

John Cunningham

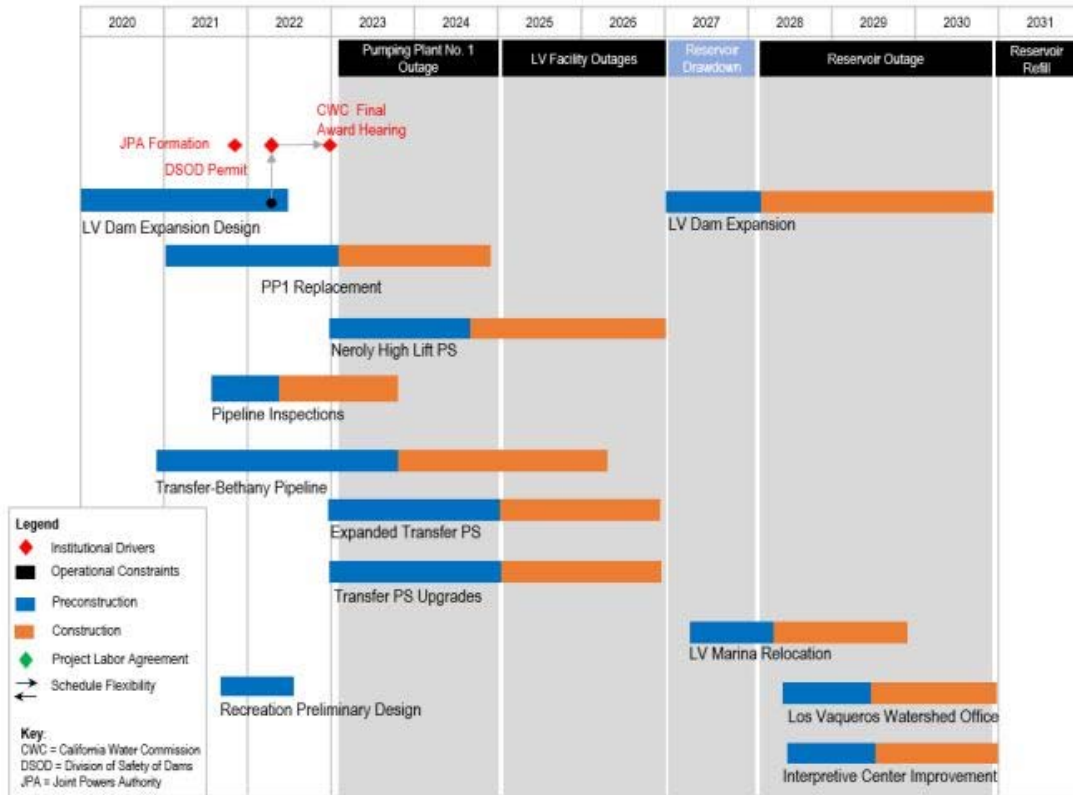
From: Leland Frayseth <leland.frayseth@gmail.com>
Sent: Wednesday, October 20, 2021 8:22 AM
To: Samantha.Arthur@cw.ca.gov; Alexandre.Makler@cw.ca.gov; daniel.curtin@cw.ca.gov; Teresa.Alvarado@cw.ca.gov; Matthew.Swanson@cw.ca.gov; Kimberly.Gallagher@cw.ca.gov; Fern.Steiner@cw.ca.gov; Jose.Solorio@cw.ca.gov; cw@water.ca.gov; Shoemaker, Brianna@DWR; amy.young@water.ca.gov; Cambra, Paul@CWC; Yun, Joseph@DWR; Klopfenstein, Rachael@DeltaCouncil; erik.erreca@deltacouncil.ca.gov; John Cunningham; spalmer@zone7water.com; Bob Wright; Obegi, Doug; Daniel Bacher; Scott Anderson; Rachel Murphy; Kennedy, Kellye J; Jennifer Allen
Subject: Re: Las Vaqueros Reservoir 275,000 acre-feet - CCWD Board to flounder in Closed Session
Attachments: 04 - LVRE 275 TAF Project Facilities.pdf; 02.03.21-4 Backstop MOU with EBMUD.pdf

Dear Commissioners, Staff and the Public,

I see item 9 is still on the agenda for your meeting this morning so as you vote I want you to have the attached latest Los Vaqueros schedule and Backstop MOU. Lisa Borba has not coordinated or gotten sign off from incidental take fish in the draining Los Vaqueros and Comanche reservoirs, migrating Sacramento and Mokelumne river salmon, steelhead, fisherwomen and fishermen, EBMUD and CCWD customers who will be impacted by the schedule, Backstop MOU and reservoir refill.

I have a lot of Department of Water Resources (DWR) public records requests to type in and queue up this morning so I will miss your meeting but I will watch the recorded video when you publish it.

Leland



LVE Project Schedule

Exhibit B



AGENDA DOCKET FORM

SUBJECT: MEMORANDUM OF UNDERSTANDING WITH EAST BAY MUNICIPAL UTILITY DISTRICT FOR DEVELOPMENT OF BACKSTOP WATER SERVICE DURING LOS VAQUEROS RESERVOIR EXPANSION PROJECT CONSTRUCTION

SUMMARY: Implementation of the Los Vaqueros Reservoir Expansion Project (Project) includes increasing the existing reservoir capacity from 160,000 acre-feet up to 275,000 acre-feet. In order to facilitate construction of modifications to the dam and associated facilities, the Los Vaqueros Reservoir will need to be drawn down completely for up to three years. The Contra Costa Water District (District) is evaluating options for securing supplemental water conveyance and/or water supplies during the reservoir outage period to ensure there are no water quality or water supply impacts to the District’s customers as a result of Project construction.

One of the most feasible options for supplemental water conveyance is through use of the existing untreated water intertie with East Bay Municipal Utility District (EBMUD). This intertie connects the District’s Los Vaqueros Pipeline to EBMUD’s Mokelumne Aqueduct No. 2 and has a capacity of 155 cubic feet per second. The intertie has been successfully operated to convey water to the District’s Transfer Facility and to the Contra Costa Canal.

