July 27, 2018

State Water Resources Control Board
Attn: Ms. Jeanine Townsend, Clerk of the Board
1001 I Street, 24th Floor
Sacramento, CA 95814-0100

Via email: LSJR-SD-Comments@waterboards.ca.gov

Subject: Comment Letter – Revisions to Proposed Bay-Delta Plan Amendments

The Santa Clara Valley Water District (District) appreciates the opportunity to comment on the proposed final amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan). The District is the primary water resource management agency for Santa Clara County providing water supply and flood protection for Silicon Valley and its 1.9 million residents.

The District also has a long-standing commitment to environmental stewardship, both within Santa Clara County as well as within the Delta and its watershed. For many years, we have actively supported and participated in science, research, and habitat restoration in coordination with the Interagency Ecological Program and fishery agencies, and for the past two years have played a leadership role in the Collaborative Science and Adaptive Management Program.

The District remains concerned with the approach the State Water Board continues to take in the proposed plan amendments, and strongly supports the State Water Board’s consideration of voluntary agreements to help achieve desired benefits. The District believes that a science-based, voluntary settlement approach that incorporates effective non-flow measures and optimizes the use of limited water supplies is the best path to protecting and improving the Delta ecosystem while balancing other beneficial uses.

**The unimpaired flow approach is not an efficient way to use limited resources**

Our considerable experience and knowledge in ongoing Delta science efforts have convinced us that a singular focus on flow volumes is not likely to provide meaningful benefits to the Delta ecosystem and detracts from the collective ability to develop a comprehensive, holistic approach to environmental restoration and wise water management. Focus on increasing flows to meet unimpaired flow targets will reduce the flexibility to adapt to changing conditions. It will

Our mission is to provide Silicon Valley safe, clean water for a healthy life, environment, and economy.
also drain financial and water resources that could be used to adaptively address a suite of stressors, focusing first on those that are most harmful to the Delta ecosystem.

The District supports the ultimate goal of improving the Bay-Delta ecosystem; however, we continue to have significant concerns over the State Board’s unwillingness to consider more efficient ways to use the State’s limited water supplies. On page 34 of the State Water Board’s Master Response 1.1, the State Water Board acknowledges that “a more natural flow pattern would be beneficial to [fish and wildlife] beneficial uses.” However, the comments do not address the District’s March 17, 2017 comments on the draft Substitute Environmental Document (SED) that “unimpaired flows” do not have the same form and function as natural flows in the highly-altered Bay Delta system, and that the best available science should be used to craft approaches that recognize and respond to competing needs. Focusing solely on unimpaired flows will cause higher flows in leveed and rock-lined channels which, merely increases the depth and velocity of the flow. In contrast, a more natural flow pattern is one where storm and spring-melt flows spill out onto the riparian and floodplain landscape and create increased spawning habitat, greater food resources, and shelter from predators that inhabit the major river corridors. Beneficial use of riparian and floodplain landscapes can be accomplished with physical modifications that reduce the stage at which floodplains are inundated, and focuses on the functions of flow, providing benefits to native fish while also sustaining other beneficial uses of that water. Simply shaping flows, as proposed by the State Water Board, will not achieve these desired ecosystem functions without using unreasonable amounts of water in the absence of physical modifications.

The State Water Board continues to propose an inefficient approach in its recently released Framework for the Sacramento/Delta Update to the Bay-Delta Plan. Available science indicates that non-flow measures, such as habitat restoration and food production, predation control, reduction of invasive species, and reduction of contaminant loading into the Bay Delta are critical to restoring the environmental health of the Bay Delta. The Framework seems to imply that in certain circumstances voluntary agreements will only result in the State Water Board imposing the lower end of the unimpaired flow range. However, the District urges the State Water Board to strive towards replacing the unimpaired flow requirement in its entirety with voluntary agreements that holistically address stressors through a combination of functional flows, physical modifications, and other non-flow measures.

