Delta Conveyance Project Information

At the September 24, 2019 Board meeting, the Santa Clara Valley Water District (Valley Water) Board of Directors approved Resolution 19-69 "Support of Governor Newsom's Proposed Delta Conveyance ('Governor's Proposed Project')" and adopted Guiding Principles to shape Valley Water's participation in the Delta Conveyance Project (Project or DCP) (Attachment 12). Since that time, several significant developments have occurred:

- A. State Water Project (SWP) contract negotiations were completed and an Agreement in Principle (AIP) was developed on how to allocate benefits and costs of the Project;
- B. SWP contractor staff have identified possible participation percentages that may be approved by their respective Boards;
- C. Potential participants have been asked to execute new funding agreements to support planning and design costs over the next four years;
- D. Amendments to the Delta Conveyance Design and Construction Authority (DCA) Joint Powers Agreement have been proposed;
- E. The DCA developed an updated cost estimate for the Project; and
- F. The State Water Contractors (SWC) developed a high-level analysis of Project benefits.

This document describes each of these developments and lays out recommended Board actions in response.

A. State Water Project (SWP) Contract Amendment for Delta Conveyance (DCP Amendment)

At the end of April 2020, the Department of Water Resources (DWR) and the SWP Contractors completed negotiations of the Draft Agreement in Principle for the SWP Water Supply Contract Amendment on a Delta Conveyance Project (AIP) (Attachment 14). The AIP provides the basis for how DWR will allocate costs and benefits of the Project through a future SWP contract amendment that will be executed only if a project is ultimately approved and only after necessary environmental review is completed. The AIP provides for SWP Contractors to (1) opt out of the Project, or (2) assume a share of Project costs and benefits that is equal to or greater than their existing proportional share of SWP water supplies (Table A percentage). The SWP Contractors did not specify participation percentages during negotiations of the AIP but have subsequently identified tentative participation levels, as described in part B below. The benefits identified in the AIP include:

- Rights to SWP water attributable to the Project;
- Rights to surplus water (Article 21 water) attributable to the Project;
- Rights to use the Project to convey non-SWP water supplies, including transfer and exchange supplies;
- Rights to use the Project if sea level rise, seismic events, flooding or other events impair the ability to pump directly from the south Delta; and
- Right to carriage water savings due to operation of the Project (i.e., water that
 otherwise would have been lost if conveyed through the Delta as is currently
 done).

Although Non-Participants would not receive surplus water produced by the Project that is allocated to Participants, the DCP Amendment would give Non-Participants the right to receive surplus water from the Project beyond the needs of Participants. DWR also reserves the right to use the Project to support Non-Participants under emergency situations.

Recommended Board Action: None. Information only.

B. SWP Contractor Provisional Participation Percentages

On October 23, 2020, DWR sent a letter to the State Water Contractors asking SWP Contractors to indicate their likely participation percentages ("AIP Section V table of percentages") to confirm that the proposed Project is fully supported, and to allocate planning costs accordingly (Attachment 15). As described in the AIP, SWP Contractors can either opt out or choose to participate at a level that is equal to or greater than their Table A percentage. Valley Water's percentage of the total SWP contract supply is approximately 2.5 percent.

Since April of this year, SWP contractors have discussed participation percentages. SWP contractors north of the Delta and most of the agricultural agencies south of the Delta have stated that they will not participate in the project (Non-Participants). Metropolitan Water District may seek their Board's approval to increase their participation percentage to cover Kern County Water Agency's agricultural water supply Table A percentage. The remaining 16 participating SWP Contractors are considering increases in their standard Table A percentage of about 14 percent on average in order to absorb the share of project costs associated with the Non-Participants. Two or three agencies may participate at levels higher than their proportionate share of the Non-Participants' share. Valley Water's participation percentage consistent with this coordination effort would be 2.73 percent. It is possible that SWP contractors' Board decisions result in additional project shares becoming available, which may require participating agencies to increase their participation percentage to ensure full funding for the project. Staff expects SWP contractors to complete their board decisions by the end of 2020 or early 2021. For the California WaterFix, staff had identified a total participation percentage of 5 percent as a reasonable proxy for participation both on the SWP and CVP which is roughly the same participation percentage that is currently included in Valley Water's rate projections.

Approval of a provisional participation percentage determines Valley Water's share of additional planning costs as defined in the Gap Funding Agreement described in section C below. It would also create a placeholder for Valley Water's final decision on whether to participate in the Project, a decision that will likely not be made for several years pending completion of environmental documentation, drafting of contract language, and completion of Project analysis. However, because the participation percentages of the participating agencies must sum to 100 percent, any deviation from preliminary participation percentages would require additional coordination and negotiation with other participants.

