Santa Clara Valley Water District (Valley Water) has proposed a completely new and much larger Pacheco Dam on Upper Pacheco Creek in southeastern Santa Clara County. The project would include removal of the current dam, constructing a new dam, and flooding about 1,500 acres of ranchland and open space. Private ranchland would be taken through eminent domain to flood it for this urban water project. The new dam project would inundate working ranchlands, destroy ecosystems, block wildlife, and come with an astronomical price tag of $2.5 billion or more. The project is currently in the environmental review and permitting process, which could take decades.

**Project Overview**

- Although Valley Water calls it an “expansion,” the dam would create a new reservoir in a different location that is about 25 times larger than the existing Pacheco Reservoir. The new reservoir footprint would only overlap the existing Pacheco Lake footprint by roughly 20 acres. (See figure on page 2.)
- Valley Water has developed other viable alternatives in its Water Supply Master Plan 2040; the new dam would be the most expensive alternative to backstop urban water supplies in Santa Clara County.

**Minimal Water Supply Benefits**

- The dam would not provide a more reliable source of water to meet municipal and industrial (M&I), and agricultural water demands.
- Although the reservoir could potentially store 140,000 acre-feet (af) of water, Valley Water estimates the average additional amount of M&I water to be only 2,470 (Alternative A) to 3,595 (Proposed Project) af per year. The rest of the water would be for undefined “emergencies.”
- Valley Water has committed to release 8,000 af per year to lower Pacheco Creek for Steelhead flows, which would not be available for consumptive uses. While Valley Water’s Proposition 1 grant claims $1.5 billion in steelhead benefits, economist Dr. Jeffery Michael explained in his review that the vast majority of the claimed “monetized benefits” of the Pacheco Dam project are unsupported and severely overstated. Other projects could provide cheaper water and far more in the way of ecosystem/fisheries benefits than the Pacheco Dam project would ever provide.
- On average, over 5,000 af of water would evaporate from the new reservoir each year. Alternatives like recharging local aquifers would avoid most of these evaporation losses.
Massive Project Footprint

- The new dam would create a reservoir with a capacity of 140,000 af, covering a 1,367-acre surface area in a largely wild and undisturbed area of the County that was part of the historic 150,000-acre San Luis Gonzaga land grant in 1843 from the Mexican Government to the Pacheco family.
- Over 37 miles of new roads would be built on private land and protected land including parks and preserves.
- Due to its location, the project would inundate the historic O’Connor Ranch house, outbuildings, corrals and barns. Built in the late 1800s, the ranch is eligible for listing in the National Historic Register.
- The new dam would also include a new pump station, parking lot, and an electrical substation with a 3.5-acre footprint, and over 4 miles of new electrical transmission lines connected by 90-120 foot-tall steel poles.
Valley Water’s New Pacheco Dam Project Would Destroy Ranchlands and Disregard Agricultural Interests

Extensive Construction
- Construction for the project would last nearly 6.5 years, and generally be five days a week, 20 hours a day. However, some construction would occur 6 or 7 days a week and at times lasting 24 hours a day.
- The project would mine nearly 180 acres to provide 13 million cubic yards of fill for the earthfill dam.
- The project would require up to 16,892 truck trips a year to haul in material and export the waste.

Ballooning Project Costs
- In 2017, Valley Water submitted a Water Storage Investment Program application to obtain Proposition 1 funding for the dam. In the application, Valley Water estimated the cost of the project to be roughly $1.1B. That estimate has continued to rise, and is now $2.5B.
- Valley Water hopes to subsidize the costs of this high-risk project with state bonds and other public funds. However, the dam fails to satisfy cost benefit ratios, undermining availability of public funding.
- Valley Water had hoped to find project partners to help pay for the project, but so far there are no project partners. Neither San Benito County Water District nor Pacheco Pass Water District has agreed to any cost share. The project currently has no identified source of funding for nearly 25% of the cost.
- The storage cost of one af of water is estimated by Valley Water to be $18,800. Alternative storage options to the new reservoir could be as low as $400 an af. The costliest alternate storage project is the expansion of the San Luis Reservoir (B.F. Sisk Dam Raise), which would be about half the cost of a new Pacheco Reservoir. (See table below.)
- A complex web of water transfers is also contemplated, but it is unclear why the B.F. Sisk Dam Raise project, which is already much further along, would not provide the storage capacity for these types of transactions. (See figure on page 2.)

