NAPA COUNTY
RESPONSES TO THE GRAND JURY REPORT ON
NAPA COUNTY GROUNDWATER MANAGEMENT

June 21, 2023

Introduction

The "Napa County Groundwater Management" Report of the 2022-2023 Napa County Grand Jury sets forth eight (8) findings and five (5) recommendations relating to the management of groundwater resources in Napa County. This Memorandum comprises the responses of the Director of the Department of Planning, Building and Environmental Services (PBES), the County Executive Officer and the Board of Supervisors.

We would also like to take this opportunity to acknowledge the work of this year's Grand Jury. We appreciate the Grand Jury's interest in and focus on groundwater management in Napa County. It is a highly complex topic, especially with the overarching goals of ensuring that water resources are managed to protect communities and the environment, ensuring water supply reliability, and preparing for future weather extremes in the face of climate change and uncertainty.

Background

Groundwater and surface water are highly important natural resources in Napa County. Together, the County and other municipalities, water districts, public water system operators, commercial and industrial operations, the agricultural community, and the public, are stewards of available water resources. Everyone living and working in Napa County has a stake in protecting the County's groundwater resources, including groundwater supplies, groundwater quality, and associated watersheds.

For many decades, Napa County and its citizens have acted to conserve and preserve groundwater resources and protect beneficial uses and users throughout the county. In 1966, Napa County restricted development and land use conversion in Napa Valley, with similar restrictions added for remaining parts of the Napa River Watershed beginning in 1973. Groundwater management actions taken by Napa County since 1991 have also aligned land use permitting with best-available data consistent with the objectives of protecting natural resources throughout the County's watersheds.

Since 2008, the County has implemented additional groundwater management actions to better understand groundwater conditions, conduct education and outreach, modify land use permitting, and develop other programs to assess and maintain groundwater sustainability. These efforts included the adoption of Goals and Policies in Napa County's 2008 General Plan, commencing new studies of the County's groundwater resources in 2009, and creation of a Groundwater Resources Advisory Committee (GRAC; 2011 to 2014) to spearhead management implementation and community outreach. In 2019, the County took the additional step of forming the Napa County Groundwater Sustainability Agency as provided for under the 2014 Sustainable Groundwater Management Act (SGMA). The next major milestone for groundwater management was the formation of the 25-member Groundwater Sustainability Plan Advisory Committee (GSPAC) in June 2020 who, over a period of 18 months, guided the development and adoption of the Napa Valley Subbasin Groundwater Sustainability Plan (GSP),

which was submitted to the California Department of Water Resources (DWR) on January 31, 2022, and approved on January 26, 2023.

As part of its overall land use and groundwater management actions, Napa County also recognizes that long-term, systematic monitoring programs are essential to provide data and the scientific analyses that allow for improved evaluation of water resources conditions and to facilitate effective water resources planning and management. Napa County has been monitoring groundwater conditions since the 1960s. The GRAC provided input on the development of the Napa County Groundwater Monitoring Plan 2013 (Plan) which was prepared to formalize and augment countywide groundwater monitoring efforts (LSCE, 2013a). The Plan recommended annual reports on groundwater conditions and modifications to the countywide groundwater monitoring program as needed. To date, nine Annual Reports have been prepared (LSCE, 2015, 2016a, 2017a, 2018b, 2019, 2020, 2021, 2022, 2023).

Since 2014, the County has been expanding the groundwater monitoring network and will continue to augment the network based on GSP implementation efforts. Today, the County's groundwater monitoring network includes 114 current active wells, including 8 new monitoring wells installed between January and April 2023, with support from DWR Proposition 68 grant funding. Approximately 70% of these wells are private wells and 30% public or County-owned wells. Additional monitoring sites are currently being examined, and monitoring wells are planned to be constructed in late summer/fall 2023 at three additional sites (i.e., for a total of six monitoring wells) for purposes of advancing understanding of groundwater and surface water interactions.

DWR has identified the major groundwater basins and subbasins in and around Napa County (DWR, 2016). The basins include the Napa-Sonoma Valley (which includes the Napa Valley and Napa-Sonoma Lowlands Subbasins), Berryessa Valley, Pope Valley, and a small part of the Suisun-Fairfield Valley Groundwater Basins.

With the California Legislature's passage of SGMA, groundwater management requirements are applied to all groundwater basins or subbasins that DWR designates as medium or high priority. Previously under the California Statewide Groundwater Elevation Monitoring Program (CASGEM), DWR classified California's groundwater basins and subbasins as either high, medium, low, or very low priority. The CASGEM priority classifications were made based on eight criteria that include the overlying population, the reliance on groundwater, and the number of wells in a basin or subbasin.

