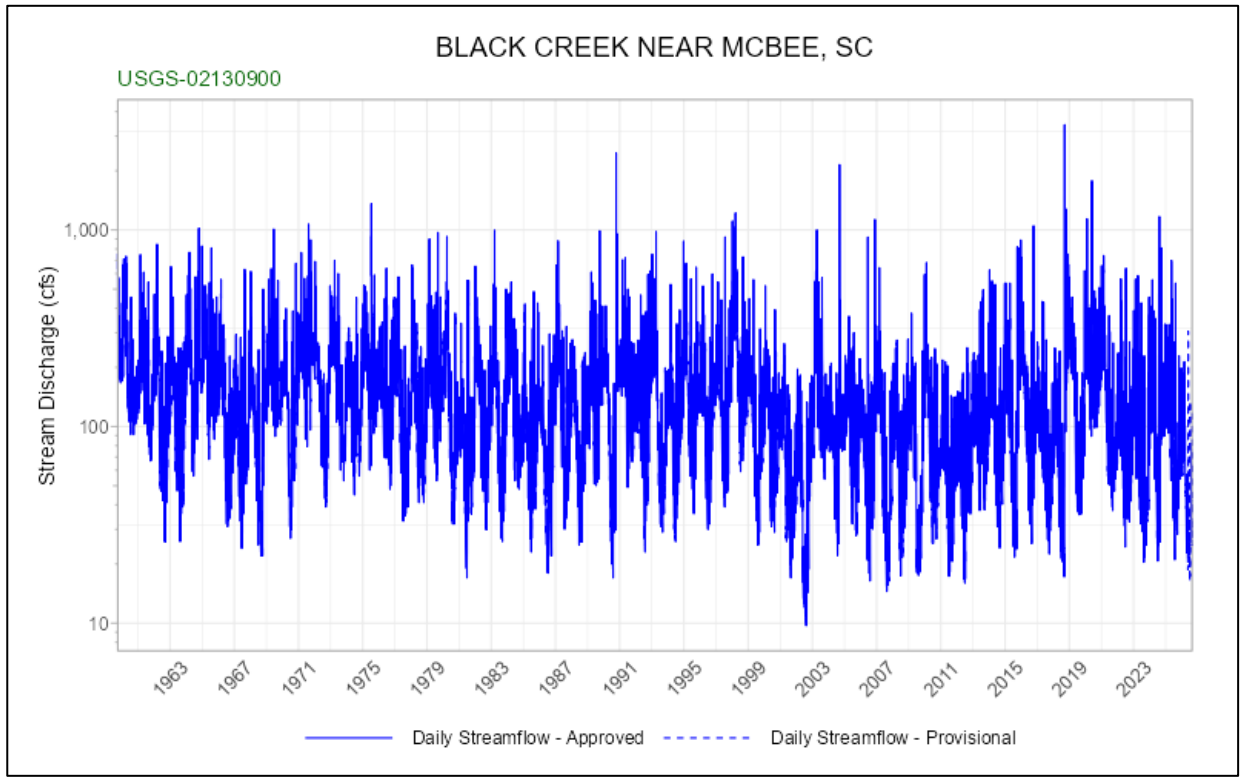


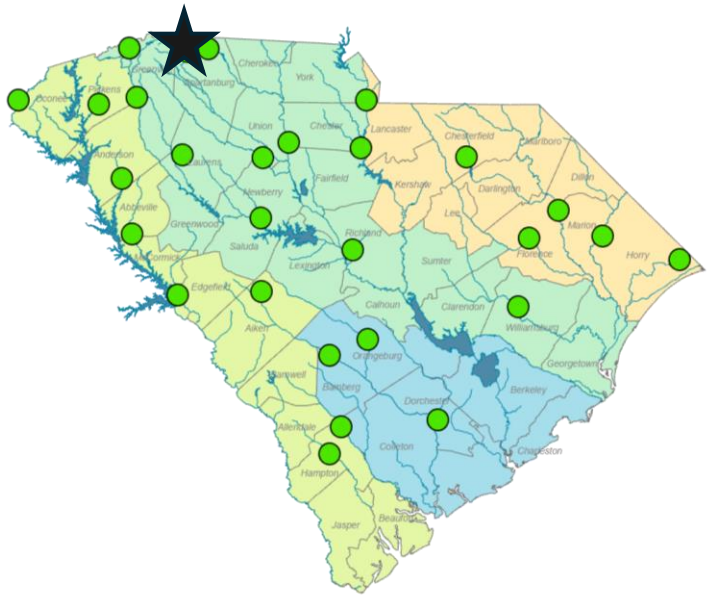
Black Creek (Chesterfield County)

Annual Minimum Flow Rankings

Year	Month	MinQ	Rank
2002	8	9.7	1
2007	8	14.5	2
2012	7	16	3
2026	**7**	**16.2**	**4**
2006	8	16.4	5
1981	6	17	6
1990	8	17	7
2001	8	17	8
2018	9	17.2	9
2011	7	17.3	10



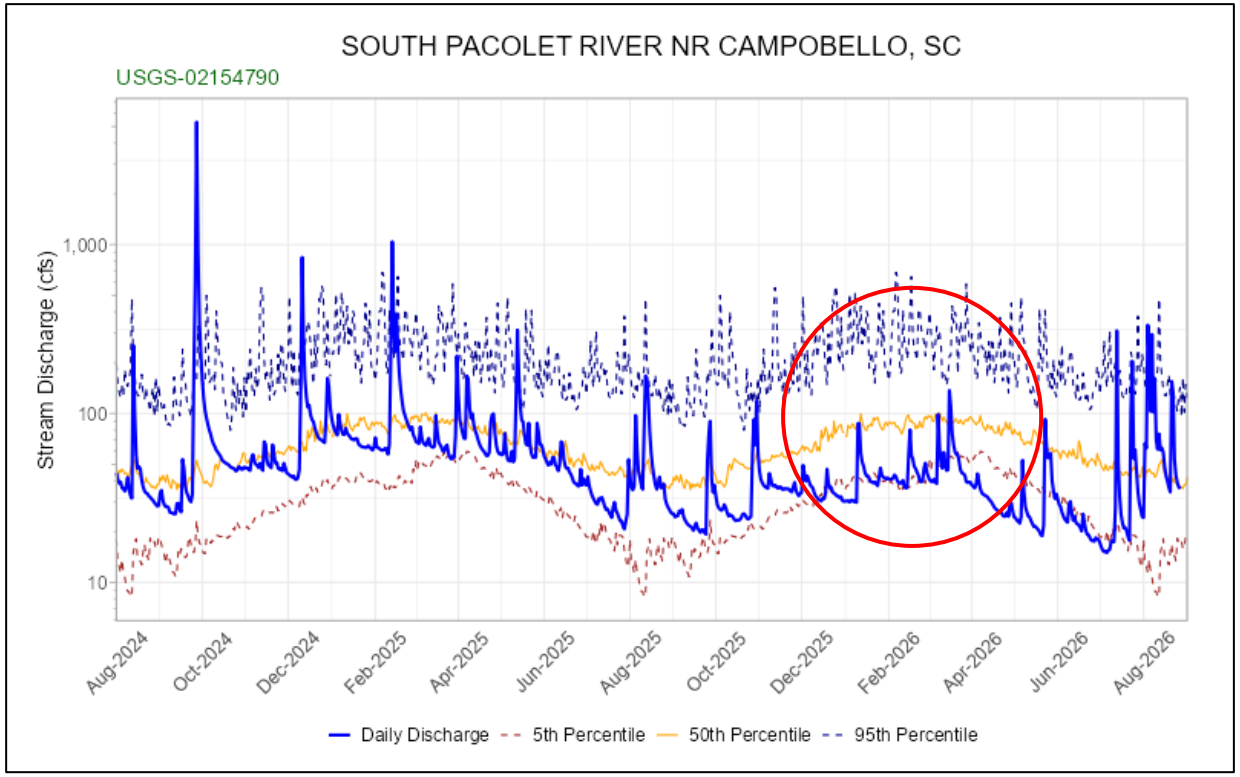


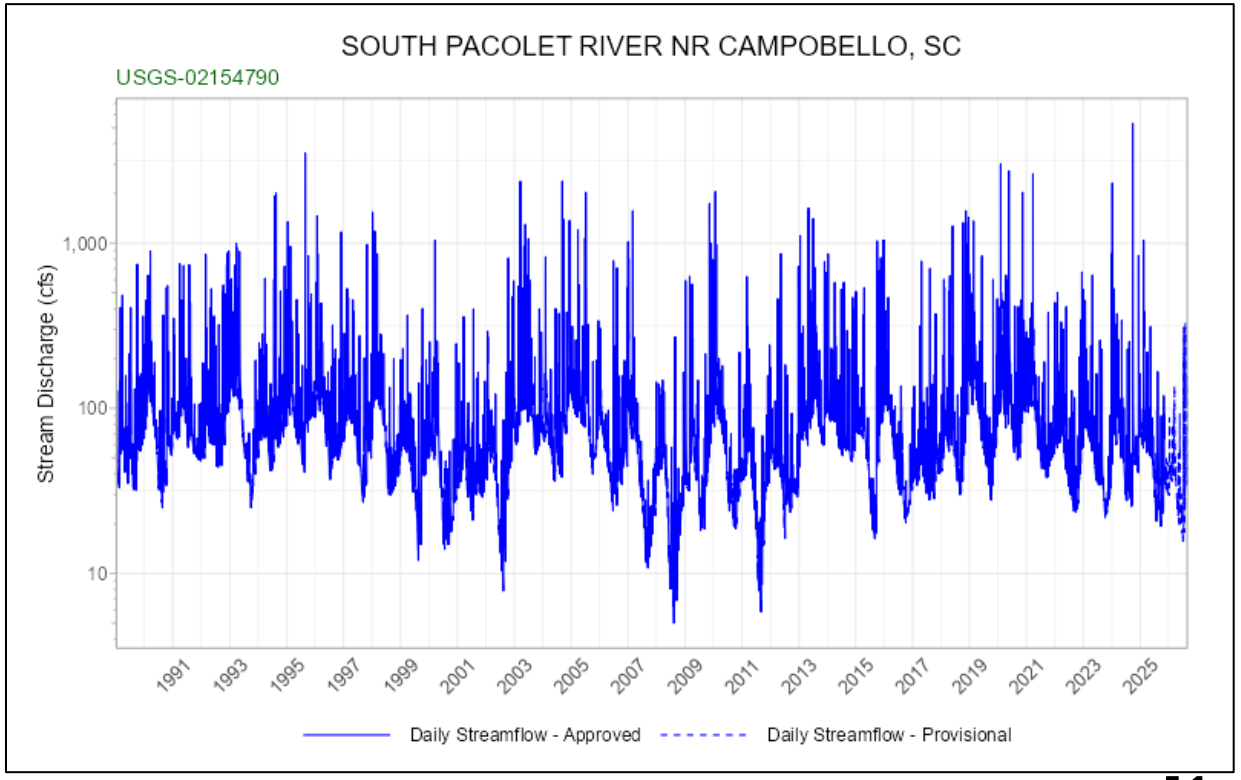


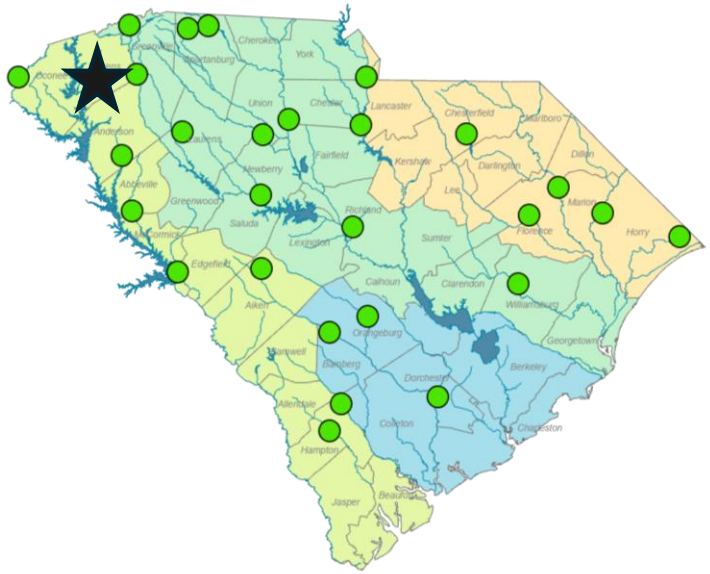
South Pacolet River (Spartanburg County)

Annual Minimum Flow Rankings

Year	Month	MinQ	Rank
2008	8	5	1
2011	9	5.85	2
2002	8	7.83	3
2007	9	10.8	4
1999	8	12	5
2000	7	14	6
2026	**7**	**15**	**7**
2015	9	16.2	8
2012	7	16.3	9
2009	7	18.2	10



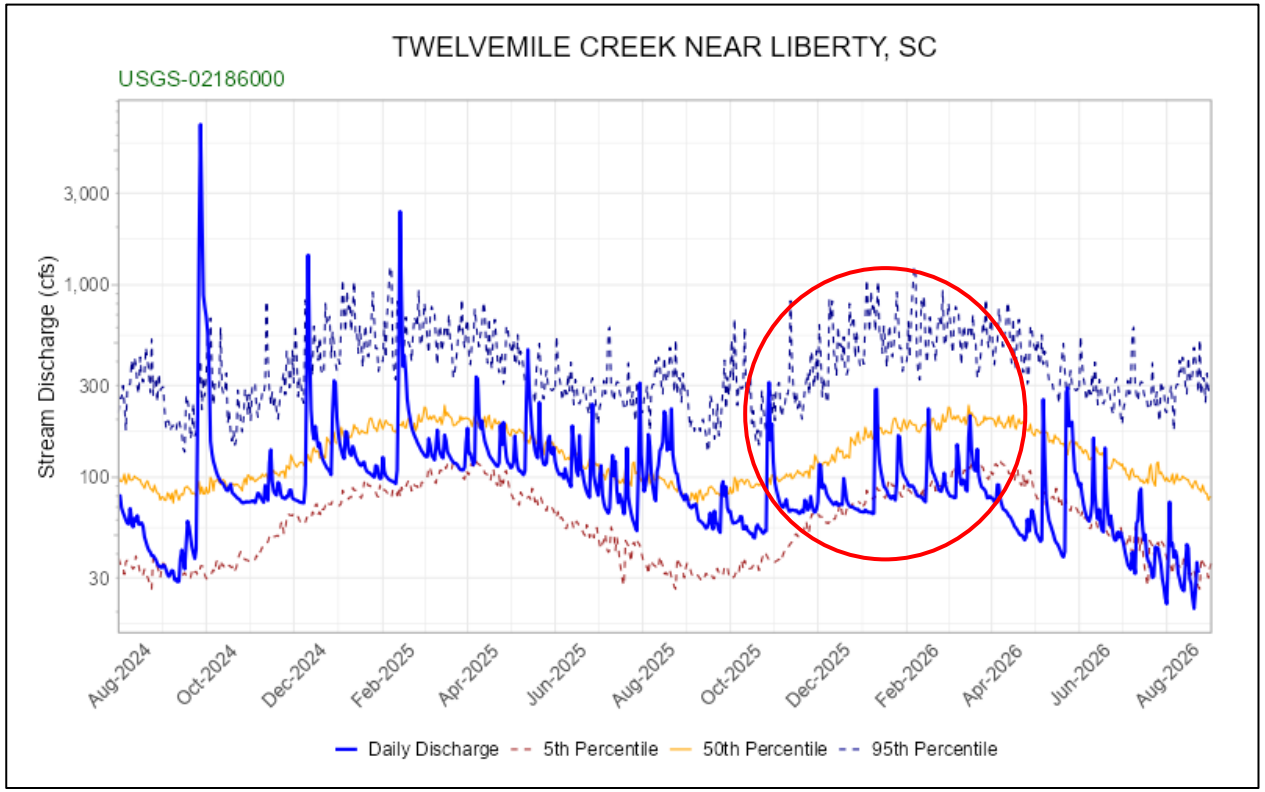


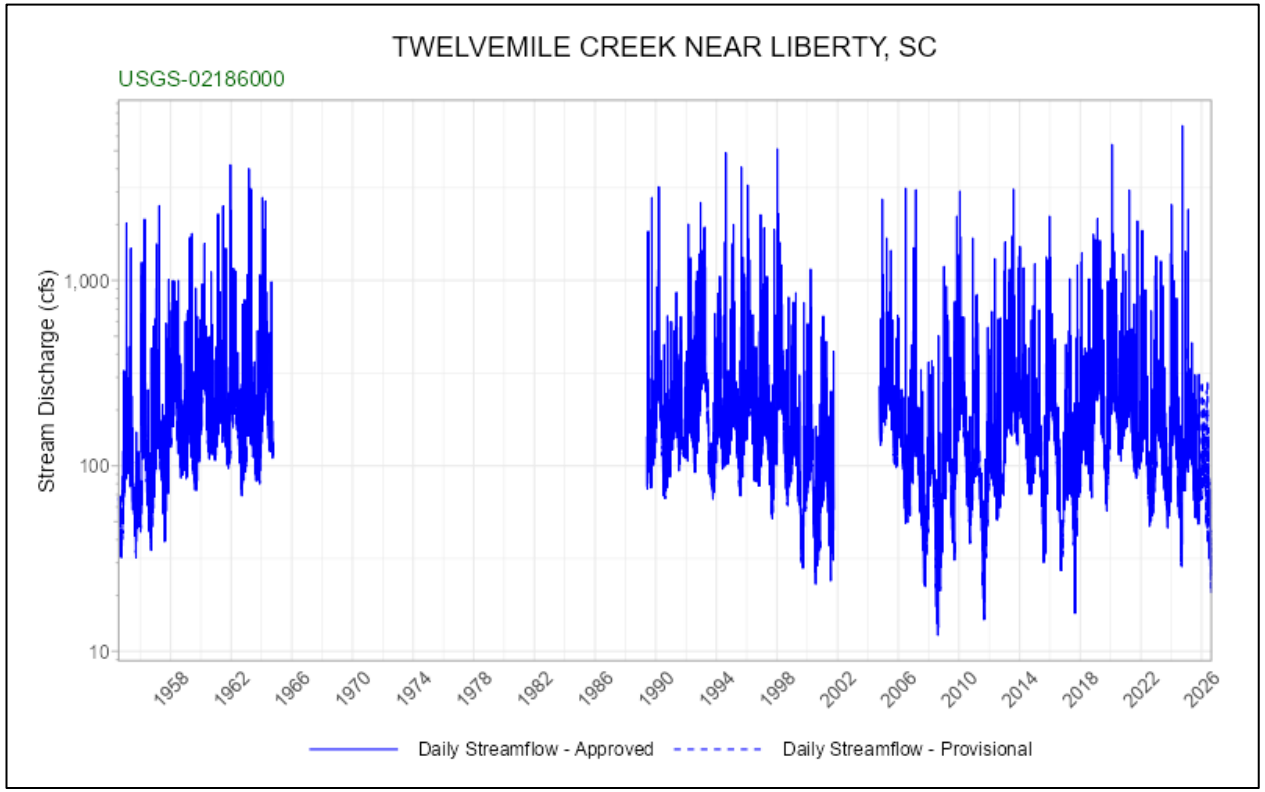


Twelvemile Creek (Pickens County)

Annual Minimum Flow Rankings

Year	Month	MinQ	Rank
2008	8	12.2	1
2011	8	14.8	2
2017	8	16	3
2026	**8**	**18.1**	**4**
2007	10	22.3	5
2000	7	23	6
2001	7	24	7
2016	9	27.3	8
1999	9	28	9
2024	9	28.6	10





