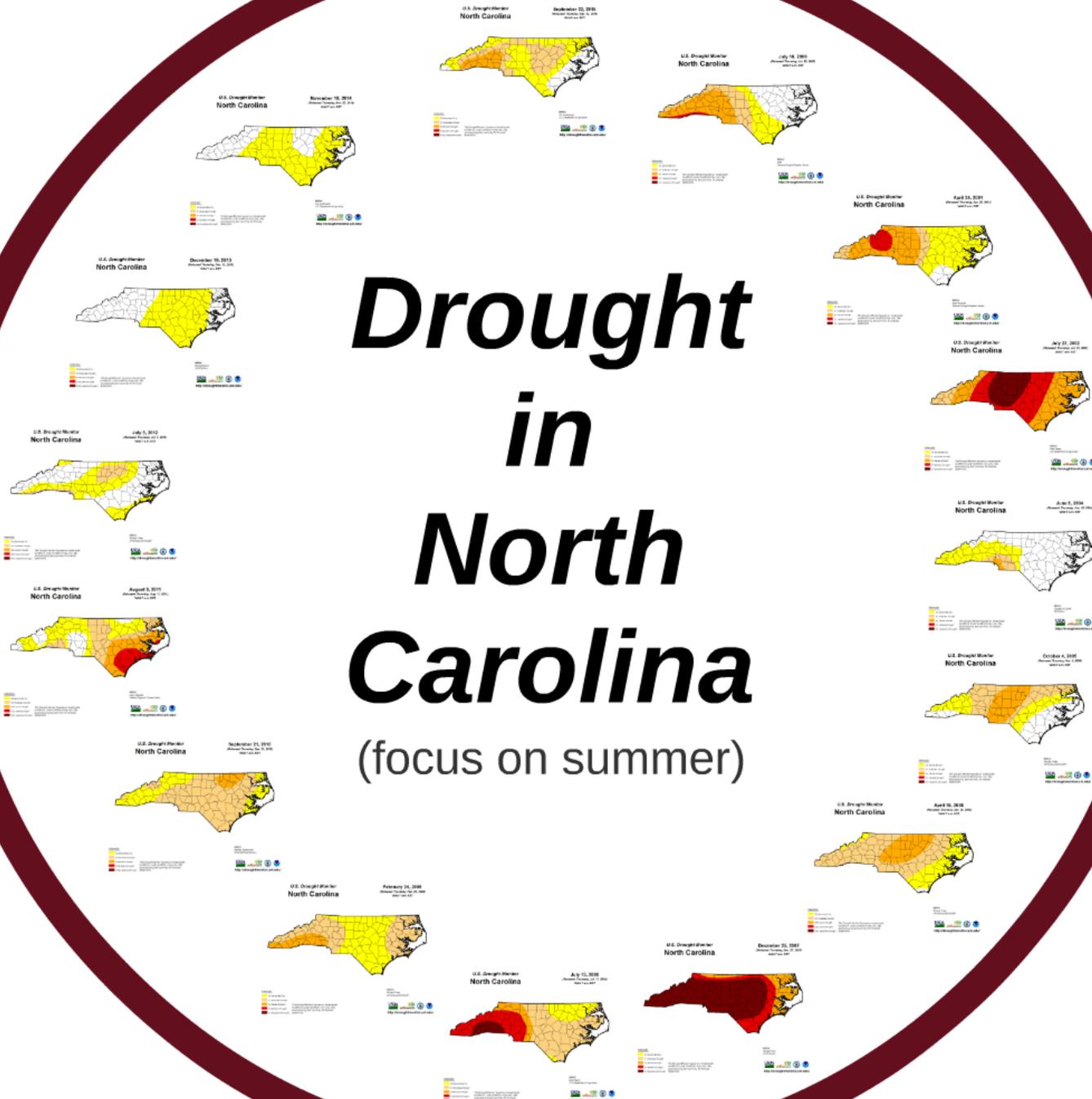


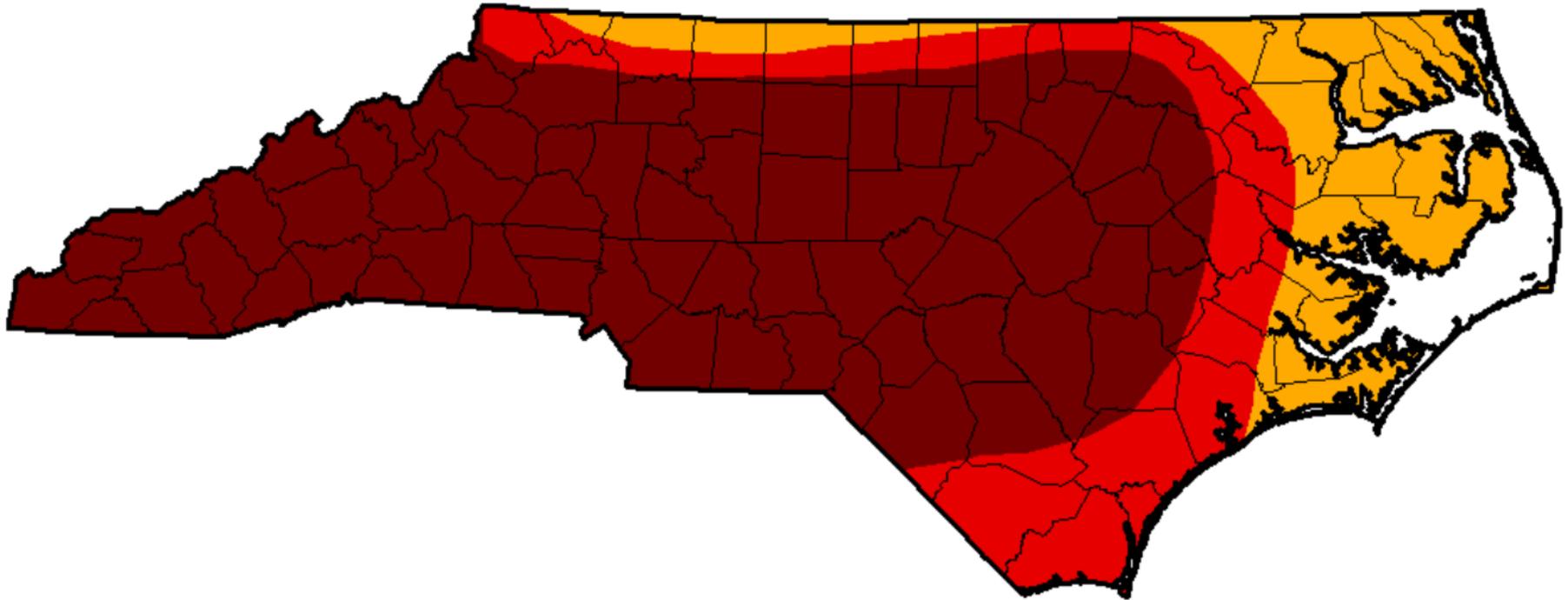
Drought in North Carolina

(focus on summer)



U.S. Drought Monitor North Carolina

December 25, 2007
(Released Thursday, Dec. 27, 2007)
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.

