

Attachment 2: Delta Conveyance Project

Additional Project Information

BACKGROUND

The Santa Clara Valley Water District (Valley Water) has been engaged in efforts to improve the conveyance of the State Water Project (SWP) and Central Valley Project (CVP) across the Sacramento-San Joaquin Delta (Delta) since 2006. Imported water from the SWP and CVP are an extremely critical source of water for Valley Water, making up about 40% of our total water supply. Statewide, the SWP is relied upon as one of the most affordable sources¹ of high-quality water.

Since the SWP was built, the deliveries have steadily declined by over 40 percent due to climate change and regulatory restrictions intended to help endangered and threatened species in the Delta. In response, the Department of Water Resources (DWR), in cooperation with the interested SWP Public Water Agencies (PWAs), has been developing the Delta Conveyance Project (DCP).

The DCP will allow the SWP to capture, move, and store water, when available, amidst the rapid swings between wet and dry conditions and a declining snowpack by adding two new intakes in the north Delta along the Sacramento River. This water would be conveyed underground through a 36-foot diameter, 45-mile-long tunnel to the existing Bethany Reservoir, just downstream from the existing SWP south Delta Clifton Court Forebay intake. The new screened intakes would be operated in coordination with the existing south Delta intake resulting in two ways to divert and convey water, or “dual conveyance.” Dual conveyance does not increase the allowed diversion volume under the SWP’s water right, but the new intakes would enable the capture of surplus water in wet conditions, restoring some of the projected losses of SWP reliability.

2020-2024 MILESTONES

California Environmental Quality Act (CEQA)

On January 15, 2020, DWR initiated a CEQA review and began developing alternatives and the environmental impact report (EIR) for the proposed project that would meet these objectives:

- To address anticipated rising sea levels and other reasonably foreseeable consequences of climate change and extreme weather events.
- To minimize the potential for public health and safety impacts from reduced quantity and quality of SWP water deliveries, and potentially CVP water deliveries, south of the Delta resulting from a major earthquake that causes breaching of Delta levees and the inundation of brackish water into the areas in which the existing SWP and CVP pumping plants operate in the southern Delta.
- To protect the ability of the SWP, and potentially the CVP, to deliver water when hydrologic conditions result in the availability of sufficient amounts, consistent

¹ <https://water.ca.gov/-/media/DWR-Website/Web-Pages/News/Files/FINAL-12-14-2023---The-Economy-of-the-State-Water-Project.pdf>

Attachment 2 Delta Conveyance Project Additional Project Information

with the requirements of state and federal law, and other existing applicable agreements.

- To provide operational flexibility to improve aquatic conditions in the Delta and better manage risks of further regulatory constraints on project operations.

On July 22, 2022, the draft EIR was released for a 142-day public review period. The draft EIR analyzed a range of potential project alternatives, including a single intake with a maximum capacity to divert 3,000 cubic feet per second (cfs), two intakes with a maximum capacity to divert 6,000 cfs, and three intakes with a maximum diversion capacity of 7,500 cfs; each option was analyzed in combination with three different tunnel alignments.

On December 21, 2023, DWR approved the Final EIR for the DCP, and the “Bethany Alternative,” with two intakes, a maximum capacity to divert 6,000 cfs, and the easternmost tunnel alignment, was selected as the alternative that best-met project objectives while minimizing environmental impacts². DWR’s CEQA Findings are included in Attachment 2, Exhibit A. The Final EIR was challenged by ten lawsuits; all have been consolidated in the County of Sacramento, and case management is expected to begin in April 2025.

National Environmental Protection Act (NEPA)

For DCP’s construction-related impacts, the U.S. Army Corps of Engineers (USACE) issued a Draft Environmental Impact Statement (EIS) on December 16, 2022. A Final EIS is anticipated by early 2025. Other federal permits (Rivers and Harbors Act Section 408, Clean Water Act Sections 404 and 401, and National Historic Preservation Act Section 106) will need to be completed prior to issuance of a Record of Decision. DCP operations were also evaluated as a part of the Long-Term Operations of the CVP and SWP led by the U.S. Bureau of Reclamation (USBR), which recently issued a Final EIS on November 15, 2024.

Federal Endangered Species Act (ESA)

Similar to the NEPA process, ESA coverage will be provided by separate Biological Opinions (BiOps) for construction and operations. The construction BiOps are expected from the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) in early 2025. For DCP operations, FWS issued their BiOp on November 8, 2024, and NMFS’ BiOp followed on December 6, 2024.

California Endangered Species Act (CESA)

DWR submitted an Incidental Take Permit application to the California Department of Fish and Wildlife on April 9, 2024, for construction and operational CESA coverage. An Incidental Take Permit is anticipated by the end of 2024.

Water Rights Petition: Change in Point of Diversion

² <https://www.deltaconveyanceproject.com/planning-processes/california-environmental-quality-act/final-eir>

Attachment 2 Delta Conveyance Project Additional Project Information

To amend the SWP water rights, DWR submitted a petition to change the point of diversion and rediversion (CPOD) to the State Water Resources Control Board (SWRCB). The SWP is not proposing an increase in the diversion volume under the SWP's water right. Instead, the dual conveyance system would enable the capture of surplus water in wet conditions, restoring some of the projected losses of SWP reliability. Thirty-eight protests were submitted to the SWRCB. On November 18, 2024, the SWRCB issued a notice outlining the dates of the water rights hearings, which will begin on February 18, 2025, and continue through April 24, 2025.