In 2018, DWR began a statewide process to revise the SGMA priority designations that it assigns to groundwater basins. Through that process, DWR changed the designation for the Napa Valley Subbasin from medium priority to high priority. The increase in priority designation for the Napa Valley Subbasin in 2018 was due primarily to revised projections of future population for the Subbasin, an increased assessment of the total number of wells in the Subbasin, and a revised approach to evaluating water quality in the Subbasin compared to the previous prioritization analysis performed in 2014. The change from medium priority to high priority did not affect requirements for the Napa Valley Subbasin under SGMA. The changed priority designation is also not a determination by DWR that the Subbasin has groundwater conditions of concern. For most basins designated by DWR as medium priority or high priority, SGMA requires the formation of groundwater sustainability agencies (GSA) and the adoption of a GSP or development of an alternative to a GSP, provided that the local entity (entities) can meet certain requirements. An alternative to a GSP may include "An analysis of basin conditions that demonstrates that the basin has operated within its sustainable yield over a period of at least 10 years" (Water Code Section 10733.6(b)(3)). In response to SGMA, Napa County prepared a Basin Analysis

Report for the Napa Valley, which was submitted to DWR on December 16, 2016. On July 17, 2019, DWR released a tentative determination to not approve the Basin Analysis Report. On November 13, 2019, DWR issued a final determination consistent with the draft determination.

Although the Basin Analysis Report was not approved, DWR's Staff Report to Napa County stated that DWR "did not consider and does not conclude that the Napa Valley Subbasin is, or has been, managed unsustainably" (DWR, 2019). Rather, DWR's decision focused on DWR's interpretation that the County had not implemented SGMA-equivalent metrics to define sustainable groundwater management prior to the passage of SGMA in 2014. DWR found the County to be "proactively managing groundwater" and noted that the Alternative submittal positioned the County for successful development of a GSP for the Napa Valley Subbasin (DWR, 2019).

Following DWR's decision to not approve the Basin Analysis Report, the Napa County Board of Supervisors acted on December 17, 2019, to become a GSA for the Napa Valley Subbasin and declare their intent to develop a GSP for the Subbasin by January 31, 2022.

In December 2019, DWR released another round of SGMA basin prioritizations, which maintained the very low priority designation for the Napa-Sonoma Lowlands Subbasin. The Lowlands Subbasin occurs along the lower Napa River, including the Carneros Subarea and American Canyon, and includes areas within Solano County. An earlier draft of the reprioritization released in 2018 had shown the Lowlands Subbasin designation increasing from very low priority to medium priority.

All other basins and subbasins located in Napa County continue to be designated as very low or low priority according to DWR's revised 2018 and 2019 designations. None of the basins and subbasins designated as very low or low priority are subject to additional requirements under SGMA, such as the development of a GSP.

Historically, County actions have included setting objective criteria to avoid adverse effects on groundwater resources. Through the development and implementation of the Napa Valley Subbasin GSP, quantifiable and sustainable management criteria were developed through a robust stakeholder process to further avoid undesirable results such as chronic lowering of groundwater levels, reduction in groundwater storage, water quality degradation, land subsidence, increased surface water flow reductions, and other adverse environmental impacts. Since 2009, Napa County has made significant progress towards executing groundwater-related studies and implementing recommendations provided by those studies to improve local understanding of groundwater conditions and ensure resource sustainability. Following adoption of the GSP, the Napa County GSA approved actions to immediately begin implementation before the GSP was submitted to DWR on January 31, 2022. The GSP was approved by DWR on January 26, 2023, and the County and the GSA are committed to sustainably managing groundwater resources by implementing an adaptive management approach supported by the best available information. New data and information are shared with the Napa County Technical Advisory Group (TAG), which had its first meeting in August 2022. The TAG receives briefings and ongoing updates and new information from County staff and technical consultants. The TAG considers how current information informs continued GSP implementation, and the TAG's role is to provide guidance on response actions as needed to ensure sustainability. The GSP implementation efforts support the overall requirement to achieve the sustainability goal.

Findings:

Finding 1. Napa County officials do not know the number, location, or capacity of groundwater wells and storage tanks in the County.