(Continued on Page 2)

FISCAL IMPACT: The current FY21-22 Project budget includes adequate funding for District staff and consultant support for implementation of the MOU. EBMUD is currently providing in-kind services for the Project through the existing Multi-Party Funding Agreement. EBMUD will ultimately seek reimbursement for the costs it incurs to provide Backstop Water Service. It is anticipated that EBMUD’s costs would be reimbursed by the future Los Vaqueros Reservoir Joint Powers Authority (JPA) and the terms for provision of Backstop Water Service and reimbursement would be included in a future Backstop Water Service Agreement.

RECOMMENDED ACTION: Authorize execution of the Memorandum of Understanding between the East Bay Municipal Utility District and the Contra Costa Water District for development of Backstop Water Service during Los Vaqueros Reservoir Expansion Project construction.

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On Sat, Oct 16, 2021 at 6:09 PM Leland Frayseth <leland.frayseth@gmail.com> wrote:
Subject: Las Vaqueros Reservoir 275,000 acre-feet - CCWD Board to flounder in Closed Session

Dear Commissioners, Staff and the Public,

This is my 42nd letter to the California Water Commission please add this comment to the 20 Oct 2021 meeting agenda item 9 Water Storage Investment Program: Los Vaqueros Reservoir Expansion Project Continuing Eligibility and Feasibility Determination (Action Item). I am a 37 year Contra Costa Water District (CCWD) ratepayer of Los Vaqueros Reservoir 100,000 and 160,000 acre-feet that gives me poor water quality, has a longitudinal crack in its crest and never was filled to 160,000 acre-feet after being raised in 2012.

I think this item should be pulled from the agenda. There is no way Staff could have determined Los Vaqueros is feasible or "will advance the long-term objectives of restoring ecological health and improving water management for beneficial uses of the Delta."

Every major reservoir in the West is almost empty; there are millions of acre-feet unused surface storage capacity in the Colorado and Sacramento River Basins. There is no water to fill them because you changed the climate by burning fossil fuels to pump water to the Central Valley and up the Tehachapi Mountains. That dumped tons of Carbon into the atmosphere. Last Spring I told you to embrace the Next California Project to move Central Valley farming the Mississippi Delta where there is abundant water.

You will dump tons more Carbon into the atmosphere burning diesel fuel for construction and earthmoving equipment to tear down the 160,000 acre-feet dam built in 2012 further exacerbating climate change.

I think Lisa Borba and her CCWD Board know the fish are winning in Court that is why they have to meet in Closed session. There will be water for fish but no 275,000 acre-feet reservoir. My tap water has been particularly nasty this year while they try to drain that stagnant pool through my kitchen faucet and shower head.

The 275,000 acre-feet schedule has slipped 5 years since what was on their Prop 1 application. CCWD's Board approved a plan to buy water from East Bay Municipal District (EBMUD) during the 5 year construction. EBMUD has no water to spare Comanche Reservoir and the Mokelumne River are dangerously low pulse flows for salmon are a trickle of what they should be from the California Data Exchange Format queries I pull.

The Federal Infrastructure Bill has not passed and its prospects look grim, there will be no more federal money for Los Vaqueros 275,000 acre-feet.

Please Commissioners if this item does not get pulled from the agenda and you do vote on it, vote it down. I know these people at CCWD very well, I have been their customer for 37 years. The 275,000 acre-feet Los Vaqueros project should be canceled, the project team terminated and migrating salmon should get the water.

Leland Frayseth



Agenda Item No. 4
 Meeting Date: February 3, 2021
 Resolution: No

AGENDA DOCKET FORM

SUBJECT: MEMORANDUM OF UNDERSTANDING WITH EAST BAY MUNICIPAL UTILITY DISTRICT FOR DEVELOPMENT OF BACKSTOP WATER SERVICE DURING LOS VAQUEROS RESERVOIR EXPANSION PROJECT CONSTRUCTION

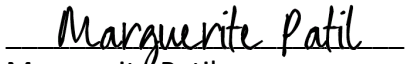
SUMMARY: Implementation of the Los Vaqueros Reservoir Expansion Project (Project) includes increasing the existing reservoir capacity from 160,000 acre-feet up to 275,000 acre-feet. In order to facilitate construction of modifications to the dam and associated facilities, the Los Vaqueros Reservoir will need to be drawn down completely for up to three years. The Contra Costa Water District (District) is evaluating options for securing supplemental water conveyance and/or water supplies during the reservoir outage period to ensure there are no water quality or water supply impacts to the District’s customers as a result of Project construction.

One of the most feasible options for supplemental water conveyance is through use of the existing untreated water intertie with East Bay Municipal Utility District (EBMUD). This intertie connects the District’s Los Vaqueros Pipeline to EBMUD’s Mokelumne Aqueduct No. 2 and has a capacity of 155 cubic feet per second. The intertie has been successfully operated to convey water to the District’s Transfer Facility and to the Contra Costa Canal.

(Continued on Page 2)

FISCAL IMPACT: The current FY21-22 Project budget includes adequate funding for District staff and consultant support for implementation of the MOU. EBMUD is currently providing in-kind services for the Project through the existing Multi-Party Funding Agreement. EBMUD will ultimately seek reimbursement for the costs it incurs to provide Backstop Water Service. It is anticipated that EBMUD’s costs would be reimbursed by the future Los Vaqueros Reservoir Joint Powers Authority (JPA) and the terms for provision of Backstop Water Service and reimbursement would be included in a future Backstop Water Service Agreement.

RECOMMENDED ACTION: Authorize execution of the Memorandum of Understanding between the East Bay Municipal Utility District and the Contra Costa Water District for development of Backstop Water Service during Los Vaqueros Reservoir Expansion Project construction.

 Maureen Martin Special Projects Manager	 Marguerite Patil Assistant General Manager	 Stephen J. Welch General Manager
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MP/MM:wec

Attachments: 1) Summary of MOU Principles, 2) Presentation Slides

AGENDA DOCKET FORM

SUMMARY (Continued from Page 1):

The District and EBMUD have executed several existing agreements that provide for various uses of the untreated water intertie, including: 1) for the delivery of water to either agency through the intertie in the event of an emergency; 2) for diversion of up to 3,200 acre-feet per year of the District's Central Valley Project (CVP) water at EBMUD's Freeport Intake on the Sacramento River and conveyance through EBMUD's system and delivery to the District through the intertie; and 3) for long-term operation and maintenance of the intertie that provides for the sharing of water resources in emergencies or to support planned critical work.

