



Legislation Text

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To: Board of Supervisors, Sonoma County Water Agency Board of Directors

Department or Agency Name(s): Department of Emergency Management, Sonoma County Water Agency

Staff Name and Phone Number: Christopher Godley, 565-2052, Grant Davis, 547-1911,

Vote Requirement: Majority

Supervisory District(s): Countywide

Title:

Drought Conditions Update and Local Emergency Proclamation Continuation

Recommended Action:

Continue Local Emergency Proclamation Due to Drought Conditions

Executive Summary:

On April 27, 2021, the Board of Supervisors proclaimed a local emergency due to drought conditions in the Sonoma County Operational Area. Critically low rainfall over the last two years has resulted in historically low water storage levels in the region's two water supply reservoirs and storage levels continue to decline.

The adverse environmental, economic, health, welfare and social impacts of the drought continue to pose an imminent threat of disaster, and threaten to cause widespread potential harm to people, businesses, agriculture, property, communities, the environment, wildlife and recreation in Sonoma County. Therefore, this item requests the Board of Supervisors approve a 60-day continuation of the April 27, 2021, proclamation of local emergency.

Discussion:

Water Supply Update

As of February 9, 2022:

- Lake Mendocino

The water supply storage level at Lake Mendocino was 42,594 acre-feet, approximately 62 percent of the available water supply pool for this time of year. At this time last year, the water supply storage level at Lake Mendocino was 29,662 acre-feet, approximately 43 percent of the water supply pool for this time of year.

- Lake Sonoma

The water supply storage level at Lake Sonoma was 151,288 acre-feet, approximately 62 percent of the available water supply pool. At this time last year, the water supply storage level at Lake Sonoma was 157,476, approximately 64 percent of the available water supply pool.

As of February 9, 2022, the Climate Prediction Center is forecasting below normal probability for precipitation in our region. Consequently, storage in both Lake Mendocino and Lake Sonoma is not expected to increase over the next 14 days.

The U.S. Drought Monitor provides the location and intensity of drought conditions across the country. Currently, all of Sonoma County and the surrounding Bay Area is classified into the D2 category (Severe Drought). This is an improvement since the last Board update on drought conditions when the region was classified into the D3 category (Extreme Drought).

State Water Board Emergency Regulations for the Russian River Watershed

Due to the decreasing level of Lake Mendocino and pursuant to the emergency regulations, the Division of Water Rights (Division) issued approximately 1,500 orders curtailing pre and post 1914 appropriative water right holders and riparian claims in the Upper Russian River on August 2, 2021, and approximately 300 pre- and post-appropriative water right holders in the Lower Russian River on August 10, 2021, directing them to stop (curtail) their diversions. The orders allow recipients to file for an exception to divert for human health and safety needs. More information on the State Water Board's actions related to the Russian River is available at https://www.waterboards.ca.gov/drought/russian_river/.

Based on water demand and water availability forecasts, the Division announced a suspension to curtailments on the lower Russian River on October 21, 2021, and the upper Russian River October 22, 2021. The suspensions will remain in place until March 1, 2022. The Division will reassess demand and water availability forecasts in late February and will update diverters on the status of curtailments for the remainder of March.

Current Water Supply Conditions & Temporary Urgency Change Petition (TUCP)

Based on Sonoma Water's water right permits established under State Water Resources Control Board (State Water Board) Decision 1610, the water-year classification for the Russian River is determined using cumulative inflow into Lake Pillsbury as the index. Lake Pillsbury is a storage reservoir located in the Eel River watershed for Pacific Gas & Electric Company's (PG&E) Potter Valley Hydroelectric Project (PVP) which transfers water into the East Fork of the Russian River. During a PVP Drought Working Group meeting on October 7, 2021, PG&E informed the group that the transformer bank at the PVP powerhouse had failed and would need to be replaced in order to convey water through the powerhouse for power generation. PG&E estimates it will take up to two years to replace the transformer bank at a cost of five to ten million dollars. In February 2022, PG&E reported to the Federal Energy Regulatory Commission (FERC) that it intends to replace the transformer bank and will submit a schedule and work plan for making the necessary repairs by the end of 2022.

