



Napa County

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Legislation Text

File #: 23-0913, **Version:** 1

TO: Board of Supervisors
FROM: David Morrison - Interim County Executive Officer
REPORT BY: Kendra Bowyer - Emergency Services Officer
SUBJECT: Adoption of a Resolution Terminating the State of Local Emergency Due To Drought Conditions

RECOMMENDATION

Interim County Executive Officer, acting as the Director of Emergency Services, requests adoption of a Resolution (see Attachment 1) terminating the State of Local Emergency due to drought conditions that are occurring in Napa County. (CONTINUED FROM MAY 16, 2023)

EXECUTIVE SUMMARY

On March 8, 2022, the Board of Supervisors proclaimed a State of Local Emergency due to drought conditions in Napa County, pursuant to Resolution No. 2022-29. Government Code section 8630(c) requires local agencies to revisit proclamations of local emergency at least once every 60 days until the local emergency is terminated.

PROCEDURAL REQUIREMENTS

1. Staff reports.
2. Public comments.
3. Motion, second, discussion and vote on the item.

FISCAL & STRATEGIC PLAN IMPACT

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|-----------------------------------|---|
| Is there a Fiscal Impact? | Yes |
| Is it currently budgeted? | No |
| Where is it budgeted? | If costs are incurred as a result of the drought staff will return to the Board with any appropriation increases. |
| Is it Mandatory or Discretionary? | Discretionary |
| Is the general fund affected? | No |

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|---|---|
| Future fiscal impact: | Ongoing drought conditions and related emergency response actions may result in future fiscal impacts to the County. Drought cycles historically last for several years |
| Consequences if not approved: | If the resolution is not adopted the County may not be eligible for emergency response funding from the State. |
| County Strategic Plan pillar addressed: | Healthy, Safe, and Welcoming Place to Live, Work, and Visit |

ENVIRONMENTAL IMPACT

ENVIRONMENTAL DETERMINATION: This proposed activity is not subject to CEQA pursuant to CEQA Guidelines section 15060(c)(3) because the activity is not a project pursuant to section 15378, and because it will not result in a direct or reasonably foreseeable indirect physical change in the environment pursuant to section 15060(c)(1).

BACKGROUND AND DISCUSSION

On May 10, 2021, the Governor issued a Proclamation of a State of Emergency declaring drought in several counties, including Napa. On March 8, 2022, the Board of Supervisors proclaimed a State of Local Emergency due to drought conditions in Napa County, pursuant to Resolution No. 2022-29. Since October 1, 2022, Napa has received nearly 32 inches of rain, which exceeds the normal Napa Valley annual rainfall for the water year and community members have asked if the region is still in a drought and whether an emergency is still needed. While drought conditions have ended, a significant need to continue groundwater management efforts still exists.

Drought Status

According to the US Drought Mitigation Center (<https://droughtmonitor.unl.edu/>), there are currently no drought conditions within Napa County. As explained below, although the three-year drought has ended, there are still adverse conditions that will continue to affect the Napa Valley groundwater subbasin.

Warming, Variable Weather

The first recorded six-year drought in California history was from 1987-1993. Since then, there was a five-year drought in 2012-2017, as well as two three-year droughts in 2007-2009 and 2020-2022. These events are part of a changing California climate where “we are experiencing extreme, sustained drought conditions in California and across the American West caused by hotter, drier weather. Our warming climate means that a greater share of the rain and snowfall we receive will be absorbed by dry soils, consumed by thirsty plants, and evaporated into the air” (California’s Water Supply Strategy, Adapting to a Hotter, Drier Future. Governor’s Office, August 2022).

Napa County is experiencing these same weather extremes. Attachments 2 and 3 show Napa Valley groundwater pumping, temperature, and evaporative drought demand for the period from 1988 to 2022; all of these parameters show increasing trends, especially during the recent hotter, drier years. During eight of the past ten years, dry to very dry conditions occurred, while only two years were wet to very wet. Concurrently, the evaporative drought demand -- a thirstier atmosphere - was observed in eight of those years. Temperatures, relative to the 20th century average, have increased since the 1960s.