The District and EBMUD have developed a new memorandum of understanding (MOU) that establishes the collaborative, good faith effort the agencies will undertake to develop a new agreement to allow for expanded use of the intertie during Project construction. The MOU describes the guiding principles and key actions needed to allow the District to divert its Central Valley Project contract supplies or Los Vaqueros water right water supplies at EBMUD's Freeport Intake and convey those supplies to the District through the untreated water intertie. The water conveyance and water supply services requested from EBMUD are referred to as "Backstop Water Service". The Backstop Water Service sought in the MOU is in addition to operations that are allowed under existing agreements between the District and EBMUD.

Under most hydrologic conditions, the District would not require Backstop Water Service as the water quality at the District's Delta intakes would be sufficient to meet water quality delivery goals. The Backstop Water Service would most likely be called upon in two circumstances: 1) during a drought when salinity at the District's intakes does not meet the District's salinity goals and fresher water is needed to blend with supplies diverted at the District's intakes, and 2) to hasten the re-filling of the reservoir following Project construction. In the event of an emergency, other than a drought, EBMUD would provide water according to the terms of other existing agreements.

A summary of the key principles included in the MOU are included in Attachment 1. If the results of the analysis described in the MOU confirm that EBMUD can reliably provide Backstop Water Service, the District and EBMUD will develop a final Backstop Water Service Agreement which sets forth mutually acceptable terms and conditions for the provision of Backstop Water Service. If the results of the analysis indicate that EBMUD cannot reliably provide Backstop Water Service, the District would consider other options for supplemental water conveyance and/or water supplies during Project construction. The analysis is anticipated to be completed by Fall 2021.

Summary of MOU Principles

- 1) The Parties will work together in good faith to analyze EBMUD's ability to provide Backstop Water Service to CCWD during Project construction and subsequent refill of Los Vaqueros. The Parties will cooperate to identify and analyze issues relevant to the potential provision of such services to CCWD by EBMUD.
- 2) Parties have agreed to evaluate the following conditions under which Backstop Water Service may be necessary:
 - a. Non-Drought/Non-Emergency Conditions: This scenario is intended to capture CCWD's potential needs to meet CCWD's delivered water quality goals, normally provided by Los Vaqueros, under non-emergency conditions during non-drought years. For this purpose, "non-drought years" means hydrologic year types EBMUD would not typically require use of Freeport Regional Water Project nor request voluntary or mandatory water use reductions from its customers.
 - b. Drought/Non-Emergency Conditions: This scenario is intended to capture CCWD's potential needs to meet CCWD's delivered water quality goals, normally provided by Los Vaqueros, under non-emergency conditions during drought years. For this purpose, "drought years" means hydrologic year types EBMUD would typically require use of Freeport Regional Water Project and/or request voluntary or mandatory water use restrictions from EBMUD's customers.
 - c. Refill of Los Vaqueros Reservoir: This scenario is intended to capture the potential to refill Los Vaqueros after construction is completed using Freeport Regional Water Project during "non-drought years" as defined above.
- 3) Emergency condition scenarios are not expected to be analyzed as part of this work because CCWD's rights to use EBMUD's facilities in emergency conditions are defined by existing agreements.
- 4) The source of supply for Backstop Water Service would be CCWD's CVP contract or the Los Vaqueros water right.
- 5) Consistent with the 2016 Principles of Agreement Regarding Wheeling of Water for CCWD through EBMUD Facilities, EBMUD will work together with CCWD on any water rights change(s) necessary for CCWD to divert water appropriated under its CVP Contract and Los Vaqueros water right (Permit No. 20749) at the Freeport Regional Water Project.
- 6) If EBMUD and CCWD each determine that Backstop Water Service can be provided, the Parties, in coordination with the Los Vaqueros Reservoir Joint Powers Authority as may be necessary, will negotiate in good faith a final written Backstop Water Service Agreement which sets forth mutually acceptable terms and conditions for the provision of Backstop Water Service.
- 7) The Parties agree that EBMUD shall be entitled to reimbursement for the costs it incurs to provide Backstop Water Service to CCWD, and such right to reimbursement shall be assured in any final Backstop Water Service Agreement.
- 8) EBMUD will continue to provide documentation of labor and services expended to CCWD to document its in-kind services provided to the Project as described in the Multi-party Agreement.

