Mount Veeder Stewardship Council
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January 6, 2015

Steven Lederer, Director
County of Napa Department of Public Works
1195 Third Street
Napa CA 94558

John McDowell, Deputy Planning Director
Napa County Planning Department for
Napa County Planning Commission
County Administration Building
1195 Third Street, Suite 305
Napa, CA 94559

Re: Napa County Water Availability Analysis
January 7, 2015 Hearing before the Napa County Planning Commission

Dear Mr. Lederer and Planning Commission:

Members of the Mount Veeder Stewardship Council have reviewed the most recent Water Availability Analysis (hereinafter "WAA") dated December 18, 2014 and submit the following comments regarding the document and the Frequently Asked Questions and Comments Received, of the same date.

Water Availability Analysis Procedure

The outlined WAA Procedure on page 4 has two goals, but the Mount Veeder Stewardship Council believes there should be a third goal: The WAA should also provide neighbors to proposed projects with a clear set of procedures for citizens to present problems and demand more study on the particular applications or existing permits.

Currently the WAA is only focused on the applicant and the Napa County administration of the WAA and the Napa County Water Conservation regulations. The WAA lacks guidelines for the inclusion of the remaining citizens of Napa County, especially the adjacent neighbors who are also using the groundwater resources.

In the Conclusion on page 14, the WAA describes a community water resource but the specific language does not give guidance to those who are significantly impacted by the Permit Applicant or Permit holder's right to use a public groundwater resource.

WAA Application Procedure

In the WAA application procedure, Item 2, on the top of page 5, requires the applicant to provide locations of existing non-project wells on other parcels within 500 feet, based on the applicants knowledge and available public information. However, for surface water rights, the applicant is only required to identify existing surface water rights within 1,500 feet based on the applicant's knowledge, **but not from available public information**.

The Applicant should be required the search public data on the Public Surface Water Rights DataBase, Electronic Water Rights Information Management System, on the California State Water Resources Control Board Website, to locate these adjacent surface water rights. Citizens holding surface water rights, especially those downstream, should be notified of the permit application for these well locations.

On the bottom of page 5, Item 2, of the criteria for the staff review of the application, non-project wells within 500 feet and are completed to similar depths as the projects well(s). The criteria for the comparison of similar well depths was not defined. What is considered similar depths? Also, there is no discussion regarding springs. There should also be consideration of springs in this item, or a separate item.

Recharge of Water in All Other Areas

On pages 7 and 8 there is a brief discussion regarding estimating recharge for All Other Areas for the Water Availability Analysis. The discussion is very brief. There should be additional guidance regarding recharge.

Water Quality and Recharge are interconnected and a better analysis should not take into consideration the recharge for a water source producing useless water for the application.

If the project well uses a 500 foot radius for interference criterion, then the recharge for that well should only use, at a maximum, the 18 acres in the 500 foot radius. If the aquifer is limited to 18 acres, then the recharge area should be limited to the same area. If there is another well, project or non-project, in that radius, then the recharge circle area is further reduced by the recharge area needed for the other well(s).

Recently, the Planning Commission approved a winery in Angwin (which is in All Other Areas pursuant to the Water Availability Analysis) which was required to show that there was adequate recharge of groundwater. The Planner who reviewed the project mentioned the rainfall in the area, and based upon very brief comments regarding rainfall and no complaints from neighbors, approved the winery use application, with out any hard data regarding actual recharge in the area.

In Appendix B, Parcel Location Factors, the project applicant will need to estimate the average annual recharge occurring in the project area. Using an average annual recharge does not consider the variations of rain amounts on the property and available for use on the project. Heavy rain years averaged with drought years does not an accurate evaluation method since the effects of drought on the project operations are not considered. Drought might force the project to import or haul water in and attempt to maintain a non-drought supply of water to the project, rather than remain as a sustainable operation that lives within its means and the capabilities of the project site to provide adequate quality groundwater resources.

Screening Criteria in All Other Areas

The Tier 2--Well Interference Criterion, the discussion of Table 2B, on page 9, describes site-specific measures of significance should also account for known seasonal variations in groundwater elevation in the vicinity, in All Other Areas. The Stewardship Council believes that neighbor notification should be more comprehensive to include neighbors who are nearby in the watershed, using a 4 foot by 8 foot project site sign posted on the property.

Posted notification could elicit more well information from neighboring properties, as was demonstrated in the Walt Ranch Public Comment Forum, when watershed neighbors shared their well water and spring level experiences throughout their history in the watershed. This would be an appropriate measure to elicit voluntary participation in the California Statewide Groundwater Elevation Monitoring (CASGEM) program, giving Napa County a head start on the upcoming California regulation concerning Aquifer Management requirements.

Springs in the Water Availability Analysis

The Water Availability Analysis now includes springs in determining the impact on water sources; however, the document is not always quite clear regarding the addition of the springs to the analysis.

So for example, on page 6, Table 1, under Tier 2 references Well Interference. It should now read Well and Spring Interference.

