From:	Katja Irvin
To:	Richard Santos; Barbara Keegan; Nai Hsueh
Cc:	Stephanie Simunic; Clerk of the Board; Ryan McCarter
Subject:	8/26/24 WSDMC - Comments on Item 4.3, Unique Requirements for the Pacheco Reservoir Project
Date:	Saturday, August 24, 2024 2:24:23 PM
Attachments:	082624 WSDMC comments on item 4-3 Unique Requirements for the Pacheco Reservoir.pdf

Chair Santos and WSDMC,

Please consider the attached comments regarding the subject agenda item for Monday's Water Supply and Demand Management Committee (August 26).

In sum, the staff report does not address the topic the Board requested last fall, which was "Discussion and review of requirements unique to the Project." Instead, staff decided to add "unique benefits" to this topic, and to focus this report on those benefits, rather than the requirements which are consequential for the feasibility of the Pacheco Reservoir Project.

Project benefits were presented to the Board in February and in June. If staff would like to discuss benefits again, a separate agenda item should be scheduled to avoid distracting from the more important discussion about unique requirements.

If the WSDMC is serious about providing input to staff about unique requirements, the Committee should ask staff to **return in September with a new report including meaningful analysis of the four requirements identified by the Board**: water rights applications; contracts for administration of public benefits; imported water supply connections; and partnership agreements.

Please see our attached comment letter for additional details, suggestions related to the topic of unique requirements, and specific information which should be included in this report.

Best regards,

Katja Irvin, AICP
Guadalupe Group Conservation Chair
Sierra Club Loma Prieta Chapter

[text Nai and Barbara to ask if they received this ... forward to Paul Rogers (will come to the full board in October)]

Water Supply and Demand Management Committee, August 26, 2024
Sierra Club Comments, Item 4.3, Receive an Informational Update on the Unique Requirements for the Pacheco Reservoir Expansion Project, Including Resulting Unique Benefits.

Please consider the following comments regarding the subject agenda item.

"Unique benefits" should not be included in this report for the following reasons.

- Benefits were discussed under a previous report topic (on February 13, 2024) and should be addressed as a separate agenda item if needed.
- Adding benefits distracts from the subject requested by the Board, which did not include benefits. Only three requirements are mentioned in this report: water rights; WSIP (Prop 1 grant) contracts and agreements; and partnerships. The fourth requirement requested by the Board, "Imported water supply connections" (see November 14, 2023 agenda), is not even mentioned in the report.
- Benefits are not as concerning as unique project requirements, which merit much more attention from the Board and from staff. An in-depth discussion of the requirements is merited, including the challenges that will or might arise.
- This report discusses benefits in more detail than requirements. The claim that these benefits are "unique" is also questionable – all surface storage projects receiving Proposition 1 grants will capture excess imported water, and all reservoirs provide some incidental flood protection.

The Board should consider addressing additional unique requirements in this report as follows:

- Mitigation requirements resulting from the scale of environmental impacts related to this huge project. Impacts of concern include, destruction of extensive, virtually undisturbed, and extremely valuable habitat, and destruction of many extremely important cultural sites and artifacts.
- Requirements related to the incursion into a State Park (Henry Coe State Park).
- Requirements related to managing the largest and most complex infrastructure project ever undertaken by Valley Water including: complexity of project management; risks of delay and cost escalation; land acquisition challenges; the remote location; etc.
- The Board's requested discussion of "Imported water supply connections" including: how imported water will be delivered to the reservoir; which pumps and conveyance will be used; possible issues or bottlenecks related to the delivery of excess water; etc.

Please consider the following comments related to specific content in the staff report and PowerPoint presentation.

- With respect to water rights and CVP contractual changes, both processes should be described in more detail, including milestones and probable timeframes.
- The process for land acquisition and eminent domain should also be described, noting that Valley Water does not presently own any of the lands required for the project.
- **Slides 4 and 6.** The Board needs to see historic projected storage volumes and water sources based on more recent water years (2003-2023). The more recent period has less wet, above normal, and below normal water years, and more critical water years.

- **Slide 4.** It would be better to compare to Anderson to Pacheco rather than Chesbro, which does not receive imported water. It would also be very helpful to overlay a line on these graphs showing fill and drain patterns based on actual hydrology from those years, providing a baseline to compare to the modeled results that are based on climate change projections.
- **Slide 15, 2023 Water Year Case Study.** This case study needs to be fully documented and provided to the Board and the public. The Board and the public need to know what assumptions were made about updated regulations and other new infrastructure. We also need to know how water releases for Pacheco Creek fisheries (based on 8-13 cfs and pulse flows of up to 45 cfs, as documented in the chart below), and for other water rights downstream are accounted for.