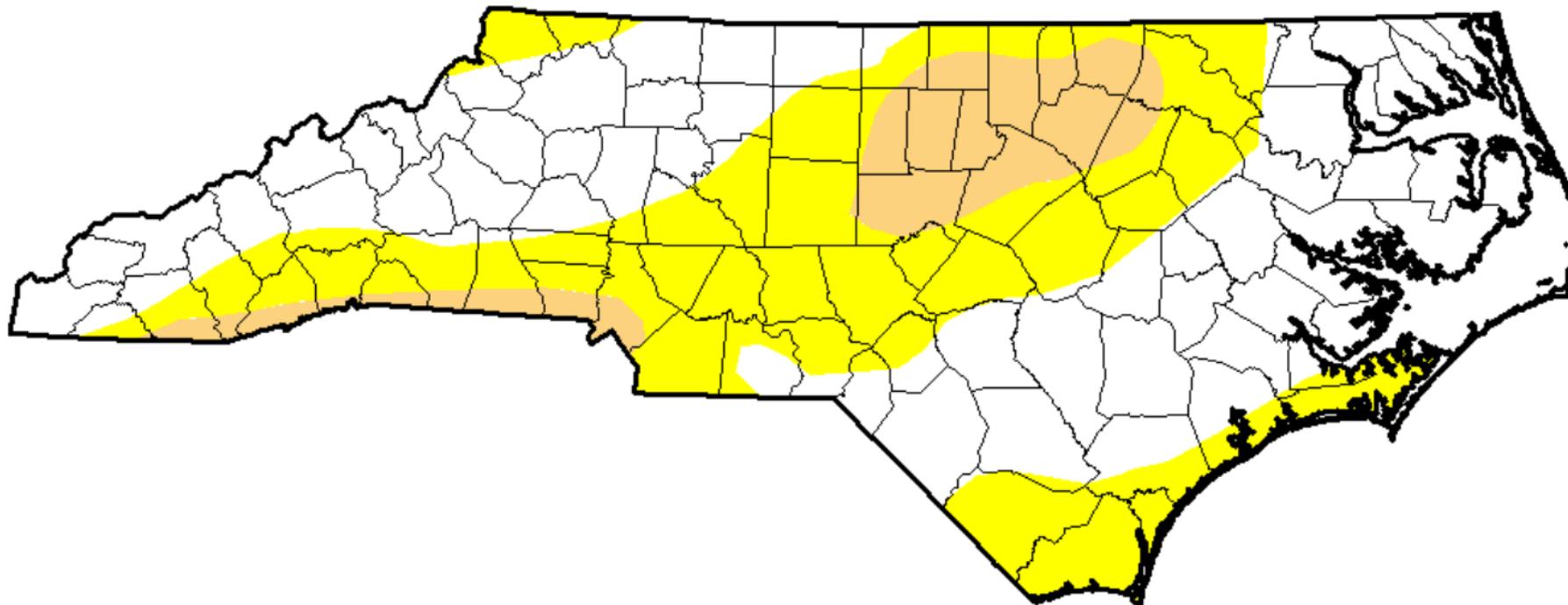
Author:
Richard Heim
NCDC/NOAA



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

U.S. Drought Monitor North Carolina

July 3, 2012
(Released Thursday, Jul. 5, 2012)
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:

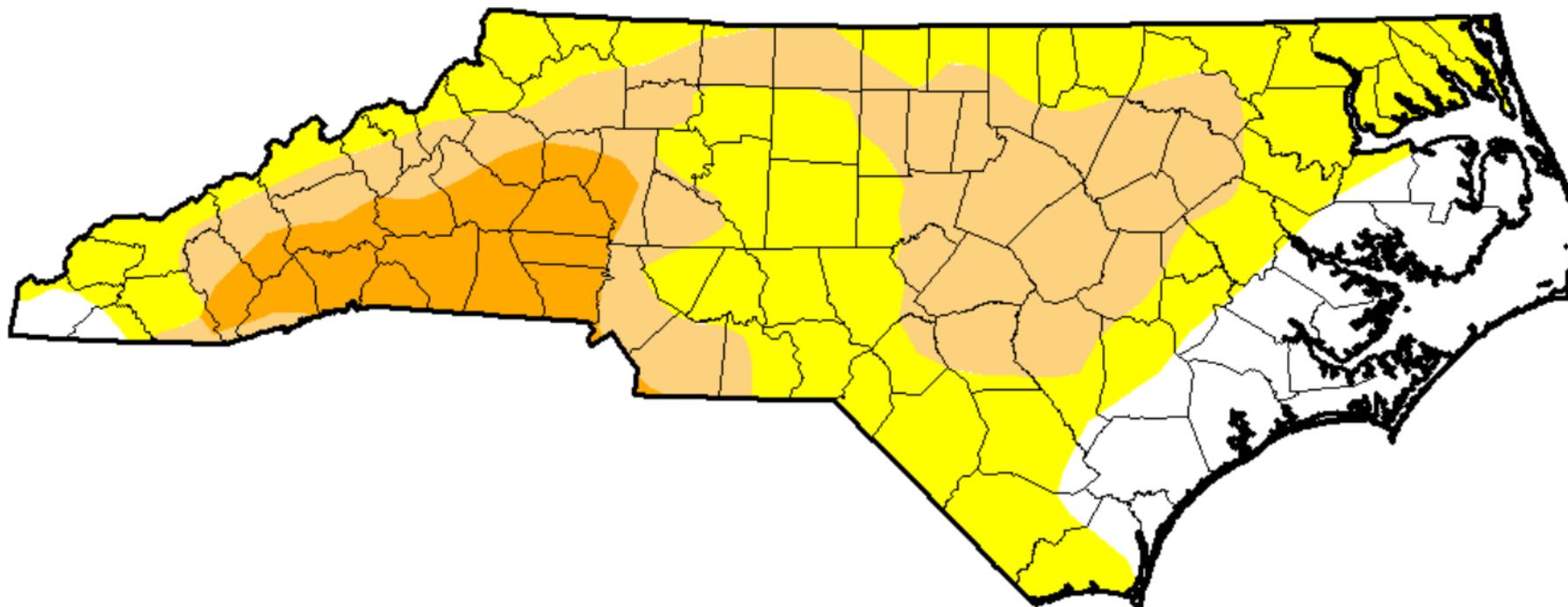
Richard Tinker
CPC/NOAA/NWS/NCEP



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

U.S. Drought Monitor North Carolina

September 22, 2015
(Released Thursday, Sep. 24, 2015)
Valid 8 a.m. EDT



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:

Eric Luebehusen
U.S. Department of Agriculture



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

Droughts Impact Many Sectors

Recreation
& Tourism

A woman in a green life vest is holding a fish while a young child in a yellow and blue life vest looks on. They are outdoors near water.

Water

A close-up of a water tap with water spraying out. Below it is a photograph of a water treatment plant with several large cylindrical tanks.

