



South Carolina Water Plan

**South Carolina Department
of Natural Resources
Land, Water, and Conservation Division
1201 Main Street, Suite 1100
Columbia, South Carolina 29201**

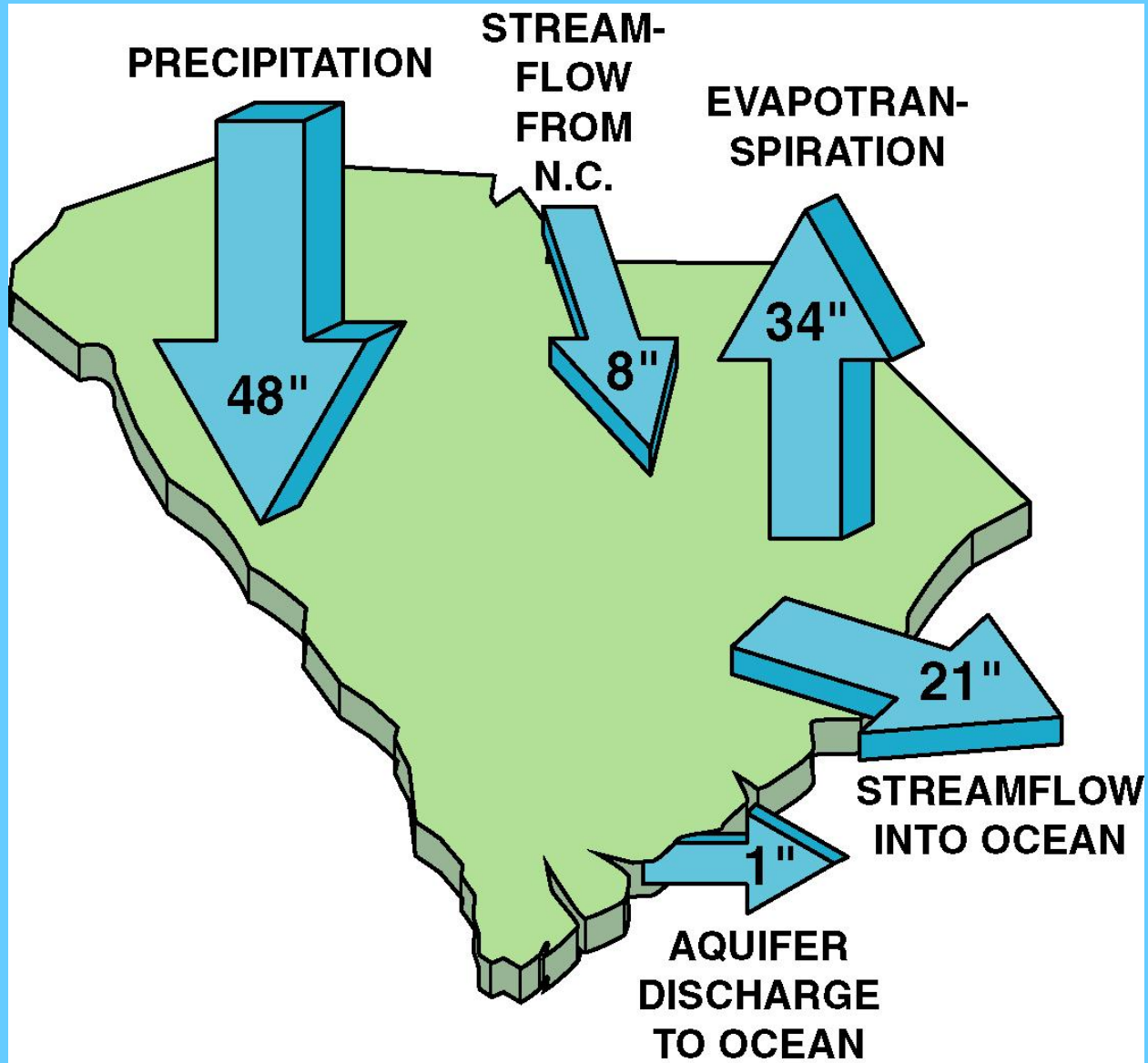
1998

To establish guidelines for the management of the State's water resources to sustain the availability of water for present and future use, to protect public health and natural systems, and to enhance the quality of life for all citizens.

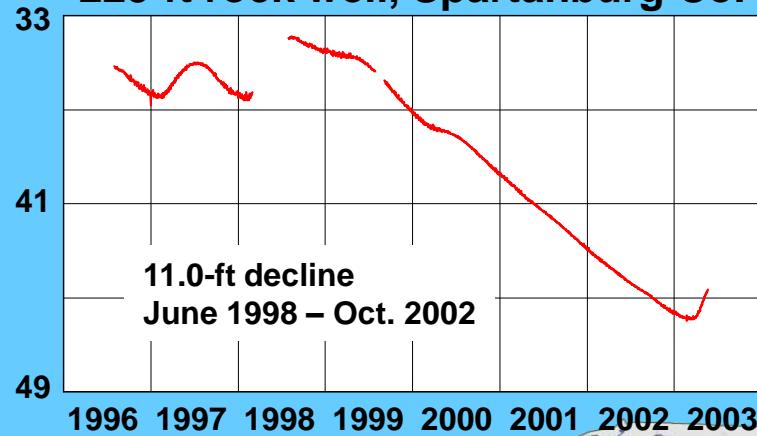
by

Rodney N. Cherry and A.W. Badr

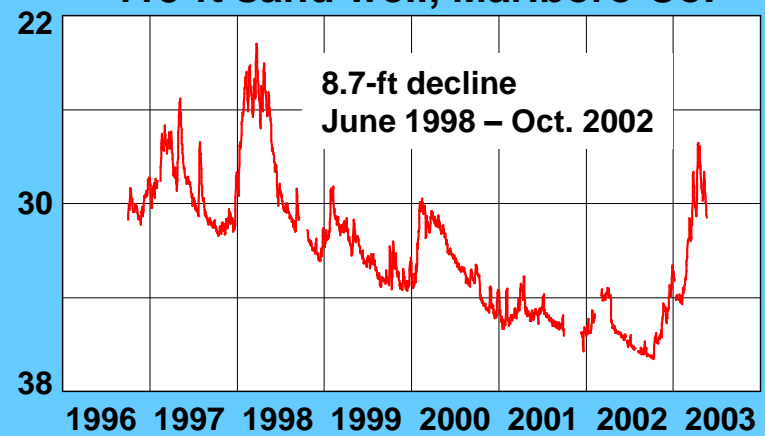
South Carolina's Water Budget



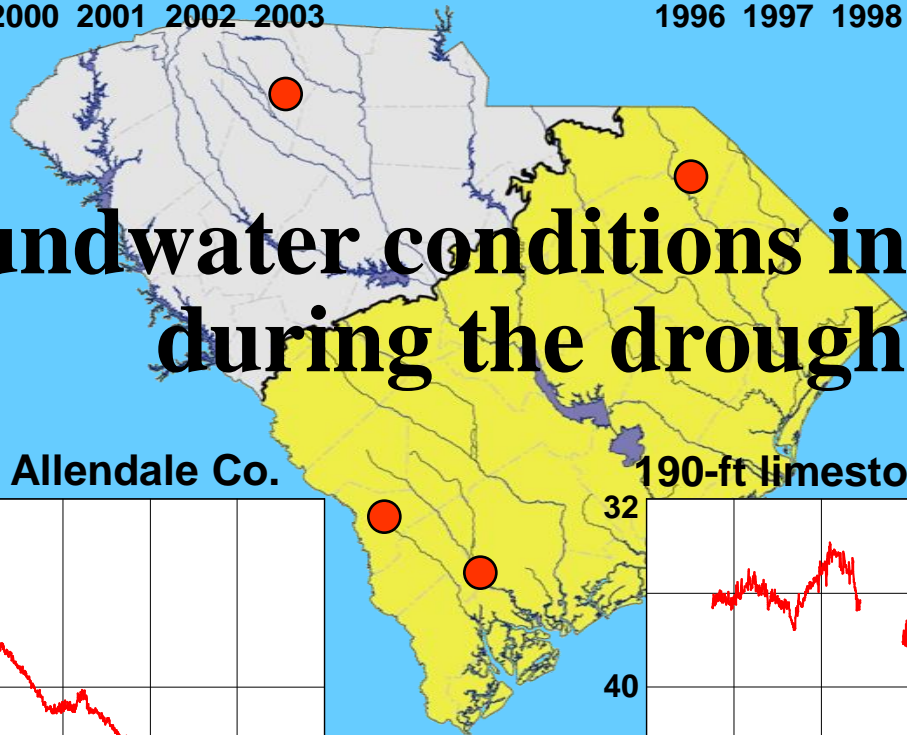
225-ft rock well, Spartanburg Co.