Table 3-3. Flow Release Schedule Under the Project and Alternative C (Variable Flow Schedule)

Month	Baseflow					Pulse Flow									
	Continuous Releases from New Dam Outlet (cfs)					Pulse Flow Target Magnitude at New Dam Outlet[1,4] (cfs)					Pulse Flow Duration[1,4] (days)				
PRII Water Year	W	AN	BN	D	C	W	AN	BN	D	C	W	AN	BN	D	C
January	8	8	8	8	8	30	30	35	35	0	5	5	5	5	0
February	8	8	8	8	8	30	30	45	45	30	5	5	5	5	5
March	8	8	8	8	8	30	30	50	45	35	8	8	8	8	8
April	8	8	8	8	8	25	25	25	25	25	14[2]	14[2]	14[2]	14[2]	14[2]
May	10	10	10	10	8	25	25	25	25	25	7	7	7	7	7
June	11	11	11	10	8[3]	--	--	--	--	--	--	--	--	--	--
July	13	13	13	10	8[3]	--	--	--	--	--	--	--	--	--	--
August	13	13	13	10	8[3]	--	--	--	--	--	--	--	--	--	--
September	13	13	13	10	8[3]	--	--	--	--	--	--	--	--	--	--
October	13	13	13	10	8[3]	--	--	--	--	--	--	--	--	--	--
November	11	11	11	9	8	--	--	--	--	--	--	--	--	--	--
December	9	9	9	9	8	--	--	--	--	--	--	--	--	--	--

Notes:
[1] The scheduled pulse flow would not be released in a given month if the target pulse flow magnitude and duration were exceeded at USGS streamgage 11153000 in Pacheco Creek.
[2] 14-day total duration reflects two separate 7-day duration pulses.
[3] Baseflow releases may be reduced to induce dryback in drought periods (may occur in Critical inflow years).
[4] Pulse flows during January, February, and March would support adult SCCC Steelhead attraction. Pulse flows during April and May would support SCCC Steelhead smolt outmigration.

Key:
-- = Not applicable
AN = Above Normal
BN = Below Normal
C = Critical
cfs = cubic feet per second
D = Dry
PRII = Pacheco Reservoir Inflow Index
D = Dry
SCCC = South-Central California Coast
USGS = U.S. Geological Survey
W = Wet

Supplemental Feasibility Documentation, November 2021, p. 3-20.

From: Jim Kuhl
Date: August 25, 2024 at 6:30:22 PM PDT
To: Barbara Keegan, Richard Santos, Nai Hsueh
Cc: Aaron Baker, Kirsten Struve
Subject: 8/26/24 Water Supply & Demand Management Committee Meeting - Presentation - Comment Questions

Email Date: **8/25/24**
To: **Directors Santos, Keegan and Hsueh**
From: **Jim Kuhl**
Subject: **8/26/24 Water Supply & Demand Management Committee Meeting – Presentation - Comment Questions**

Agenda Item: **4.3 "Update of PREP and Unique Benefits " Presentation by Ryan McCarter**

Presentation Comment Questions

The Bold Faced Text contains nine (9) questions desiring answers.

Previously, it was understood Pacheco Reservoir Expansion Project's (PREP) original primary value lay in avoiding algae blooms surrounding San Luis Reservoir's intake when the reservoir's water level was low during droughts plus 'Local Control', a nebulous undefined but important Valley Water desired project characteristic. On page 15 of this meeting's 17 page presentation, the extraordinary numbers of 22,000 to 58,000 AF is now being identified as the additional water made available by PREP during droughts derived from a 2023 Case Study. Detailed Case Study information is not being provided in the presentation supporting these claims. The 2023 Case Study has not been published for public review making creditable specific Comment critique feedback impossible.

