



Santa Clara Valley Water District

File No.: 24-0618

Agenda Date: 6/25/2024

Item No.: *3.5.

BOARD AGENDA MEMORANDUM

Government Code § 84308 Applies: Yes No
(If "YES" Complete Attachment A - Gov. Code § 84308)

SUBJECT:

Receive an Update on the Delta Conveyance Project.

RECOMMENDATION:

Receive information regarding the Delta Conveyance Project.

SUMMARY:

This agenda item provides a status update on the Delta Conveyance Project (Project), with emphasis on the recently released cost estimate and Benefit-Cost Analysis. Representatives from the Department of Water Resources (DWR), Delta Conveyance Design and Construction Authority (DCA), and the Berkeley Research Group (BRG) will present to the Board, as follows:

- A. *Introduction by Carrie Buckman, Delta Conveyance Project Environmental Program Manager, DWR.*
- B. *Updated cost estimate by Graham Bradner, Executive Director, DCA.*
- C. *Benefit-Cost Analysis by David Sunding, BRG.*

Santa Clara Valley Water District (Valley Water) has been engaged in planning to improve the conveyance of State Water Project (SWP) and Central Valley Project (CVP) supplies across the Delta since 2006, recognizing increasing risks to the current approach of diverting water in the vulnerable southern Delta. On September 24, 2019, Valley Water Board of Directors (Board) adopted Guiding Principles for participation in the Project (Principles; Resolution 19-69). The Principles highlight the Board's emphasis on protecting Santa Clara County's interests, addressing Silicon Valley stakeholder and community input, and ensuring our future water supply needs are met cost-effectively. The Principles support participating in the Project at a level higher than Valley Water's initial 2.5 percent share to offset projected declines in CVP deliveries and mitigating future uncertainty.

On November 17, 2020, the Board adopted Resolution 20-91 approving a provisional participation at 2.73 percent, authorized an increase in Valley Water's provisional participation to 3.23 percent, and authorized the CEO to negotiate a funding agreement with DWR for \$4,034,001 for planning and

design costs in calendar years 2021 and 2022. Subsequently, on April 12, 2022, the Board authorized additional planning and design funds for calendar years 2023 and 2024 by committing \$6,972,348 (Resolution 22-22).

The Project is one of many potential infrastructure investments undergoing evaluation in the Water Supply Master Plan (WSMP) 2050 planning process.

On May 16, 2024, the DWR released an updated cost estimate (Attachment 1) and an economic evaluation of the Project, known as a Benefit-Cost Analysis (Attachment 2).

DWR’s PowerPoint presentation will be published in a supplemental memo on June 21, 2024.

UPDATED PROJECT COSTS

In December 2023, DWR released the Final Environmental Impact Report (FEIR) and selected the “Bethany Reservoir Alignment” as the approved Project. The Project would construct and operate new facilities that would increase the SWP’s operational flexibility. With a capacity of 6,000 cubic feet per second (cfs), the Project includes two new screened points of diversion in the North Delta along the Sacramento River and a single tunnel to convey water to the existing Bethany Reservoir. The Project’s preliminary cost estimate of \$15.9 billion, presented to the Board in November 2020, was not specific to the Bethany Alignment. On May 16, 2024, the DCA updated the cost estimate in 2023 dollars that reflects the Bethany Alignment (Attachment 1). The DCA also developed several project innovations that could lead to cost savings, if adopted. Table 1 compares the past and current cost estimates, including Valley Water’s 3.23% participation share.