Response of the Director of the Department of Planning, Building and Environmental Services and County Executive Officer: We disagree wholly with the finding about number, location, and capacity of wells. We disagree partially with the finding about number, location, and capacity of groundwater tanks. Groundwater storage tanks 5,000 gallons or larger are required to be installed under a permit obtained from the Building Division. However, due to complexities of the permit tracking system, the number and location of tanks cannot be estimated with a reasonable degree of certainty. However, the number of such tanks is not indicative of the relative abundance or scarcity of groundwater in the Napa Valley Subbasin, and no conclusions or inferences about the health of the Subbasin should be drawn from any knowledge, be it anecdotal or evidentiary, of the existence of such tanks. Moreover, in some ways tanks can be beneficial in that they allow water to be stored and dispensed as needed instead of continuously pumping during peak usage periods, typically morning and evening for most households. Storage tanks also provide water in case of an emergency, pump failure, power outage, or when maintenance of the well or pump is necessary.

With respect to the number and location of wells, the County has permitted well construction including new, replacement, and the destruction of wells since late 1970 (under Ordinance 335). It is unknown exactly how many wells may have been installed prior to this date; however, in 2022 GIS staff from PBES (including the GIS Coordinator and two GIS technicians) embarked on a rigorous, 500+ hour exercise to verify the existence of all wells for which records exist, either within PBES or DWR. Staff reviewed over 10,000 well locations provided by the publicly available DWR *Well Completion Reports* online GIS layer. Many of the wells from the DWR layer were not located accurately. Where feasible, staff reconciled well locations by situs address and/or assessor's parcel number. The remaining wells lacking accurate site information were located by other means: 1) finding locations based on hand-drawn sketches in the well completion report, 2) matching well ID numbers to department-issued permits, or 3) utilizing visual matching means using engineering drawings or aerial photos as reference. As a result, GIS staff estimates that over 90% of these wells have been located with a minimum parcel-level accuracy.

The well verification exercise was ongoing at the time the Grand Jury was conducting their investigation and concluded only recently. County staff estimate the current number of wells as shown in the table below. It is important to recognize the number of wells does not correlate to the amount of water being pumped from the aquifer. The amount of water being pumped correlates to the land uses on the parcel (e.g., vineyard, dwelling, winery, etc.).

		Grand Total	Total	
Well Type	**Well Use + Cat.**		**GSA**	**Non-GSA**
Water Supply	**Domestic - Domestic**	4,978	1,601	3,377
	Irrigation - Ag + Landscape	2,573	1,131	1,442
	Public (Locally Regulated)*	184	81	103
	Other - Combined	339	128	211
	TOTAL, Water Supply	**8,075**	**2,942**	**5,133**
Monitoring		691	505	186
Other or Unknown		879	435	444
TOTAL WELLS		**9,645**	**3,882**	**5,763**
*These wells are GPS'd and tracked by PBES Environmental Health staff				

Most of the wells' locations have been verified with parcel-level accuracy and are stored in the County's GIS. During inspections of new public supply wells and destructions of existing public wells, staff use GPS to locate the well in the field and upload the data to the GIS system. Additionally, during well permit review, the well locations identified on permit submittal materials are shared with GIS staff for use to check the work in the GIS system and update as needed.

It should be noted that while the estimate of the number of wells presented here is believed to be accurate within the practical limits of time and staff resources, the exact number can never be absolutely ascertained. County staff will, on an ongoing basis, review any new or newly obtained records and revise the well count accordingly.

As to the question of well capacity, well drillers often estimate the flow of water following well installation and during or at the conclusion of well development. Sometimes this information is recorded on the Well Completion Report. However, these estimates are found to be generally unreliable and do not represent the ongoing, reliable groundwater flow that can be produced from the well after installation is complete. Moreover, these estimates (absent other information and analyses) would not provide useful information as to the health of the underlying aquifer even if they were accurate and consistently reported.

Additionally, a well yield test is required prior to the issuance of a building permit for a new dwelling or replacement dwelling. The water supply must provide a minimum yield prior to issuance of a permit to build a new dwelling (Napa County Code 13.04.040). A yield test must be conducted for a new small public water system prior to approval of a permit in accordance with California Code of Regulations, Chapter 16, Waterworks Standards, Section 64451. These yield tests are made available to the County when required to satisfy building permit requirements. These tests provide an indication of the amount of groundwater that can be reliably pumped from a well at a given location to meet the water demand for the intended use. This test is not an indication of the status of the regional groundwater system.

The Board of Supervisors agrees with the Director of the Department of Planning, Building and Environmental Services and County Executive Officer.

