

Scenario Time Point 1

Response Actions

Moderate Drought Statewide

July – August 2021

Response Actions: What Happens at Moderate Drought Stage

- State

- DNR, SCO, DRC
 - Monitor conditions
 - Communicate and disseminate information
 - Make recommendations to assist water suppliers and users manage drought
- State agencies
 - Monitor conditions
 - Activities to address and/or alleviate impacts (agriculture, fire risks)

- Water suppliers

- Review plans and ordinances
- Some may request voluntary water use restrictions

- Basin

- USACE/SRB Drought Contingency Plan is in place
- LIPs are in place (Duke Energy)

Moderate Drought – Response Actions [state agencies and organizations]

Monitoring	Document	Organization
<ul style="list-style-type: none"> • <u>The Drought Information Center</u> shall routinely collect, monitor, and evaluate selected climatic, water-supply and water-use data as necessary to identify at an early stage the onset of drought or potential for drought, geographic extent of the affected area and changes in drought levels • <u>Monitoring shall be accelerated whenever drought conditions approach or enter the moderate drought stage in one or more drought management areas.</u> This may include acquiring additional rainfall, stream flow, water use, and ground water level data; and collecting additional information on the impact of the drought on agriculture, industry, domestic water supplies, and other users. 	Reg 121-11.7	SCO/DNR
<ul style="list-style-type: none"> • <u>Evaluates conditions within Drought Management Areas</u> to determine if need exists for action beyond scope of local government • Consults with and invites participation by representatives of municipalities, counties, Commissions of public works, public and private water suppliers, public service districts, power generation facilities, industries, special purpose districts and any other water users in the affected drought management area while evaluating drought conditions and preparing recommended actions 	Reg 121-11.6	DRC
<ul style="list-style-type: none"> • <u>During periods of moderate, severe or extreme drought, available drought related data, as appropriate, will be provided to the Drought Information Center</u> by the South Carolina Department of Agriculture, South Carolina Emergency Preparedness Division, South Carolina Forestry Commission, South Carolina Department of Health and Environmental Control, as well as by any other State Agency that is either impacted by or has information on drought conditions. 	Reg 121-11.7	<ul style="list-style-type: none"> • Dept of Agriculture • Emergency Preparedness Division • Forestry Commission • DHEC • Other state agencies impacted by drought or have information on drought conditions
<ul style="list-style-type: none"> • Appropriate [state] agencies must accelerate monitoring activities 	Reg 121-11.8	
<ul style="list-style-type: none"> • Various federal and local agencies may be asked to provide drought information on a voluntary basis. 	Reg 121-11.7	

Moderate Drought – Response Actions [state agencies and organizations]

<u>Communications</u>	Document	Organization
<ul style="list-style-type: none"> • <u>Notifies and provides information to DRC</u> regarding Drought Alert Phase in each Drought Management Area 	Reg 121-11.6	DNR
<ul style="list-style-type: none"> • Releases drought statements to the news media 	Reg 121-11.8	DNR
<ul style="list-style-type: none"> • <u>Disseminates public information concerning all aspects of the drought</u> at the inception of each drought alert phase. Initial action is public education, providing information as to existing and potential conditions and water conservation measures necessary to meet the demand for water at each drought alert phase. 	DRA [SEC 49-23-70] Reg 121-11.9	DNR
<ul style="list-style-type: none"> • Notifies by first class mail public water systems in the affected Drought Management Areas and other appropriate agencies and individuals at the inception of a Moderate Drought Alert Phase • Publishes notice at least once in a newspaper of general circulation in the areas affected at the inception of a Moderate Drought Alert Phase 	Reg 121-11.9	DNR
<ul style="list-style-type: none"> • <u>Maintains Drought Information Center</u> • Collects and disseminates information about the status of drought conditions and impacts on the economy and well-being of the State 	Reg 121-11.7	SCO/DNR

Scenario Time Point 1

Discussion Questions
Moderate Drought Statewide
July – August 2021

a. Questions for local water systems:

- How current is the information in your local drought response plan and ordinance? (For example, water system information, drought triggers and response actions, and contact information)
- What currently works well at this stage?
- What does not work well at this stage?

b. Questions for state agencies and other organizations:

- Does your organization have a plan in place for monitoring, responding to, and preparing for drought?
- What does your organization do at this stage of drought?
- Do you have the necessary information, personnel, and/or resources to respond to this stage of drought?
- If not, what would help your organization more effectively respond to and prepare for drought?

c. What, and how, is your organization communicating with the public?

