

**From:** [Todd Sexauer](#)  
**To:** [Victor Gutierrez](#); [Ryan McCarter](#); [Melih Ozbilgin](#); [Mason Holmes](#); [Janell Hillman](#); [Jason Nishijima](#)  
**Cc:** [Pacheco Expansion](#)  
**Subject:** FW: Pacheco Dam EIR Comments  
**Date:** Tuesday, February 15, 2022 3:51:22 PM  
**Attachments:** [Comments on the Pacheco Dam Draft EIR, J Smith.pdf](#)

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FYI

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**From:** Jerry Smith <[frogs\\_and\\_fish](mailto:frogs_and_fish) [REDACTED]>  
**Sent:** Tuesday, February 15, 2022 3:21 PM  
**To:** Todd Sexauer <[TSexauer@valleywater.org](mailto:TSexauer@valleywater.org)>  
**Subject:** Pacheco Dam EIR Comments

Dear Todd Sexauer:

Attached are my comments on the Proposed Pacheco Dam draft EIR.

Jerry Smith

[REDACTED]

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Subject: Comments on the Draft Environmental Impact Report (DEIR) for Santa Clara Valley Water District's (Valley Water) Pacheco Reservoir Expansion Project in Santa Clara County, California

Dear Todd Sexauer:

The proposed dam replacement/enlargement project on North Fork Pacheco Creek proposes to provide year round reservoir releases to North Pacheco Creek and Pacheco Creek in most years (other than some critically dry years) (**Table ES-2**). Those releases address adult steelhead (January-March) attraction and passage flows, smolt outmigration flows (April and early May), and cool spring through winter juvenile rearing flows (from a large deep reservoir). This would potentially provide substantial benefits for threatened SCCC steelhead compared to the no project alternative. This would be especially important for SCCC steelhead in Santa Clara and Santa Cruz counties, as the remaining steelhead runs are in Uvas Creek watershed (Santa Clara County) and Corralitos Creek watershed (Santa Cruz County). The steelhead runs in those watersheds have been declining due to increasing urbanization impacts and the effects of recent droughts (Casagrande 2020), so additional large steelhead populations are needed to maintain the run in the Pajaro River watershed.

**The following comments deal with specific aspects of the proposal:**

**Page 3.6-3 Last paragraph of Pacheco Reservoir section.**

The East Fork of Pacheco Creek is listed as having a historical steelhead population (DFG 1990 as cited in Becker and Reining). This is most probably due to confusion in the naming of "forks." The dry conditions in the East Fork (a tributary to the North Fork) would have prevented steelhead use even before the dam was constructed. However, the East Branch of the South Fork, which parallels Hwy 152 has often been referred to the East Fork, including by me (Smith 1982). The east branch of the south fork had steelhead use in the 1970's and 1980's in a short perennial reach downstream of an impassable boulder falls.

**Page ES-15, Table ES-4 Cohort Scores of the different alternatives.**

The proposed project alternative and other variable flow alternatives have lower cohort benefit scores than fixed flow alternatives. During agency/stakeholder/Valley Water workshops considerable effort was made to improve the flow release strategy compared to the original WISP proposal. Adult attraction and passage flows were added and adjusted to take advantage of tributary contributions to adult flows; smolt passage flows were added in early May, and summer/fall monthly flows were adjusted to prevent

late summer dry-back when fall conditions would still allow fish growth. The flow were adjusted for water year type, including in critically dry years when steelhead use might be precluded by adult access. All of these changes were made to improve conditions for steelhead within the original amount of water available for release. The cohort scores for the variable flow alternatives should be higher, not lower than the other alternatives. An explanation of the analysis is needed to either correct this error or explain why the preferred alternative has a lower cohort benefit score.

**Pages 3.6-21 (Pamm Fish 2) and 3.6-33 Steelhead exclusion from the construction site and stream flows during construction.**

Flows past the new dam construction site in years 2-6+ of construction would be bypassed at the site and would follow the natural hydrograph. This would result in drying of Pacheco Creek in summer for more than 5 years. This would eliminate any potential for rearing steelhead in North Fork Pacheco Creek and in Pacheco Creek. In addition, an attempt to exclude steelhead access in Pacheco Creek by a structure in Miller Canal would prevent potential access in wet years to marginal steelhead habitat in Cedar Creek and the South Fork, where very limited rearing might occur. **There would be no steelhead run in the Pacheco Creek watershed at the time the dam construction is completed and storage would begin to provide potential releases for steelhead.**

**However, the present condition is that there is already a lack of a steelhead run in Pacheco Creek.**

Reservoir operations by Pacheco Water District in 2002-2012 resulted in extensive early and late summer dry-backs that would have eliminated significant steelhead rearing even in wet years resulted in mortality of sycamores in the flood plain of Pacheco Creek (Smith 2020a). Drought in 2007-2009 also contributed lack of conditions for steelhead and sycamore mortality. Lack of adult steelhead access in 2013 (no releser release until 1 May; Mlcko and Smith 2020) and drought in 2014 and 2015 further resulted in no steelhead rearing and sycamore mortality (Smith 2020a and 200b; Micko and Smith 2020). High flows in 2017 apparently allowed some steelhead access, but damage to the spillway resulted in restrictions to storage in the present reservoir and apparently poor rearing conditions in 2017 (Micko and Smith 2020). In 2018-2021 dry-back in summer and warm water temperature and especially severe drought in 2020 and 2021 eliminated any possible steelhead rearing in Pacheco Creek. The droughts in 2007-2009, 2013-2014 and 2021-2021 also almost certainly eliminated any rearing by steelhead or resident trout in the South Fork Pacheco and Cedar Creek (Micko and Smith 2020 and 2021).

