



Attention: Napa County Groundwater Sustainability Agency
Napa County, Dept. of Planning, Building and Environmental Services
1195 Third Street, 2nd Floor
Napa, CA 94559
GSPWorkplanComments@countyofnapa.org

Dear Napa County Groundwater Sustainability Agency,

On behalf of the nearly 650 members of the Napa Valley Grapegrowers, thank you for the opportunity to provide comments on the Draft Groundwater Sustainability Plan (GSP) Workplans. NVG's mission is to cultivate viticultural excellence and environmental stewardship for the Napa Valley; we are deeply passionate about educating on sustainable farming practices. To this end, we deliver dozens of educational programs to Napa County growers each year centered on farming with the highest respect for the environment and our natural resources; this, in turn, ensures the continued viability of Napa County's farming operations.

Our commitment to stewardship includes acting as the tip of the spear when it comes to water conservation practices. NVG believes that resource conservation and the preservation of ag land are inherently linked. To this end, we are proud of Napa County's foresight in instituting landmark Ag Preserve and Ag Watershed zoning policies as early as 1968, and, subsequently, comprehensive Conservation Regulations by 1991. Napa County's historic protection of agricultural green spaces, along with these mandates, has set our County up for continual returns when it comes to environmental benefits.

NVG's Involvement in the GSP Process to Date

As an organization, we have participated in all community efforts related to water conservation to date, including with representatives on the Groundwater Advisory Committee (GRAC) in 2014, and more recently, on the Groundwater Sustainability Plan Advisory Committee (GSPAC) leading up the development of the workplans under review. We have presented on multiple occasions to the GSP Technical Advisory Group (TAG) on 'Water Mitigation Strategies in Napa Valley Vineyards' including providing detailed data on trends in viticultural practices related to water use and conservation. In this way, we have been an active partner with the County on the development of the GSP Workplans.

We are grateful to county staff, as well as the GSA and TAG, for regularly including us in meetings and discussions. The following comments are intended to aid the county in refining and clarifying the proposed plan, to help build confidence in the model, and to lead to successful adoption. We recognize the complexity and detailedness of the GSP, and as such, encourage a measured rollout with ample community outreach, as many water users are still unfamiliar with the program. We continue to be willing partners in achieving the success of the GSP and remain available to provide in-the-field, science-based expertise.

Questions for Napa County:

- *What additional outreach do you have planned to ensure water users are aware of the measures outlined in the four workplans?*
- *What is the timeline for rolling out voluntary measures?*

Water Use Trends in Napa County Vineyards

Napa County growers want to be part of the solution when it comes to protecting communitywide water resources; growers in Napa County are deeply committed to water conservation and have been employing best practices since the beginning of this long-term drought. There is an array of tactics currently being employed in Napa County vineyards, and in most cases several tactics are employed; it's not a "one size fits all" approach due to different sites, soil types, vineyard designs, and farming practices. A 2023 Napa Valley Grapegrowers survey reflects this high interest in water conservation¹:

- 89% of grower respondents were interested in more programs and education related to water conservation, a slight increase over 2022, even after a rainier season.
- Growers use more than one source of water within a growing season, allowing for seasonal flexibility and leveraging water supplies when they are not at highest levels. Groundwater, surface water, municipal recycled water (i.e. NapaSAN, Yountville, etc...), and private-source recycled water are the most common sources. Others include municipal water, water delivery by truck, reservoirs, and captured drain tile water.
- 88% of growers surveyed already measure the amount of applied water, with irrigation schedules and groundwater and surface water pumping being the most common methods.

Even with such widescale adoption of water conservation practices and high levels of interest, it is imperative that the County make a proactive effort to support growers in achieving an additional 10% reduction over all and to actively mitigate challenges growers face when undertaking these voluntary efforts. According to the aforementioned survey, the most significant barriers for implementing new conservation measures are related to costs and uncertainty around efficacy of changes in practice.

This highlights both the need for incentives for viticultural water users to make changes in practice, as well as more education and outreach to ensure confidence in the GSP model. Since the state's mandate allows for implementation over 20 years, this affords Napa County time for ground truthing the current model and working in partnership with grape growers to track positive benefits of voluntary measures. Incentives include both financial support, as well as reducing regulatory obstacles; for example, Napa County must ensure that its Track 2 Erosion Control Plan (ECP) approval process allows for water conservation enhancing redesign opportunities i.e. related to row spacing and orientation. This "carrot" approach tends to lead to greater outcomes than a "stick" approach, as well as greater investment of all stakeholders in the success of the plan.

