



February 14, 2022

Todd Sexauer, Senior Environmental Planner  
Santa Clara Valley Water District  
5750 Almaden Expressway  
San Jose, CA 95118  
Via e-mail: TSexauer@valleywater.org

RE: Pacheco Reservoir Expansion Project (PREP) Draft EIR/EIS Comments

Dear Mr. Sexauer,

The Santa Clara Valley Audubon Society (SCVAS) was founded in 1925 and is one of the largest Audubon Society chapters in California. SCVAS promotes the enjoyment, understanding, and protection of birds and other wildlife by engaging people of all ages in birding, education, and conservation. SCVAS is formally opposed to the Pacheco Reservoir Expansion Project due to its unparalleled and devastating impacts on wildlife, wildlife connectivity, and remaining intact habitat in Santa Clara County and the Pajaro River watershed. We are also concerned with eroding the ability of the Santa Clara Valley Habitat Plan (VHP), which we have supported since its inception, to deliver its commitments to our community. We believe that the ecological benefits of the project are dwarfed by the harm it will cause to species and ecosystems and the biodiversity of Santa Clara County. SCVAS respectfully submits the following comments on the Draft EIR/EIS for the Pacheco Reservoir Expansion Project (Project).

1) Minimal water to wildlife refuges

The Project expects to benefit from Prop 1 funding due to the potential to improve habitat to South Central Coast steelhead and to water contributions to wildlife refuges in the California Central Valley. As shown in this letter Table 1, the proposed contribution of water to wildlife refuges is miniscule compared to that of the similar-scale Los Vaqueros expansion project and is non-existent when the wildlife refuges need it most. This is despite the fact that the expansion of the Los Vaqueros reservoir has minor impacts to biological resources as compared to the Project (Figure 1). Furthermore, the water will be provided by exchanges and not directly from Valley Water facilities<sup>1</sup>. To provide benefits to birds, the Project should surpass the Los Vaqueros

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<sup>1</sup> Valley Water Public Meeting January 13th, Response to Comments,  
[https://www.youtube.com/watch?v=jwK\\_t9eZfuc](https://www.youtube.com/watch?v=jwK_t9eZfuc)

allocations of water to the wildlife refuges, and provide the water directly from Valley Water facilities.

Table 1. Comparison of water allocations between PREP and Los Vaqueros Reservoir Expansion

Water Year	Los Vaqueros Reservoir Expansion	Pacheco Reservoir Expansion
Wet	92,000 AF	0 AF
Above Normal	62,000 AF	0 AF
Below Normal	31,000 AF	2,000 AF*
Dry	12,000 AF	0 AF
Critically Dry	0 AF	0 AF

\*Through exchanges

2) Impact of long term operations on watershed

The EIR must analyze watershed impacts of long term operations, specifically as they pertain to the release of pulses of water from the reservoir into the Pajaro Creek in terms of seasonality, frequency and length of dry-out conditions downstream. These pulses as proposed may possibly support fish, but impacts to downstream species and ecosystems, especially sycamore alluvial woodland and riparian ecosystems, are likely. DEIR Chapter 3.5 suggests that an adaptive management plan would be prepared for flow operations, but where watershed-wide impacts can be expected, transparency is critical and the preparation of a management plan should not be deferred. The adaptive management plan should be provided for public review as an integral and essential part of the EIR with full evaluation, disclosure and mitigation of all impacts to each species and ecosystem.

3) Conflict with Valley Habitat Plan

Valley Water is one of six agencies that rely on the Valley Habitat Plan (VHP) to cover biological impacts of development, land use decisions and activities<sup>2</sup>. Purchase of land in Santa Clara County for mitigation of biological impacts would compete with the VHP for mitigation land and thus, significantly and unavoidably impair the work and likelihood of success of the adopted VHP. The VHP implements both a Habitat Conservation Plan (HCP) and a Natural Community Conservation Plan (NCCP). The NCCP program is an unprecedented effort by the State of California to take a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. NCCPs are managed to increase the value of the habitat, and not simply to set aside land to mitigate impacts. The VHP includes goals that aim to protect species and regenerate their habitat (including sycamore alluvial woodland (SAW)) in Santa Clara County. The VHP must acquire a minimum 46,496 acres to be protected through conservation by

<sup>2</sup> The Habitat Agency was formed in May 2013 and has a major role in implementing the Habitat Plan, which was developed by the Santa Clara Valley Transportation Agency, Santa Clara Valley Water District, County of Santa Clara, and the Cities of Gilroy, Morgan Hill, and San Jose

2063. Competition for available mitigation lands will drive mitigation-land prices up, putting the VHP and the other five partners at a disadvantage.