**The need to reestablish a steelhead run.** After dam construction reestablishing the steelhead run in Pacheco Creek will be necessary. As the uppermost tributary of the Pajaro River system, straying to Pacheco Creek is unlikely. In addition, the steelhead runs elsewhere (Corralitos Creek and Uvas Creek) have been substantially reduced by the recent droughts. Rescue operations in those stream during seasonal dryback of downstream reaches or drying tributaries (Sisal, Little Arthur, Bodfish Creeks in the Uvas Creek watershed) are a potential source of steelhead juveniles to jumpstart the run in Pacheco Creek.

**Section 3.6.3.4 page 36-37 and page 3.6-2 Dry-backs in Critically Dry years to reduce young willows long the stream and benefit sycamores.**

On page 3.6-4.2 the text indicates a release of 8 cfs in critically dry years. Discussions in the workshops were for a cutback to 2 cfs. This error should be corrected.

However, during those discussions evidence was presented by Jeff Micko that at 2 cfs, there would still be high ground water levels near the stream bed within the Valley Habitat Agency Parcel. It is doubtful that willows, other than very small willows would be affected. And since these dry-backs during critically dry years would be infrequent even such a drastic dry-back would not substantially affect willows. Periodical mechanical removal would be more effective. In addition, the mixed riparian of sycamores and willows is also a target for expansion in Pacheco Creek. Farther downstream from the Valley Habitat Agency Parcel and from the CalFire Station cattle grazing prevents willow (and sycamore) establishment (Smith 2016). Between CalFire and the Valley Habitat Parcel (the channel loop between the two bridges) cattle grazing used to occur, but has not occurred for 6+ years).

Since before 2004 most of the mortality of sycamores was of sycamore alluvial woodland on the flood plain of Pacheco Creek, where willows would not establish (Smith 2020a and 2020b). That sycamore "savanna" provides uniquely valuable wildlife habitat. Targeting reestablishing sycamores there would provide the most valuable restoration of sycamore alluvial habitat. This might be accomplished by grading secondary channels onto the flood plain (such as in the privately owned loop immediately downstream of the Valley Habitat Parcel or near the upstream portion of the VHA parcel). The high ground water levels produced by the regularly perennial flows from the proposed project mean that planted sycamore samplings (caged/fenced against grazing) should reestablish sycamores lost on the flood plain. Even with flood year flows naturally reestablishing sycamores on the flood plain would rarely occur.

**Page 3.6-69 Construction and Operation effects on Monterey Hitch and Monterey Roach.**

Monterey roach are present in Cedar Creek and the South Fork of Pacheco Creek. They are also present in North Fork Pacheco Creek. They are not present in Pacheco Creek downstream of the North/South Fork Confluence, where Monterey Hitch are present. The two closely-related species compete and hybridize (Smith 1982; Avise, Smith, and Ayala 1975), with hitch dominating in downstream habitats or those with large pools and reduced flooding (such as below dams); roach could live in the downstream habitats but are excluded by competition and hybridization with hitch. Both species tolerate and do best in warmer water.

Both are listed as California Species of Concern, but are actually widespread. In the Pajaro hitch are present in Pacheco, Llagas, Salsipuedes and Uvas creeks and in the Pajaro and Salinas Rivers (Smith 1982). They are also present in the Salinas River system and its tributaries below dams (Moyle 2002). Monterey roach are also present in Uvas creek above and below Uvas Reservoir and in Llagas Creek

above Chesbro Reservoir (Smith 1982). They are also present in the San Lorenzo River and in tributaries of the Salinas River.

Depending upon the new reservoir location, Monterey roach would be lost to reservoir inundation or from being downstream of the new reservoir (and replaced by hitch) in two reaches of North Fork Pacheco Creek that maintain surface water in dry years: The reach immediately upstream of the present reservoir inundation zone upstream to the East Fork; and the 1 mile reach at and upstream of the private ranch house near the stream (Smith 1982). Roach would still be present farther upstream in Henry Coe State Park. They would also be present at the numerous locations mentioned above.

## References

- Avise, J. C., J. J. Smith, and F. J. Ayala 1975. Adaptive differentiation with little genic change between two native California minnows. *Evolution* 29(3): 411-426.
- Casagrande, J. 2020. Uvas Creek Juvenile Steelhead Distribution and Abundance and Adult Observations, 2019. Prepared for the California Department of Fish and Wildlife and the National Marine Fisheries. 52 pp cumulative report 2005-2019.
- Micko, J. and J. Smith. 2020. Pacheco Creek Reservoir Releases and Environmental Conditions on Pacheco Creek in 2013-2020. 60 pp cumulative report.
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- \_\_\_\_\_. 2017 and 2020a. Pacheco Creek Sycamore Alluvial Woodland. 23 pp power point with revised text in 2020. Provided to most workshop participants.
- \_\_\_\_\_. 2020b. Maps of Sycamore Distribution and Mortality on Pacheco Creek in 2014-2020. Provided to workshop participants.