Questions for the County:

- *Will the County adopt a mechanism in the plan to recognize water users that have already undertaken voluntary conservation measures?*
- *What incentives will be provided to mitigate challenges of implementation for viticultural water users – both monetary and reducing regulatory barriers that disincentivize conservation actions?*

- *Will costs for changes in pumping practices and fees, such as for monitoring, come out of the County's General Fund or will individual users be responsible for these costs?*

Pattens of Land Use & Future Development

Through analysis of Napa County Crop Reports and ECPAs, we can understand the following about patterns of land use and future development related to vineyards in Napa County:

- Vineyard acreage is increasing at an annual rate of less than a half percent over the last 5 years, with a .4% annual increase as of 2022.
- In 2020 and 2021 Napa County saw a slight decrease in overall vineyard acreage.
- Pending ECPAs represent a .009% increase over current vineyard acreage.

In the context of the GSP, this means:

- We are seeing very slow growth when it comes to anticipated vineyard development. In the subbasin being monitored by the GSP, acreage has remained virtually the same over the last five year, or even in some years, decreased.
- Current trends actually point to a sustained decrease in vineyard developed Napa County in the near future.
- It is possible that in areas of decreased vineyard acreage, water uses are being traded for other uses, whether commercial, landscaping, or housing related.
- Thus, additional strains on the water systems will largely come as a result of climatic pressures and/or non-agricultural development.

Questions for the County:

- *Will the County analyze recent trends in land use changes away from agriculture to understand how water uses are being traded?*

Napa County's Sustainable Yield and Methodology

It has been mentioned in many public discussions that Napa County has fallen below its determined sustainable yield (*GPR Plan Section 1*). This is important to put into context. In 2022, the County revised the sustainable yield using a new numerical model that changed the yield from 17,000 – 20,000 AFY to ~15,000 AFY (*GPR Plan Section 8*). This update to the model coincided with a period of exacerbated drought, causing an almost immediate trigger in the plan. However, historically, growers have always been able to meet goals laid out in previous models, and NVG survey results indicate positive trends toward achieving the overall 10% reduction of pumping proposed in the GSP (*GPR Plan Section 1.1*). For GSP adoption, it is key that the County establish confidence in the model and methodologies. As noted above, uncertainty over the efficacy of water conservation efforts is a barrier for viticultural water users who would like their efforts to result in positive outcomes. To this end, it's important for the County to make clear the reasons for the update to the model and how this directly impacts the health of the subbasin. The GSPAC discussed prolonged drought impacts on sustainable yield at length as a point that needs to be continually revisited. That is, multi-year analyses of drought years are necessary to understand if hitting triggers is a cumulative input problem rather than an extraction problem.

Questions for the County:

- *With respect to stream flow, if we had remained within 15,000 AFY prior to 2022, would stream flow and subbasin outcomes have been different?*
- *We know that if all pumping stopped now, the tributary flow would not change, which points to the fact that we are facing an input problem rather than an extraction problem. How will this be adequately distinguished moving forward?*

Groundwater Pumping Reduction Plan (GPR): Implementation and Monitoring

There has been significant discussion among the TAG related to metering and monitoring. Within the GPR Plan, it is important to acknowledge the following:

- The GSPAC specifically supported a voluntary 10% reduction in pumping; however, this was not intended as a mandate for all individual well owners, but to be achieved in aggregate by all groundwater users across the basin.
- Enough metered and monitored wells exist today in the County inventory, either by voluntary measures or mandatory reporting, to provide a statistically significant sample set that can inform the GSP. Mandatory metering and reporting is not necessary to establish a baseline and/or record the impact of voluntary reductions.

It is important to acknowledge the limitations of ET-based data. ET-based data does not adequately differentiate between water sources, and in practice ET monitors do not always reside in places that represent surface water accurately; this means that there is potential confirmation bias built in to relying solely on ET data, and it would be better to look at multiple sources of data a sample set of sites.

The GPR also references the reduction of water use criterion for the subbasin to 0.3 AFY, without providing a scientific basis for this criterion. This is something that should be grounded solidly in science and directly correlate to desired outcomes.

