

SONOMA COUNTY

575 ADMINISTRATION DRIVE, ROOM 102A SANTA ROSA, CA 95403

Legislation Text

File #: 2021-1228, Version: 1

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

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

Transportation and Public Works

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

565-2231

Vote Requirement: Majority

Supervisorial 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 December 17, 2021:

Lake Mendocino

The water supply storage level at Lake Mendocino was 26,700 acre-feet, approximately 39 percent of the available water supply pool for this time of year. This is an increase in storage of 14,200 acre-feet since Lake Mendocino reached its minimum storage level of approximately 12,500 acre-feet in late October.

• Lake Sonoma

The water supply storage level at Lake Sonoma was 129,100 acre-feet, approximately 53 percent of the available water supply pool. This is an annual increase in storage of 23,500 acre-feet since Lake Sonoma reached its minimum storage level of approximately 105,600 acre-feet in late October.

As of December 17, the Climate Prediction Center is forecasting above normal probability for precipitation in our region. Consequently, storage in both Lake Mendocino and Lake Sonoma are expected to increase through at least the end of the year.

The U.S. Drought Monitor provides the location and intensity of drought conditions across the country. Currently, Sonoma County and the surrounding Bay Area is classified into the D3 category (Extreme Drought). This is an improvement since the last Board update on drought conditions when the region was classified into the D4 category (Exceptional 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 and the upper Russian River October 22. The suspensions will remain in place until January 10, 2022. The Division will reassess demand and water availability forecasts in early January and will update diverters on the status of curtailments for the remainder of January.

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. It is highly uncertain whether PG&E will make the necessary repairs to continue power generation as its FERC operating license expires in April 2022. In January 2019, PG&E withdrew its Preliminary Application Document and Notice of Intent to relicense the project.

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 Federal Energy Regulatory Commission (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 April 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 will be 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 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 Waters 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 proposed 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 Proposed Santa Rosa Plain Drought Resiliency Project (Project) consists of two phases:

- Phase 1 will utilize the county contingency funds and entails completing 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 anticipated 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 September 2021. The planning and preliminary design for Phase 2 has been completed and an application was submitted to the California Department of Water Resources on November 18, 2021 for implementation funding. Sonoma Water has contracted with an engineering consultant to provide the project's final design, which was commenced in early December. The implementation schedule for constructing the improvements needed for Phase 2 remains subject to the continuation of emergency drought conditions.

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.

Sonoma Water staff collects annual salmon and steelhead abundance data in the Russian River watershed. Since fall 2020, counts of returning adult salmon and steelhead indicate that populations are low compared to historic levels and sampling through summer 2021 found that many streams were dry and juvenile fish populations were depressed. Prior to the October 2021 level 5 atmospheric river event, video counts of upstream migrating salmon at Sonoma Water's Mirabel Dam were extremely low (less than 50 returning Chinook salmon). The storm event breached the estuary and eased passage conditions for adult fish, however, Mirabel Dam was deflated due to high river flow and the video counting station (which functions only when the dam is inflated) was closed for the season. Because the video system was taken offline early in the migration season, it is not possible to compare the abundance of salmon in fall 2021 to other years. Sonoma Water crews have been conducting spawning ground surveys but poor water visibility has hampered efforts to collect spawning ground data in Dry Creek and the mainstem Russian River. Prior to the week of December 13, spawning ground surveys in smaller tributary stream revealed very low numbers of fish. With the onset of recent storms, however, fish numbers are on the rise. Sonoma Water biologists will continue to monitor spawning grounds through April and meet weekly with staff from the National Marine Fisheries Service and California Department of Fish and Wildlife to discuss river 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.

Sonoma Water staff coordinated a fish and habitat sampling plan for the recently issued December 2021 Temporary Urgency Change Order with NMFS, CDFW, and the Regional Board. Activities include upper and lower Russian River habitat and fish monitoring if winter and spring river flows are low. Sampling results are discussed during the weekly meetings with NMFS, CDFW, and the Regional Board.

Government Affairs

Sonoma Water's government affairs team continues to coordinate drought funding opportunities with its

water contractors, the Russian River Watershed Association, North Bay Watershed Association, and community stakeholders. The California Department of Water Resources and State Water Resources Control Board have held several drought funding informational workshops which have been made available to all stakeholders in our region.

Community Affairs

The winter outreach campaign of the Sonoma-Marin Saving Water Partnership continues to emphasize that the drought has not ended following October's and more recent rains and that landscape irrigation should remain off for the season. To better illustrate the ongoing drought conditions, the weekly water supply infographic published online and in print in The Press Democrat newspaper was 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 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. Bill inserts have been developed and will be 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, new 15 and 30-second video commercials in English and Spanish were created for regional online television placements that will air on Comcast streaming stations for a four-week run beginning December 20, 2021. The ads show low reservoir levels to emphasize the continued drought conditions and the need to save water.

Lastly, work is already under way on development of a new weekly social media campaign to run from January through March. The campaign focuses initially on developing everyday habits to save water and then transitions to a focus on leak detection and repair leading up to the EPA WaterSense and Partnership sponsored Fix-a-Leak Week March 14 through 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 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:

- 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:

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None.

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

	Narrative Exp	lanation (of Staffing	Impacts	If Req	uired)	1
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N/A

Attachments:

None.

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

None.