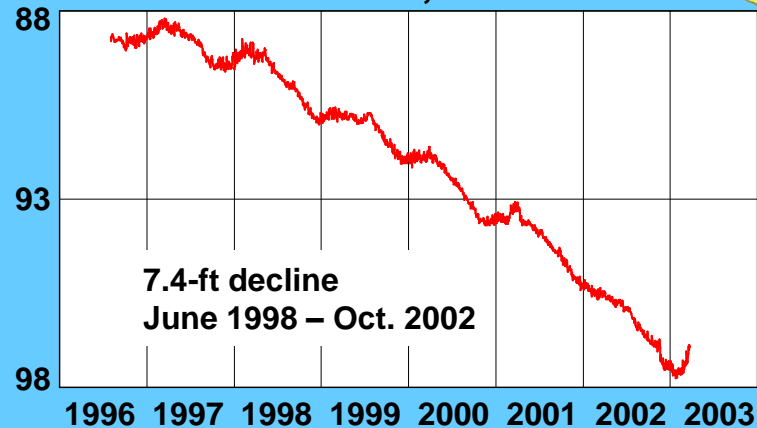
115-ft sand well, Marlboro Co.



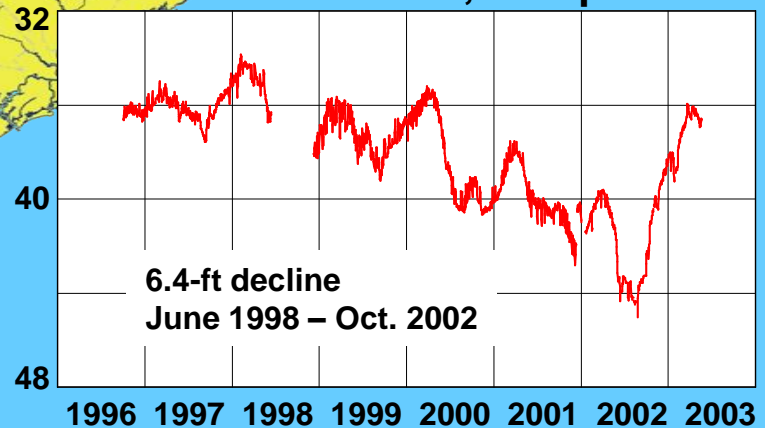
Groundwater conditions in the State during the drought



1400-ft sand well, Allendale Co.



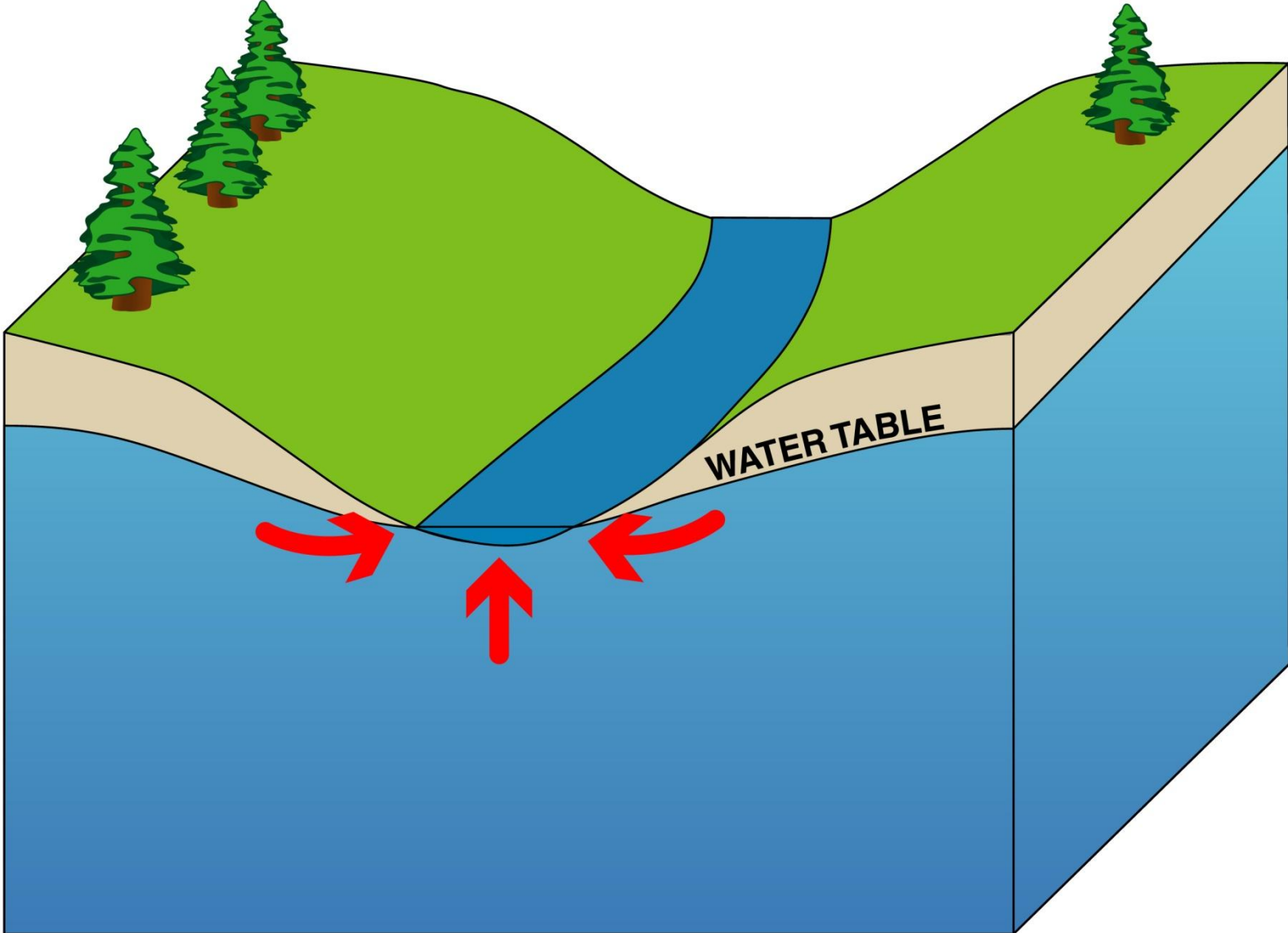
190-ft limestone well, Hampton Co.



