



**LOS VAQUEROS RESERVOIR JOINT POWERS AUTHORITY  
OPERATIONS AND ENGINEERING COMMITTEE**

**AGENDA**

Regular Meeting

April 21, 2022 – 2:00 p.m.

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**SPECIAL NOTICE OF TELECONFERENCE ACCESSIBILITY**

Pursuant to the provisions of Government Code Section 54953(e), as amended by Assembly Bill 361, any Committee Member and any member of the public who desires to participate in the open session items of this meeting may do so by accessing the Zoom link below without otherwise complying with the Brown Act's teleconference requirements.

**Please click the link below to join the Meeting/Webinar:**

**<https://lagerlof.zoom.us/j/86595794916?pwd=NUNWSUUvc3dDcUZkdXdDUjVqT0ZsZz09>**

**Meeting/Webinar ID: 865 9579 4916**

**Passcode: 356893**

**Or One tap mobile :**

**+1-669-900-6833 865-9579-4916# \*356893# or**

**+1-253-215-8782 865-9579-4916# \*356893#**

Any member of the public wishing to make any comments to the Committee may do so by accessing the above-referenced link where they may select the option to join via webcam or teleconference. Members of the public may also submit written comments to the Interim Clerk by 4:00 p.m. on the day prior to the meeting for the Interim Clerk to read into the record (subject to three-minute limitation). The meeting Chair will acknowledge such individual(s) at the appropriate time in the meeting prior to making their comment. Members of the public will be disconnected from the meeting prior to any Closed Session, if applicable.

*NOTE: To comply with the Americans with Disabilities Act, if you need special assistance to participate in this Committee meeting, please contact the Authority's Interim Clerk at [rperea@lagerlof.com](mailto:rperea@lagerlof.com) by 4:00 p.m. on April 20, 2022 to inform the Authority of your needs and to determine if accommodation is feasible. Each item on the Agenda shall be deemed to include any appropriate motion, resolution, or ordinance, to take action on any item. Materials related to items on this Agenda are available for public review at: [www.losvaquerosjpa.com/board-meetings](http://www.losvaquerosjpa.com/board-meetings).*

## **CALL TO ORDER**

## **PLEDGE OF ALLEGIANCE**

## **ROLL CALL OF COMMITTEE MEMBERS**

Jose Gutierrez – Chair, San Luis & Delta-Mendota Water Authority

Jonathan Wunderlich – Alameda County Water District

Lisa Borba – Contra Costa Water District

Steve Ritchie – San Francisco Public Utilities Commission

## **PUBLIC COMMENT ON NON-AGENDA ITEMS**

*Any member of the public wishing to address the Operations and Engineering Committee regarding items not on the Agenda should do so at this time. The Committee welcomes your comments and requests that speakers present their remarks within established time limits and on issues that directly affect the Authority or are within the jurisdiction of the Authority.*

## **DISCUSSION ITEMS**

**1.1 Overview of Phase 2 Los Vaqueros Reservoir Expansion Project Facilities**

**1.2 Scheduling of Future Committee Meetings**

## **FUTURE AGENDA ITEMS**

## **ADJOURNMENT**

**ITEM 1.1: OVERVIEW OF PHASE 2 LOS VAQUEROS RESERVOIR EXPANSION PROJECT FACILITIES**

**RESPONSIBLE/LEAD STAFF MEMBER:**

Marguerite Patil, Interim Administrator

**DISCUSSION:**

Contra Costa Water District (CCWD) is the owner and operator of the existing Los Vaqueros Reservoir and associated conveyance facilities referred to as CCWD-Provided Facilities. East Bay Municipal Utility District (EBMUD) is the owner and operator of the Freeport Intake, Mokelumne Aqueduct, and associated conveyance facilities referred to as EBMUD-Provided Facilities. The Los Vaqueros Reservoir Joint Exercise of Powers Agreement (JPA Agreement) describes the relationship of the CCWD-Provided Facilities and EBMUD-Provided Facilities to the Phase 2 Los Vaqueros Reservoir Expansion Project (LVE Project). The LVE Project also includes several new and modified facilities. A List of Facilities was included in Exhibit B to the JPA Agreement (see attached).

Chris Hentz, LVE Project Engineering Manager at CCWD, will provide the Committee with an overview of the existing and planned new and modified facilities included in the LVE Project.

**ALTERNATIVES:**

For information only; no alternatives applicable.

**FISCAL ANALYSIS:**

Fiscal impact will depend on facilities' design and construction costs at the time of implementation.

**ENVIRONMENTAL REQUIREMENTS:**

Not applicable.

**EXHIBITS/ATTACHMENTS:**

JPA Agreement - Exhibit B – List of Facilities

Slide deck

**EXHIBIT B  
LIST OF FACILITIES\***

<b>No.</b>	<b>Description</b>	<b>Type</b>	<b>Builder</b>	<b>Operator</b>
1	Los Vaqueros Dam Raise	New Facility	CCWD	CCWD
2	Neroly High-Lift Pump Station	New Facility	CCWD	CCWD
3	Transfer Facility Expansion	New Facility	CCWD	CCWD
4	Transfer-Bethany Pipeline	New Facility	CCWD	CCWD
5	Los Vaqueros Recreation Facilities	Modified Facility	CCWD	CCWD
6	Rock Slough PP#1 Replacement	Modified Facility	CCWD	CCWD
7	Transfer Facilities Improvements	Modified Facility	CCWD	CCWD
8	Mokelumne Aqueduct Lining	Modified Facility	EBMUD	EBMUD
9	Walnut Creek VFDs	New Facility	EBMUD	EBMUD
10	Mokelumne Aqueduct	EBMUD-Provided Facility	EBMUD is responsible for construction, operation, and maintenance and is compensated through the EBMUD Facilities Usage Agreement	
11	Freeport Intake	EBMUD-Provided Facility		
12	Walnut Creek Pumping Plant	EBMUD-Provided Facility		
13	EBMUD-CCWD Intertie	CCWD-Provided Facility	CCWD is responsible for construction, operation, and maintenance and is compensated through the CCWD Facilities Usage Agreement	
14	Los Vaqueros Dam	CCWD-Provided Facility		
15	Los Vaqueros Pipeline	CCWD-Provided Facility		
16	Middle River Intake	CCWD-Provided Facility		
17	Middle River Pipeline	CCWD-Provided Facility		
18	Old River Intake	CCWD-Provided Facility		
19	Old River Pipeline	CCWD-Provided Facility		
20	Rock Slough Facilities	CCWD-Provided Facility		
21	Transfer Pipeline	CCWD-Provided Facility		

\*This Exhibit B lists those facilities that have been included in various Project application and agreement documents. Some facilities listed on Exhibit B will provide differing levels of benefits (or no benefits) to certain Members. The Service Agreements and Facilities Usage Agreements will address those specific levels of benefits and related cost allocations. Facilities listed in this Exhibit B are subject to modification as to the nature and type of the facility, and additional facilities may be added to Exhibit B prior to JPA formation as circumstances may warrant, including obtaining of additional state or federal grant funding. No rights to the use of any facility are provided by reason of the listing of that facility on Exhibit B. Such rights of use are only provided through the Facilities Usage Agreements and Service Agreements to be entered into.