Wildlife



*Images: NCSU Cooperative
Extension; Greenways for Wildlife at
NCSU.edu*

Agriculture



Images: NCSU Cooperative Extension

Homeowners



Recreation



& Tourism

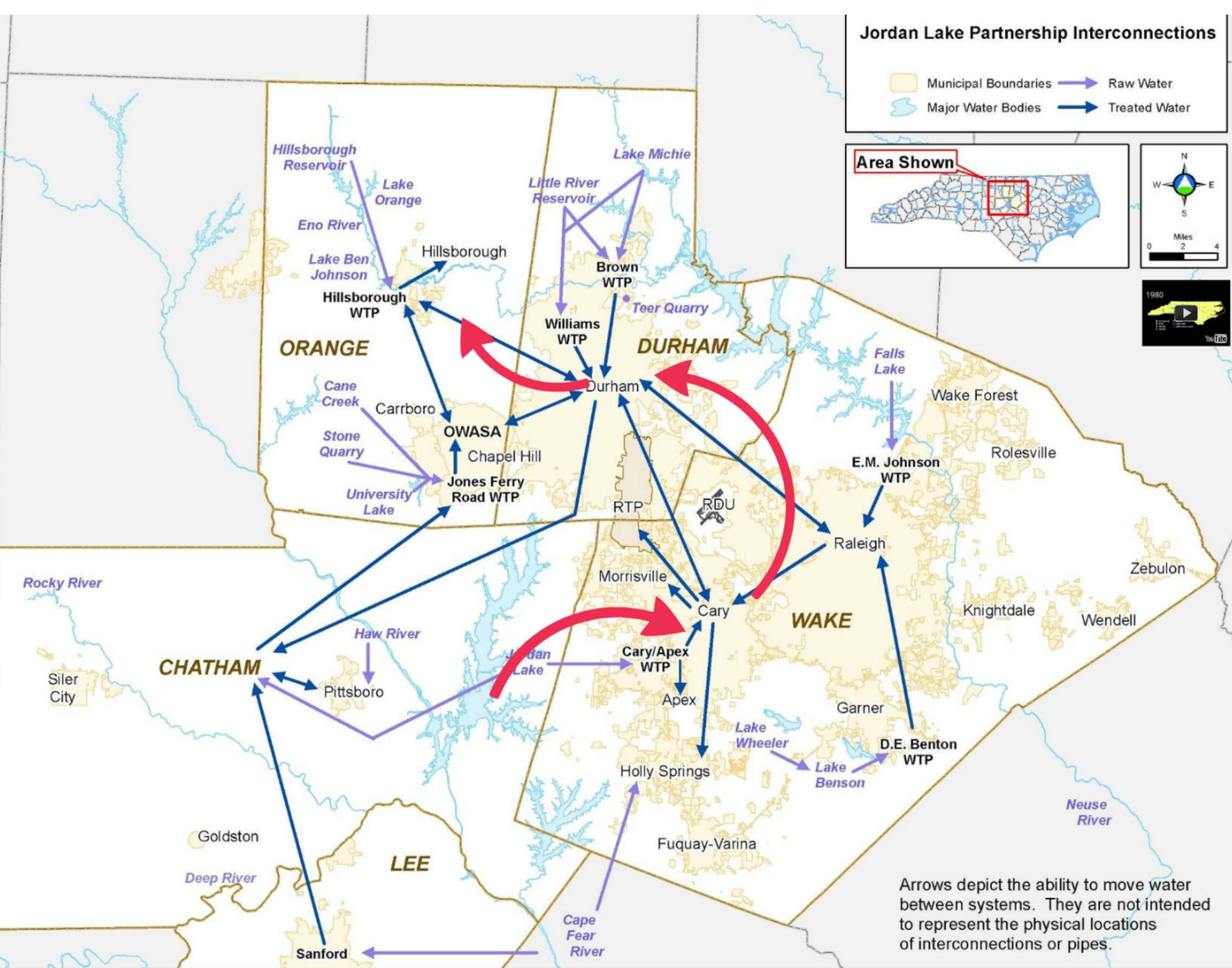


Water Supply



Jordan Lake Partnership Interconnections

- Municipal Boundaries
- Major Water Bodies
- Raw Water
- Treated Water



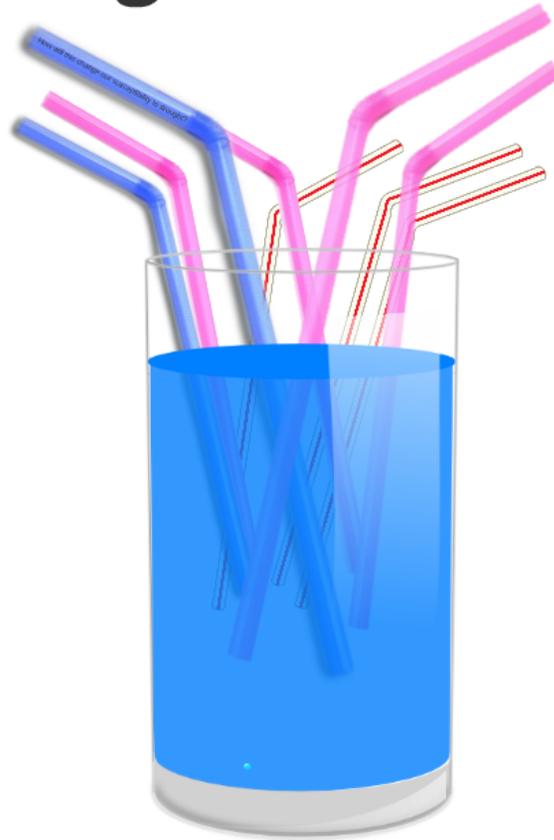
Arrows depict the ability to move water between systems. They are not intended to represent the physical locations of interconnections or pipes.