Finding 2. Despite the 2022-2023 storms, drought is still a concern in Napa County.

Response of the Director of the Department of Planning, Building and Environmental Services and County Executive Officer: We strongly agree with the finding. As presented in Agenda Item 11A to the Board of Supervisors on May 30, 2023, the Governor issued a Proclamation of a State of Emergency declaring drought in several counties, including Napa on May 10, 2021. 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 has prompted community members to ask if the region is still in a drought and whether an emergency is still needed. While drought conditions have ended and the Board terminated the State of Local Emergency on May 30, 2023, ongoing groundwater management efforts are required in the Subbasin and necessary countywide.

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" (Executive Order 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."

The Board of Supervisors agrees with the Director of the Department of Planning, Building and Environmental Services and County Executive Officer.

Finding 3. Napa County does not have an umbrella water agency to coordinate, oversee, and set policy for its 14 public and 20 private water districts.

Response of Director of the Department of Planning, Building and Environmental Services and County Executive Officer: We agree with the finding that the County does not have an umbrella water agency. The idea was preliminarily considered in the Napa Countywide Water and Wastewater Municipal Service Review issued by the Local Agency Formation Commission (LAFCO) in 2020. Examination of the pros, cons, level of effort and funding required to effectuate such an outcome will require further analysis. The creation of any such umbrella water agency would require approval by the 34 separate public and private entities, their customers, and the LAFCO.

The Board of Supervisors agrees with the Director of the Department of Planning, Building and Environmental Services and County Executive Officer.

Finding 4. Groundwater over pumping can lead to land subsidence, saltwater intrusion, decreased water quality, and depletion of aquifers.

Response of Director of the Department of Planning, Building and Environmental Services and County Executive Officer: We agree with this finding. The goal of the GSP is to achieve sustainability by ensuring that there are no Undesirable Results in the Napa Valley Subbasin by 2042. To accomplish the sustainability goal, the GSP includes six Sustainability Indicators for the purpose of avoiding significant and unreasonable effects on groundwater conditions throughout the Subbasin, including:

1. Chronic groundwater level decline;
2. **Reduction in groundwater storage;**
3. **Depletion of interconnected surface water;**
4. Land subsidence;
5. Degraded water quality; and
6. Seawater intrusion

Sustainable Management Criteria (quantitative metrics) are defined for each Sustainability Indicator, including the Measurable Objective, Minimum Threshold, and Undesirable Result. The Minimum Threshold defines when the indicators are declining to a point where the GSA should evaluate the conditions and determine the necessary responses needed to maintain or achieve sustainability, including implementing Projects and Management Actions (PMAs) to avoid Undesirable Results. An Undesirable Result indicates conditions that need to be avoided to protect the long-term health of groundwater in the Subbasin (including interconnections with surface water) and achieve sustainability.

In Water Year (WY) 2022, Minimum Thresholds were exceeded, at least in part, for five of the six indicators (all except seawater intrusion) and Undesirable Results were brought about for the two indicators shown above in bold print: reduction in groundwater storage and depletion of interconnected surface water. There were substantial groundwater level declines in more than 20% of the Subbasin representative monitoring site wells. Two monitoring wells at stream monitoring sites indicated consecutive fall occurrences in effects on the level of interconnected surface water at those locations. Groundwater declines in monitoring wells indicate the potential for subsidence, although InSAR (Interferometric Synthetic Aperture Radar) land surface displacement data indicate that the Minimum Threshold of 0.2 feet of subsidence has not occurred.

Although overall groundwater pumping in the Subbasin decreased compared with WY 2021, pumping in WY 2022 was still significant enough to result in an Undesirable Result for the Sustainability Indicator for reduction in groundwater storage. The 7-year average of annual groundwater extraction exceeded the estimated sustainable yield of 15,000 acre-feet/year for the Napa Valley Subbasin. In WY 2022, groundwater storage increased across most of the basin by 11,910 acre-feet. This contributed to some groundwater replenishment; however, the Subbasin was still significantly affected by persistent drought conditions during WYs 2020, 2021, and 2022; groundwater levels exceeded Minimum Thresholds, and Undesirable Results occurred for two

Sustainability Indicators. The large amount of precipitation in the first five months of WY 2023 is likely to result in significantly more groundwater replenishment in WY 2023 compared to WY 2022.