Currently, the PVP is rated at a flow rate up to 240 cubic feet per second (cfs) through the powerhouse for power generation. PG&E can bypass the powerhouse at flow rates up to 135 cfs to meet FERC license

requirements for minimum instream releases into the East Branch Russian River and water supply contract requirements with the Potter Valley Irrigation District (PVID).

PG&E's transfer obligations to meet FERC license requirements and PVID contract amounts until April 14 is 45 cfs. On April 15 the transfer requirement to the East Branch Russian River will be reassessed based on the water year classification. PG&E has indicated that without the ability to generate hydropower, it is unlikely PG&E will make discretionary transfers of Eel River water through the PVP above its FERC license and contract obligations. Discretionary transfers to generate hydropower can occur up until early March if hydrologic conditions on the Eel River and at Lake Pillsbury are being met. Without the discretionary transfer of Eel River water to generate hydropower, the total transfer through the PVP has been reduced by up to 400 acre-feet per day.

Under these operating conditions of the PVP, the influence of the Eel River water imports on downstream hydrologic conditions in the Russian River will be greatly diminished. Therefore, there will be little to no correlation between cumulative inflow into Lake Pillsbury and the hydrologic conditions in the Russian River watershed. Consequently, Sonoma Water filed Temporary Urgency Change Petitions with the Division of Water Rights on November 17, 2021 requesting that storage thresholds in Lake Mendocino be used as the hydrologic index to determine the water-year classification in the Russian River watershed. The same storage thresholds were requested by Sonoma Water in prior Temporary Urgency Change Petitions (TUCP) filed in December 2013 and January 2021, which the State Water Board approved in orders issued on December 31, 2013, and February 4, 2021, respectively. On December 10, 2021, the Division of Water Rights issued an order approving Sonoma Water's petitions. The order expires on June 7, 2022.

Santa Rosa Plain Drought Resiliency Project

On May 11, 2021, Sonoma Water and County staff presented an overview of the status of the drought in Sonoma County, and specific actions currently underway or planned by Sonoma Water and other County departments/agencies in response to the drought emergency. The Board directed Sonoma Water and County staff to return to the Board to seek authorization and funding to expedite design and environmental review for activating one of Sonoma Water's Santa Rosa Plain wells to assist in addressing drought impacts. On May 18, 2021, the Board approved a concurrent budget resolution providing \$400,000 of County contingency funds to support this effort.

The project is intended to bolster water supply reliability for Sonoma Water's water contractors, and address water shortages impacting the agriculture sector. In general, the Santa Rosa Plain Drought Resiliency Project (Project) consists of two phases:

- Phase 1 utilizes the county contingency funds and completes the necessary engineering, environmental review, and other activities needed to activate one of Sonoma Water's Santa Rosa Plain wells.
- Phase 2 involves developing the planning and pre-design activities necessary to seek state drought emergency funding to activate the remaining two Santa Rosa Plain wells, in addition to adding recharge

capabilities via groundwater banking.

These collective activities are intended to result in increased drought resiliency by helping drought impacted communities and assist in longer-term groundwater management activities under the Sustainable Groundwater Management Act. Sonoma Water staff have formed an internal team to coordinate its activities and facilitate collaboration with partners in implementing the proposed Project.

Sonoma Water activated the Phase 1 well in October 2021. Activation of the well makes available an additional 200,000 to 500,000 gallons a day (approximately) for residents and ranchers who have lost domestic water supply and need water for health and safety in areas experiencing severe water shortages. The Phase 1 well could also produce an additional 1 million gallons daily (approximately) for Sonoma Water's water contractors to help alleviate drought impacts to their customers.