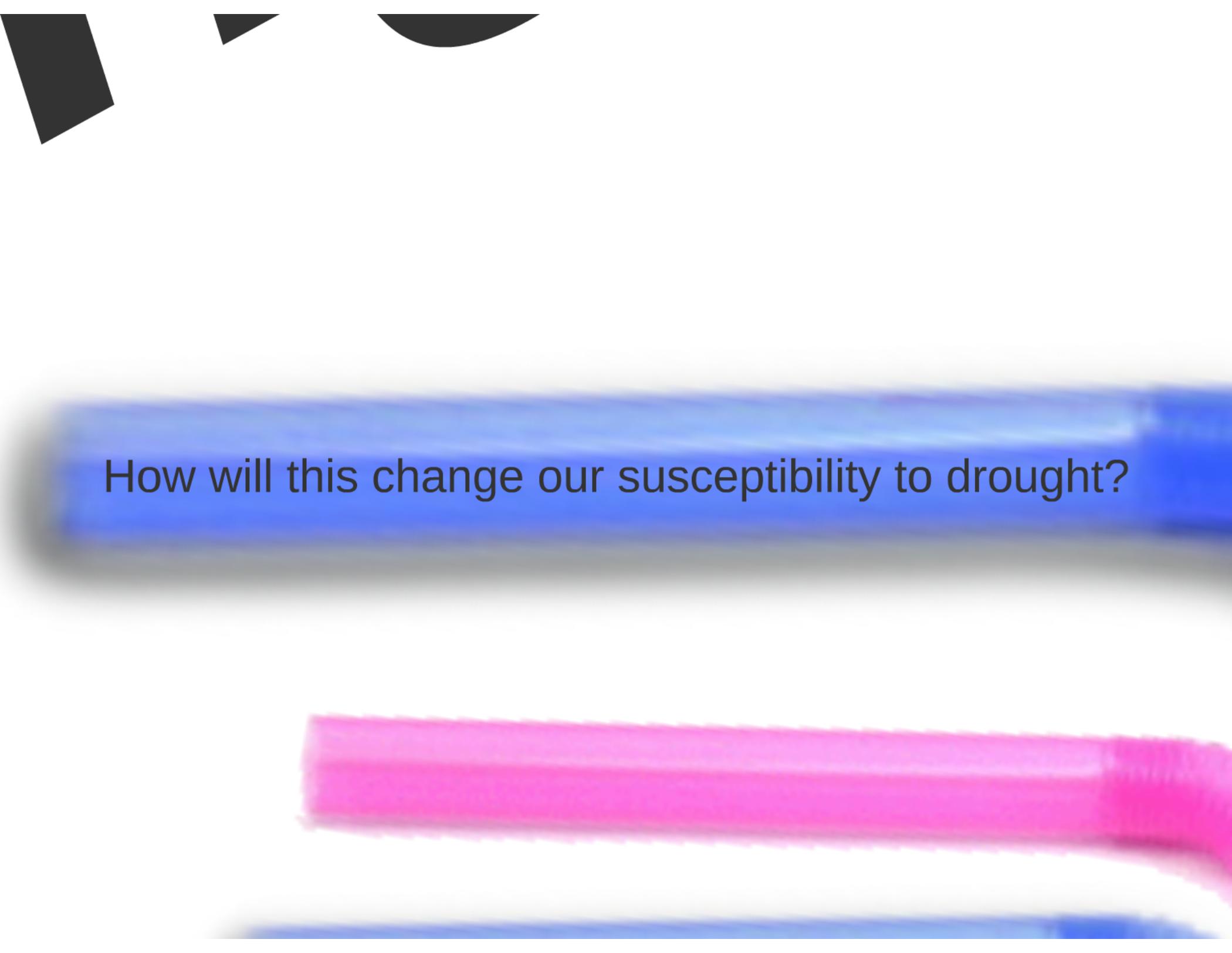
1980



You Tube

***More Demand from
Existing Water Sources***





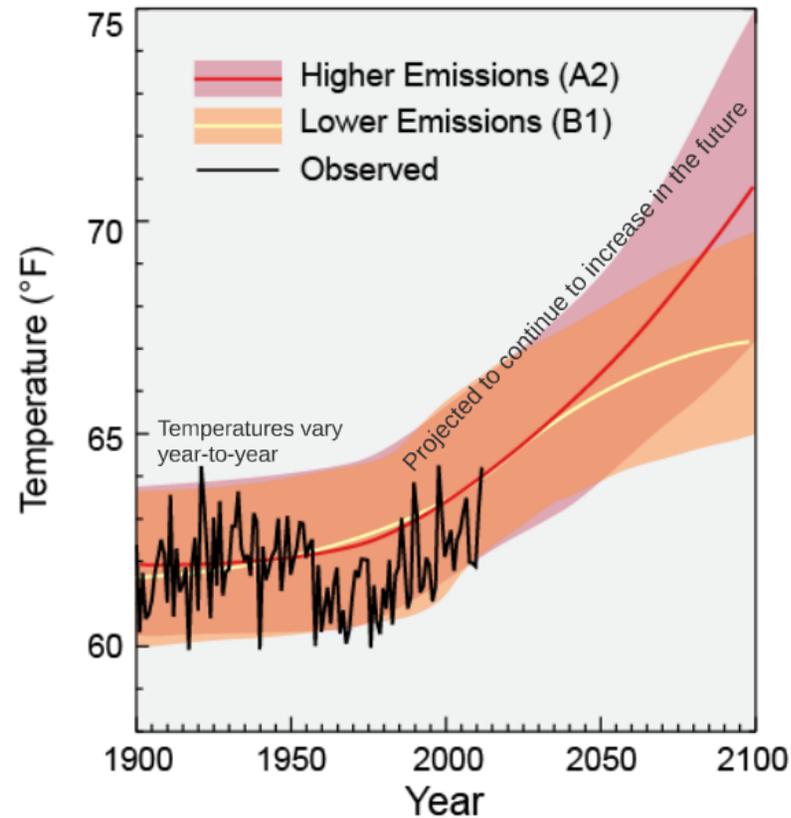
How will this change our susceptibility to drought?



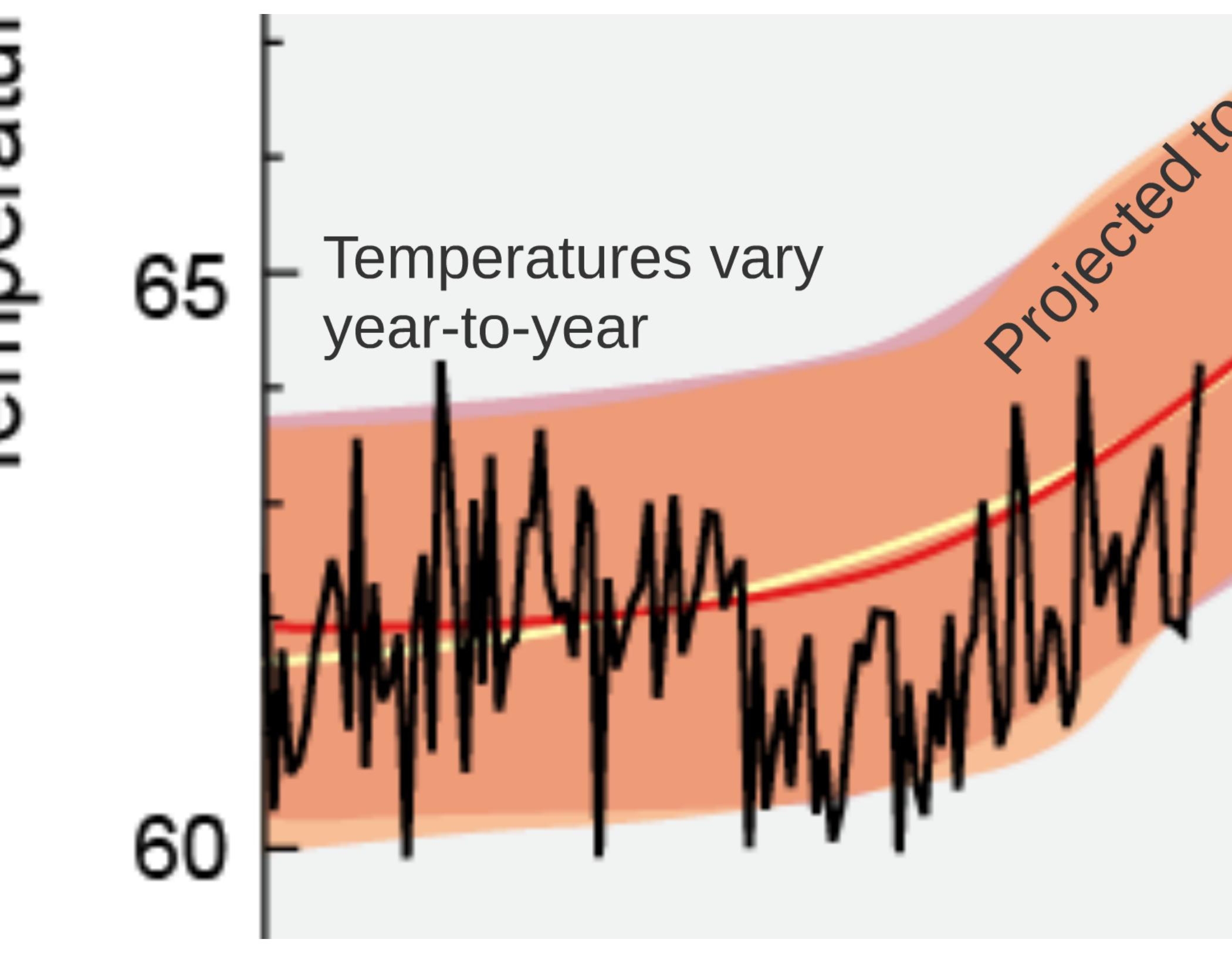
Future
droughts
may be
different.