The patterns of rainfall also have implications. Water Year 2022 (October 1, 2021 to September 30, 2022) received nearly 22 inches or 79 percent of the average rainfall and the timing of the precipitation was highly abnormal with much of the precipitation occurring during Fall 2021. January through March 2022 were very dry months, and very little precipitation occurred the remainder of the year, resulting in increased groundwater pumping to compensate.

Preliminary Data for Water Year 2023

The Napa Valley groundwater subbasin is highly sensitive to weather extremes. Recent Spring 2023 groundwater level measurements for wells in the Napa Valley Subbasin Groundwater Sustainability Plan (GSP) monitoring network indicate that notable increases in groundwater levels have occurred across much of the Subbasin since Spring 2022. However, these increases, while highly encouraging, are not sufficient to address requirements as adopted by the County Supervisors in their role as the Groundwater Sustainability Agency (GSA).

A total of 27 groundwater level Representative Monitoring Site (RMS) wells are included in the GSP. These wells have Sustainable Management Criteria (SMC) that are used to define when groundwater conditions are causing Undesirable Results in the Subbasin. In turn, Minimum Thresholds (MTs) define the numeric thresholds for groundwater conditions that may lead to Undesirable Result. Under the Sustainable Groundwater Management Act of 2014 (SGMA), Undesirable Results are defined for each of six sustainability indicators in the GSP. This system of criteria, thresholds, and results are used to support Measurable Objectives which establish specific, quantifiable goals for the maintenance or improvement of the groundwater conditions to achieve the sustainability goal for the basin.

Although many of the RMS wells measured in Spring 2023 contain higher groundwater levels than in Spring 2022, projections of potential groundwater level conditions in Fall 2023 suggest groundwater levels in three of the wells may fall below the MT values and almost half will fail to meet the Measurable Objective values.

While the wetter winter of 2022-2023 appears to have achieved a notable recovery in groundwater levels since 2022; this alone is unlikely to be sufficient to maintain the resilience of Subbasin water resources due to future

climatic uncertainty and variability. As a very recent example, Water Year 2022 precipitation replenished only a portion of the groundwater storage depleted in 2020 to 2021; the cumulative volume of groundwater in storage was still significantly depleted at -14,370 acre-feet (see Attachment 4). To date in Water Year 2023, with the recent rains and total precipitation of 32 inches, groundwater in storage increased by about 18,000 acre-feet. As of Spring 2023, the cumulative groundwater storage change is about + 4,800 acre-feet; however, the four-month period remaining in Water Year 2023 is when most groundwater extraction (with little recharge) will occur. These anticipated groundwater extractions average approximately 18,150 acre-feet annually (based on 2015-2022 total annual pumping) and will reduce groundwater storage.

Under the GSP, when a drought occurs, regulations require the GSA to demonstrate how extractions and recharge will be managed as necessary to ensure that reactions in groundwater levels or storage during a drought are offset by increases in groundwater levels or storage during other periods within the SMC for the chronic lowering of groundwater levels. The recent precipitation events and natural recharge have shifted the Subbasin from a depleted condition (negative cumulative storage volume) to a positive cumulative storage volume at this time, which helps to demonstrate the potential replenishment that can be achieved when a very wet year occurs. However, it is still incumbent on the GSA to demonstrate how extractions through the balance of the water year will be managed to avoid Undesirable Results.

The spring groundwater level dataset is just one of many datasets, including the groundwater levels outside of the Subbasin, used to evaluate groundwater conditions over the course of a water year. Other analyses to determine whether undesirable results will persist for interconnected surface water cannot be completed until after the end of Water Year 2023. Based on experience from prior years, it is expected that the Undesirable Result for reduction in groundwater storage will persist until further replenishment of the groundwater basin occurs and there is less groundwater extraction.

Undesirable Results in Water Years 2021 and 2022 and Response Actions

Just as the groundwater subbasin responds rapidly to a wet year, it responds rapidly to drought. At the conclusion of Water Year 2022, more than 40 percent of the RMS sites in the GSP groundwater level monitoring network exceeded MTs. More importantly, two Undesirable Results occurred - depletion of interconnected surface water and a reduction in groundwater storage. The weather extremes and corresponding adverse effects have demonstrated the vulnerability of the Subbasin to climate change. Circumstances in the Subbasin leading to these Undesirable Results prompt the need to address these undesirable conditions and require management by the GSA to help the subbasin become sustainable.