April Historical Minimum Flows

Station_Name	Year	MinQ
BLACK CREEK NEAR MCBEE, SC	**2026**	**22.8**
BLACK RIVER AT KINGSTREE, SC	**2026**	**29**
BROAD RIVER NEAR CARLISLE, SC	1942	478
BUSH RIVER NR PROSPERITY, SC	2012	9.71
CATAWBA RIVER BELOW CATAWBA, SC	2004	657
CHATTOOGA RIVER NEAR CLAYTON, GA	**2026**	**257**
COOSAWHATCHIE RIVER NEAR HAMPTON, SC	2012	0
EDISTO RIVER NR GIVHANS, SC	**2026**	**462**
ENOREE RIVER AT WHITMIRE, SC	**2026**	**159**
GILLS CREEK AT COLUMBIA, SC	2007	3.26
LITTLE PEE DEE R. AT GALIVANTS FERRY, SC	**2026**	**280**
LITTLE RIVER NEAR MT. CARMEL, SC	2012	27
LYNCHES RIVER AT EFFINGHAM, SC	**2026**	**174**
MCTIER CREEK RD 209 NEAR MONETTA, SC	**2026**	**2.37**
MIDDLE SALUDA RIVER NEAR CLEVELAND, SC	**2026**	**24**
NORTH FORK EDISTO RIVER AT ORANGEBURG, SC	2012	215
NORTH PACOLET RIVER AT FINGERVILLE, SC	2026	69.4
PEE DEE RIVER AT PEEDEE, SC	2002	1180
ROCKY CREEK AT GREAT FALLS, SC	**2026**	**10.8**
ROCKY RIVER NR STARR, SC	**2026**	**26.5**
SALKEHATCHIE RIVER NEAR MILEY, SC	2012	45.5
SALUDA RIVER NEAR GREENVILLE, SC	**2026**	**114**
SOUTH FORK EDISTO RIVER NEAR DENMARK, SC	2012	204
SOUTH PACOLET RIVER NR CAMPOBELLO, SC	**2026**	**24.6**
SOUTH RABON CREEK NEAR GRAY COURT, SC	2012	6.81
STEVENS CREEK NEAR MODOC, SC	2012	5.6
TWELVEMILE CREEK NEAR LIBERTY, SC	**2026**	**47.2**
WACCAMAW RIVER NEAR LONGS, SC	**2026**	**33.2**

May Historical Minimum Flows

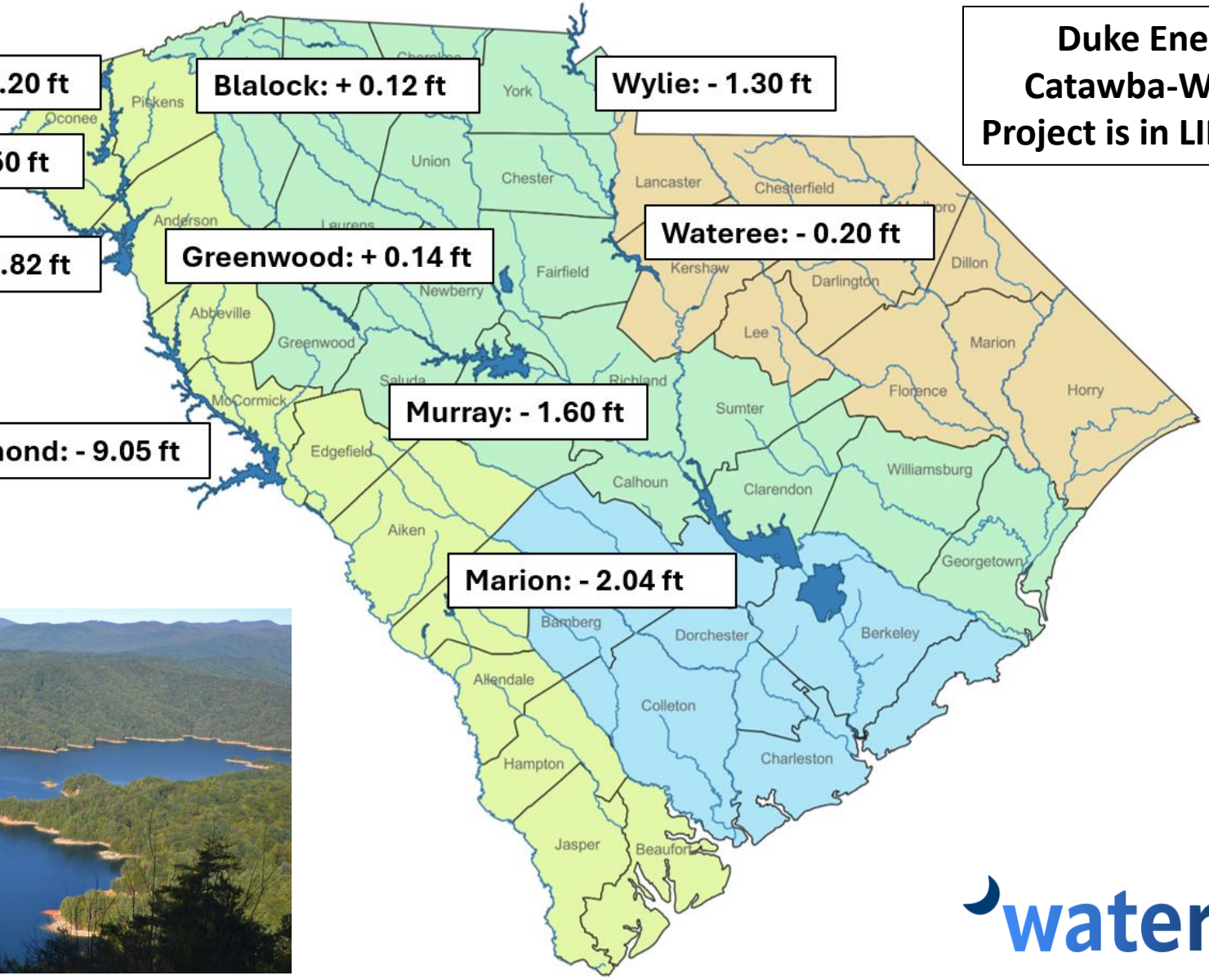
Station_Name	Year	MinQ
BLACK CREEK NEAR MCBEE, SC	**2026**	**18.7**
BLACK RIVER AT KINGSTREE, SC	1941	11
BROAD RIVER NEAR CARLISLE, SC	1940	192
BUSH RIVER NR PROSPERITY, SC	2012	6.96
CATAWBA RIVER BELOW CATAWBA, SC	2008	797
CHATTOOGA RIVER NEAR CLAYTON, GA	2001	187
COOSAWHATCHIE RIVER NEAR HAMPTON, SC	1995	0
EDISTO RIVER NR GIVHANS, SC	2012	282
ENOREE RIVER AT WHITMIRE, SC	2001	141
GILLS CREEK AT COLUMBIA, SC	1986	3.6
LITTLE PEE DEE R. AT GALIVANTS FERRY, SC	**2026**	**251**
LITTLE RIVER NEAR MT. CARMEL, SC	2012	8.74
LYNCHES RIVER AT EFFINGHAM, SC	2002	130
MCTIER CREEK RD 209 NEAR MONETTA, SC	2012	1.44
MIDDLE SALUDA RIVER NEAR CLEVELAND, SC	**2026**	**17**
NORTH FORK EDISTO RIVER AT ORANGEBURG, SC	2012	173
NORTH PACOLET RIVER AT FINGERVILLE, SC	**2026**	**49.5**
PEE DEE RIVER AT PEEDEE, SC	2002	1110
ROCKY CREEK AT GREAT FALLS, SC	**2026**	**6.62**
ROCKY RIVER NR STARR, SC	2012	20.2
SALKEHATCHIE RIVER NEAR MILEY, SC	2011	20.6
SALUDA RIVER NEAR GREENVILLE, SC	2001	104
SOUTH FORK EDISTO RIVER NEAR DENMARK, SC	2012	166
SOUTH PACOLET RIVER NR CAMPOBELLO, SC	**2026**	**18.9**
SOUTH RABON CREEK NEAR GRAY COURT, SC	2012	4.72
STEVENS CREEK NEAR MODOC, SC	2012	2.57
TWELVEMILE CREEK NEAR LIBERTY, SC	**2026**	**38.5**
WACCAMAW RIVER NEAR LONGS, SC	1995	14

Current Lake Level Deficit/Surpluses
September 14th, 2026

Duke Energy's Keowee-Toxaway Project is in LIP stage 2.

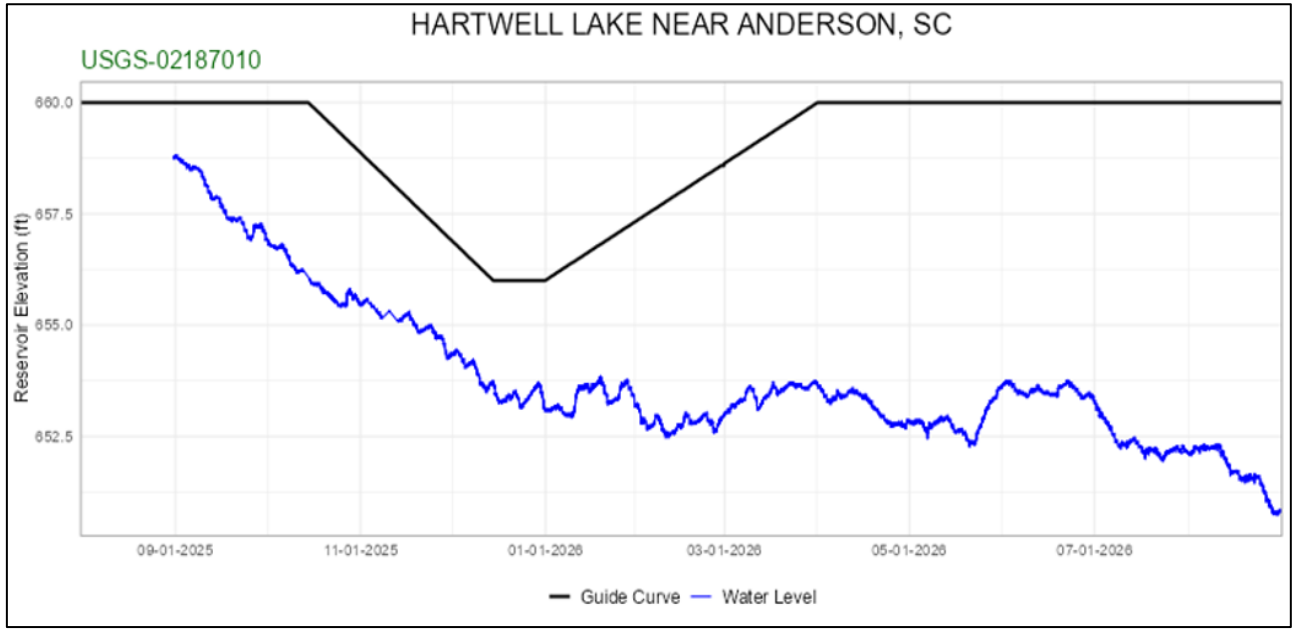
Duke Energy's Catawba-Wateree Project is in LIP stage 2.

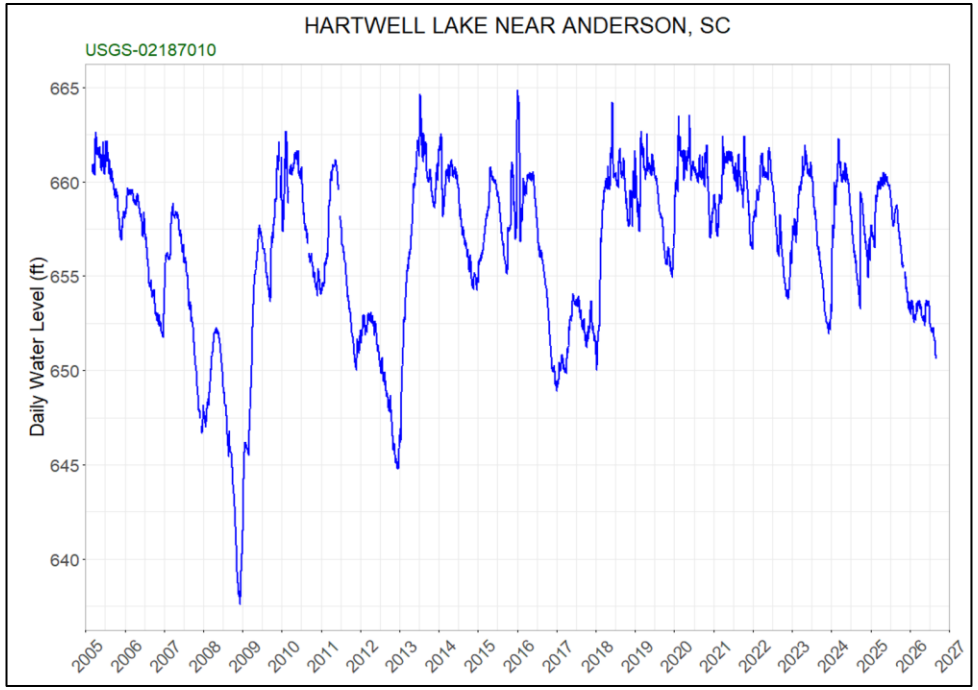
USACE Savannah District has declared stage 2 drought.

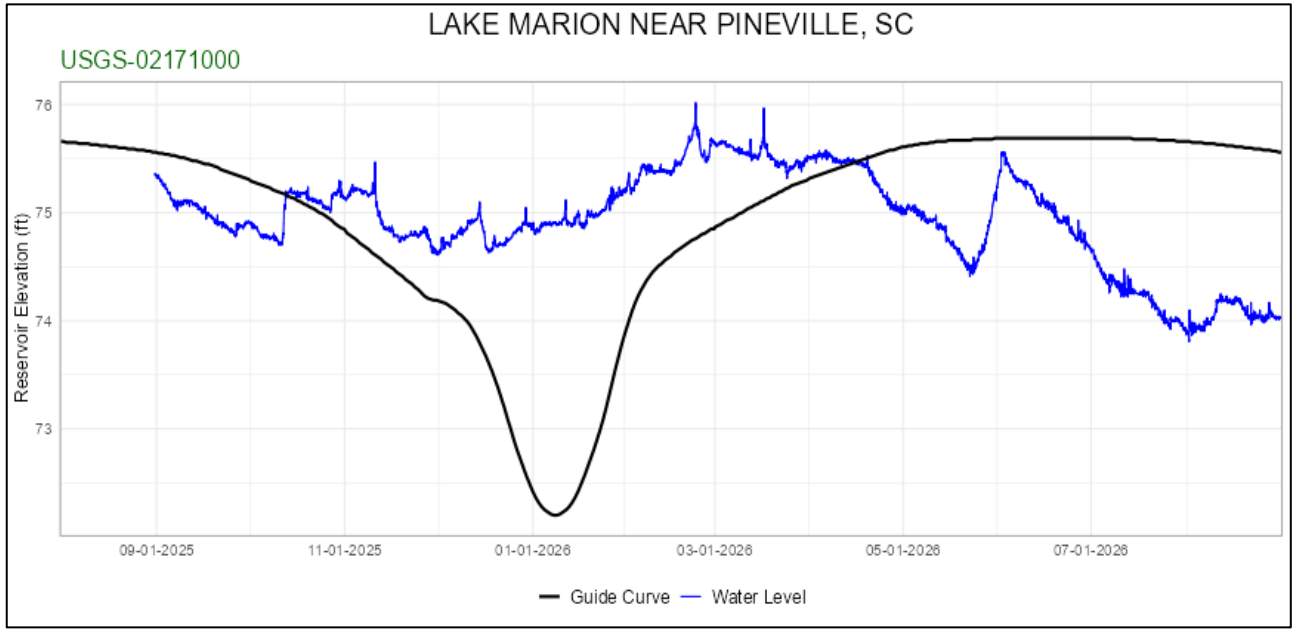


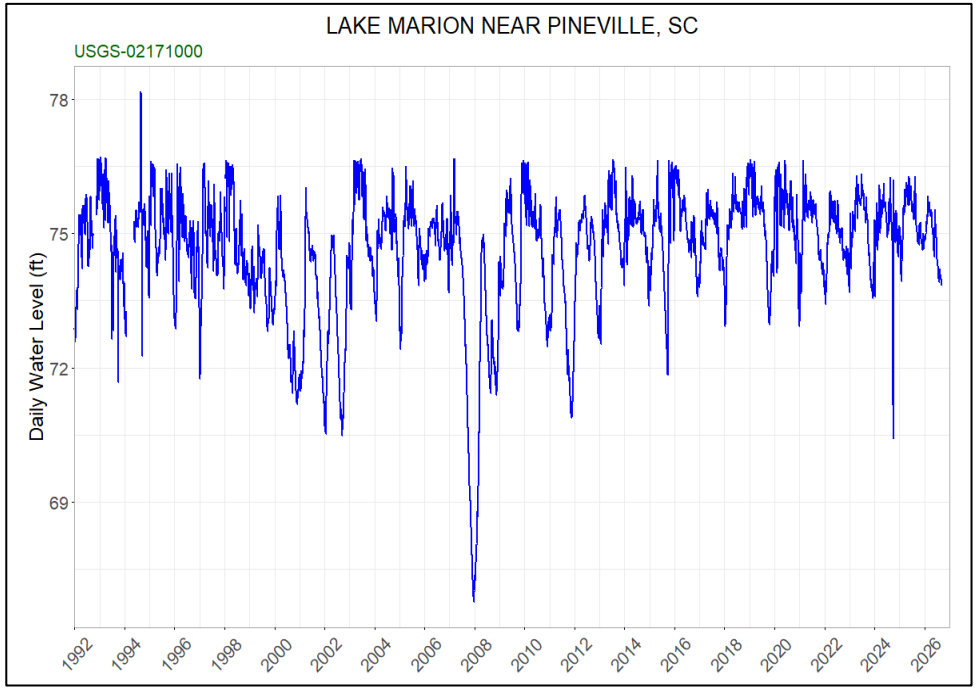


waterSC

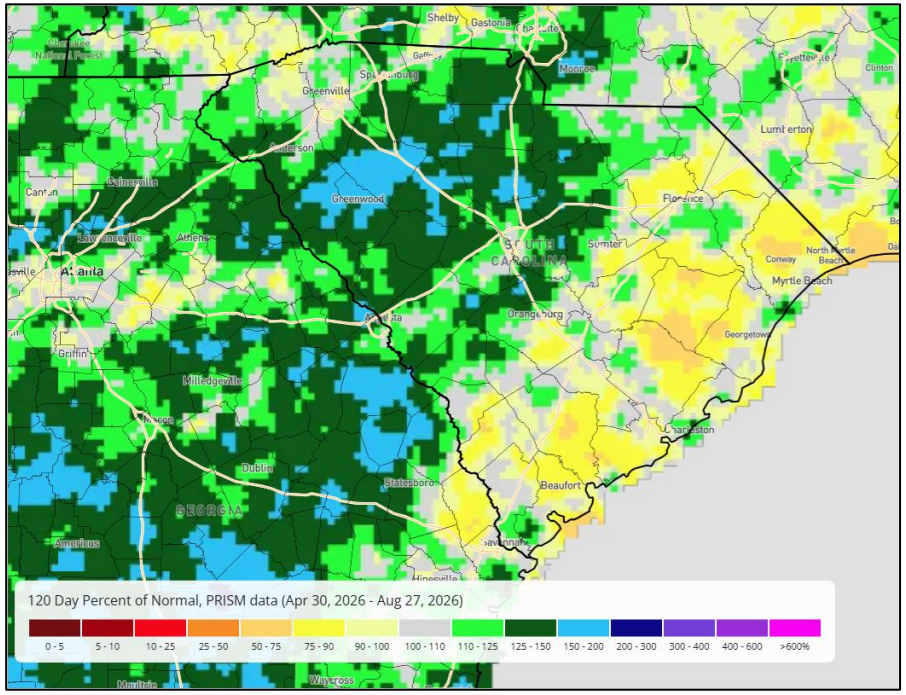

HARTWELL LAKE NEAR ANDERSON, SC
USGS-02187010
660.0
657.5
655.0
652.5
Reservoir Elevation (ft)
09-01-2025
11-01-2025
01-01-2026
03-01-2026
05-01-2026
07-01-2026
Guide Curve
Water Level