Warming Temperatures

Southeast Temperature: Observed and Projected



Source: 2014 National Climate Assessment

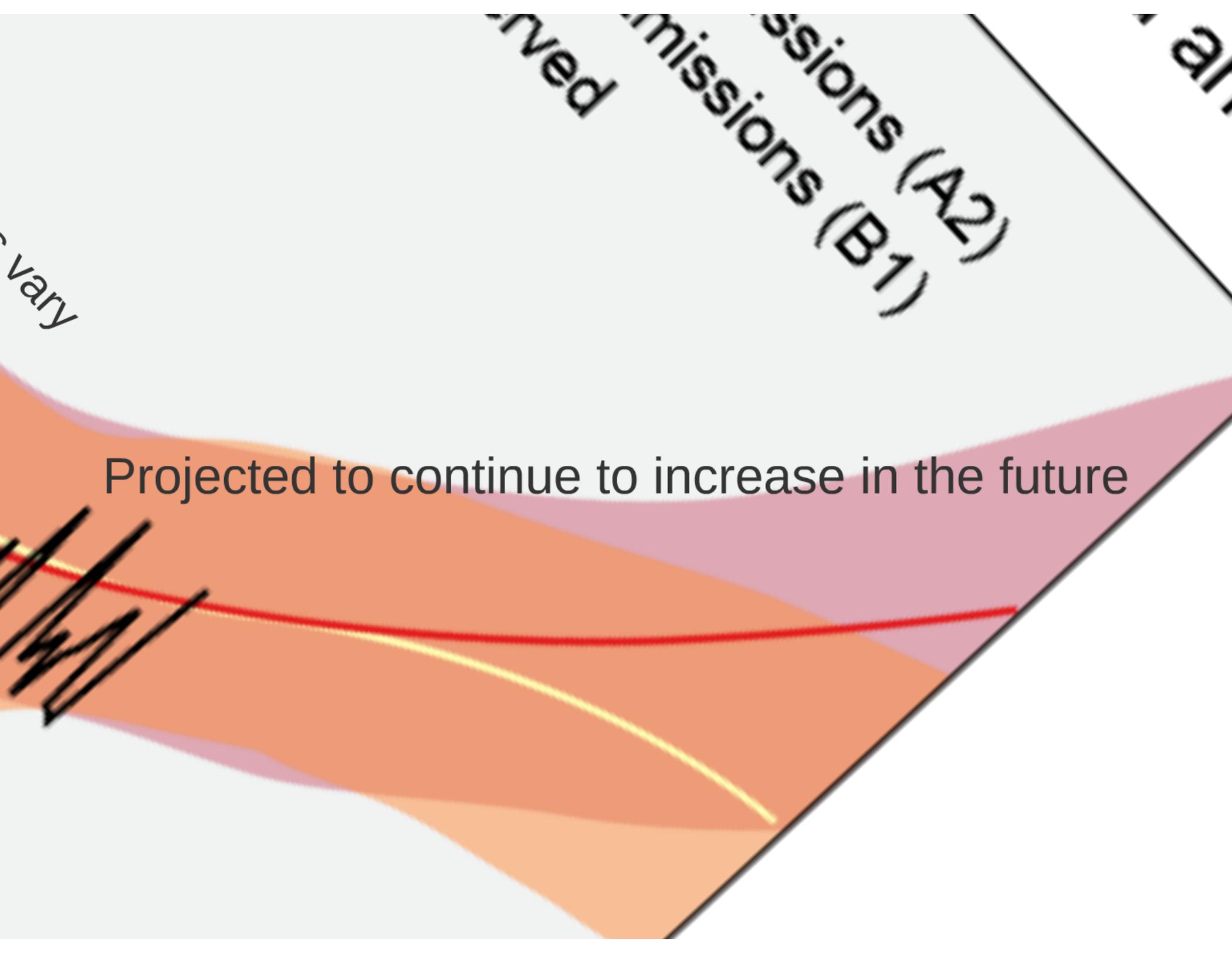


65

Temperatures vary year-to-year

60

Projected to



Projected to continue to increase in the future

vary

erved Emissions (A2)
Emissions (B1)

Projected Change in Average Summer (June - August) Temperature

Time Period: 2040 to 2059 compared with 1950 to 2005) Future Emissions: Current Levels (High)

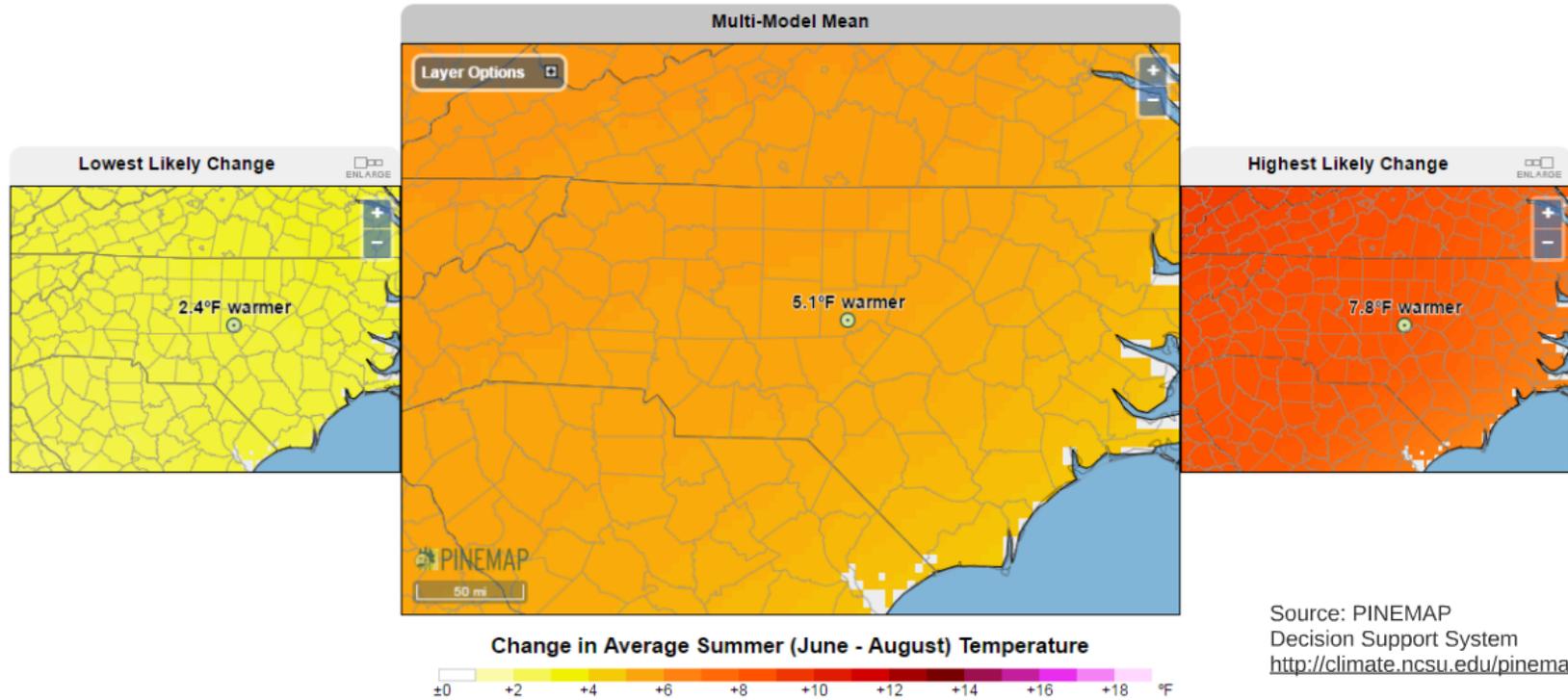


Location: In Chatham County, NC (35.63°N 79.31°W)