Scenario Time Point 2

Response Actions

Severe Drought Statewide

December 2021

Response Actions: What Happens at Severe Drought Stage

- State

- DNR, SCO, DRC
 - Monitor conditions
 - Communicate and disseminate information
 - Make recommendations to assist water suppliers and users manage drought
- State agencies
 - Monitor conditions
 - Activities to address and/or alleviate impacts (agriculture, fire risks, water supplies)

- Water suppliers

- Review plans and ordinances
- Some may request voluntary or mandatory water use restrictions

- Basin

- USACE/SRB Drought Contingency Plan is in place
- LIPs are in place (Duke Energy)

Response Actions:

Additional Actions Available at Severe Drought Stage

- Communications

- DRC may request ESF-15 (Public Information) function to initiate public information campaign, with DNR
- Governor may encourage awareness and voluntary conservation in press release

- Curtailment of water use

- **“A drought of this severity normally requires an official declaration by DNR and water withdrawals and water use restrictions”** [Reg 121-11.2]
- **“During severe or extreme drought conditions,** the South Carolina Department of Natural Resources may require mandatory reduction or curtailment of non-essential water use in affected drought management areas if recommended by the Drought Response Committee in accordance with R.121-11.6.” [Reg 121-11.10]

Severe Drought – Response Actions

<u>Monitoring</u>	Document	Organization
<ul style="list-style-type: none"> The Drought Information Center shall routinely collect, monitor, and evaluate selected climatic, water-supply and water-use data as necessary to identify at an early stage the onset of drought or potential for drought, geographic extent of the affected area and changes in drought levels 	Reg 121-11.7	SCO/DNR
<ul style="list-style-type: none"> <u>This Severe Drought Alert Phase must be verified utilizing data, forecasts, and outlooks from various agencies. Indication by one index alone does not mandate a declaration.</u> 	Reg 121-11.8	DNR
<ul style="list-style-type: none"> Evaluates conditions within Drought Management Areas to determine if need exists for action beyond scope of local government Consults with and invites participation by representatives of municipalities, counties, Commissions of public works, public and private water suppliers, public service districts, power generation facilities, industries, special purpose districts and any other water users in the affected drought management area while evaluating drought conditions and preparing recommended actions 	Reg 121-11.6	DRC
<ul style="list-style-type: none"> During periods of moderate, severe or extreme drought, available drought related data, as appropriate, will be provided to the Drought Information Center by the South Carolina Department of Agriculture, South Carolina Emergency Preparedness Division, South Carolina Forestry Commission, South Carolina Department of Health and Environmental Control, as well as by any other State Agency that is either impacted by or has information on drought conditions. 	Reg 121-11.7	<ul style="list-style-type: none"> Dept of Agriculture Emergency Preparedness Division Forestry Commission DHEC Other state agencies impacted by drought or have information on drought conditions
<ul style="list-style-type: none"> <u>Appropriate agencies must accelerate monitoring activities</u> 	Reg 121-11.8	
<ul style="list-style-type: none"> <u>Various federal and local agencies may be asked to provide drought information on a voluntary basis.</u> 	Reg 121-11.7	

Severe Drought – Response Actions

<u>Communications</u>	Document	Organization
<ul style="list-style-type: none"> • Notifies and provides information to DRC regarding Drought Alert Phase in each Drought Management Area 	Reg 121-11.6	DNR
<ul style="list-style-type: none"> • Releases drought statements to the news media 	Reg 121-11.8	DNR
<ul style="list-style-type: none"> • Disseminates public information concerning all aspects of the drought at the inception of each drought alert phase. Initial action is public education, providing information as to existing and potential conditions and water conservation measures necessary to meet the demand for water at each drought alert phase. 	DRA [SEC 49-23-70] Reg 121-11.9	DNR
<ul style="list-style-type: none"> • Notifies by first class mail public water systems in the affected Drought Management Areas and other appropriate agencies and individuals at the inception of a Moderate Drought Alert Phase and each upgrading of the drought alert to a higher phase • Publish notice at least once in a newspaper of general circulation in the areas affected at the inception of a Moderate Drought Alert Phase and each upgrading of the drought alert to a higher phase 	Reg 121-11.9	DNR
<ul style="list-style-type: none"> • <u>Following determination of non-essential water use by the DRC, DNR will issue a declaration specifying areas affected and identifying categories of non-essential water use to be reduced or curtailed. Declaration will be distributed to water systems, news media, and newspapers of general circulation in each affected county.</u> 	DRA [SEC 49-23-70] Reg 121-11.10	DNR
<ul style="list-style-type: none"> • Maintains Drought Information Center • Collects and disseminates information about the status of drought conditions and impacts on the economy and well-being of the State 	Reg 121-11.7	SCO
<ul style="list-style-type: none"> • <u>May request ESF-15 (Public Information) function to initiate public information campaign, with DNR</u> 	EOP Appendix 10-8	DRC

