



COUNTY OF SONOMA

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

SUMMARY REPORT

Agenda Date: 5/11/2021

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

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

Staff Name and Phone Number: Sheryl Bratton, 565-2241 Christopher Godley, 565-2052, Grant Davis, 547-1911

Vote Requirement: Majority

Supervisorial District(s): Countywide

Title:

Water Supply Conditions Update and Actions Related to Drought Conditions

Recommended Action:

- A) Receive update on current status of drought conditions and actions in Sonoma County
- B) Adopt a Concurrent Resolution of the Board of Supervisors and the Board of Directors of the Sonoma County Water Agency urging a 20% voluntary reduction in water use and other specific actions in response to the drought emergency

Executive Summary:

Due to critically low rainfall over the last two years, water storage levels are at historic lows in both of the region's two water supply reservoirs, Lake Sonoma and Lake Mendocino. Most critical is Lake Mendocino currently at 43 percent of water supply storage capacity, with a real threat of going dry this year without further demand reductions. Lake Sonoma's water supply capacity is currently 62 percent, the lowest on record for this time of year.

This potentially historic drought in Sonoma County will result in impacts and considerations that extend beyond surface water shortages including impacts to groundwater resources. These impacts to water resources will not only affect drinking water supplies but also agriculture, commercial and industrial business sectors, recreation, and ecosystems. These drought impacts will be felt broadly across the County's operational responsibilities and mission practices. Consequently, county departments whose operations are anticipated to be impacted by the drought are coordinating drought response actions to reduce impacts to their respective operations. Examples of response will be provided to the Board during the presentation on May 11.

On March 5, 2021, the Secretary of the United States Department of Agriculture designated 50 California counties, including Sonoma County, as primary natural disaster areas due to drought. This Secretarial disaster designation makes farm operators eligible to be considered for certain assistance from the Farm Service Agency, including emergency loans.

On April 21, 2021, Governor Newsom visited Lake Mendocino and proclaimed a state of emergency for Sonoma and Mendocino counties due to drought conditions in the Russian River Watershed.

On April 27, 2021, the Board of Supervisors proclaimed a local emergency due to the adverse environmental, economic, health, welfare and social impacts of the drought which 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 the County of Sonoma. Due to the potentially historic impact of this drought, the proclamation also requested that the Governor seek a Presidential Declaration of Disaster.

This item provides an overview of the current status of the drought in Sonoma County, specific actions underway or planned by Sonoma Water, and requests your Board's adoption of 20% voluntary water conservation measures and other specific actions in response to the drought emergency. Staff will provide updated information during May 11 meeting.

Discussion:**Regional Climate Summary & Water Supply**

California as a whole, and the Russian River Watershed in particular, is in the second consecutive year of extremely dry conditions due to historically low rainfall totals. Rainfall and water storage are well below average for this time of year. The 2019-2020 (October 2019 - September 2020) water year was the third driest water year on record over the last 127 years. To date, rainfall totals for the current water year are 38% of average for Santa Rosa and Ukiah. Lake Mendocino is currently at 43% of water supply storage capacity, and without demand reduction, faces a significant threat of going dry this year or becoming so low that releases cannot be made. Lake Sonoma's water supply capacity is currently 62%, the lowest on record for this time of year.

Northern and central California has seen approximately 50% of average precipitation for the 20/21 water year with little to no chance of recovery at this point. The latest calculations make this the 3rd driest year on record. Two consecutive dry years have left reservoirs about half full. These precipitation deficits, combined with high temperatures, have reduced streamflow, dried out soils, and stressed vegetation.

The 3-month precipitation/temperature outlook for Apr-May-June shows below-normal precipitation for the northern half of the state and above-normal temperatures across the entire state.

On April 29, 2021, The U.S. Drought Monitor was updated to show the location and intensity of drought across the country. This most recent updated map moved the entirety of Sonoma County into the D3 (Extreme Drought) category.

Potential Drought Impacts

Water Sector: Throughout the United States, droughts have caused cascading effects on the water sector that may include, but are not limited to:

- Loss of supply (both surface water and groundwater)
- Increased demand from customers (e.g., previously self-supplied communities that cannot meet the demand, agricultural customers requiring more water for irrigation)
- Deterioration of water quality and difficulties complying with drinking water regulations
- Increases in treatment and pumping-related costs
- Limited options for accessing other local water sources through interconnections due to increased regional demand and water scarcity

- Potential power interruptions due to high energy demand if drought is accompanied with unusually high temperatures
- Loss of fire suppression capabilities
- Increased pressure to develop water reuse practices

Agriculture Sector: Drought can reduce the water availability and quality necessary for productive farms, ranches, and grazing lands. It can also contribute to insect outbreaks, increases in wildfire, and altered rates of carbon, nutrient, and water cycling-impacting agricultural production and critical ecosystem services.

Public Health Sector: Drought can cause significant human health outcomes, including decreased water quantity and quality, increased incidence of illness and disease (e.g., Valley Fever), adverse mental health outcomes as livelihoods are challenged, and overall, increased mortality rates.