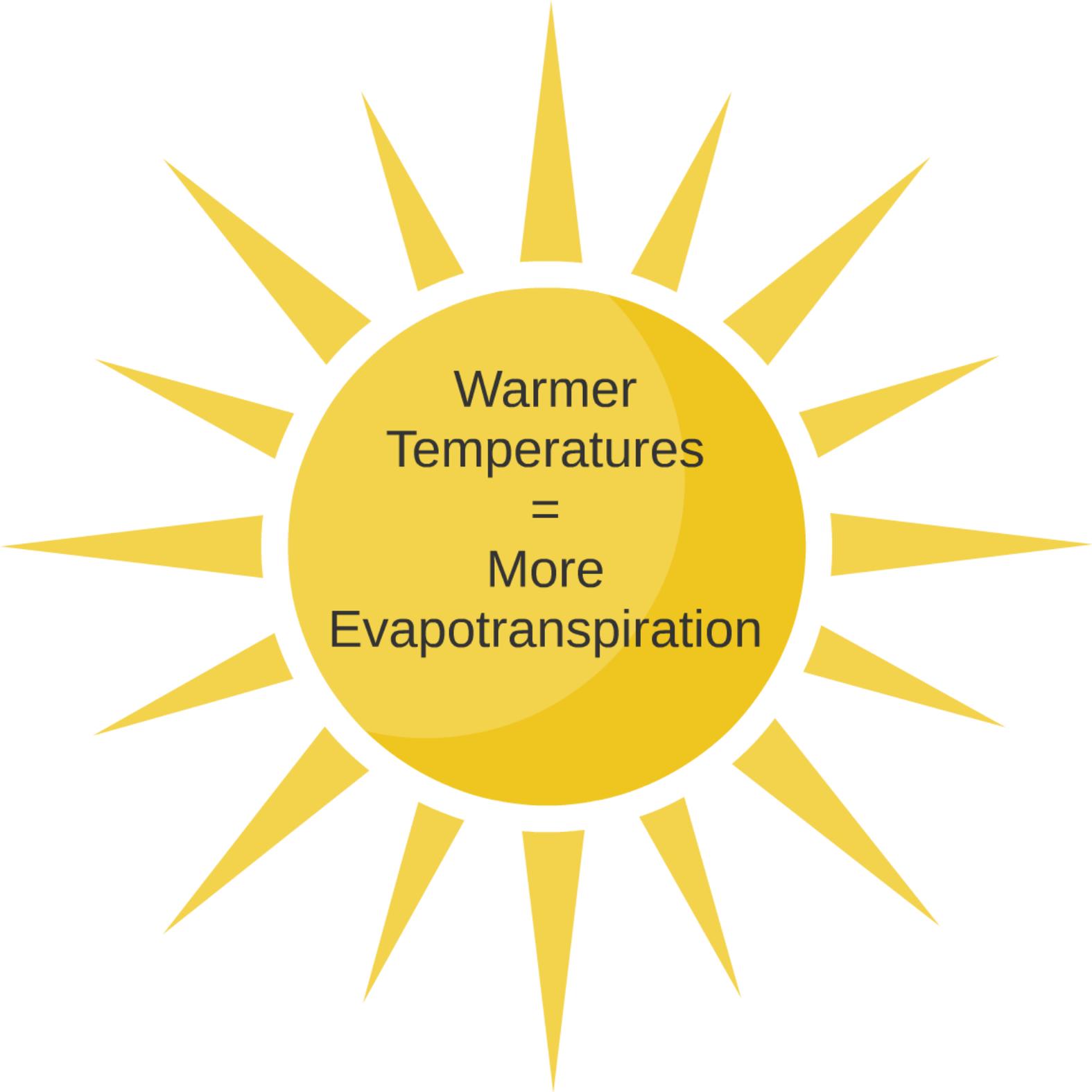
To select a location, click on the map or enter your coordinates: 35.63 °N, 79.31 °W Go

Map Help

About the Side Maps



Source: PINEMAP
Decision Support System
<http://climate.ncsu.edu/pinemap/>



Warmer
Temperatures
=
More
Evapotranspiration

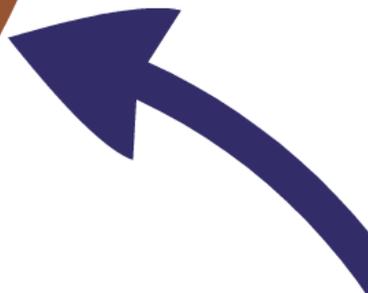
Exacerbate Drought



Scott Nelson, Flickr CC BY 2.0
<http://creativecommons.org/licenses/by/2.0/legalcode>



Warmer Temperatures



More Heatwaves

Heat wave helps spread drought in NC

Posted June 9, 2011

21 | Share

Reactions



VIDEO FORECAST



RALEIGH, N.C. — A h much of the eastern h States helped spread i North Carolina this we showers and storms n this weekend.

The Sandhills got som storms overnight and morning, but they largely dissipated by early afternoon.

MORE ON THIS

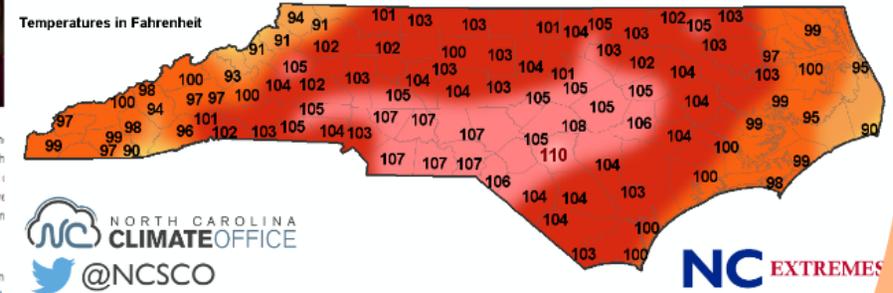
- N.C. drought maps time lapse animation
- Temperature Tracker
- Help with the heat
- Hourly forecast
- UV Index

Meanwhile, forecasters say 90-plus degree temperatures will continue to hold sway in the South and as far away as the Great Lakes and New York and New Jersey.

"I think everybody's really tired of seeing such hot temperatures," WRAL meteorologist Elizabeth Gardner said.

