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TO: Technical Advisory Group for the Napa County Groundwater Sustainability Agency

FROM: Brian Bordona - Interim Director of Planning, Building and Environmental Services

REPORT BY: Jamison Crosby, Natural Resources Conservation Manager

SUBJECT: Napa Valley Subbasin Groundwater Sustainability Plan Implementation: The First Five Years

RECOMMENDATION

The Technical Advisory Group members will receive: 1) an update on implementation activities since Groundwater Sustainability Plan (GSP) adoption, and 2) a summary of key elements of GSP implementation efforts leading to the GSP five-year update due to the Department of Water Resources January 31, 2027, the GSP's adaptive management process, and response actions occurring in response to groundwater conditions.

EXECUTIVE SUMMARY

The Sustainable Groundwater Management Act (SGMA) establishes the requirements for groundwater sustainability agencies (GSAs) to achieve their basin sustainability goals over a long-term horizon. Monitoring associated with the GSP-specific networks, which in the Napa Valley Subbasin encompass all six sustainability indicators, and reporting progress towards achieving sustainability are integral to successful implementation of the Napa Valley Subbasin GSP. Following adoption of the GSP, the Napa County GSA (NCGSA) immediately approved actions to begin GSP implementation before the GSP was submitted to DWR on January 31, 2022.

The County and NCGSA are committed to sustainably managing groundwater resources by implementing an adaptive management approach supported by best available information. To better manage and respond to changing conditions, the NCGSA formed the Technical Advisory Group (TAG) to advise the NCGSA and aid in the implementation of the Napa Valley Subbasin GSP. The five-member committee was first convened on August 11, 2022. A major milestone was achieved when the California Department of Water Resources (DWR) approved the GSP on January 26, 2023. GSAs are required to evaluate their GSPs at least every five years; for the Napa Valley Subbasin, the due date is at least by January 31, 2027.

Ten TAG meetings have occurred since the formation of the TAG. The prior meetings have included many topics and updates related to GSP implementation efforts. The May 2023 TAG meeting includes an overview of the GSP for the first five years of GSP implementation, which incorporates an adaptive management process. As implementation proceeds, new data and information will be shared with the TAG who will consider how the new information informs continued implementation. The TAG will provide guidance on response actions

needed to achieve the sustainability goal.

The TAG will revisit the recent and significant change in the water use criterion applied by the County to new wells and discretionary projects in the Subbasin as a prelude to the July meeting when the TAG's input and guidance will be sought on whether, how, and under what conditions the criteria may be adjusted in the future.

Procedure

Staff introduces the item.

Questions and answers with the TAG.

Public comments.

ENVIRONMENTAL IMPACT

ENVIRONMENTAL DETERMINATION: The proposed action is not a project as defined by 14 California Code of Regulations 15378 (State CEQA Guidelines) and therefore CEQA is not applicable.

BACKGROUND AND DISCUSSION

Nine consecutive annual reports, including the Water Year 2021 and 2022 Annual Reports (reported on at the TAG's August 2022, March 2023, and other meetings), have provided updates on groundwater conditions in the Napa Valley Subbasin and elsewhere in Napa County. A major milestone was achieved when DWR approved the GSP on January 26, 2023. GSAs are required to evaluate their GSPs at least every five years; for the Napa Valley Subbasin, the due date is at least by January 31, 2027.

The technical team presented an update to the TAG on groundwater conditions during the March meeting. Climate change, including drought effects and hotter/drier conditions, have resulted in increased pumping in response to those conditions. The Subbasin was significantly affected by persistent drought conditions during Water Years 2020, 2021, and 2022; groundwater levels exceeded Minimum Thresholds, and Undesirable Results occurred for two sustainability indicators - interconnected surface water and reduction in groundwater storage. As described in the GSP, once Minimum Thresholds have been exceeded and/or Undesirable Results have occurred, the GSA should assess the causal factors resulting in the exceedance(s), including the extent to which the drought has contributed to these conditions. Response actions are called for to ensure that the Subbasin remains on track to achieve the sustainability goal. Critical analysis of the factors and careful consideration of the changed groundwater conditions are important to inform the steps to implement response actions and whether and to what extent Projects and Management Actions (PMAs) are implemented.

Groundwater pumping volumes in 1988 through 2022 indicate an increase in pumping in more recent years. The increase coincides with drought conditions and the increase in the National Oceanic and Atmospheric Administration (NOAA) evaporative drought demand index (the "thirstier atmosphere") discussed with the TAG at the March meeting. Notably, the average annual groundwater pumping in 1988 to 2014 was 14,890 acre -feet (ac-ft). This time period was pre-SGMA initiation, and the average volume pumped was less than the current estimate of sustainable yield of 15,000 ac-ft/year. The average annual groundwater pumping in 2015 to 2022 was 18,150 ac-ft, which is significantly greater than the sustainable yield.

Following the NCGSA's adoption of the GSP in January 2022, GSA staff and technical consultants initiated the development of several workplans regarding interconnected surface waters and groundwater dependent

ecosystems (GDEs), water conservation, stormwater resources, and groundwater pumping reduction. Altogether, these plans will include implementing advanced technologies for water conservation, pumping reduction, stormwater management and potential utilization of surplus stormflows for managed aquifer recharge, measures for tracking and reporting groundwater use in the Subbasin, and assessments of GDEs within the Subbasin. These workplans are being developed with input from stakeholders and the public.

Additionally, as presented to the TAG in January 2023, an early and significant GSP implementation action occurred in June 2022 when the County Board of Supervisors adopted a reduced water use criterion. The action was taken to comply with the Governor's Executive Order (EO) (N-7-22) and in consideration of many other factors including: the Subbasin sustainability goal, the County's own drought emergency and recent court decisions including public trust considerations. Prior to June 2022, the water use criterion for land inside the Subbasin was 1 ac-ft/acre. The Board of Supervisors' action reduced the water use criterion to 0.3 ac-ft/acre 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). The 0.3 ac-ft/acre criterion was derived by dividing the estimated sustainable yield of 15,000 ac-ft/year by the total Subbasin area of 45,900 acres. The changes to the water use criterion were made while revisions are being made to the County's Groundwater Ordinance and the WAA to incorporate the Governor's EO, GSP implementation, recent court decisions and public trust considerations.

As of January 2023, Napa County Planning, Building and Environmental Services Department (PBES) requires new and replacement well permit applications throughout the County to meet new regulatory requirements. The reduced water use criterion is in effect and may be adjusted (either up or down) as revisions to the Groundwater Ordinance and the WAA are considered, applicable workplans are completed in 2023, and ongoing monitoring and analysis of the sustainable management criteria for all six sustainability indicators continue on an ongoing basis. An item will be brought before the TAG in July to get their input and guidance on whether, how, and under what conditions the criteria may be adjusted in the future.

SUPPORTING DOCUMENTS

A. Presentation-Napa Valley Subbasin Groundwater Sustainability Plan Implementation: The First Five Years