

**Short Term Response Actions**

Action	Category	Description	Timeframe	Estimated Cost	Lead Entity(ies)
<b>General Drought Response for Short Term Response Actions</b>					
<b>Tier 1</b>					
Well Sounding	Water Supply	Domestic well owners could utilize well soundings to measure the depth-to-water level during a drought emergency. Well sounding can provide critical information about the status of a system's well(s), particularly over time.			
Water Stations	Emergency Potable Water Supply	Short term transplant and filling of water stations could provide SWS and domestic well owners with an emergency source of water supply. The County would work with vendors to transplant and fill these water stations for vulnerable communities. The County would approve the water source(s) to ensure that the water being transported to communities is sufficient to handle the immediate need for clean drinkable water.  Additionally, the county could provide installation of small water tanks for SWS to have ready to receive emergency water, or to maintain a small amount of backup supply.			
Packaged or bottled water	Emergency Potable Water Supply	Short -term transportation of packaged or bottled water could provide SWS and domestic well owners with an emergency source of water supply. The County would work with vendors to transport in packaged or bottled water for vulnerable communities. The County would approve the water source(s) to ensure that the water being transported to communities is sufficient to meet the immediate need for clean drinkable water.			
Water Hauling	Emergency Potable Water Supply	The County would work with vendors to haul in water or complete bulk deliveries for vulnerable communities. The County would approve the water source(s) to ensure that the water being transported to communities is sufficient to handle an immediate need for clean drinkable water.			
Regulatory Action	Water Conservation	The County would put policies and programs in place aimed at conserving the water storage in communities with higher vulnerability.			
Water Conserving Programs	Water Conservation	The County would launch program(s) that work with domestic well and SWS users to save water around their households. Program conservation recommendations would be based on the State suggestions, i.e., small water systems should be instructed on how to treat stored water and maintain safe water supplies using storage tanks, etc.			
Establish Network of Vendors and County Contacts	Planning and Assistance	The County could provide SWS and domestic well communities with an established network of vendors and County contacts prior to a drought emergency that could be utilized to obtain personnel, equipment, materials, and/or associate services from other utilities to restore critical operations impacted.			
<b>Tier 2</b>					
County Policy Streamlining	Planning and Assistance	The County could utilize the emergency declaration to set up short-term procedures and protocols that would allow for certain permit streamlining and improved coordination.			
Task Force Meetings and Community Outreach	Planning and Assistance	The County would work with the established Task Force to increase the frequency of meetings and community outreach efforts to domestic wells and state water system communities.			
Community Outreach	Planning and Assistance	A short-term increase in domestic well and SWS form meetings could help with the policies and actions in place to help communities with higher vulnerability during water shortage events. The County would work with the Task Force and local support to distribute educational materials, hold public meetings and townhalls, send out informational emails and mailer, and update the County and City websites.			

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<b>Tier 3</b>					
Water Quality Response	Water Supply	In the event that poor water quality is discovered, SSWSs may be able to take advantage of point of entry (POE)/point of use (POU) water treatment systems. Income-limited residents served by a SSWS will be eligible to receive financial assistance for POE/POU treatment systems for two-to-three years.			
Treatment of Water from Alternate Sources	Emergency Potable Water Supply	Short-term chemical treatment could provide SWS with an emergency source of supply during disruptions. The State Drinking Water Program or County Health Department would be required to approve the water source and/or treatment unit to ensure that the treatment is sufficient for addressing the source water contamination.			
Partnership with Non-Governmental Organizations	Planning and Assistance	The County would work with NGOs to provide alternative actions for current drought or water emergencies. These NGOs would focus on SWS and domestic wells with immediate need. The County would weigh all possible options jointly for funding and assistance opportunities with the partnership of NGOs.			
Regulation for water rationing and conservation	Planning and Assistance	Implementing short-term policies and guidelines for domestic well and SWS communities could help promote conservation efforts when clean water is available. The established Task Force would work with the County and City personnel to implement water rationing and conservation policies to reduce water usage during water shortage events.			
Emergency Personnel	Planning and Assistance	The County would work with local emergency personnel to establish call networks and point of contact information for immediate emergency situations. Local fire, police, and paramedics would be involved with this effort.			