Phase 2 efforts were initiated in September 2021. The planning and preliminary design for Phase 2 was completed and an application was submitted to the California Department of Water Resources on November 18, 2021, for implementation funding. On December 23, 2021, DWR released the program's Phase 1 awards. Sonoma Water was awarded \$6,900,000 for the Santa Rosa Plain Water Supply Resiliency Project. Sonoma Water has contracted with an engineering consultant to provide the project's Phase 2 construction design, which was commenced in early December. Efforts to facilitate testing and investigation of the existing wells is underway. The implementation schedule for constructing the improvements needed for Phase 2 remains subject to the continuation of emergency drought conditions. If emergency conditions persist, Sonoma Water anticipates re-activation of at least one of the additional wells to help meet summer/fall 2022 water demands.

Environmental Resources Drought Activities

Sonoma Water staff continue to meet weekly with staff from the National Marine Fisheries Service (NMFS), California Department of Fish and Wildlife (CDFW), and the North Coast Regional Water Quality Control Board (Regional Board) to discuss Russian River fish distribution, fish habitat and water quality conditions.

As previously described, the atmospheric river event in October precluded collection of video monitoring data at Sonoma Water's inflatable dam and the number of Chinook salmon returning to the Russian River this past fall could not be estimated. Sonoma Water biologists have turned their attention to counting fish and nests on smaller tributary stream throughout the watershed. Those surveys have revealed the highest number of endangered coho salmon returning to spawn in more than a decade. However, the recent month-long dry spell is beginning to affect these smaller streams and is hampering the ability of fish to access tributaries. Steelhead migration and spawning activity typically peaks in February and March. To date, the number of steelhead returning to spawn in tributaries and the fish hatcheries at Warm Springs Dam/Lake Sonoma and Coyote Valley Dam/Lake Mendocino are below average. Until we receive more rainfall, it is too early to tell if steelhead numbers will remain low for the season. As river flow continues to drop, Sonoma Water crews may need to survey portions of the upper river. Per the December 21, 2021 Urgency Change Order, if river flow at

Hopland is 100 cfs or lower Sonoma Water crews will monitor river depth and fish passage conditions.

With the expiration of the June 2021 TUC Order and winter rains resulting in increased river flows, mainstem Russian River water quality and algae monitoring is suspended for the season. Sonoma Water and Regional Board staff will meet by mid-April 2022 to discuss monitoring measures for the 2022 dry season. Water quality conditions will continue to be discussed during the weekly meetings with the State Water Board, NMFS, CDFW, and the Regional Board.

Public Outreach

The Sonoma-Marin Saving Water Partnership's (Partnership) winter outreach campaign continues to emphasize that the drought has not ended. October's heavy rains and a wet December were followed by a very dry January and continuing dry conditions. To better illustrate the ongoing drought conditions, the weekly water supply infographic published online and in print in The Press Democrat newspaper has been updated to show current water supply levels in Lakes Mendocino and Sonoma as compared to the same date in 2020 and 2019 (<https://www.sonomawater.org/current-water-supply-levels>). The updated graphic now demonstrates the multi-year drought by showing consecutively lowering water supply years and drives home the likelihood of continued drought without significantly above average rainfall.

The Partnership campaign's online, print, and social media advertising also continues to provide tips and information about ways to save water at home, with an emphasis on indoor water conservation. Water bill inserts have been developed and shared with partner agencies to encourage the installation and use of rainwater capture and greywater systems, and to take action to remove lawns, fix leaking toilets, and consider water-efficient appliances. In addition, the 15 and 30-second video commercials in English and Spanish that were created for regional online television placements are being repurposed for website and social media outreach. The ads show low reservoir levels to emphasize the continued drought conditions and the need to save water.

The Partnership's website now contains a video library (<https://www.savingwaterpartnership.org/video-library/>) for water saving resources such as greywater webinars, presentations on drought gardening tips, business water saving tips, and more. Although the current number of recordings is modest, work is underway to expand the selection to include care and prioritization of trees during drought, the water saving and climate benefits of carbon gardening, and other related topics, with the goal to continually expand the offerings and build a regional following for this resource site.