AGENDA ITEM NO. 4

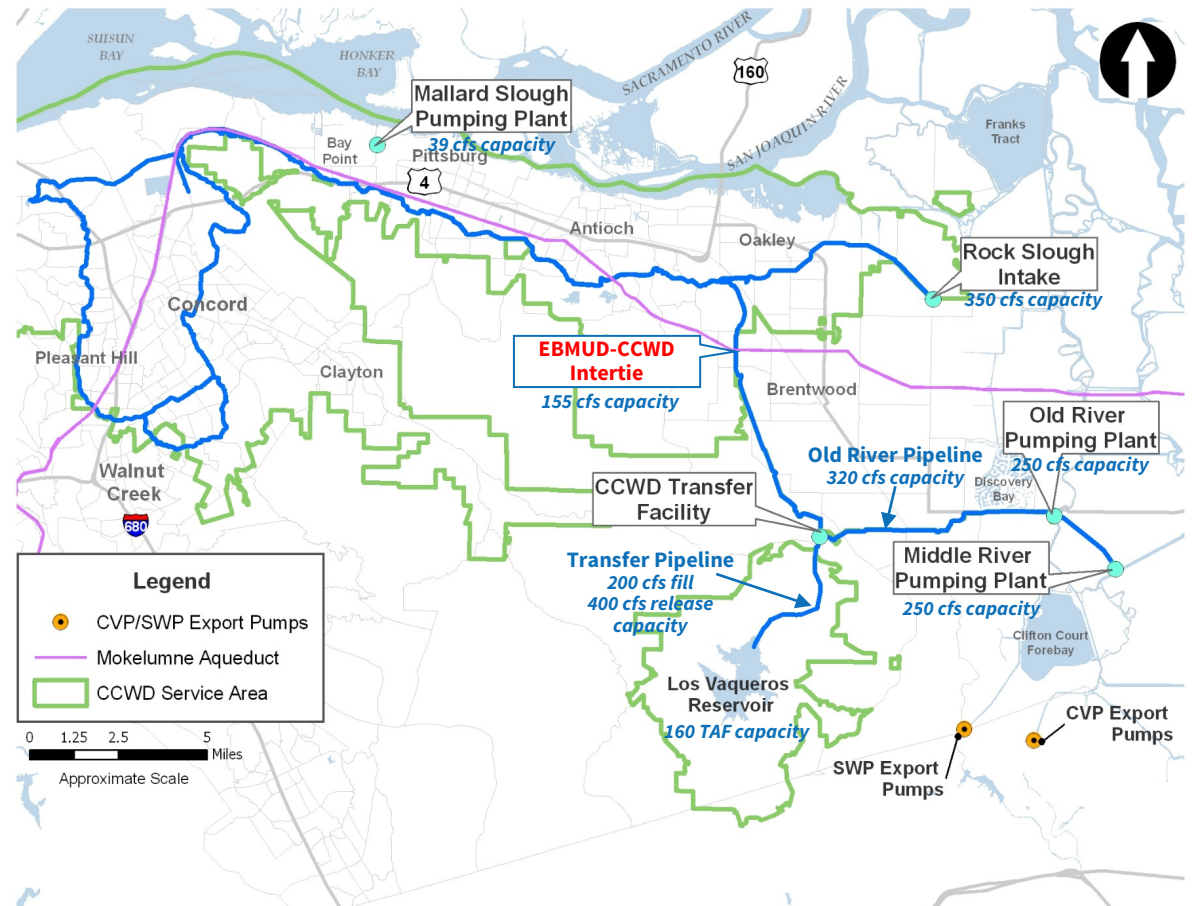
BACKSTOP MOU WITH EBMUD

BACKSTOP MOU WITH EBMUD



Background

- CCWD and the East Bay Municipal Utility District (EBMUD) have an existing untreated water intertie
- Connects Los Vaqueros Pipeline & Mokelumne Aqueduct No. 2
- Capacity is 155 cubic feet per second (cfs)
- Intertie operates in both directions



BACKSTOP MOU WITH EBMUD



Background

- 2002 - EBMUD and CCWD entered into an agreement for the delivery of water to either agency in the event of an emergency
- 2004 - EBMUD and CCWD entered into an agreement for wheeling up to 3,200 acre-feet per year of CCWD's Central Valley Project ("CVP") water through the Freeport Regional Water Project (FRWP)
- 2007 - EBMUD and CCWD entered into an agreement for long-term operation and maintenance of the untreated water intertie that provides for the sharing of water resources in emergencies or to support planned critical work

BACKSTOP MOU WITH EBMUD



Background

- 2011, 2013, & 2014 - EBMUD wheeled water through the raw water intertie for delivery to CCWD
- 2016 - EBMUD and CCWD adopted Principles of Agreement Regarding Wheeling of Water for CCWD through EBMUD Facilities that expressed the parties' commitment to:
 - work together to develop an agreement for additional use of the intertie for mutual benefit
 - seek permits needed to divert CCWD's Los Vaqueros water right water at FRWP
 - explore the possibility of using the Los Vaqueros Reservoir to store water for EBMUD

Construction of Los Vaqueros Dam Raise

- To construct dam raise, the site adjacent to the dam foundation will need to be dry, and the reservoir will need to be drained
- During dam construction, the District would not have access to the water quality and emergency supplies normally provided by Los Vaqueros Reservoir
- District is seeking Backstop Water Service during this period to ensure no water quality or water supply impacts to District customers

