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February 4, 2020

Santa Clara Valley Water District
Attn: Mr. Michael Martin
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Email: michael.martin@valleywater.org

Subject: Comments on the Almaden Lake Improvement Project Draft Environmental Impact Report (State Clearinghouse No. 2014042041), Santa Clara County

Dear Mr. Martin:

San Francisco Bay Regional Water Quality Control Board (Water Board) staff reviewed the Draft Environmental Impact Report (DEIR) for the Almaden Lake Improvement Project prepared by the Santa Clara Valley Water District (Valley Water) pursuant to the California Environmental Quality Act (CEQA). Thank you for the opportunity to comment on the Project, and for the comment period extension to February 4, 2020. The proposed Project will require Clean Water Act (CWA) section 401 water quality certification (WQC) and waste discharge requirements (WDRs) from the Water Board because it entails excavating or filling about 1,092,000 cubic yards of sediment and soil (in addition to other materials) in jurisdictional wetlands and other waters of the U.S. and the State. As a responsible agency under CEQA, we offer the following comments on the DEIR. They are intended to support evaluation of the Project's potential significant environmental impacts, and the Water Board's future review of applications to authorize project construction.

The proposed Project will improve existing baseline conditions in Almaden Lake (Lake) and Alamitos Creek (Creek) by separating the Lake from the Creek. The anticipated benefits of the Project include enhanced water quality in the Lake, lower concentrations of mercury and methylmercury in the Lake, and improved fish passage for anadromous fish in the Creek. Alamitos Creek supports the federally Central California Coast steelhead trout (steelhead) (Oncorhynchus mykiss), and Chinook salmon (*Oncorhynchus tshawytscha*), and the Creek has the cold freshwater habitat, rare and endangered species, migration habitat, and spawning habitat, among its beneficial identified in the San Francisco Bay Water Quality Control Plan (Basin Plan). As explained in our comments below, the DEIR, however, has deficiencies pertaining to evaluation of the Project's benefits. In addition, the DEIR findings of significance, in some cases, are inconsistent with the rationale in the DEIR narrative. To help expedite our review of a future permit application, and could minimize the need for any supplemental environmental review pursuant to CEQA, we recommend the DEIR be revised

to address these concerns and the other issues in our comments.

Project Summary

Almaden Lake is a 32-acre in-channel impoundment on Alamitos Creek in the city of San Jose. The lake is part of the Almaden Lake Park, a 64-acre municipal recreational facility operated by the city of San Jose. The Project purpose is "to restore Alamitos Creek's function within the footprint of Almaden Lake Park in order to improve physical habitat for steelhead and other anadromous fish, while improving water quality within the lake footprint, and minimizing impacts to existing recreational features within the Park." To achieve these purposes, the proposed Project includes separating the Lake from the Creek by constructing a levee roughly along the historical Creek alignment (about 1,800 linear feet); re-contouring the lake bottom and shoreline and capping the Lake with clean fill; expanding the Park into the existing lake and beach areas; expanding the existing island and constructing a new island in the Lake; revegetating the area with native vegetation; constructing pipelines to supply the Lake with imported water by gravity from the Almaden Valley Pipeline, and a pipeline with an outlet structure and pump station to pump water from the Lake to the Los Alamitos Percolation Pond for groundwater recharge, and a third pipeline to pump water from the Lake to the Creek using the same aforementioned pump station.

Comments

Comment 1–Impacts to Federal and State Jurisdictional Wetlands and Other Waters

The proposed Project will result in a net permanent loss of 2.64 acres of jurisdictional wetlands or waters (including permanent loss of 15.44 acres of open waters but gain of 11.30 acres of riverine waters). The loss of surface area of jurisdictional waters results, in part, from to the conversion of open waters to riverine waters. We concur with the conclusion presented in the DEIR that filling the Lake to restore the Creek channel would provide a net environmental benefit based on the existing baseline. However, the DEIR discussion of the Project's benefits to aquatic habitat lack sufficient detail to clearly document that the Project's benefits to aquatic habitat will provide full mitigation for the Project's impacts to waters of the U.S. and of the State. Accordingly, the DEIR should be revised to include a more detailed discussion of the Project's net benefits to aquatic habitat. This discussion should include significance thresholds for assessing Project benefits to habitat for native fish, including Central California Coast steelhead. For example, significance thresholds for temperature may include temperature impacts on the life stages of steelhead (e.g., redds, juvenile rearing habitat, and adult migration to spawning beds). Measures to assess net benefits to native fish populations, such as life cycle population censuses, should also be discussed to confirm the Projects benefits to aquatic habitat.