A weekly social media campaign will continue through March 2022, focused on developing everyday habits to save water, including an emphasis on leak detection and repair. This campaign is leading up to the EPA WaterSense and Partnership sponsored Fix-a-Leak Week March 14-20, 2022.

Interagency Drought Task Force

Sonoma Water staff, in coordination with the Sonoma County Department of Emergency Management, continue to support and facilitate the Sonoma Interagency Drought Task Force to provide multi-agency, multi-discipline coordination and information sharing through the duration of the current drought. The task force meets, as needed, and has over forty participating agencies representing local, state, regional, and tribal partners.

Agreement for Emergency Water Service

On November 2, 2021, the Board approved an agreement between the County of Sonoma and California American Water (CalAm) for the drought relief program for potable water. This program intends to supply immediate potable water for health and safety purposes in the upper Russian River region.

Since approval of the agreement, the State Water Board temporarily suspended previous diversion cutbacks on the Russian River with the increased precipitation from recent storms. There has been no request for the drought relief program from rural residents with water insecurity to support health and safety with the current rainfall.

Department of Emergency Management (DEM) continues to work with Sonoma Water and coordinate support efforts, while Transportation and Public Works (TPW) has the drought potable water program active in contingent mode and will continue to monitor.

Continuance of Local Emergency Proclamation

As required by Government Code section 8630, the Board must review the proclamation of local emergency every 60 days and determine if there is a need for continuing the local emergency. Due to the ongoing adverse impacts of the drought, staff recommend that the Board of Supervisors approve continuation of the April 27, 2021 Proclamation of a Local Emergency Due to Drought Conditions in the Sonoma County Operational Area for an additional 60 days.

Prior Board Actions:

- 01-04-2022: Received Drought Conditions Update and Local Emergency Proclamation Declaration Continued
- 11-02-2021: Received Drought Conditions Update and Local Emergency Proclamation Declaration Continued. Board authorized the Director of the Transportation and Public Works Department to execute the Agreement for Emergency Water Service with California-American Water Company until October 1, 2022
- 09-14-2021: Received Drought Conditions Update and Local Emergency Proclamation Declaration Continued
- 07-20-2021: Received Drought Conditions Update and Local Emergency Proclamation Declaration Continued
- 06-18-2021: Board of Directors approved emergency drought response actions including adopting a resolution making findings of a need to perform emergency work without bidding to protect health, property and essential public services; and delegating authority to the General Manager of Sonoma Water to take actions necessary pursuant to the restructured agreement for water supply.
- 06-08-2021: Board received drought conditions update and continued the April 27, 2021 local emergency proclamation due to drought conditions.
- 05-18-2021: Board adopted a concurrent budget resolution providing \$400,000 of contingency funding to support Santa Rosa Plain Drought Resiliency Project.
- 05-11-2021: Board received an update on current status of drought conditions and adopted a concurrent resolution urging a 20% voluntary reduction in water use and other specific actions.
- 04-27-2021: Board of Supervisors adopted Resolution Proclaiming a Local Emergency to Drought Conditions in the Sonoma County Operational Area and Requesting the Governor to Seek a Presidential Declaration.

FISCAL SUMMARY

Expenditures	FY 21-22 Adopted	FY22-23 Projected	FY 23-24 Projected
Budgeted Expenses			
Additional Appropriation Requested			
Total Expenditures			
Funding Sources			
General Fund/WA GF			
State/Federal			
Fees/Other			
Use of Fund Balance			
Contingencies			
Total Sources			

Narrative Explanation of Fiscal Impacts:

None.

Staffing Impacts:			
Position Title (Payroll Classification)	Monthly Salary Range (A-I Step)	Additions (Number)	Deletions (Number)

Narrative Explanation of Staffing Impacts (If Required):

N/A

Attachments:

None.

Related Items "On File" with the Clerk of the Board:

None