



Agenda Item No. 4  
Meeting Date: September 18, 2024  
Resolution: No

**AGENDA DOCKET FORM**

**SUBJECT: LOS VAQUEROS RESERVOIR EXPANSION PROJECT UPDATE**


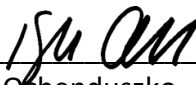
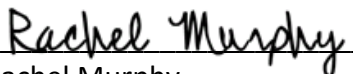
**SUMMARY:** On June 5, 2024, the Contra Costa Water District (CCWD) Board of Directors (Board) authorized execution of Amendment No. 6 to the Multi-Party Cost Share Agreement (MPA Amendment No. 6) for the Phase 2 Los Vaqueros Reservoir Expansion Project (LVE Phase 2 Project). Concurrent with this authorization, the Board directed the General Manager to engage the general managers of the Los Vaqueros (LV) Reservoir Joint Powers Authority (JPA) Member Agencies (Member Agencies) to determine their commitments to the LVE Phase 2 Project based on the updated cost, estimated benefits, and defined agreement terms. The Board also directed the General Manager to provide a report to the CCWD Board in September on the Member Agencies' commitments and responses.

*(Continued on Page 2)*

**FISCAL IMPACT:** The LVE Phase 2 Project places CCWD in a unique position as CCWD would incur new costs associated with new facilities for which CCWD obtains new benefits as well as recoup some costs of existing facilities through usage fees charged to other JPA Member Agencies when CCWD's existing facilities are used to deliver benefits to the JPA.

Funding for CCWD's Fiscal Year 2025 (FY25) activities has been collected as part of the Multi-Party Cost Share Agreement for the scope of work developed to support the JPA's Capital Preservation Strategy. The FY25 JPA budget anticipates a monthly cash flow of approximately \$1.1 million per month for JPA and CCWD expenditures on LVE Phase 2 Project activities.

**RECOMMENDED ACTION:** Receive and comment on the Los Vaqueros Reservoir Expansion Project update.

 Lucinda Shih Water Resources Manager	 Kyle Ochendusko Assistant General Manager	 Rachel Murphy General Manager
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RM/KO/LS:wec

Attachment: Staff Report

## **AGENDA DOCKET FORM**

### **SUMMARY (Continued from Page 1):**

On June 11, 2024, the CCWD General Manager issued a letter to the general managers of the JPA Member Agencies summarizing the key outstanding, unresolved issues in the LVE Phase 2 Project and seeking an update on each member's commitment to the LVE Phase 2 Project.

The key outstanding, unresolved issues are summarized below.

1. Design and Construction Agreement: Member Agencies have not yet agreed on a methodology for allocating risk and responsibility for the total cost of construction, including potential cost overruns.
2. Facilities Usage Agreement: Member Agencies have not agreed on how the various facilities would be utilized, including CCWD's LV Reservoir and conveyance facilities, and East Bay Municipal Utility District's conveyance facilities. Additionally, Member Agencies have not agreed on the usage fees associated with use of CCWD's existing facilities as part of the LVE Phase 2 Project.
3. Backstop Agreement: A backstop plan and agreement for CCWD are needed to ensure adequate assurances that water supply and water quality for CCWD customers will be maintained at acceptable levels during dam demolition, reconstruction, and refilling.
4. LV JPA Agreement: CCWD believes more work is needed to incorporate protection of its customers and their significant past investments into the terms for various Project agreements and permits, consistent with foundational Project documents, agreements, and environmental approvals.
5. Status of Member Agency Business Case: Member Agencies have stated that additional work is needed to develop their business case for Project participation.

Following CCWD's General Manager's letter in June 2024, several JPA Member Agencies have conducted public meetings where their respective Boards received reports on the outstanding, unresolved issues and updates to their individual business case. The reports underscored that rising project costs and increased environmental regulations have greatly decreased anticipated LVE Phase 2 Project benefits. Additionally, the discussions during these meetings have highlighted Member Agency concerns regarding the updated business case analysis and, for several, have resulted in recommendations to decrease their level of participation in the LVE Phase 2 Project.

CCWD has received several responses to the June 11 correspondence. Most Member Agencies have indicated ongoing support to continue evaluating the LVE Phase 2 Project and noted that additional time is needed to be able to definitively respond to CCWD's June 11 inquiry. Responses from the Member Agencies indicate that alignment is still lacking on several outstanding policy questions.

**AGENDA DOCKET FORM**

**SUMMARY (Continued from Page 2):**

The attached Staff Report provides an overview of the LV Project history, a review of the factors impacting the LVE Phase 2 Project business case development, an update on the implementation agreements, and a review of Member Agency activities and feedback. Given the information provided within this update and responses from JPA member agencies, now is an appropriate time for CCWD to consider its future participation in the LVE Phase 2 Project and, in particular, whether additional time is likely to result in the successful resolution of the various outstanding issues or improved conditions leading to more favorable business case evaluations among LVE Phase 2 Project participants.