We acknowledge that Table 3.D-2 includes an accounting of the net changes in acreage to the jurisdictional waters of the State, and identifies the changes as construction impacts that are less than significant. We recommend revising the DEIR to acknowledge this is a significant impact to jurisdictional waters under impact 3.K-3(iv)—*Project would substantially alter the existing drainage pattern of the site or area in a manner which could impede or*

redirect flows, and to propose appropriate mitigation for the loss of waters. The revised DEIR should then provide a clear demonstration of the Project's net benefits to jurisdictional waters.

In addition, although this is not strictly a CEQA review requirement, a Project must meet the California Wetlands Conservation Policy, also called the no net loss policy, for the Water Board to authorize WQC/WDRs for the Project. The Water Board adopted U.S. Environmental Protection Agency's (EPA's) Clean Water Act (CWA) section 404(b)(1) Guidelines (Guidelines) to evaluate whether a project, as proposed, constitutes the least environmentally damaging practicable alternative (LEDPA) that will achieve the basic project purpose. A project complies with the Guidelines if the following can be demonstrated, in order of sequence:

1. First, there is no practicable alternative to the proposed Project that would avoid or result in less adverse impacts to aquatic resources. Potential practicable alternatives include, but are not limited to, alternative available locations, modified designs, and/or reductions in size, configuration, or density;
2. Second, all practicable steps have been taken to minimize unavoidable adverse impacts to aquatic resources; and
3. Finally, after impacts have been avoided and minimized to the maximum extent practicable, compensatory mitigation for unavoidable loss of acreage, beneficial uses and aquatic resource functions is provided.

Once a project proponent has demonstrated that the proposed Project design is the LEDPA (e.g., that fill has been avoided and minimized to the maximum extent practicable), we will require appropriate compensatory mitigation for both temporary and permanent impacts to waters of the State. We will evaluate both the project and the proposed mitigation together to ensure that there will be no net loss of acreage and no net loss of functions. The accounting of losses and benefits to waters of the State could be used to inform the LEDPA analysis.

The proposed Project does not yet represent the LEDPA given that it results in a net loss of waters, and the discussion of Project benefits to aquatic habitat in the DEIR is not yet sufficient to establish that the Project will have a net benefit to aquatic habitat in jurisdictional waters. We recommend the DEIR be revised to provide a more detailed assessment of the Project's benefits to aquatic habitat, including performance metrics to document the Project's improvements to aquatic habitat. We encourage Valley Water to coordinate with the Water Board, the Californian Department of Fish and Wildlife, and the National Marine Fisheries Service, which is the federal agency responsible for protection of steelhead under the Federal ESA, to develop appropriate metrics assessing the Project's benefits to aquatic habitat; this coordination should expedite the permitting stage of the Project.

Comment 2–Clarification of Water Operations and Discharges from Lake to Creek

The Project is grounded in water operations for delivering water to the Los Alamitos Percolation Pond (Pond) for groundwater recharge, coupled with continuous flow-through in

the Lake to minimize stagnation and concentration of pollutants such as nutrients and bacteria, and to sustain dissolved oxygen at levels to suppress methylmecury production in the Lake. The Project's new pipelines and a pump station include transferring Lake water to the Creek when the Pond is unavailable to receive flow. However, the DEIR provided little information on transferring Lake water to the Creek, such as the anticipated frequency, duration, and flow rate (except for the pipeline size and pump station capacity). The DEIR should be revised with such details to clarify the potential for Lake discharges to the Creek, and should identify the discharge of Lake water to the Creek as a significant impact to Hydrology and Water Quality, impact 3.K-1, *The Project would violate water quality standards or waste discharge requirements, conflict with or obstruct implementation of the Basin Plan, or otherwise substantially degrade surface or groundwater quality*.