The logo for the Los Vaqueros Reservoir Expansion Project. It features the words "LOS VAQUEROS" in blue, "RESERVOIR EXPANSION" in green, and "PROJECT" in green. To the right of the text is a stylized graphic of a reservoir dam or structure, composed of several horizontal bars in shades of blue and green, forming a trapezoidal shape.

# LOS VAQUEROS RESERVOIR EXPANSION PROJECT

A scenic landscape photograph of the Los Vaqueros Reservoir. The reservoir is a large body of blue water in the middle ground. In the background, there are rolling green hills with several wind turbines. The foreground shows a grassy hillside with a road and some trees.

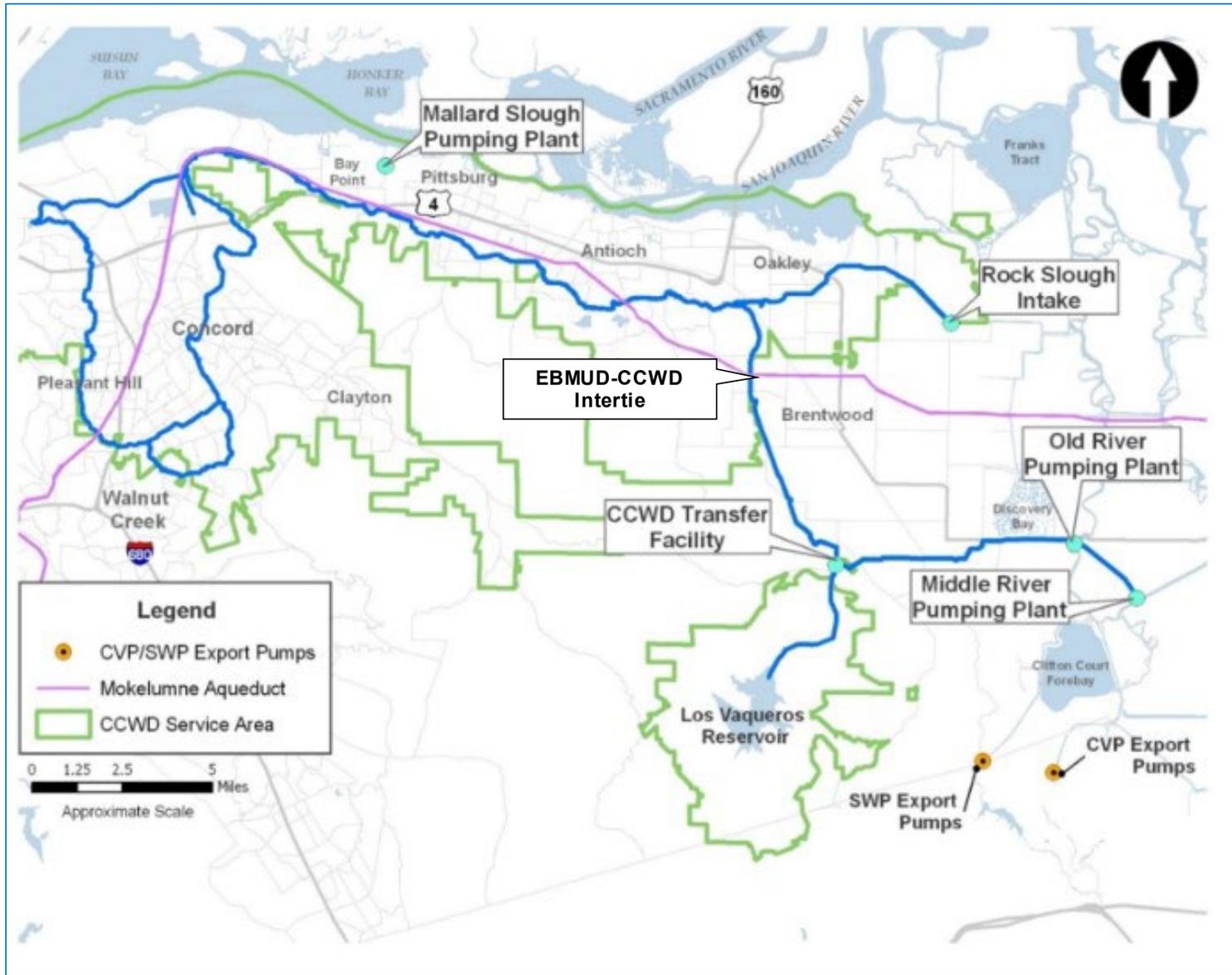
Los Vaqueros Reservoir Joint Powers Authority  
Operations & Engineering Committee  
LVE Facilities Overview  
April 21, 2022

## Background

- Los Vaqueros (LV) Project was constructed in 1990s to improve water quality, reliability and emergency storage
- Phase 1 LV Expansion increased storage 160 thousand acre-feet (TAF) in 2012
- Excess conveyance capacity provides opportunity for re - operation to accrue regional benefits for JPA members
- LVE facilities and operations are intended to maximize partner benefits while meeting CCWD objectives

