MEMO

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DATE: **September 14, 2016**

SUBJECT: **Comments on Draft EIR for General Waste Discharge Requirements for Vineyard Properties located in the Napa River and Sonoma Creek Watersheds**

The City of Napa (City) has reviewed the Draft Environmental Impact Report (EIR) for the proposed General Waste Discharge Requirements for Vineyard Properties located in the Napa River and Sonoma Creek Watersheds (General Permit). The City appreciates the opportunity to review and comment on the EIR and to cooperate with the San Francisco Bay Regional Water Quality Control Board (Regional Board) staff to prevent degradation of municipal drinking water quality in water supply reservoirs downstream from Vineyard Properties that would be authorized to discharge waste under the General Permit.

Background

The City relies upon two local reservoirs — Milliken Reservoir and Lake Hennessey — to provide more than half of the public drinking water supplies needed to serve 86,000 City residents, certain neighboring cities and approximately 2,200 individual water service accounts in unincorporated Napa County (County).

Milliken Reservoir provides the highest source water quality of all the City's water sources, followed by Lake Hennessey and then the State Water Project (SWP), which delivers water imported from the Sacramento River, whose seasonal quality is significantly lower than that of Milliken and Hennessey reservoirs. The City faces increasingly stringent drinking water quality standards and customer expectations, and source water quality is among the factors guiding the City's use of its different water sources to provide public water service that is affordable, reliable and safe.

The Milliken Creek Watershed encompasses 6,141 acres above Milliken Reservoir, of which the City owns approximately 2,200 acres. The remaining acreage is under increasing vineyard development pressure because the Napa Valley floor is essentially fully developed, so vineyard developers are focusing their efforts on surrounding hillsides and watersheds. With the end of the Great Recession, new land development is progressing again. The County has been approving vineyard development projects upstream from the City's municipal drinking water reservoirs and relying on erosion control plans to prevent water quality impacts to the City's sources of drinking water supply. For example, new vineyard projects ranging in size from 24-acres to 368 acres that drain into the Milliken Reservoir watershed have been approved in 2016.

The watershed above Hennessey Reservoir encompasses 34,000 acres, of which the City owns 2,822 acres. The continuing trend of vineyard development in this much larger watershed (34,000 acres versus 6,141 acres) correlates with a trend of degrading water quality and increased algal growth and corresponding total organic carbon (TOC), a pre-cursor to heavily regulated disinfection byproducts in Hennessey Reservoir — even with the County's erosion control planning program in place.

Reservoir water quality is affected by pesticides, herbicides and other natural and man-made constituents, including phosphates, nitrates, sulfates and other nutrients that degrade drinking water quality. The City participates in the California Environmental Quality Act (CEQA) review process for projects in the watershed, but the County does not require monitoring of vineyard discharges unless the applicant is willing to do so voluntarily. When possible, the City is working with willing project applicants to participate in voluntary monitoring programs and to address BMP improvements on a case by case basis.

According to the County's Agricultural Commissioner, more than 832,200 pounds of sulfur was applied for grape growing in Napa County in 2015, along with 18,750 pounds of lime-sulfur, and 9,000 pounds of ammonium sulfate. Sulfur and sulfates degrade drinking water quality and cause taste and odor problems addressed by a secondary MCL of 250 mg/L.

Phosphates pose another major threat for drinking water quality. More than 50,000 pounds of glyphosate were applied for grape growing in Napa County in 2015. Phosphates, including glyphosate, increase nutrient concentrations in receiving waters, which spurs the growth of algae. That algae dies, decomposes, consumes dissolved oxygen needed by aquatic biological resources, and imparts a foul taste and odor to drinking water. Treatment with ozone and granular activated carbon is required to mitigate such drinking water quality degradation. The City's drinking water treatment plants for Milliken and Hennessey reservoirs do not include

ozone or granular activated carbon in their treatment trains. Water quality degradation from nutrient discharges caused by development and operation of vineyards in the Milliken and Hennessey watersheds is causing water quality degradation that accelerates the need for costly drinking water treatment plant upgrades.

Specific Comments

The City appreciates the opportunity posed by development of the General Permit to assess and prevent water quality degradation from vineyard discharges, specifically as they relate to watersheds that supply municipal drinking water supplies and the EIR's analysis of hydrology and water quality, which states:

> **Section 8. HYDROLOGY AND WATER QUALITY**
> This section presents: a) baseline physical conditions with regard to hydrology, groundwater, and water quality in the Napa River and Sonoma Creek watersheds including the effects of natural processes and land-use activities on the baseline conditions; b) relevant laws and policies that provide for water quality, groundwater, and flood protection; and c) potential impacts to hydrology and water quality that may result from project implementation and mitigation measures to lessen those impacts.

Comment: The EIR explains that the proposed General Permit "authorizes discharges of pollutants to the waters of the State that originate on Vineyard Properties" (EIR at p. 47), but the EIR does not seem to clearly define the environmental baseline used to assess the significance of water quality impacts from those authorized discharges. Under CEQA, the environmental baseline may not include degradation from new vineyard discharges authorized by the General Permit.

Recommendation: Please revise the EIR to clearly describe the environmental baseline used to assess the significance of water quality impacts from new discharges authorized by the General Permit.

Comment: Section 8.5.1 of the EIR describes the "Regulatory Setting, " including State water quality regulatory requirements. Section 8.6 of the EIR describes the thresholds of significance, or criteria, used to determine the significance of General Permit's water quality impacts. Those criteria include whether the General Permit: (1) "would violate any water quality standards or waste discharge requirements;" or (2) "would otherwise substantially degrade water quality." Neither Section 8.5.1 nor section 8.6 explain that — where existing receiving water quality equals or is better than the floor established by water quality standards — the State's Antidegradation Policy applies to inform application of the EIR's significance criteria.

