

EXECUTIVE OFFICER SUMMARY REPORT
March 9, 2011

- ITEM: 5
- SUBJECT: Information Item: Groundwater Salinity and the Development of the Temecula Valley Wine Country. (*Amy Grove*)
- PURPOSE: To provide an overview of potential groundwater quality issues related to the proposed Temecula Valley Wine Country expansion, including the need for salt and nutrient management planning and oversight, and the need for waste discharge requirements for new and expanding wineries in Temecula Valley.
- PUBLIC NOTICE: This item was publicly noticed in the Meeting Notice and Agenda for the March 9, 2011 Board Meeting. Notice was also posted on the San Diego Water Board website.
- DISCUSSION: The County of Riverside is in the process of amending its General Land Use Plan (Plan) to incorporate the expansion of the Temecula Valley Wine Country. The San Diego Water Board is coordinating with the County, water supply and sewerage agencies, winery owners, and other stakeholders to ensure that potential water quality impacts from the proposed Plan amendment are adequately addressed in the amendment process.
- The Wine Country area is located east of the City of Temecula, and north of Highway 79 South, and incorporates both equestrian and winery land uses. There are currently 32 wineries in Temecula Valley Wine Country. The General Land Use Plan amendment proposes a total of 88 wineries for this area by the year 2035. Along with the winery expansion, the Plan amendment anticipates hotels, gift shops, bed and breakfast establishments, and restaurants to transform the Temecula Valley Wine Country into a destination resort area. A Public Hearing on the proposed Plan amendment and modified General Plan Environmental Impact Report is anticipated for September/October 2011.

The Temecula Valley Wine Country is underlain by the Temecula aquifer. This important aquifer is the largest in the San Diego Region and provides one third of the water demands for southern Riverside County. The *Water Quality Control Plan for the San Diego Basin* establishes a 500 milligram per liter (mg/l) water quality objective for total dissolved solids (TDS) for both the upper and lower parts of the Temecula aquifer in this portion of the Santa Margarita Watershed.

The preliminary results of the Rancho California Water District's (RCWD) hydrologic assessment of the Temecula aquifer indicates that there is no gross assimilative capacity for TDS remaining in the Wine Country area of the aquifer. Assimilative capacity for TDS is the ability of the aquifer to absorb salts into groundwater without causing adverse impacts to water quality. There may be some localized assimilative capacity available, however, individual projects will need to be evaluated on a case-by-case basis.

If the RCWD's preliminary findings are confirmed, then the San Diego Water Board's options for regulating the treatment and disposal of wastewater associated with the Wine Country expansion will be limited, even on a short-term basis. The RCWD hopes to complete the full groundwater analysis, including a detailed evaluation of the assimilative capacity of the aquifer, and an assessment of the projected salt loading from the proposed changes in land use, in June 2011.

There are a number of different types of waste produced at wineries. These wastes include storm water runoff, composting wastes, domestic wastewater from restaurants, tasting rooms (existing), and hotels (proposed); irrigation run-off from vineyards; and winery wastes, which include wash water and solid wastes produced during the crushing of grapes. The options for treatment and/or disposal include connection to an extension of the sewer system; formation of a new community system run by a public agency; conventional on-site septic systems or advanced treatment systems with or without reverse osmosis; or lined evaporation ponds and other treatment systems for winery wastes.

Eastern MWD has proposed the implementation of sewer service as a long-term solution for wastewater disposal;

however, this system will not be available for another two to three years. Eastern MWD would provide the sewer backbone, but the cost to extend lines to individual wineries would be the burden of the project proponents. Eastern MWD's feasibility study, including project alternatives is slated for completion in April 2011.

The San Diego Water Board has been coordinating with stakeholders on the proposed Plan amendment since July 2010. Stakeholders include owners and operators of Temecula Wine Country wineries, Riverside County Department of Environmental Health, Riverside County Planning and Land Use, RCWD, and Eastern Municipal Water District (MWD). The San Diego Water Board has attended several stakeholder meetings in Temecula, most recently on February 17, 2011.

The proposed expansion of the Temecula Valley Wine Country highlights the need for an overall salt and nutrient management plan for this part of the San Diego Region. The San Diego Water Board is looking to RCWD to lead the salt and nutrient management planning effort for the Temecula aquifer. Salt and nutrient management planning is a requirement of the State Recycled Water Policy and is envisioned to be a stakeholder led process.

LEGAL CONCERNS: None.

KEY ISSUES:

1. The groundwater aquifer underlying the Temecula Valley Wine Country is an important source of drinking water for Riverside County and the protection of this aquifer is critical.
2. The Temecula Valley Winery Expansion General Land Use Plan Amendment is key to the economic development of Riverside County. The San Diego Water Board is coordinating with the County of Riverside and other stakeholders to ensure that water quality issues are addressed during the amendment process.
3. The aquifer underlying Temecula Valley Wine Country have limited assimilative capacity for total dissolved solids. Thus, the San Diego Water Board's options to permit the treatment and disposal of wastewater to land are limited.

4. Extension of the sewer system into this part of Riverside County is a viable long-term solution for the disposal of onsite wastewater produced at some, but not all of the Temecula Valley wineries. This option, however, will not be available for at least two or three years and may not solve the disposal issues for the entire Wine Country area.
5. The San Diego Water Board is looking to RCWD to lead the salt and nutrient management planning efforts for the Temecula aquifer, as required by the Statewide Recycled Water Policy.

**SUPPORTING
DOCUMENTS:**

1. Map of Temecula Valley Wine County.

RECOMMENDATION:

There is no recommendation as this is an information item and the Board will take no action.