Responses to Regional Water Board December 29, 2015 Comments on SFCJPA Bay-Hwy. 101 Project O&M Manual

- 1. Text has been added in the updated version. Table was deemed unnecessary since all actions are called out in contents.
- 2. Text for 2.b and 2.e added. Mitigation is already called out. Faber tract creek-marsh interface is within National Wildlife Refuge jurisdiction.
- 3. The MMP and Manual are consistent.
- 4. The December 29, 2015 letter from the Regional Water Board Executive Officer to the SFCJPA and staff memo attached to it state that Stanford University has made a decision regarding the future management of Searsville Dam and Reservoir. In fact, as Regional Water Board staff are aware due to their participation in 2013-15 in the Searsville Advisory Group, Stanford has not made such a decision. This was recently confirmed with the co-chair of the Stanford's Steering Committee, Jean McCown, and the co-chair of its staff Working Group, Tom Zigterman. Both of these individuals have offered to discuss with Regional Water Board staff the fact that no such decision has been made.

These senior Stanford staff have also offered to discuss with Regional Water Board staff the fact that the University will be required by law and by the Searsville-related permits issued by the Regional Water Board and other agencies to mitigate for its actions. The fact that Stanford, and not another entity such as the SFCJPA, would be responsible for mitigating its own actions, was discussed and agreed to by the leadership of the SFCJPA and Regional Water Board in 2014. Should Stanford choose to pursue a project to modify the dam, the Regional Water Board's permit to the University would address your concerns regarding sediment introduced by that modification. Stanford is aware of its obligation to avoid or mitigate for downstream impacts and intends to do so, in cooperation with the SFCJPA and others representing the downstream community, if and when a decision is made and an action is taken at Searsville.

Regardless of a potential future project by Stanford at Searsville, sediment is and will be transported to the Project area from Searsville and upstream tributaries of San Francisquito Creek. The Project design has taken this issue into account. Item 8 below discusses the issue of current and future annual sediment deposition in the Project area. As also agreed to by the Regional Water Board's Executive Officer in 2014, future maintenance activities in response to unforeseeable future conditions or an unpredictable event, beyond what can be anticipated now in the O&M Manual, will be subject to a future Water Quality Certification, and review and approval of other resource agencies as appropriate. The 5-year report is an appropriate place to communicate to regulators the status and performance of the Project features and channel.

- 5. Requested information is listed in Section 1.3.
- 6. O&M procedures are consistent with SMP.
- 7. Table has been revised.
- 8. 8.a. An additional trigger for sediment deposition has been added
 - 8.b. The 1958 project that created the existing channel featured 1H:1V earthen levees

forming a trapezoidal channel with a flat bottom. The 2016 Project design features 3H:1V inboard levee faces with inboard levee toes at approximately 8 ft NAVD, and in-stream benches sloping from 8 ft down to approximately 6 ft at the upper hinge of a functional low flow channel appropriately sized for both fluvial flows and tidal action with no fluvial input.

With the new channel geometry, larger events that generate an appreciable amount of suspended sediment load will occupy a wider cross section than under current conditions. However, as flows recede and the stream loses energy, rather than water velocities slowing to a point where suspended load starts falling out, as is the case with a flat bottom channel, the sloped design of the in-stream benches will concentrate flows into a continually narrower channel cross section as the water surface falls. This narrowing of the active channel cross section will maintain the velocities needed for effective sediment transport over diminishing flows, and is why hydraulic experts consulted on the Project do not expect problematic sediment deposition in the project reach. As stated in number 5 above, should future conditions, beyond what can be anticipated now in the O&M Manual, occur, maintenance of the channel will be subject to a future Water Quality Certification, and review and approval of other resource agencies as appropriate. The 5-year report is an appropriate place to communicate to regulators the status and performance of the Project features and channel.

- 9. The Manual contains inspection criteria used by all District facilities in accordance with the SMP.
- 10. The N value was calculated using guidance from the United States Geological Survey Water-Supply Paper 2339, proposed vegetation conditions, and observations of stable vegetation in similar tidal reaches in San Francisco Bay.
- 11. USACE vegetation-free zone is no longer part of the project.
- 12. A flow of 5,000 cfs (or WSE = 13.8' (NAVD88) at the downstream face of E. Bayshore Road would cause channel velocities averaging over 5 ft/s and will trigger immediate levee inspection. 5,000 cfs is roughly a 20-year flow.
- 13. The criteria for levee inspection after an earthquake were adopted from the Coyote Creek Operations and Maintenance Manual, and found to be appropriate by the geotechnical engineer of record for the San Francisquito Creek project. Both projects referenced the criteria for inspection of levees used by the <u>California State Water Project</u>. The California State Water Project uses the equation, "Distance = 36 (Magnitude - 3.722)" to calculate the parameters for levee inspection after an earthquake, where:
 - Distance = distance from the levee to the epicenter of the earthquake; and
 - Magnitude = Richter scale level of the earthquake.

The distances we specified are slightly more conservative than the State Water Project's distances.

- 14. Text added as suggested.
- 15. Explanatory text added. Biannual report revised to annual report.
- 16. Unused terms purged. Appendices will contain definitions if needed.

17. Figures 1a and 1b titles are revised to Maintenance Access Downstream and Upstream. Glossary item purged. As-built drawings delineate physical features and plantings.

- 18. Referred to HDR, who will provide an updated DDP or separate responses.
- 19. a. same dates
 - b. deleted
 - c. 6.5 deleted, no LBV;
 - 7 no changes;
 - 8. Revised; 15, deleted, directed to Section 3.1.3.j.;
 - 9-15.5 specific species BOs cited in Section 3.1.3, Protection for Endangered Species.
 - d. District NPW covers all proposed work. East Palo Alto notice will be in Maintenance Agreement.