WY 2022 saw a continuation of drought conditions throughout Napa County and the Napa Valley Subbasin. WY 2020 and 2021 registered as the driest consecutive years since at least the 1890s, as measured by the precipitation gauge at the State Hospital in the City of Napa. Despite the early rains in October and December 2021, minimal precipitation occurred in later months in WY 2022. The precipitation total in WY 2022 was 21.24 inches and registered as a normal (below average) year.

Total water use (surface water, groundwater, and recycled water) in the Napa Valley Subbasin in WY 2022 is estimated to have been approximately 40,302 acre feet (approximately 4,000 acre-feet less than WY 2021), including uses by agriculture, cities, small public water systems, individual well users, Groundwater Dependent Ecosystems (GDEs), and other native vegetation. This is within the range of total annual water use documented since 1988, which has varied between approximately 38,000 and 47,000 acre-feet per year.

Groundwater extraction by wells totaled approximately 18,790 acre-feet in WY 2022, representing 47% of total water use. The highest level of pumping was in WY 2021 (22,840 acre-feet) and the second highest year of groundwater pumping was in WY 2020, when 19,610 acre-feet of groundwater was used. For the third consecutive year, groundwater pumping exceeded the estimated sustainable Subbasin yield of 15,000 acre-feet per year. With reduced rain, especially in Spring 2022, landowners appeared to increase their use of groundwater compared to years prior to 2020. Direct uptake of groundwater by GDEs and native vegetation accounted for another 16% (approximately 6,000 acre-feet) of total water use.

As described in the GSP, once Minimum Thresholds and/or Undesirable Results have been exceeded, the Napa County GSA should assess the causal factors resulting in the exceedance(s), including the extent to which the drought has contributed to these conditions. This analysis is critical to ensure careful consideration of potentially changed groundwater conditions and inform steps to implement Projects and Management Actions (PMAs). GSP Section 11 describes PMAs; this section also describes an adaptive management process. Ongoing data analysis to assess the status of each Sustainability Indicator is key to determining whether conditions are changing, and actions are warranted to curtail a trend in conditions such that they do not become significant and unreasonable and ultimately an Undesirable Result. It is useful to establish “early warning” metrics, which can be a specified, pre-defined trigger or an analysis approach to quantify a declining status or trend. This approach is designed to initiate a PMA well before the occurrence of an Undesirable Result. GSP Table 11-3 summarizes the criteria for the six Sustainability Indicators that trigger prompt analysis of basin conditions and possible implementation of PMAs to address the potential or actual exceedance of Minimum Thresholds or to mitigate Undesirable Results that have already occurred or are imminent. For WY 2022, Minimum Threshold exceedances, Undesirable Results, and response actions are summarized in Annual Report Table ES-6.

The Board of Supervisors agrees with the Director of the Department of Planning, Building and Environmental Services and County Executive Officer.

Finding 5. Education of vineyard and winery owners, vineyard managers, farmworkers, wine production employees, landscapers, and residential users, is critical for improved groundwater management.

Response of Director of the Department of Planning, Building and Environmental Services and County Executive Officer: We strongly agree with this finding. Education and outreach to the stakeholder community has been a priority for many years and efforts are underway to broaden and strengthen our engagement with the community. For example, the Communication and Engagement Plan (CEP, November 2020) prepared during GSP development is currently being updated and will include findings obtained through approximately 10-15 stakeholder interviews conducted by Stantec (under a facilitation support services agreement between DWR and the County) with a myriad of different stakeholder groups during the months of July and August 2023. The County maintains an email listserv of approximately 500 individuals who receive periodic emails about meetings of the GSA and TAG as well as water-related news and information. The County also convened a Drought and Water Shortage Task Force in 2021 in response to Senate Bill (SB) 552 and is developing a mitigation plan ("Drought Response Plan") to address measures to assist owners of domestic wells in the event those wells go dry as a result of declining water levels.

In addition, the County is developing two (2) workplans whose intended audience is vineyard and winery owners, vineyard managers, farmworkers, vineyard and winery industry associations, the Farm Bureau, and owners of individual domestic wells. These workplans include: 1) Napa County Water Conservation Workplan: A Guide for Vineyards, Wineries and Other Sectors, and 2) Groundwater Pumping Reduction Workplan. Representatives of industry associations, the Farm Bureau and the public regularly participate in GSA and TAG meetings and County staff and consultants have participated in educational seminars conducted by Napa Valley Grape growers and Napa Green, fostering multi-directional communication and study.

The Board of Supervisors agrees with the Director of the Department of Planning, Building and Environmental Services and County Executive Officer.

