



Assembly
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ASSEMBLY COMMITTEE ON
ENVIRONMENTAL SAFETY AND TOXIC MATERIALS

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To: Members of the Assembly Committees on Environmental Safety & Toxic Materials and on Health

From: Assemblymember Luis Alejo, Chair

Subject: Joint Oversight Hearing on the Impact of the Drought on Vulnerable Communities' Access to Drinking Water

The Assembly Committee on Environmental Safety and Toxic Materials (ESTM), along with the Assembly Committee on Health, will hold a joint oversight hearing on Tuesday, February 18, 2014, to review the impact of the 2013- 2014 drought on vulnerable communities' access to safe drinking water and to investigate how California's Drinking Water Program (DWP), which is housed at the California Department of Public Health (CDPH), plans to address this challenge.

At the hearing, Committee members will gather information and take testimony on policy issues associated with drought-related drinking water issues. In particular, the CDPH has been provided the following questions to address at the hearing during their testimony:

- 1) The CDPH announced that it has identified and offered support to 17 rural communities with vulnerable drinking water systems due to drought conditions.
 - a) What is the status of action on the 17 identified drinking water systems, and how does CDPH plan to address additional drinking water systems that are at immediate risk?
 - b) Which drinking water systems may lack adequate water supplies to provide adequate drinking water and emergency water during the drought?
 - c) Which drinking water systems are likely to suffer a decline in water quality as a result of ongoing drought conditions?
 - d) What steps are being taken to address the risk to underserved communities without adequate water supplies that are uniquely affected by ongoing drought conditions?
 - e) How will CDPH's drought response integrate with the ongoing DWP project to bring 63 small community public water systems that currently violate primary drinking water quality standards into compliance?

- 2) What is the financial condition of the State's Safe Drinking Water Revolving Fund, including the balance of unencumbered funds?
- 3) What is the status of the State's "Section 75021 Emergency Grant" funds, and are these funds available for actions specific to water systems impaired by drought conditions?
- 4) What steps is CDPH taking to prepare for the broader public health risks associated with ongoing drought conditions?

Background

Drought State of Emergency. At the end of 2013 and the beginning of 2014, state water officials announced that California's rivers and reservoirs were below their record lows and that the state's snowpack's water content was at about 20 percent of normal average for that time of year. As California faced water shortages in the driest year in recorded state history, on January 17, 2014, Governor Edmund G. Brown Jr. proclaimed a State of Emergency and directed state officials to take all necessary actions to prepare for the drought conditions. In the State of Emergency declaration, Governor Brown directed state officials to ensure that the state can respond if Californians face drinking water shortages. Specifically, Governor Brown ordered:

"The state's Drinking Water Program will work with local agencies to identify communities that may run out of drinking water, and will provide technical and financial assistance to help these communities address drinking water shortages. It will also identify emergency interconnections that exist among the state's public water systems that can help these threatened communities."

Drinking Water Supply Shortages. Following the Governor's declaration of a State of Emergency, on January 28, 2014, CDPH announced that it had identified and offered support to 17 rural communities with vulnerable drinking water systems due to drought conditions. The 17 rural drinking water systems identified serve communities that range in size from 39 to approximately 11,000 Californians.

According to CDPH, the list of 17 communities was developed by surveying the state's community water systems and may change as solutions for these systems are implemented and additional vulnerable systems are identified. CDPH asserted that the 17 identified communities may face severe water shortages in the 60 to 100 days following the announcement.

CDPH's DWP initially identified the following drinking water systems as those at greatest risk:

- Shaver Lake Heights Mutual Water Company (Fresno County)
- Sierra Cedars Community Services District (Fresno County)
- Bass Lake Water Company (Madera County)
- Whispering Pines Apts (Mariposa County)
- Boulder Canyon Water Association (Kern County)
- Cypress Canyon Water System (Kern County)

- Lake Of The Woods Mutual Water Company (Kern County)
- Camp Condor (Kern County)
- Jackson Valley Irrigation District (Amador County)
- City of Willits (Mendocino County)
- Redwood Valley Community Water District (Mendocino County)
- Brooktrail Township Community Services District (Mendocino County)
- Washington Ridge Conservation Camp (Nevada County)
- Ophir Gardens (Placer County)
- Lompico County Water District (Santa Cruz County)
- City of Cloverdale (Sonoma County)
- Healdsburg (Sonoma County)"

CDPH announced that it "will work with the impacted systems to ensure that they have implemented required conservation measures (this could include no outside watering or rationing in addition to proper noticing of system customers of the required conservation measures); identify any possible additional sources (nearby water systems or hauled water); and provide guidance on the possible construction of additional wells to meet the system's needs."

According to CDPH, the DWP has 23 district offices throughout the state that closely monitor the needs of drinking water systems. CDPH staff works with these systems and local officials to determine access and need. The state will continue to assess California's drinking water systems to identify and support those potentially at risk.