HARTWELL LAKE NEAR ANDERSON, SC
USGS-02187010
665
660
655
650
645
640
Daily Water Level (ft)
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027

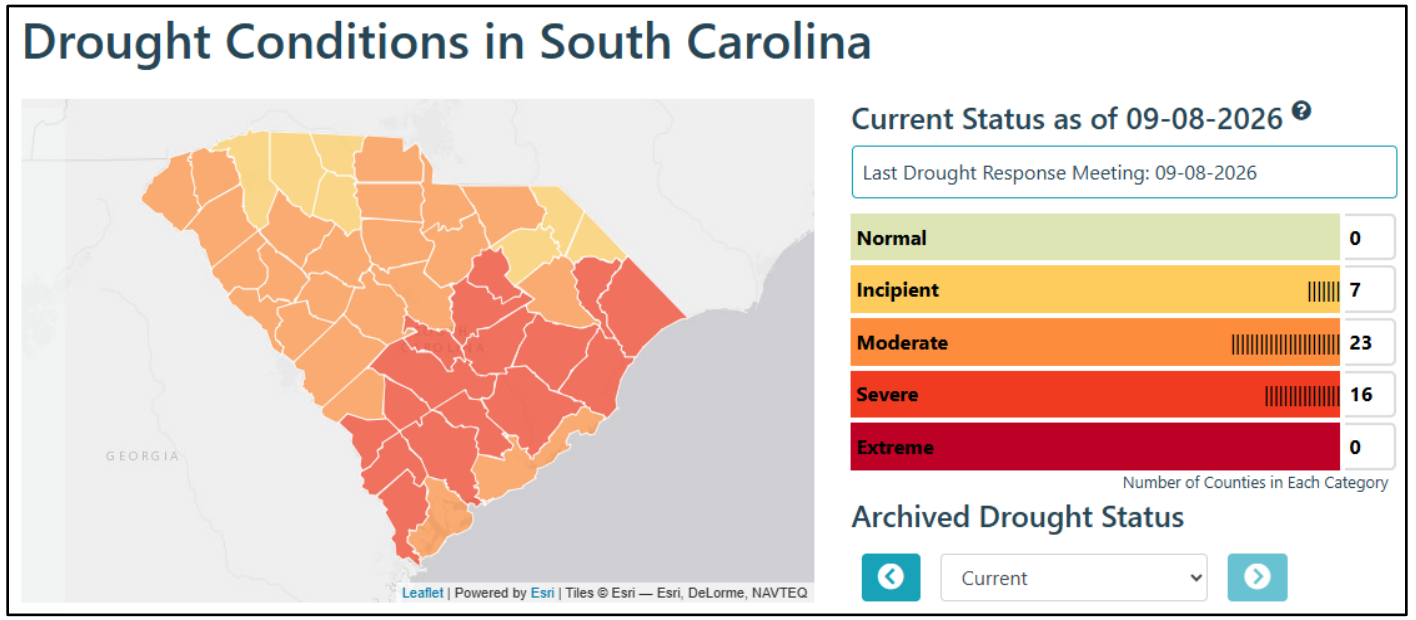

LAKE MARION NEAR PINEVILLE, SC
USGS-02171000
76
75
74
73
Reservoir Elevation (ft)
09-01-2025
11-01-2025
01-01-2026
03-01-2026
05-01-2026
07-01-2026
Guide Curve
Water Level


LAKE MARION NEAR PINEVILLE, SC
USGS-02171000
78
75
72
69
Daily Water Level (ft)
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
2020
2022
2024
2026

120-Day Departure from Normal (Apr 30, 2026 – Aug 27, 2026)

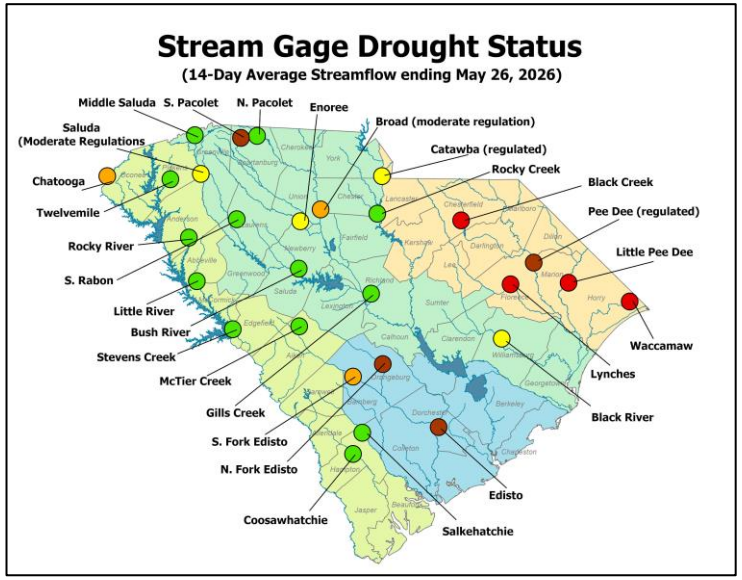


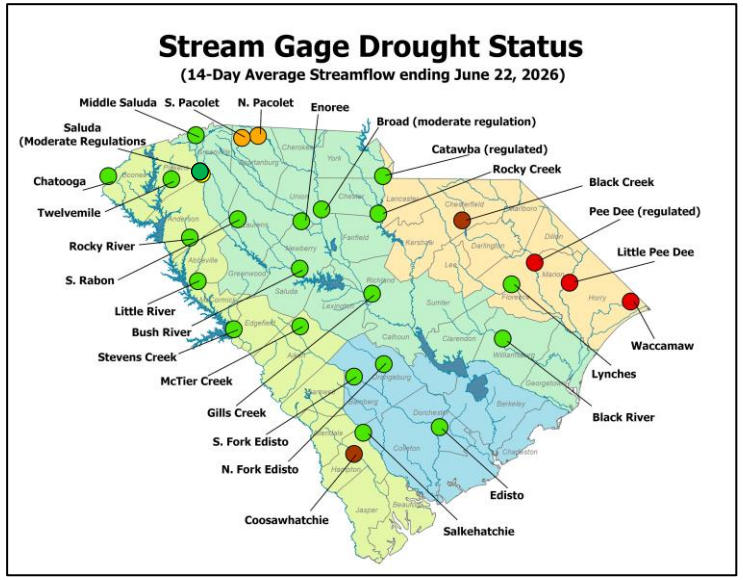
SC Current Drought Status

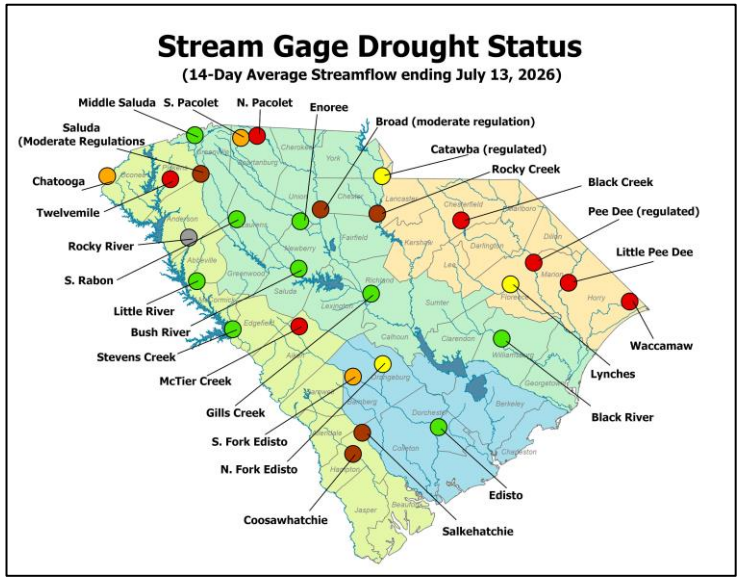


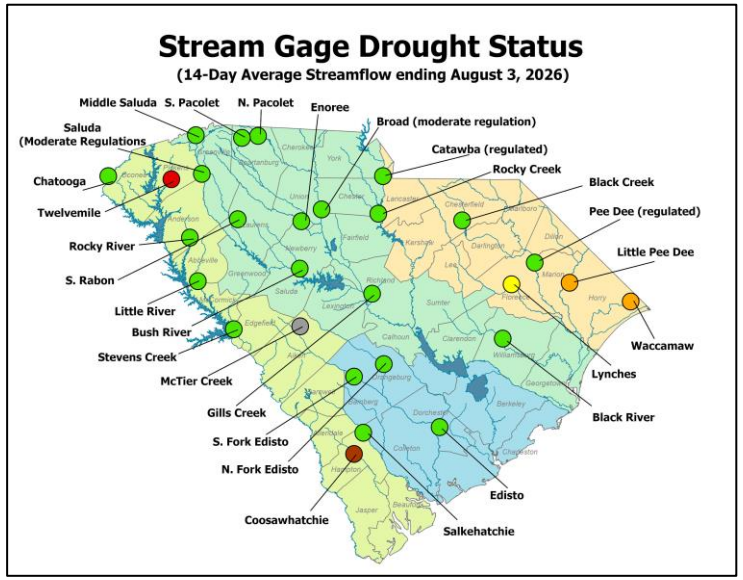
* Source - Southern Regional Climate Center

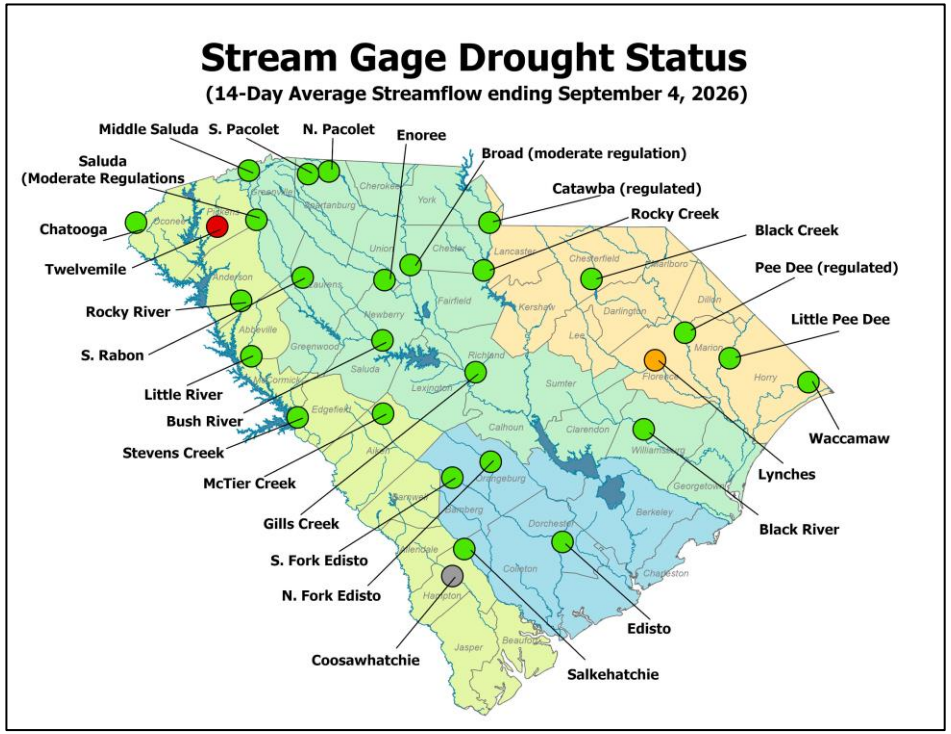
Current Conditions



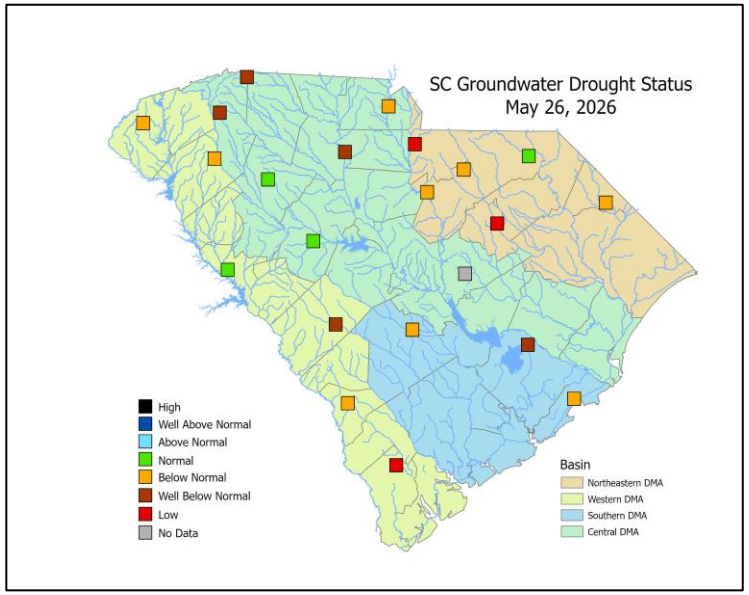


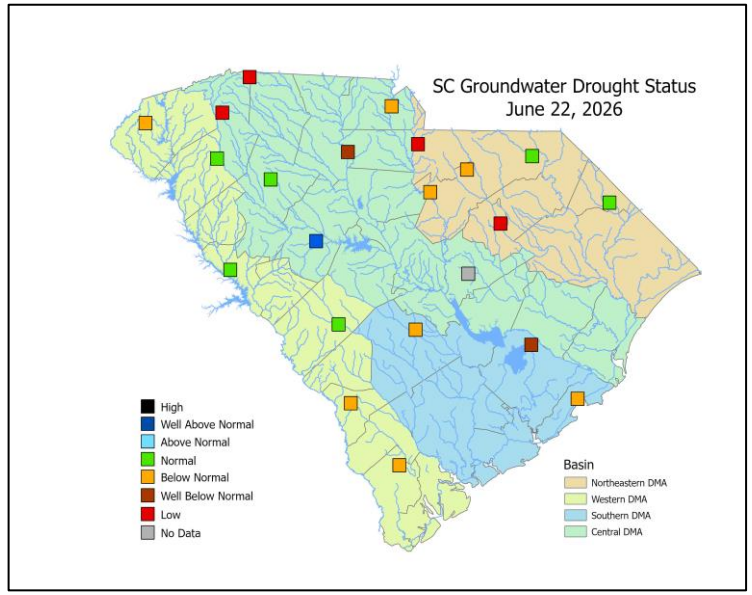


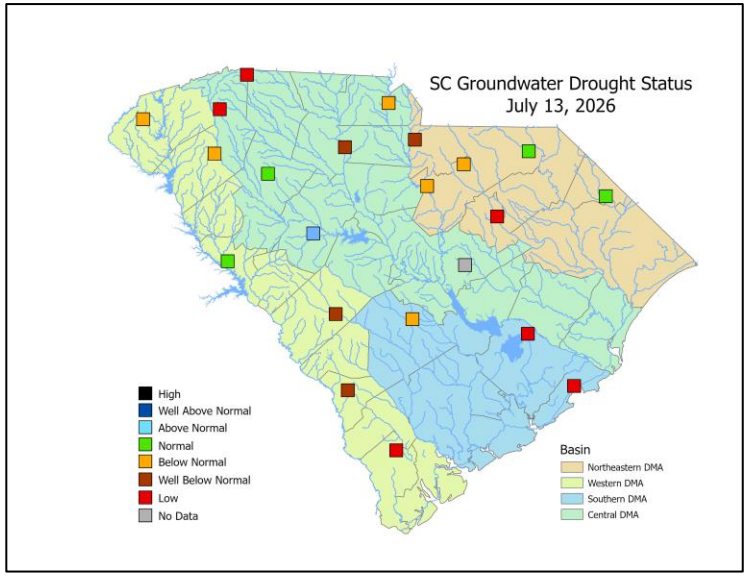


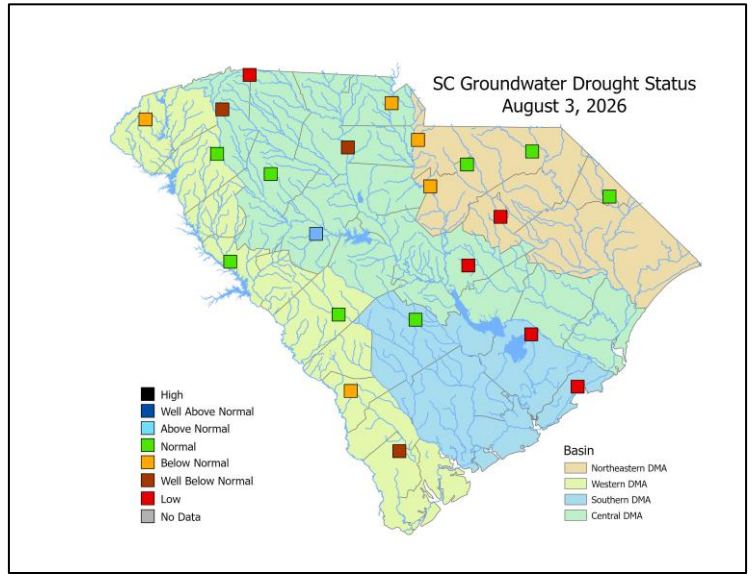


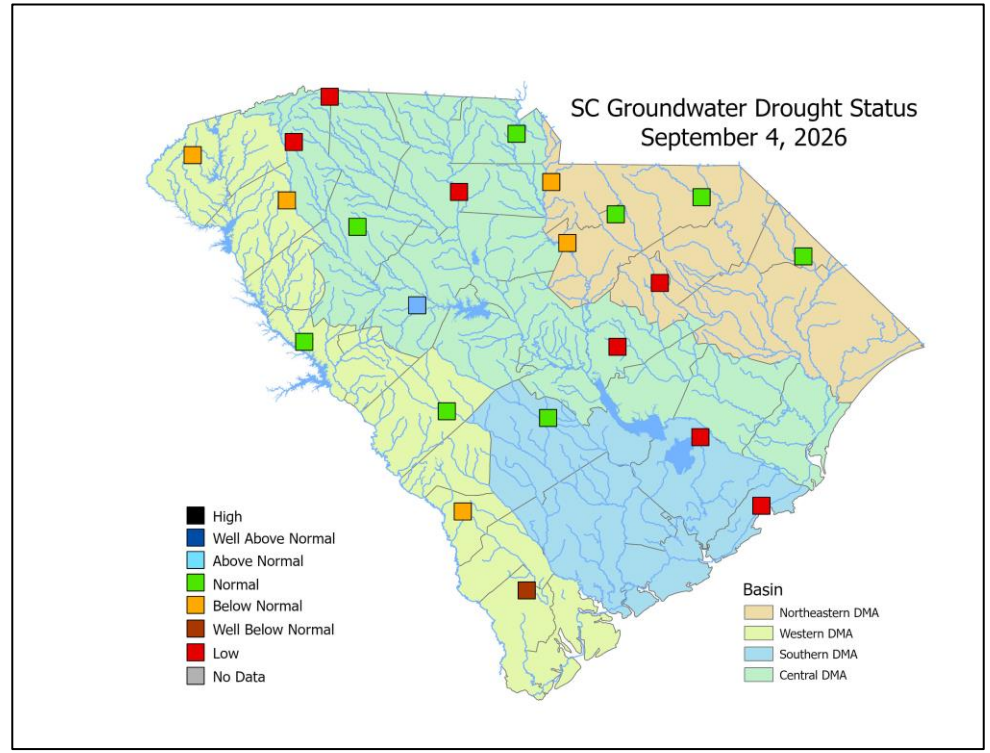
Current Conditions











Summary

- Very dry winter: 6-month period from Nov 2025 – April 2026 was the driest on record (131 years) with statewide average ~12 inches below normal.
- Winter GW recharge greatly reduced leading to suppressed GW levels and baseflow levels in streams.
  - Hydrologic conditions already below normal in most of the State by early spring.
- Onset of growing season and evapotranspiration rates worsened conditions leading to severe drought declaration for the entire state by May 2026.
- Improved late spring and summer rainfall prevented *hydrologic conditions* from worsening; drought status was downgraded in the Piedmont and parts of the Upper Coastal Plain.
- SC still has a few more months of the “dry” season.
  - Statewide drought conditions will likely not significantly improve until the winter without any tropical systems.
  - El Niño conditions typically result in wetter winters for SC.

