South Carolina Water Planning Process

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August 9th, 2022

Background

South Carolina Water Resources Planning and Coordination Act

- South Carolina Department of Natural Resources (SCDNR) is responsible to establish a comprehensive water resource policy, or water plan, for the state
- First state water plan was published in 1998
- Updated in 2004
  - The update incorporated lessons learned from the 1998-2002 drought
  - Provides numerous recommendations, specifically:
    - Formation of advisory committees to develop comprehensive water resources plans for the major river basins in the state.
      - This approach would help each river basin deal with drought impacts and management that were unique to each basin.
- 2004 Plan was the last state water plan update

More Recently

2018: SCDNR convened the State Water Planning Process Advisory Committee (PPAC)

- Water Planning is beyond the scope of one agency or stakeholder group
- 20 members on the PPAC
  - Water supplies, power generation, agriculture, trade, conservation organizations, state agencies, and academia

The PPAC:

- Created the SC State Water Planning Framework
  - Provides guidance to the development of the river basin plans
- Oversee the appointments for each of the river basin councils (RBCs)

PPAC Members

South Carolina's Eight Major River Basins

Funding has not been provided for all the river basin plans yet.

Current Planning:

- Edisto
  - First RBC meeting in June 2020
  - Should be done by November 2022
- Broad
  - First RBC meeting in February 2022
  - 6 meeting conducted thus far
- Pee Dee
  - First RBC meeting in June 2022
  - 2 meetings conducted thus far

Near Future Planning:

- Two more basins have been funded
- Specific Basins have not been selected yet

The River Basin Councils (RBCs)

Who they are

A group of 25 different stakeholders with water related interests

- The RBC members apply for their positions are accepted by the PPAC

RBC Stakeholder groups

1. Agriculture, forestry, and irrigation interests
2. Local government
3. Water and sewer utilities
4. Electric-power utilities & non-federal reservoir operators
5. Industry and economic development interests
6. Water-based recreational interests
7. Environmental interest
8. At-large water-based

Purpose and Responsibilities

Developing , by consensus and stakeholder engagement, a basin wide plan that meets all water needs over the 50-year planning horizon

Responsibilities

1. Develop and implement the river basin plan
2. Communicate with stakeholders inside the basin
3. Identify recommendations for policy, legislative, regulatory, or process changes
4. Communication outside the basin with:
   - PPAC
   - South Carolina Drought Response Committee
   - Other RBCs and other water planning groups

Data and Scenarios in the Plan

Data considerations for the model

- Surface Water
  - Historical supply and demand
- Groundwater
  - Historical Supply and demand
- Water demand projections

Data not considered

- Water quality
- Changing climate

Scenarios for identifying water shortages

Surface water

- Current surface water use: current water use practices
- Permitted and registered surface water use: incorporates fully permitted or registered water use allowable under existing permits and registrations
- Business-as-usual water demand projection: surface water simulation of future water demand based on normal climate and moderate population and economic growth
- High water-demand projection: surface water simulation of future demand with a hot and dry climate and high population and economic growth

Groundwater

- Predevelopment ground water use: removes all ground water withdrawals from the model and simulates groundwater levels prior to any groundwater development
- Current Groundwater Use: see above, but for groundwater.
- Permitted Groundwater Use: see above, but for groundwater.
- Business-as-usual water demand projection: see above, but for groundwater.
- High water-demand projection: See above, but for groundwater.

The River Basin Plan

RBC will propose management strategies to:

1. Directly address any water availability identified from the scenario models

   or

2. Enhance or optimize the overall water availability in the basin

Management strategies could be

- Water Conservation
  - Such as public-supply, residential, agricultural, industrial, and thermoelectric conservation
  - Grey water
  - Reclaimed water
- Expand Supplies:
  - Expand existing or construct new reservoirs
  - Construct new groundwater wells
  - Aquifer storage and recovery
  - Desalinization
- Increase connections:
  - Regional water utility interconnections
  - Interbasin transfers

The River Basin Plan

Ultimately, the River basin plan is a collaborative process, in which a group of selected, and diverse, local stakeholders evaluate the possible scenarios of water supply over the next 50 years, and how the river basin wants to protect it water through collaboration.