Delta Reform Act: Consistency Determination

On October 8, 2024, DWR submitted a draft Certification of Consistency with the Delta Stewardship Council (DSC) to certify that geotechnical activities are consistent with the Delta Plan. Appeals have been filed with the DSC, which will be followed by public hearings and a decision from the DSC in early 2025. DWR may not initiate implementation of the geotechnical work until the DSC denies all administrative appeals and the trial court, where the ten coordinated CEQA cases are pending, lifts the preliminary injunction.

Preliminary Design

In the initial design phase, the Delta Conveyance Design and Construction Authority (DCA) formed a Stakeholder Engagement Committee (SEC) to minimize project impacts on Delta communities. The SEC included Delta residents, business owners, Tribal representatives, and other interested parties. An Independent Technical Review team has also been engaged throughout the design and has provided feedback on specific project components, such as the intake structures, tunnels, and shafts, and more recently on potential project innovations that could reduce costs. Additional design accomplishments include completing a cost estimate, developing a master schedule, and carrying out studies to support design and permitting.

Community Benefits Program

The Community Benefits Program is a \$200 million commitment to fund projects that will benefit impacted communities. It provides benefits that are above and beyond the mitigation requirements of CEQA and acknowledges that impacts will be concentrated on Delta communities. On October 11, 2024, DWR released the Draft Implementation Plan and Guidelines³ for public review through March 1, 2025.

Project Costs

On May 17, 2024, the DCA released an updated cost estimate of \$20.1 billion in 2023 dollars,⁴ which includes construction, soft costs, environmental mitigation, a \$200 million Community Benefits Program, and a 30 percent contingency. The DCA also conducted a preliminary value engineering exercise to identify cost-saving innovations. If adopted, there could be cost reductions of about \$1.2 billion. Based on the latest estimate, Valley

³ https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Delta-Conveyance/Public-Information/CBP-Draft-Implementation-Plan_Final_Oct2024_Final.pdf

⁴ https://www.dcdca.org/wp-content/uploads/2024/05/2023-Bethany-Total-Project-Cost-Estimate.pdf?utm_medium=email&utm_source=govdelivery

Attachment 2 Delta Conveyance Project Additional Project Information

Water's share of DCP costs would be \$649,876,000 at a 3.23 percent participation rate. The DCP is 88 percent subscribed among participating SWP contractors, leaving a 12 percent gap in future funding.

Benefit-Cost Analysis

In May 2024, the Berkeley Research Group released a Benefit-Cost Analysis⁵ that compared DCP costs and benefits through the projected Project lifespan (2045-2145) with multiple 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. The primary scenario estimates an average water supply benefit of 403 thousand acre-feet (TAF) per year in 2070 and Valley Water's portion would be 13 TAF per year on average. When the benefits are compared to costs, the primary scenario resulted in a benefit-cost ratio of 2.2. In other words, every \$1 invested in the DCP is expected to yield \$2.2 in benefits, indicating that the benefits outweigh the costs. The climate sensitivity analyses had benefit-cost ratios that ranged from 1.54 (under a 2040 climate) to 2.63 (under a 2070 climate with 3.5 feet of sea level rise). So even if climate change leads to 2040 hydrologic conditions holding steady through 2145, the benefits would outweigh the costs.

It's important to note that the Benefit-Cost Analysis did not monetize several DCP benefits that are important to Valley Water, including operational flexibility and improved groundwater conditions.

PROJECT BENEFITS

The DCP's primary benefit is provided by increasing the SWP's ability to capture water during wet times. As mentioned above, the primary climate scenario estimates an average water supply benefit of 403 TAF per year in 2070, of which Valley Water would receive 13 TAF per year. The DCP would also mitigate risks associated with sea-level rise and levee failures that could lead to saltwater intrusion into the South Delta, where the current SWP and CVP diversion points are located.

Additionally, the DCP would create flexibility for water transfers, potentially when water is less expensive. 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. Transferring water in normal and above-normal years would support better drought recovery and preparedness for Valley Water.

Water Supply Master Plan (WSMP) 2050 Evaluation

The anticipated operational flexibility of the DCP would also enhance and/or complement the benefits of other projects being considered under the WSMP 2050, including the Sisk Dam Raise, Sites Reservoir, Groundwater Banking, and Pacheco Reservoir Expansion.

⁵ https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Delta-Conveyance/Public-Information/DCP-Benefit-Cost-Analysis-2024-05-13__ADA.pdf

Attachment 2 Delta Conveyance Project
 Additional Project Information

The DCP was included in two of the three WSMP 2050 water supply reliability strategies that were presented in a December 10, 2024, Board Item⁶. Table 1 summarizes the portfolio approach and costs anticipated to meet Valley Water’s future supply needs.

Table 1 Multiple Strategies for Water Supply Reliability

Strategies	Projects ¹	Portfolio Cost Estimate ² (Billions)
Lower Cost	San José Direct Potable Reuse, B.F. Sisk Dam Raise, DCP , Groundwater Banking, South County Recharge	\$ 4.0
Local Control	San José Direct Potable Reuse, Palo Alto Potable Reuse, Pacheco without Partners, Groundwater Banking, South County Recharge	\$5.9
Diversified	San José Direct Potable Reuse, DCP , B. F. Sisk, Pacheco with Partners, Groundwater Banking, South County Recharge	\$5.3

¹Conservation is factored in the baseline condition.

²Portfolio cost includes the sum of the present value total cost for each project.

⁶ <https://scvwd.legistar.com/gateway.aspx?m=l&id=/matter.aspx?key=12258>

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