San Francisco Bay Regional Water Quality Control Board

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October 26, 2020

Santa Clara Valley Water District
Attn: Alex Hunt
5750 Almaden Expressway
San Jose, CA 95118-3614
e-mail: ahunt@valleywater.org

Subject: Comments on Calabazas Creek Bank Rehabilitation Project Draft Mitigated Negative Declaration (State Clearinghouse No. 2020090370), Santa Clara County

Dear Mr. Hunt:

San Francisco Bay Regional Water Quality Control Board (Water Board) staff has reviewed the Santa Clara Valley Water District's (Valley Water's) draft mitigated negative declaration (MND) for the Calabazas Creek Bank Rehabilitation Project (Project) (State Clearinghouse No. 2020090370), prepared by Valley Water pursuant to the California Environmental Quality Act (CEQA). Thank you for the opportunity to comment on the draft MND with the extended deadline of October 26, 2020.

The proposed Project is in Cupertino in the Calabazas Creek reach that spans 0.7 miles between Miller Avenue (downstream end) and Bollinger Road (upstream end). The Project purpose is to remediate the creek bank toe erosion, bank failure, and/or surfaces lacking vegetative cover at ten locations along about 1,550 linear feet within the Project reach. The methods of bank stabilization vary by site and include rock riprap, hydroseed, and/or sheet pile.

The Water Board is a responsible agency under CEQA because the Project would be subject to water quality certification and waste discharge requirements (WDRs) issued by the Water Board, pursuant to the federal Clean Water Act, section 401, and California Water Code. As a responsible agency under CEQA, we offer the following comments on the proposed Project. These comments are intended to advise on concerns so they may be addressed in the planning and design processes for the Project, and to advise you on the Water Board's future review of an application to authorize project construction. Our primary concerns, as summarized below, are that

the draft MND does not include information on the alternatives considered other than the proposed alternative, does not recognize the Project's impacts, nor does it include information for the basis of design. In addition, the Project does not appear to incorporate a sustainable design given that similar erosion repairs were constructed in 2011 with the larger flood control project.

Comment 1. Bank Stabilization Would Result in Significant Impact

The draft MND is inadequate because it presents a preferred alternative that would degrade water quality but does not recognize those adverse impacts or propose appropriate mitigation for them, nor does the draft MND include other, less impactful construction alternatives. Although the draft MND states that natural bioengineering alternatives were analyzed but ruled out because of "high flow velocities and shear stress in the channel" (p. 2-3), the draft MND does not include any data or other information to qualify that conclusion, or descriptions of other alternatives that were analyzed. Valley Water's conclusion of no significant impact based on the *Hydrology and Water Quality* criterion is, therefore, unfounded, and we disagree with that finding. As noted below, the draft MND should be revised to address the following issues. Given that the proposed Project would degrade the Creek's riparian functions, we would be unable to issue water quality certification of the proposed Project. We would require additional analyses as described in the next comment, that a proposed project is the least environmentally damaging practicable alternative (LEDPA).

One way the proposed Project would adversely affect water quality is that at some of the bank repair sites, rock slope protection (RSP) would extend to 10 feet up the Creek banks and would be keyed in up to 6 feet deep beneath the creek bed. This would permanently degrade the functions inherent in soft-earthen substrates, which include nutrient cycling; adsorption and breakdown of some pollutants in stormwater runoff; and substrate for benthic invertebrate communities. This would permanently impact the Creek's cold freshwater habitat (COLD), warm freshwater habitat (WARM), and wildlife habitat (WILD) beneficial uses. The draft MND should be revised to recognize this impact as significant and provide appropriate mitigation to compensate for the impacts, if they are unavoidable.

Further, it is unclear whether the proposed Project would promote a stable creek design. At some of the erosion sites, the previously-constructed hardscape appears to have induced additional erosion, such as at Site 8, with erosion on the bare bank above the rock riprap, and at Site 9, with erosion on the mostly bare bank at the log revetment and overhead pipeline. This is not surprising since the Creek is sediment starved (MND, p. 4-21 and 4-65). Adding additional hardscape, as with the proposed Project, may not prevent additional erosion at the bank toes or ends of hardened sections of the banks, and may result in the same kinds of erosion problems as with the Creek's current conditions. The draft MND should be revised to incorporate evaluations of creek flow velocity, shear stress values, Manning's N roughness coefficients, and any other analyses used to evaluate the Project reach and alternatives to achieve the Project purpose.

At Sites 9 and 10, sheet pile would be pressed into the bank, extending from the top of bank to below the channel bed elevation, and behind the existing lower banks, leaving the lower banks intact. However, the draft MND states that the existing lower banks may erode with time, but this is reported as a benefit because it would purportedly create new waters of the U.S. (i.e., intermittent stream) by widening the Creek's cross section (p. 4-35).

This would be a significant impact because the Project could apparently induce erosion to the point that no Creek bank would remain. Accordingly, the draft MND should be revised to address this impact as significant, and to provide alternatives that would avoid and minimize such an impact.

Comment 2. Least Environmentally Damaging Practicable Alternative

For the Water Board to permit the proposed Project pursuant to the Clean Water Act, section 401, we will require an alternatives analysis consistent with the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (Procedures) that allows the permitting authority to determine whether the proposed project is the Least Environmentally Damaging Practicable Alternative (LEDPA).Although the LEDPA analysis is not required by CEQA, a project proponent may tailor their alternative analysis to fulfill both the CEQA and Procedures requirements to help expedite the Water Board's Project review to issue a 401 certification. Compensatory mitigation cannot be used as a strategy to arrive at a preferred alternative with a LEDPA analysis and should only be used after all avoidance and minimization measures have been exhausted. Valley Water would need to exhaust all impact avoidance and minimization measures before relying on compensatory mitigation to determine LEDPA when applying for a permit from the Water Board to authorize the Project.

In particular, the MND should be revised with analyses to show whether soft or hybrid bank stabilization methods are feasible. An example of a successful hybrid bank stabilization project is in Wildcat Creek in San Pablo, which the Water Board authorized in 2013. Like the Project reach, the Wildcat Creek site has very steep banks at 1:1 slope and near-vertical banks in some locations and is constrained by urban development. This project includes a steel H-pile supported retaining wall with rock, soil, and willow brush layering at the toe of the wall. The planted willows stabilize the bank toe with their root matrices and soften the upper sacrete-lined banks with their branching foliage. This results in greater function than the proposed Project's hardscape while providing support and stability for the upper banks. The existing native vegetation in the Project site suggests that water is present to support vegetation for soft or hybrid bank stabilization methods after an establishment period that would need to be supported by Valley Water. The MND should be revised to address alternatives which incorporate vegetated systems that maximize riparian functions and avoid or minimize hardscape.

In conclusion, the draft MND does not include enough information for us to evaluate the proposed Project's impacts or mitigation and make a determination that water quality standards will not be impacted. We encourage the Valley Water to incorporate a sustainable design throughout the Project to account for the lack of dynamic equilibrium at play, as evidenced by the ongoing erosion problems in the Creek's reach. If you have any questions concerning our comments, please contact Susan Glendening at susan.glendening@waterboards.ca.gov or (510) 622-2462. We look forward to continuing to work with you on this project.

Sincerely,

Elizabeth Morrison
Senior Environmental Scientist

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