Other Public Health Impacts of the Drought. According to the Centers for Disease Control and Prevention's (CDC's) *When Every Drop Counts: Protecting Public Health During Drought Conditions—A Guide for Public Health Professionals*, in addition to a shortage of drinking water supplies, the public health implications of drought are numerous and extensive, and are discussed below.

Drought can compromise the quality of both surface water and groundwater. Drought reduces stream and river flows which, in turn, increases the concentration of pollutants in water and causes stagnation. Higher water temperatures in lakes and reservoirs lead to reduced oxygen levels, which can affect aquatic life and water quality. Runoff from drought-related wildfires can carry extra sediment, ash, charcoal, and woody debris to surface waters, killing fish and other aquatic life by decreasing oxygen levels in the water. Additionally, unusually high sediment loads, such as those caused by wildfires, can clog filters at water treatment facilities.

California already faces a near catastrophe due to groundwater contamination. The State Water Resources Control Board (SWRCB) recently identified 682 community public water systems, which serve nearly 21 million people, that rely on contaminated groundwater as a primary source of drinking water. Research by the SWRCB suggests that drinking water contamination in California disproportionately affects small, rural, and low-income communities that depend mostly on groundwater as their drinking water source.

The groundwater that these communities rely upon for drinking water is likely to be further impacted by the drought. Reduced precipitation and increased evaporation of surface water can impact the recharge of groundwater supplies over time. Drought in coastal areas can increase saltwater intrusion into fresh groundwater supplies. The non-profit Public Health Institute asserts that as surface and groundwater levels decline and water temperatures increase, pathogens and contaminants become more concentrated, raising the risk of disease.

In addition to impacts on water quantity and quality, drought conditions can compromise food and nutrition. Inadequate precipitation can substantially reduce crop yields. As water supplies dwindle, the quality of water being used for agricultural purposes typically decreases. When low water levels result in concentrated contaminants, contaminants can concentrate in shellfish and freshwater fish. Drought also impacts the health of livestock raised for food.

Drought exacerbates dusty, dry conditions, which along with the wildfires that typically accompany drought, can compromise human health. The availability of water for cleaning, sanitation, and hygiene is directly linked to the reduction or control of numerous diseases, so drought conditions can increase health risks when people reduce hygienic actions in order to conserve water. The CDC also reports that many types of human diseases are associated with drought, including those that are infectious, chronic, and transmitted by animals and insects (i.e., vectorborne and zoonotic). Numerous factors contribute to the increased incidence of these diseases in drought conditions, ranging from higher concentrations of human pathogens in water to changes in the behavioral patterns of wild animals.

The State Drinking Water Program. In 1974, the U.S. Congress passed the federal Safe Drinking Water Act (SDWA) to protect public health by regulating public drinking water sources. The federal SDWA authorized the United States Environmental Protection Agency (US EPA) to establish mandatory drinking water standards. In 1976, the California SDWA (CA SDWA) was enacted to build on and strengthen the federal SDWA. The CA SDWA requires the CDPH to manage the state's DWP. The DWP's mission includes the enforcement of the federal and state safe drinking water acts and the oversight of public water systems (PWSs) throughout the state.

In California, several state entities have responsibility over water quality; however, CDPH is the only entity responsible for the oversight of the DWP and required to enforce the quality and safety of the state's drinking water. CDPH's responsibility for the quality of drinking water begins when water is pumped from a drinking water well or surface-water intake point. The State Water Resources Control Board (SWRCB) and the regional water quality control boards are responsible for the quality of the water source before the water is pumped.

The DWP, which is a component of the Division of Drinking Water and Environmental Management within the Center for Environmental Health at CDPH, regulates over 8,000 PWSs by inspecting the systems, issuing permits, taking enforcement actions, and implementing new requirements due to changes in federal or state law or regulations. The CDPH has delegated the DWP regulatory authority for small PWSs serving less than 200 service connections to 34 counties in California. The delegated counties (local primacy agencies) regulate approximately

4,600 small PWSs that are usually owned by schools, churches, and small businesses, like restaurants and hotels.

The DWP has other functions, including responding to emergencies by providing technical assistance to damaged water systems, assessing drinking water contamination, and ensuring access to safe drinking water; providing information on drought preparedness and water conservation; overseeing water recycling projects; certifying residential water treatment devices; certifying drinking water treatment and distribution operators; supporting and promoting water system security; providing support for small water systems and for improving technical, managerial, and financial capacity; overseeing the Drinking Water Treatment and Research Fund; and providing funding opportunities and financial assistance for water system improvements, including funding under Proposition 50 (2002), Proposition 84 (2006), and the Safe Drinking Water State Revolving Fund.