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Questions

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Private Well Program

Greg Withycombe

September 17, 2026

Topic Overview

- Program Overview
- Drought and Well Construction
- SCDES Drought Response



Private Well Program

Private Well Program Overview

- Issues Private Residential and Irrigation well permits
- Coordinates water well records (D-1903)
- Reviews, invoices, and communicates private residential water well sample results
- Conducts routine inspections to ensure compliance with R. 61-71

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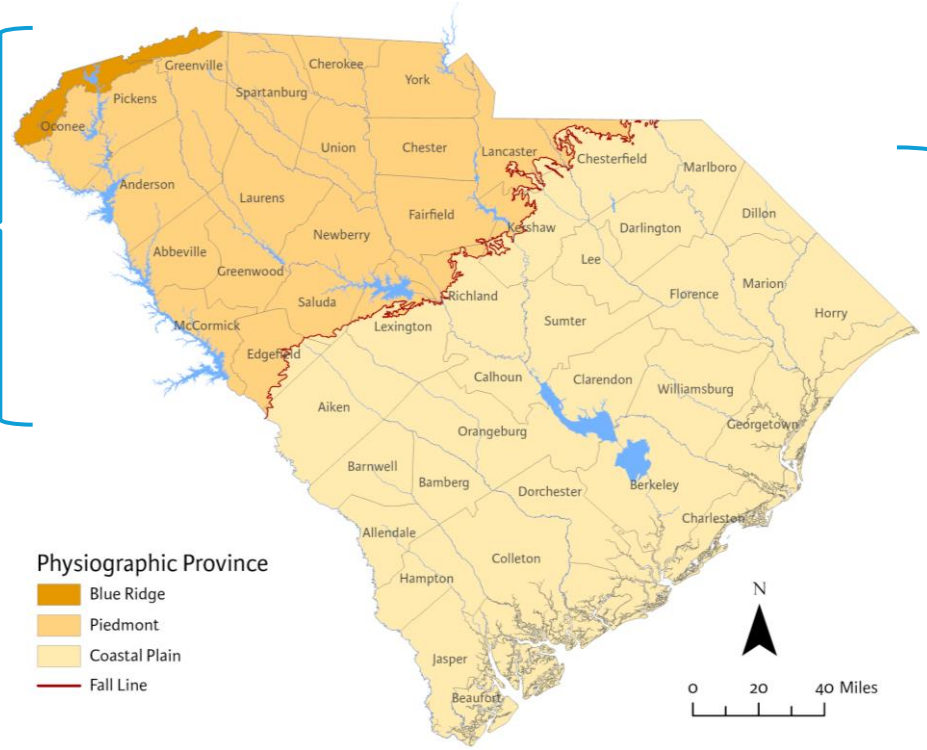
What the Private Well Program Is Not

- Regulate water quality or quantity in a private well
- Regulate placement of wells on private property
- Regulate the depth of residential wells

Bedrock Wells



Screened Wells

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Drought and Well Construction

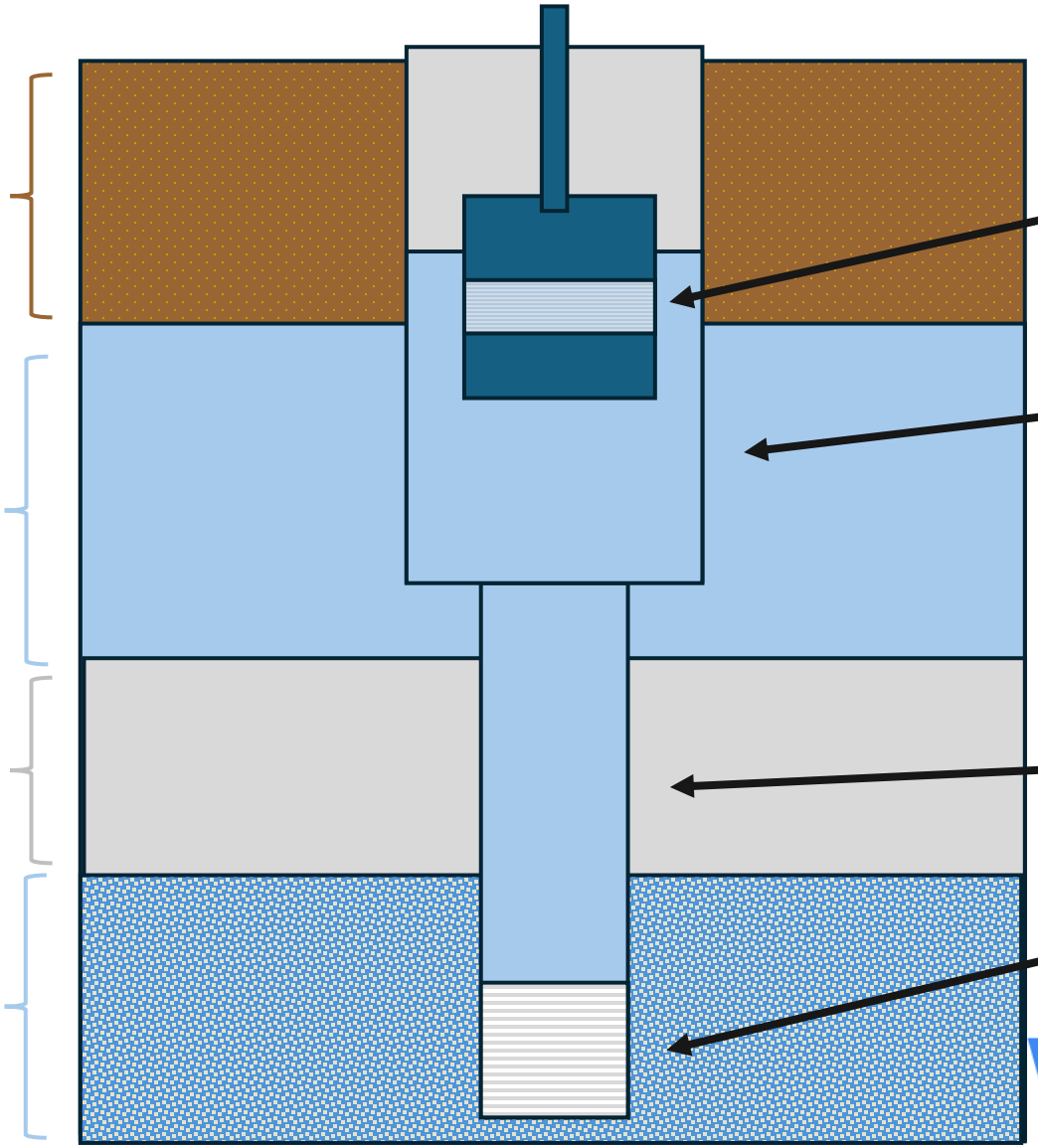
2008 Drought

- Pee Dee area was primarily affected

- Well construction – 4-inch diameter wells telescoped to 2-inch diameter
  - Creates issues with ability to lower pumps

- Very few shallow surficial wells impacted

Screened Well Construction Example



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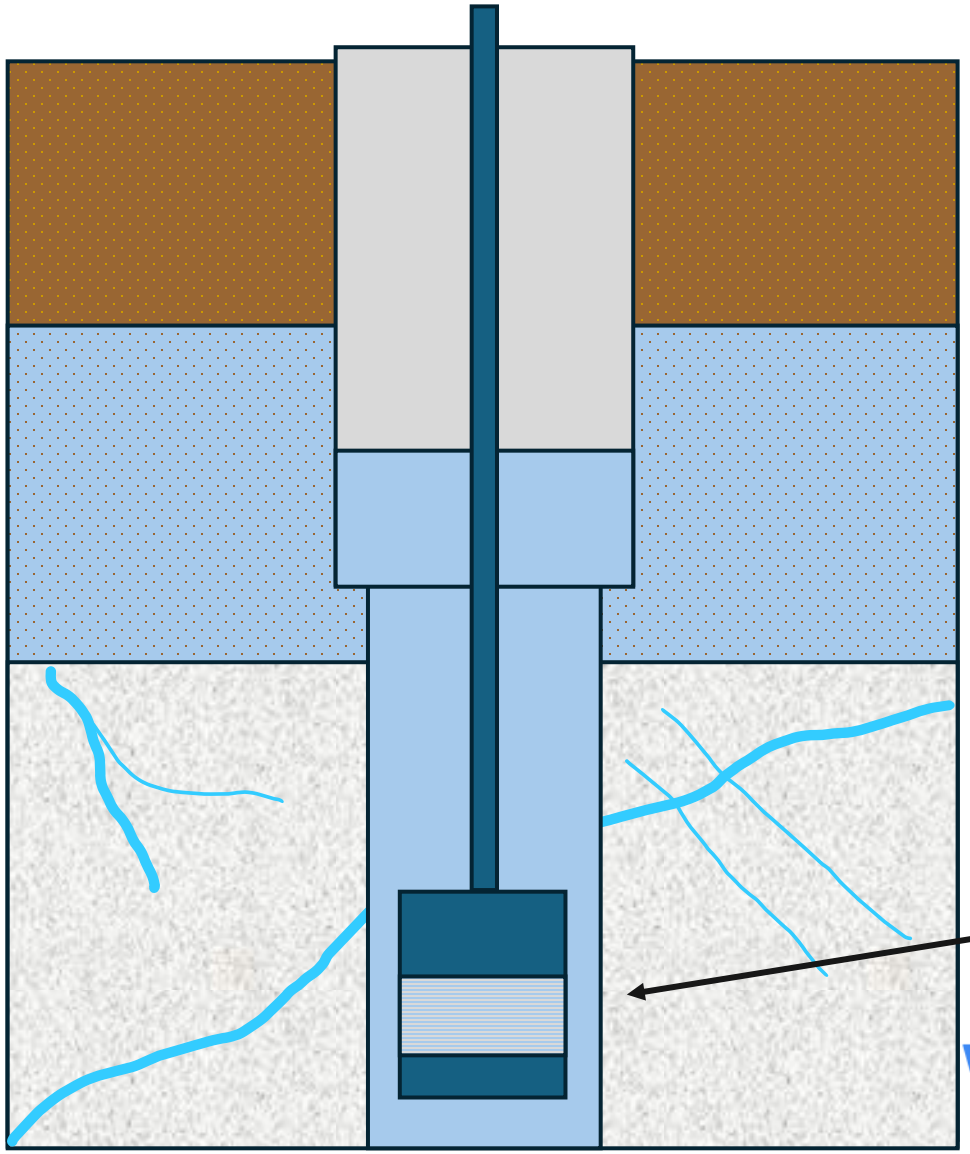
2026 Drought

- Lowcountry area, primarily Hampton County affected (~70 wells)
- Well construction – 4-inch casings, with 3-inch open holes into limestone
- No shallow surficial wells were reported – only those within deeper aquifers

Open Hole Bedrock Well Construction Example



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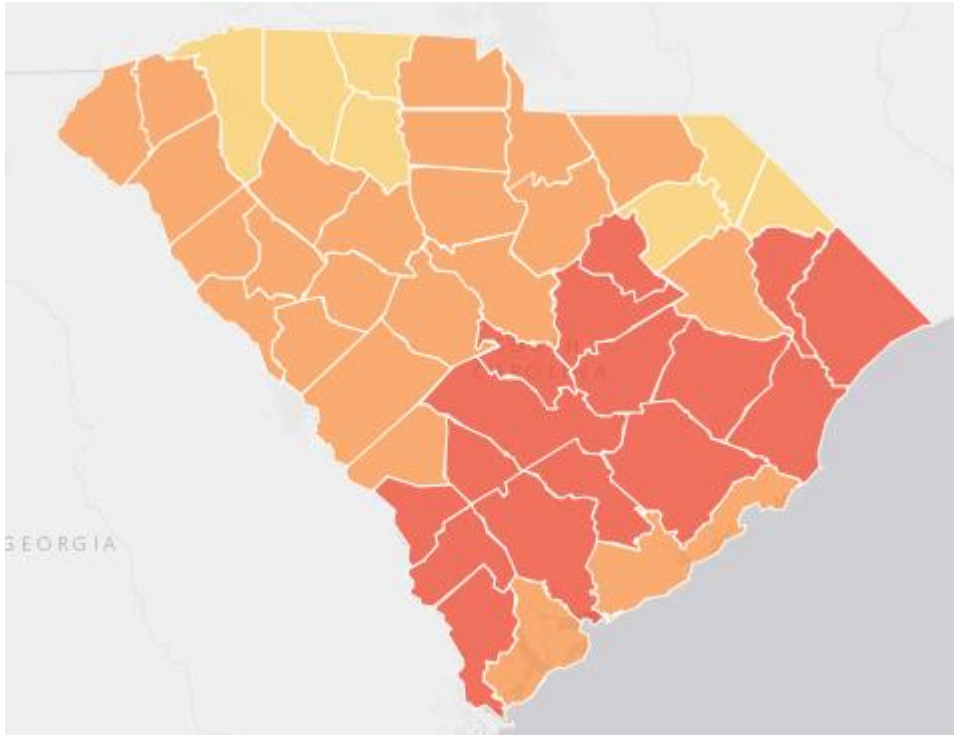
SCDES Drought Response

Communication

- The Private Well hotline activated, and number posted across social media
- Calls tracked in case Emergency Management funds became available
- Individual remediation options were discussed with impacted well owners
- Financial Assistance program (SERCAP, Water Well Trust) information distributed
- Drought information sheet published and circulated

Potential Impacts of Severe Drought on Drinking Water Availability

- Droughts called “slow-moving disasters” by EPA
- 18 systems implementing mandatory water restrictions (as of 9-10-2026)
- 50 systems implementing voluntary water restrictions (as of 9-10-2026)



State Drought Map as of 9-8-2026

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Potential Impacts of Severe Drought on Drinking Water Availability (cont.)

- Options for private well owners:
  - Lower pump if able
  - Deepen existing rock well (no guarantee of more water)
  - Drill completely new well
  - Consider developing permanent community public well if whole neighborhood is impacted
  - Connect to public water system (if available)

- des.sc.gov/2026drought for more information

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Questions?



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Groundwater Withdrawal Management

Leigh Anne Monroe

September 17, 2026

Topic Overview

- Benefits for a Managed System
- Brief Groundwater Withdrawal Permitting Background and Capacity Use Areas (CUAs)
- Potentiometric Map and Hydrograph Updates

