



A Tradition of Stewardship
A Commitment to Service

Department of Public Works

1195 Third Street, Suite 101
Napa, CA 94559
www.countyofnapa.org

Steven E. Lederer
Director

MEMORANDUM

To: Planning Department Charlene Gallina	From: Department of Public Works Steven Lederer
Date: August 14, 2018	Re: Anthem Winery #P14-00320-UP Water Availability Analysis 3454 Redwood Road APN 035-470-046

Charlene:

The Department of Public Works in collaboration with Luhdorff & Scalmanini Consulting Engineers (L&S) have reviewed the Water Availability Analysis (WAA) responses provided in the memorandum prepared by Richard C. Slade & Associates LLC (RCS), dated March 23, 2018. The March 2018 RCS memo was prepared in response to comments by L&S dated January 22, 2018 in response to L&S’s peer review of the Project’s April 2017 Water Availability Analysis prepared by RCS.

The following summarizes our review of the documentation and responses provided in March 23, 2018 RCS letter.

Item 1 (Updated Hydrographs and Totalizer Data for Project Wells 3, 6, and 8)

- a. The memorandum dated 3/22/2018 addresses the request for additional data, and the Applicant’s consultant notes “based on the available data, the total groundwater extraction at the property does not appear to have exceeded the estimates presented in the RSA+ Tier 1 calculations for existing uses” (p.2).
 - 1. The groundwater pumping data provided do show that the three project wells have produced enough water annually to meet the existing annual demands documented in the WAA, although the data show that Well 8 has supplied the majority of the groundwater produced by all three wells in two of the three years. This is inconsistent with the statement in the Draft Addendum to the WAA, dated October 19,2017, that “Well 8 was drilled and constructed to help support the proposed project, and is not need[ed] to meet the existing water demands on Parcel 1 or Parcel 2” (p. 5).
 - 2. As requested, the water level hydrographs included in the 3/22/2018 memorandum provide updated groundwater data through February 2018. The updated hydrographs, along with the reported groundwater pumping volumes, highlight the relatively limited capacity of the project wells.

The response is sufficient in providing additional information to demonstrate adequate groundwater availability to meet current demands, though the Applicant's consultant may want to provide clarification as to the need for using Well 8 to meet existing groundwater demands. The additional data also highlight the need for conditions of approval, as described on our letter dated January 22, 2018 (also see below), to ensure that groundwater conditions and water use are tracked and reported going forward, and to ensure that the three project wells are able to meet increased future groundwater demands over multiple years and different water year types.

Item 2 (regarding the 5 gallon water/1 gallon wine rate of use for the proposed winery)

- a. The response provides additional professional opinion from consultants RSA+ that the proposed winery is designed to meet the stated rate of water use for winery processes.

Item 3 (regarding the lack of losses anticipated in recycling winery process water for re-use to meet irrigation demands)

- a. The response by consultants RSA+ provides additional information, as requested, specifying that the project incorporates infrastructure and operation Best Management Practices to minimize losses.

Item 4 (additional documentation for 2013 and 2014 trucked water deliveries)

- a. The response addresses the request for documentation to support the summary presented in the WAA, and is sufficient to meet the need for the additional data that we identified.

Based on the County's review, in collaboration with L&S, of the documentation provided in the Project's April 10, 2017 Water Availability Analysis, and subsequent October 19, 2017 and March 23, 2018 peer review responses, the County has determined the WAA to be adequate. This determination has been made because the WAA adequately discloses potential impacts of the project, which are anticipated to be less than significant. Additionally, conditions of approval developed for this project, as described below, are anticipated to maintain potential impacts at a less than significant level. The proposed Conditions of Approval for this project have been developed in collaboration with L&S. Any changes in use may necessitate additional conditions for approval.

Feel free to contact the Public Works Department or L&S with any questions, or if you would like to discuss this matter further.

Recommended Conditions of Approval:

4.9 GROUND WATER MANAGEMENT - WELLS

This condition is implemented jointly by the Public Works and PBES Departments:

The permittee shall be required (at the permittee's expense) to record well monitoring data (specifically, static water level no less than quarterly, and the volume of water no less than monthly). Such data will be provided to the County, if the PBES Director determines that substantial evidence indicates that water usage at the winery is affecting, or would potentially affect, groundwater supplies or nearby wells. If data indicates the need for additional monitoring, and if the applicant is unable to secure monitoring access to neighboring wells, onsite monitoring wells may need to be established to gauge potential impacts on the groundwater resource utilized for the

project. Water usage shall be minimized by use of best available control technology and best water management conservation practices.

In order to support the County's groundwater monitoring program, well monitoring data as discussed above will be provided to the County if the Director of Public Works determines that such data could be useful in supporting the County's groundwater monitoring program. The project well will be made available for inclusion in the groundwater monitoring network if the Director of Public Works determines that the well could be useful in supporting the program.

In the event that changed circumstances or significant new information provide substantial evidence¹ that the groundwater system referenced in the Use Permit would significantly affect the groundwater basin, the PBES Director shall be authorized to recommend additional reasonable conditions on the permittee, or revocation of this permit, as necessary, to meet the requirements of the County Code and to protect public health, safety, and welfare.