The proposed amendments will have a significant impact on SFPUC wholesale customers in Santa Clara County

The District is extremely concerned about the potential impacts to Santa Clara County’s water supplies from the combination of Phase 1 and Phase 2 amendments to the Bay-Delta Plan. Santa Clara County relies on water from the Delta watershed for 55 percent of its water supply on average. Forty percent is conveyed through the Delta by the State Water Project (SWP) and Central Valley Project (CVP) and 15 percent, or about 60 thousand acre-feet (TAF) per year, comes from San Francisco’s Regional Water System (RWS).
According to the State Water Board’s own analysis, the 40 percent of unimpaired flows scenario could result in an average reduction of up to 137 TAF in supplies to San Francisco’s RWS each year during a repeat of the 1987 to 1992 drought. The District’s March 2017 comment letter described the significant impacts to Santa Clara County’s water supplies that would result from a flow objective requiring 40 percent of unimpaired flow from the Tuolumne River and other tributaries to the San Joaquin River. The State Water Board’s response dismissed the District’s concerns, claiming that the District inflated the severity of rationing to RWS customers within Santa Clara County by prorating allocations to wholesale customers for shortages in excess of 20 percent based on the allocations prescribed for a 20 percent shortage. To the contrary, SFPUC managers have concurred that the rationing scenario the District modeled is a reasonable potential outcome of the Phase 1 amendments.

To capture the potential range of impacts, the District updated its modeling to include an alternative approach to rationing consistent with assumptions made in the March 2017 report, “Bay Area Socioeconomic Impacts Resulting from Instream Flow Requirements for the Tuolumne River”, prepared for SFPUC by Dr. David Sunding. The updated analysis provides a possible range of impacts to RWS deliveries to Santa Clara County during a repeat of the 1987-1992 drought, as shown in the table below. The modeling shows reductions in deliveries of about 18% or 11 TAF during a repeat of the drought even without the unimpaired flow requirements. The table shows the additional shortage that would be attributed to the unimpaired flow requirement. Additional details on the analysis are provided in Attachment 1.

<table>
<thead>
<tr>
<th>Unimpaired Flow Requirement</th>
<th>Incremental Reduction in RWS Deliveries to Santa Clara County Wholesale Customers (Percent)</th>
<th>Incremental Reduction in RWS Deliveries to Santa Clara County Wholesale Customers (TAF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30%</td>
<td>21%-32%</td>
<td>12-18</td>
</tr>
<tr>
<td>40%</td>
<td>35%-55%</td>
<td>21-32</td>
</tr>
<tr>
<td>50%</td>
<td>50%-78%</td>
<td>29-45</td>
</tr>
</tbody>
</table>

**The proposed amendments will have a significant impact on Santa Clara County’s water supply reliability**

When the District integrates these shortages into the entire water supply portfolio for Santa Clara County, including recycled water, local surface water, groundwater, conservation, SWP and CVP supplies, and groundwater banking in the Central Valley, they result in significant impacts to the county’s water supply reliability.
In the base case, without the proposed unimpaired flow requirements, District modeling indicates that county-wide shortages occur in about 32% of years with an average annual magnitude of 69 TAF\(^1\). The proposed flow requirements would increase the frequency of shortages by 4-15 percent and increase the average magnitude of those shortages by 5-19 percent. More details on the analysis and results are included in Attachment 1.

To minimize county-wide shortages caused by the reductions in deliveries to Santa Clara County’s RWS wholesale customers, these customers would draw more heavily on local groundwater supplies which are necessary to help get through extended dry periods. Therefore, in addition to increased shortages, the County’s overall system reliability would be decreased in response to the unimpaired flow requirements. The reductions to RWS’s wholesale customers in Santa Clara County, in particular when considered in the context of the potential Phase 2 amendments, will have a significant impact on the ability of the District to provide reliable water supplies to our communities, businesses, and local streams, and make it more difficult for us to protect our local groundwater basins and prevent land surface subsidence. The reduction in local storage would make Santa Clara County more vulnerable to future dry periods, emergencies, and facility outages. These groundwater depletions will require additional supplies to recharge groundwater levels; such incremental supplies are not identified and their impacts are not analyzed in the Final SED.