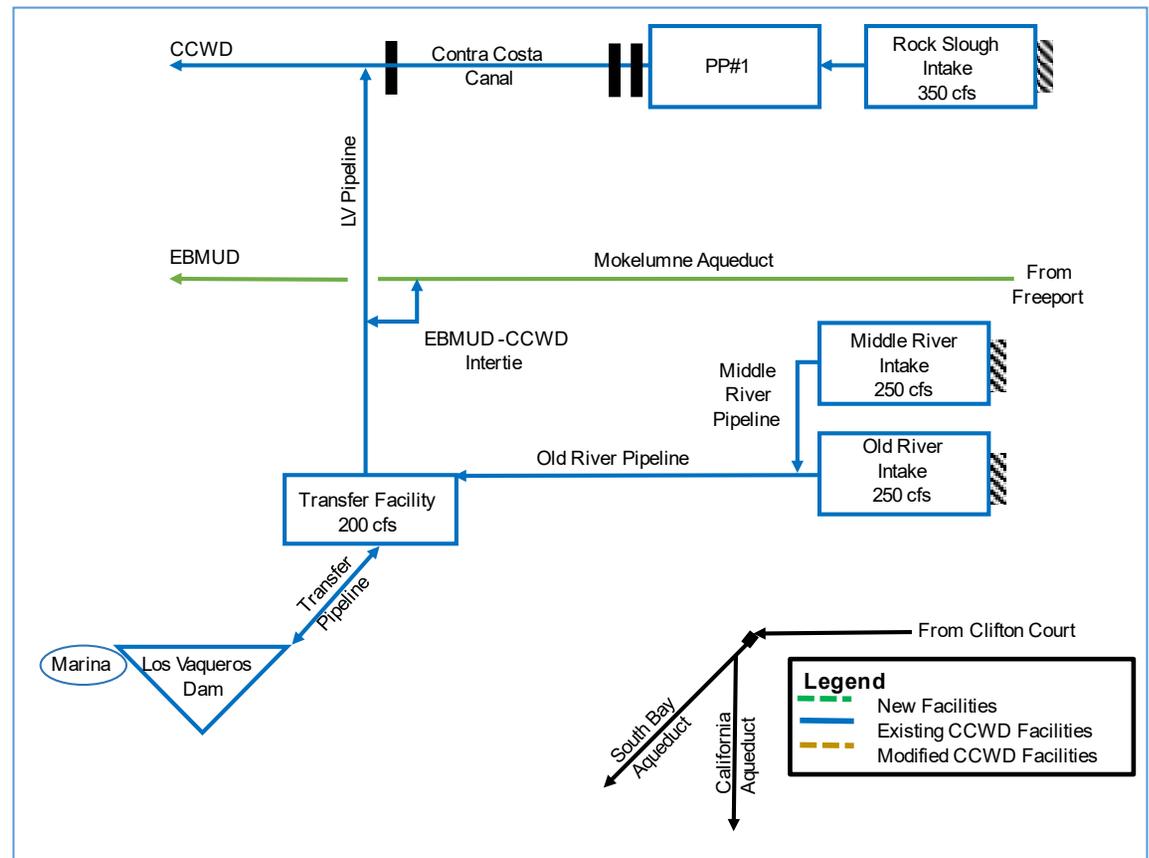
## Background (Cont.)

- CCWD continues to plan and develop designs for facilities consistent with the Multi -Party Cost Share Agreement
- JPA Agreement (Exhibit B) defines new and modified facilities included in the LVE Project
  - CCWD is responsible for facilities presented herein
  - EBMUD is responsible for facilities improvements associated with the Mokelumne Aqueduct
- Future design and construction agreements will further define roles and responsibilities for Project implementation



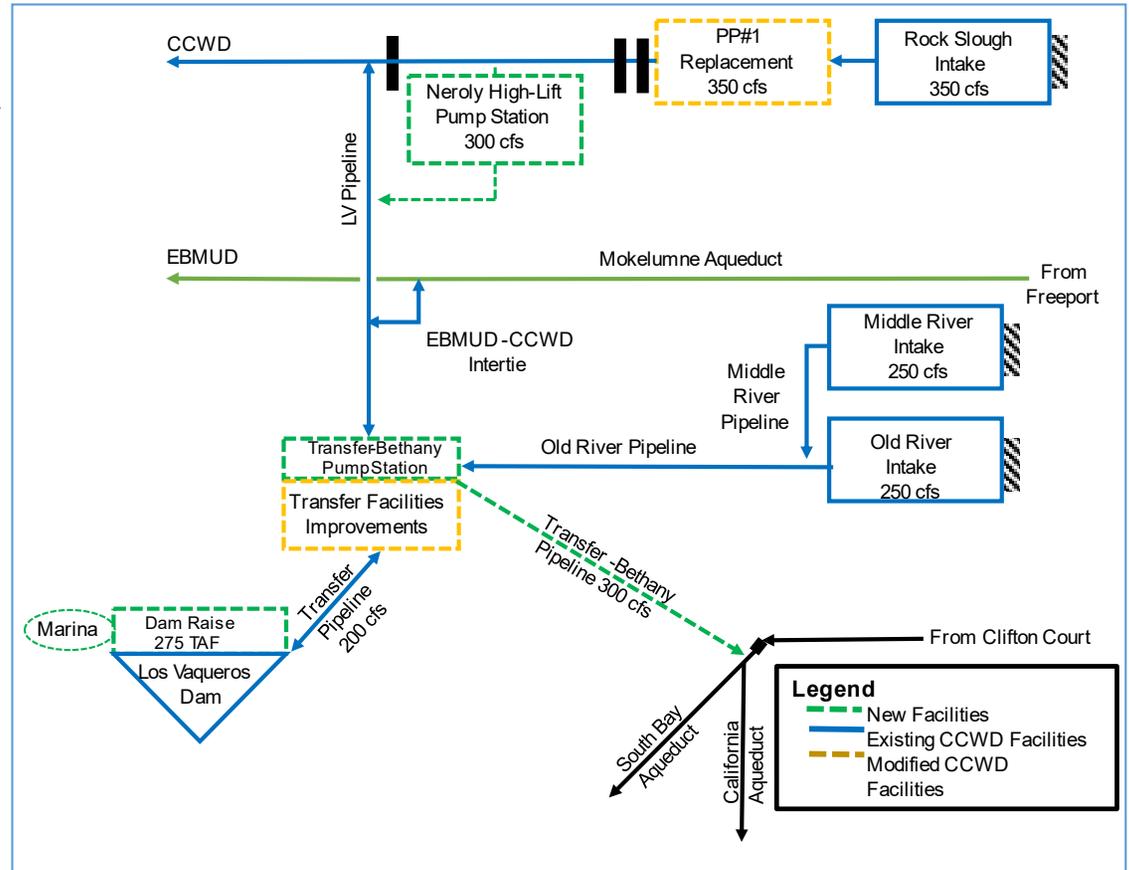
# Existing Facilities and Operations

- Direct deliveries to Contra Costa Canal (Canal) from all intakes
- Deliveries to storage from Old River & Middle River
- LV releases to Canal for water quality blending and supply
- LVE Operations will utilize all CCWD facilities shown