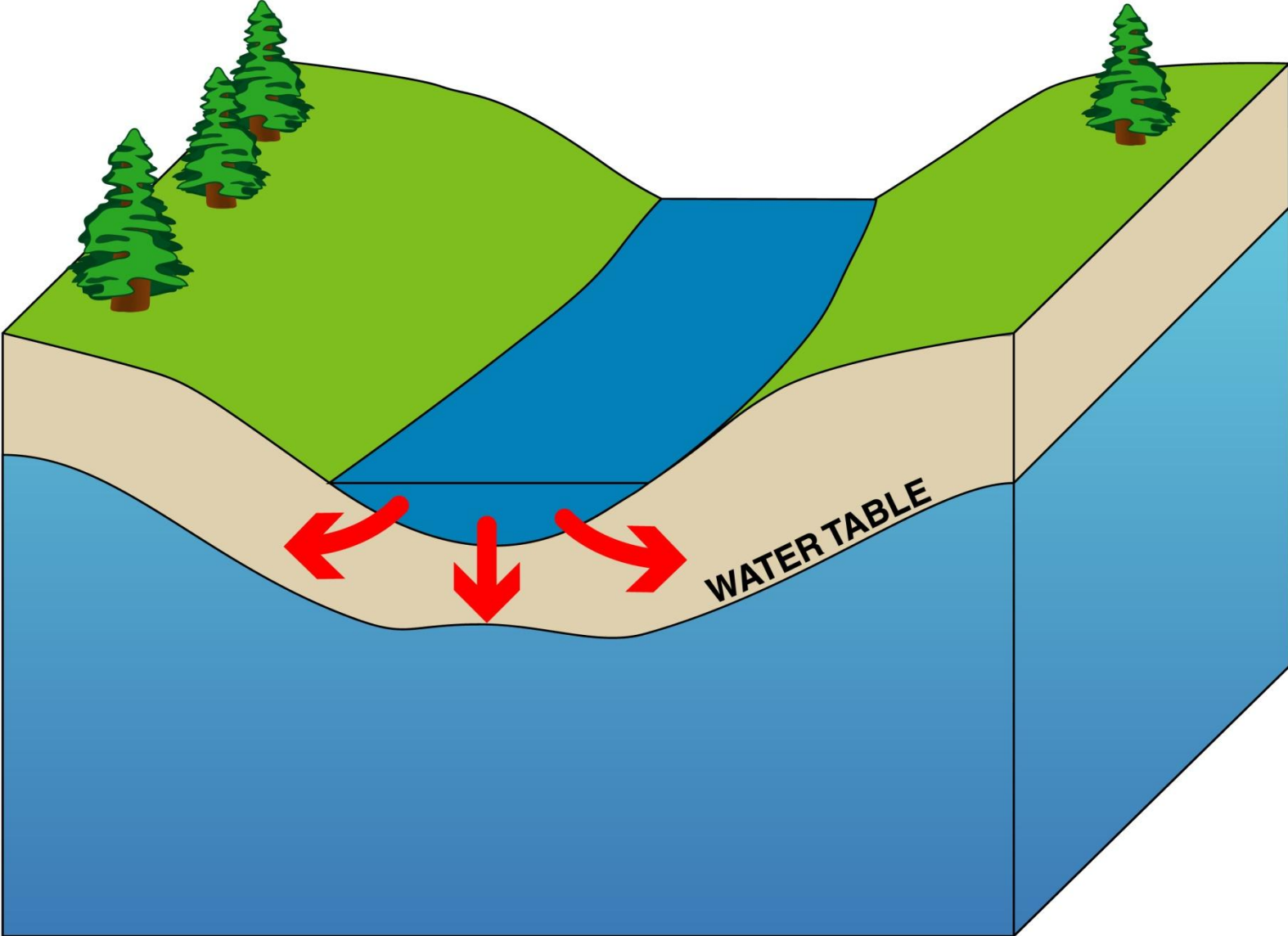
Unregulated streams that had record low flows during the 1998-2002 drought.



STREAM GAINING WATER FROM GROUND

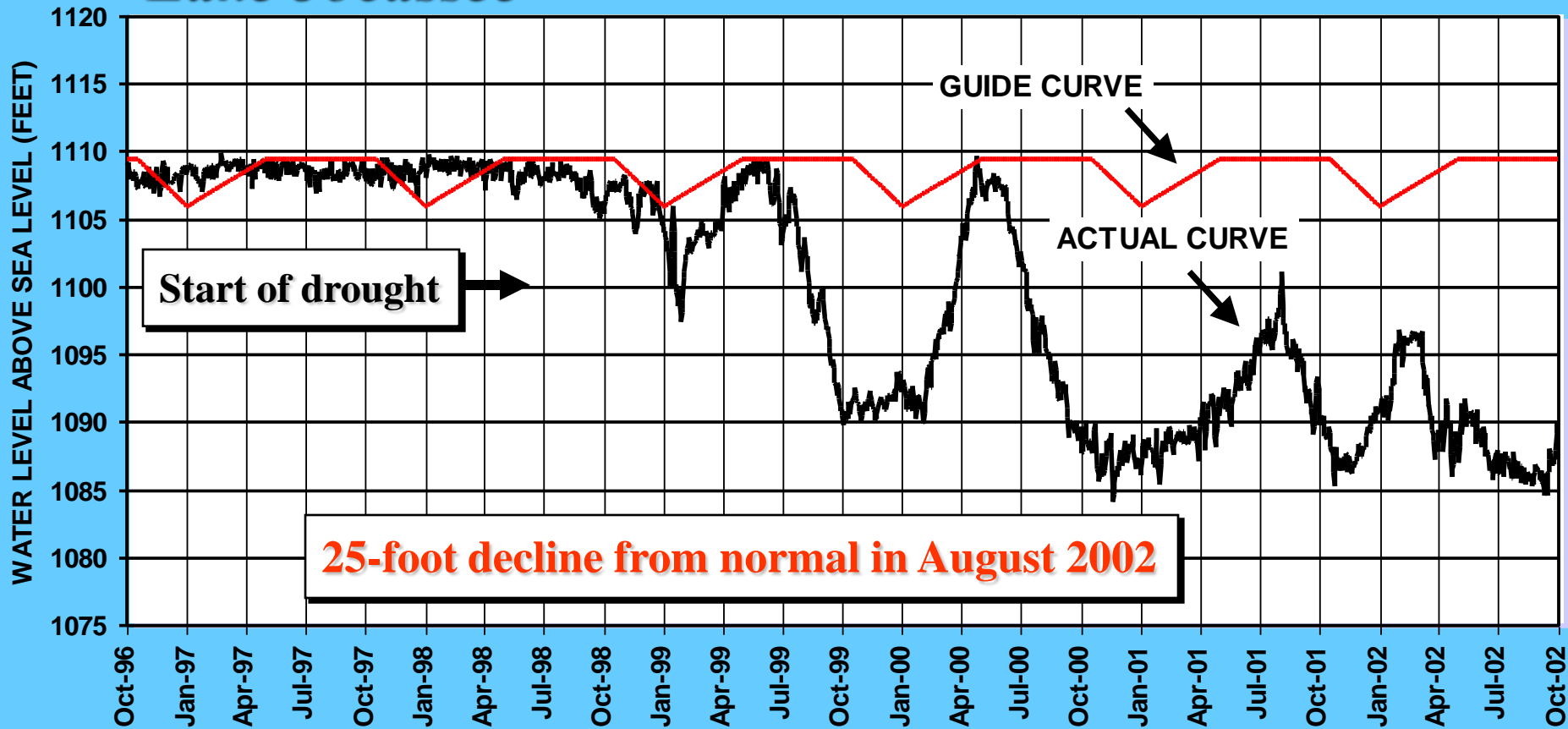


STREAM LOSING WATER TO GROUND



Lake conditions in the State during the drought

Lake Jocassee



South Carolina Water Plan

Second Edition

South Carolina Department
of Natural Resources


Land, Water and Conservation Division



by
A.W. Badr
Andrew Wachob
Joseph A. Gellici

2004

What's new in the Water Plan?

- 
- A map of South Carolina is overlaid on the slide, showing various water management regions in shades of yellow and light blue. The map highlights the state's geographical features, including major rivers and coastal areas.
- **Drought management**
 - **Minimum flow requirements**
 - **Monitoring networks**
 - **Groundwater allocation**
 - **Surface water allocation**
 - **Reservoir management**
 - **Interstate issues**

Minimum flow requirements

A map of South Carolina is overlaid on the slide, showing the state's outline in yellow and its major river networks in light blue. The map is positioned behind the title and the first three bullet points.