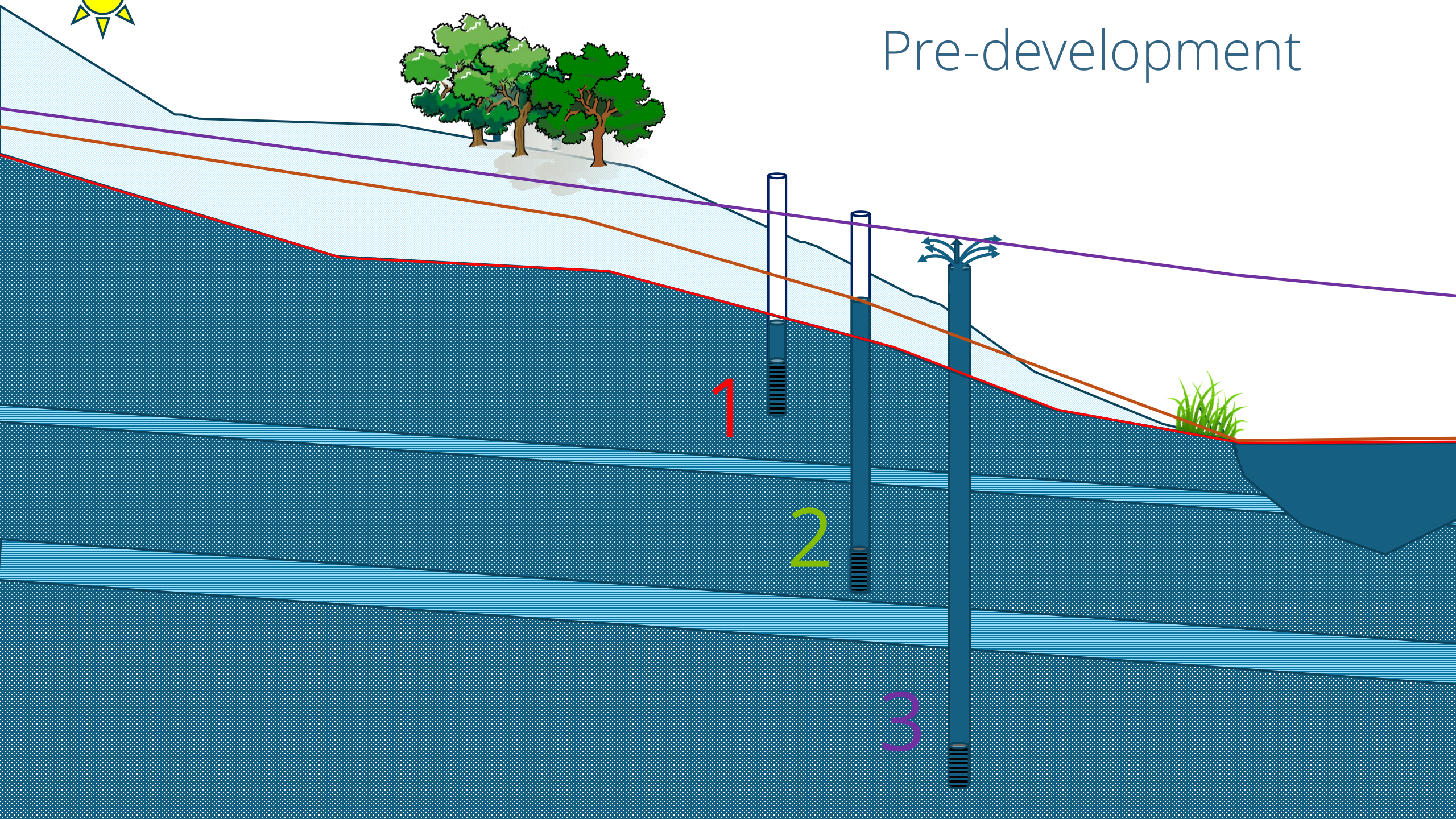


Benefits to a Managed System

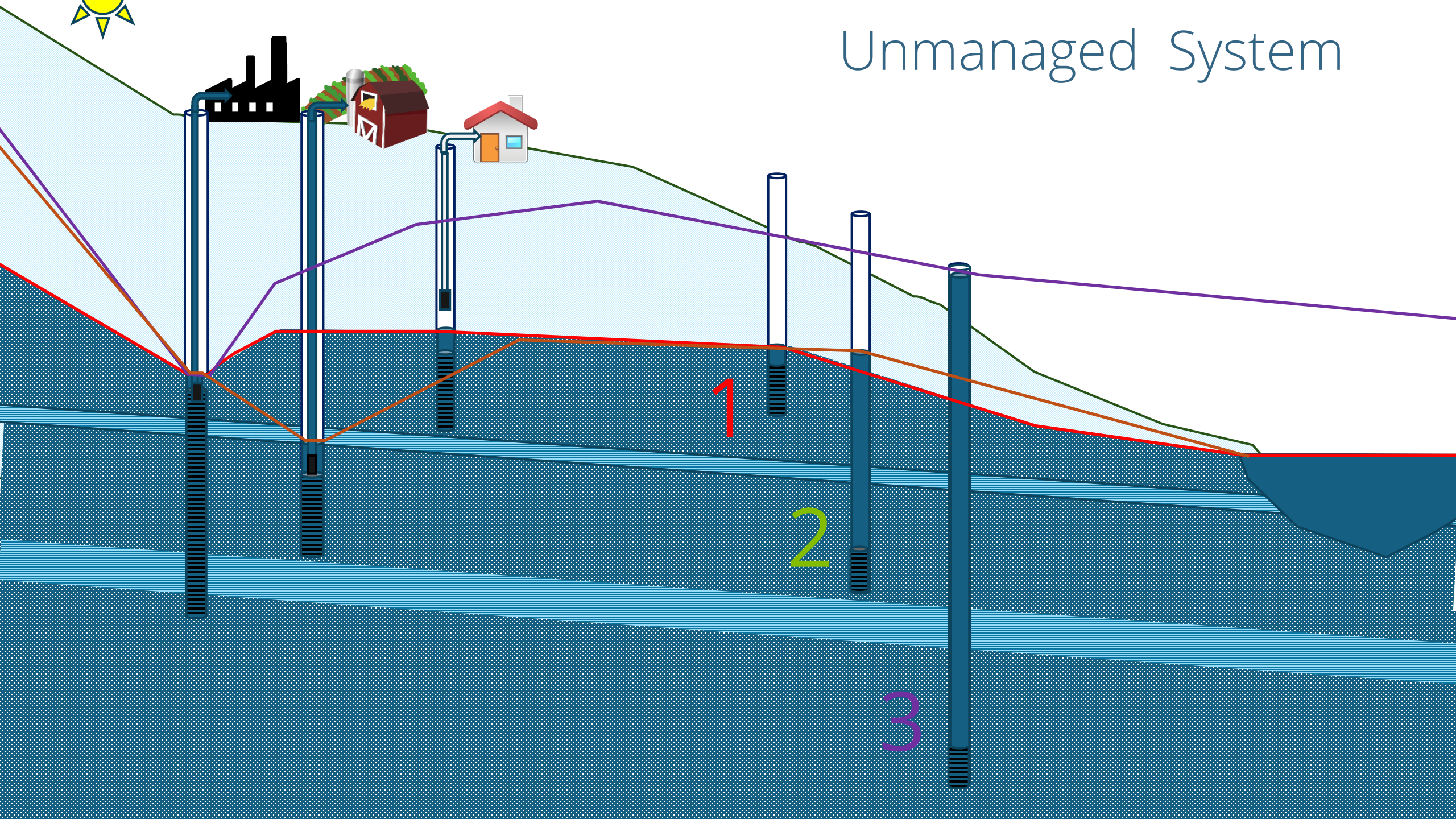
Benefits to Water Resource Management

- Track resources available
- Track resources being used
- Ability to adjust and redirect when issues arise
- Ensuring resource for future generations
- Identify areas for economic growth

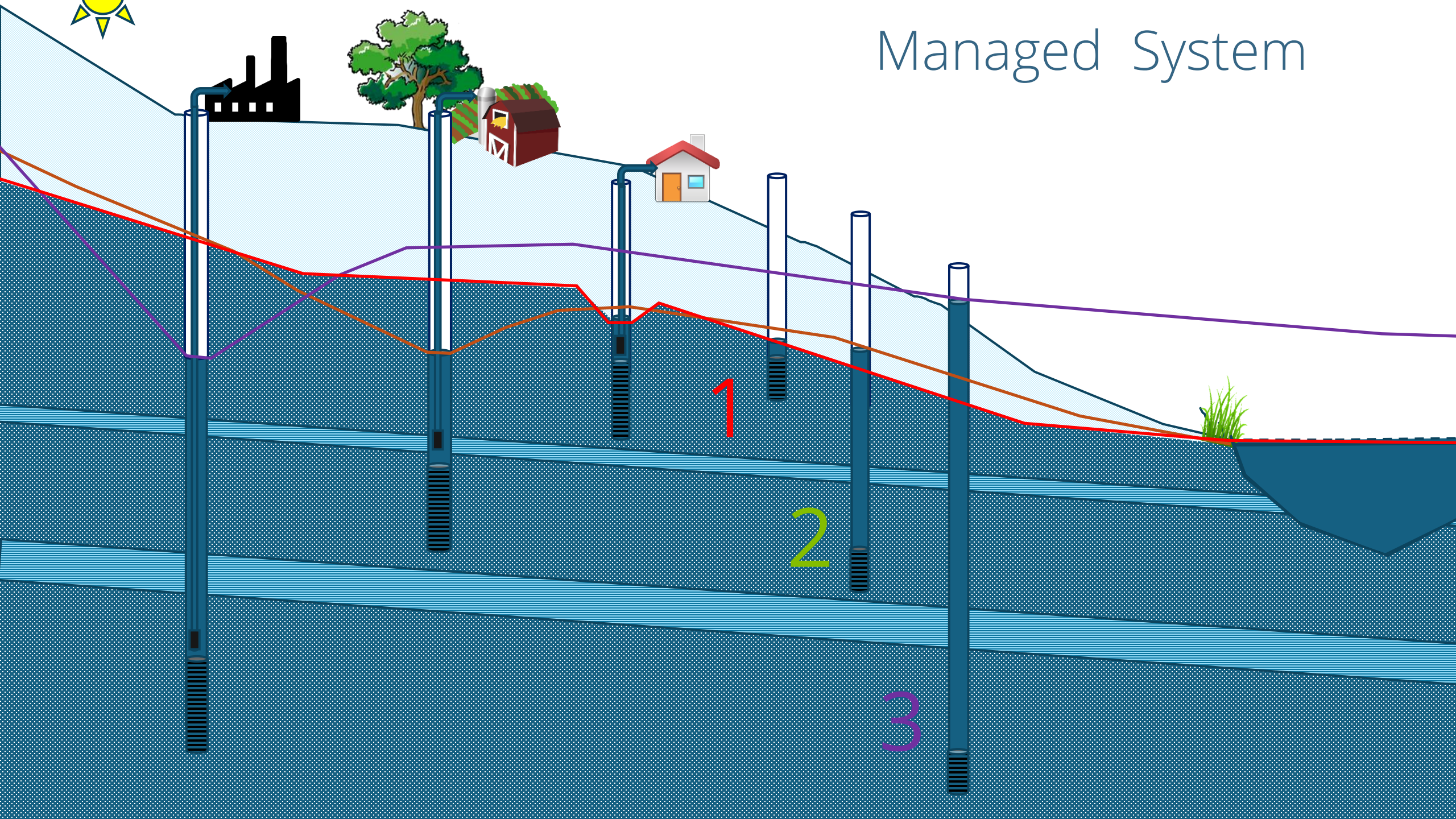
Pre-development



Unmanaged System



Managed System



Goals of Capacity Use



- Groundwater resources of the State be put to beneficial use to the fullest extent to which they are capable
- Subject to reasonable regulation

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Groundwater Withdrawal Permitting Background

Groundwater Use and Reporting Act Legislative Declaration of Policy

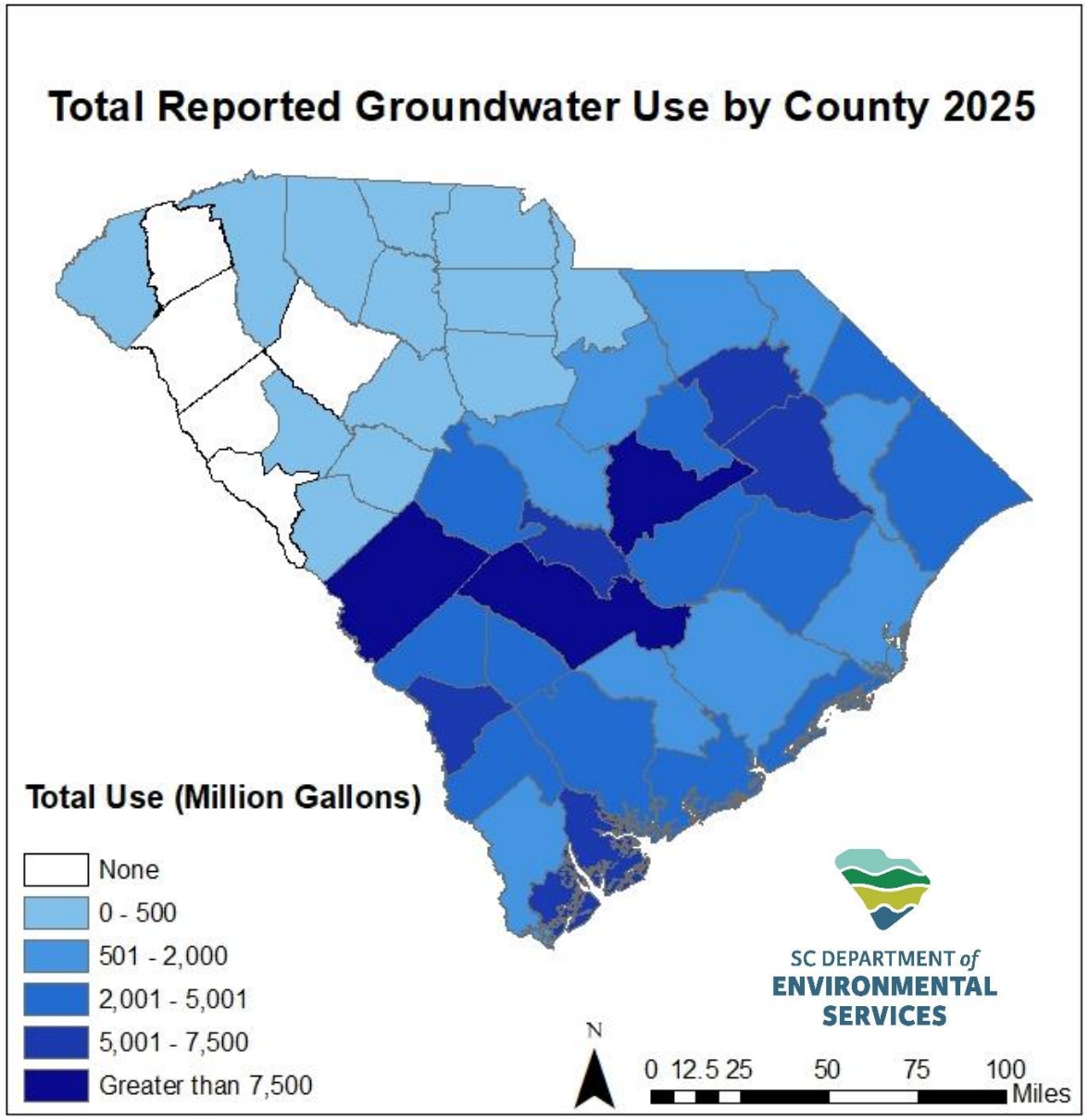
"The General Assembly declares that the general welfare and public interest require that the groundwater resources of the State be put to beneficial use to the fullest extent to which they are capable, subject to reasonable regulation, in order to conserve and protect these resources, prevent waste, and to provide and maintain conditions which are conducive to the development and use of water resources."

Groundwater Use and Reporting Act Capacity Use Area Designation

Where groundwater withdrawal:

- Presents potential adverse effects to the natural resources
- Poses a threat to public health, safety, or economic welfare
- Poses a significant threat to the long-term integrity of the groundwater source

The Department, local government or groundwater withdrawers may initiate a Capacity Use Area (CUA) designation process



Review of Groundwater Withdrawal Permitting

- Issues permits in designated CUAs of the coastal plain over for withdrawals over 3 million gallons in any month (~1in of water per week for 28 acres or average use for 1,000 people)
- Users outside of CUAs must register wells if well or well system will withdraw over 3 million gallons in any month
- All registered and permitted groundwater withdrawers report their annual water use to the Department

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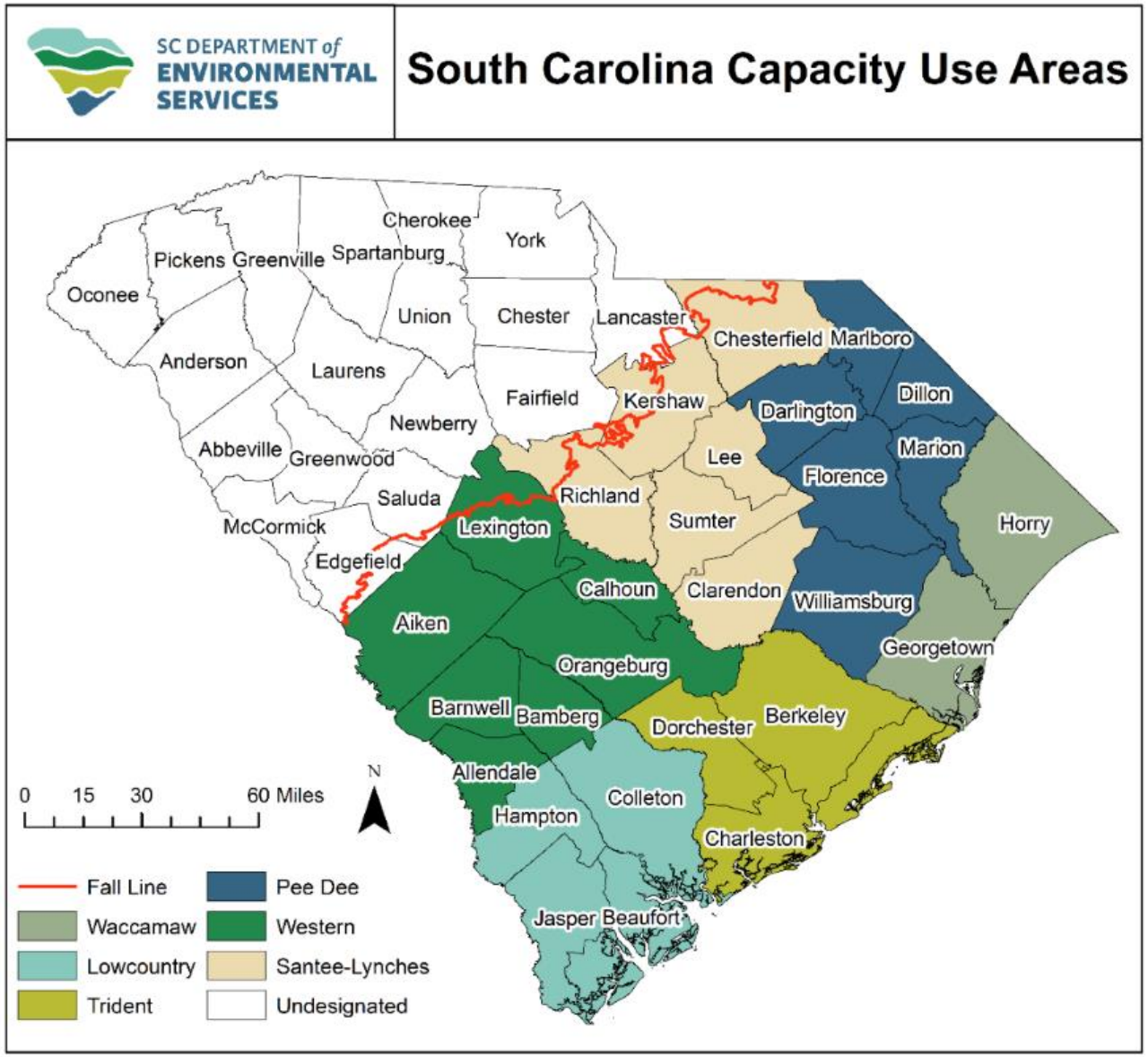
Review of Groundwater Withdrawal Permitting

6 CUAs:

- Waccamaw (1979)
- Lowcountry (1981)
- Trident (2002)
- Pee Dee (2004)
- Western (2018)
- Santee-Lynches (2021)



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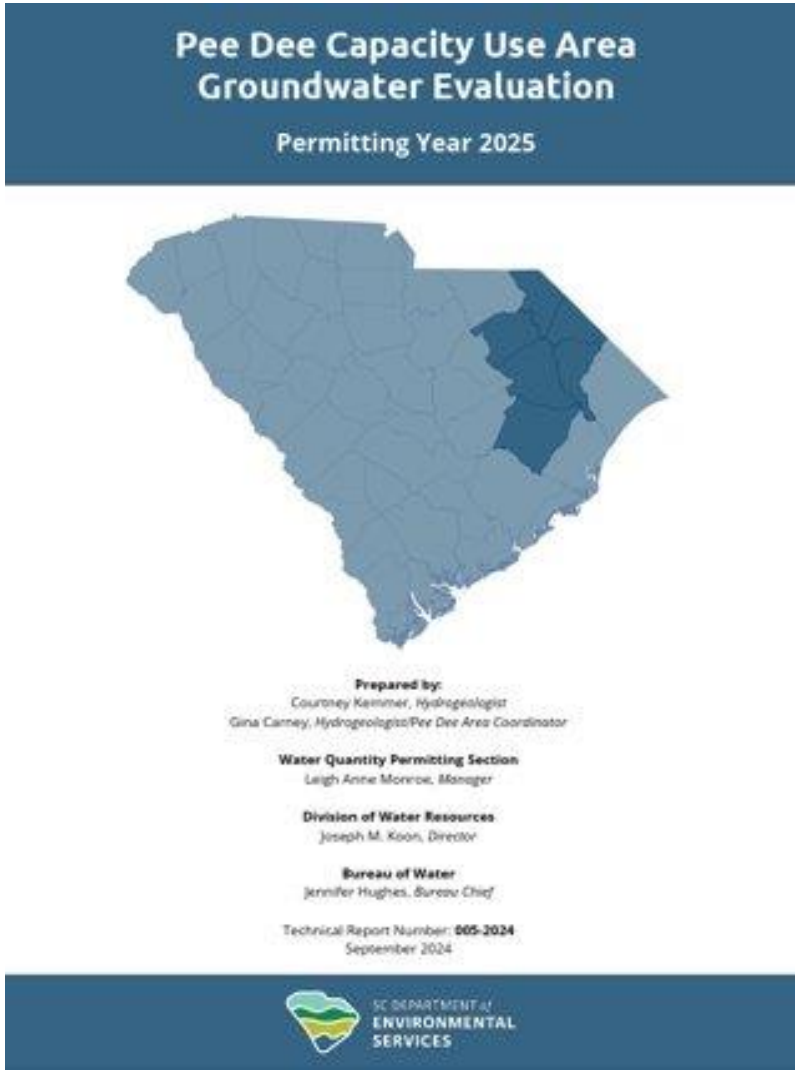
5-Year Groundwater Evaluations