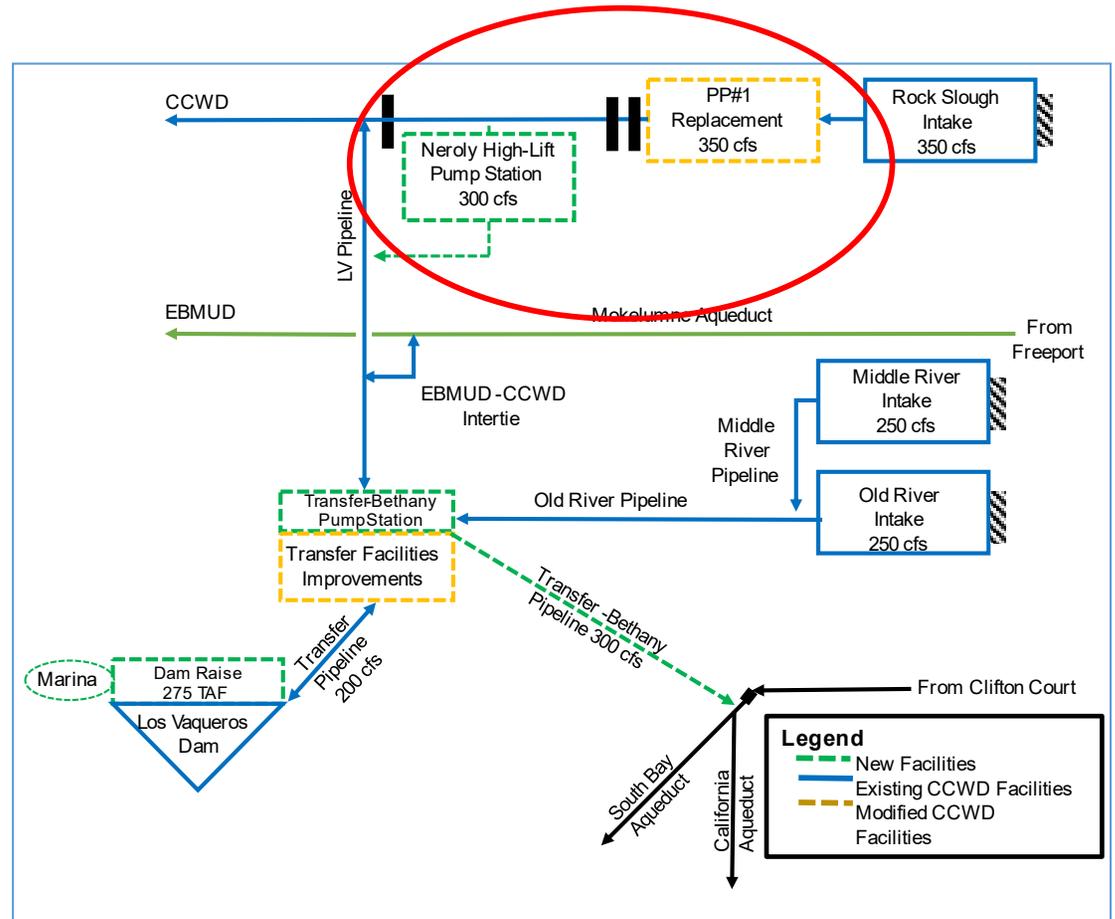
# LVE Facilities and Operations

- Rock Slough (RS) Deliveries
  - Enable RS deliveries to storage or direct deliveries to partners
  - Reliable RS capacity to meet CCWD demands and free up other intakes for partner operations
- Deliveries to the CA Aqueduct
  - Pump and convey water from direct diversions from all intakes
  - Direct deliver from storage
- Increased storage



# LVE Facilities and Operations

- Rock Slough Deliveries
  - Pumping Plant No. 1 Replacement
  - Neroly High-Lift Pump Station