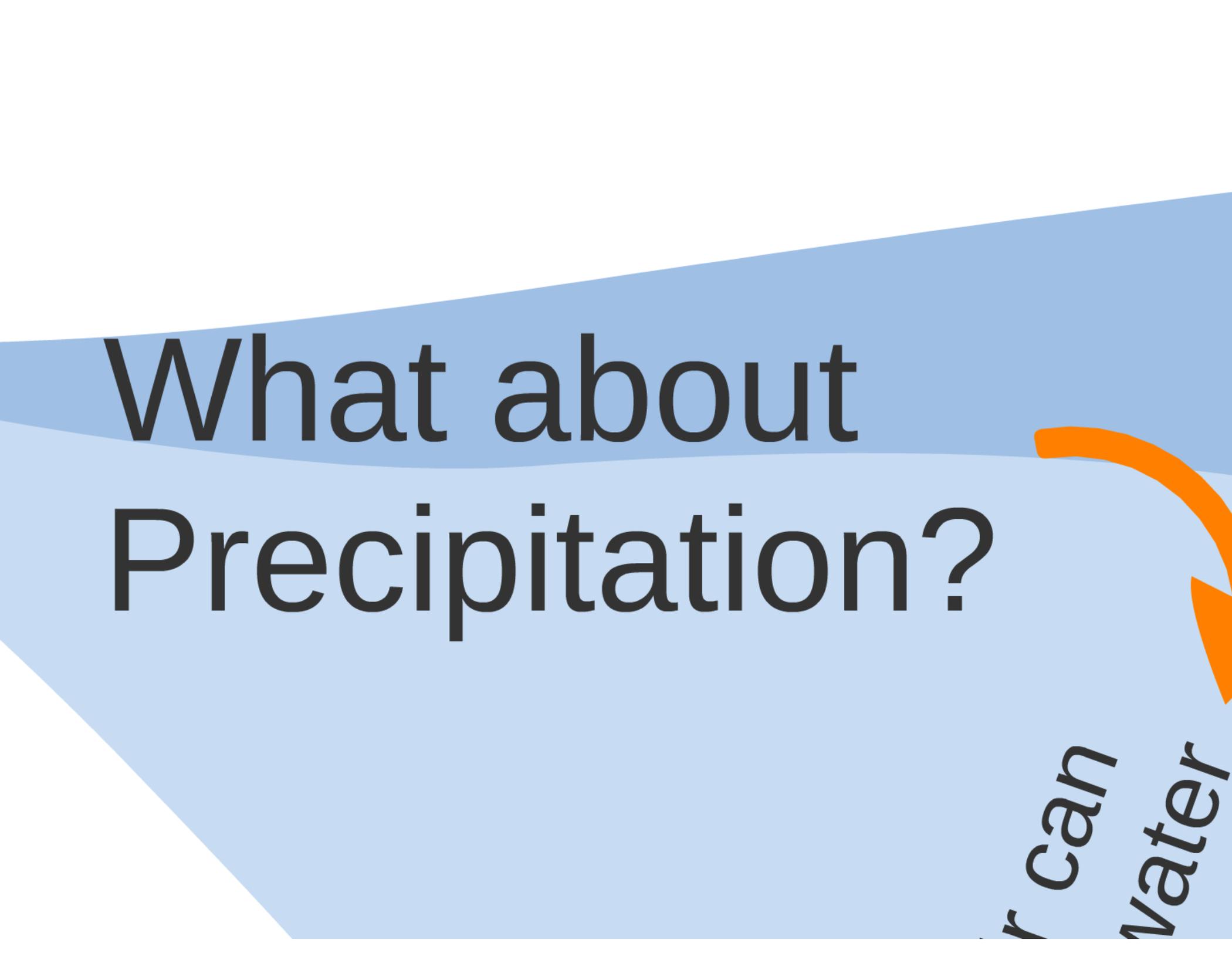
<http://www.wral.com/weather/story/9705271/>

Maximum Temperatures from August 21-24, 1983

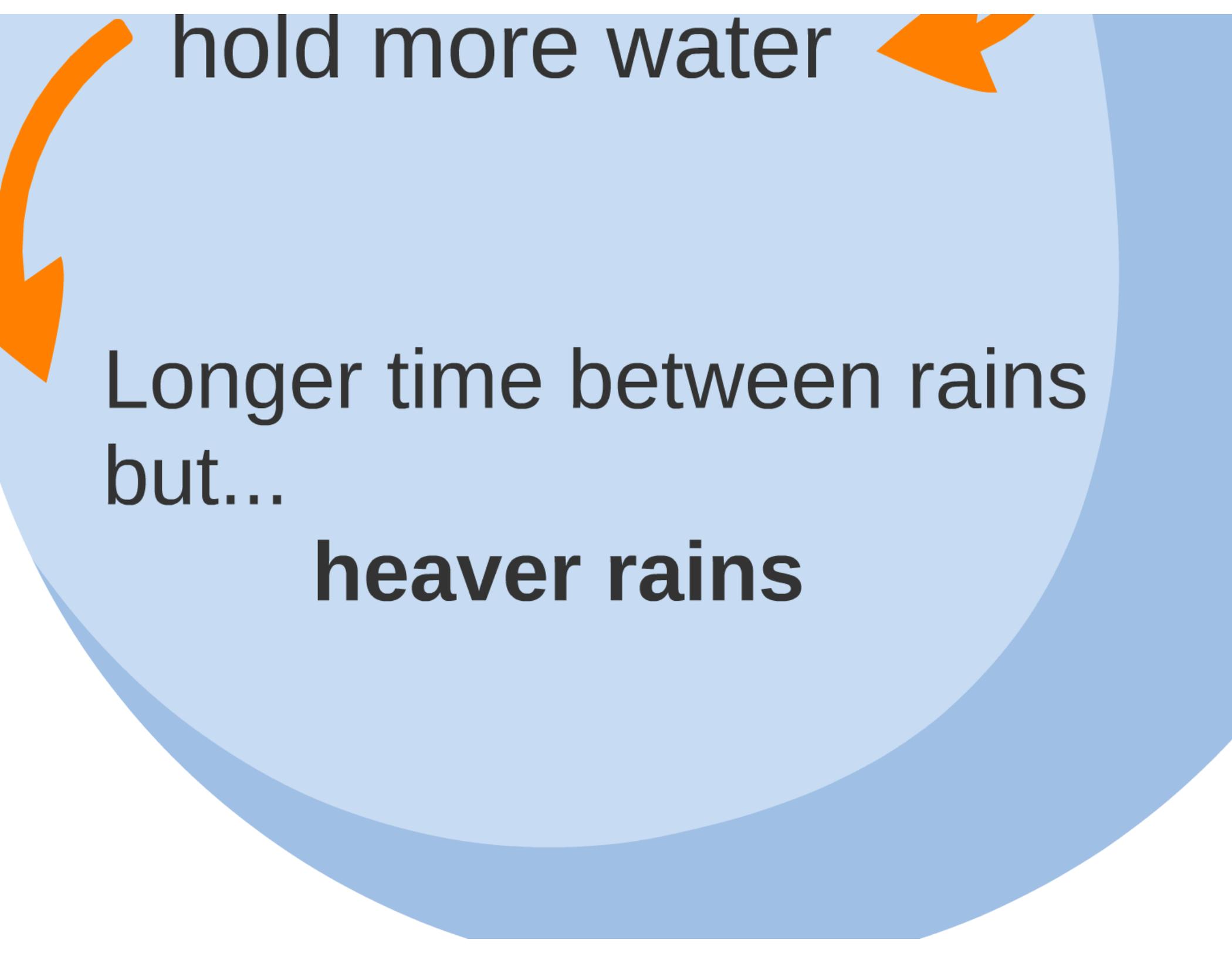


What about Precipitation?

r can
Water



Warmer air can
hold more water



hold more water

Longer time between rains
but...

heaver rains

How do we plan for the future?