**CONTRA COSTA WATER DISTRICT**  
**Staff Report**

**DATE:** September 18, 2024  
**TO:** Board of Directors  
**FROM:** Rachel Murphy *Rachel Murphy*  
**SUBJECT:** **Los Vaqueros Reservoir Expansion Project Update**

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**INTRODUCTION**

During the update provided in conjunction with consideration of Multi-Party Cost Share Agreement Amendment No. 6 for the Phase 2 Los Vaqueros Reservoir Expansion Project (LVE Phase 2 Project) at its June 5, 2024 meeting, the CCWD Board of Directors (Board) expressed concerns regarding the lack of alignment between Los Vaqueros Reservoir Joint Powers Authority (JPA) Member Agencies (Member Agencies) on foundational project conditions and the limited progress related to agreement negotiations and project investment decisions by the Member Agencies. The Board directed CCWD staff to engage with Member Agencies to further assess these areas of misalignment and the status of project decisions, and to bring the Board an update on the results of these discussions within 90 days. This Board Item summarizes the results of these discussions and provides the requested status update on the LVE Project.

**RECOMMENDATION**

Receive and comment on the Los Vaqueros Reservoir Expansion Project update.

**DISCUSSION**

Los Vaqueros Project History

A regional water storage project has been contemplated on Kellogg Creek since the 1950s by both state and federal entities. Following the severe drought in 1976-77, CCWD undertook the original Los Vaqueros (LV) Project to provide water quality and emergency storage benefits for CCWD customers. CCWD's customers voted to approve financing the Los Vaqueros Project in 1988, and CCWD completed construction of the LV Reservoir, with a capacity of 100 thousand acre-feet (TAF), in 1997.

CCWD, with voter authorization in 2004 and with support from the California Department of Water Resources (DWR) and the U.S. Department of Interior Bureau of Reclamation (Reclamation), began studies and adopted Board principles for the LV Expansion Project (LVE Project). Beginning in 2004, CCWD and regional agencies who expressed interest in the LVE Project signed a related Memorandum of Understanding (LVE MOU).

CCWD and Reclamation finalized the environmental analysis for the LVE Project in 2010, which described options to provide regional benefits by expanding the Los Vaqueros Reservoir to either 160 TAF or 275 TAF, constructing new or upgraded pumping facilities, and constructing a new interconnection to the California Aqueduct. The proposed project described regional water supply and environmental benefits, but potential partners were not interested in proceeding with construction of the LVE Project as they were not certain of their need for LVE Project benefits. CCWD was already seeing the effects of climate change and increasing Delta regulatory restrictions, and so, in 2012, CCWD alone funded and constructed the Phase 1 Los Vaqueros Reservoir Expansion Project (Phase 1 Expansion) to increase reservoir storage to 160 TAF to satisfy the current and future water quality and emergency and drought supply needs of CCWD customers. CCWD has also undertaken additional water quality protection projects, including the Alternative Intake Project, which constructed the Middle River Intake at Victoria Canal, and the Canal Replacement Project, which replaced the unlined section of the Contra Costa Canal with a buried pipeline.

Following completion of the Phase 1 Expansion, CCWD successfully completed two water transfers to Alameda County Water District (ACWD) and Byron-Bethany Irrigation District (BBID) in 2014, an extreme drought period. These transfers helped to illustrate the potential benefits of a partnership with CCWD and regional partners. By 2016, potential partners who were signatories to the LVE MOU included ACWD, Bay Area Water Supply and Conservation Agency, BBID, Reclamation, City of Brentwood, California Department of Fish and Wildlife, County of Contra Costa, Delta Stewardship Council, DWR, East Bay Municipal Utility District (EBMUD), East Contra Costa Irrigation District, Grassland Water District, National Marine Fisheries Service, Santa Clara Valley Water District (Valley Water), San Francisco Public Utilities Commission (SFPUC), San Luis & Delta-Mendota Water Authority, U.S. Fish and Wildlife Service, and Zone 7 Water Agency (Zone 7).

Meanwhile, also in 2014, California voters passed Proposition 1, authorizing the state to fund the public benefits of water storage projects to improve water resources management for the future. The availability of state funding through Proposition 1 and federal funding under the 2016 Water Infrastructure Improvements for the Nation (WIIN) Act allowed for improved water supply reliability for south-of-Delta wildlife refuges to be added as a project benefit. CCWD and Reclamation updated the environmental analysis for the LVE Project, finalizing the Supplement to Final Environmental Impact Statement/Environmental Impact Report in 2020, which described options for Phase 2 of the Los Vaqueros Expansion Project (LVE Phase 2 Project) to provide a balance of urban, agriculture, and environmental benefits.