Approximate Storage Project Cost Comparison

<table>
<thead>
<tr>
<th></th>
<th>Pacheco Reservoir Expansion</th>
<th>Los Vaqueros Expansion and Transfer Bethany Pipeline</th>
<th>Sisk Dam Raise</th>
<th>McMullen ‘Aquaterra’ Groundwater Bank</th>
<th>AVEK ‘High Desert’ Groundwater Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Capital Cost</td>
<td>~$2,520 Million</td>
<td>~$951 Million</td>
<td>~$1,292 Million</td>
<td>~$344 Million</td>
<td>~$159 Million</td>
</tr>
<tr>
<td>Total Storage Capacity</td>
<td>134 TAF</td>
<td>115 TAF</td>
<td>130 TAF</td>
<td>800 TAF</td>
<td>280 TAF</td>
</tr>
<tr>
<td>$/AF of storage capacity</td>
<td>$18,800/AF</td>
<td>$8,300/AF</td>
<td>$9,900/AF</td>
<td>$400/AF</td>
<td>$600/AF</td>
</tr>
</tbody>
</table>

1. LV: Total Project Cost based on LV Expansion Preliminary Financial Model Version 5.0 Total Capital Cost, which includes the Transfer Bethany Pipeline cost.
2. Sisk Total Project Cost based on Sisk Dam final feasibility report dated December 2020, which was converted to an inflated cost projection using 4% inflation assumption.
3. McMullen Total Project Cost based on 2020 preliminary estimate (to be revised) which was converted to an inflated cost projection using 4% inflation assumption.
4. AVEK Total Project Cost based on Phase 1 Project Cost (similar size/scope), which was converted to an inflated cost projection using 4% inflation assumption.

Rate Increases
- The Valley Water District Act allows Valley Water to charge agricultural water up to 25% of non-agricultural water. Currently, Valley Water has chosen not to increase agricultural water rates, but projects like the Pacheco Dam increase pressure to raise rates.
For fiscal year 21-22 Valley Water proposed a 196% increase in agricultural water rates. This would have resulted in groundwater being $85.38 per af and surface water being $126.48 per af. Valley Water ultimately adopted charges of $34.15 per af and $75.05 per af. These numbers equate to 10% in zone W-8, 6% in zone W-7, 7% in zone W-5, and 2.28% in zone W-2. Valley Water could hike rates 15% to 22% and still be within the 25% authorized by the District Act. Building the new Pacheco Dam would likely force Valley Water to increase rates.

Cancellation of Williamson Act Contracts
- Inundation and construction of other facilities would require the cancellation of about 1,525 acres of land currently under Williamson Act contracts.
- Valley Water does not propose any action, such as agricultural easements in a different location, to offset these agricultural land losses.
- Proposed operations of the new dam would also impact 60 acres of Williamson Act contract land downstream through flooding, bank erosion, and sedimentation.

Other Land Use Impacts
- The majority of construction would occur in areas designated as ranchlands under the Santa Clara County General Plan.
- The project would be inconsistent with Santa Clara County General Plan Policies R-LU 36 and R-LU 39, as well as Santa Clara County AR zone; all of which are intended to protect ranching.
  - R-LU 36 – Intended to protect and enhance the continued use of the land for ranching.
  - R-LU 39 – Provides a list of other uses that could be utilized with ranching (e.g., agriculture, hunting, mineral extraction).
  - AR Zone – Intended to preserve ranching, natural resources and rural character of lands zoned AR.
- The reservoir would inundate more than 13 acres of Henry W. Coe State Park and block important wildlife corridors, forcing wildlife into more populated areas of the County.

Bottom Line
The Pacheco Dam project is poorly planned and is being poorly executed. The most glaring shortfall is Valley Water’s indifference to available alternative storage options such as underground storage and recharge, and the B.F. Sisk Dam Raise and Los Vaqueros Reservoir expansion; these alternatives would provide much cheaper water, and do not require taking private ranchland or taking on huge risks to ratepayers. Further, the storage capacity that Valley Water already has is not full (and rarely is), and building another reservoir that would often sit empty would be wasteful. While M&I ratepayers may take the brunt of rate hikes initially, Valley Water would need to eventually look to agriculture to fill funding gaps.

Additional Information
Stop Pacheco Dam Coalition
Website: StopPachecoDam.org
Twitter: @StopPachecoDam
Facebook: @StopPachecoDamProject

Valley Water: https://www.valleywater.org/project-updates/a1-pacheco-reservoir-expansion-project

CA Water Commission: https://cwc.ca.gov/Water-Storage/WSIP-Project-Review-Portal/All-Projects/Pacheco-Reservoir-Expansion-Project