



A Tradition of Stewardship
A Commitment to Service

Agenda Date: 1/7/2015
Agenda Placement: 10A

Napa County Planning Commission Board Agenda Letter

TO: Napa County Planning Commission

FROM: John McDowell for Steven Lederer - Director of Public Works
Public Works

REPORT BY: Patrick Lowe, NATURAL RESOURCES CONSERVATION MGR - 259-5937

SUBJECT: Proposed Updates to the Water Availability Analysis (WAA) Program

RECOMMENDATION

PROPOSED REVISIONS TO THE WATER AVAILABILITY ANALYSIS PROGRAM

CEQA Status: Consideration and possible adoption of Categorical Exemptions Class 7 and Class 8. It has been determined that this type of project does not have a significant effect on the environment and is exempt from the California Environmental Quality Act. [See Class 7 ("Actions by Regulatory Agencies for Protection of Natural Resources") which may be found in the guidelines for the implementation of the California Environmental Quality Act at 14 CCR §15307 and see Class 8 ("Actions by Regulatory Agencies for Protection of the Environment") which may be found in the guidelines for the implementation of the California Environmental Quality Act at 14 CCR §15308.]

Request: Consideration of Staff's proposal to revise the Water Availability Analysis (WAA) Program, which is used in environmental evaluation documents prepared for new discretionary development proposals that rely on groundwater resources. The WAA is a technical document prepared by a project applicant or their professional representative that quantifies the estimated amount of available groundwater and relates it to the amount of groundwater required to serve the proposed development. Proposed changes consist of replacing the past Phase I and Phase II theoretical analysis, with a two-tier approach based on best available technical documentation.

Staff Recommendation: Recommend to the Board of Supervisors that they adopt the proposed WAA revisions and find that they are Categorically Exempt from CEQA.

Staff Contact: Patrick Lowe, Natural Resources Conservation Manager, (707) 259-5937,
patrick.lowe@countyofnapa.org

EXECUTIVE SUMMARY

Proposed Actions:

That the Planning Commission recommend to the Board of Supervisors:

1. The proposed revisions to the Water Availability Analysis are Categorical Exemption from the provisions of CEQA; and
2. The proposed revisions to the Water Availability Analysis be adopted by a simple motion.

Summary:

The Water Availability Analysis (WAA) was first put in place in the early 1990's and has been used since that time, with periodic revisions, as a tool for analyzing groundwater impacts resulting from discretionary projects such as wineries, new vineyards on slopes over 5%, restaurants, hotels and others located in the unincorporated area of the County that propose to use groundwater. Following the work of the Groundwater Advisory Committee (GRAC), policy direction from the Board of Supervisors, information provided by the County's groundwater consultant, Luhdorff & Scalmanini Consulting Engineers (LSCE), and the County's experience over the last 20 plus years using the existing procedure, various changes to the WAA are proposed. This staff report summarizes the major changes proposed to the three tiered procedure used in the WAA. For additional detail, please see the proposed WAA and the Frequently Asked Questions document for a more comprehensive analysis of the proposed changes.

This is an Administrative Item, but the Planning Commission should accept and consider public testimony before forwarding a recommendation to the Board of Supervisors. Agenda date for the Board of Supervisors will be set after the Commission forwards a recommendation on the proposal.

FISCAL IMPACT

Is there a Fiscal Impact? No

ENVIRONMENTAL IMPACT

Consideration and possible adoption of Categorical Exemptions Class 7 and Class 8. It has been determined that this type of project does not have a significant effect on the environment and is exempt from the California Environmental Quality Act. [See Class 7 ("Actions by Regulatory Agencies for Protection of Natural Resources") which may be found in the guidelines for the implementation of the California Environmental Quality Act at 14 CCR §15307 and see Class 8 ("Actions by Regulatory Agencies for Protection of the Environment") which may be found in the guidelines for the implementation of the California Environmental Quality Act at 14 CCR §15308.]

BACKGROUND AND DISCUSSION**Proposed Updates to the Water Availability Analysis (WAA) Procedure**

The WAA was first put in place in the early 1990's and has been used since that time, with periodic revisions, as a tool for analyzing groundwater impacts resulting from discretionary projects such as wineries, new vineyards on slopes over 5%, restaurants, hotels and others located in the unincorporated area of the County that propose to

use groundwater. Following the work of the Groundwater Advisory Committee (GRAC), policy direction from the Board of Supervisors, information provided by LSCE, and the County's experience over the last 20 plus years using the existing procedure, various changes to the WAA are proposed. Evolving drafts of this document have been shared with the public, via an e-mail list of interested parties that includes over 125 names, a public workshop, and numerous individual and small group meetings.