Groundwater Management Activities to Address Deficiencies and Achieve Sustainability

GSP implementation includes ongoing assessment, monitoring, analysis, and actions to avoid Undesirable Results and ensure sustainability. Four workplans, enhanced by the expertise of the Napa County Technical

Advisory Group (TAG), guide implementation of the GSP management actions. The plans include:

1. Stormwater Resource Plan (completed)
2. Interconnected Surface Water and GDEs Workplan (Fall 2023)
3. Napa County Vineyard, Winery and Other Water Conservation Workplan (Fall 2023)
4. Groundwater Pumping Reduction Workplan (Fall 2023)

On June 7, 2022, the County Board of Supervisors adopted a reduced water use criterion and reinforced considerations of mutual well interference and interconnected surface water and groundwater, where the latter considerations were already included in the 2015 Water Availability Analysis (WAA). These requirements were not put in place as a result of the State of Local Emergency. A range of factors resulted in the change to the water use criterion:

- MT exceedances and a reduction in groundwater storage that had already occurred in Water Year 2021
- Governor's Executive Order (EO) (N-7-22) and updated as (EO) (N-3-23) on February 13, 2023
- Compliance with California Water Code §106.3
- Recent court decisions including public trust considerations
- County's mission to manage the water resources within the County for sustainability and resilience to benefit the County's beneficial users
- Napa Valley Subbasin GSP sustainability goal

Although the Governor, through EO N-5-23, rolled back some of the drought emergency provisions in late March 2023, due to current water conditions, the Governor's Emergency Order remains in place and the remaining criteria for the County's action remain. The reduced water use criterion currently in effect (0.3 acre-feet per acre for new wells in the Subbasin) may be adjusted up or down in the future, as the County's Groundwater Ordinance and updates to the WAA are considered, the three groundwater management workplans underway are completed, and pending information from ongoing monitoring and analysis of the sustainable management criteria becomes available.

Navigating the New Normal

The Governor's office continues to emphasize that "while recent storms have helped ease drought impacts, regions and communities across the state continue to experience water supply shortages, especially communities that rely on groundwater supplies that have been severely depleted in recent years." The Governor's office also stated that "next winter's hydrology is uncertain and the most efficient way to preserve the State's improved surface water supplies is for Californians to continue their ongoing efforts to make conservation a way of life" (EO N-5-23). On March 28, 2023, a presentation to the Napa County GSA on the

Water Year 2022 Annual Report concluded with the recommendation --whether it's drought or deluge - that "conservation be a Napa way of life."

During the May 11, 2023 Napa County Technical Advisory Group (TAG) meeting, the TAG members provided feedback on GSP implementation efforts, including their perspectives on climate change adaptation and building resiliency to climate variability and future drought. The following key points from those deliberations follow.

1. The need for conservation will not go away.
2. There is a need to think beyond just water conservation towards building a buffer and resilience.
3. During wet years it is important to hold some water over either in the ground or in surface water for sustaining the drier years.
4. Conservation is an ongoing effort that does not depend on the type of water year.
5. The County should think beyond SGMA and instead look at managing the water for many, many decades to come.
6. The groundwater and interconnected surface water system is very responsive; it is a system that receives some amount of recharge annually during the rainy season and then that water is extracted and used in the dry season; however, we just don't have that much reservoir storage capacity or even groundwater storage capacity, so there is a need for behavior change.

Staff believe that future water management will require building climate resiliency through public education and outreach, expanding water conservation across all sectors, facilitating recharge and use of alternative water sources to help mitigate drought effects, and developing tools and technologies to refine water management strategies. In addition to completing the above workplans, updating the WAA, and revising the Groundwater Ordinance, staff is preparing the SB 552 Drought Resilience Plan and is working with local jurisdictions on preparing a Regional Climate Action Plan - all of which will inform the BOS/GSA about potential water management approaches to build and improve climate resiliency.

Drought Emergency

Government Code section 8630(c) requires local agencies to revisit proclamations of local emergency at least once every 60 days until the local emergency is terminated. During the State of Local Emergency, the powers, functions and duties of the Director of Emergency Services and the emergency organization of the County shall be those prescribed by state law, and by ordinance and resolution of Napa County.

Based on current ground and surface water conditions, staff recommends terminating the drought State of

Emergency.