



# Drought Management and Response Part 2

*Agenda Item 5*



# DROUGHT PLANNING GUIDEBOOK

A Resource for Water Systems  
in the Palmetto State

Guidance for Reviewing and Updating Drought  
Management Plans and Response Ordinances

Presented by  
The South Carolina State Climatology Office within the  
S.C. Department of Natural Resources



## TABLE OF CONTENTS

<b>CHECKLIST FOR REVIEWING &amp; UPDATING A DROUGHT PLAN . . . .</b>	<b>4</b>
<b>OVERVIEW OF BEST PRACTICES . . . . .</b>	<b>5</b>
<b>1. WHY DO WE NEED ANOTHER DROUGHT PLANNING GUIDE? . . . .</b>	<b>9</b>
<b>2. DROUGHT AS A NATURAL HAZARD. . . . .</b>	<b>11</b>
DROUGHT IN SOUTH CAROLINA . . . . .	11
<b>3. GETTING STARTED: DROUGHT PLANNING FRAMEWORKS . . . .</b>	<b>14</b>
DROUGHT PLANNING IN SOUTH CAROLINA . . . . .	14
ADDITIONAL DROUGHT PLANNING EFFORTS IN THE STATE. . . . .	16
THREE PILLARS OF DROUGHT MANAGEMENT. . . . .	19
<b>4. REVIEW, UPDATE, &amp; APPROVE THE NEW PLAN . . . . .</b>	<b>20</b>
REVIEWING THE PLAN . . . . .	20
UPDATING THE PLAN . . . . .	21
APPROVING THE PLAN. . . . .	22
<b>5. INFORMATION GATHERING &amp; DROUGHT RISK ASSESSMENT. . . .</b>	<b>23</b>
HAZARD . . . . .	24
VULNERABILITY . . . . .	24
RISK . . . . .	26
AMERICA'S WATER INFRASTRUCTURE ACT OF 2018 (AWIA) . . . . .	28
<b>6. DROUGHT MONITORING &amp; EARLY WARNING . . . . .</b>	<b>29</b>
STATE-LEVEL DROUGHT MONITORING . . . . .	29
LOCAL-LEVEL DROUGHT MONITORING . . . . .	30
<b>7. THE OPERATIONS OF THE DROUGHT RESPONSE PLAN . . . . .</b>	<b>33</b>
PURPOSE OF THE PLAN. . . . .	33
TRIGGERS. . . . .	34
WATER CONSERVATION. . . . .	38
OPERATIONAL TASKS. . . . .	40
COMMUNICATION . . . . .	41
ENFORCEMENT . . . . .	43
<b>8. MITIGATION: TAKING CURRENT STEPS TO REDUCE FUTURE     IMPACTS. . . . .</b>	<b>45</b>
PARTNERSHIPS AND COOPERATIVE AGREEMENTS . . . . .	45
REGULARLY REVIEWING AND UPDATING THE PLAN . . . . .	47
INVESTING IN TECHNOLOGY . . . . .	47
HAVING EDUCATION & OUTREACH MATERIALS CREATED BEFOREHAND. . . . .	48
<b>9. CONCLUDING REMARKS . . . . .</b>	<b>50</b>

# Saluda River Basin Drought Management Plans (examples)

Entity	Year	Water Source	Drought Indicator / Trigger Types <sup>1</sup>
Belton-Honea Path Water Authority	2003	Surface Water - Saluda River	Stream impoundment level at Holidays Dam 2 feet, 3 feet, or 4 feet below flashboards on the dam. Drought Response Committee declares Moderate, Severe, or Extreme Drought.
City of Columbia	2003	Surface Water - Broad River Canal, Lake Murray	Average daily use greater than 85 MGD for 7-10 consecutive days, 90 MGD for 7 consecutive days, or 95 MGD for 2-3 consecutive days.
Easley-Central Water District	2003	Surface Water - Twelve-Mile River (in Savannah basin)	Storage falls below 80, 70, or 60 percentage of capacity. Average daily use greater than 1.8 MGD, 1.9 MGD, or 2.0 MGD for 30 consecutive days.
Easley-Central Water District #2	2003	Purchased Surface Water - Easley Combined Utilities (ECU)	Storage falls below 80, 70, or 60 percentage of capacity.
Easley Combined Utilities	2007	Surface Water - Saluda Lake	Average discharge in Saluda Lake is 99.5, 91.9 or 80.0 cfs or Average daily use is greater than 16.5 MGD for 5 consecutive days, 17.0 MGD for 5 consecutive days, or 17.5 MGD for 3 consecutive days.
Greenwood Commissioners of Public Works	2003	Surface Water - Lake Greenwood	Lake Greenwood falls to elevation 433 feet (50 percent full), 431 feet (40 percent full), or 430 feet (30 percent full). System storage falls below 25 percent, 50 percent, or 75 percent of capacity and is unable to recover. Daily use greater than 24 MGD, 26 MGD, or 28 MGD for 5 consecutive days.
Laurens Commission of Public Works	2003	Surface Water - Lake Rabon, Rabon Creek, and Reedy Fork Creek	The elevation of Lake Rabon falls to 528 feet, 527 feet, or 526 feet.