Where a General Permit would authorize vineyards to discharge nutrients and other wastes into receiving waters whose baseline quality exceeds water quality standards, the State Water Resource Control Board's (State Board) Antidegradation Policy specially protects such "high quality" waters. (State Board Resolution 68-16.) To prevent degradation of high quality waters, Antidegradation Policy requires application of "best practicable treatment or control" as mitigation.

Recommendation: Please revise the EIR to apply State Antidegradation Policy through the significance criteria used to assess the General Permit's water quality impacts.

Comment: The EIR explains that the General Permit would help implement the sediment TMDL for the Napa River and relies heavily on the TMDL to support the EIR's conclusion that the General Permit will have a beneficial impact with respect to water quality. However, the water quality monitoring associated with the sediment TMDL did not address drinking water quality in any of the five major public water supply reservoirs within the area in which vineyard discharges would be authorized by the General Permit. There was no assessment of impacts in the reservoir water column due to land-use activities relative to baseline conditions. All monitoring locations were assessed downstream of municipal drinking water supplies and ignored the impacts of sedimentation, nutrients and identification of nonpoint source pollutants that need to be reduced to avoid degradation of reservoir water quality and impacts to the established beneficial uses.

Recommendation: Prior to adopting and finding that the General Permit will cause no significant adverse water quality effects, the beneficial uses of water as a drinking water supply should be considered. Monitoring should be performed and existing historical data should be assessed.

Nutrient addition in the water column of a drinking water supply, in the presence of sunlight, causes algal growth that, in turn, causes taste and odor problems in public drinking water supplies. The City has been monitoring algal growth and comparing historical temperature data as well as residual nitrogen and phosphorous in the water column of its reservoirs. Data from water samples analyzed in areas of high algal blooms shows nitrogen and phosphorous are co-limiting nutrients. Hence, increases in nutrients will increase algal growth. Algal growth has shown an increase since 2007 even though the application of algaecide to reduce growth has increased to combat the problem. Individual dosages were doubled in volume as of 2008.

Comment: Federal and state drinking water quality standards continue to become more and more stringent. Caught between long-term trends of increasingly stringent drinking water quality standards, on one hand, and increasing vineyard development, on the other hand, the City and its water customers end up bearing the burden of degraded water quality from vineyard discharges and the need to carry out costly drinking water treatment upgrade projects to protect public health and to avoid fines and penalties.

The Regional Board non-point source regulatory staff working on the vineyard General Permit do not seem to be coordinating with the Regional Board's regulatory staff working on the City's discharge permit for its drinking water treatment plants. Although the City does not use pesticides in its drinking water treatment process — despite numerous objections, comments and conversations regarding monitoring requirements over the "reasonable potential analysis" with Regional Board staff prior to issuance of the April 2016 order R2-2016 -0009 — the City of Napa is now required to monitor its receiving/source water for all pesticides to levels below drinking water standards. This monitoring might trigger treatment upgrades and fines and penalties if certain thresholds are exceeded.

While the discharge permit for washwater discharged by the City's Hennessey drinking water treatment plant strictly regulates pesticide concentrations in source water from the reservoirs, the EIR for vineyard discharges authorized by the General Permit does not provide any meaningful or adequate analysis of resulting degradation of receiving water quality in the City's municipal drinking water reservoirs. It seems that washwater from the City's treated drinking water process, which has no reasonable potential to contribute pesticides into the reservoir, is being regulated for pesticides contributed by upstream vineyards whose discharges would be authorized by the General Permit. It seems illogical, unjust and ineffective for the Regional Board to approve a General Permit authorizing vineyard discharges of pesticides into the City's public water supply reservoirs based on a CEQA finding of insignificant water quality impacts (but no discharge quality monitoring and adaptive management) — on one hand — and for the Regional Board to regulate the City's drinking water treatment plant discharge in a way that makes the City responsible for the quality of reservoir source water that is degraded by vineyard discharges of pesticides and other wastes — on the other hand. When non-point sources in the watershed contribute pesticides or other regulated drinking water constituents into the City's drinking water supply reservoir under the General Permit — without any monitoring and adaptive management requirements on vineyard discharge quality — and monitoring of those constituents at the City's drinking water treatment plant exceed thresholds under the City's discharge permit, the City should not have to pay fines.

Recommendation: Recognize and correct the failure to coordinate discharge permitting for vineyards and the City's drinking water treatment plants, and apply Antidegradation Policy (State Water Quality Control Board Resolution 68-16). Require monitoring of pesticides and nutrients in discharges from vineyards in watersheds that contribute to municipal drinking water supplies, because those discharges have the "reasonable potential to contribute" to violation of Antidegradation Policy and water quality standards, require "best practicable treatment or control," and prohibit ongoing and additional degradation.

The City respectfully requests assistance from the Regional Board to ensure non-point sources do not contribute pesticides and nutrients into the waterways feeding the City's public drinking water supplies and, furthermore, if they are contributed, to ensure they do not result in automatic fines to the City — the drinking water provider under the permitted NPDES discharge. The City seeks to work with the Regional Board and all stakeholders to proactively address the issue at the source and to protect water quality for maximum beneficial use over the long term, as required by Article X, Section 2 of the California Constitution.

Thank you for your consideration and attention to this matter. If you would like clarification feel free to contact me at (707) 257-9319.