Given the lower demand projections in the Water Supply Master Plan Monitoring and Assessment Program (MAP) 2020 report and the current state of the economy, staff is not recommending participation at a 5 percent level; however, because this project is critical for securing Valley Water's baseline SWP supplies into the future, staff is recommending approval of a provisional participation percentage of 2.73 percent, and authorization for up to an additional 0.5 percent in the event additional shares become available, for a total provisional participation percentage of 3.23 percent.

Recommended Board Action: Approve a provisional participation percentage in the Project of 2.73 percent and authorize the CEO to increase Valley Water's provisional participation percentage up to a total of 3.23 percent if additional shares become available.

C. Gap Funding Agreement to Support Planning and Design Costs

DWR has stated that it has existing authority to issue revenue bonds for the Project, but filed a validation action on August 6, 2020 to provide the requisite assurance to the financial community for the sale of Project revenue bonds. DWR anticipates an appellate court ruling in 2024, at which time DWR plans to issue the Project revenue bonds. To fund the Project in the interim four years, and to credit those SWP contractors who advanced funding prior to the effective date of this Gap Funding Agreement, DWR requests participating SWP contractors to enter into a funding agreement (Gap Funding Agreement) to provide \$340.7 million for environmental review, planning, and design of the proposed Project (Attachment 16).

Staff anticipates interim funding will be reimbursed or credited upon first issuance of revenue bonds for the Project. However, there is a chance that funds will not be reimbursed or credited if DWR determines that such reimbursement or credit is not consistent with applicable law, judicial rulings, or contractual obligations of DWR, or if the terms of the future agreements to accomplish the reimbursement or credit are not

acceptable to DWR. In addition, if the Project does not proceed to construction, no reimbursements of this funding will occur.

The Gap Funding Agreement provides Valley Water with the option to approve its entire obligation for the next four years of Project planning, or to limit the commitment to just the first two years, with the remaining amount subject to future Board action without requiring an amendment to the agreement. Table 1 illustrates Valley Water's share of interim funding costs for a range of potential participation percentages. Attachment 17 shows costs for each 0.1 percent participation percentage increment. The attached Gap Funding Agreement is currently written to reflect a two-year funding commitment, with an option to commit to an additional two years in the future, subject to future Board approval. The Gap Funding Agreement will be revised to reflect the funding commitment commensurate with the final provisional participation percentage.

Table 1: Potential Gap Funding Costs

Participation Level	Two Years of Funding (\$M)	Four Years of Funding (\$M)
2.5%	\$3.1	\$8.5
2.73%	\$3.4	\$9.3
3.0%	\$3.7	\$10.2
3.23%	\$4.0	\$11.0
4.0%	\$5.0	\$13.6
5.0%	\$6.2	\$17.0
6.0%	\$7.5	\$20.4

Recommended Board Action: Adopt the Resolution APPROVAL OF PROVISIONAL PARTICIPATION PERCENTAGE AND AUTHORIZING NEGOTIATION AND EXECUTION OF A FUNDING AGREEMENT FOR PRELIMINARY PLANNING AND DESIGN COSTS RELATED TO A POTENTIAL DELTA CONVEYANCE PROJECT

(Attachment 18) and authorize the CEO to negotiate and execute a funding agreement with the Department of Water Resources committing up to \$4,034,001 for Project environmental planning and design costs incurred in Calendar Years 2021 and 2022, with an option to commit up to an additional \$6,972,348, upon future Board approval, for Project environmental planning and design costs incurred in Calendar Years 2023 and 2024.

D. Amendments to the DCA Joint Powers Authority Formation Agreement

In May 2018, certain SWP Contractors, including Valley Water, entered into a Joint Powers Agreement and formed the DCA, whose purpose was to actively participate with DWR in the design and construction of California WaterFix. The DCA subsequently entered into a Joint Exercise of Powers Agreement with DWR (JEPA). Shortly after DWR rescinded its approvals of WaterFix and the Governor indicated support for a single tunnel project, the JEPA was amended and its purpose shifted to provide preliminary design, planning and other preconstruction activities to assist the environmental process for a potential Delta Conveyance Project. Given these changes, some SWP Contractors are seeking to reorganize the governance structure to better align with current participation in the proposed Project. The proposed amendments would primarily amend the governance structure. Attachment 19 is a redline-strike out copy of the proposed amendments to the DCA Joint Powers Agreement.

The proposed amendments include the following:

- Changes the number of DCA Board of Directors' seats from five to seven. Valley Water retains a designated seat;
- Board officers are selected by the Board, eliminating the fixed rotation;
- Voting thresholds are changed to a simple majority of the Board for all actions;
- A reconsideration provision is added for items that previously needed a supermajority vote; and
- Amendments to the agreement can be made by approval of two-thirds of the Members instead of requiring all Members to approve; and
- Formation of the Environmental Compliance and Monitoring Committee is deferred to after Project approval.