4.20 OTHER CONDITIONS APPLICABLE TO THE OPERATIONAL ASPECTS OF THE PROJECT

- a. The project parcels (Parcel 1, 3123 Dry Creek Road, APN 035-460-038; and Parcel 2, 3454 Redwood Road, APN 035-470-046) shall be limited overall to **4.71 acre-feet of groundwater per year** for all groundwater consuming activities on the project parcels. Specifically, Parcel 1 shall be limited to 0.75 acre-feet of groundwater per year, and Parcel 2 shall be limited to 3.96 acre-feet of groundwater per year. A Groundwater Demand Management Program shall be developed and implemented for the project property as outlined in COA 6.15(a) below.
- b. The planned transfer of groundwater from Parcel 2 (3454 Redwood Road: APN 035-470-046) to supply existing residential uses on Parcel 1 (3123 Dry Creek Road: APN 035-460-038), shall be documented and memorialized through the recordation of an "Agreement for Grant of Easement and Water Right" as described in Appendix E of the Water Availability Analysis Guidance Document (Napa County, 2015). The Agreement shall be on a form approved by the County and shall be recorded by the owner/permittee prior to commencement of any activities authorized by #P14-00320-UP.
- c. The planned transfer of reclaimed winery process wastewater from Parcel 2 (3454 Redwood Road: APN 035-470-046), to supply the proposed additional vineyard acreage on Parcel 1 (3123 Dry Creek Road: APN 035-460-038), shall be documented and memorialized through the recordation of an "Agreement for Grant of Easement and Water Right" as described in Appendix E of the Water Availability Analysis Guidance Document (Napa County, 2015). The Agreement shall be on a form approved by the County and shall be recorded by the owner/permittee prior to commencement of any activities authorized by #P14-00320-UP or #P14-00322-ECPA.
- d. The applicant/Permittee shall verify prior to issuance of a certificate of occupancy, that water storage capacity sufficient to meet the maximum monthly storage requirements exists on-site (1.26 acre-feet), in addition to any storage required for fire safety, as detailed in the water balance information provided in the revised "*Tier 1 Water Use Calculations*" prepared by RSA+ August 30, 2017. The "*Tier 1 Water Use Calculations*" are also appended the Peer Review Response dated October 19, 2017 prepared by Richard C. Slade & Associates LLC.
- e. No new or existing on-site or off-site water sources, other than that evaluated as part of this Use Permit (#P14-00320-UP) and Agricultural Erosion Control Plan (#P14-00322-ECPA) shall be used for winery operations or vineyard irrigation. Any other proposed irrigation source, including but not limited to wells, imported water, new or existing ponds/reservoir(s) or other surface water impoundments, to serve the winery or vineyard, shall not be allowed without

¹ Substantial evidence is defined by case law as evidence that is of ponderable legal significance, reasonable in nature, credible and of solid value. The following constitute substantial evidence: facts, reasonable assumptions predicated on facts; and expert opinions supported by facts. Argument, speculation, unsubstantiated opinion or narrative, or clearly inaccurate or erroneous information do not constitute substantial evidence.

additional environmental review, if necessary, and may be subject to a modification to this UP and ECPA.

6.15 OTHER CONDITIONS APPLICABLE TO THE PROJECT PERMITTING PROCESS

a. Groundwater Demand Management Program

1. The permittee shall install a meters on each well serving the project parcels (i.e. Parcels 1 and 2) and on any other water sources used to supply the project water (i.e. rainwater harvesting system and reclaimed/recycled winery process wastewater system). Each meter shall be placed in a location that will allow for the measurement of all groundwater, harvested rainwater and reclaimed water use on the project parcels. Additionally, groundwater level data for each well serving the project parcels shall be recorded and reported as described in 5 and 7 below. Prior to the issuance of a grading or building permit for the winery or commencement of vineyard development, the permittee shall submit for review and approval by the Director of Public Works a groundwater demand management plan which includes a plan for the location and the configuration of the installation of a meter on all wells serving the parcels (including method of groundwater level measurement), and the installation of a meter on all other winery water source.
2. The Plan shall identify how best available technology and best management water conservation practices will be applied throughout the parcels.
3. The Plan shall identify how best management water conservation practices will be applied where possible in the structures on site. This includes but is not limited to the installation of low flow fixtures and appliances.
4. As a groundwater consuming activity already exists on the properties, meter installation and monitoring shall begin immediately.
5. For the first twelve months of operation under the Use Permit, the applicant/permittee shall read the meters at the beginning of each month and provide the data to the Public Works Director and the Planning Department monthly. If the water usage on the properties exceeds, or is on track to exceed, 4.71 acre-feet per year, or if the permittee fails to report, additional reviews and analysis and/or a corrective action program at the permittee's expense, shall be required and shall be submitted to the Public Works Director and the PBES Director for review and action.
6. The permittee's wells shall be included in the Napa County Groundwater Monitoring program if the County finds the well suitable.
7. At the completion of the reporting period per 5 above, and so long as the water usage is within the 4.71 acre-feet per year as specified above, the permittee may begin the following meter reading schedule:
 - a. On or near the first day of each month the permittee shall read the water meters, and provide the data to the Public Works Director during the first weeks of April and October. The Public Works Director, or his designated representative, has the right to access and verify the operation and readings of the meters during regular business hours.
 - b. Water monitoring data collection and reporting shall be conducted for a minimum of five years from the start of winery production or the completion of the vineyard, whichever is later.

9.9 OTHER CONDITIONS APPLICABLE PRIOR TO ISSUANCE OF A FINAL CERTIFICATE OF OCCUPANCY

- a. All required meters shall be installed and all groundwater usage monitoring required in COA 4.20(a) and 6.15(a) shall commence prior to final occupancy.