Transportation Sector: Drought impacts port and waterway transportation and supply chains, resulting in increased transportation costs. Higher temperatures that coexist with drought can impact roads, airport runways, and rail lines.

Wildfire: Drought can be a contributing factor to wildfire in an area already prone to catastrophic wildfire activity. Dry, hot, and windy weather combined with dried out (and more flammable) vegetation can increase the probability of large-scale wildfires.

Ecosystems: Drought can alter or degrade critical functions of healthy ecosystems, including reduced plant growth, impacts to riparian habitat that support critical species including salmonids listed by the Endangered Species Act, and landscape-level transitions (e.g., a forest being replaced by a grassland).

Sonoma Water Drought-Related Actions

In 2020, Sonoma Water and its partners was able to save about 11,000 acre-feet of additional winter/spring water in Lake Mendocino (20% of its water capacity at the time) by implementing a major deviation request that allowed the U.S. Army Corps of Engineers to use Forecast Informed Reservoir Operations (FIRO) decision support tools. This was a significant and innovative water supply reliability effort and the first of its kind in the nation. The development and implementation of FIRO was a direct result of the last drought the region faced in 2013/2014.

In addition, in the summer of 2020, due to dry weather conditions, Sonoma Water filed for and received a Temporary Urgency Change Order from the State Water Resources Control Board (SWRCB) to preserve water in Lake Mendocino. This effort is estimated to have saved over 11,000 acre-feet of water in Lake Mendocino through the end of 2020. Sonoma Water also implemented a public service announcement campaign alerting our community of the dry weather conditions and the need to use water wisely.

In early 2021, Sonoma Water received approval and authorization to reduce in-stream flows to critical hydrologic conditions in the Upper Russian River (above the confluence with Dry Creek) to 25 cubic feet per second (cfs) to help preserve water storage in Lake Mendocino through another Temporary Urgency Change Order approved by the SWRCB.

In early 2021, the Sonoma Marin Saving Water Partnership (Partnership) launched an aggressive public

outreach campaign to emphasize the need to save water by highlighting actions customers can take to reduce water use and improve water use efficiency. This is in addition to the Partnership's year-round conservation campaign efforts. The Partnership's current regional water use of 107 gallons per capita per day (GPCD) represents a 37 percent reduction in water use, well ahead of the State's required 20% reduction in GPCD water use by 2020.

Sonoma Water staff have provided drought update presentations to cities, water districts and community organizations as part of its community engagement program. Staff have also made themselves available to the media for ongoing public awareness opportunities.

A dedicated drought web page has been created on Sonoma Water's website (sonomawater.org/drought) where updated reservoir storage graphs and facts are updated on daily basis.

Sonoma Water hosts and/or participates in regular water supply coordination calls with Mendocino county water agencies, along with agricultural community groups, state and federal agencies, along with its water retailers.

Upcoming and continuing activities:

On May 3, 2021, the Water Advisory Committee, representing the cities of Santa Rosa, Rohnert Park, Petaluma, Cotati, Sonoma, the Town of Windsor, and the Valley of the Moon, Marin Municipal, and North Marin water districts, will pass a resolution seeking a voluntary 20% reduction in water use from their respective service areas.

On May 3, 2021, the Partnership will launch an aggressive new public outreach campaign. The new campaign slogan is, "Drought is here. Save water." The multi-media campaign will feature a non-English component and include public service announcements in North Bay radio, television, website, and social media outlets.

In early to mid-May, Sonoma Water staff anticipate filing a new Temporary Urgency Change Petition with the SWRCB to: (1) continue minimum in-stream flows of 25 cfs for the upper Russian River to preserve, to the extent possible, water storage in Lake Mendocino, (2) reduce minimum in-stream flows to critical hydrologic conditions (35 cfs at Hacienda Bridge) to help preserve water storage at Lake Sonoma; and (3) reduce Russian River diversions by Sonoma Water and entities diverting Russian River water under Sonoma Water's water rights between July 1 to October 31, 2021. Sonoma Water is working closely with its Water Contractors to plan for a coordinated response between anticipated Sonoma Water diversion reductions and corresponding reductions by each Water Contractor pursuant to their respective Water Shortage Contingency Plans. The exact amount of conservation required by each of Sonoma Water's Water Contractors will vary depending on that entity's local water supplies and drought contingency plans.

On June 12, 2021, the Partnership will host a Drought Drive-Up event at various locations throughout the Russian River Watershed. At this event, community members can drive up to a location and receive a free drought bucket filled with drought response tools and educational materials. These events are being planned in accordance with current COVID-19 related public health safety measures.

Sonoma Water staff will continue to publish weekly water storage updates in the Sunday issue of the Press Democrat and keep its website (sonomawater.org) updated with daily drought updates. Sonoma Water is

encouraging community organizations to contact its community affairs team to schedule drought update presentations.