Severe Drought – Response Actions		
<u>Curtailment of Water Use</u>	Document	Organization
<ul style="list-style-type: none"> • <u>Evaluates conditions within Drought Management Areas</u> to determine if need exists for action beyond scope of local government • If DRC determines that action in addition to local measures is necessary, <u>prepares recommendations to reduce or alleviate drought impacts and submits those recommendations to DNR for implementation</u> 	Reg 121-11.6	DRC
<ul style="list-style-type: none"> • <u>The DRC shall determine which categories of non-essential water use must be reduced</u> or curtailed after reviewing each category of water use 	DRA [SEC 49-23-70] Reg 121-11.10	DRC
<ul style="list-style-type: none"> • <i>During severe or extreme drought conditions</i>, the South Carolina Department of Natural Resources <u>may require mandatory reduction or curtailment of non-essential water use</u> in affected drought management areas if recommended by the Drought Response Committee in accordance with R.121-11.6. • The curtailment of water use may involve adjusting the quality of water to meet the water use; adjusting the time of water use; and/or utilizing different sources of water 	Reg 121-11.10	DNR
<ul style="list-style-type: none"> • DNR may promulgate regulations to specify categories of nonessential water use and other terms necessary to implement this section • DNR by regulation may provide for the mandatory curtailment of nonessential water uses during periods of severe or extreme drought in drought management areas 	DRA [SEC 49-23-70]	DNR

Scenario Time Point 2

Discussion Questions
Severe Drought Statewide
December 2021

- a. *How do inconsistencies at different organizational levels affect drought response and communications at this stage? For example:*
- State level: The Drought Response Committee encourages voluntary conservation and implementation of local ordinances and plans but does not recommend or impose mandatory restrictions.
 - Local level: Water systems ask for no, voluntary, or mandatory restrictions.
 - Basin level: Many basins have Low Inflow Protocols (LIPs) or other reservoir management plans and procedures, others do not have a coordinated approach.

b. Are local ordinances and plans up-to-date and consistent with other drought plans in your area (i.e., wholesale customers, neighboring communities) or basin (i.e., LIPs)?

- Are actions at the severe drought stage, as outlined in the plans, adequate and effective?
- Are wholesale customers required to implement conservation?

c. How are other sectors (agriculture, forestry, industry) responding to drought?

d. What, and how, is your organization communicating with the public?

e. What challenges are evident at this drought stage?

Scenario Time Point 3

Response Actions

Extreme Drought Statewide

July – August 2022

Summary of Conditions and Impacts

Widespread impacts to agriculture, fire risks, water systems, and water-dependent industries and businesses

- 30% of corn, hay, and other crops already lost
- Cattle producers are bringing in hay
- 27 counties declared USDA-federal disaster areas
- 24 Class D fires, 200 Class C fires, 15,000 acres burned
- Higher-than-normal, widespread fire activity taxing local resources
- Most water systems have requested voluntary restrictions, 1/3 have mandatory restrictions
- Some water systems and dischargers pursuing additional conservation and supply measures
- Recreation and tourism businesses losing customers, cancelling events

Response Actions: What Happens at Extreme Drought Stage

- DRC, DNR
 - May require mandatory reduction or curtailment of non-essential water use
 - May recommend that the Governor issue a public statement that an extreme drought situation exists and that appropriate restrictions be imposed
- DNR
 - Reviews and makes determination on variance requests
 - Mediates disputes regarding competing water demands
- State agencies
 - Monitor conditions
 - Collect information about impacts
 - Activities to address impacts

- Water suppliers
 - Determine if mandatory restrictions are required based on drought/water supply triggers
 - Goal is to reduce overall water use by 25%
 - Communications to customers, local media, DNR
 - Additional measures (next slides)

- Basin
 - Drought Contingency Plan is in place (USACE/SRB)
 - LIPs are in place (Duke Energy)

Additional Actions

- The SC Forestry Commission may request an Executive Order from the Governor to activate the National Guard for state duty, to assist with fire suppression
- Depending on local response, the Governor may issue a press release requesting voluntary water conservation

Water System Actions at Extreme Drought Stage

- Mandatory restrictions – the following water uses to be eliminated:
 - Landscape irrigation
 - Washing of hard surfaced areas, buildings, gutters, vehicles
 - Fountains, ponds, decorative water bodies
 - Filling or maintaining swimming pools
 - Obtaining water from fire hydrants (for purpose other than fire fighting, flushing to maintain water quality)

- Limit normal water use:
 - Restaurants
 - Scenic and recreational water bodies
 - Golf course irrigation
- Limit:
 - expanding commercial nursery facilities
 - placing new irrigated agricultural land in production
 - planting or landscaping when required by site design review purpose