CCWD submitted an application to the California Water Commission for funding of the LVE Phase 2 Project under the Water Storage Investment Program created by Proposition 1, securing a conditional funding award of \$478 million. Following extensive discussions and negotiations, CCWD and interested partners formed the Los Vaqueros Reservoir Joint Powers Authority (JPA) in 2021 to finance the local cost share of the LVE Phase 2 Project construction, execute the necessary agreements with CCWD for design, construction and operation of the LVE Phase 2 Project facilities, manage the state contracts for administration of the LVE Phase 2 Project public benefits, and coordinate service requests among member agencies.

#### Factors Impacting LVE Phase 2 Project Business Case

In the decade since the details of the LVE Phase 2 Project were originally formulated, regulations controlling Delta operations, which impact both CCWD-specific operations and state-wide system operations, have significantly changed and indications are that regulations will continue to tighten as discussed below.

LVE Phase 2 Project benefits for the JPA Member Agencies are largely derived from using excess capacity at CCWD's Delta intakes to capture excess water, when it is available, under existing water rights, contracts, and permit conditions. Changing Delta regulations will require more flows to be dedicated to the needs of the environment, which will reduce opportunities for the proposed LVE Phase 2 Project operations to deliver benefits to the JPA Member Agencies. Near-term potential Delta regulatory changes include, but are not limited to, the State Water Resources Control Board's Bay-Delta Water Quality Control Plan Update and the associated Healthy Rivers and Landscapes Program proposal, as well as the re-consultation on the biological opinions governing the Long-Term Operations of the Central Valley Project and State Water Project. It is unknown how additional future Delta regulatory changes will impact LVE Phase 2 Project operations.

In March 2024, California Department of Fish and Wildlife (CDFW) issued a new Incidental Take Permit for CCWD-specific operations that modified the diversion limits at CCWD's intakes. These modified requirements are intended to protect larval smelt and are anticipated to reduce LVE Phase 2 Project yield by up to 30%. The Contract for Administration of Public Benefits (CAPB) for the wildlife refuge water supply benefits is currently being negotiated with CDFW, which is seeking assurances in the CAPB language that this reduction in yield is not borne predominantly by the wildlife refuges and is instead spread across all JPA Member Agencies.

The business case analysis and investment decisions currently underway by the JPA Member Agencies rely upon the realization of sufficient benefits from the LVE Phase 2 Project, which have reduced over time. At the same time, the construction and implementation costs have continued to increase due to schedule delays, related inflationary increases, and LVE Phase 2 Project changes. As of May 2024, the total costs at completion are estimated to be near \$1.6 billion, a 54% increase from the \$900 million estimated originally in the 2017 application for Water Storage Investment Program funding.

### Update on Implementation Agreements

As described during previous LVE Project updates, significant challenges have emerged during negotiation of the LVE Phase 2 Project implementation agreements, particularly as it relates to terms foundational to CCWD's original decision to pursue a regional project. Principally, areas of disagreement relate to risk allocation during construction, control of construction and operations decisions, and guaranteed delivery of benefits. Limited progress has been made in resolving the misalignment on these core issues since June, as discussed below.

**Facilities Usage Agreement (FUA)** – The FUA will be entered between CCWD and the JPA. The FUA will grant the JPA the ability to utilize unused capacity in CCWD-provided and/or operated facilities in exchange for making payments to CCWD for the use of its facilities. The usage fees are intended to reimburse CCWD customers for the value derived from the existing CCWD facilities utilized for the Project and to fund a proportionate share of future renewal and replacement costs. CCWD and the JPA are in active negotiations on the terms of the FUA and while progress has been made on several key issues, final agreement terms have not yet been reached and there is no agreement on the FUA usage fees.

**Design and Construction Agreement (DCA)** – The DCA defines the services CCWD will provide for design and construction of the new and modified facilities associated with the LVE Phase 2 Project. The principles adopted by CCWD's Board assert that CCWD will remain operator of the LV Reservoir system. As such, CCWD must retain control over design, construction and operational decisions related to this system of facilities. Initial negotiations occurred in summer and fall 2023, and a draft DCA was sent to the JPA in January 2024. As reported to the Board in February 2024, a key area of concern expressed by the JPA Member Agencies is the level of control and oversight CCWD would retain over design and construction decisions related to modifications to CCWD's facilities, principally the demolition and reconstruction of the LV dam, given the financial investment being made by the Member Agencies. Additionally, several Member Agencies have asserted their perception that CCWD would receive benefits from completion of the LVE Phase 2 Project facilities and should share in the financial risks associated with all elements of the LVE Phase 2 Project, which is contrary to the beneficiary pays principle. No other JPA Member Agency has been asked to share in the cost of project facilities which provide no additional benefits to their customers. This issue is unresolved and JPA staff have indicated that comments on the draft DCA will be provided once negotiations are completed on the FUA.

