Comments of Jim and Olga Martin Steele
Regarding
Monte Cristo Vineyards
Major Use Permit Application for
AP# 006-007-17,23,30

Location Relevance: The location of the proposed project abuts our property line and potentially is within the radius of influence for all fractured rock aquifer wells such as ours. We noted that the Hydrology report for the project appeared to treat the ground water influence evaluation as though the site is similar to an alluvial plain aquifer without qualification. It is not. California is naturally a desert state with highly variable rainfall events and Lake County sits entirely within the inner-coastal range of complex geology and groundwater aquifers. This should be the starting point for radius of influence and impacts analysis.

While drilling our well, we noted that useable water was only located in a narrowly confined aquifer zone before the drill passed through to a non-water-containing layer. These aquifers commonly recharge laterally and sometimes from significant distances. Confined aquifers are said to common along the ridgeline to the south of High Valley historically producing springs where they daylight and create artesian effects in wells. Over the years, many of these springs have ceased to flow and well water-levels have dropped in correlation with intense agriculture in High Valley and the recent long drought period.

As example, our own well has a significantly less artesian level today even though we only have a small family use impact. When first drilled, the well water level arose from the water strike location at ~300 feet depth up to within 100 feet of the well head by artesian pressure. The loss of this effect over twenty years appears to correlate with both the rise in High valley intense water-use agriculture and the prolong drought (described by some as a 1200 year event). Neighbors are reporting the same effects.

Potential cumulative impacts: We've noted (Realm Hydrology Report) that wells that could be in the area of influence for this project did not include our well location as "known" nor potential impacts to any neighbors at lower elevations along the Southern Slope leading to the lake front. These well users should be included in the analysis because of their potential dependence on water drafting at elevations higher on the mountain. The history of drying springs and continually lower well levels could be an indicator of the cumulative impact of both the prolonged drought and the advent of intense agriculture in the High Valley area. This potential should be noted and analyzed

using science that evaluates the relevant sensitivity of the methods used, rather than just applying engineering formulas as though no room for error-of-relevance exists.

Outside of required protection area: The project location is outside of a recognized groundwater basin management area mandated by the State. Therefore, by definition no required or monitored management plan is in existence for the special fractured rock aquifers that exist outside of the High Valley groundwater basin. Because a State plan is not required is not to say that no impacts exist, nor that a trend toward less available water exist, nor that additional protections for surrounding wells is not appropriate. Just that no data exists for supporting a no-impacts conclusion and therefore protections equal to these unknowns should be required.

Major-Use Permit opportunity: The project application is for a major use permit and is the opportunity for a modern day reset in protections for groundwater use for todays and future environment. A de novo analysis should be completed for the proposed project's impacts independent of the previous uses in the area and not compared to past water draws from the proposed wells. They are no longer relevant. Since the existing wells were drilled, more users are in the area using water from the aquifer, the drought has reduced the chance for groundwater recharge for all users, and the proposed use is different therefore: retirement of the old wells and a no-project finding in an unpredictable drought environment should also be part of the consideration.

Special need for a complete arm's length analysis: The water availability analysis should take advantage of suitable existing studies and evaluations from relevant disciplines. I note that Geologist reports completed for the High Valley Area were not referenced in the Hydrology report or used in analysis. Understanding the local geology and how groundwater is influenced by Geological structures influencing impervious layers, connectivity, percolation rates vs. runoff dynamics, lateral migration recharge and loss appears essential to a good evaluation.

During my own work as a consultant doing evaluations of sensitive aquatic projects in other counties, I was required to work under the direction of the Approving Agency and independent of the project proponent (who paid the Agency by fee). This situation seems to apply here because of the controversial nature of the proposed project and its new use in High Valley as a major use project. In this case, the proponent should not select the consultant.

Recommendations:

1. Set the stage: The large nature of this project including the increased intensive water use activity should be analyzed de novo of past local use. The analysis

should begin with both the unknowns and knowns of the water supply and its users to set the stage for relevant standards for future major use operations and potential climate conditions.

2. **Protections:** The extreme drought and the unpredictable persistence of future low water years should guide protections that would apply to surrounding families and food farmers that depend on water that could be affected by a non-essential, major-use project. Small well users should not be put in a position of determining what caused their wells to fail or to challenge larger and well-funded users.
3. **Appropriate review level:** At the very least, a properly funded **"focused" water-availability and use EIR** should be required to analyze the suitability of available data, describe the data needed for conclusions and to develop the protections relevant to neighboring family and farm users consistent with the natural desert-like inner coastal environment.
   -Some potential protections could include: **a.** specific purpose witness wells at appropriate depths protective of ground water over drafting, **b.** water use gaging on all wells, **c.** continually recording automatic water level monitoring (and reporting) and **d.** an arm's length professional evaluation of the surrounding water aquifers and their connectivity. All information should be electronically available for public review w/o charge for the life of the project.

Staff Role: The Board of Supervisors at the time of passing the ordinance for land use by cannabis operations sought to bring the industry into the permit process to protect water, land and neighbors because of past illegal activity impacts. What was expected are well evaluated applications that would not result in unanticipated future consequences. Adequate staffing levels have not always been available for this important program so staff-support consulting is needed to analyze complex applications.
Even though the Planning Commissioners make the final decision on this Major Use permit, the role of staff is extremely important as gathers of relevant data and providing evaluations that influence the decision. This is not a ministerial process.

We know staff represents and works for the people of Lake County as independent reviewers w/o bias and knowledgeable in the science needed for a decision with appropriate protections. This is a big public trust responsibility and we recognize and commend staff for their efforts in bringing the proper protections forward.

Thank you.

Jim and Olga Martin Steele
10750 Pingree Road, Clearlake Oaks, CA
4/20/2022