Document: Model Drought Response Ordinance, Section D, “Extreme Drought Phase”

Water System Actions at Extreme Drought Stage

- Intensify efforts to identify and correct water leaks in the distribution system
- Cease installation of new irrigation taps on the water system
- Outline other conservation measures, for example:
 - Place moratorium on issuance of new water service connections and contracts for all new water main extensions
 - Encourage all residential customers to reduce overall usage to 70% of average usage
 - If voluntary reductions are not successful, implement excessive use rate schedule
 - Impose a drought surcharge
 - Reduce water system pressure

Document: Model Drought Response Ordinance, Section D, “Extreme Drought Phase”

Water System Actions at Extreme Drought Stage

- **Communications:**
 - Widely publicize penalties for violations of mandatory restrictions
 - Expand use of education and public relations efforts
 - Provide written notification monthly to DNR regarding success of mandatory restrictions

Document: Model Drought Response Ordinance, Section D, “Extreme Drought Phase”

- **Enforcement of Restrictions:**
 - Add surcharges to water bills
 - Terminate water service
- **Variations:**
 - Customers unable to comply with mandatory restrictions may petition for a variance within 10 working days after the issuance of restrictions

Document: Model Drought Response Ordinance, Section F (“Enforcement of Restrictions”) and Section D (“Variations”)

Scenario Time Point 3

Discussion Questions
Extreme Drought Statewide
July – August 2022

a. How do inconsistencies at different organizational levels affect drought response and communications at this stage?

- State level: The Drought Response Committee does not impose mandatory restrictions, but requests implementation of local ordinances and mandatory restrictions if indicated by plans.
- Local level: Water systems and communities are implementing and enforcing water use restrictions.
- Basin level: Plans may be at different levels of drought and response actions.

b. Are local ordinances and plans up-to-date and consistent with other drought plans in your area or basin?

- Are actions at the extreme drought stage, as outlined in the plans, adequate and effective?
- Are there different criteria for wholesale v. individual customers?
- To what extent are ordinances and restrictions coordinated across neighboring water systems and communities?

*c. How are the agriculture and forestry sectors being affected and responding?
How are aid and assistance programs working?*

- What is required to seek assistance from other states?

d. How are industry and individual businesses responding?

- They are not required to have a drought plan, but might be considered a non-essential water use.

e. What, and how, is your organization communicating with the public?

f. What challenges are evident at this drought stage?

Scenario Time Point 4

Response Actions

Extreme Drought Intensifies

January 2023

Summary of Conditions and Impacts

Conditions are deteriorating. Safety, health, and welfare are threatened. Drought Response Committee decides that State measures are necessary.

- Streamflow and reservoir levels are at record lows
- LIPs are at highest stage of drought severity
- 40 counties given USDA disaster declarations
- Continuing increased risk of more, and more intense, wildfires
- 29 Class D fires (100-299 acres), 400 Class C fires (10-99 acres)
- Many water systems have reported water quantity and/or quality concerns to DHEC
 - 60 water systems report 100 days (or less) of water supply remaining
 - 15 water systems pursuing emergency supplies and interconnections
 - Saltwater intrusion into coastal water supplies
- Recreational facilities across the state have been closed

Response Actions: What Happens at this Stage

- DRC submits recommendations to DNR to alleviate impacts.
- DRC evaluates non-essential water uses that can be curtailed.
- DRC recommends that Governor issue public statements about drought conditions.
 - A first statement may recommend voluntary water use and withdrawal conservation.
 - A second statement may recommend or impose mandatory restrictions on water use and withdrawals.
- DRC notifies SCEMD that drought conditions have progressed to a level that may require activation of the Emergency Operations Plan (EOP)

Documents: Drought Response Act [SEC 49-23-70, 49-23-80]; Regulations 121-11.10; EOP Sec. V

Curtailment of Water Use

Response Actions

Extreme Drought Intensifies

January 2023

Drought Regulations 121-11.10

- During severe or extreme drought conditions, the South Carolina Department of Natural Resources may require mandatory reduction or curtailment of non-essential water use in affected drought management areas if recommended by the Drought Response Committee in accordance with R.121-11.6.
- The curtailment of water use may involve
 - adjusting the quantity of water used;
 - adjusting the quality of water to meet the water use;
 - adjusting the time of water use; and/or
 - utilizing different sources of water.