Table 1. Project Costs

	Preliminary Cost Estimate (2020 dollars)	Bethany Alignment Cost Estimate (2023 dollars)
Total Cost*	15,900,000,000	20,120,000,000
Valley Water’s Share	514,000,000	649,876,000

**Total cost includes construction, soft costs, environmental mitigation, community benefits program, and contingency*

BENEFIT-COST ANALYSIS

DWR contracted with Dr. David Sunding and Dr. Oliver Brown of BRG, to conduct a Benefit-Cost Analysis for the Project (Attachment 2). The analysis compared Project costs and benefits in economic terms through the projected Project lifespan (2045-2145) with intermediate climate change assumptions. Based on the California Ocean Protection Council guidance, the primary scenario uses 1.8 feet of sea-level rise and a 2070 median climate change scenario for the period of 2056-2085. In addition, several other scenarios were considered as sensitivity analyses, including a 2040 climate and varying degrees of sea-level rise. The main scenario estimates an average water supply benefit of 403,000 acre-feet (TAF) per year in 2070; Valley Water’s portion would be 13 TAF per year on average based on a 3.23 percent participation level.

The water supply benefits included monetized values for urban water supply reliability, agricultural

water supply reliability, urban water quality, agricultural water quality, and seismic reliability. When the benefits are compared to the Project costs, including construction, operations and maintenance, environmental mitigation, and the Community Benefits Program, the main scenario resulted in a benefit-cost ratio of 2.2. In other words, every \$1 invested in the Project is expected to yield \$2.2 in benefits, indicating that the benefits far outweigh the costs. Amongst the sensitivity analyses, the ratios ranged from 1.54, under a less severe 2040 climate change scenario, to 2.63, under a 2070 climate change scenario with 3.5 feet of sea level rise, highlighting that the Project's benefit-cost ratio is robust under different climate change scenarios.

The Benefit-Cost Analysis did not include monetized values for several important Project benefits, including operational flexibility, the effects of the Community Benefits Program, job creation during construction, and improved groundwater conditions statewide due to the ability to convey additional water to groundwater storage during above-normal and wet years. Additionally, the cost estimate included in the analysis did not include financing cost assumptions.

BENEFITS TO VALLEY WATER

The Project's primary benefits are provided through stabilizing water supplies in the face of climate change by increasing the SWP's ability to capture water during wet times, which would double the frequency in which San Luis Reservoir fills. The Project modernizes the infrastructure in the Delta and significantly mitigates risks associated with sea level rise and levee failures due to seismic events that could lead to saltwater intrusion into the South Delta, where the current SWP and CVP diversion points are located. Additionally, the Project would create additional flexibility for water transfers. Currently, transfer water cannot be moved across the Delta in normal and above-normal hydrologic years because of a lack of conveyance capacity across the Delta. The Project would provide access to water transfers during such times, potentially allowing for water transfers when water is less expensive, which would support better drought recovery and preparedness for Valley Water.

The modeled water supply yields demonstrate the Project's main objective to maintain SWP supplies despite a future hotter-drier climate. However, the Project would provide additional benefits that are not captured in the models because they cannot account for biological triggers or nuanced operations. For example, in 2024, due to an unusually high occurrence of special status species in the vicinity of the SWP and CVP intakes, exports were limited to a 40 percent allocation, despite being an above-normal water year. If the Project were in operation, an additional 909 TAF could have been diverted while maintaining water quality and fishery protection measures.

In addition to water supply and infrastructure resiliency benefits, the Project would enhance and/or complement the benefits of other projects that are being considered under the WSMP 2050. Projects such as the Sisk Dam Raise, Sites Reservoir, Groundwater Banking, and Pacheco Reservoir Expansion would be enhanced by providing access to above-normal and wet year water supplies north of the Delta that can be conveyed to new storage and used during droughts, when water is the most expensive and ecosystem needs are the greatest.

PROJECT STATUS

Environmental Review

DWR initiated planning for the Project in early 2020, including the evaluation of several potential tunnel alignments. The environmental review process included extensive outreach, workshops, and a 142-day public comment period during which DWR received and considered over 700 letters and 7,000 individual comments. The FEIR was published in December 2023, which subsequently led to DWR's approval of the Bethany Reservoir Alignment and FEIR certification.