- Protection of water quality
- Protection of fish and wildlife habitats
- Maintenance of navigability
- **Maintenance of estuaries and prevention of saltwater intrusion.**

Monitoring networks

A map of South Carolina is shown in the background, with a light yellow landmass and light blue water. The map is overlaid with a network of thin lines representing monitoring points for surface water, groundwater, and water-table monitoring. The network is denser in the central and eastern parts of the state, particularly around major water bodies and coastal areas.

Surface water monitoring network

- streams and lakes

Groundwater monitoring network

- confined aquifers

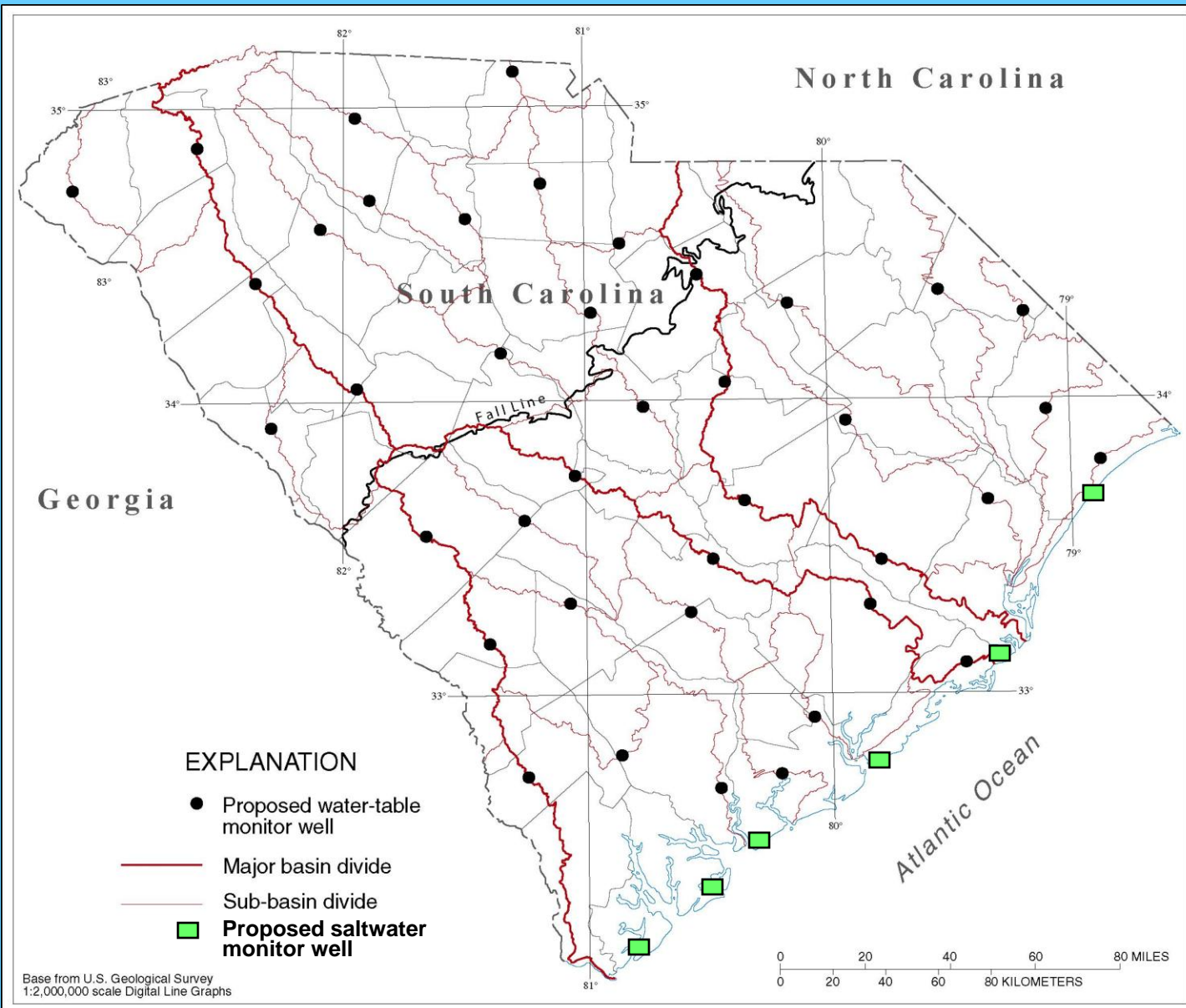
Water-table monitoring network

- unconfined aquifers

Saltwater intrusion monitoring network

- coastal aquifers

Proposed monitoring networks



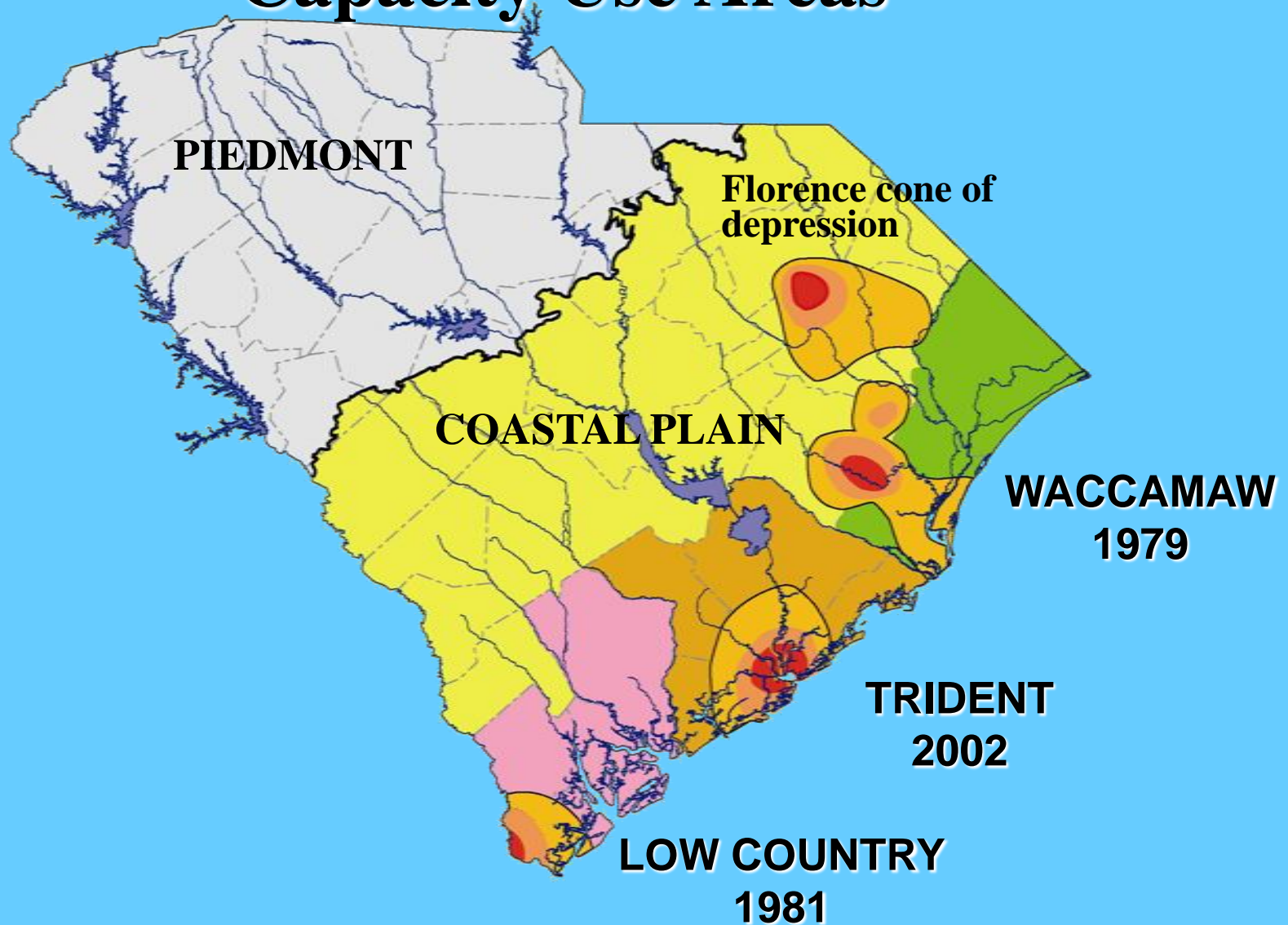
Groundwater allocation

Designate Capacity Use Areas on the basis of water level declines (Trigger Levels) and saltwater intrusion.

