

# Comments of Dr. Jeffrey Michael

October 12, 2023

SENT VIA EMAIL: Board@valleywater.org

Santa Clara Valley Water District  
Water Storage Exploratory Committee  
5750 Almaden Expressway  
San Jose, CA 95118-3686

RE: October 13, 2023, Water Storage Exploratory Committee Meeting  
Agenda Item 4.1 – Consider follow-up topics from the August 22, 2023, Board of Directors meeting regarding the Pacheco Reservoir Expansion Project.

Dear Committee Representatives of the Water Storage Exploratory Committee:

As an economist who has been following the economic and financial analysis of Pacheco Dam for years, I offer these comments on the updates provided by Valley Water staff on March 13, August 22, and September 19, 2023. While the March 13 meeting was a step in the right direction of more accurate and transparent estimates of economics and ratepayer effects, the August and September meetings were a step backwards towards confusing, misleading and inaccurate representations of the proposed Pacheco Dam's economics. In deciding whether to continue on with Pacheco Dam, the Board should consider these comments and request more clear and correct analysis of the project's benefits, financing, and ratepayer effects.

Below are summary comments in five major areas.

1. Dropping Pacheco Dam from the CIP Would Reduce Near-Term Rate Increases by Much More Than Staff Indicates.
  - a. March 13, 2023, staff analysis of rates states that Valley Water plans to shorten the amortization period for revenue bonds used for other projects (frontloading the cost of Anderson Dam and other projects), and backload Pacheco Dam debt to maintain more level debt service. The No Pacheco scenario displayed by staff shows no change to planned rate increases in the near term, which indicates that the financing plans are not adjusted to normal amortization periods when Pacheco is removed. The No Pacheco scenario needs to be reassessed to include the full array of financing options available for other projects once the enormous costs of financing Pacheco are removed from the plan. There is more opportunity to mitigate planned rate increases without Pacheco than the staff analysis indicates.

2. Pacheco Capital Costs are not consistently reported.
  - a. Pacheco Capital Costs in the September 19, 2023, Board presentation are listed as \$2.28 billion, not the updated figure of \$2.78 billion.
  - b. The costs with financing charges have not been updated recently and are unlikely to fully reflect the recent increases to long-term interest rates that are expected to persist further into the future.
  
3. The recasting of Pacheco Dam benefits as lost opportunity costs in the August 22, 2023, Board presentation is misleading, and the discussion of benefits contains multiple errors.
  - a. The confusing list of “lost opportunity costs” results in claimed benefits appearing in multiple ways on the list so that they are double-counted. For example, a claimed environmental benefit of Pacheco is the benefit funded by the Prop. 1 WSIP award, thus including both the value of the environmental benefits and the Prop. 1 award in the same list of “lost opportunity costs” is double-counting benefits and leads to inaccurate conclusions about the project’s potential net benefits.
  - b. The presentation of Pacheco Dam costs and benefits includes a statement that construction cost escalation of the project also raises the benefit of the project. This bizarre comment flies in the face of basic economic theory and common sense, and only serves to highlight the invalid approach used to value the project’s claimed environmental benefits as a percentage of the project’s construction costs.

The valuation of benefits of a project should be independent of changing construction costs, and it is invalid to say that benefits automatically increase when construction costs increase. The Board should request alternative valuations of the project’s environmental benefits using more conventional and accepted methodologies. While the California Water Commission used its discretion to accept this methodology (against the advice of its own technical manual, apparently because of deadlines to allocate billions in storage funding and a lack of competitive projects), that is not justification for Valley Water stakeholders to only consider this one questionable approach to valuing environmental benefits when making their own decisions about continuing with the project.

4. While Valley Water staff reports are now at least presenting numbers that represent no-partner funding, the economic analysis of partner cost-sharing is still lacking and overly optimistic. Staff and consultants have described scenarios in which a partner might invest, but have not presented any valuation of these benefits or the impact on Valley Water's potential project benefits. Placing a reasonable range of values on these potential partner benefits is certainly within the technical ability of consultants. It is invalid to continue assuming a substantial partner cost-share at this stage of the process without appropriate justification of the benefit valuation figure.
  
5. Valley Water demand forecast in the September 19, 2023, Board presentation is severely inflated to justify costly and environmentally damaging capital projects that are unlikely to be needed. The demand forecast fails to even consider a reduced demand scenario, even though that is the most likely outcome, given up-to-date forecasts of population growth and continued conservation trends. Valley Water has seen water demand that has been flat to decreasing for the past 25 years during a time when population and economic growth of the region has been much higher than currently forecast. In addition, the demand forecast should not be based on Bay Area Plan 2040 and city general plans, as these projections are badly outdated, and not the best possible current sources. A more updated demand projection would start with the 2023 demographic projections published by the California Department of Finance.

In conclusion, Valley Water board members and ratepayers deserve more accurate and transparent economic and financial analysis than they have been receiving from staff and consultants. Ratepayers are facing extremely stiff rate increases due to capital projects whose costs are being frontloaded on short amortization schedules to make room for the questionable Pacheco Dam project. They are not being presented with clear and accurate information on the valuation of project benefits, or realistic values for partner cost sharing and future water demand. Given the enormous costs of the Pacheco Dam, which will add to the already unbearable cost-of-living in the region, it is imperative that Valley Water improve upon the project's economic and financial analysis to properly inform its decisionmaking on the project.

Sincerely,

Jeffrey A. Michael, Ph.D.

Santa Clara Valley Water District

October 12, 2023

Page 4 of 4

Sent via email:

Board Representatives:

Director Richard P. Santos, District 3, [rsantos@valleywater.org](mailto:rsantos@valleywater.org)

Director Nai Hsueh, District 5, [nhsueh@valleywater.org](mailto:nhsueh@valleywater.org)

Director Rebecca Eisenberg, District 7, [jvarela@valleywater.org](mailto:jvarela@valleywater.org)

Committee Liaisons:

Vincent Gin, Deputy Operating Officer, Water Supply Division, [VGin@valleywater.org](mailto:VGin@valleywater.org)

Ryan McCarter, Acting-Deputy Operating Officer, Dam Safety & Capital Delivery  
Division, [rmccarter@valleywater.org](mailto:rmccarter@valleywater.org)