Recommended Board Action: Approve and Authorize the Chief Executive Officer to execute the Amended and Restated Joint Powers Agreement Forming the Delta Conveyance Design and Construction Joint Powers Authority.

E. Delta Conveyance Design and Construction Authority (DCA) Cost Assessment

On August 20, 2020, the DCA released a preliminary cost assessment of \$15.9 billion for the proposed Project in undiscounted 2020 dollars that includes capital costs for design and construction, soft costs, and environmental mitigation. It does not include financing costs. The proposed facilities include two intakes each with a capacity of Attachment 13

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3,000 cubic feet per second (cfs), one tunnel with a length of 42 miles and a capacity of 6,000 cfs, and a complex of facilities in the south Delta including a pumping station, forebay, and connection to the California Aqueduct.

The DCA characterized its preliminary cost estimate as being very conservative due to the Project's early stage of development. The construction cost includes a 38 percent contingency such that together with an estimate of \$354 million for risk mitigation, total Project contingency levels are 44 percent. DCA engineers believe this is an appropriately conservative contingency given the current level of project development.

The assessment will be refined over time as planning and environmental review proceeds and more precise design and engineering are available to increase confidence in the potential costs based on industry standard methodologies.

The \$15.9 billion preliminary cost estimate for the Project is larger than the previously estimated cost for the SWP portion of the California WaterFix, which in 2018 DWR estimated to be \$11.09 billion in undiscounted 2017 dollars (*Economic Analysis of Stage I of the California WaterFix*, The Brattle Group, 2018). This is equivalent to about \$12.6 billion in 2020 dollars. The primary reasons for the difference in costs include a more conservative approach to ground improvements at the intake structures and southern forebay, and a more advanced design approach to the southern complex facilities. The DCA also adopted a larger contingency given the early stages of design. The three alternative tunnel alignments currently being considered differ from those considered by the California WaterFix project and incorporate substantial input from local Delta stakeholders to reduce impacts. Attachment 17 shows Valley Water's potential total project costs for each 0.1 percent participation percentage increment.

Recommended Board Action: None. Information only.

F. State Water Contractors High Level Analysis of Project Benefits

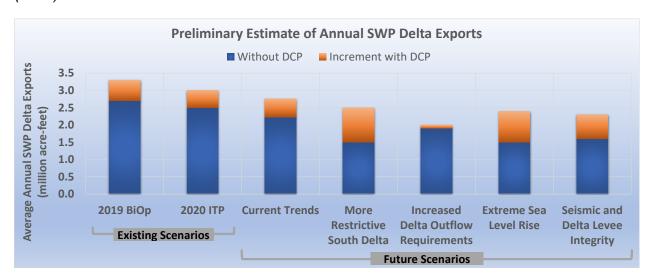
The Project is expected to improve SWP resiliency under multiple potential future risks that can be low frequency-high impact (e.g. seismic risks in the Delta) or sustained impacts (e.g. climate change and sea level rise or Delta regulations). See Table 3 for a summary of potential benefits.

Table 3. Summary of Potential Benefits

Benefit	Analysis of the Delta Conveyance Project	
Sustained water supplies	Increases water supply reliability in the event of a temporary or permanent physical, regulatory, or contractual disruption of southern Delta diversions; mitigates losses under many of the future plausible risks; restores 100 thousand acre-feet (TAF) to 1 million acre-feet (MAF) per year of SWP water supplies that could be lost under these future risk scenarios without the Project	
Improved aquatic conditions	Provides flexibility to improve aquatic conditions and respond to future regulatory constraints; minimizes impacts to fish with state-of-the-art fish screens; improves flow patterns in the south Delta for fish	
Improved water quality	Decreases average annual salinity of water delivered; reduces salt loading to drinking water treatment plants and county groundwater basins	
Resiliency during Delta levee failure events	Minimizes public health and safety impacts from reduced quality and quantity of water if Delta levees fail from earthquakes, sea level rise, or extreme flood events; restores about 700 TAF of water supply that could be lost under levee failure scenarios without the Project	
Resiliency to climate change including sea level rise	Diverts where salinity intrusion will be minimal under sea level rise scenarios; facilitates diversion during extreme storm events; restores about 900 TAF of water supply that could be lost under extreme sea level rise scenario without the Project	
Improvements to water transfers	Conveys transfer water when existing system cannot; reduces water loss during transport	
Operational flexibility	Increases operational flexibility to capture peak storm flows, which may become increasingly valuable under future climate change conditions where water is likely to come in concentrated and shorter wet periods	