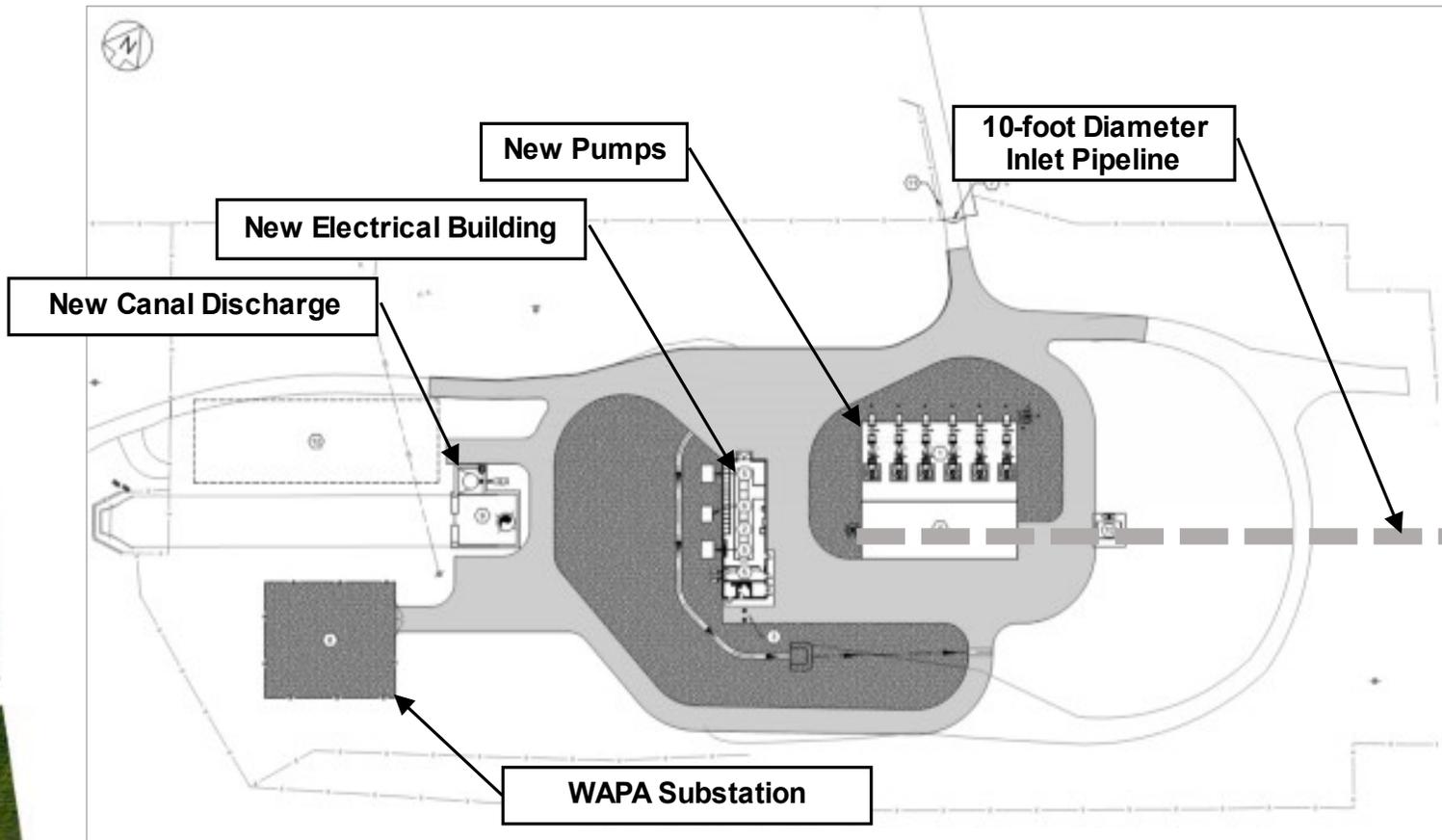


## Pumping Plant #1 (PP1) Replacement

- Existing PP1 unable to supply 350 cubic feet per second (cfs) permitted diversion capacity needed to meet LVE operations
- Critical facility to meet CCWD demands during LVE facility construction
- Reconstruct pump station
  - 6 pumps, cfs capacity
  - New electrical facilities



# Pumping Plant #1 (PP1) Replacement



## PP1 Replacement Design

### Design Status

- 30% Design has been completed
- CCWD and Reclamation are conducting Value Engineering
- Additional geotechnical investigations will be completed in June 2022
- Final design completion early 2023



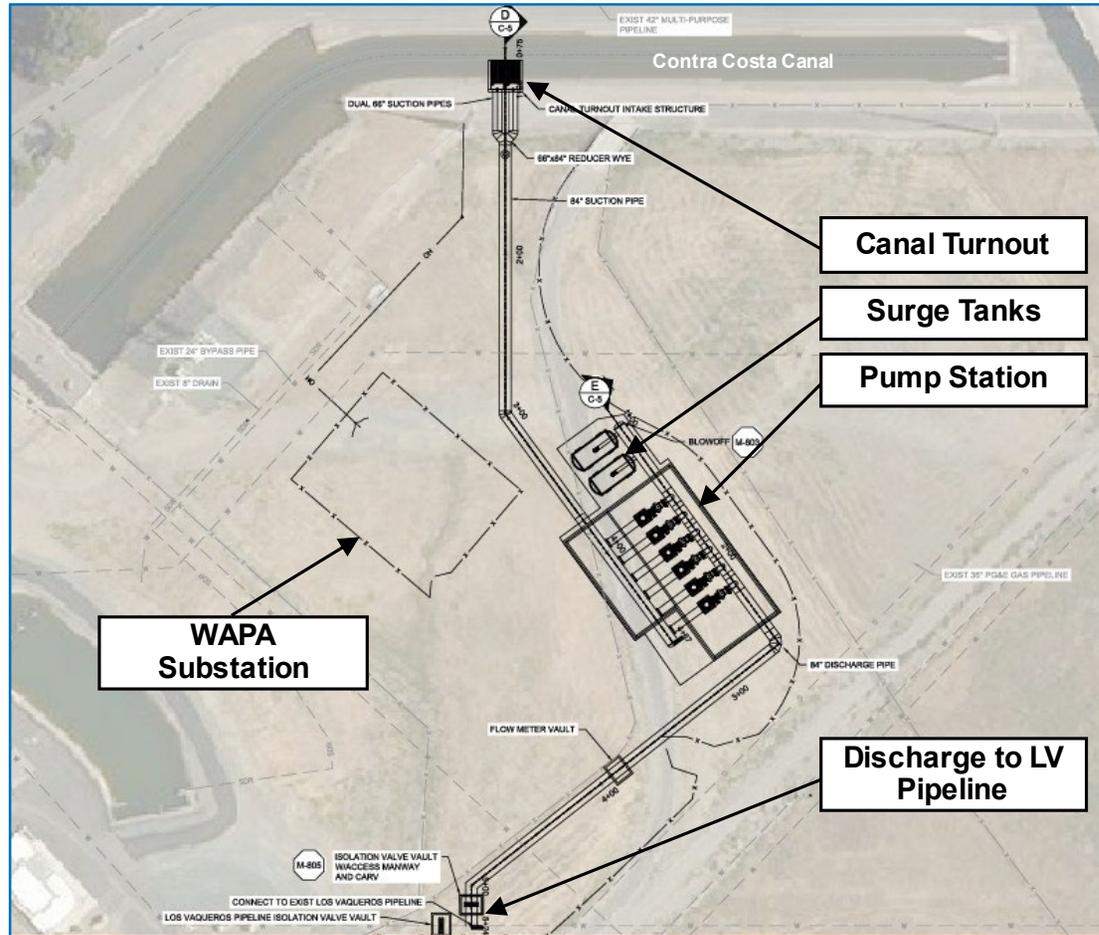
# Neroly High Lift Pump Station (NHLPS)



- Allows pumping from Canal to storage in LVE or delivery to CA Aqueduct
- New NHLPS
  - 6 pumps
  - 300 cfs capacity
  - Electrical facilities
  - Surge tanks