This is because the Lake water may be unsuitable for discharging to the Creek due to the same factors invoking the flow-through design, such as (but not limited to) elevated levels of bacteria, nutrients, and mercury. Discharges of Lake water may also be unsuitably warm and with dissolved oxygen levels that would not support the cold water habitat beneficial use of Alamitos Creek. In addition, Lake discharges may contain non-native biota that bypass screens. We recommend the DEIR include avoidance and minimization alternatives to discharging Lake water to the Creek, such as recirculating the Lake water within the Lake instead of discharging it to the Creek. Otherwise, a discharge permit separate from WDRs authorizing construction of the Project may be required. We urge Valley Water to consult with the Water Board to address this issue before finalizing the EIR.

Comment 3–Sediment Reuse and Imported Soil Fill

The DEIR should include a soil monitoring plan to determine the appropriate beneficial reuse or disposal options for any soil excavated in the Project site. The Water Board requires any soil fill to meet the criteria in the Water Board May 2000 staff report, *Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines*, or the most current revised version. Modifications to these procedures may be approved on a case by case basis, pending Valley Water's ability to demonstrate that the soil proposed for reuse and any imported soil fill material is unlikely to adversely impact beneficial uses of the jurisdictional wetlands and waters in the Project. For example, the DEIR indicates that beneficial reuse of excavated soil would be based on hazardous waste criteria or environmental screening level (ESL) criteria (DEIR pp. 2-38 – 2-40), which may be acceptable depending on the circumstances such as soil sampling frequencies. Finally, the DEIR, Appendix B, Table B-2 states an assumption that 80 percent of excavated sediment would be reused onsite, and 20 percent would need to be hauled offsite for disposal. This assumption must be verified with the appropriate analyses.

Comment 4–Lake Dewatering and Creek Bypass Discharges

To construct the Project, the Lake would be completely drained. In addition, Alamitos Creek flow would be rerouted around the Project reach and discharged downstream from the lake, near the footbridge and Coleman Road overcrossing of the Creek. A complete dewatering and diversion plan will be required as part of the application for a WQC/WDRs, and we encourage Valley Water to include these in the EIR to ensure the considerations for staging,

storage tanks, pipelines, pumps, wells, or other elements have been fully evaluated site conditions. The plan must include elements to contain, monitor, and treat the water, as appropriate, to prevent adverse water quality impacts. The dewatering and diversion plans will also need to include diagrams of alignments and locations of piping, cofferdams, pumps, and flow dissipaters, which need to be sized correctly for the anticipated flows to be managed. In addition, the plans must include a discharge monitoring plan to determine whether the dewatering and diversion flows meet the Basin Plan receiving water quality objectives, particularly for turbidity, dissolved oxygen, temperature, and pH. In addition, the plans must include continuation of the mercury TMDL water quality monitoring program until the Lake has been fully dewatered, and propose appropriate monitoring for total mercury and methylmercury associated with potential discharges during construction.

Comment 5–Sediment Transport

DEIR should include a detailed maintenance plan to explain how sediment is transported through the restored creek reach, and whether the Project will result in sediment deposition within the Project footprint, downstream along the reach from Coleman Avenue to the Alamitos flashboard dam, and further downstream of the dam. During the interagency meeting of January 22, 2020, NMFS voiced concerns that sediment accumulation is already a problem at the mouth of Guadalupe Creek, which is close to the downstream boundary of the Project, and that the Project would exacerbate that problem. In addition, the Project design accounts for an instream quarry pit close to the downstream boundary being readily filled in, suggesting the area will remain a depositional zone. In fact, the DEIR indicates 5,000 cubic yards of sediment will be removed once every 10 years from the Project reach. Please revise the DEIR to fully characterize this apparent indirect impact of the Project.

Comment 6–Legacy Mercury Contamination

Numerous creeks and reservoirs in the Guadalupe River watershed, including Alamitos Creek and Almaden Lake, are impaired by mercury due to legacy mining activities. As a result, the Water Board developed a watershed-wide mercury management strategy under the Guadalupe River Watershed Total Maximum Daily Load (TMDL) implementation plan (Basin Plan, section 7.7.1). The DEIR should be revised to provide details on changes to mercury fate and transport anticipated by implementing the Project, and how compliance with the TMDL would be affected by the Project. To address this, we recommend the DEIR include the following assessments and mitigation measures and to include them as mitigation for the *Hazards and Hazardous Materials* impacts:

a. *Clay Cap*. The Project includes constructing a clay cap on the lake bed to prevent migration of mercury and methylmercury into the lake's bottom substrate and water column. However, the DEIR indicates the clay cap will be 2.5 feet thick, while the Geotechnical investigation report (Appendix D) states that it would be no less than 5 feet thick, and would be 10 feet thick at the levee toe. Please revise the DEIR to explain this discrepancy in the clay cap thickness, and provide more details sufficient to show that the clay cap would be effective in preventing mercury and methylmercury from migrating upward through the cap.