**Backstop Agreement** – Implementation of the LVE Phase 2 Project will require CCWD to completely draw down its storage in the existing LV Reservoir in order to demolish and construct the expanded reservoir and dam facilities. During the anticipated 3-to-6-year period required for demolition, construction, and reservoir refilling, the water quality and emergency water supply benefits of LV Reservoir will be unavailable to CCWD and its customers. As a result, CCWD requires assurances that the water quality and emergency water supply functions that are usually provided by the LV Reservoir will be available through other means.

In accordance with the Memorandum of Understanding with the EBMUD approved by the CCWD Board in February 2021, EBMUD confirmed their willingness to develop a new agreement to allow for expanded use of an existing untreated water intertie that interconnects CCWD’s LV Pipeline to EBMUD’s Mokelumne Aqueduct No. 2. This new agreement was envisioned to supplement existing agreements between CCWD and EBMUD to address water quality and emergency water supply needs during LVE Phase 2 Project construction. EBMUD has continued to express willingness to assist CCWD with addressing its water quality and emergency water supply needs provided that such backstop operations do not create water quality or water supply impacts for EBMUD customers, do not impact implementation of planned EBMUD capital investments, and are permissible under EBMUD’s existing permits and agreements. EBMUD is unable to guarantee their ability to provide backstop services at all of the times when CCWD may need these backstop services. An example of when backstop operations from EBMUD may not be available is during a drought, which is when CCWD’s water quality blending needs would be the greatest. While CCWD is exploring alternative ways to mitigate delivered water quality impacts to CCWD customers as well as potential water supply shortages through water treatment plant improvements and securing transfer water agreements, it is not expected that these alternatives will fully eliminate the risks to CCWD customers. Additionally, JPA Member Agencies would be obligated to fund these mitigation measures through an agreement which remains to be negotiated.

Recent Member Agency Activities and Feedback

Member Agencies have been actively engaged throughout the summer to resolve areas of uncertainty related to LVE Phase 2 Project benefits, progress their business case analysis and reach their final project investment decisions. Given the significant reduction in LVE Phase 2 Project benefits and increase in LVE Phase 2 Project costs, several Member Agencies have noted a compression of their business case analysis and have highlighted that the cost to participate in the LVE Phase 2 Project is on par with or more costly than other alternative water supply options under consideration. Additionally, while interest in the conveyance aspects of the LVE Phase 2 Project remains strong, three Member Agencies have reduced their storage participation as described in Table 1 below, which has resulted in the expanded reservoir capacity transitioning from being significantly oversubscribed to now being undersubscribed by over 25%. Overall, requests from Member Agencies to ‘buy in’ to the LVE Phase 2 Project storage have declined by approximately 50%.

**Table 1 – Recent Reductions in Reservoir Capacity Allocations**

Date	Agency	Previous Storage Allocation	Current Storage Allocation
May 28, 2024	SFPUC	40 TAF	20 TAF
August 27, 2024	EBMUD	30 TAF	0 TAF
September 10, 2024	Valley Water	50 TAF	20 TAF



CCWD has received several responses to the June 11 correspondence from CCWD's General Manager to the Member Agency general managers regarding the outstanding policy questions and status of LVE Phase 2 Project investment decisions. Most Member Agencies have not directly addressed the outstanding policy questions but have indicated continued support to further evaluate the project and complete their business case analysis. The responses do indicate that alignment is still lacking on several outstanding policy questions. Additionally, as the development and analysis of their business cases continues and results tighten, Member Agencies are dialing back or, in some cases, eliminating altogether pursuit of benefits from the LVE Phase 2 Project.

### **FISCAL IMPACT**

The LVE Phase 2 Project places CCWD in a unique position as CCWD would incur new costs associated with new facilities for which CCWD obtains new benefits as well as recoup some costs of existing facilities through usage fees charged to other JPA Member Agencies when CCWD's existing facilities are used to deliver benefits to the JPA.

Funding for CCWD's Fiscal Year 2025 (FY25) activities has been collected as part of the Multi-Party Cost Share Agreement for the scope of work developed to support the JPA's Capital Preservation Strategy. The FY25 JPA budget anticipates a monthly cash flow of approximately \$1.1 million per month for JPA and CCWD expenditures on LVE Phase 2 Project activities.

### **NEXT STEPS**

Given the information provided within this update and responses from JPA member agencies, now is an appropriate time for CCWD to consider its future participation in the LVE Phase 2 Project and, in particular, whether additional time is likely to result in the successful resolution of the various outstanding issues or improved conditions leading to more favorable business case evaluations among project participants.

RM/KO/LS:wec