BACKSTOP MOU WITH EBMUD



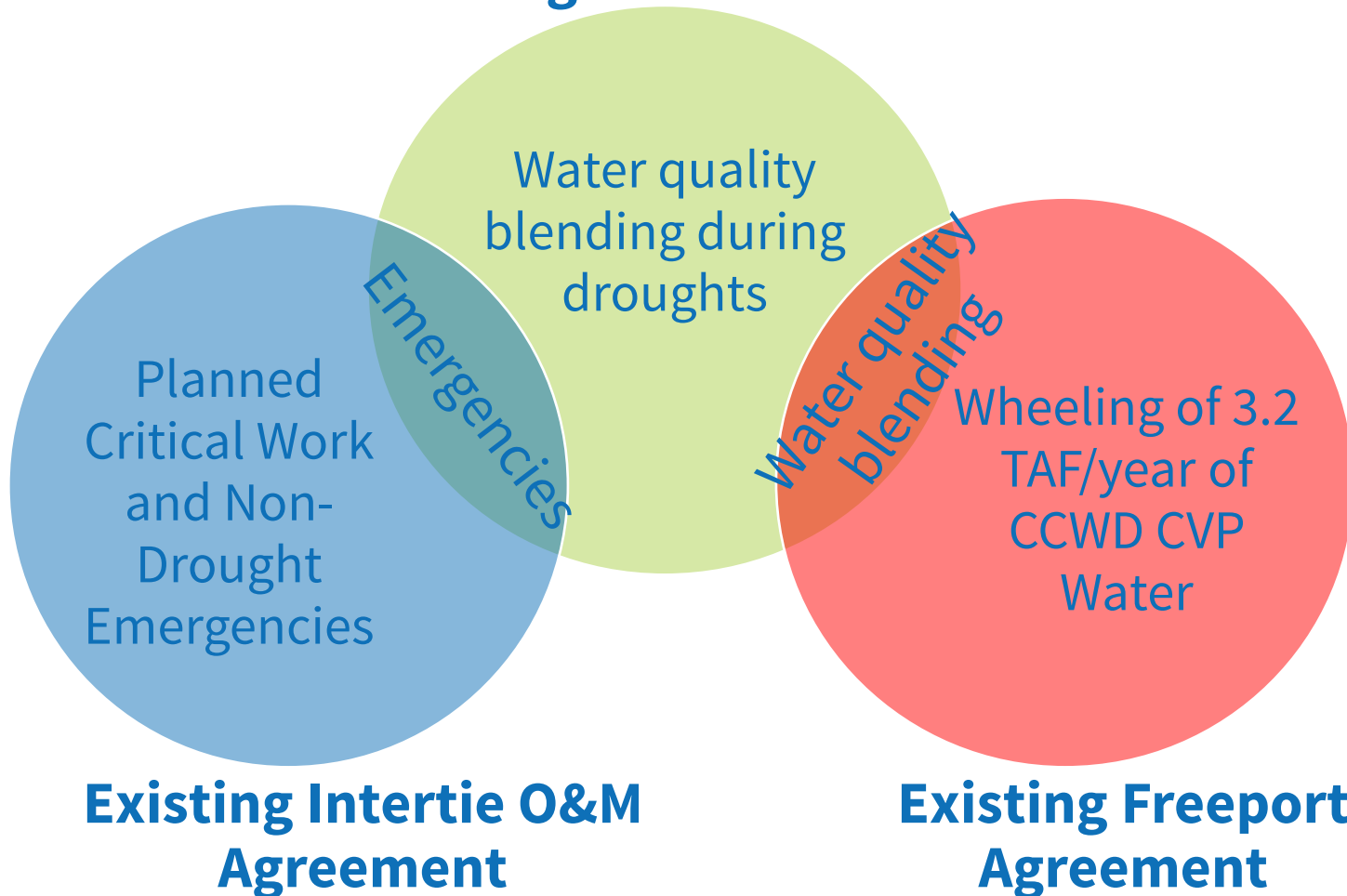
Backstop Water Service

- The District is seeking a backup source of high-quality water
- Could be needed during construction of the dam raise if the Delta is too salty to meet District's water quality delivery goals
- This situation would typically occur during a drought and/or during re-fill of the reservoir
- Provisions for conveyance and/or supplies during droughts and during re-fill of the reservoir are not covered in existing agreements with EBMUD

BACKSTOP MOU WITH EBMUD



New LVE Backstop Agreement



Emergency Supplies

- Emergency condition scenarios are not expected to be analyzed as part of this work because that is covered by existing agreements
- The source of supply for Backstop Water Service would be the District's Central Valley Project (CVP) contract or Los Vaqueros water right

BACKSTOP MOU WITH EBMUD



Next Steps

- EBMUD and CCWD conduct analyses to determine that Backstop Water Service can be provided under the desired conditions
- A final Backstop Water Service Agreement will be drafted which sets forth mutually acceptable terms and conditions for the provision of Backstop Water Service
- EBMUD will be entitled to reimbursement (funded by JPA) for the costs it incurs to provide Backstop Water Service to CCWD

BACKSTOP MOU WITH EBMUD




Next Steps (cont.)

- EBMUD will work together with CCWD on any water rights change(s) necessary for CCWD to divert water appropriated under its CVP Contract and Los Vaqueros water right at Freeport

CONTRA COSTA WATER DISTRICT
Staff Report

DATE: September 8, 2021

TO: Operations and Engineering Committee

FROM: Stephen J. Welch 

SUBJECT: **Los Vaqueros Reservoir Expansion Project – Facilities Update**

INTRODUCTION

The Contra Costa Water District (District) continues to conduct planning, permitting, cost estimating, and design of Phase 2 Los Vaqueros (LV) Reservoir Expansion Project (LVE Project) facilities, consistent with the Multi-Party Agreement with the Local Agency Partners (LAPs), the Funding Agreement with the California Water Commission (CWC) and the proposed Assistance Agreement with the United States Bureau of Reclamation (Reclamation) approved by the Board on June 16, 2021. The purpose of this report is to provide an overview of the new facilities and upgrades at the Transfer Facility and to provide an update on the LV Dam Expansion design schedule.

RECOMMENDATION

Receive report and comment.

DISCUSSION

The LVE Project includes the design and construction of several new conveyance facilities, modifications to existing conveyance facilities and expansion of the LV Dam (see Exhibit A). The District continues to progress a variety of facilities planning, design and cost estimating to support the project and to refine the planned timeline (see Exhibit B). The focus of this report is to provide an update on the planned Expanded Transfer Facility and the Transfer Pump Station upgrades, which will be the hub of all water deliveries for the LVE Project. This report also provides an update on the schedule for California Division of Safety of Dams (DSOD) approval of the application for the expanded reservoir.

Existing Transfer Facility