Essential Water Use

- Firefighting
- Health and medical purposes
- Agricultural operations for food production
- Minimum streamflow requirements
- Minimum levels in potable drinking water supplies, groundwater tables
- Public health and safety requirements

Document: Drought Response Act [SEC 49-23-70 (C)]

Non-Essential Water Use

- Agricultural operations for nonfood production, and nonessential water users that may suffer a critical economic loss as a result of mandatory curtailment, have **priority** over other nonessential water users.
- Agricultural operations for nonfood production and nonessential water users that may suffer a critical economic loss as a result of mandatory curtailment must certify to the Drought Response Committee the nature of the loss in order to qualify for the higher priority nonessential use.
- **Mandatory curtailment** of nonessential water use shall become effective only **after the Drought Response Committee determines the action to be reasonably necessary to ensure supplies of water** in drought management areas.

Document: Drought Response Act [SEC 49-23-70 (C)]

Upon such a finding, the Drought Response Committee shall determine which categories of nonessential water must be curtailed after reviewing each category by the following standards:

Documents: Drought Response Act [SEC 49-23-70 (C), 49-23-80]; Regulations 121-11.10

- 1) Purpose of the use;
- 2) Suitability of the use to the watercourse, lake, or aquifer;
- 3) Economic value of the use;
- 4) Social value of the use;
- 5) Extent and amount of the harm it causes;
- 6) Practicality of avoiding the harm by adjusting the use or method of use of one person or the other;
- 7) Practicality of adjusting the quantity of water used by each person;
- 8) Protection of existing values of water uses, land, investments, and enterprises;
- 9) Consumptive or non-consumptive nature of the use;
- 10) Impacts on essential water uses

Non-essential water uses shall be evaluated in accordance with the following categories:

(1) Agricultural use;

(a) Irrigation;

(2) Commercial use;

(a) Commercial domestic use;

(b) Commercial process use;

(3) Domestic use;

(a) Inside use;

(b) Outside use;

(4) Electric Power Generation

(5) Industrial use;

(a) Industrial domestic use;

(b) Once through cooling;

(c) Industrial process use;

(6) Institutional;

(7) Recreational

Documents: Drought Response Act [SEC 49-23-70 (C)]; Regulations 121-11.10

Drought Regulations 121-11.10 (D) - Communications

- Following determination of non-essential water use, by the Drought Response Committee, the South Carolina Department of Natural Resources shall issue a declaration specifying the drought management areas affected and identifying the categories of non-essential water use to be reduced or curtailed.
- The declaration shall be sent to water systems, widely distributed to the news media, and published at least once a week in a newspaper of general circulation in each county affected.

Document: Drought Response Act [SEC 49-23-70 (C)]

Drought Regulations 121-11.10 (E) - Variances

- Any person adversely affected by mandatory curtailment may, within ten days after such curtailment becomes effective, submit appropriate information to the South Carolina Department of Natural Resources and seek a variance from the curtailment.
- Request includes detailed statement how mandatory curtailment adversely affects person making the request
- DNR or person making request may request a meeting to discuss
- DNR staff makes determination regarding variance request
 - Within 5 days of receipt of all information or within 20 days of curtailment declaration, whichever comes first

Document: Drought Response Act [SEC 49-23-70 (C)]

Mediation of Disputes

Response Actions

Extreme Drought Intensifies

January 2023

Drought Regulations 121-11.11 - Mediation

- (A) **During any drought alert phase, the South Carolina Department of Natural Resources shall offer its services to mediate any dispute arising from competing demands for water.** The mediation may be undertaken only upon the request of the parties involved and may not be binding.
- (G) **A party affected by a declaration of the Drought Response Committee has the right to appeal that action to the Administrative Law Judge Division.** The appeal must be filed within five days of the declaration. The filing of an appeal operates as an immediate stay of the declaration of the Drought Response Committee as it affects the appellant. **A review of the immediate stay must be heard by the Administrative Law Judge Division within five days of the filing of the notice of appeal with the Administrative Law Judge Division.** All issues under appeal must be heard as a contested case pursuant to the provisions of the Administrative Procedures Act and the rules of the Administrative Law Judge Division.

Document: Drought Response Act [SEC 49-23-70 (D)]

Scenario Time Point 4

Discussion Questions
Extreme Drought Intensifies
January 2023

a. What resources, information, or additional capacity does the DRC need to assess conditions and recommend actions at this drought level?

b. How will the equitable allocation of water be determined?

- Drought Response Act Sec. 49-23-80

c. If the DRC requests mandatory restrictions, will affected parties appeal to the Administrative Law Judge, which has 5 days to hear the case?

- How will this affect timeliness and effectiveness of conservation and response efforts?

d. When, and how, is your organization communicating with the public?

e. When exactly will the SC Emergency Operations Plan be activated?

f. How long will the State Emergency Response Team (SERT) be activated?