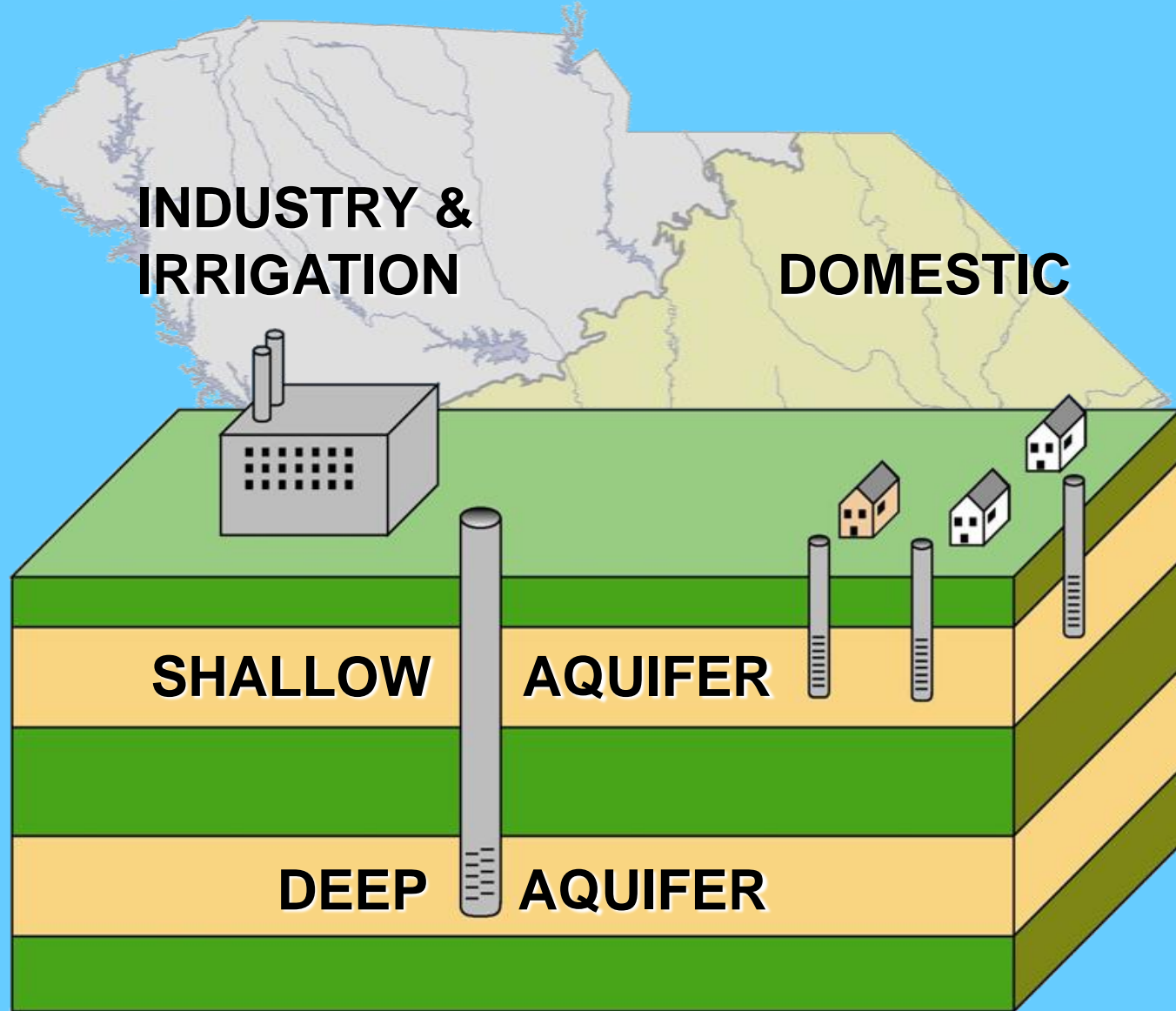
Designate the entire Coastal Plain a Capacity Use Area.

Designate aquifers for specific uses.

Major cones of depression and Capacity Use Areas



Designate aquifers for specific uses



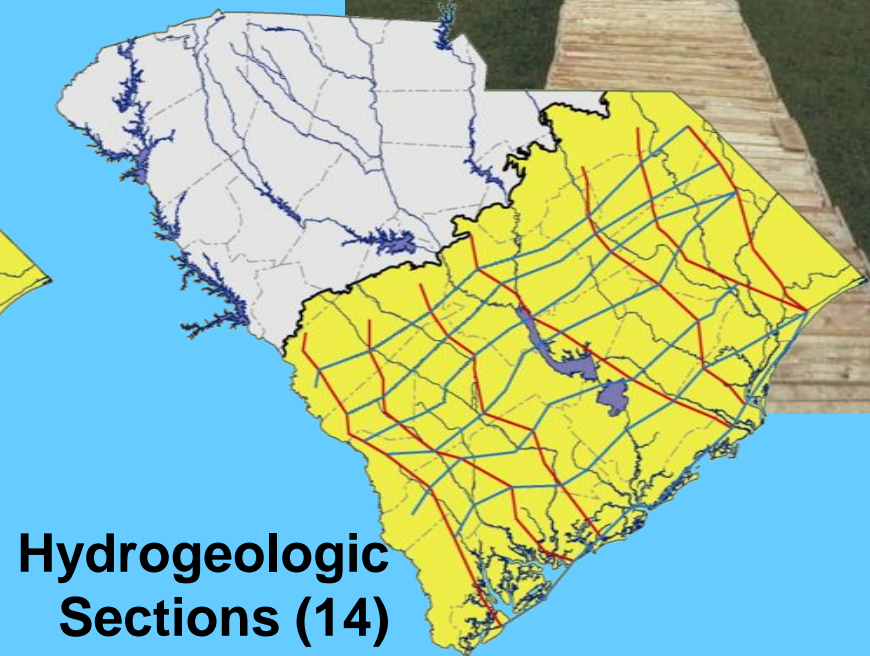
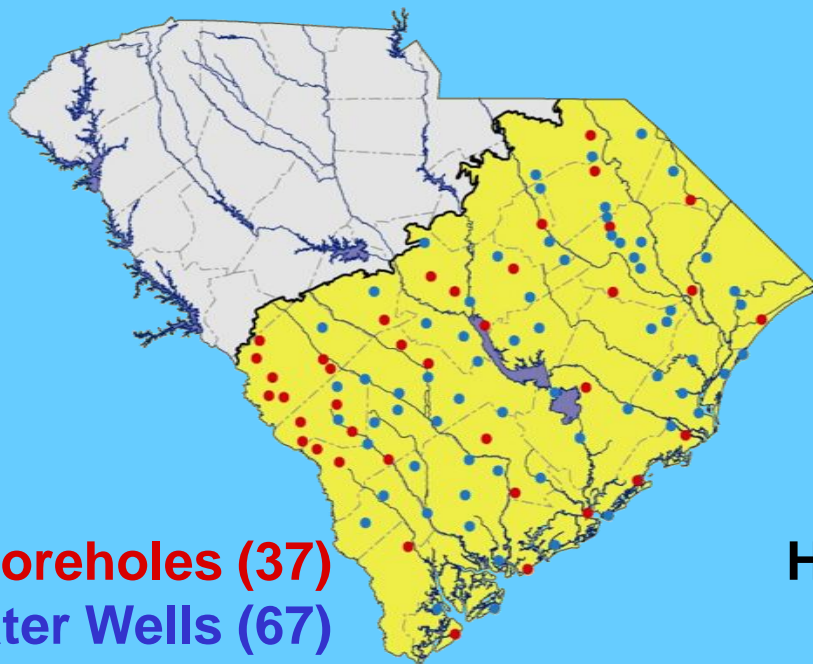
Aquifer Delineation Project