Finding 6. Government, wine industry, and environmental groups do not consistently collaborate on groundwater management issues.

Response of Director of the Department of Planning, Building and Environmental Services and County Executive Officer. We disagree with this finding. As described in response to Finding 5, communication among these groups has been an ongoing theme and regular occurrence for many years. The County's goal, as stated in the GSP, is to bring the Napa Valley Subbasin into a condition of "sustainability" as soon as possible and by 2042 at the latest (to be SGMA-compliant). We believe this is a goal shared by our partners in local environmental groups and the wine/vineyard industry who have regularly expressed their commitment to responsibly stewarding the land and water resources. GSP implementation has involved coordination and collaboration in many different forms; we have provided some examples below. As described in Finding 5, efforts are underway to increase communication and engagement, including productive collaboration, as described below:

- Outreach to vineyard and winery organizations seeking their input during the development of the outline for the Napa County Water Conservation Workplan;
- Meetings with the Napa County Farm Bureau, Winegrowers of Napa County, and others regarding GSP implementation activities and to address questions and receive input;
- Provided draft outline for Interconnected Surface Water and GDEs Workplan to California Department of Fish and Wildlife (CDFW) and NOAA to receive input on Workplan content;
- Collaboration with other Napa County governmental entities on the Drought Contingency Plan and response to SB 552, including assembling the Drought and Water Shortage Task Force;
- Coordination with Napa County Resource Conservation District (Napa County RCD) on development of a brochure that is being distributed to growers to encourage their participation in and volunteered contribution of land-based remote sensing data to help refine Subbasin water use estimates;
- Meetings with Sonoma Water to share concepts and information related to assessment of surface water and groundwater interconnectivity and refinement of Sustainable Management Criteria;
- Participation in a regional assemblage of Subbasins in Sonoma County, Lake County, Ukiah, Mendocino, Solano, and Yolo County areas to share concepts, ideas, information, and potential outreach strategies related to SGMA and GSP implementation;
- Coordination with other entities on grant funding pursuits, including GSP implementation, entities included but were not limited to Napa County RCD, University of California at Berkeley, University of California at Davis; letters of support requested and received from Senator Bill Dodd, CDFW, and NOAA;
- Coordination and initial meetings with researchers and others involved in the OpenET platform to examine approaches for refining water use estimates;
- Coordination with DWR regarding the establishment of a new CIMIS station in Napa County, including conversations with entities where the station might be sited; and
- Outreach to and collaboration with numerous entities including City of St. Helena, Town of Yountville and the Napa County Farm Labor Centers about participation in the GSP monitoring program, especially groundwater quality monitoring;
- Meeting with Sierra Club members during GSP development regarding Groundwater Dependent Ecosystems (GDEs)
- Meeting with to tribal representatives of the Yocha Dehe Wintun Nation regarding GSP development
- Meeting with ICARE (Institute for Conservation Advocacy Research and Education) and DWR regarding Airborne Electromagnetic Surveys (AEM)
- Meeting with SF Water Board, NOAA, CDFW and and ICARE representatives regarding low flows in Napa River during drought

County staff firmly believe that collaboration among these groups is critical to our success and will endeavor to foster a collaborative spirit in all matters related to groundwater management.

The Board of Supervisors agrees with the of Director of the Department of Planning, Building and Environmental Services and County Executive Officer.

Finding 7. The County permitting process is inconsistent, inefficient, and confusing to applicants seeking groundwater well permits.

R*esponse of Director of the Department of Planning, Building and Environmental Services and County Executive Officer.* We disagree with this finding. Prior to March 2022, the County's permitting process was streamlined and efficient. Permits were issued in a timely fashion and the public was very familiar with County procedures. With the promulgation of the Governor's Executive Order (EO) N-7-22 in March 2022, as well as recent court decisions, the permitting procedures of every county in the State had to be re-considered, and in some cases (such as Napa County), completely re-designed. In consultation with legal counsel and in recognition of the multiple priorities of the EO, alignment and consistency with GSP requirements, CEQA, public trust and intensifying drought, the County developed and adopted interim procedures for reviewing and issuing well permits in June 2022. Although the Governor, through a subsequent 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. The new procedures significantly increased the level of technical review and expertise required, both on the part of the applicant and staff, which likely resulted in some inconsistencies and confusion as staff and well drillers adapted to the new requirements. As with any new requirement or procedure, there can be a temporary lack of human and financial resources necessary to assimilate the range of legal considerations, establish performance metrics, and conduct outreach and trainings, etc. The new well permitting process has been functioning and running well, but this may not have been the case at the time the Grand Jury's investigation was conducted.