Questions for the County:

- *How will Napa County adequately differentiate between water sources when using ET monitoring?*
- *What is the scientific basis for the 0.3 AFY criterion referenced, as well as the setting of well permitting requirements without approved Board of Supervisors or GSA action?*
- *While outside the scope of the current plan, can we prioritize quantifying the impact of land and river restoration in and around the subbasin?*

Interconnected Surface Water and Groundwater Dependent Ecosystems (ISW & GDEs)

While it is inherently difficult to understand the interconnectedness of groundwater and surface water, this linkage is foundational to the development of this workplan. If not thoroughly assessed and validated, the County runs the risk of creating a hierarchy of uses that is not in the purview of the state mandated GSP (between surface, groundwater, or other users).

Depending on annual climate conditions, the interconnectedness of surface and groundwater also provides opportunities to benefit various environmental goals. For example, within the plan, the County

should not ignore the opportunity for impounded surface water or groundwater to augment streamflow, thereby supporting surrounding ecosystems and protected species. This kind of program is employed by agencies like NOAA with great effectiveness, with positive outcomes that were presented to the GSPAC.

It is also important to note that housing is known to use more AFY than either winery or vineyard uses; as noted in figures in the workplan, rural residential water use accounts for 18% of groundwater usage in the subbasin, with 90% of this dedicated to landscaping and irrigation. This points to the fact that the impact of de minimis users can be extreme. Although not explicitly included in the purview of the workplan, this County should do due diligence in continuing to assess this high intensity use. This is especially important in California, where preservation of farmland is under threat, and land use most often yields to residential and commercial uses. As referenced above, additional strains on the water systems will largely come as a result of climactic pressures and/or non-agricultural development based on current patterns of land use and rates of development.

Questions for the County:

- *Where is the data to support the following statement: "The analyses assume that all surface water in the Subbasin is connected to groundwater at least some of the time?" Will the County do more to assess and validate this statement?*
- *Can opportunities to augment streamflow be better incorporated into the workplan i.e. managed releases of groundwater in drought years and/or impounded surface water in higher rainfall years?*
- *How is the County accounting for anticipated land use changes that include potential loss of farmland and yielding to residential and commercial uses that are known to be more water intensive per acre than agricultural land?*

Water Conservation Plan (WC)

The WC Plan is a crucial component in ensuring adoption of the GSP model across water users. It points to strategic opportunities to leverage resources and incentivize users to voluntarily participate in the plan and share monitoring data. To this end, the WC Plan should make clear incentives that exist for water users willing to adopt voluntary measures or who have already adopted such measures proactively, as well as for those are willing to voluntarily share data that supports ground truthing the model and the efficacy of the GSP over time.

Additionally, in the face of more extreme weather events, Napa County will face both drought and flood scenarios. Therefore, the WC Plan should include dealing with an excess of stormwater and how to leverage this as a resource i.e. through time-delay impoundments and other mechanisms.

Questions for the County:

- *Will there be cost decreases and other incentives for water users taking voluntary actions and/or sharing monitoring data?*
- *Will the County incorporate all extreme weather scenarios including both drought and flood events and mechanisms to leverage water supplies amidst both challenges?*

Supplementing the GSP

To supplement the GSP, we advocate for the following:

- Include some analysis and monitoring of de minimis users in the workplans.
- Consider inclusion of well data that is already mandated per use permits and other county processes in this monitoring network.
- Examine opportunities to improve the overall health of the aquifer through land and river restoration strategies. This would require the ability to accurately portray what ecosystems look like after restoration and to focus less on extraction. Ongoing efforts such as along Bale Slough and past efforts such as along Rutherford Reach have already been employed with positive outcomes.

Questions for the County:

- *How much well data is already mandated that could support the plan through processes like modifications to use permits and updates to the Water Availability Analysis? Will these be applied to the dataset?*
- *Will water users get feedback on whether the 10% reduction in aggregate goal has been achieved, and what is the reporting frequency to the public?*
- *What are the benefits of ongoing river restoration efforts and how can we capture these benefits as part of the plan moving forward?*

We thank you for this opportunity to comment on the GSP Workplans and welcome any questions. We continue to serve as a voice for growers through this process and an enthusiastic partner in sharing effective water mitigation strategies in Napa County vineyards, as well as ensuring the County meets the environmental goals mandated by the state.

Sincerely,



Sonya DeLuca
Interim Executive Director
Napa Valley Grapegrowers

cc: CEO Ryan Alsop, Planning Director Brian Bordona, Napa County Groundwater GSA, and Jamison Crosby

ⁱ [Water Mitigation Strategies in Napa Valley Vineyards](#)