Swansea
Elementary
School

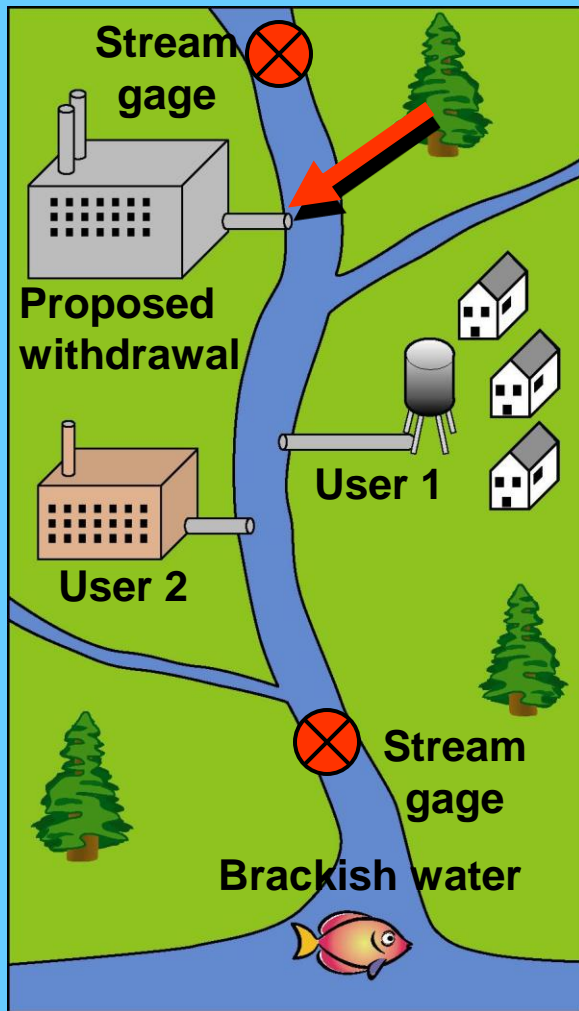
Lexington
County
School



Delineate and map the principal aquifers and confining units of the Coastal Plain.

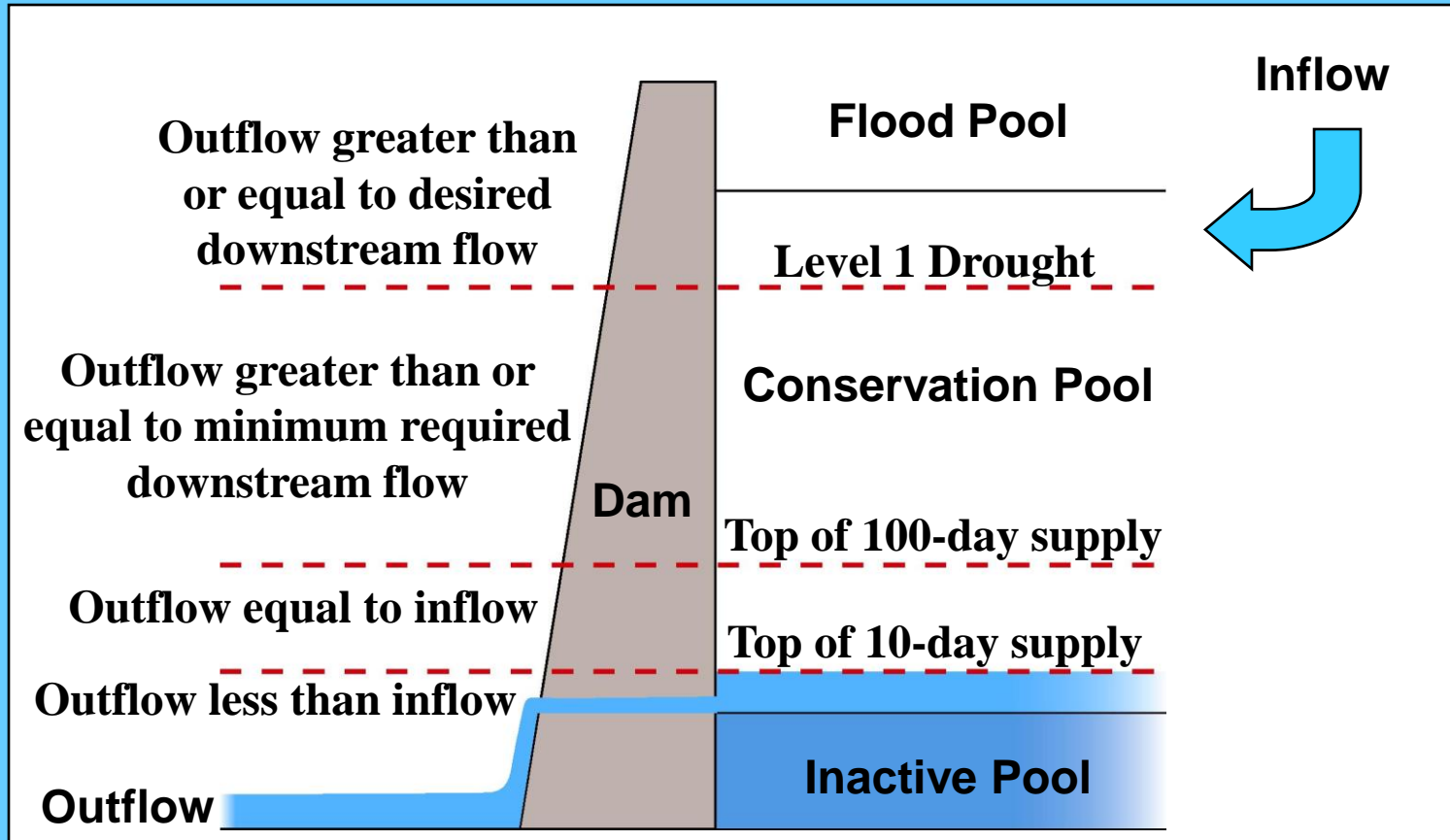


Regulating surface water withdrawals to sustain water availability



1. Determine the flow history at proposed withdrawal site (on average, how much water is available).
2. Determine the flow requirements of all downstream users.
3. Determine the flow requirements at the proposed withdrawal site that will sustain the new user and the downstream users.
4. Determine the required offstream storage.
5. Issue conditional permit to withdraw.