Capacity Use Area Evaluations



Every five years, total annual groundwater withdrawals are compiled and compared to available aquifer potentiometric maps and hydrographs. The report includes:

- List of all permitted withdrawers, permitted limits, and most recent reported groundwater withdrawals;
- Evaluation of withdrawals by category and by aquifer;
- Identification of areas of aquifer stress and all withdrawers utilizing the stressed aquifer(s).
- Recommendations based on aquifer level data and reported withdrawals

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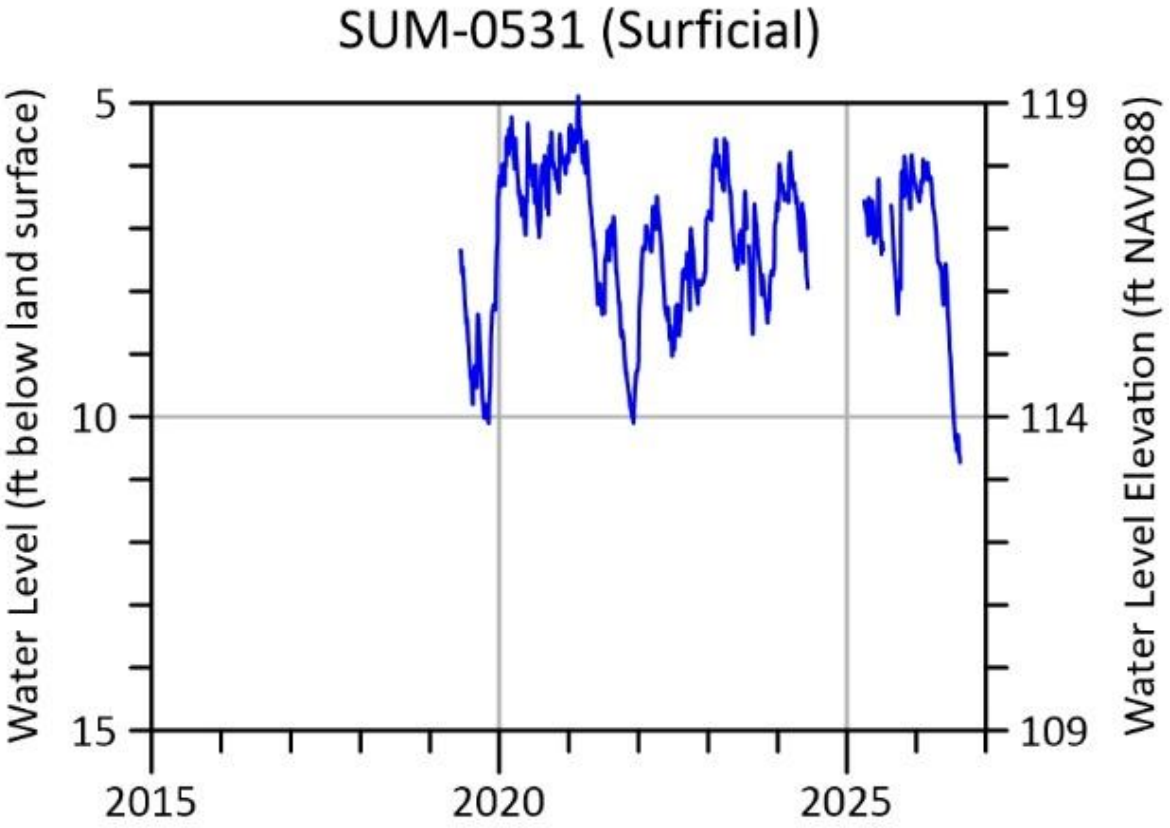
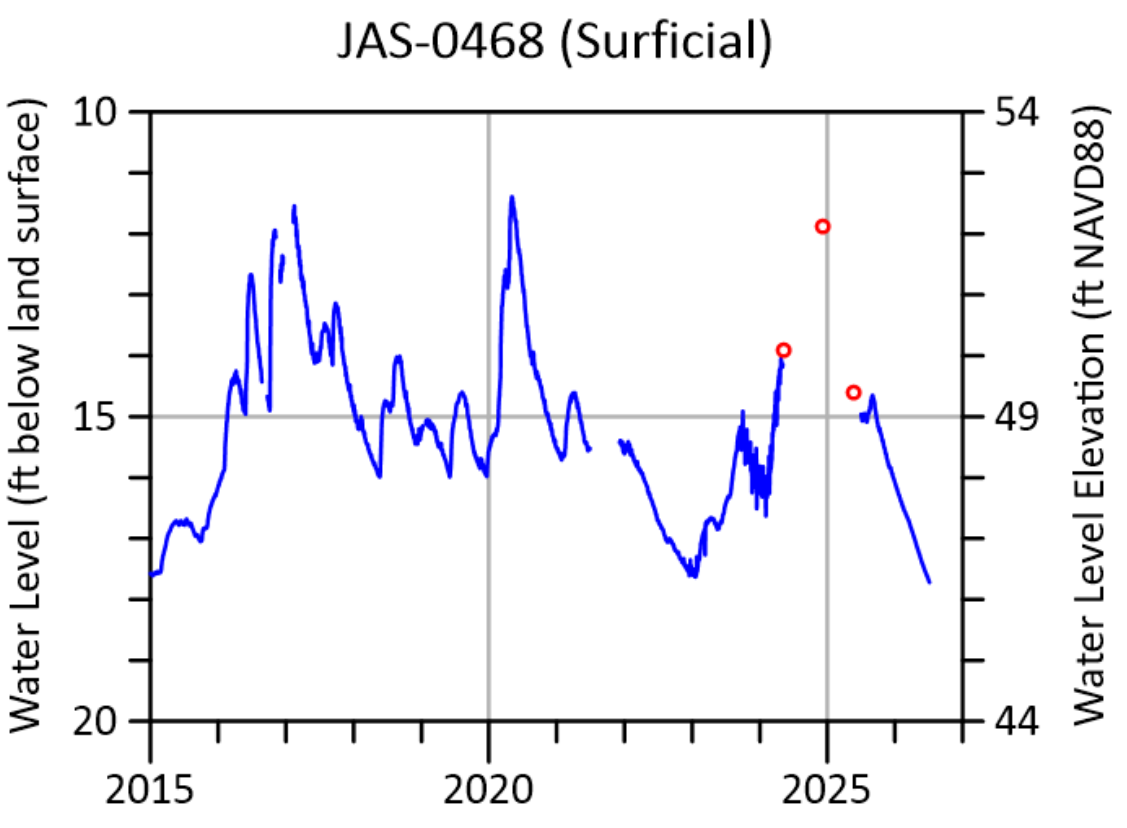
Capacity Use Area Evaluations - Data

- Hydrographs of water level data are included to better show changes in water level in a specific point in an aquifer over time. These can also show any seasonal changes due to local water use
- Updated potentiometric maps are included to show regional aquifer levels and how they have changed over time. These can also point to any cones of depression or rebound; and indicate groundwater flow direction.
- Minor climate data is included to show how regional use trends could be changing due to available rainfall or drought conditions as well as population changes.

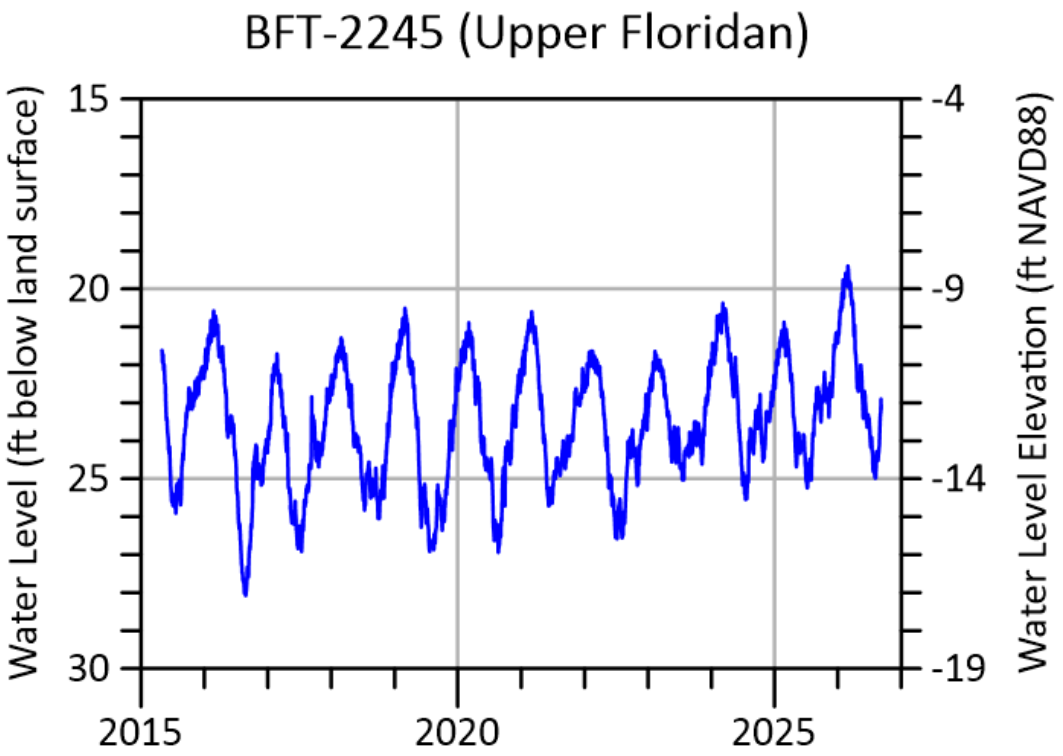
Potentiometric Map and Hydrograph Updates

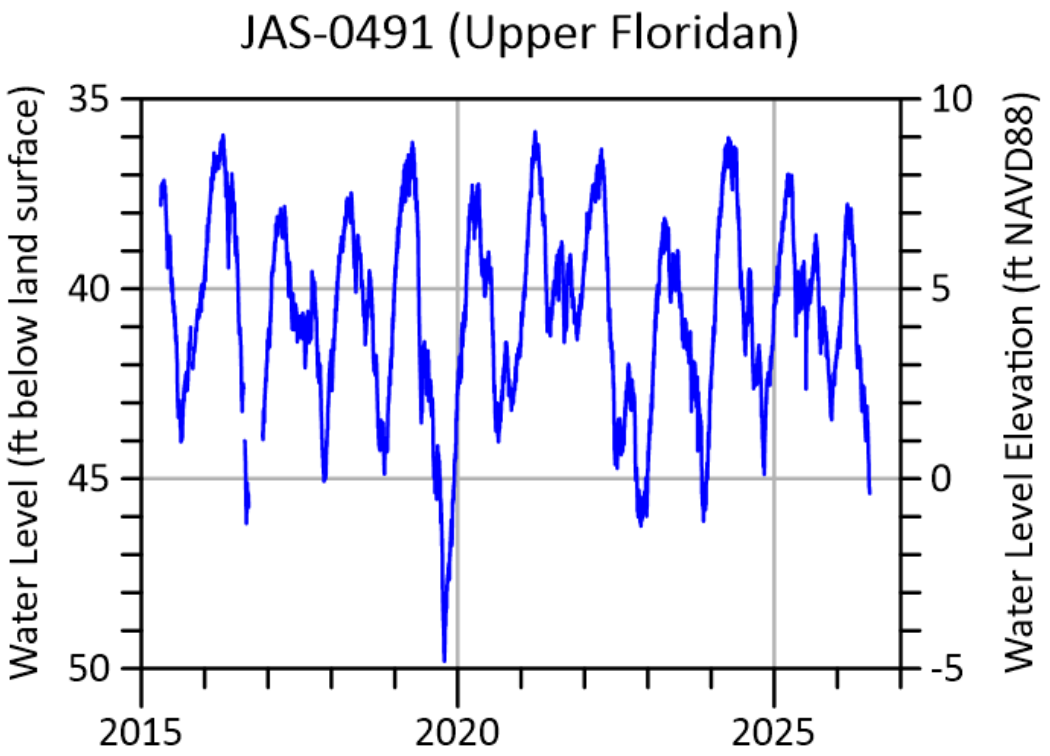
Surficial Aquifer Hydrographs





Upper Floridan Aquifer Hydrographs





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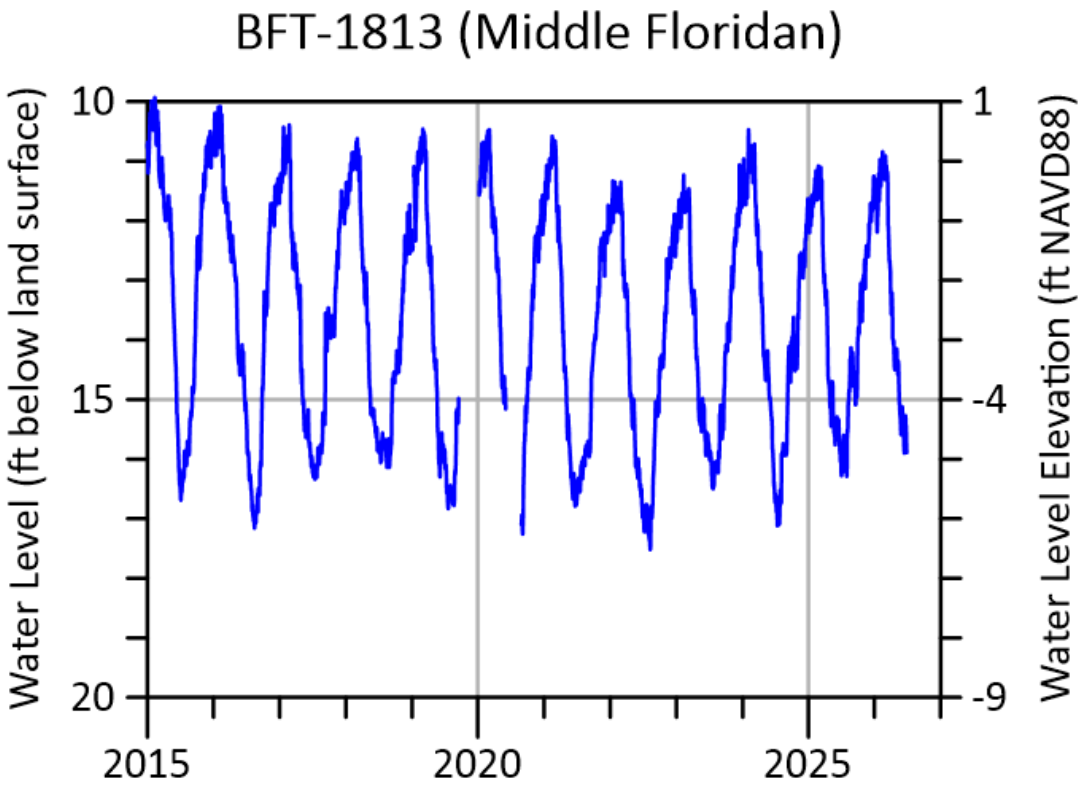
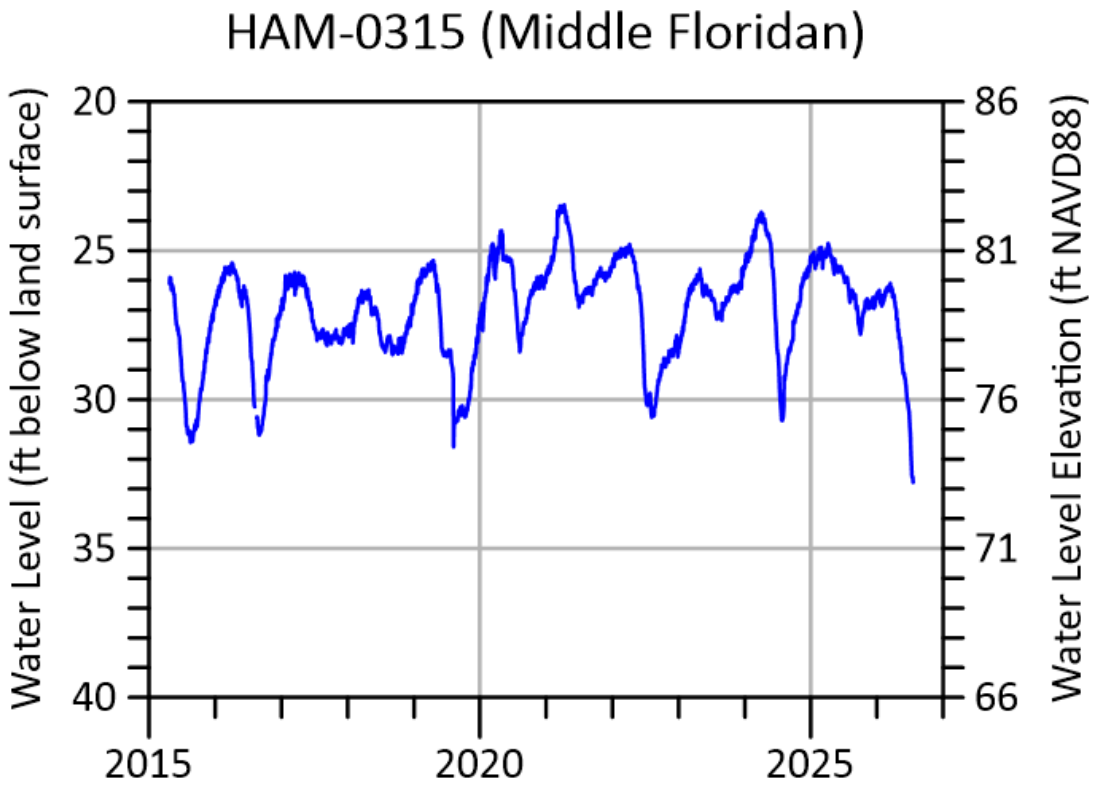
Middle Floridan Aquifer Hydrographs