Likewise, on page 8 there is a header which reads "Tier 2 - Well Interference Criterion". Either this should be changed to "Well and Spring Interference Criterion" or on page 9 the header entitled "Springs" should be changed to "Tier 2 - Spring Interference Criterion".

On page 9, the last paragraph reads in part that:

> Because springs originate as groundwater, springs are mentioned in the WAA Tier 2 analysis. It is recommended that any proposed project wells occurring within 1,500 feet of natural springs that are being used for potable or agricultural purposes be evaluated to assess potential connectivity between the part of the aquifer system from which groundwater is planned to be produced and the spring(s).

First, springs are not "mentioned" but rather **included** in the Water Availability Analysis.

Second, it should be **required**, not recommended, that springs within 1,500 feet of a proposed project well, as well as **an existing project well**, be evaluated to determine impact of the well on the springs.

On pages 9 and 10, for springs, it is only recommended and not required that analysis of the connectivity between the part of the aquifer system from which groundwater is planned to be produced and the spring(s). What is the technical criteria for a recommendation and the requirement for monitoring and further analysis? It should be required, especially since this spring water is used as a neighbor's potable water source and a basic requirement for the neighbor's health and safety.

While Appendix F, has a section for Well Interference Evaluation, it lacks a section for Spring Interference Evaluation for the Tier 2 analysis. There should also be a section in this appendix for the Spring Interference Evaluation.

Additional Analysis Required

On pages 12 and 13, Additional Analysis Required, paragraph 3, it appears to be assumed that the valley floor consists entirely of unconsolidated aquifer material. In the case of the Yountville Hill Winery, the well was drilled into consolidated or hard rock aquifer materials, but the WAA used the rule of thumb of 1 acre-foot of water available for each acre of land for unconsolidated aquifer material, rather than the project specific requirements of the WAA for consolidated aquifer material.

Water Quality

Water Quality is not addressed in the WAA Working Draft of December 18, 2014, and only mentioned in the Frequently Asked Questions, Item 5. The Mount Veeder Stewardship Council believes that Water Quality is an integral component in determining many aspects of well to well and well to spring interference, and the recharge calculations for availability and quantity of the groundwater and surface water resources to be used by the applicant.

Water Quality and Recharge are interconnected and a better analysis should not take into consideration the recharge for a water source producing useless water for the application. This water should not be counted as available in the permit calculations.

In the case of the Woolls Ranch Vineyard and winery permits, and the subsequent WAA, the Water Quality evaluations were an integral part of the well to well and spring interference investigations. The similarity of the mineral footprints of the Winery Well and the Springs indicated a connection of the Aquifers for each source. The same was true for the Woolls-Walker Well and the Allen/ Walker well on the adjacent neighboring property.

The need for water quality (mineral footprint) testing was also demonstrated by the Pond Well on the Woolls property. The water contained high levels of boron that were too concentrated to apply directly on the vineyard grapestock. Dilution was the only solution to this high boron content, and the only available water source for dilution is the other two proven wells on the property, the Winery Well and the Woolls-Walker Well.

The Woolls Pond Well was tested at the completion of the well construction in 2007, and analysis at that time indicated a high level of boron. Three years later, in 2010, the vineyard was planted and irrigated with well water from the Pond Well, the Winery Well and the Woolls-Walker Well. All three wells were pumped into the pond for distribution in the irrigation system. When the consultant did a Pond Water Quality Test (mineral test) for the Woolls WAA, the Pond water contained a boron concentration too high for vine irrigation.

If Woolls was aware of the original well water quality testing, they might have made better choices for their irrigation regime and avoided costly hauling water they needed to correct this boron problem. This quality testing was also available to Planning Staff, whose review of the report and consultation with the applicant, could have avoided the resulting problems.

Monitoring of Actual Water Use for a Project

The Mount Veeder Stewardship Council believes that any project which is granted a discretionary permit and is subject to either Tier 1, Tier 2 or Tier 3 water availability analysis must be required to track water usage for the project. The tracking of water usage, through the use of water meters should be broken down into various categories. If there are residences on the parcel, there should be tracking of residential usage of water. There should also be separate tracking of water usage for any vineyards on the parcel. There should be a system set up to track all water usage in the winery and all winery operations on the parcel.

Since use permits are discretionary, a condition requiring tracking of water on a parcel obtaining a discretionary use permit is reasonable and the County of Napa has the authority to require the

applicant, as part of the approval process, to track its water usage.

Given the fact that California is still in a drought, this monitoring must begin to occur, if there is any hope that projects which require use permit approval will become sustainable.

Conclusion

The Department of Public Works has made significant progress with the Water Availability Analysis, addressing concerns regarding the Hillsides, now referred to as All Other Areas. The Mount Veeder Stewardship Council would like to see another draft Water Availability Analysis, addressing the above concerns, before the document is presented to the Board of Supervisors.

Thank you for your time and consideration regarding the above issues.

Sincerely Yours,

MOUNT VEEDER STEWARDSHIP COUNCIL

Gary Margadant, President