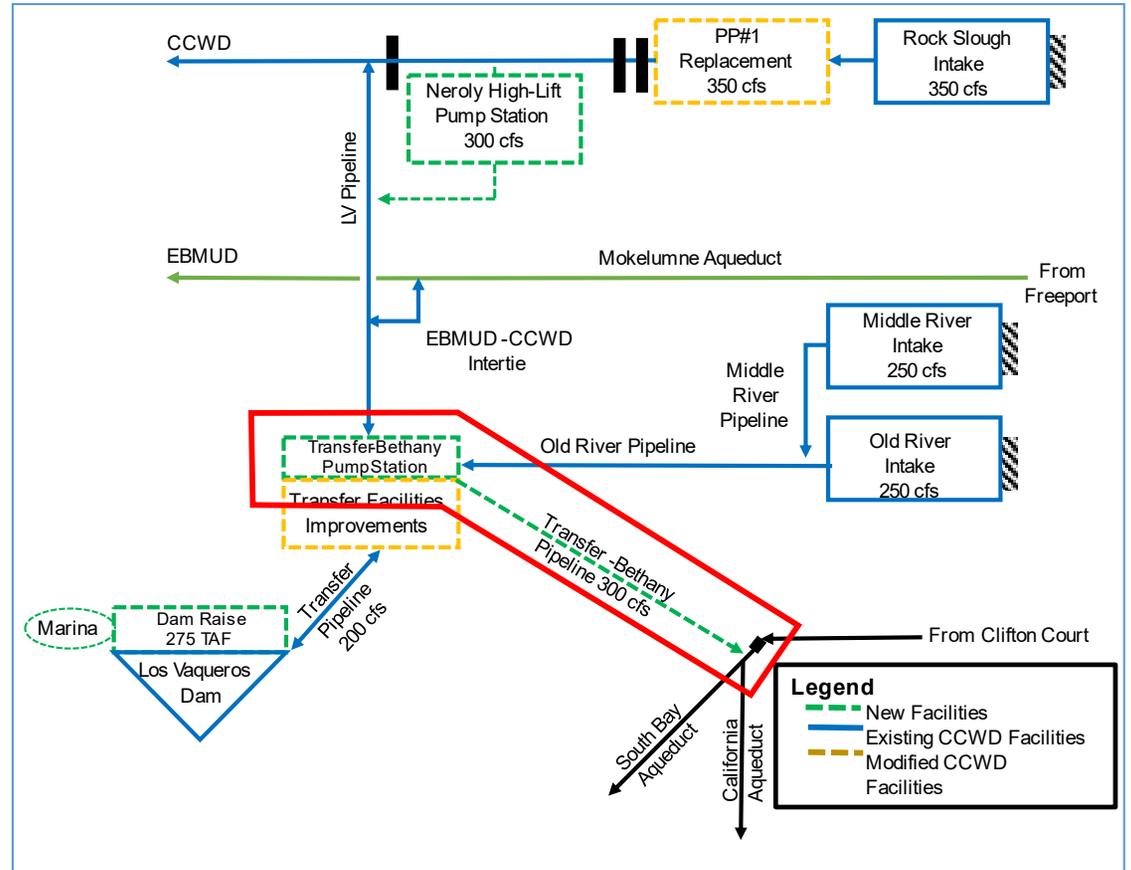


# Neroly High Lift Pump Station (NHLPS)



# LVE Facilities and Operations

- Deliveries to the CA Aqueduct
  - New Transfer-Bethany Pump Station
  - Transfer-Bethany Pipeline