**Long-Term Mitigation Strategies and Actions**

Action	Category	Description	Timeframe	Estimated Cost	Lead Entity(ies)
<b>General Drought Response for Long Term Mitigation Strategies and Actions</b>					
Education	General	The County would work with local agencies to promote water conservation and other drought related education through outreach and educational materials. Primary focus would be for SWS and domestic well users.			
Conservation Management Plan and Implementation.	Wildfire	The County would develop and implement a conservation management plan to reduce wildland fire risk through appropriate best management practices.			
Construct Surface Water Storage	Water Infrastructure	The County would construct more surface water storage, including lined reservoirs with higher capacities.			
Develop Groundwater Sources	Water Infrastructure	The County would develop groundwater sources to supplement the surface water supply during drought.			
Installation of water measuring	Water Infrastructure	Installation of flow meters, groundwater-level measuring devices, and a well-monitoring network to monitor water use and levels in the County service areas.			
General	Education	Create and maintain a web portal with county information, permits, and forms in one place; develop an online mapping and data tool. Ensure that portals and tools are simple, accessible, and easy to navigate to remove avoidable associated barriers.			
General	Communications	Collect, standardize, update, and publish service areas boundaries for all water suppliers as a critical step toward having the necessary tools to assess risk to drought and water shortage and engage water system consolidations and regional partnerships. Water service area boundaries would also be important geospatial datasets for estimating and projecting utility populations and water demand for water supply planning, providing information to the public about their water supplies and drinking water quality, and for emergency response.			
General	Water Infrastructure	Install water treatment facilities to allow SWS to utilize water sources that were previously unusable and provide water supply redundancy.			
General	Water Infrastructure	Perform infrastructure upgrades to improve the reliability of a SWS' delivery system and reduce system losses. This effort could include managing system water pressure, repairing aging pipelines, replacing outdated meters, etc. Updates to infrastructure would not only improve water supply reliability and efficiency but also increase the likelihood that a PWA would consolidate with a smaller system.			
General	Water Infrastructure	Emergency interties could provide SWS with an additional source of supply by allowing water to be transferred from a system with a supply surplus. Establishing interties would require identifying potential sources, assessing the capacity and feasibility of interconnections, and installing the necessary infrastructure to facilitate the transfer of water.			
General	Water Infrastructure	Improve the efficiency of existing irrigation systems for lawns, small agriculture plots, and/or orchards to help reduce water use and decrease demand. Installing the appropriate irrigation system type could reduce evaporation, percolation, and runoff.			
General	Communications	Create and maintain a dry well reporting system during drought or water shortage events to provide insight into the availability of groundwater resources. The ability to easily identify areas that are experiencing groundwater depletion will allow County staff to effectively implement water conservation measures and other emergency response actions. While DWR has an established dry well reporting system, well owners may be hesitant to report dry wells to the state due to concerns about citations/sanctions; many users may be more willing to share dry well information with the County rather than the State.			

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General	Planning	Develop drought preparedness and Water Shortage Contingency Plans to help SWS and rural communities better prepare for drought events by providing an assessment of drought vulnerability, identifying actions to reduce drought vulnerability, establish drought response triggers, and develop a staged demand-reduction program.			
General	Planning	Develop an emergency response or drinking water distribution plan to outline the procedures and protocols for responding to water supply emergencies, such as drought or water shortage events. The plan will typically include strategies for maintaining and distributing a safe and reliable supply of drinking water to the affected population/community during an emergency situation.			
Technical Assistance	Planning	The County could provide technical assistance and additional resources to help navigate many of these drought preparation and planning, which is often prohibitively expensive and time-consuming for water systems—particularly for SWS with fewer resources.			
General	Communication / Outreach	Provide assistance to SWS and well owners to identify and pursue funding opportunities available at the State and federal level to more quickly distribute monies for infrastructure repairs, improvements, and other necessary measures. This effort would help in the event that it is cost-prohibitive for a water system to implement short-term response actions and long-term mitigation actions, and difficult to navigate different funding mechanisms.			
Technical Assistance	Education	Collaborate with SAFER and support their Water Partnership Trainings to help raise awareness about potential opportunities for support and/or consolidation. Periodically, SAFER hosts Water Partnership Trainings to inform SWS of the support SAFER can provide (e.g., technical, financial, managerial assistance) them and to bring awareness to the various types of partnerships and consolidations they can utilize.			
Connect SWS to larger systems or storage basins	Infrastructure	Build or maintain a physical interconnection between water systems to permit the exchange or delivery of water between those systems. Prioritize connections with water systems without backup supplies and/or few resources.			