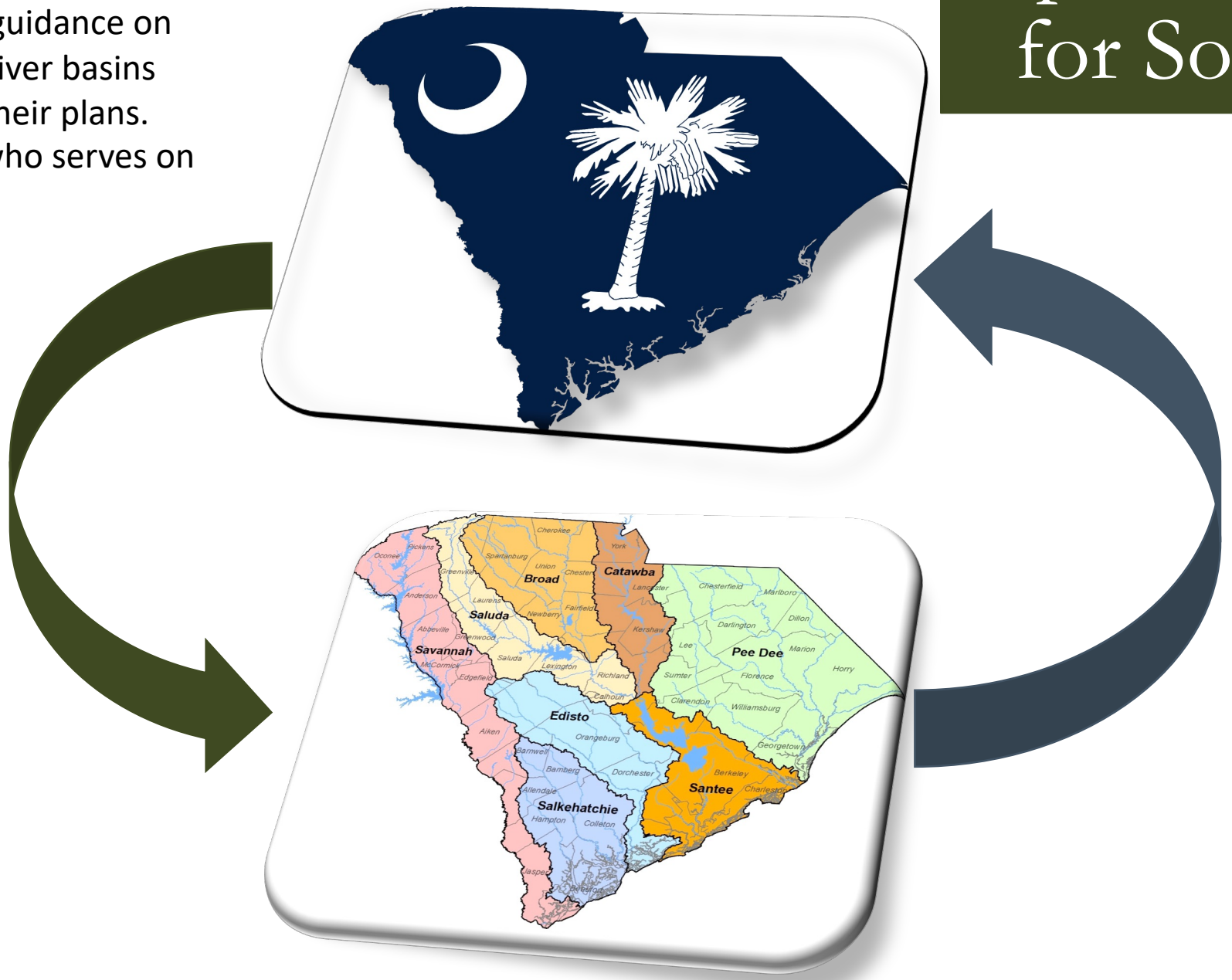
The River Basin Plan provides insight to potential problems that a drought may cause, in relation to water supply and water demands.

It is important to note that the plan has no “teeth”. The plan can not enforce any implementation. All the actions are volunteer based.

Updated Water Plans for South Carolina

The State:

- Provides guidance on how the river basins develop their plans.
- Decides who serves on the RBCs.



The RBCs:

- Provide recommendations to the state for water management in their basin.
- Provide recommendations for any policy changes needed for better water management in the state.
- All 8 river basin plans will serve as the foundation for the new state water plan.