Unlike the NCCP, which restores and enhances habitat, the Project's requirements for mitigation are limited to setting land aside without restoration and habitat enhancement activities. This means that overall, the quality of mitigation lands will be lower than that of land purchased by the VHP, at a net loss to Santa Clara County species and ecosystems. Lastly, the Project contains land and resources that, in absence of the Project, could potentially be acquired by the VHP to help achieve its conservation goals. The EIR should show that these goals are achievable if the Project land is not available for preservation.

The impact of building a dam and inundating some of the most valuable habitat in Santa Clara County, making this land unavailable to the VHP, combined with the competition for other mitigation land in Santa Clara County, leads us to believe that the impact to the VHP remains significant and unavoidable.

4) Question over feasible mitigation acreage

The EIR relies extensively on the availability of private land to mitigate significant biological impacts to a presumed less-than-significant level, despite stating clearly that, "Selection of lands and activities for compensatory mitigation related to botanical/natural community and terrestrial resource mitigation measures" is an issue to be resolved (Section ES.11). The Project will require thousands of acres to mitigate biological impacts to a less-than-significant level. The Final EIR should provide a table that includes, for each biological mitigation measure, the following columns: mitigation measure, impacted biological resource, number of acres impacted, number of acres needed for mitigation.

The Project needs to show that this many acres of habitat are feasibly available to purchase for mitigation, and that purchase of such land will not conflict with the ability of the VHP or other HCPs and NCCPs to meet their required conservation goals. In addition, for each reliance on "available private land" for mitigation of a specific impact, the EIR must set forth specific mitigation measures or set forth performance standards so that such measures would be achieved by various, specified approaches.

5) Impact to Williamson Act

No feasible mitigation measure is available to offset over 1200 acres of land under Williamson Act contracts that will be impacted by inundation or other Project-related permanent facilities. This remains a significant unavoidable impact since there is no feasible mitigation measure available that would move Project facilities and inundation areas to nearby lands not under Williamson Act contract. Please provide information detailing the process that Valley Water expects to use to cancel the Williamson Act contracts.

6) Impacts of power transmission infrastructure on birds should be avoided

The installation of the new transmission line and substation presents an increased risk of electrocution on special-status avian species and other migratory bird and raptor species. To reduce the impact, the Project proposes to use APLIC design standards and practices (Mitigation Measure BI-13a). However, we believe that in addition to the proposed mitigations, impact to most bird species can and should be avoided by placing most of the new transmission infrastructure underground. Placing the transmission infrastructure underground should also greatly reduce the risk of power-line ignition of wildfires<sup>3</sup>.

7) Impacts of lighting during construction and operations

The project proposes construction-related lighting lasting at least 6 years and new permanent lighting at the substation, pump station, switchyard and the Hwy 152 intersection. This will introduce Artificial Light At Night (ALAN) to an area which is currently dark. This new lighting may impact the scientific work of astronomers at the Lick Observatory, and will have a significant ecosystem-wide impacts on species and ecosystem<sup>4</sup> function in the Project's area.

A recent workshop titled 'Dark and Quiet Skies for Science and Society' was organized by the United Nations Office for Outer Space Affairs, Spain, and the International Astronomical Union (IAU). The workshop was followed by a report<sup>5</sup> which provides a comprehensive analysis of the impacts of ALAN on science and astronomy, and also includes a comprehensive analysis of "light pollution impact on the bio-environment" that addresses impacts to health and behavior in a large number of species as well as impacts to ecosystems and biomes. Artificial Light At Night (ALAN) is emerging as a significant threat to all species and both aquatic and terrestrial ecosystem function<sup>6</sup>.

Based on the recommendations of the International Dark Sky Association and the "Dark and Quiet Skies for Science and Society" report, we ask that the Project address ALAN by following the International Dark-sky Association (IDA) resolution for outdoor lighting guidelines<sup>7</sup> and in addition:

- Avoid lighting to the largest extent possible and use timers and dimmers where lighting is required.