The revised three tiered WAA approach is as follows:

Tier 1: Water Usage Volumes ^[1] The existing WAA includes a section for evaluating proposed water usage (volume) and thresholds for acceptable use. These thresholds are 1.0 acre-ft allowed/acre of land on the valley floor, 0.3 acre ft allowed/acre of land in the MST, and 0.5 acre-ft allowed/acre of land in all other areas. While the 1.0 acre-ft/acre criteria on the valley floor and the 0.3 acre-ft criteria in the MST have proven to be both scientifically and operationally adequate, the same cannot be said of the 0.5 acre-ft/acre criteria used in "all other areas", which primarily means hillside parcels. While the 0.5 acre-ft/acre criteria is generally applicable on a watershed scale, the variability of water availability for individual parcels in the hills makes it impractical to create a single meaningful threshold that would apply to all parcels. As such, the revised WAA deletes the 0.5 acre-ft/acre criteria and instead requires a parcel-specific analysis for hillside parcels. Basically the parcel-specific analysis requires an applicant to identify existing and planned water uses on the parcel, and to then calculate and compare the planned usage to the parcel's recharge characteristics.

Tier 2: Well to Well Interference The existing WAA contains a "well to well" interference analysis, which is used only when the initial water usage standards (as discussed above) are exceeded. The analysis currently required is a pump test which was (theoretically) designed to identify both well capacity and well to well interference. Unfortunately, this pump test has not worked well from a practical standpoint, and LSCE's analysis finds it questionable from a technically defensible standpoint.

As proposed in the revised WAA, the Tier 2 analysis will be required:

- For "all other areas" (i.e. hillside parcels); this is new, as discussed above; or
- If the water thresholds of Tier 1 are exceeded (this is current practice); or
- If substantial evidence in the record indicates a need to do so (current practice and CEQA required).

The basic steps of a Tier 2 "well to well" interference analysis are as follows:

- Step 1: If project well is >500 feet away from other wells; no further analysis is required (Note: The well to be used for the project ("project well") could be an existing or new well);
- Step 2: If the well does not meet the distance standard under Step 1, determine appropriate location of well (or adequacy of existing well) following further analysis of the site specific conditions such as:
 - o Distance to nearest well
 - o Hydrogeologic setting
 - o Well construction details (i.e., design pump rates, depth, screen and seal depths)
 - o Operational procedures

The Tier 2 analysis also provides guidance for how to analyze potential impacts on springs that are in use and are located near the project site.

Tier 3: Groundwater/Surface Water Interaction The current WAA does not contain standards for, and does not specifically require, evaluating "well to surface water" interference. Because there was no standard, a small vineyard project was unable to demonstrate that it would not have an impact on a small stream that feeds the Napa River and which was located in proximity to the project. Opponents of the project raised the issue that the project's well would reduce flows in the tributary stream, which may have been a habitat for endangered species. In the absence of adopted standards, the only method of addressing the opponent's assertion was to perform expensive project specific hydrogeologic studies, which were beyond the applicant's financial ability to conduct.

Ultimately, the project applicant withdrew his application. As such, well to surface water procedures (Tier 3) have been created for those situations where they are needed. The Tier 3 analysis will be required when substantial evidence in the record indicates a need to do so (this is current practice and CEQA required).

The basic steps of the well to surface water procedure are similar to the well to well interference procedure (Tier 2), but the threshold distance in step 1 is between 500 to 1500 feet, depending on pumping capacity.

Summary of Tiers Described Above:

Criteria	Current WAA	Proposed WAA
Tier 1: Water Usage	Exists	Use existing standards for MST and Valley Floor, require parcel specific analysis for all other areas (hillsides)
Tier 2: Well to Well Interference	Exists	Change method of performance; required for hillside parcels
Tier 3: Groundwater/Surface Water Interaction	Does not address	Included new procedure for performing analysis when it is required by CEQA

In staff's opinion, the revised WAA will provide a more robust and defensible analysis and result in a better understanding of a project's potential groundwater impacts.

[1] An acre-foot of water is 325,851 gallons.

SUPPORTING DOCUMENTS

- A . Draft Water Availability Analysis (WAA) Policy
- B . Draft Water Availability Analysis (WAA) Policy FAQs

Napa County Planning Commission: Approve

Reviewed By: John McDowell