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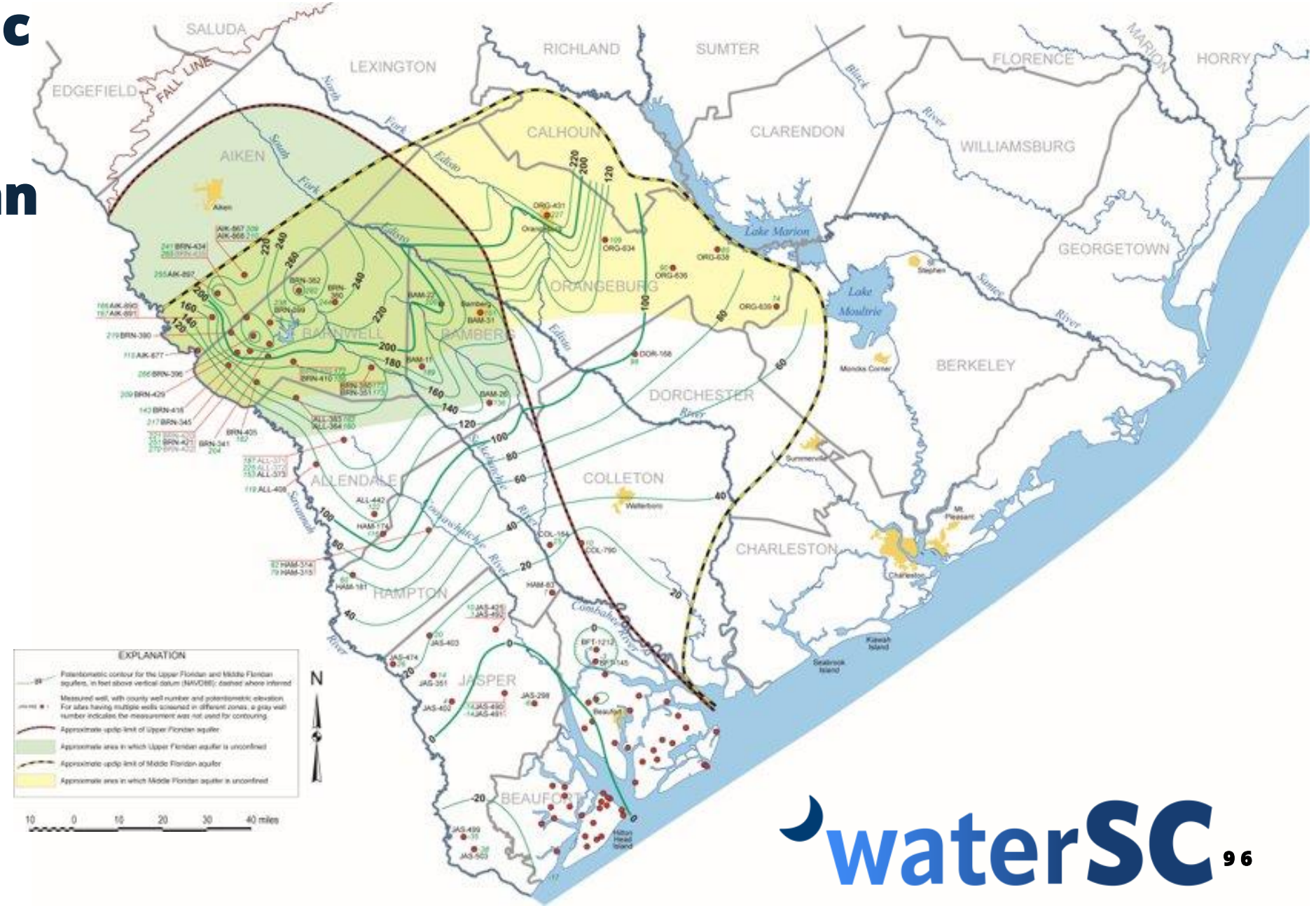
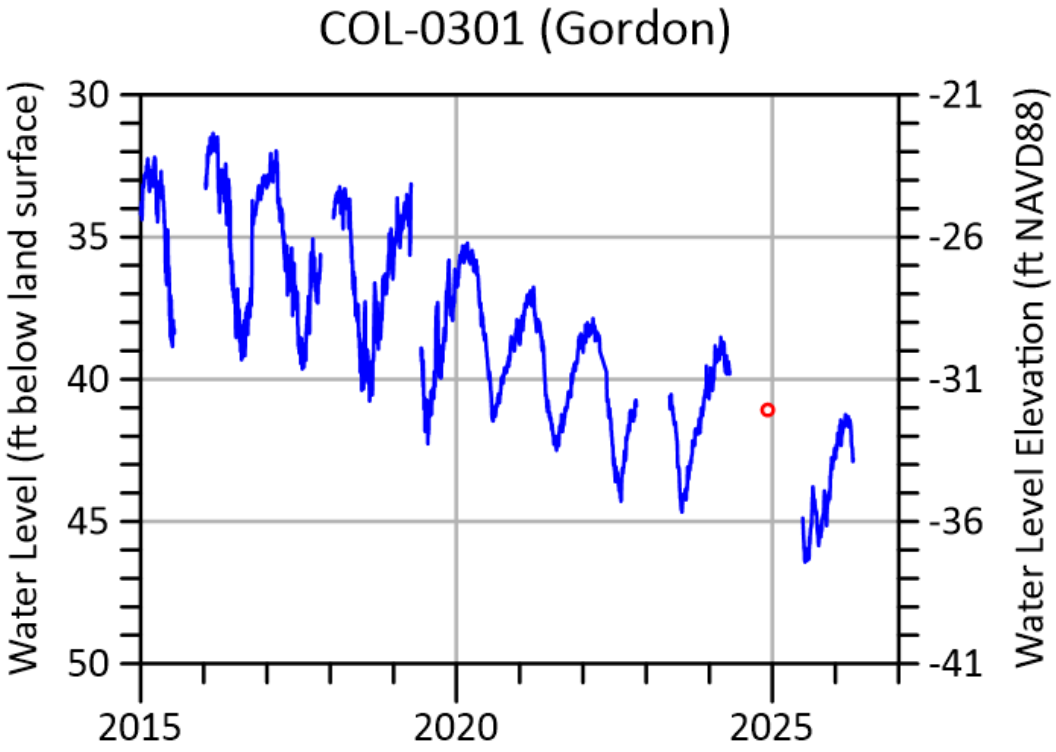
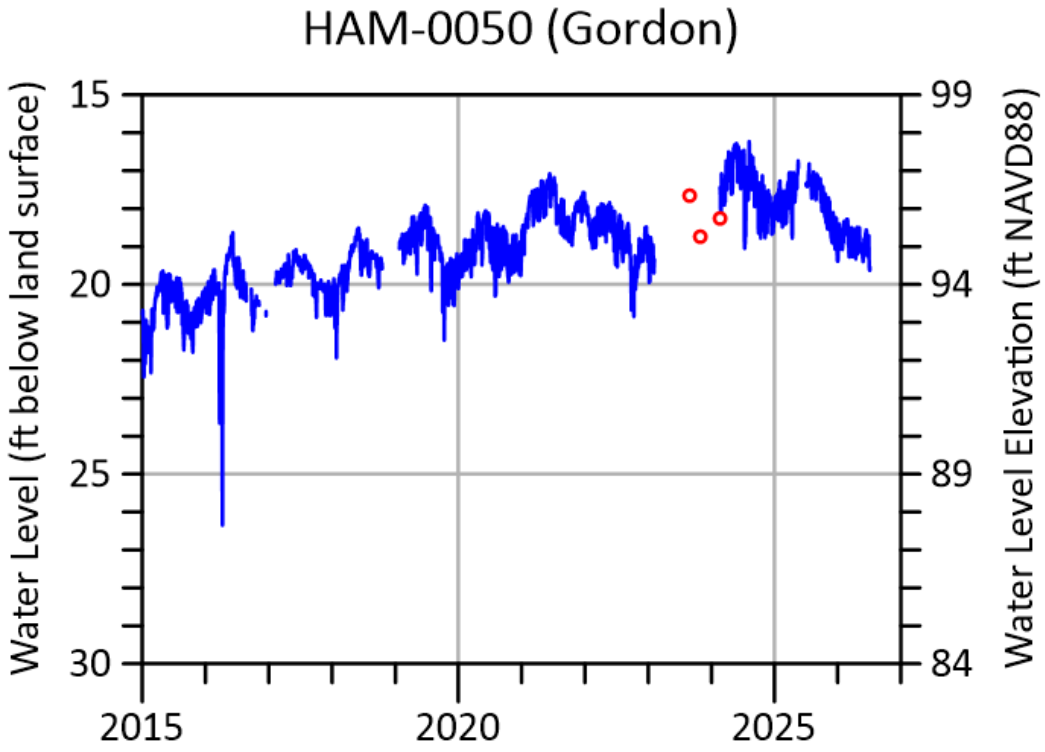
Potentiometric Surface of the Upper and Middle Floridan aquifers 2024