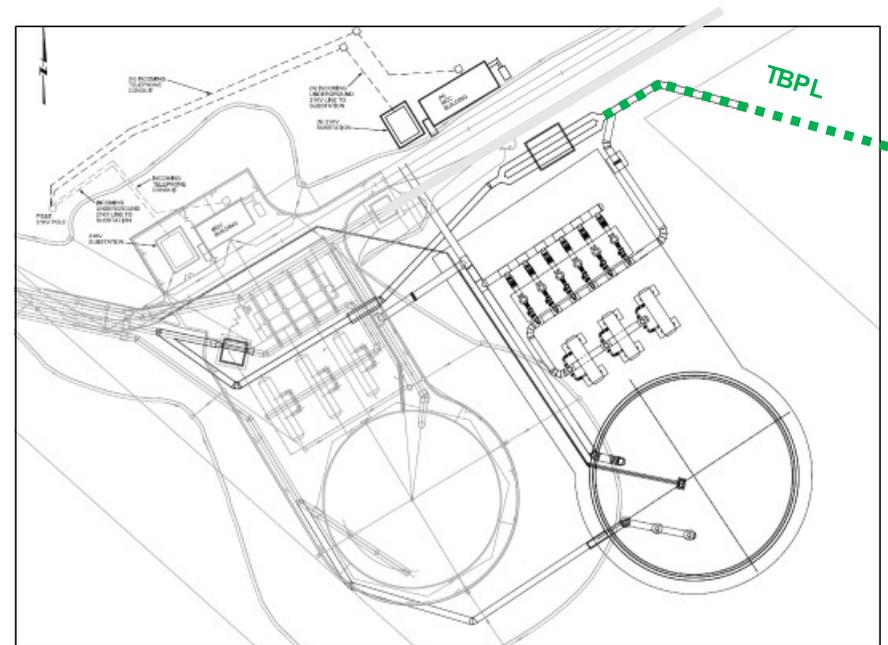




# Transfer-Bethany Pump Station



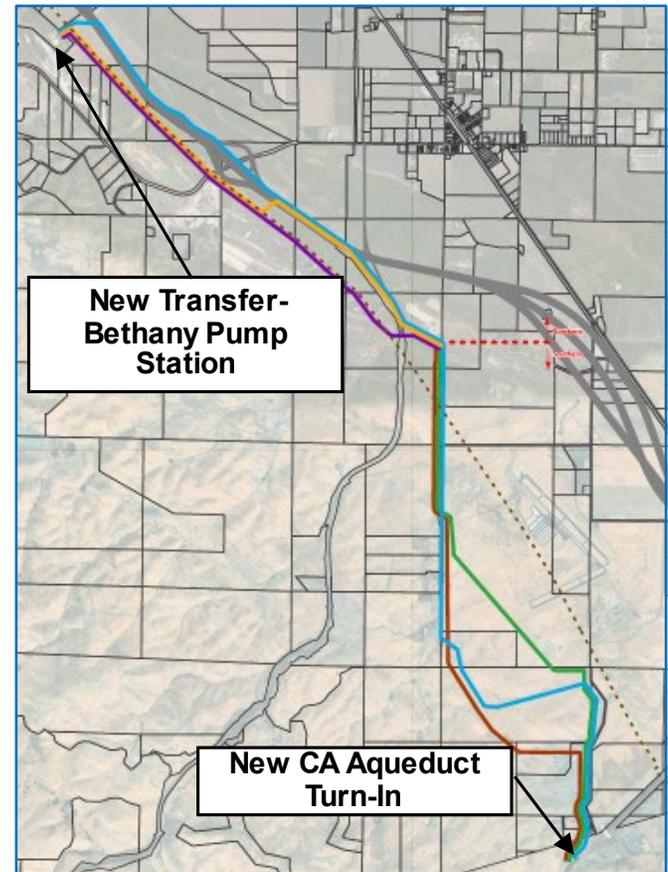
- Pumps to Transfer -Bethany Pipeline (TBPL) for deliveries to the CA Aqueduct
  - 300 cfs firm capacity
  - 6 pumps
  - Surge protection
- New 10 MG Reservoir
- Flow Control Station
- Detailed design planned to begin in early 2023





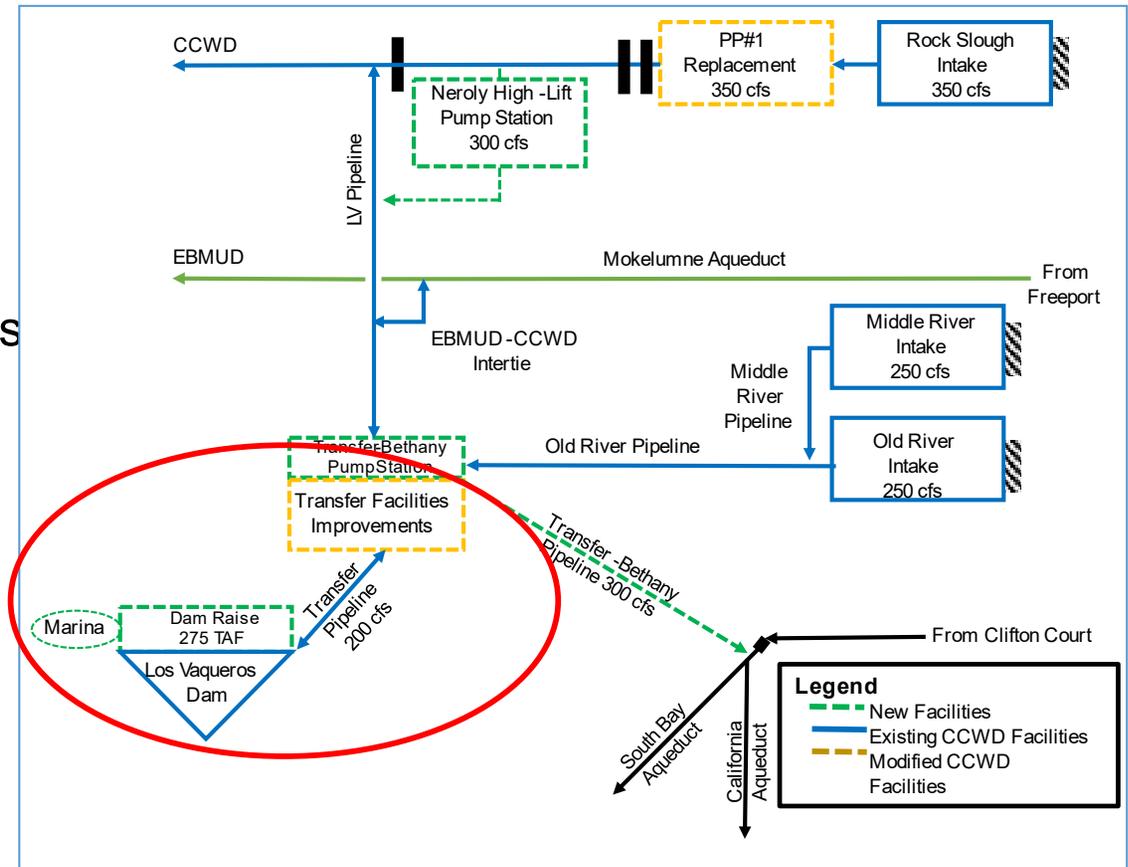
# Transfer-Bethany Pipeline

- Conveyance from new Transfer Facilities to CA Aqueduct
  - 8-mile, 84 -inch diameter pipeline
  - 300 cfs capacity
- Pipeline alignments are being evaluated
- Completed 30% design of connection to the CA Aqueduct



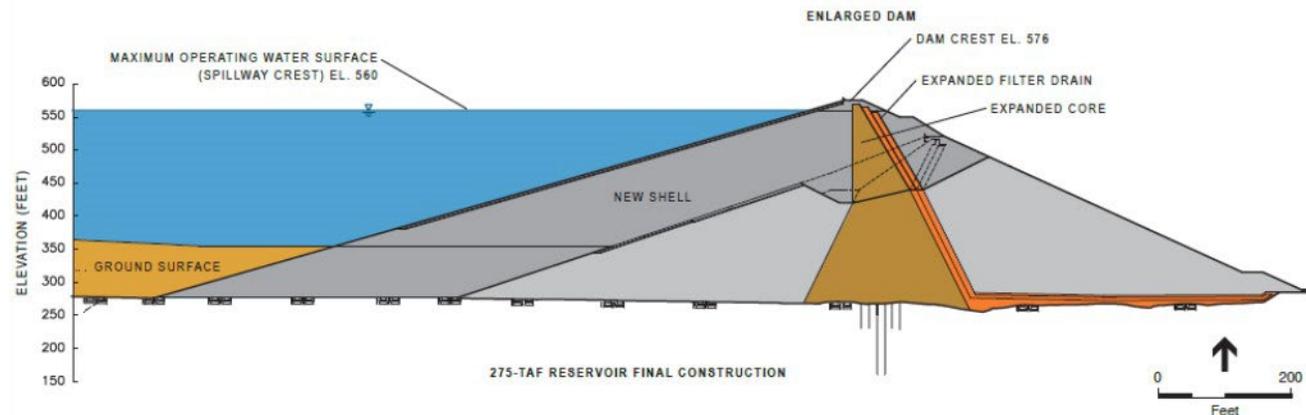
# LVE Facilities and Operations

- Deliveries to storage
  - Expanded LV Dam
  - Transfer Facility Improvements
  - LV Marina Relocation