Reservoir management



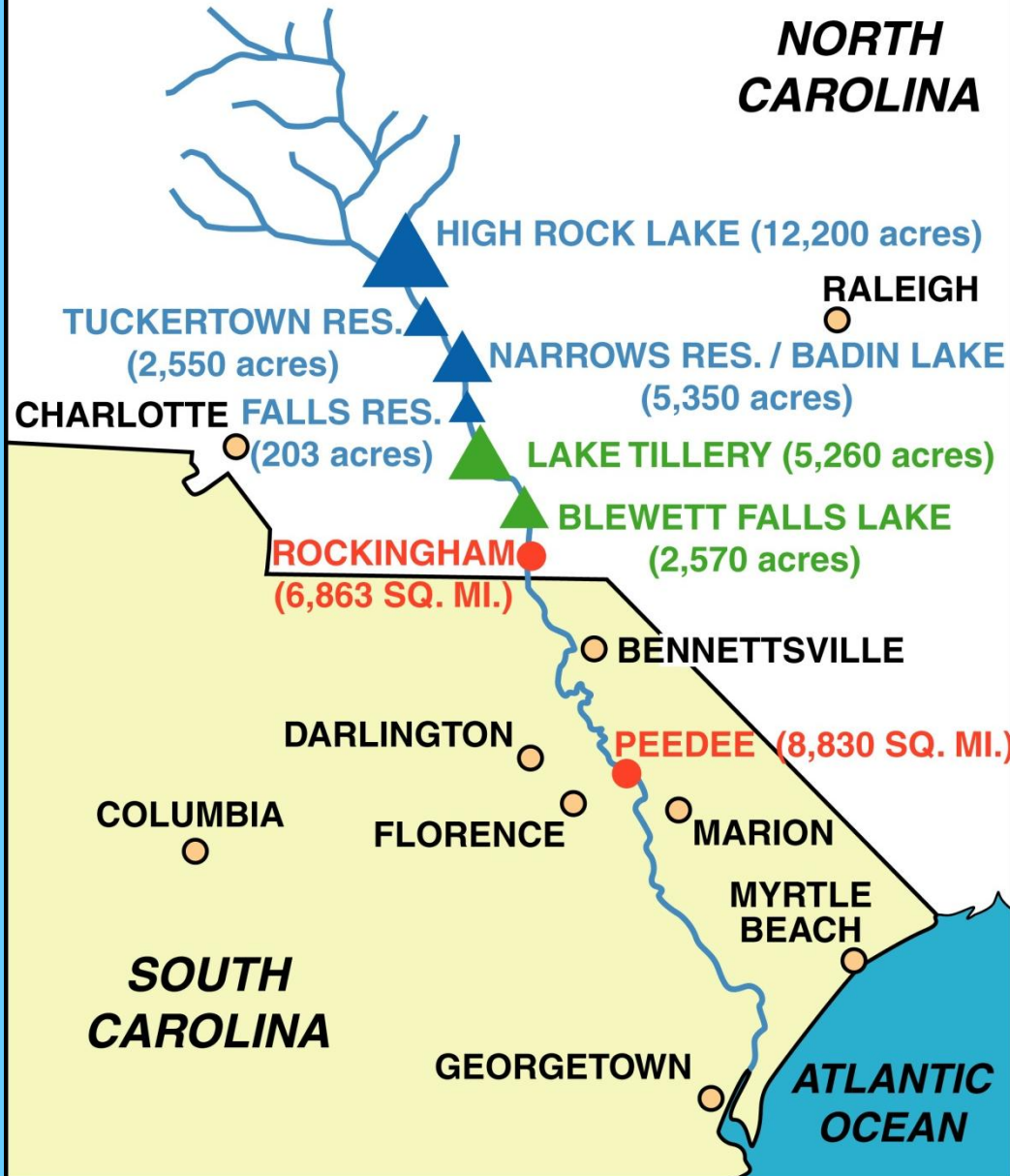
Interstate issues

Currently, there are no formal agreements with Georgia or North Carolina regarding water management of the Savannah, Santee, and Pee Dee river basins.

Formal mechanisms, such as river basin advisory committees, interstate compacts, memoranda of agreement, or protocols, should be developed with Georgia and North Carolina.

PEE DEE RIVER

**NORTH
CAROLINA**



CHARLOTTE

ROCKINGHAM
(6,863 SQ. MI.)

PEEDEE (8,830 SQ. MI.)