b. *Dust evasion of dewatered reservoir.* The DEIR should address the potential for mercury-laden sediment fines to be picked up by wind during construction and pose a risk to workers, park users, nearby residents, and biota in the area.

c. *Monitoring to capture Project's effects on methylmecury levels.* Monitoring lake concentrations of mercury and methylmercury will need to continue to evaluate compliance with the TMDL.

d. *Non-native fish prevention.* The TMDL has mercury objectives based on fish tissue concentrations. The DEIR should include a plan to prevent introduction of non-native fish into the Lake after being re-filled. However, we recognize that non-native fish could be reintroduced by fish anglers, and by other means such as unwanted pet fish being released into the Lake. Therefore, we suggest the DEIR to include alternatives for an intensive public education and outreach effort to dissuade these practices.

Comment 7–Construction General Permit

We acknowledge and appreciate the DEIR indicates Valley Water would seek coverage under the statewide General Permit for Discharges of Storm Water Associated with Construction Activities (Order No. DWQ-2009-0009, as amended by Order Nos. 2010-0014-DWQ and 2012-006-DWQ) (Construction General Permit). The Construction General Permit requires a stormwater pollution prevention plan (SWPPP) that specifies all BMPs that will be used to avoid impacts to State wetlands and other waters. These considerations should be incorporated into project design as early in the planning phase as possible.

Comment 8– Horizontal Directional Drilling Plan

The DEIR should be revised to include a Horizontal Directional Drilling Plan. The Water Board's permit authorizing construction of the Project will require this plan, and we urge Valley Water to include the plan in the DEIR to ensure the site conditions will accommodate the plan elements. The plan must include measures to prevent impacts during horizontal directional drilling, including proposed disposal locations or methods for excess sediment, proposed sediment reuse, and related information. The plan should also include a sketch of the approximate locations of drill entry and exit points; the proposed depth of bore(s) and a description of streambed conditions that supports the proposed depth of the bore; and the approximate length of the proposed bores. In addition, the plan for a future WQC/WDRs for the Project will also require additional details such as: type and size of boring equipment to be used; the estimated time to complete the bore; a list of lubricants and muds to be used; the name of the contractor and cell phone numbers of its construction supervisor and monitor; name of the environmental and biological monitor; site-specific monitoring conditions; monitoring protocols; and a containment and cleanup plan in the event of a discharge of drilling muds or other materials to a receiving water or to a location where they could be discharged to a receiving water. During construction, the Water Board will require Valley Water to monitor drill mud pressure and volume at all times during drilling to ensure that hydrofracture or other loss of drill muds has not occurred, and precautionary measures in the event of a sudden loss in pressure or volume, and steps including immediately halting the drilling operation, to ensure that drilling muds are not discharged to waters of the State.

Comment 9–Post-construction Stormwater Management Plan

The Project includes features that will potentially be impervious, including the levee maintenance road, boat house, and boat ramps. The Project should be designed to minimize impervious surfaces, and where impervious surfaces are unavoidable, to incorporate nature-based stormwater treatment systems such as infiltration swales, to disconnect direct discharge of stormwater runoff to storm drains and waters of the State. Such designs and treatment systems should be consistent with the Santa Clara Valley Urban Runoff Pollution Prevention Program C.3 handbook (2016 or current version). The DEIR should be revised to demonstrate the appropriate site design and stormwater treatments are incorporated in the Project before finalizing the EIR. This is necessary to ensure the appropriate amount of space to accommodate onsite stormwater treatment systems is available. In addition, the DEIR should be revised to ensure that necessary measures to control trash are included, consistent with MRP Provision C.10.