- For a drought event, activation could last for months, or longer.

g. When is a SCEMD Drought Response Working Group formed to develop response, recovery, and mitigation plans in response to extreme drought conditions?

Scenario Time Point 5

Response Actions

Emergency Operations Plan is Activated

February-April 2023

Summary of Conditions and Impacts

Safety, health, or welfare of people or infrastructure is seriously threatened or impacted

- Communities have initiated water restrictions or rationing
- Community water supplies are continuing to be depleted to the level of exhaustion
- Local utility companies have begun shutting down power generation
- The requirement of firefighting resources beyond the capabilities of the SCFC and implementation of Fire Fighter Mobilization Plans or the Southeastern Forest Fire Compact
- **The DRC recommends plan activation**

Response Actions – Preparedness Phase

- Communications

- DRC may request ESF-15 (Public Information) function to initiate public information campaign, with DNR
- Governor may encourage awareness and voluntary conservation in press releases

- State agencies

- Each State agency develops list of actions to conserve internal water usage by 10%
- All State agencies will develop and refine drought response measures that they can implement. This would include, for example, developing and recommending changes to current drought legislation, relief support, and tracking impacts.

Response Actions: EOP is Activated

- State Emergency Operations Center (SEOC) and State Emergency Response Team (SERT) are activated
 - SERT develops Drought Emergency Executive Order for Governor.
 - SERT, with DRC, works with local EM directors and water suppliers to develop response and recovery measures.
 - The Governor may issue emergency regulations to require curtailment of withdrawals.
 - State agencies are required to reduce water use by 10%.
- Other SERT activities
 - Distribute donated or purchased water
 - Coordinate with DHEC, FEMA, USACE to assist with drilling of new water wells, desalinization, purification, or related projects
 - Provide temporary shelter for citizens without access to water
 - Provide relief assistance to affected communities and individuals

Scenario Time Point 5

Discussion Questions

Emergency Operations Plan is Activated

February – April 2023

Review the agency-specific actions outlined in the EOP:

- a. Are the necessary resources, expertise, and capacity available to fulfill these actions?*
- b. What tasks or actions are not listed here, but should be included?*
- c. When, and how, is your organization communicating with the public?*
- d. What challenges do you foresee in implementing the Emergency Operations Plan?*

e. Does the Governor seek a federal disaster declaration? Are Individual and Public Assistance funding programs available?

f. What legislative action might be required?

g. How long will the SERT be activated?

h. How will SC coordinate with other states?

- Extreme drought conditions will likely affect our neighbors as well.

Response Actions – By Agency/Organization

Governor

- May declare a State of Emergency or a Drought Emergency by Executive Order
- May issue emergency regulations to require curtailment of withdrawals or allocate water on an equitable basis
- May seek a Federal Disaster Declaration in order to receive Federal resources

ESF 15 (Public Information)

- Issue weekly press releases providing updates on drought status and actions being taken
- Provide information on relief programs available from both the State and Federal level

Response Actions – By Agency/Organization

SCEMD

- In coordination with the Drought Response Committee, advise the Governor regarding the necessity of authorizing the SC Department of Transportation (SCDOT) to grant temporary overweight/overwidth exemptions to carriers transporting essential emergency relief supplies into and through South Carolina in order to support disaster response and recovery.

SCEMD

- For impacted communities, provide access to State and Federal assistance programs in dealing with a drought emergency.

Response Actions – By Agency/Organization

SERT

- Develop response plans based upon the situation.

SERT

- Some of the remediation could include hauling water, drilling new wells, providing temporary hook ups to other water systems, and coordinating rationing operations

Recovery Actions

- Continue drought response activities and monitoring of the drought indicators.
- Assist with implementation of State and Federal relief programs

- Seek Federal disaster declarations for both Individual and Public Assistance funding

Mitigation Actions [[reference Hazard Mitigation Plan here?](#)]

- Develop programs and projects to improve water storage and collection capability within the State
- Continue to develop interoperability between different water systems and river basins
- Develop and implement long term conservation measures to reduce water usage as the population continues to grow
- Coordinate with surrounding States to develop a Regional Drought Mitigation Plan

- Develop and implement permanent solutions to alleviate water shortage issues
- Encourage the development of drought mitigation plans for industry and municipal public works departments
- Establish a groundwater well monitoring system to assess hydrologic changes and monitor drought conditions as recommended by the State Water Plan

Agency Responsibilities - General

- Upon notification of activation of this plan, all State agencies involved in drought response will provide representatives to staff the SEOC
- Agencies represented on the Drought Response Committee will provide members to the SCEMD Drought Response Working Group