**SOUTH
CAROLINA**

**ATLANTIC
OCEAN**



JOCASSEE

KEOWEE

HARTWELL

RUSSELL

THURMOND

SOUTH
CAROLINA

GEORGIA

ATLANTIC
OCEAN

Keowee-Jocassee
August 2016

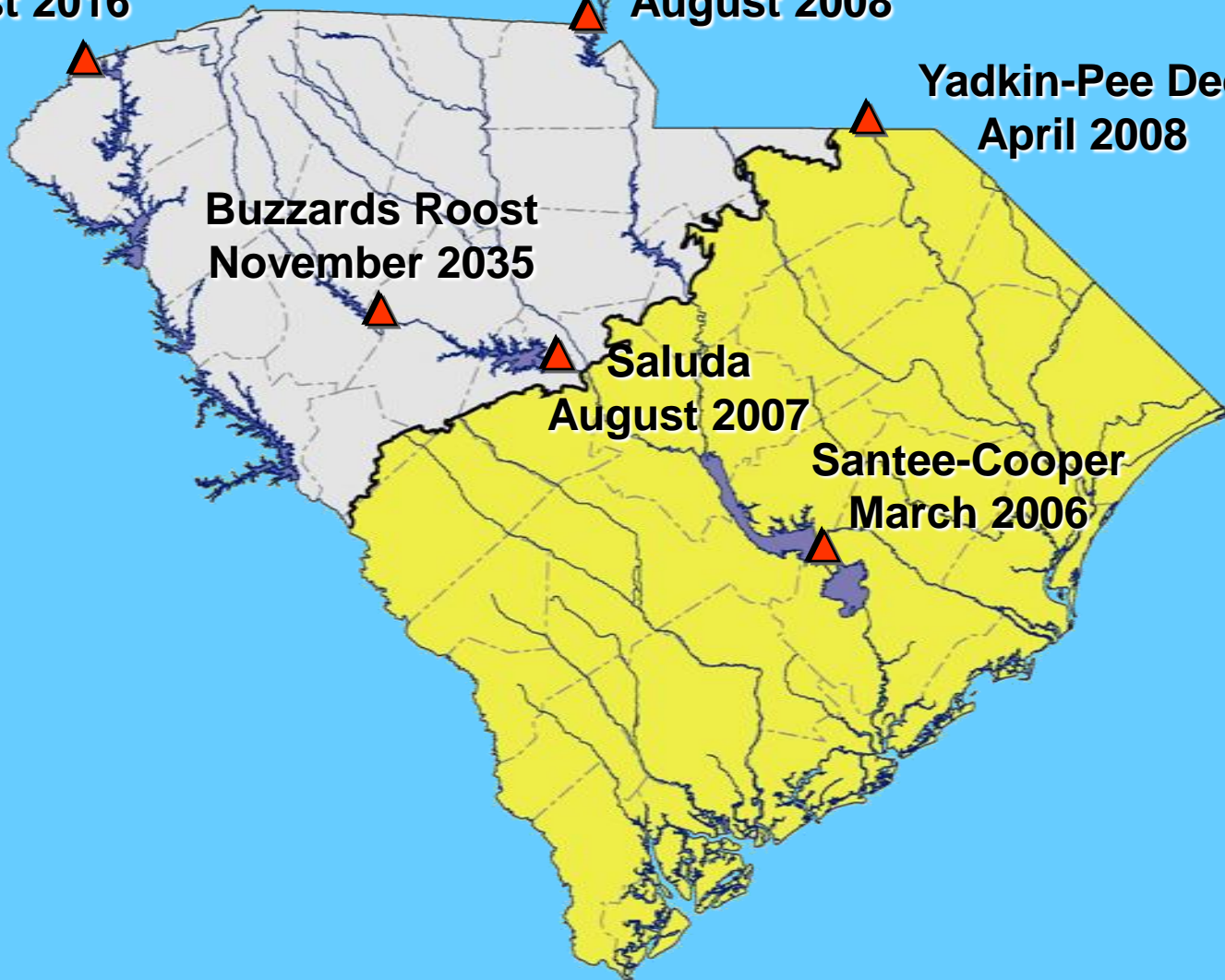
Catawba-Wateree
August 2008

Yadkin-Pee Dee
April 2008

Buzzards Roost
November 2035

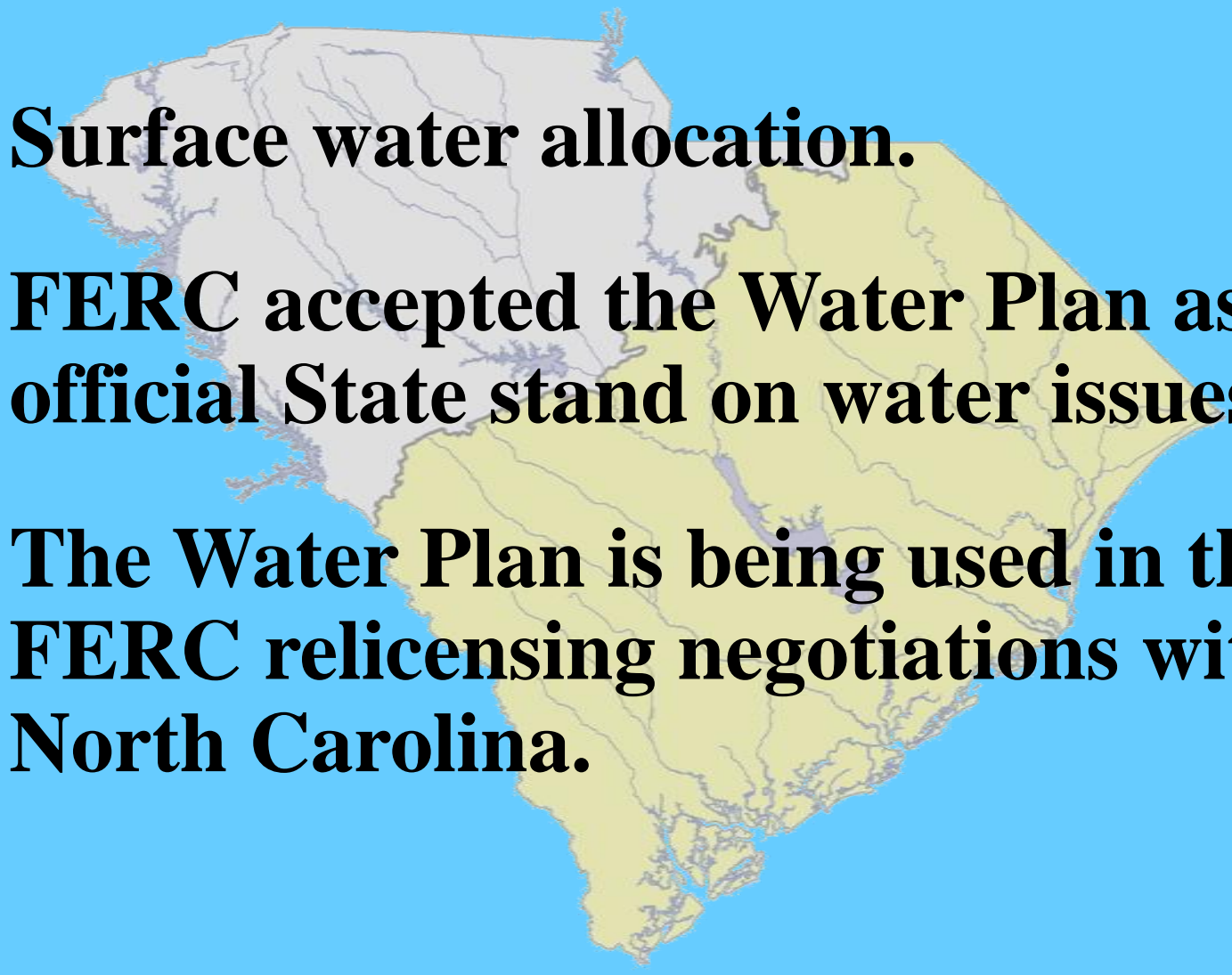
Saluda
August 2007

Santee-Cooper
March 2006

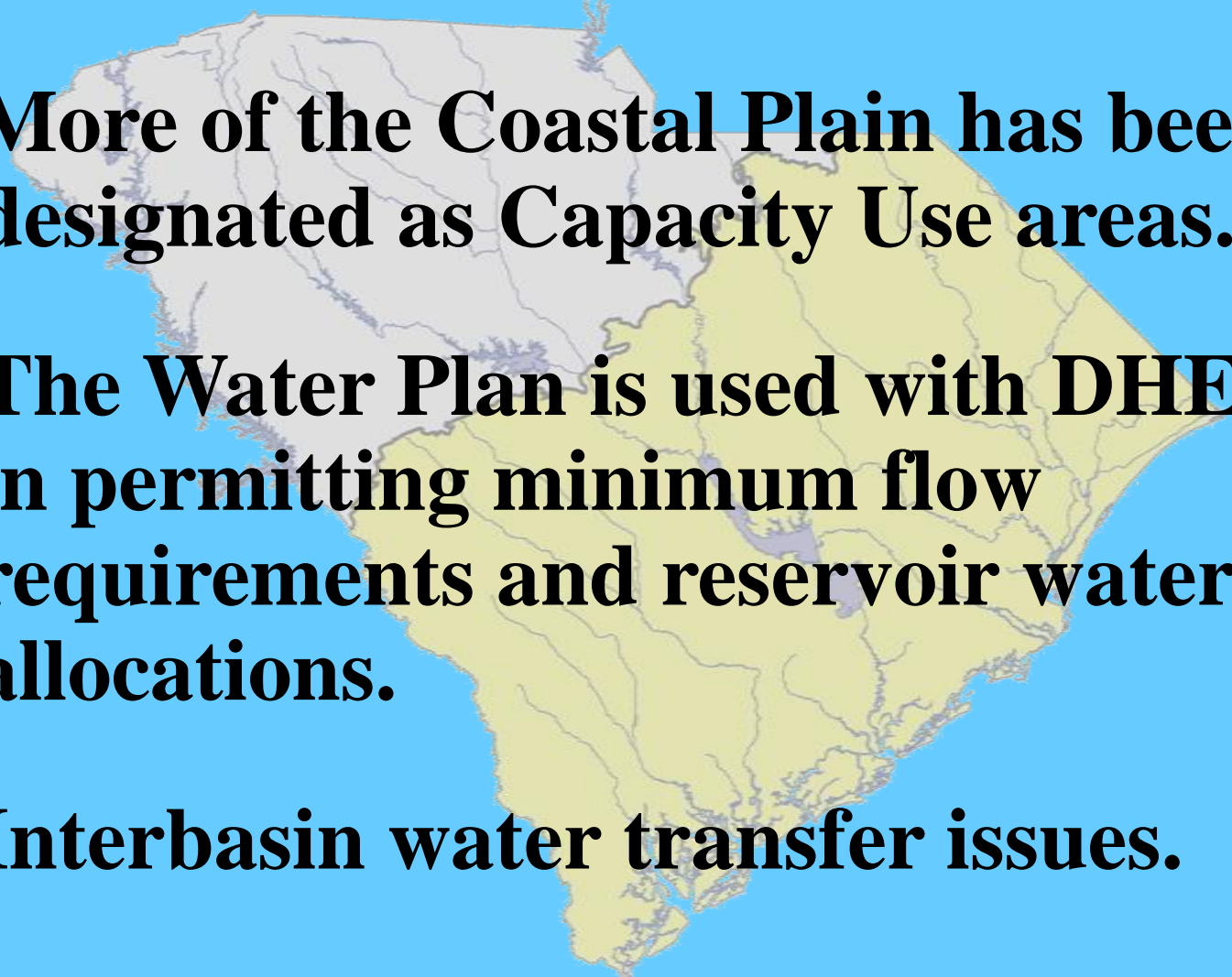


Expiration dates of FERC hydropower licenses

Water Plan Implementation

- **Surface water allocation.**
 - **FERC accepted the Water Plan as an official State stand on water issues.**
 - **The Water Plan is being used in the FERC relicensing negotiations with North Carolina.**
- 
- A map of South Carolina is overlaid on the slide, showing the state's outline and a network of rivers and streams. The map is colored in shades of yellow and light blue, with the rivers and streams highlighted in a darker blue. The map is positioned behind the text, providing a geographical context for the water-related information.

Water Plan Implementation

- **More of the Coastal Plain has been designated as Capacity Use areas.**
 - **The Water Plan is used with DHEC in permitting minimum flow requirements and reservoir water allocations.**
 - **Interbasin water transfer issues.**
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- A map of South Carolina is overlaid on the slide, showing various water basins and regions. The map is color-coded, with a large yellow area in the eastern and southern parts of the state, likely representing the Coastal Plain and Capacity Use areas mentioned in the text. The map also shows major rivers and reservoirs across the state.

Future Plans

- **Continue testing and applying the recommendations in the Water Plan.**
- **Rewrite or update the Water Plan every five years or as needed to reflect new experience and knowledge.**