**Water managers cannot rely on water transfers to compensate for these magnitudes of reductions in supplies**

The State Water Board also asserts that SFPUC’s water rationing-only approach is not reasonably foreseeable in part because SFPUC would be more likely to secure replacement supplies than to “undertake a course of action that would have potentially devastating effects on the San Francisco Bay Area economy and that would be expected to be widely unacceptable to residents of the Bay Area community” (See SED Master Response 8.5 at 19). However, the State Water Board’s transfers-only approach is not reasonably foreseeable. The District previously commented that the District and SFPUC will be hard pressed to find the volume of transfer supplies that the State Water Board envisions. The State Water Board’s response does not address our stated concern that in dry years demand exceeds available transfer supplies, and sellers face political and environmental pressures to abstain from transferring water outside of their region. Implementation of the 40 percent unimpaired flow requirements will exacerbate this situation, especially in light of the State Water Board’s reference to future, unknown minimum reservoir carryover storage targets (see SED Appendix K at 28) and the recent Framework for the Sacramento/Delta Update to the Bay-Delta Plan, which contemplates an additional two million-acre-foot (MAF) reduction in available water supplies resulting from the proposed 55 percent unimpaired flow requirement.

The State Water Board’s response also does not address our concern that in years when transfer supplies are more plentiful, conveyance capacity across the Delta can be severely

\(^1\) Based on modeling using 94-years of hydrologic data (1922 to 2015) and future demands.
limited. For example, in 2016, there was no conveyance capacity for new transfers of non-SWP/CVP water. Nor does the State Water Board response consider the impact of conveyance losses of up to 35% on the quantity or cost of transfer supplies. Attachment 1 provides additional information supporting the District’s concerns with the State Water Board’s analysis of water transfer availability and cost.

Concerns regarding Phase 1 amendments are amplified given the recently released Phase 2 Framework for the Sacramento/Delta Update to the Bay-Delta Plan (Phase 2 Framework)

The State Water Board’s recently released Phase 2 Framework proposes a similar, but even higher unimpaired flow requirement than that proposed in Phase 1 for the San Joaquin River and its tributaries, repeating an approach that promotes the inefficient use of limited water supplies and magnifying the water supply impacts produced by the Phase 1 unimpaired flow requirements. The District’s analysis of Phase 1 impacts likely understates water supply impacts, especially in light of the State Water Board’s reference to future, unknown minimum reservoir carryover storage targets (see SED Appendix K at 28) and the Phase 2 Framework. While it is still unknown how much of the supply reduction from the Phase 2 Framework will be assigned to the SWP and CVP, it is likely that the District will see additional impacts to its water supplies, either as reductions in SWP and CVP imports which make of 40 percent of the District’s water supplies on average, or as reduced availability of supplemental transfer supplies. The District requests that the State Water Board consider other more reasonable options to make the best use of California’s precious water supplies, such as utilizing a functional flow approach coupled with physical modifications to optimize biological benefits, and allowing more time for voluntary settlement agreements to develop, instead of perpetuating the unimpaired flow approach in the Phase 2 amendments.

The District has long been committed to both reliable water supplies and environmental stewardship. We continue to encourage the State Water Board to develop solutions that meet both of these objectives.

Sincerely,

Norma J. Camacho
Chief Executive Officer

Attachment 1: Technical Comments on Proposed Amendments to Bay-Delta Plan

cc: Santa Clara Valley Water District Board Members
Apologies, this time with letter right-side-up.

The Santa Clara Valley Water District appreciates the opportunity to comment on the proposed final amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary. Please find our comments attached.

Sincerely,
Frances Brewster