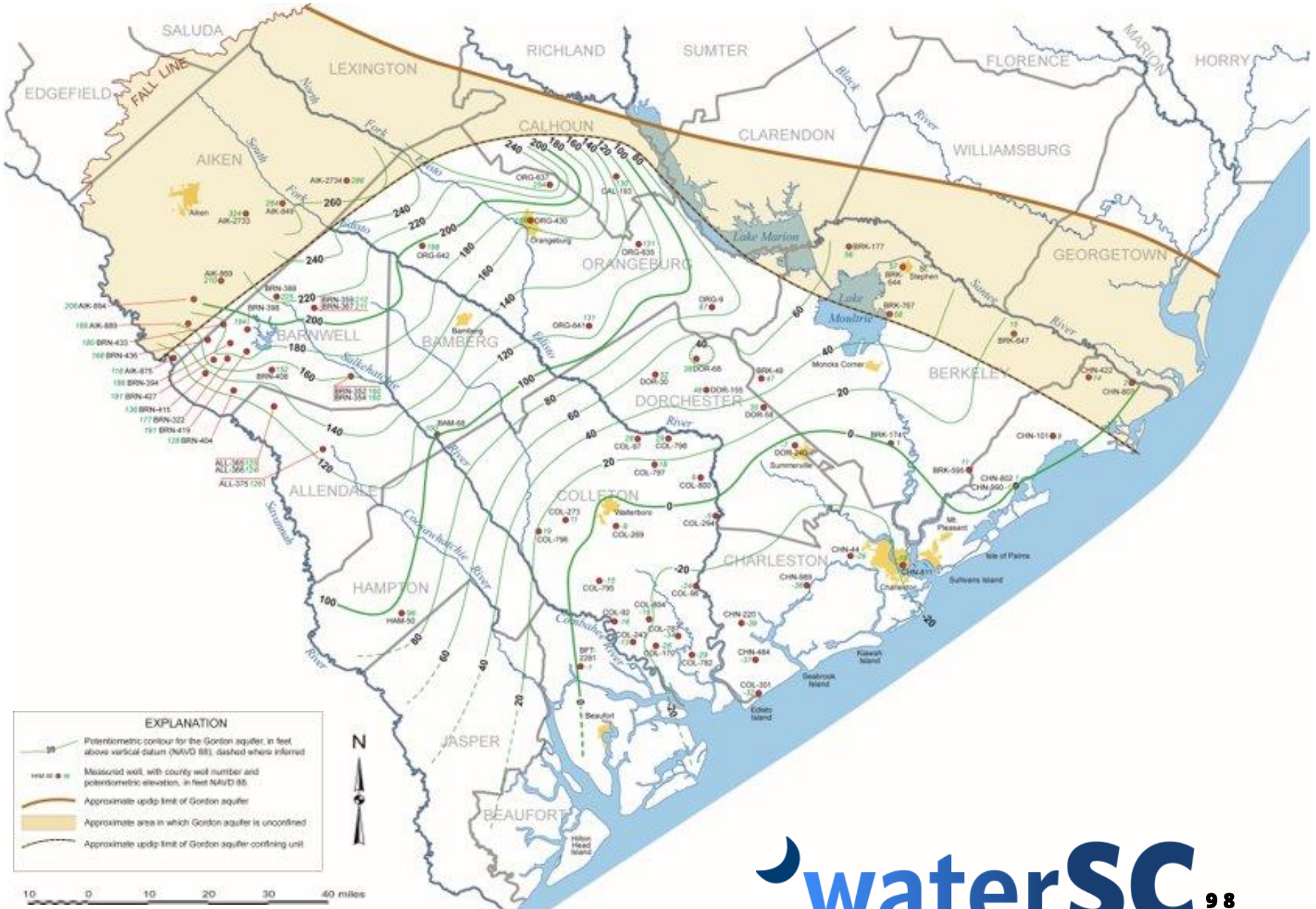


Gordon Aquifer Hydrographs

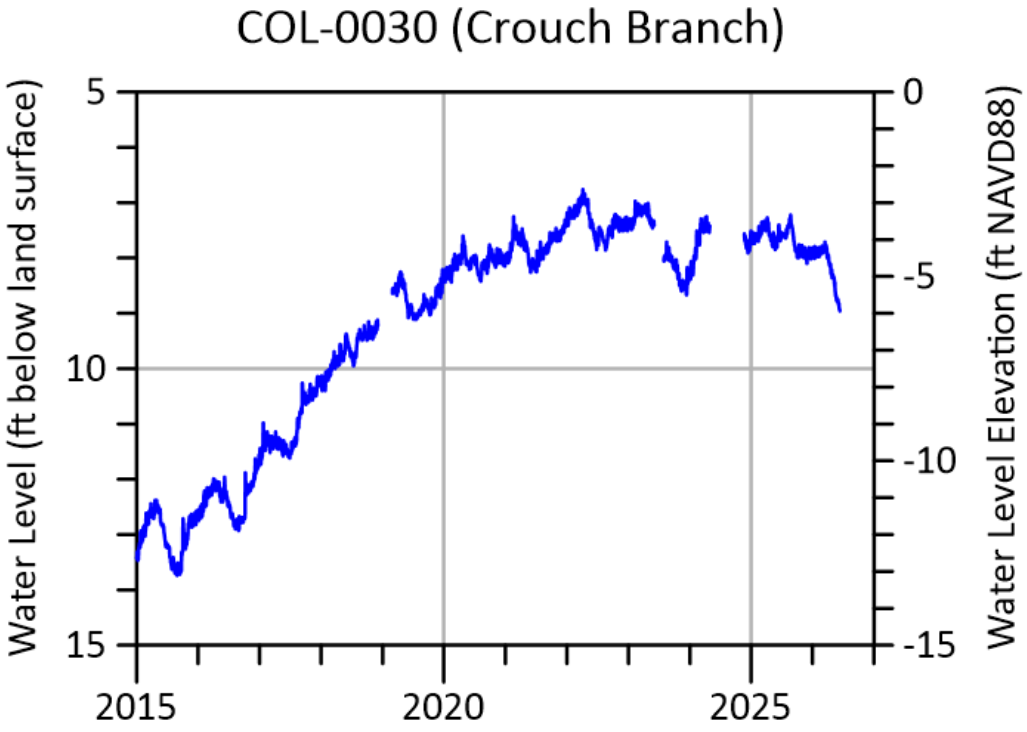


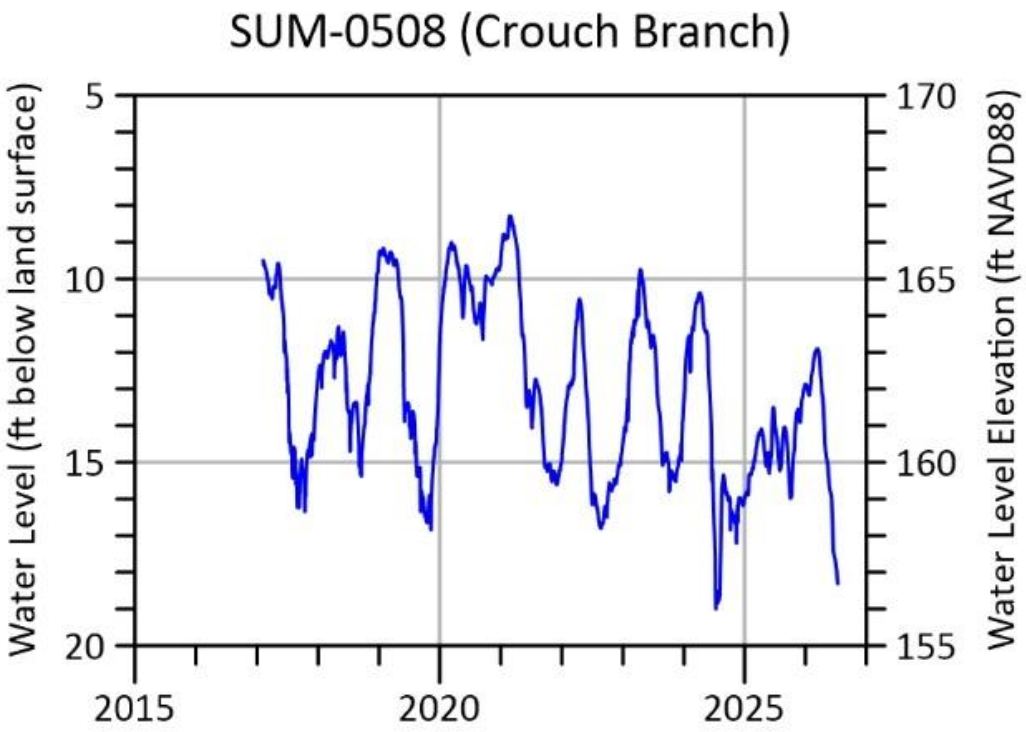


Potentiometric Surface of the Gordon Aquifer 2024

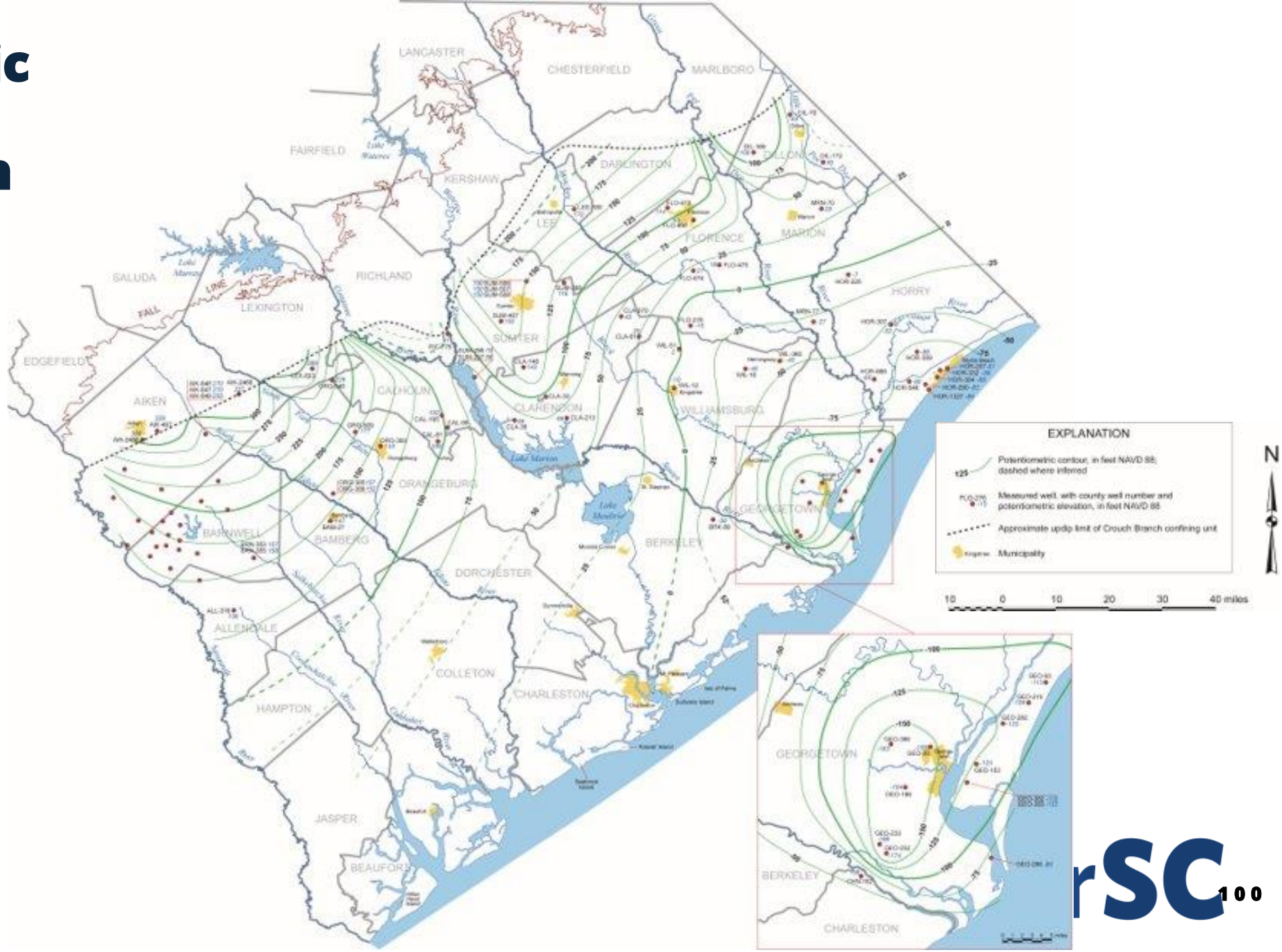


Crouch Branch Aquifer Hydrographs





Potentiometric Surface of the Crouch Branch Aquifer 2023



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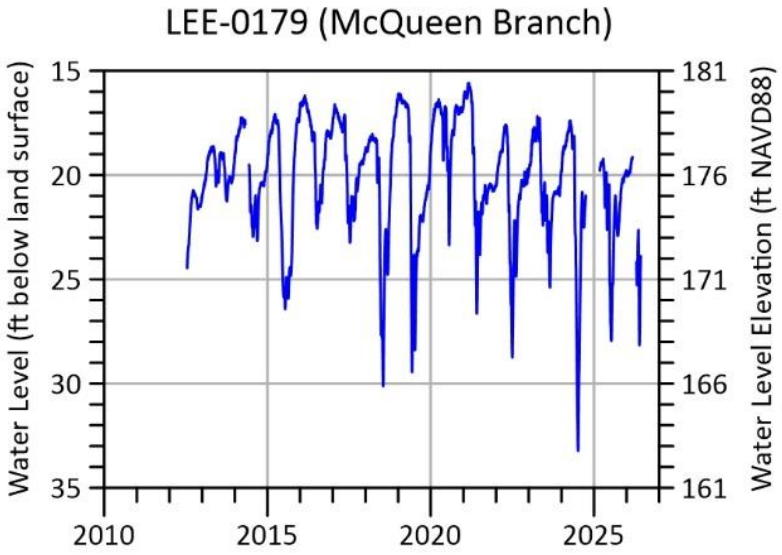
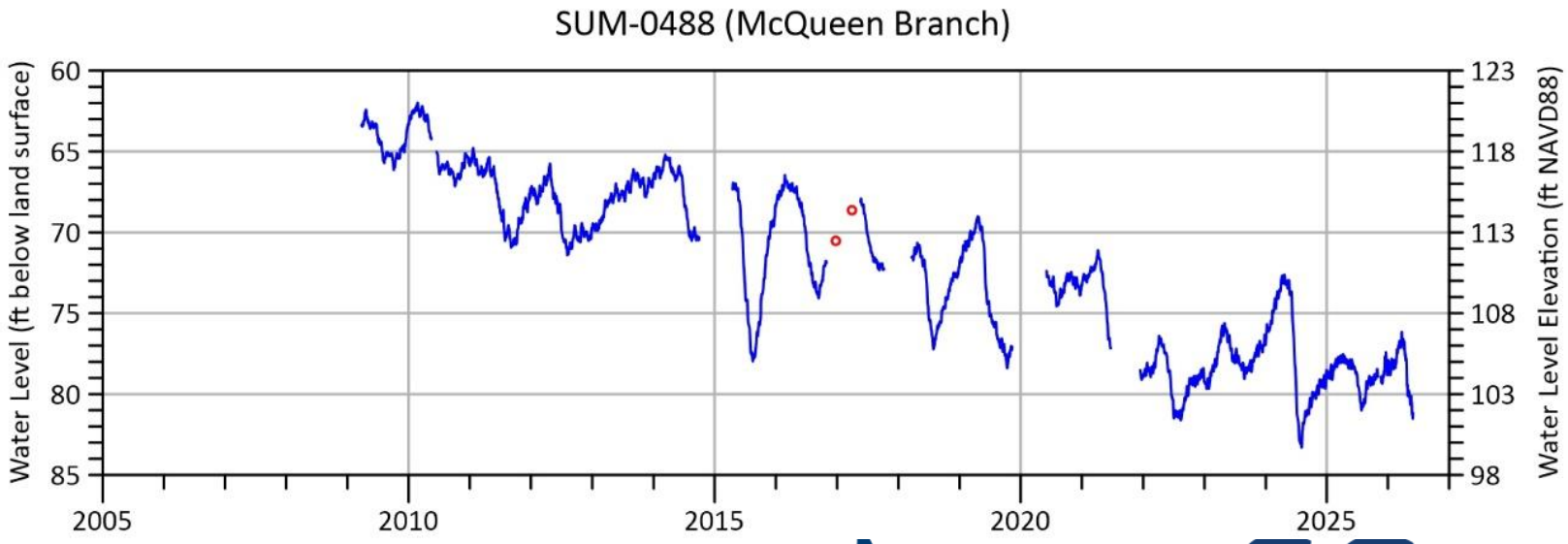
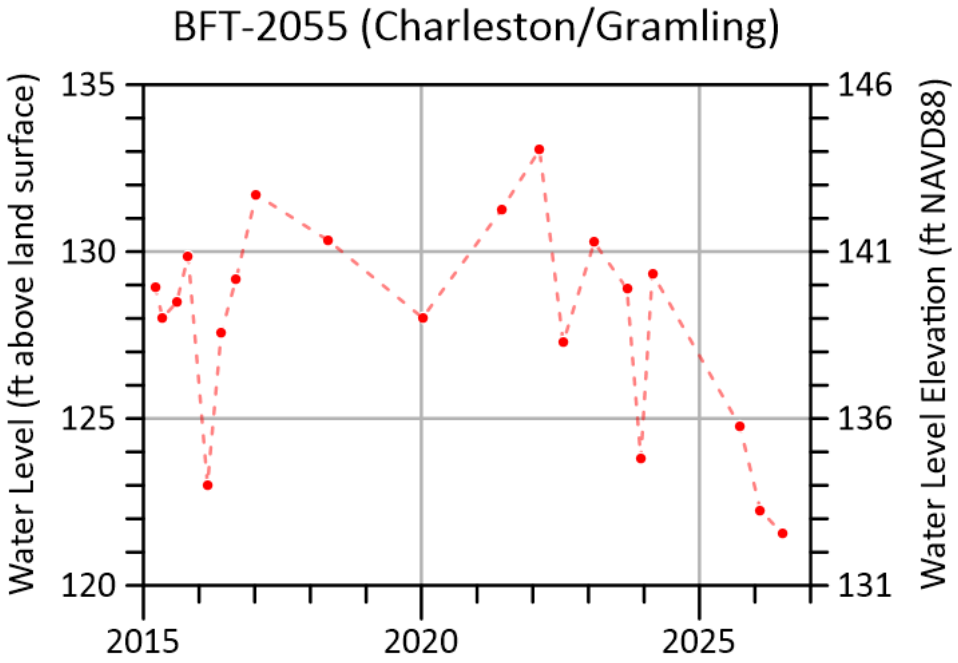
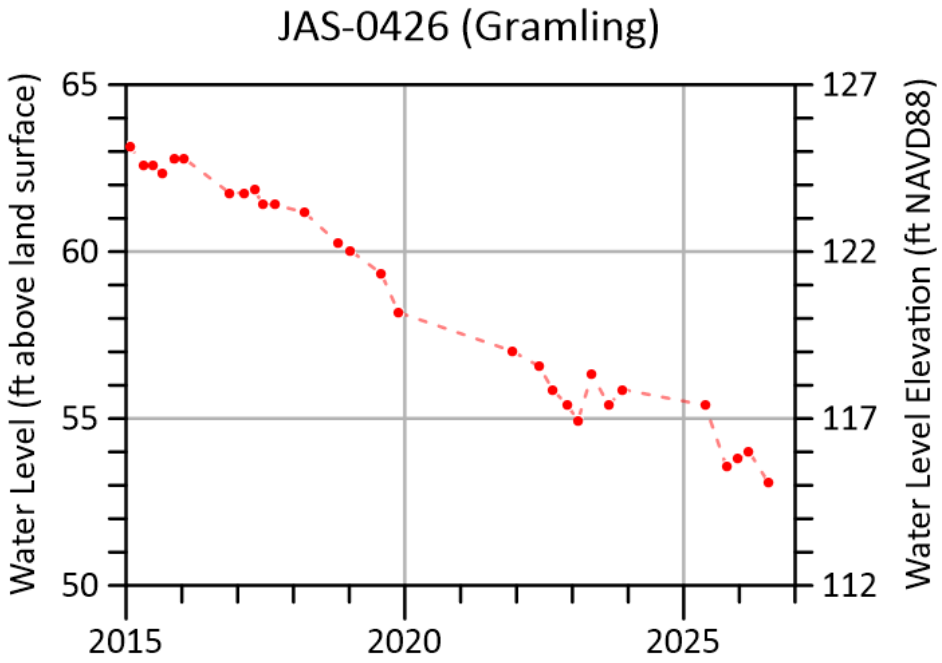
McQueen Branch Aquifer Hydrographs



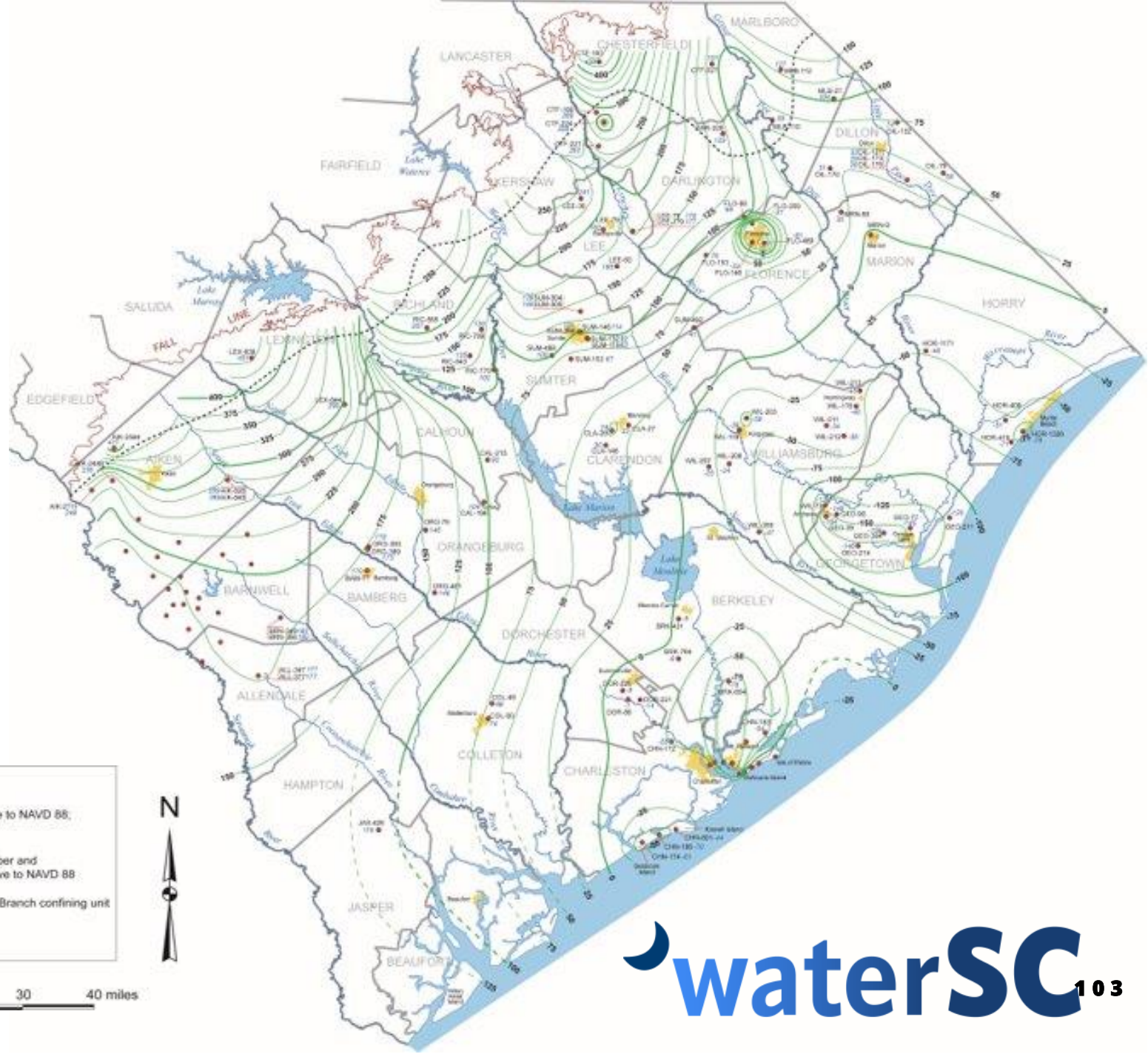


Charleston-Gramling Aquifer Hydrographs





Potentiometric Surface of the McQueen Branch & Charleston Aquifers 2025



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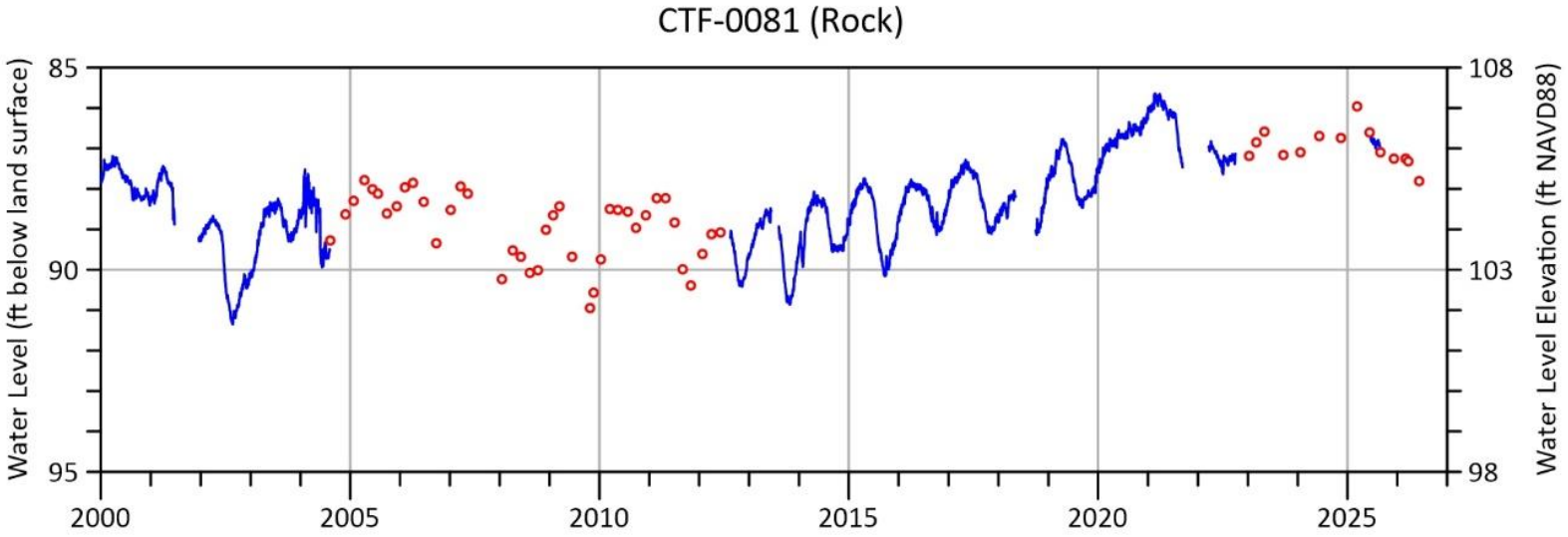
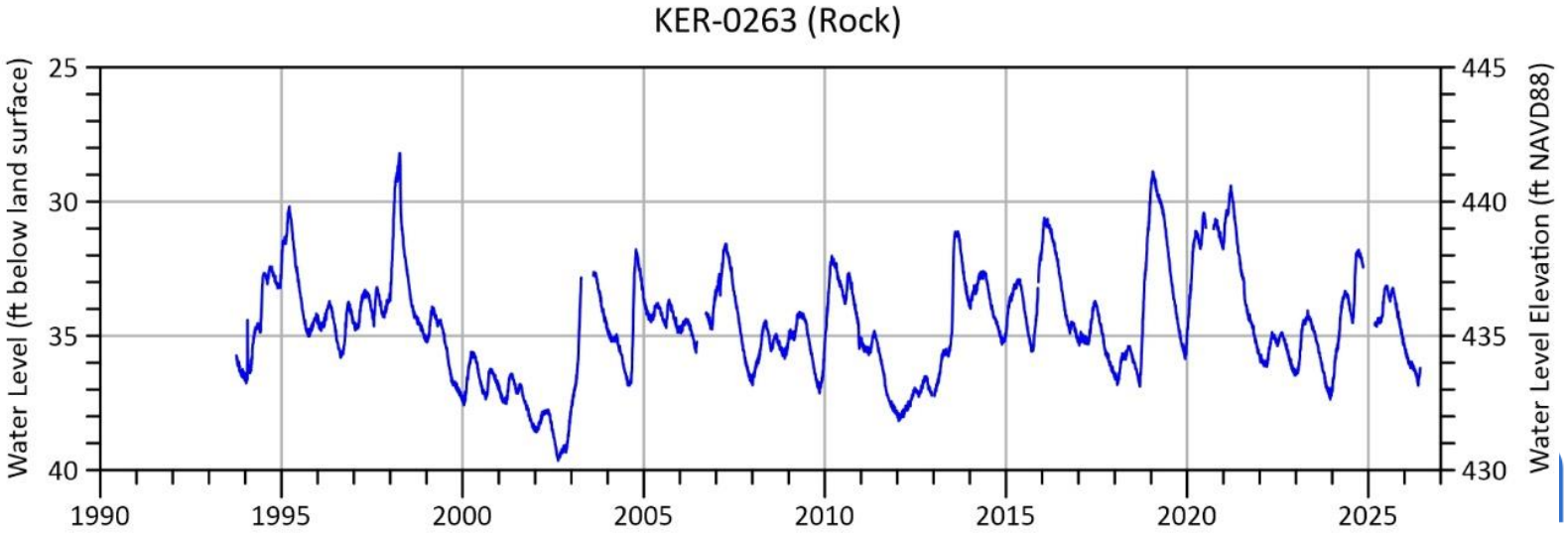
Bedrock Aquifer Hydrographs





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Questions

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Facilitated Discussion

Discussion Topics

- What impacts have you seen or experienced?
- How to we collaborate to take action? How can RBCs help in addressing drought issues?
- What are available education and outreach resources and what others are needed?

Discussion Notes

- What impacts have you seen or experienced?

Discussion Notes

- How to we collaborate to take action? How can RBCs help in addressing drought issues?

Discussion Notes

- What are available education and outreach resources and what others are needed?

Next Steps

Winter Meeting

- Next Meeting: **December 17, 2026 1pm-4pm**
- Water Quality Focused:
  - 303(d) and Total Maximum Daily Load
  - Water Quality Standards
  - Stormwater
  - Infrastructure Improvements
  - Annual Water Planning Update

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