Comment 10–Horizontal Directional Drilling Plan

The DEIR should be revised to include a Horizontal Directional Drilling Plan. The Water Board's permit authorizing construction of the Project will require this plan, and we urge Valley Water to include the plan in the DEIR to ensure the site conditions will accommodate the plan elements. The plan must include measures to prevent impacts during horizontal directional drilling, including proposed disposal locations or methods for excess sediment, proposed sediment reuse, and related information. The plan should also include a sketch of the approximate locations of drill entry and exit points; the proposed depth of bore(s) and a description of streambed conditions that supports the proposed depth of the bore; and the approximate length of the proposed bores. In addition, the plan for a future WQC/WDRs for the Project will also require additional details such as: type and size of boring equipment to be used; the estimated time to complete the bore; a list of lubricants and muds to be used; the name of the contractor and cell phone numbers of its construction supervisor and monitor; name of the environmental and biological monitor; site-specific monitoring conditions; monitoring protocols; and a containment and cleanup plan in the event of a discharge of drilling muds or other materials to a receiving water or to a location where they could be discharged to a receiving water. During construction, the Water Board will require Valley Water to monitor drill mud pressure and volume at all times during drilling to ensure that hydrofracture or other loss of drill muds has not occurred, and precautionary measures in the event of a sudden loss in pressure or volume, and steps including immediately halting the drilling operation, to ensure that drilling muds are not discharged to waters of the State.

Comment 11–Impacts from Hazardous Materials

For impacts to *Hazards and Hazardous Materials* (impacts 3.J-1, 3.J-2, and 3.J-5, and 5.K, addressing release of hazardous materials, release of contaminated soil, emergency response plan or emergency evacuation plan, and cumulative exposure to or release of hazardous materials), the DEIR's findings are less than significant (LS), even when avoidance and minimization measures will be used, and are necessary, to prevent adverse impact to the environment or public health and safety. CEQA defines mitigation to include avoidance and minimization of impacts, in addition to compensation for significant adverse

impacts that are unavoidable. Therefore the DEIR should be revised for these impacts with a finding of less than significant with mitigation (LSM).

Regarding *Hazards and Hazardous Materials* impact 3.J-4, *The Project is located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 or other listings, but would not create a significant hazard to the public or the environment*, the DEIR found the impact to be less than significant based on sealing the Lake bed with a clay cap to prevent mercury and methylmercury from migrating to the Lake substrate and water column, and the Project will remove and dispose of contaminated sediments. The Project will result in supplying the Lake with imported water from the State Water Project as well as other local sources. The water supply is expected to contain trace amounts of mercury, as is typical of most central California surface waters. Therefore, the Lake will remain under the Guadalupe River TMDL, and the DEIR should be revised for impact 3.J-4 to be LSM (see also Comment 6 pertaining to the Guadalupe River Mercury TMDL).

Comment 12–Santa Clara Valley Habitat Plan

Although the Water Board is not a party to the Santa Clara Valley Habitat Plan (VHP), the VHP includes impact avoidance and minimization measures that overlap with the Water Board's regulatory requirements and with Valley Water's standard BMPs. However, the VHP has not yet developed a mitigation program that meets the requirements of the Water Board. In some cases, mitigation projects implemented by the VHP on VHP property may provide appropriate mitigation for impacts authorized by Water Board permits. But Water Board permits require that a specific mitigation project be identified to provide appropriate compensation for impacts to waters of the State authorized by a Water Board permit. At this time, payment of a fee to the VHP does not provide acceptable mitigation for Water Board permits.

Closing

In conclusion, we support the Project because it will improve baseline conditions. We note, however, that the preferred Project will not resolve effects of the Alamitos flashboard dam downstream of the Project boundary, which results in backwater in the Project. The backwater may result in conditions that cannot support the cold freshwater habitat, fish migration, protection of rare and endangered species, and fish spawning beneficial uses in the Creek. We will continue to expect Valley Water to address those impacts in the future, and identify the opportunity to improve conditions in line with the project's stated goals. This would likely help expedite our review of a future permit application, and could minimize the need for any supplemental environmental review pursuant to CEQA.

Finally, thank you for convening an interagency meeting on January 22, 2020, to discuss the Project, and providing supplemental information not included in the DEIR (i.e., sediment transport technical memo, bankfull channel design memo; revised 30 percent design plan, vegetation plan, and cross sections). We were unable to timely review that information, but we urge Valley Water to incorporate it in the final EIR, with syntheses of how they inform the Project.

We look forward to continuing to work with you collaboratively with Valley Water on this important project. If you have any questions about our comments, please contact Susan Glendening of my staff by e-mail at susan.glendening@waterboards.ca.gov or via phone at (510) 622-2462.

Sincerely,

Nicole Fairley
Water Resources Control Engineer
Section Leader (Acting)

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