Administrative Responses to Drinking Water Risks Due to the Drought. On December 17, 2013, Governor Brown established a Drought Task Force to "coordinate with federal and local agencies to ensure that we together can respond to next year's water shortages, and protect our people and natural resources." The Task Force met weekly and made recommendations on whether conditions warranted a declaration of statewide drought. Following initial Task Force meetings, Governor Brown proclaimed a State of Emergency and directed state officials to take all necessary actions to prepare for drought conditions, including ensuring that the state can respond if Californians face drinking water shortages.

CDPH listed the following actions it is taking in response to the drought:

- "Collecting information on public water systems to help identify those anticipating severe shortages or water outages;
- Providing assistance in identifying and permitting alternative water supplies;
- Providing emergency funding assistance through Prop 84;
- Seeking federal approval to use SRF [State revolving Funds] Funds to help with emergency drought response actions; and,
- CDPH - Division of Drinking Water is also participating on the Governor's Drought Task Force."

Legislative Response to Drinking Water Risks Due to the Drought. In early February, Senate President Pro Tempore Darrell Steinberg announced that he is drafting legislation that would expedite help for communities facing severe problems due to the drought. According to the *Sacramento Bee*, the measures are proposed as urgency amendments to Senate Bill 731, a pending bill drafted by Steinberg that makes changes to the California Environmental Quality Act. The goal is to avoid further delaying "shovel ready" projects that can bring relief to issues exacerbated due to the drought. The proposal would appropriate \$11 million of existing state and federal funds for clean drinking water programs and direct the State Water Resources Control Board to expedite spending that money to help poor and disadvantaged communities. Background information provided by the Office of the Pro Tempore delineated the following allotments being considered for inclusion in the bill:

- \$4 million in Clean-up and Abatement Funds for disadvantaged communities dealing with drinking water contamination, including needs exacerbated by drought (included in the Governor's budget);
- \$7 million in Small Community Grant Funds for the State Water Resources Control Board for grants to small and severely disadvantaged communities to comply with water quality regulations, protect surface and groundwater quality, and reduce threats to public health and safety (included in the Governor's budget); and,
- \$5 million from the General Fund for the Emergency Drinking Water Fund to address emergency water shortages due to drought. These funds will be coordinated with other available state and federal sources for drinking water projects.

Federal Responses to Drinking Water Risks Due to the Drought. In response to the drought, Rep. David Valadao [R-Calif.] introduced H.R. 3964, the "Sacramento-San Joaquin Valley Emergency Water Delivery Act," on January 29, 2014. According to the Congressional Budget Office, H.R. 3964 would amend the Central Valley Project Improvement Act and the San Joaquin River Restoration Settlement Act to change water management plans and environmental restoration goals for the Central Valley region in California. The bill would authorize the Bureau of Reclamation to convert some water service contracts to accelerated repayment contracts, which would increase receipts to the federal government in the first few years after enactment, but reduce receipts in subsequent years. The bill also would impose a specified timeline for water transfers among the Central Valley Project contractors and would deem certain water transfers to have met the requirements of some environmental laws. This bill makes no specific provisions for addressing communities' potential lack of drinking water. H.R. 3964 passed the House (229 – 121) on February 5, 2014, and is being considered by the Senate.

On February 11, 2013, Senator Dianne Feinstein [D-Calif.] introduced S.2016, the "California Emergency Drought Relief Act of 2014," a bill to provide nation-wide drought relief. According to the authors, S.2016, which does not waive any federal or state law, includes a range of provisions that require federal agencies to use existing powers to maximize water supplies, reduce project review times, and ensure water is directed to users whose need is greatest. The bill also provides \$300 million in emergency funds to be used on a range of projects to maximize water supplies for farmers, consumers and municipalities, and provide economic assistance.

The authors assert that maintaining sufficient supplies of safe drinking water to meet minimum public health and safety needs is a top priority in the bill. One key grant program, the Emergency Community Water Assistance Grants, will receive \$25 million for projects to increase the availability of drinking water. These grants of up to \$1 million are to complete projects that boost the availability and quality of drinking water, including in California communities at risk of running out of safe drinking water. The authors maintain that, additionally, the bill prioritizes grant funding under US EPA's Drinking and Clean Water State Revolving Funds and the Bureau of Reclamation's WaterSMART program for projects that boost drinking and municipal water supplies. S.2016 was referred to the Committee on Energy and Natural Resources.

Later on February 11, 2013, Rep. Jim Costa [D- Calif.] introduced the House companion to the "California Emergency Drought Relief Act of 2014." According to the author, his bill will "help maximize available resources and assist farmers and communities during this historically dry year. According to some estimates, this legislation has the potential to generate more than 500,000 acre-feet for water agencies that receive water from the Central Valley Project and the State Water Project." As of February 12, 2013, this bill had not been assigned a number.