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<sup>3</sup> <https://www.eastbaytimes.com/2021/07/21/wildfires-pge-will-place-10000-miles-of-electric-lines-underground/>

<sup>4</sup> ● <https://esajournals.onlinelibrary.wiley.com/doi/full/10.1890/1540-9295%282004%29002%5B0191%3AELP%5D2.0.CO%3B2>

● <https://www.frontiersin.org/articles/10.3389/fnins.2020.602796/full>

<sup>5</sup> <https://www.iau.org/static/publications/dqskies-book-29-12-20.pdf>

<sup>6</sup> ● [https://www.exeter.ac.uk/news/homepage/title\\_823811\\_en.html](https://www.exeter.ac.uk/news/homepage/title_823811_en.html)

● <https://esajournals.onlinelibrary.wiley.com/doi/full/10.1890/1540-9295%282004%29002%5B0191%3AELP%5D2.0.CO%3B2>

● <https://www.frontiersin.org/articles/10.3389/fenvs.2017.00061/full>

● <https://www.nature.com/articles/s41598-020-68667-y>

● <https://pubmed.ncbi.nlm.nih.gov/33139919/>

<sup>7</sup> <https://www.darksky.org/our-work/lighting/values-centered-outdoor-lighting/>

- Use the minimum-possible lighting intensity for both temporary (construction related) lighting and for long term, permanent lighting.
- If LED lights are used, the amount of blue light ( $\lambda < 500$  nm) should be below 5% of the total spectral power. Generally this requires using LED luminaires with a corresponding color temperature of 2200 Kelvin (K) or less<sup>8</sup>.
- Because of the abundance of wildlife in the Project area, motion triggered lighting should be discouraged.
- Consult with the Lick Observatory to avoid impacting the scientific work and function of this institution.

PAMM AES-1 Project Lighting proposes to minimize potential for light trespass from night lighting by avoiding or minimizing direct lighting or skyglow. Lighting will be oriented downward, hooded, and motion-activated where practicable so as to concentrate light on task areas and reduce lighting spillover into locations outside of the Project area. New street lighting associated with proposed interchanges shall be shielded, directed toward only the areas where required, and minimized to the levels required for operations and safety.

- Directing light down, even when light is triggered by motion, impacts wildlife large and small and interferes with wildlife movement along wildlife corridors.<sup>9</sup> Unless mitigated, this should be considered a significant impact to most wildlife species. Please provide mitigation for wildlife movement along waterways (even small ditches) and other movement corridors to allow wildlife movement.

#### 8) PAMM BI-13 Aquatic Invasive Species Management

Invasive species are one of the primary driver of species extinction and ecosystem collapse<sup>10</sup>. Invasive aquatic species (bivalves, fish, plants and aquatic vegetation, pathogens) are especially difficult to control, and their impact once they colonize a watershed often has tremendous ecosystem and economic harm<sup>11</sup>. Invasive species are one of the primary stressors in the delta<sup>12</sup>. The proposed PAMM BI-13 Aquatic Invasive Species Management has not prevented wide-spread invasions of water bodies elsewhere. Over time, these management measures are not likely to prevent colonization of the Pajaro River watershed and potentially also Monterey Bay by invasive aquatic organisms and/or pathogens that originate in the delta or brought in by

<sup>8</sup> recommendation DS\_Oas 10 in <https://www.iau.org/static/publications/dqskies-book-29-12-20.pdf>

<sup>9</sup> ● [https://www.researchgate.net/publication/309616837\\_LIGHT\\_POLLUTION\\_IN\\_THE\\_CONTEXT\\_OF\\_THREATS\\_TO\\_THE\\_WILDLIFE\\_CORRIDORS](https://www.researchgate.net/publication/309616837_LIGHT_POLLUTION_IN_THE_CONTEXT_OF_THREATS_TO_THE_WILDLIFE_CORRIDORS)  
● <https://esajournals.onlinelibrary.wiley.com/doi/full/10.1890/1540-9295%282004%29002%5B0191%3AELP%5D2.0.CO%3B2>

<sup>10</sup> <https://www.weforum.org/agenda/2020/11/wwf-living-planet-report-2020-biodiversity-threat>

<sup>11</sup> <https://link.springer.com/article/10.1007/s10750-014-2166-0>

<sup>12</sup> ● [https://www.ppic.org/wp-content/uploads/content/pubs/report/R\\_612JMR.pdf](https://www.ppic.org/wp-content/uploads/content/pubs/report/R_612JMR.pdf) and  
● <https://deltacouncil.ca.gov/pdf/isb/products/2021-05-21-isb-non-native-species-review.pdf>  
● <https://deltacouncil.ca.gov/pdf/isb/meeting-materials/2020-05-23-draft-isb-invasives-review.pdf>

visitors. If and when a pathogen such as fish mycobacterium<sup>13</sup> from the delta enters Monterey Bay, the resulting ecological and economic disaster will be incalculable.

Thank you,

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<sup>13</sup>[https://www.researchgate.net/publication/272748617\\_Subclinical\\_Mycobacterium\\_infections\\_in\\_wild\\_delta\\_smelt](https://www.researchgate.net/publication/272748617_Subclinical_Mycobacterium_infections_in_wild_delta_smelt)