The existing Transfer Facility, constructed as part of the original LV Project, consists of: 1) Transfer Pump Station, a 200 cubic-feet per second (cfs) pump station to fill the LV Reservoir, and 2) Transfer Reservoir, a four million gallon (MG) steel tank. The Transfer Facility is the conveyance hub that directs diversions from Old River Pump Station and Middle River Pump Station to fill and

release water from the LV Reservoir, delivers water to the Contra Costa Canal (Canal), and for water deliveries for the East Bay Municipal Utilities District intertie. Transfer Reservoir provides operational storage and is the hydraulic control to prevent over-pressurizing the LV Pipeline.

Expanded Transfer Facility

The LVE Project will construct new facilities within the existing Transfer Facility site to deliver water to the Transfer-Bethany Pipeline for conveyance to the California Aqueduct and the LAPs. The Expanded Transfer Facility includes a new Transfer-Bethany Pump Station, a new flow control station (Flow Control Station No. 3), and a new 10 MG Transfer Reservoir No. 2. The new pump station will have a design capacity of 300 cfs, consisting of seven 50 cfs pumps designed to meet maximum pumping demands with one of the pumps out of service for routine maintenance or an unplanned outage. The new pump station will convey water to the Transfer-Bethany Pipeline that is either diverted from Old River, Middle River or pumped from the Canal through the proposed Neroly High Lift Pump Station.

Water released from the Expanded LV Reservoir will flow through Flow Control Station No. 3 by gravity to the Transfer-Bethany Pipeline for delivery to the California Aqueduct. The new flow control station will be similar to the two existing flow control stations designed and constructed with the original LV Project to control releases from the LV Reservoir and deliveries to the Canal.

The new Transfer Reservoir No. 2 will be constructed adjacent to the existing Transfer Reservoir and will operate in parallel to balance flows during LVE operations. The District completed operational modeling and determined the new reservoir should be 10 MG to provide sufficient operational storage for the variety of LVE operations while protecting against potential overflow or reservoir-draining events. Modeling evaluated use of multiple intakes and pump stations at maximum anticipated capacities, time needed for operational decisions in reaction to events, systematic adjustments to changing demands, and emergency shutdowns.

Transfer Pump Station Upgrades

The existing 200 cfs Transfer Pump Station, consisting of four 50-cfs pumps, will be upgraded to deliver water to the elevated water surface of the expanded LV Reservoir. Upgrades will be designed to meet planned LVE operations and provide operational flexibility to meet changing conditions and water supply demands. The existing pumps will be replaced with pumps capable of delivering 200 cfs to the expanded reservoir with one pump out of service. Variable frequency drives are also planned to enable pumping through the full range of reservoir levels while matching the combined flows from the other pump stations. Matching flows will simplify operations and provide flexibility as adjustments are made to other facility operations.