The Board of Supervisors agrees with the Director of the Department of Planning, Building and Environmental Services and County Executive Officer.

Finding 8. The GSA has only just begun to address groundwater issues via the GSP. However, most public and private groups and agencies feel the plan needs to be implemented as soon as possible.

Response of Director of the Department of Planning, Building and Environmental Services and County Executive Officer. We strongly agree with the finding that the GSP needs to be implemented as soon as possible. We disagree with any characterization that GSP implementation has not already begun. In fact, County staff contend implementation began immediately upon GSP adoption in January 2022.

An early and significant GSP implementation action occurred in June 2022. During the June 7, 2022, Board of Supervisors meeting, the Director of PBES explained that while the Governor's EO N-7-22 (issued on March 28, 2022) catalyzed the need for changes to the County's well permitting procedures, the EO was by no means the only factor contributing to that need. Other factors included: recent court decisions including public trust considerations, the County's own drought emergency and significantly, the GSP itself. The Director noted that PBES needs to be "*very nimble and very responsive as conditions*

change both for the environment and the regulatory area" and recommended that the County revise its well permitting procedures along with a concomitant change to the water use criterion from 1 acre-feet /acre to 0.3 acre-feet /acre.

On June 7, 2022, the Board of Supervisors unanimously accepted the Director's recommendation to revise groundwater well permitting procedures, including the 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).

The new water use criterion of 0.3 acre-feet /acre for land inside the Subbasin was derived by dividing the estimated sustainable yield of 15,000 AFY by the total Subbasin area of 45,900 acres. The determination of sustainable yield was made during GSP development. In short, the Governor's EO was a catalyst for procedural revisions necessary to satisfy multiple needs and requirements. These procedural changes were made while revisions to the County's Groundwater Ordinance and the WAA can be made to incorporate those factors. As of January 2023, Napa County PBES requires new and replacement well permit applications throughout the County to meet new regulatory requirements. The process of updating the WAA and ordinances has begun as of July 2022.

Additional examples of GSP implementation actions are below and can also be found in Finding 6.

The follow GSP implementation activities have been completed:

- ✓ GSP PMA Project #1 - Stormwater Resource Plan (May 2023) has been completed.
- ✓ The Technical Advisory Group (TAG) was formed and appointed – Eleven (11) meetings have been held since the first meeting in August 2022 and will continue.
- ✓ Four dual-completion groundwater monitoring wells were installed in Spring 2023 (equaling 8 new wells in total) for the purpose of enhancing understanding of interconnected surface water and groundwater at four sites around the Napa Valley Subbasin (i.e., Bale Lane, Rutherford Road, Petra Drive and Jefferson Street).
- ✓ Three or more potential (additional) monitoring sites are being evaluated for the purpose of installing more wells to advance understanding of groundwater-surface water interactions.
- ✓ Ongoing twice yearly (October and April) monitoring of approximately 115 public and private wells and dedicated monitoring wells in the County's monitoring network (some monitoring wells are monitored monthly, and 18 dedicated monitoring wells are (or will soon be for the new wells) monitored continuously (two-hour interval).

GSP implementation activities underway include efforts related to the following Projects and Management Actions (PMAs):

1. GSP PMA/Project #1 Managed Aquifer Recharge, through development of the Stormwater Resource Plan and assessment of Subbasin areas that have physical characteristics suitable for potential recharge. Additional evaluation of potential recharge areas will involve consideration of other factors.
2. GSP PMA/Project #2 Expansion of Recycled Water Use.

3. GSP PMA/Management Action #1, the Napa County Water Conservation Workplan: A Guide for Vineyards, Wineries and Other Sectors, is under development with numerous public meetings to receive input from the TAG and stakeholders.
4. GSP PMA/Management Action #2, the Groundwater Pumping Reduction Workplan is under development with numerous public meetings to receive input from the TAG and stakeholders.
5. Interconnected Surface Water and Groundwater Dependent Ecosystems (GDEs) Workplan is under development with numerous public meetings to receive input from the TAG and stakeholders.
6. GSP PMA/Management Action #3, revisions to the County's Groundwater Ordinance and 2015 Water Availability Analysis. Modifications to the WAA process and water use allocations were initiated in July 2022 in response to EO N-7-22. Further modifications and revisions to the Groundwater Ordinance are in development.
7. Public outreach and community engagement.