Learn from
Past Droughts

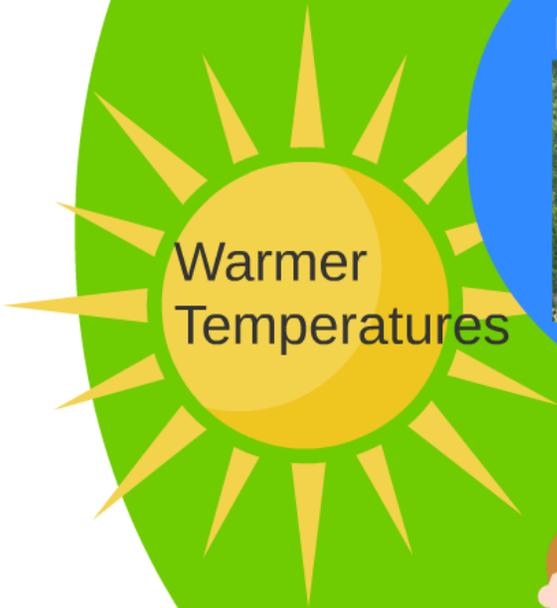


*First Broad River during 2008 drought.
Courtesy: City of Shelby*

Changing Precipitation
Patterns



Warmer
Temperatures



Increasing Demand



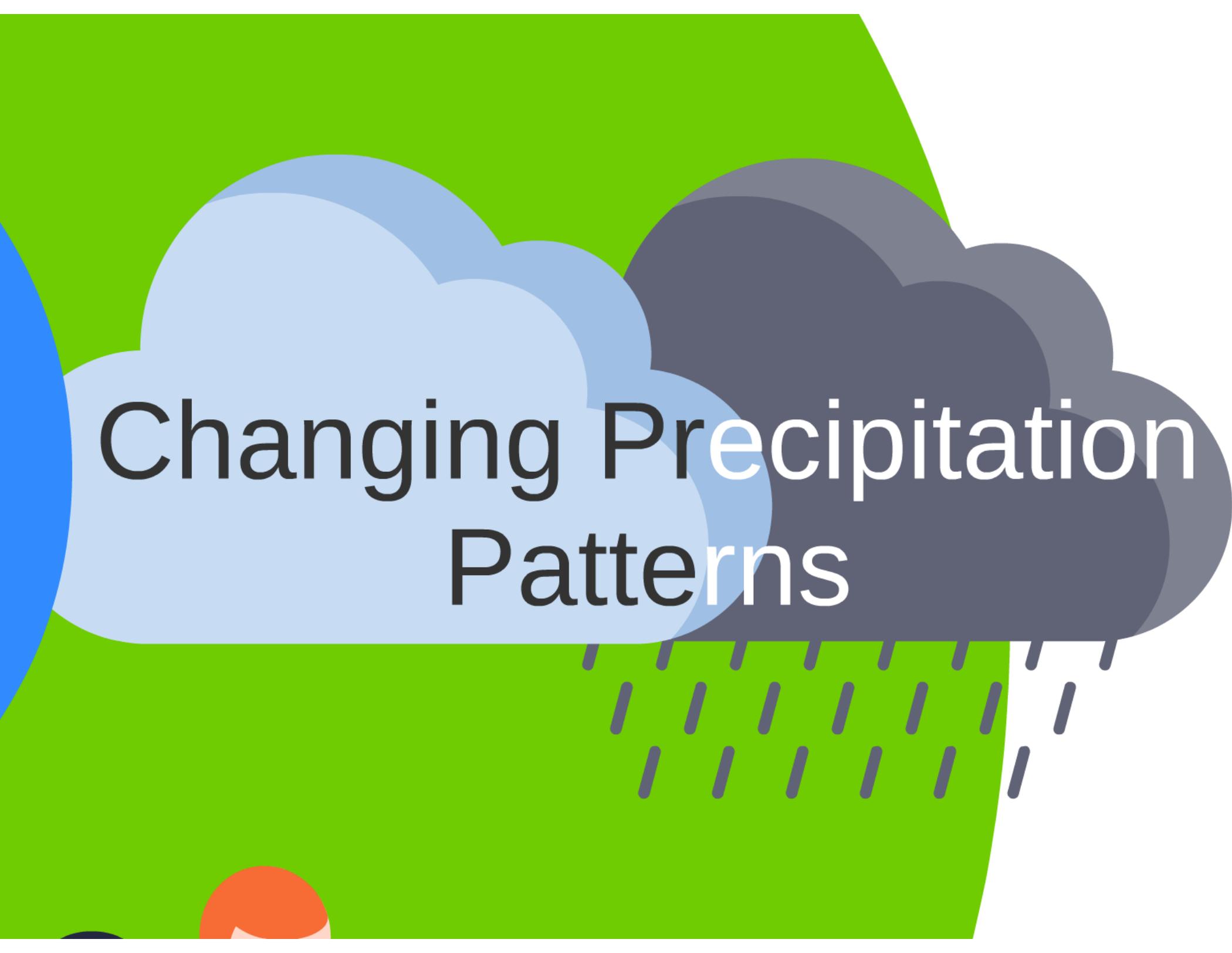
Warmer Temperatures

Past D



*First Broad River
Courtesy:*





Changing Precipitation Patterns

*First Broad River during 2008 drought.
Courtesy: City of Shelby*



Increasing Demand

How do we plan for the future?

Warmer
Temperatures

Learn from
Past Droughts



*First Broad River during 2008 drought.
Courtesy: City of Shelby*

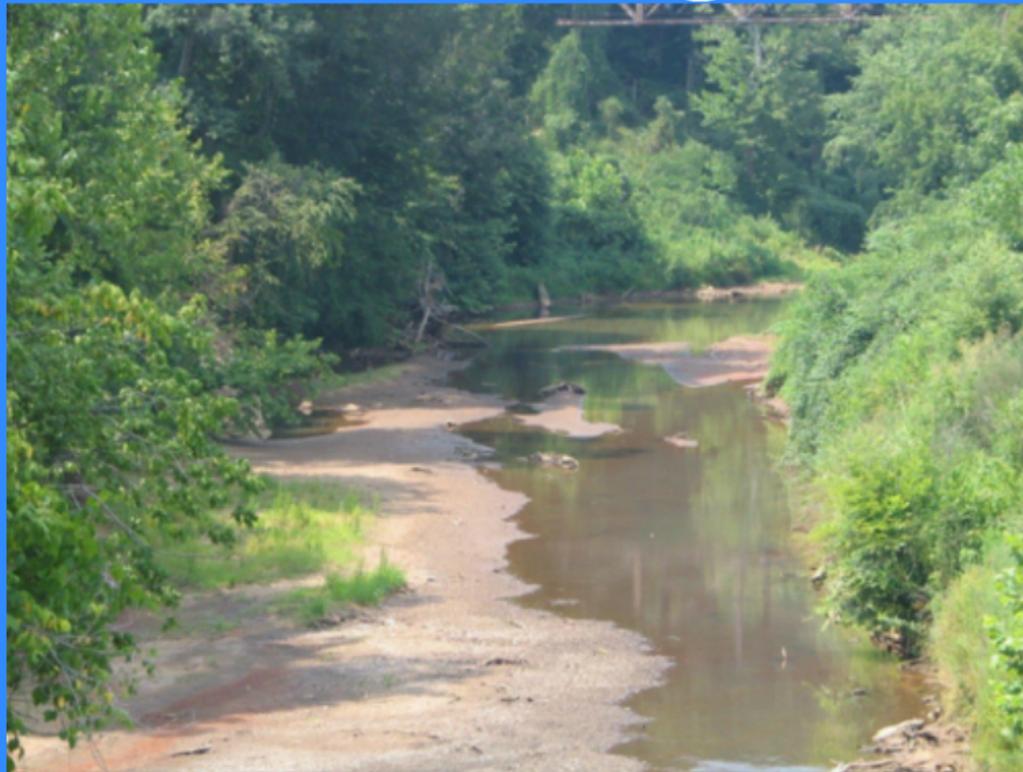
Changing Precipitation
Patterns



Increasing Demand



Learn from Past Droughts



*First Broad River during 2008 drought.
Courtesy: City of Shelby*

Cha

atures