

# Review and Selection of Supply-side Strategies and Low Flow Strategy for Effectiveness Evaluation



# Existing Supply Side Water Management Strategies

1. **Aiken** – Ability to temporarily augment flows in Shaw Creek through releases from Masons Branch Reservoir
2. **CWS** – Alternate surface water sources in the Santee Basin
3. **Orangeburg** – Emergency interconnection to Lake Marion Regional Water System (Santee Basin) and ASR wells
4. **Agriculture** – Limited conjunctive use capabilities (ability to use both groundwater and surface water). Only known example is Walther's Farm
5. **Dominion Energy's Cope Station** – Conjunctive use

# What Additional Water Management Strategies Does the RBC Want to Consider to Address the Identified Issues?

## 1. Low Flow Management Strategy (already proposed)

- a. **Purpose** – Address identified shortage at CWS Intake during High Demand Scenario and allow for some water to remain in river (environmental flow)
- b. **Approach** – Trigger incremental shifts to other sources for upstream surface withdrawers able to do so and/or temporarily reduce demand where possible
- c. Some may shift more than others based off their ability to do so and the condition of the other water source
- d. Includes establishment of a Surface Condition of 332 cfs at Givhans Ferry (20% of median flow)

# Proposed Low Flow Management Strategy

20% Increments Percent Below MIF	River Flow Range (cfs)		Basin-wide % Reduction in SW Withdrawals
	Lower	Upper	
0 - 20%	266	332	20%
20 - 40%	199	266	40%
40 - 60%	133	199	60%
60 - 80%	66	133	80%
80 - 100%	0	66	100%

Here, MIF is set at 20% of the median daily flow, which is 332 cfs at Givhans Ferry

# Does the RBC Want to Consider an Additional Supply Side Water Management Strategies to Address the Identified Issues?

## 1. Strategies to increase supply? Some examples...

- a. New impoundments, ponds, reservoirs, tanks
- b. Aquifer storage and recovery
- c. Conjunctive use
- d. Water reuse systems
- e. Interbasin transfer
- f. Flow augmentation (pump groundwater to increase streamflow)

# Does the RBC Want to Consider an Additional Supply Side Water Management Strategies to Address the Identified Issues?

## 1. RBC-identified strategies to evaluate:

### a. Conjunctive use - RBC Direction to CDM Smith was to:

1. *Identify which existing users have conjunctive use capabilities, and*
2. *Use the SWAM model to evaluate impacts during low flows by implementing more conjunctive use. For example, examine ranges of conjunctive use, and their ability to improve low flows at strategic nodes. For example, assume 50% of water users can meet 25% of their demands from groundwater during low flows.*

# Next Edisto RBC Meeting

Wed, January 19

## Informational Topic

- **[Pending]** Groundwater Scenario Results - Comparison and Discussion
- Results of Surface Water Management Strategy Effectiveness (Supply Side)

## RBC Discussion

- **[Pending]** Begin to consider trigger levels and/or desired future conditions for groundwater
- Consider and discuss effectiveness of supply-side surface water management strategies, and select strategies for feasibility (Step 2) study

**Future Meetings: February 16 and March 16**  
**(3<sup>rd</sup> Wednesday of each month)**