Los Vaqueros Dam Expansion Design

Final design of the expanded LV Dam is needed to secure approval from the DSOD, prior to the CWC award of the full funding agreement. The timing of the CWC award has been extended to

allow the LAPs to complete formation of the LV Reservoir Joint Powers Authority and to enter into the other agreements that are also needed prior to full funding, anticipated in Summer 2022 at the earliest.

DSOD has reviewed progressive design submittals and participated in meetings with the District's Technical Review Board. The 90-percent dam expansion design plans and specifications were submitted in June. DSOD recently notified the District that the lead project engineer has been promoted to a position working on other projects and that DSOD is in the process of hiring a replacement, which will result in a delay as the new engineer is on-boarded.

Working with DSOD, the District has revised the design review schedule to align with DSOD's resources and meet the anticipated CWC approval timeframe. The following is an updated summary of the key dam review and approval milestones:

- | | |
|--|---------------|
| • DSOD Comments on 90-percent Dam Design | November 2021 |
| • Submit 100-percent Dam Design | February 2022 |
| • DSOD Approval of Dam Expansion | May 2022 |

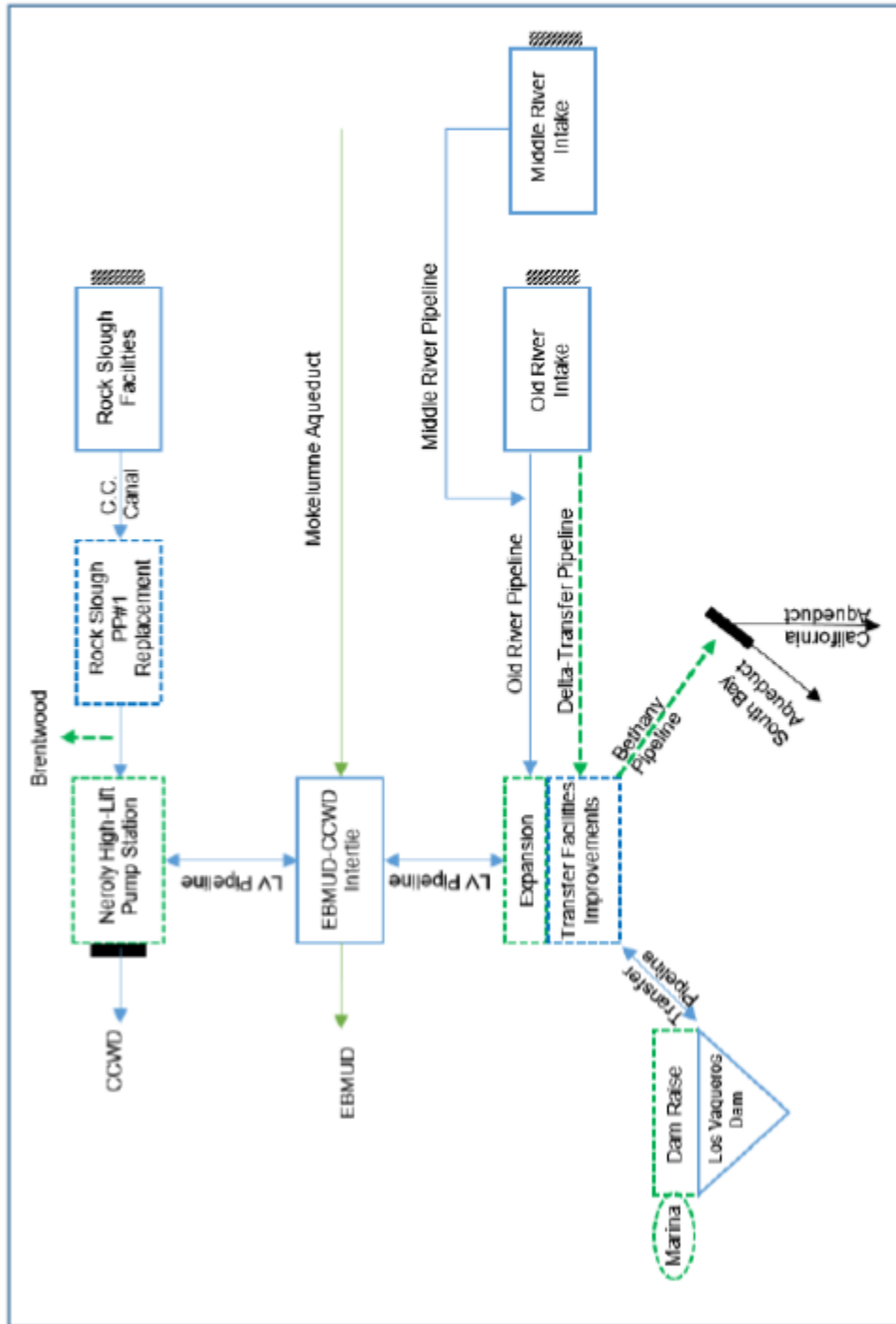
FISCAL IMPACT

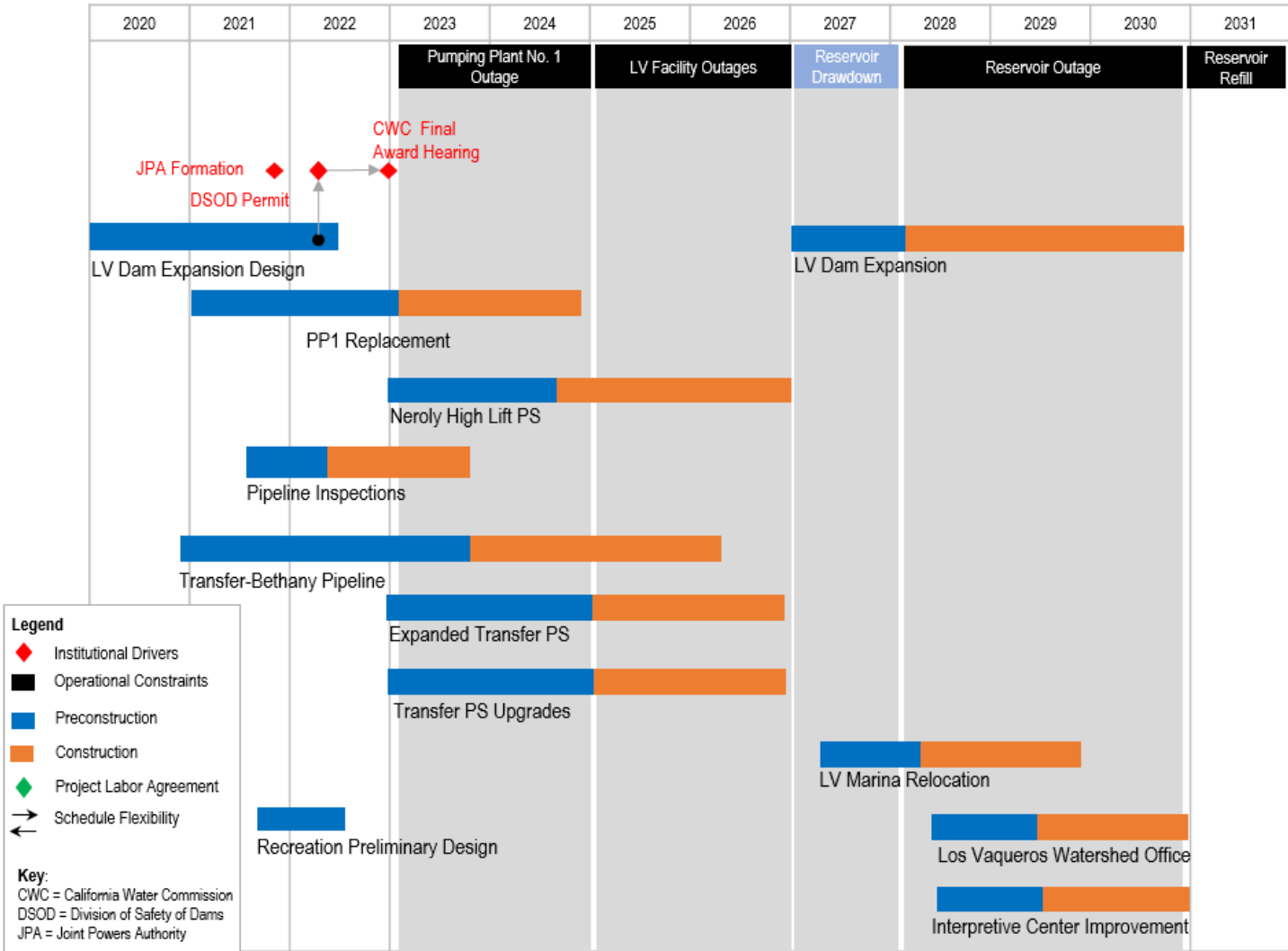
Staff, consulting services and agency fees are funded by existing agreements with the CWC and LAPs. The District has proposed Amendment No. 3 to the Multi-Party Agreement with the LAPs to fund activities in 2022 and is working with Reclamation to finalize the Assistance Agreement to provide matching funds for costs incurred from January 1, 2021 through December 20, 2022. The Fiscal Year 2022 budget includes sufficient funds to cover anticipated expenditures. The District continues to monitor work progress to ensure the consultant work does not exceed the funds available.

SW/RM/CH:mc

Exhibits: A – LVE Project Facilities
 B – LVE Project Schedule
 C – Presentation Slides