Although DWR has not yet defined project operations or secured necessary permits that may affect project performance, the State Water Contractors conducted a preliminary analysis of potential total Project water supply benefits under a range of potential future scenarios to assess the Project's ability to maintain or improve SWP reliability and resiliency. While no single scenario likely represents the true future, the analysis does provide some indication of how the Project could perform under those types of potential futures. The analysis evaluated a range of regulatory scenarios, including continuing the existing regulations and considering how the Project might perform if future regulations require additional outflow or impose additional restrictions on south Delta operations. That analysis indicates that future regulatory scenarios could reduce SWP system-wide supplies by anywhere from about 300 thousand acre-feet (TAF) to over 1 million acrefeet (MAF), depending on the regulatory scenario. Under these scenarios, the Project could restore available SWP system-wide deliveries by anywhere from about 100 TAF to 1 MAF per year on average, showing the least benefits if future regulations require greater outflows and the most benefits with additional south Delta restrictions. The modeling also indicates that late century sea level rise could result in over 1 MAF of reduced supplies without the Project. Under this future scenario, the Project could potentially restore approximately 900 TAF of system-wide deliveries.

Figure 1. Preliminary modeled average annual SWP exports under existing and future scenarios and corresponding increment resulting with the Delta Conveyance Project (DCP). Source: State Water Contractors.



If Valley Water invests in the Project, then Valley Water would receive a portion of that water supply reliability benefit. However, the timing and volume of when water is available could impact the level of benefits Valley Water could experience from the Project. For example, if most of the reliability or increased delivery is provided during infrequent wet years, then it may be difficult for Valley Water to use the water effectively

without also investing in new storage since local supplies will generally also be abundant in wet years.

In addition to the water supply benefits estimated above, the Project is expected to provide additional benefits including improved flow patterns in the south Delta for fish, operational flexibility to capture peak storm flows, water quality improvements for SWP deliveries, additional conveyance capacity for water transfers, and potential carriage water savings. As Project planning progresses, Valley Water will continue to evaluate potential benefits of the Project.

Recommended Board Action: None. Information only.

G. Background

Valley Water has been engaged in planning efforts to improve the conveyance of SWP and CVP supplies across the Delta since 2006, recognizing that the current approach of diverting directly from rivers in the vulnerable southern end of the Delta is unsustainable. Plans to build twin tunnels beneath the Delta evolved from development of the Bay Delta Conservation Plan to the California WaterFix, with staff presenting information about the risks, costs, and benefits of the evolving planning effort, as well as various stakeholder perspectives, in over 60 public meetings.

As described in DWR's Notice of Preparation, the proposed Project would construct and operate new conveyance facilities in the Delta that would be operated as part of the existing SWP infrastructure. Specifically, two new points of diversion with intake facilities would be located in the north Delta along the Sacramento River between Freeport and the confluence with Sutter Slough and would include a single tunnel to convey water from the new intakes to the existing Banks Pumping Plant in the south Delta.

The new intake and conveyance facilities would be sized to convey up to 6,000 cfs of water from the Sacramento River to the SWP facilities in the south Delta. As part of the environmental review process, DWR is considering a range of capacities from 3,000 to 7,500 cfs, three tunnel alignments, and participation with and without the CVP.

The Project's overarching objective is to protect the SWP's ability to continue to deliver water south of the Delta. Additional objectives include improving SWP resiliency to the impacts of climate change and extreme weather events; minimizing the potential public health and safety impacts from reduced quantity and quality of water caused by earthquakes; and providing SWP operational flexibility to improve aquatic conditions and better manage risks of additional future regulatory constraints on project operations.

Since 2007 Valley Water has provided \$15.1 million towards planning costs for the Bay Delta Conservation Plan and California WaterFix projects through a number of

agreements with DWR, the United States Bureau of Reclamation, and the San Luis and Delta-Mendota Water Authority. Of this amount, approximately \$4.7 million has been credited towards Valley Water's share of operations and maintenance costs on the CVP and \$895,621 was returned through Valley Water's 2021 SWP Statement of Charges. Valley Water anticipates that the balance of these contributions will be reimbursed upon DWR's issuance of bond financing for the Project such that Valley Water would only be responsible for its proportionate share of projects costs, commensurate with its ultimate participation percentage.

H. Next Steps and Schedule

DWR's preliminary schedule has the environmental review being completed in 2023 and other environmental, permitting and regulatory processes being completed in 2024. Once the Project receives all necessary approvals and permits and has complied with all legal requirements, including but not limited to obtaining a change in point of diversion to DWR's existing water rights permit, and permits under the federal and State Endangered Species Acts, construction could begin.