Agency Responsibilities - SCEMD

- Coordinate and direct restoration and recovery operations when local government resources are exhausted
 - Establish a working group to develop response, recovery, and mitigation plans in response to severe or extreme drought conditions within the State
 - Develop and initiate a statewide public information campaign as requested by the Drought Response Committee
- Develop and initiate a statewide public information campaign as requested by the Drought Response Committee
 - Provide impacted populations access to State and Federal assistance programs in dealing with a drought emergency
 - Review and update this plan annually

Agency Responsibilities – SC DNR, State Climatology Office

- Provide the Drought Response Committee notification of the onset of each Drought Alert Phase in Drought Management Areas
 - Continue to evaluate information from various sources and provide updates on the State drought assessment
 - In coordination with the DHEC, develop a state-wide groundwater well monitoring system to assess well water levels
- Evaluate climate outlooks and forecasts to provide information regarding future conditions for the State.
 - Continue to work with the Drought Response Committee to develop and promote conservation and mitigation programs at the local level across the State
 - Assist in drafting the Governor's Executive Order

Agency Responsibilities – SC Forestry Commission

- Provide SCEMD a daily update once the 100 wildfires/day threshold has been reached, and the Fire Fighter Mobilization plan or the Southeastern Forest Fire Compact has been activated

- Upon activation of this plan, be prepared to deploy one or more Incident Management Teams to support drought response activities

Agency Responsibilities – SC Department of Commerce

- Compile economic loss data from impacted areas of the State by either sector or region
 - Identify major commercial and industrial problem areas
- Where possible, compile the loss of sales tax revenues, increase in unemployment, and decreases in tourism levels or lodging receipts to aid in Federal Disaster Declaration determinations

Agency Responsibilities – SC Department of Health and Environmental Control

- Work with the Drought Response Committee to ease or waive well drilling permit restrictions, as necessary, to support mitigation plans

- Assist SCDNR in their development of a statewide groundwater well monitoring system
- Maintain records including locations of public water supply facilities

Agency Responsibilities – Clemson Extension, SC Department of Agriculture

- Compile agricultural loss data from impacted areas of the State by either sector or region

- Develop and maintain plans to assist in:
 - Feeding & watering or evacuating large farm animals
 - Poultry water usage for drinking and evaporative cooling
 - Dairy industry water needs for sanitation
 - Swine industry drinking water and waste management

Agency Responsibilities –SC Office of Regulatory Staff

- Monitor the nuclear power producing and hydro-electric facilities power production and report any loss of capability due to lack of water

- Assist in gathering economic loss information from the energy producing sector in the State

Agency Responsibilities –SC National Guard

- Develop plans to support water hauling operations to include providing security
 - Upon activation of the SERT, provide an equipment list of water transport equipment and water purification equipment available within the state
- Develop plans to assist in the evacuation of citizens from drought stricken areas to temporary shelter locations within the State

Agency Responsibilities –US Army Corps of Engineers

Upon a request from the Governor, USACE may provide the following programs to assist with drought relief:

a. The Emergency Well Construction and Water Transport Program

(1) Provides for the construction of wells and/or the transport of water to farmers, ranchers, and political subdivisions that are drought distressed.

(2) USACE will transport the water at no cost; however, the cost of the water is the responsibility of the requesting organization

(3) USACE will also contract drilling of new wells, but the requesting jurisdiction must pay for the services

b. Other programs available include selling of USACE's reservoirs of surplus water and planning assistance in the development of a state drought contingency plan. The planning assistance is a 50-50 cost share program.

Agency Responsibilities –US Army Corps of Engineers

- USACE cannot provide water for livestock, irrigation, or commercial/industrial processing

- Additional USACE assistance is outlined in Attachment B (Programs Available to Support Drought Response)

Agency Responsibilities –

National Oceanic and Atmospheric Administration (NOAA)

Drought Monitoring

- US Drought Monitor
- Short- and long-term drought indicators blends and products

Climate forecasts and outlooks

- National Weather Service (NWS) Climate Prediction Center
 - Monthly Drought Outlook
 - Seasonal Drought Outlook
 - Hazards Outlook
 - Precipitation and temperature outlooks (3-7 days, 6-10 days, 8-14 days, 1 month, 3 months)

Agency Responsibilities – Small Business Administration and US Department of Agriculture

Upon declaration of an agriculture disaster by the Secretary of Agriculture, both agencies can provide drought assistance in the form of disaster relief loans for farmers and small business owners [See Attachment B (Programs Available to Support Drought Response)].