## LV Dam Expansion

- Expand from 160 TAF to 275 TAF
- Increase maximum water level by 55 feet
- Upstream dam raise requires draining reservoir and outage for at least three years
- Relocate the LV Marina above maximum water level
- Submit final design to DSOD in June 2022



## Transfer Facility Improvements

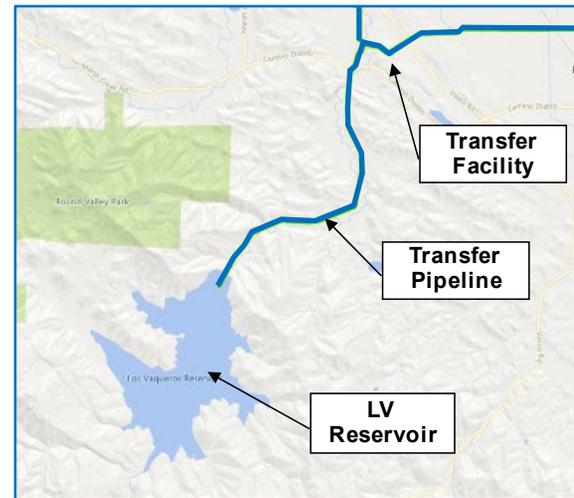
- Install new pumps capable of delivering to the new high water level of the expanded dam
  - 200 cfs capacity
  - Confirming 4 pumps are sufficient
- Additional surge tank
- Upgrade substation and electrical equipment
- Design planned to begin early 2023



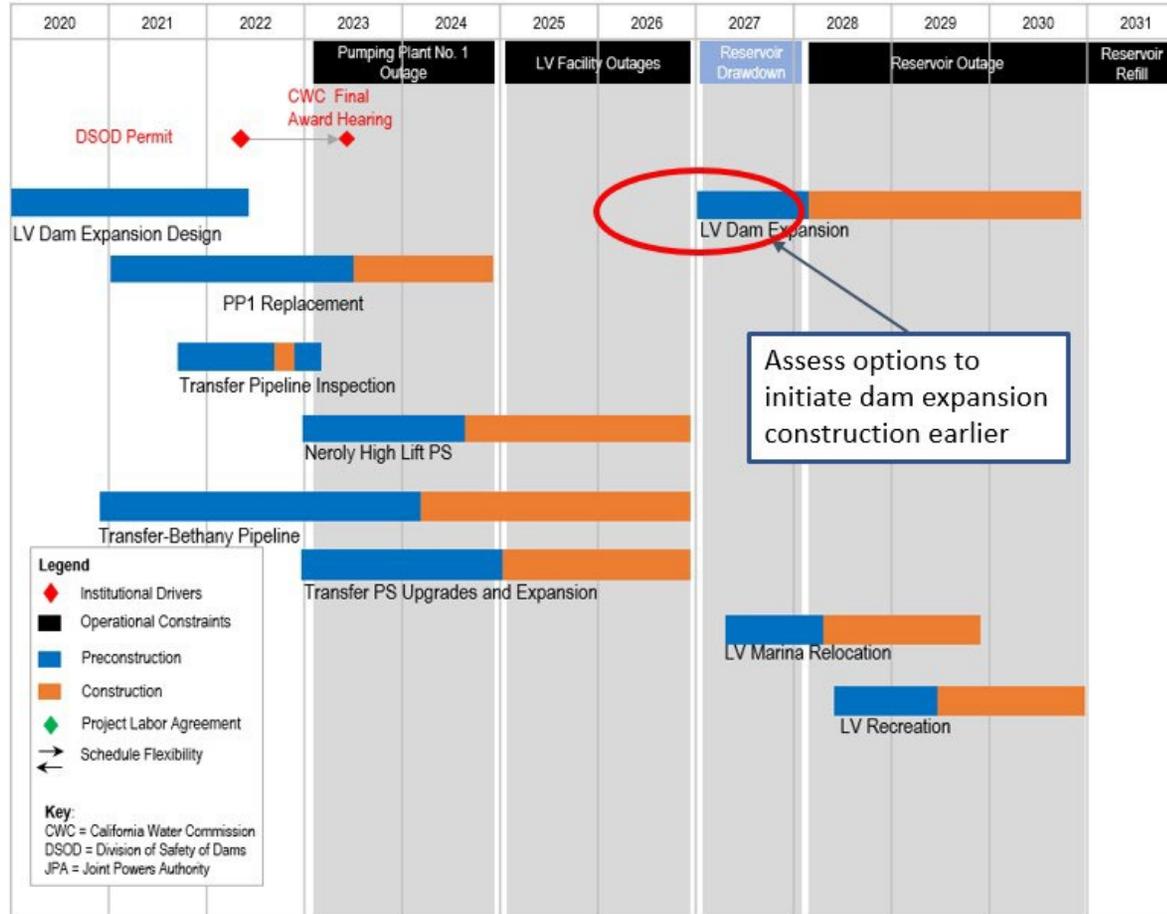


# Transfer Pipeline Inspection

- Transfer Pipeline will be operated at higher pressures with the expanded LV Dam
- Structural analysis recommended inspections to confirm conditions of the liner and appurtenances
- Inspections planned for Fall 2022



# LVE Project Schedule



**Questions?**

**ITEM 1.2 SCHEDULING FUTURE COMMITTEE MEETINGS**

**RESPONSIBLE/LEAD STAFF MEMBER:**

Marguerite Patil, Interim Administrator

**DISCUSSION:**

It is recommended that the Committee discuss the establishment of regular Committee meeting dates and times to reduce the administrative burden for scheduling meetings and support more effective planning for future meetings. In addition, the Committee will need to discuss the proposed location of future Committee meetings once in-person meetings can proceed. As with the Authority Board meetings, the Brown Act requires the Committee meetings occur within the Authority's geographic jurisdiction.

**ALTERNATIVES:**

The Committee could defer discussion of this item to a later date.

**FISCAL ANALYSIS:**

Not applicable

**ENVIRONMENTAL REQUIREMENTS:**

Not applicable

**EXHIBITS/ATTACHMENTS:**

None