October 22, 2021

To: Mayor Sam liccardo and San Jose City Council Members

Re: Agenda Item 6.1 Report on Bids and Award of Construction Contract for 7745 - Outfall Channel and Instrumentation Improvements Project at the San José-Santa Clara Regional Wastewater Facility.

Dear Mayor Liccardo and Council Members,

Santa Clara Valley Audubon Society (SCVAS) and Citizens Committee to Complete the Refuge (CCCR) commented on the Draft Mitigated Negative Declaration (DMND) for the San José-Santa Clara Regional Wastewater Facility (RWF) Outfall Bridge and Instrumentation Improvements (Project) in May 2021. SCVAS and CCCR participated in the Community Advisory Group for the RWF Master Plan and recognize that the Project is critical for operations at the RWF.

The IS/MND proposes that lighting on the Outfall Bridge is needed to ensure safety of staff that conducts "about five trips per day by operations and maintenance … to read and maintain the instruments in addition to periodic mowing of the levees."

In our comment letter, we highlighted the devastating impacts of lighting (especially blue light) on almost all species and all ecosystems. We believe that with minor modifications to lighting design, San Jose can further reduce or avoid adverse impacts to bay ecosystems with no consequences to functionality.

Revisions to the Initial Study 4-2 states: "*New lighting would consist of CrouseHinds Champ Pro PVML Type 1 lighting (or an equivalent system) LED blue spectrum (i.e., 5,000 Kelvin) cool white floodlights with a brightness of approximately 10,730 nominal lumens. The new lights which would be on all the time during night hours to provide safe operator access to the bridge.*" in addition,

As we have highlighted in our comment letter, state-of-the-art science shows that LED blue spectrum (i.e., 5,000 Kelvin) floodlights are harmful to all species of wildlife and to ecosystems. Lighting in general, and especially in environmentally sensitive environments, should be used only where needed, when needed, and at the lowest brightness possible and lowest Correlated Color Temperature (Kelvin)

possible[1]. Recommendations from the UN and the IDA direct that sensitive environments should be kept dark, and areas surrounding sensitive ecosystems should use lighting at wavelengths of 520 nanometers or less[2]

We suggest the following changes be made to the Project:

1. Use innovative lighting technology to ensure that all lights are off when staff is not working at the bridge or sampling water at night (switches, or remote lighting control come to mind). Timers can be used to ensure that lights go off after a reasonable amount of time.
2. New lighting fixtures should be limited to no more than 520 nanometers (yellowish light) rather than cold blue light, even if energy use is higher. This will reduce impacts to wildlife and the bay ecosystem.

Adopting the proposed measures can help the city achieve Bay and Baylands Policies ER-3.1 Protect, preserve and restore the baylands ecosystem in a manner consistent with the fragile environmental characteristics of this area and the interest of the citizens of San José in a healthful environment. ER-3.4 Avoid new development which creates substantial adverse impacts on the Don Edwards San Francisco Bay National Wildlife Refuge or results in a net loss of baylands habitat value.

Thank you for your consideration,

[redacted]

Eileen McLaughlin, Board Member
Citizens Committee to Complete the Refuge

[redacted]

Shani Kleinhaus, Ph.D.
Environmental Advocate
Santa Clara Valley Audubon Society

[1] https://www.darksky.org/values-centered-lighting-resolution/?eType=EmailBlastContent&eId=e18a9f9f-e20c-469d-9cea-fc43510d1c14

[2] https://www.iau.org/static/publications/dqskies-book-29-12-20.pdf