Attachment B – Other Programs and Resources - USDA

Farm Service Resources

- SC Farm Service Agency Office
 - County FSA Offices
- Disaster Assistance Programs
- FSA Hay Net

Conservation and Livestock Assistance

- FSA Emergency Conservation Program (ECP)
- FSA Livestock Forage Disaster Program (LFP)
- FSA Livestock Indemnity Program (LIP)
- NRCS Drought Assistance
- Rural Development: Emergency Community Water Assistance Grants

Attachment B – Other Programs and Resources - USDA

Crop Insurance Assistance

- FSA Noninsured Crop Disaster Assistance Program
- Risk Management Agency

Credit Assistance

- FSA Emergency Farm Loans
- FSA Guaranteed Farm Loan Program

Attachment B – Other Programs and Resources – Department of Commerce

Small Business Administration

- Economic Injury Disaster Loan program provides small-interest loans to businesses and small agricultural cooperatives suffering uninsured economic injury due to a disaster, including drought. Loan maximum limit is \$1,500,000 and either a Presidential, SBA or USDA disaster declaration must be made

Economic Development Administration

- Provides 75-25% cost-sharing grants to the State and local governments, certain Private Non-Profit (PNP) organizations, and Indian tribes to assist development and implementation strategies that address adjustment problems resulting from sudden and severe economic dislocation

Attachment B – Other Programs and Resources – US Army Corps of Engineers

- USACE may provide temporary emergency water assistance for human consumption/usage to a drought distressed area to meet minimum public health and welfare requirements
- USACE assistance is supplemental to state and local efforts. Long term solutions to water supply problems are the responsibility of state and local interests

Additional criteria and conditions listed under III. A. 3-7

Types of Assistance

- Transport of water to local water points
- Distribution of bottled water
- Temporary connections of a new supply to existing distribution systems
- Installation of temporary filtration
- Use of military units with water purification, storage, or distribution capability

USACE assistance for above measures will be at 100% federal cost

Wells constructed by applicant will be paid for by applicant

Attachment B – Other Programs and Resources – FEMA

With a Presidential Disaster Declaration, under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Section 403, Essential Assistance, Direct Federal Assistance (DFA) may be authorized to provide assistance in order to

- Save lives and preserve property
- Provide for the public health and safety, including provision of food, water, medicine, and other essential needs, including movement of supplies or persons

Public Assistance (PA) assistance may be authorized to reimburse the State and local applicants and Indian tribes for water resources they have contracted for and acquired for mass care purposes

- These missions would be cost-shared at not less than 75% Federal share

Attachment B – Other Programs and Resources – EPA

- EPA may be issued a technical assistance mission assignment to conduct environmental assessments of potable water situation, and provide guidance to the State, local governments, and Indian tribes for meeting safe water drinking standards.
- Technical assistance provided through the EPA is at no cost to the State

Attachment B – Other Programs and Resources – Health and Human Services/Public Health Service

- HHS/PHS may be issued a technical assistance mission assignment to assess the public health situation at risk and make appropriate recommendations to the State, local governments, and Indian tribes to preserve public health and safety standards. Technical assistance provided through the HHS/PHS is at no cost to the State.
- HHS/PHS may be issued a DFA mission assignment to provide the necessary public health and medical assistance and commodities needed such as Disaster Medical Assistance Teams (DMATs) or medical supplies if the State and local governments cannot provide them.
- Assistance provided during Presidential Disaster Declarations is subject to 75% federal cost sharing. Costs for assistance provided without of a Presidential Disaster Declaration are absorbed by the State

Attachment B – Other Programs and Resources – Disaster Unemployment Assistance

- May be provided to those applicants who lost their jobs due to the drought not to exceed 26 weeks of assistance after a disaster is declared

Attachment B – Other Programs and Resources – Fire Suppression Grants

- May be provided from the President's Disaster Relief Fund for use in a designed fire complex at the request of a Governor and concurrence from the USFS Principal Advisor to FEMA which threatens life and property and constitutes a threat of a major disaster

- This is a reimbursement grant for the State's wildfire fighting costs. The State must first meet annual floor cost (5% of the State's average annual expenditures for firefighting) on a single declared fire. Then FEMA will pay 70% of costs for that declared fire and all subsequent declared wildfires.
- After the State's costs exceed annual average, FEMA will pay 70% of all costs for declared fire with no deduction for floor costs. After the State's costs exceed twice the annual average, then FEMA will reimburse 100% of the State's eligible costs.

Attachment B – Other Programs and Resources – American Red Cross (ARC)

- Under its own authorities, ARC may provide the following:
 - Technical consultation and guidance to State and local governments when planning for water distribution to residents
 - Establishing and staffing designated water distribution sites
 - Coordinating voluntary agency activities designed to support local community response efforts
 - Providing voluntary personnel to assist local government response actions, including providing limited potable water quantities.
- ARC does not provide assistance to commercial, industrial or agricultural corporations with drought or water-shortage caused losses