The Board of Supervisors agrees with the Director of the Department of Planning, Building and Environmental Services and County Executive Officer.

Recommendations:

Recommendation 1. By December 31, 2023, the Board of Supervisors will fill current gaps in groundwater usage data by expanding groundwater monitoring in key locations and initiate and enforce procedures to enhance data collection from agricultural and residential users.

Response of Director of the Department of Planning, Building and Environmental Services and County Executive Officer: The recommendation has been implemented. Four dual-completion monitoring wells were installed in the Spring of 2023, but opportunities for expansion will be an ongoing effort (see discussion in Background and also Finding 8). Groundwater level monitoring does not by itself provide accurate information on groundwater usage. As noted in Finding 6, many efforts are underway to develop refined information on groundwater use. The recommendation to initiate and enforce procedures to enhance data collection from groundwater users has been initiated but will take significant time to fully implement. Staff will continue to apprise the public about the progress of this recommendation.

The Board of Supervisors agrees with the Director of the Department of Planning, Building and Environmental Services and County Executive Officer.

Recommendation 2. By June 30, 2024, the Board of Supervisors in conjunction with all 14 public and 20 private water districts consider creating a single County-wide agency to oversee groundwater management.

Response of Director of the Department of Planning, Building and Environmental Services and County Executive Officer: The recommendation requires further analysis. The County cannot unilaterally require that other local governments and private districts consider an action, much less within the specified timeframe. As several of the entities rely on water from the North Bay Aqueduct, it also

involves state agencies. This is a very complex issue that affects the majority of all water users within Napa County. Examination of the pros, cons, level of effort and funding required to effectuate such an outcome will require further analysis.

The Board of Supervisors agrees with the Director of the Department of Planning, Building and Environmental Services and County Executive Officer.

Recommendation 3. By December 31, 2023, the Board of Supervisors will create and implement a plan to increase awareness of groundwater preservation strategies through the education of winery and vineyard owners and managers, farmworkers, landscapers, and residential users.

Response of Director of the Department of Planning, Building and Environmental Services and County Executive Officer: The recommendation has been implemented. As described in the response to Finding 6, the GSA has undertaken numerous efforts to increase public education, outreach, and awareness of water conservation. The GSA is also in the process of developing the Napa County Water Conservation Workplan: A Guide for Vineyards, Wineries, and Other Sectors, as well as the Groundwater Pumping Reduction Workplan, to be completed by the end of 2023. See also Findings 5 and 8.

The Board of Supervisors agrees with the Director of the Department of Planning, Building and Environmental Services and County Executive Officer.

Recommendation 4. By June 30, 2024, the Napa County Planning Department will enable more effective communication with applicants during the permitting process.

Response of Director of the Department of Planning, Building and Environmental Services and County Executive Officer: The recommendation has been implemented. In addition, opportunities for continued improvement exist and will continue to be explored. The applicants submitting well permits are licensed well drilling contractors as required by the California Well Standards and Napa County Code. During review of well permits over the last year, Environmental Health staff have communicated more closely with parcel owners than in previous years, but correspondence is primarily with the well drilling contractors submitting the application.

During the implementation of the changes triggered by the Governor's EO N-7-22 in March 2022 (and other factors noted in Finding 7) and then following the Board of Supervisor's acceptance of procedural changes in June 2022, conversations with the well drilling contractors working in Napa County occurred over the phone and during one-on-one meetings to discuss the overall requirements and project-specific requirements in particular. As new information was published, electronic mail was sent to well drilling contractors with handouts and information to help them understand the process.

The Board of Supervisors agrees with the Director of the Department of Planning, Building and Environmental Services and County Executive Officer.

Recommendation 5. By June 30, 2024, the Napa PBES research and communicate to the GSA the number of new or upgraded wells, their output, and the number of storage tanks.

Response of Director of the Department of Planning, Building and Environmental Services and County Executive Officer: The recommendation has been partially implemented. As described in response to Finding 1, PBES staff only just completed an exhaustive effort to confirm the existence of and map the locations of all wells in the County (to the extent historical state and county records were available) and created a GIS layer with the locations identified. County staff will, on an ongoing basis, review any new or newly obtained records and revise the well count accordingly. The recommendation to report the number of storage tanks is not warranted or reasonable for the reasons provided in response to Finding 1.

The Board of Supervisors agrees with the Director of the Department of Planning, Building and Environmental Services and County Executive Officer.