LVE Project Facilities





LVE Project Schedule

AGENDA ITEM NO. 4

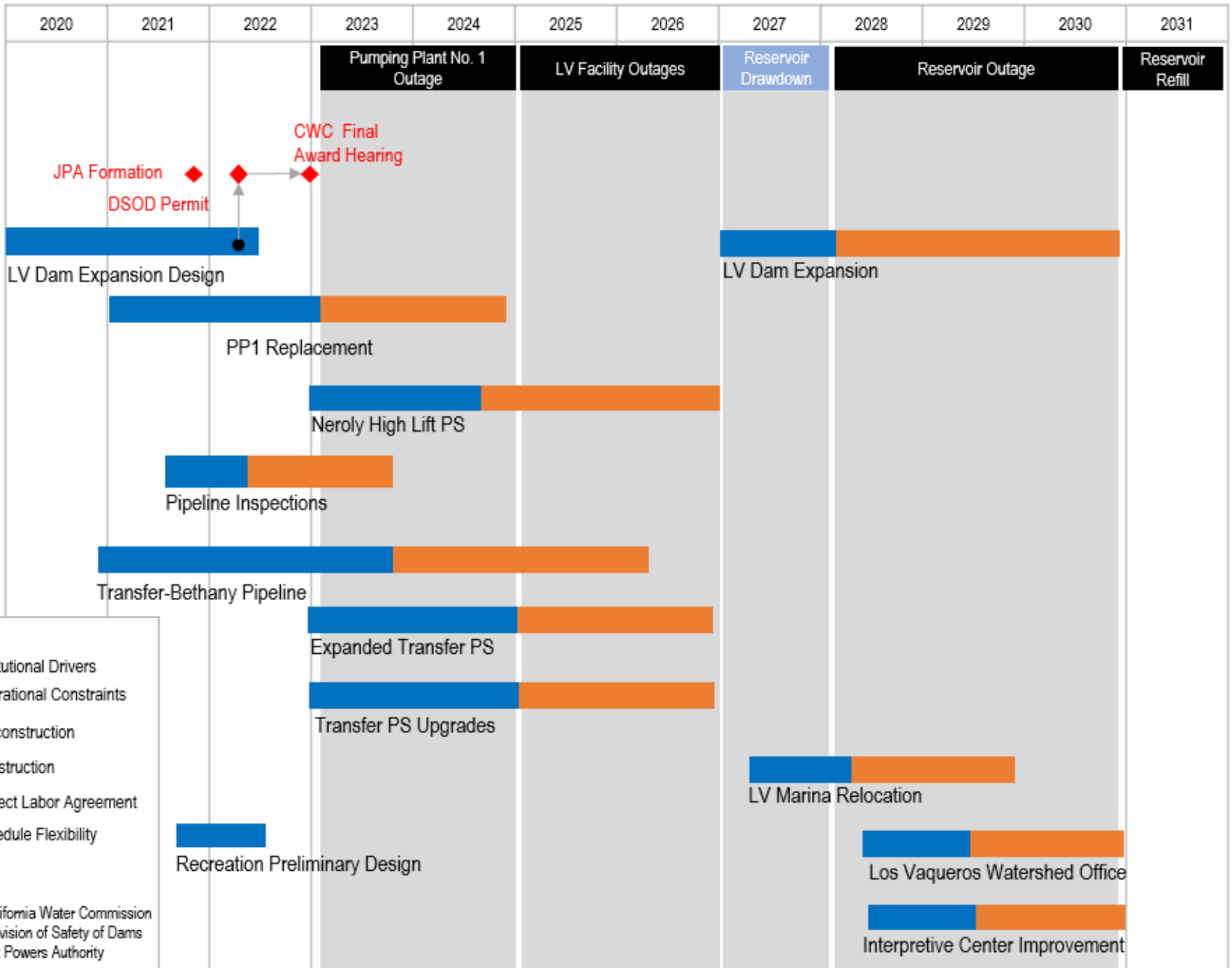
LOS VAQUEROS RESERVOIR EXPANSION PROJECT – FACILITIES UPDATE

LOS VAQUEROS RESERVOIR EXPANSION PROJECT – FACILITIES UPDATE



Project Facility Activities

- Detailed design of several facilities is progressing to meet the LVE Project schedule
 - Pumping Plant No. 1 Replacement
 - Transfer-Bethany Pipeline
 - Los Vaqueros (LV) Dam Expansion
- Plans for new and upgraded facilities continue to be evaluated to confirm the LVE Project scope and cost



LOS VAQUEROS RESERVOIR EXPANSION PROJECT – FACILITIES UPDATE



Existing Transfer Facility

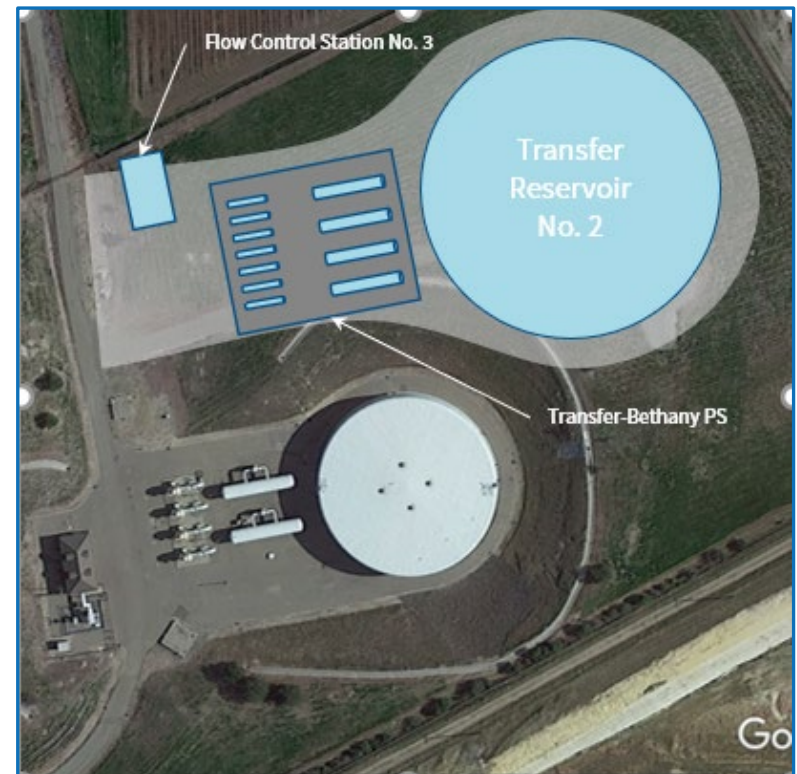
- Hub of the LV system operation for diversions and deliveries to storage and the Canal
- Transfer Pump Station can deliver up to 200 cubic feet per second (cfs) to the existing LV Reservoir
- 4 million gallon (MG) reservoir provides operational storage and hydraulic control



LOS VAQUEROS RESERVOIR EXPANSION PROJECT – FACILITIES UPDATE

Expanded Transfer Facility

- New facilities located within the existing Transfer Facility
 - Transfer-Bethany Pump Station
 - Transfer Reservoir No. 2
 - Flow Control Station No. 3



LOS VAQUEROS RESERVOIR EXPANSION PROJECT – FACILITIES UPDATE



Transfer-Bethany Pump Station

- Deliver 300 cfs through the Transfer-Bethany Pipeline to the CA Aqueduct
- Meet design capacity with one pump out of service
- Include Variable Frequency Drives to efficiently match flows and simplify operations
- New electrical feed, substation and electrical building

LOS VAQUEROS RESERVOIR EXPANSION PROJECT – FACILITIES UPDATE



Transfer Reservoir No. 2

- 10 MG reservoir will operate in parallel with existing Transfer Reservoir
- Provides operational storage and hydraulic control to balance operations
- Sized to prevent overflow or draining under normal and emergency operating conditions

LOS VAQUEROS RESERVOIR EXPANSION PROJECT – FACILITIES UPDATE



Flow Control Station No. 3

- Controls LV releases to Transfer-Bethany Pipeline for conveyance to CA Aqueduct
- Dual sleeve valve provides redundancy, matching existing District flow control stations
- Design to minimize surge potential, applying lessons from original LV Project

LOS VAQUEROS RESERVOIR EXPANSION PROJECT – FACILITIES UPDATE



Transfer Pump Station Upgrades

- Replace pumps, motors and electrical equipment
- Deliver 200 cubic-feet per second to the highest reservoir level
- Meet design capacity with one pump out of service
- Install variable frequency drives to efficiently match other LVE operations
- Install additional surge protection



LOS VAQUEROS RESERVOIR EXPANSION PROJECT – FACILITIES UPDATE



Los Vaqueros Dam Expansion

- Complete design and obtain Division of Safety of Dams (DSOD) approval prior to full funding agreement
- DSOD staffing changes have slowed review of 90 percent design
- Final design planned for February 2022
- DSOD Approval anticipated in May 2022
- Revised schedule meets LVE Project objectives

LOS VAQUEROS RESERVOIR EXPANSION PROJECT – FACILITIES UPDATE



Fiscal Impact

- Funding for ongoing work is included in project agreements:
 - Multi-Party Agreement Amendment No. 3
 - CWC Early Funding Agreement
 - Pre-Construction Agreement with Reclamation