In parallel to the State process, the U.S. Army Corps of Engineers (USACE) is conducting a federal environmental review in compliance with the National Environmental Policy Act (NEPA). A draft Environmental Impact Statement (DEIS) for construction was issued in December 2022 and a final EIS is expected this year. A separate NEPA process is underway to evaluate the operations of the DCP, which will be included in the DEIS for the Long-Term Operations of the CVP and SWP, led by the U.S. Bureau of Reclamation, and will be available for review this summer.

Environmental Permitting

DWR and other agencies are advancing several environmental permitting processes, including compliance with the state and federal Endangered Species Acts (CESA/ESA), submission of a Change in Point of Diversion Petition (CPOD) to the State Water Resources Control Board (SWB), and verification of consistency with the Delta Plan. These processes are likely to extend through 2026.

To comply with CESA, DWR applied to the California Department of Fish and Wildlife (CDFW) for an Incidental Take Permit (ITP) in April 2024 and the ITP application was recently deemed complete by CDFW. Based on the early consultation process, additional fish protection measures were incorporated into the application and into the modeling used for the Benefit-Cost Analysis.

Similarly, the Federal process to comply with ESA for construction-related impacts is underway, with the Biological Assessments being provided to the National Marine Fisheries Service and U.S. Fish and Wildlife Service. At a programmatic level, the ESA impacts associated with the Project operations are being evaluated through the reconsultation of long-term operations of the SWP and Central Valley Project. Both ESA processes are expected to be completed in late 2024.

In February 2024, DWR submitted a CPOD to the SWB. The CPOD does not create a new water right or change the maximum permitted diversion amount under existing DWR water right permits. Rather, it allows for a change in the location where water may be collected. The SWB is leading a public process considering the petition. The protest period has recently closed, with 45 protests being filed. The water right process is expected to conclude in mid-2026.

The last permitting step is for the Project to comply with the Delta Reform Act. DWR has begun early consultation with the Delta Stewardship Council regarding their consistency documentation and expects to conclude this step in late 2026.

NEXT STEPS

In 2020 and 2022, the Board approved funding that would support the Project into calendar year 2025. A commitment for additional funding will be needed this fall/winter to continue planning and design work slated for calendar years 2025 and 2026. Staff anticipates bringing a recommendation to the Board regarding the provision of additional funding in December 2024 or January 2025. DWR estimates that \$300,000,000 is needed for the next phase of planning and design, of which Valley Water's portion would be \$9,690,000 at the current participation level.

ENVIRONMENTAL JUSTICE AND EQUITY IMPACT:

This is an information item and does not have an environmental justice or equity impact. However, approximately 27 million people receive water from the SWP, including millions of people in disadvantaged communities. One of the objectives of the Project is to protect the reliability of these relatively affordable supplies.

DWR has continued to engage with Tribal community members, in-Delta communities, and historically underrepresented populations as part of the Project's ongoing outreach. These efforts are anticipated to ramp up with the rollout of the Community Benefits Program, which will offer \$200 million through grants to benefit the Delta communities that will be most impacted by the direct construction activities.

FINANCIAL IMPACT:

There is no financial impact associated with this informational item.

CEQA:

The recommended action does not constitute a project under CEQA because it does not have a potential for resulting in direct or reasonably foreseeable indirect physical change in the environment.

ATTACHMENTS:

- Attachment 1: Total Project Cost Summary Memorandum (DCA)
- Attachment 2: Benefit-Cost Analysis of the Delta Conveyance Project (BRG)
- *Supplemental Board Agenda Memo
- *Supplemental Attachment 1: PowerPoint
- *Handout 3.5-A: K. Mercer
- *Handout 3.5-B: J. Borcz
- *Handout 3.5-C: L. Colyer
- *Handout 3.5-D: Sierra Club
- *Handout 3.5-E: L. Kishler
- *Handout 3.5-F: T. McRae
- *Handout 3.5-G: K. Jaques

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