Sonoma Water will continue to actively participate in collaboration meetings with stakeholders from throughout the region on the drought with a goal of fostering coordination, cooperation, and communication amongst all agencies and organizations working together to address drought concerns and impacts.

Countywide Coordination

On April 30, 2021, Sonoma Water staff convened a Sonoma County Drought Planning meeting with County department/agency representatives to provide:

- An overview of water sources and systems in Sonoma County including Sonoma Water's water supply and transmission system, a review of Russian River management practices, and an update on current activities associated with groundwater basins.
- A current water supply update, including historical rainfall records compared to current drought conditions, groundwater levels and an update on water storage levels and projections for Lake Mendocino and Lake Sonoma.
- An overview of Sonoma Water's current and planned drought response programs and actions.
- An opportunity for County departments/agencies to identify potential or expected drought impacts, specific to their function, and discuss potential mitigation and response actions.
- An opportunity to discuss how we can best coordinate and support our respective actions in the coming months as drought conditions continue to worsen.

Sonoma County Drought Task Force

As an outcome of the April 30th Sonoma County Drought Planning meeting, Sonoma Water, in coordination with the Department of Emergency Management, is establishing a countywide Drought Task Force comprised of County departments and agencies with direct response and/or support roles during drought conditions. The task force, modeled after the Watershed Task Force formed after the 2017 wildfires, has been established to provide interagency coordination and information sharing through the duration of the current drought conditions and is intended to:

- Establish a clearinghouse of water shortage/drought related information.
- Assess the regional effects of current and projected drought conditions, including socio-, economic, and environmental impacts.
- Help identify and support potential infrastructure improvements; identify and align projects with funding opportunities.
- Coordinate actions to respond to water shortages and alleviate impacts. Note: Implementation of task force recommended response actions or activities is the responsibility of the appropriate agency or entity based on its jurisdiction or expertise.
- Coordinate public education and outreach.
- Establish and manage functional working groups, as needed, and ensure working group activities are coordinated and integrated into overall task force activities.

The task force will ensure a broad assessment and coordination within the sectors: agriculture, forests, rural groundwater, public education and outreach, recreation, ecosystems and fisheries management, rural communities, and tribal communities, and long-term contingency planning.

County and Sonoma Water legislative affairs and communications staff have been and will continue to meet to coordinate on drought related community and government affairs opportunities and will also coordinate within the broader Drought Task Force, once established. Sonoma Water staff will provide weekly communications updates at the countywide PIO staff meetings and countywide legislative affairs staff will continue to meet to develop collaborative strategies for legislation and funding solutions.

State and Federal Activities

On April 28, 2021, the California State Senate released its drought proposal that totals \$3.4 billion of Federal and State funding. Below are funding items of interest related to local drought needs:

- \$250 million to Department of Water Resources (DWR) for competitive grants for agricultural water-use efficiency projects including building and upgrading irrigation and treatment ponds. \$40 million of which shall be allocated for purposes of the State Water Efficiency and Enhancement Program (SWEET) at the California Department of Food and Agriculture.
- \$300 million to DWR for competitive grants that support implementation of the Sustainable Groundwater Management Act (SGMA) (Part 2.74 (commencing with Section 10720) of Division 6 of the Water Code).
- \$50 million to the Wildlife Conservation Board (WCB) for grants pursuant to the Ecosystem Restoration on Agricultural Lands Program for groundwater sustainability projects that create, protect, or restore wildlife habitat and support implementation of SGMA.
- \$200 million to DWR for competitive grants for projects that provide multiple benefits, including water supply reliability, ecosystem benefits, system reliability benefits, groundwater management and enhancements. Eligible projects include conjunctive use projects; groundwater recharge; well rehabilitation or other well improvements in support of groundwater banking or recharge; transfers of water for environmental purposes; restoration of upper watersheds that are a significant source of water supply for the state; and other projects that provide improved regional resilience to climate change and drought conditions.
- \$200 million to State Water Resources Control Board (SWRCB) for competitive grants for projects related to water reuse and water recycling.
- \$200 million to SWRCB for competitive grants for multi-benefit stormwater management projects
- Additional \$50 million for stream gauges, forecasting for FRO and atmospheric river programs, and for projects that support advanced technologies to measure snowpack and forecast runoff.

Sonoma Water and County legislative staff will continue to coordinate on the passage and implementation of the above bill and coordinate on future legislative/funding opportunities.

County Emergency Drought Water Conservation Resolution

Following the Board's recent proclamation of a local emergency, the attached concurrent resolution of the Board of Supervisors and the Board of Directors of the Sonoma County Water Agency is urging a 20% voluntary reduction in water use for all water consumers in the Sonoma Operational Area. This voluntary reduction request aligns with similar resolutions being adopted by local agencies throughout the region.

Prior Board Actions:

April 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.

Agenda Date: 5/11/2021

FISCAL SUMMARY

Expenditures	FY 20-21 Adopted	FY21-22 Projected	FY 22-23 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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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:

Resolution

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

None