PREP relies entirely on Delta imported water. This Delta water becomes almost entirely unavailable during extended drought. The February, 2024 projection by Valley Water stated that PREP would provide ≈8,000 AF of water carryover year to year in a drought. This amount was very small compared to the claims now being presented. In addition, this the prior projection was the total amount available, not diminished 35% by the project partner's allocation. Finally, it was very arguable that no PREP water for year to year transfer would be available in a the final years of an extended drought. Now the Case Study claim is 22,000 to 58,000 AF would be available – Hmmm. Perhaps a mistake is being made identifying the annual flow through PREP in the 4th and 5th years versus the reservoir's actual unique projected storage carryover as a sole and separate contributor element in storing Delta water.

1. **Why wasn't the 2023 Case Study's PREP higher water carryover employed in the February 2024 Valley Water presentation?**

PREP's main goal should be providing significant increase in water storage carryover in the 4th and 5th years of an extended drought, ignoring second order ancillary benefits such as fisheries, wildlife refuges, 'Local Control', etc.

2. **What is the additional AF of water PREP carryover from year 3 to 4 and year 4 to 5 for the '1988 to 1992 Design Drought' and Valley Water's share with and without a partner?**

3. **Is the additional year 4th & 5th year drought storage capacity (e.g., 8,000 AF or 58,000 AF or whatever) a unique result of PREP or is it the direct result of other planned reservoir expansions (i.e., Vaqueros and San Luis) making more water available for inflow into PREP?**

From a reservoir expansion standpoint, the $5.6B investment cost of PREP, inclusive of interest (INT), remains a very poor investment at $29,500/AF compared to the expansions of Vaqueros at $5,100/AF and San Luis at $11,800/AF. As a result, PREP must have profound value or be terminated and other more effective options to improve water supply pursued.

4. **Given expansion of Vaqueros and San Luis Reservoirs, what additional unique value does PREP add just focusing on the main goal of increasing water availability in the 'Design Drought' years 4 and 5?**

It was reported by Valley water in July 2024 that the operational cost to import water from the Delta was $510/AF. However, in August 2024, Valley Water stated the Delta Conveyance project had an Annualized Unit Cost of $1,800/AF. This new cost for importing Delta water input from Valley Water implies reuse of wastewater would be better investment choice to provide water supply resiliency, considering all factors.

5. **Define what costs Valley Water captures in the term Annualized Unit Cost ($/AF) and how it differs from annual operating cost ($/AF)?**

6. **What is the operational cost and Annualized Unit Cost to import Delta water to PREP in 2023 and the projection for 2034 and 2044 and does it contained all planned and anticipated projects for incorporation into the 2050 Water Supply Master Plan?**

Table 1 below compares Valley Water Projects annualized unit costs to the 'Best-In-Class performers in 2023 economics.

Table 1: Project Evaluation Metrics	**Orange County Wastewater Conversion**	**Valley Water's San Jose Direct Potable Reuse**	**Carlsbad Desalinization Plant**	**Valley Water's Local Seawater Desalinization**	**Valley Water's PREP**
Capital Investment	$1B w INT	$2.14B wo INT	$2.2B w INT	S2.14B wo INT	$2.7B wo INT & $5.6B w INT
Operational Cost	$750/AF	$1,250/AF	$1,629/AF	$1,250/AF	Was $510/AF questionable number
Annualized Unit Cost	$1,330/AF	$5,000/AF	$2,923/AF	$5,000/AF	Now $1,800/AF with Delta Conveyance
Drought Water Supply Capacity	152,000AF	24,000 AF	56,000 AF/Y	24,000AF/Y	NA
Drought Year 4 & 5 Water Storage Capacity	NA	NA	NA	NA	Was 8,000AF Now : 22,000 to 58,000 ??

From Table 1, Valley Water's project financial performance metrics are significantly worse when compared to 'Best-In-Class' benchmarks (i.e., Orange County Wastewater Conversion Facility and Carlsbad Desalinization Plant).

7. **Has San Jose Reuse and Local Desalinization Projects' performance expectations been validated as being reasonable when compared to 'Best-In-Class' benchmarks and by whom?**

8. **Can the public obtain a copy of the Valley Water's benchmark evaluation(s), if any exist, for review and assessment?**

Given an extended drought, Valley Water's Potable Ruse Projects appear to be better options than PREP considering all factors in supplying water supply resiliency as they directly increase the water supply, independent of drought. However, Valley Water continues to conclude that PREP must be pursued because it provides extremely high value because it possesses the characteristic labeled 'Local Control'.

9. **What is the important value PREP provides by being a reservoir under 'Local Control'?**

Best regards,

Jim

Jim Kuhl, Civic Issue Activist and Environmental Advocate