



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

Regular Meeting
September 15, 2022 – 10:00 a.m.

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/86287179399?pwd=eG83b3NMeVJMTkxkSEpUNVVVYTkIFZz09>

Meeting ID: 862 8717 9399

Passcode: 600779

Or One tap mobile:

US: +16699006833,,86287179399#,,,*600779#

or Telephone: +1 669 900 6833

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 by 4:00 p.m. on September 14, 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.

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
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 August 18, 2022 Operations and Engineering Committee Meeting Summary**
- 1.2 Update on Project Design and Cost Estimate**

FUTURE AGENDA ITEMS

ADJOURNMENT

ITEM 1.1: AUGUST 18, 2022 OPERATIONS AND ENGINEERING COMMITTEE MEETING SUMMARY

RESPONSIBLE/LEAD STAFF MEMBER:

James Ciampa, Interim General Counsel

DISCUSSION:

Attached for the Committee's information is the summary prepared for the August 18, 2022 Operations and Engineering Committee meeting.

ALTERNATIVES:

Any suggested revisions to the attached summary will be considered.

FISCAL ANALYSIS:

Not applicable.

ENVIRONMENTAL REQUIREMENTS:

Not applicable.

EXHIBITS/ATTACHMENTS:

Summary from August 18, 2022 Operations and Engineering Committee meeting



SUMMARY OF REGULAR MEETING OF OPERATIONS AND ENGINEERING COMMITTEE

August 18, 2022 – 10:00 a.m.

All members of the Committee (Jose Gutierrez, Chair; Jonathan Wunderlich and Steve Ritchie) were present.

1.1 June 16, 2022 Operations and Engineering Committee Meeting Summary

The summary from the June 16, 2022 Operations and Engineering Committee meeting was presented and was unanimously accepted without change. Interim Administrator Marguerite Patil noted several revisions were made to the summary from the version that was presented at the August 10, 2022 Board of Directors' meeting.

1.2 Overview of Contracts for Administration of Public Benefits

Interim Administrator Patil introduced Maureen Martin, Deputy Interim Administrator, who provided the Committee with an overview of the Contracts for Administration of Public Benefits (CAPBs) that are a key element of the California Water Commission's (CWC) Water Storage Investment Program (WSIP). The Authority is required to execute CAPBs with the California Department of Water Resources and the California Department of Fish and Wildlife prior to the Final Award Hearing with the CWC for the Phase 2 Los Vaqueros Reservoir Expansion Project. CAPBs establish the requirements and procedures for the administration of the public benefits funded by the WSIP. The required benefits consist of ecosystem benefits, emergency response benefits and recreational benefits.

Members of the Committee discussed the contents of the presentation. Committee Member Ritchie provided information with his experience in working with Adaptive Management Plans and emphasized those plans need to be science-based. Committee Member Wunderlich requested information on the process of how the fifty percent of the public benefits that are required to be ecosystem benefits are quantified and determined in relation to whether that percentage has been met. Chair Gutierrez inquired how public benefits are ascertained in the long-term to ensure that funding that has been provided will not be required to be repaid. Ms. Martin and Ms. Patil provided further information supplementing the discussion, including the sequence of next steps and clarifying that the Authority will be entering into the CAPBs but some responsibilities will be passed through to Contra Costa Water District due its ownership of the physical facilities.

Future Agenda Items:

Interim Administrator Patil asked the Committee for any additional items to be included in future Committee meetings. Committee Member Wunderlich mentioned that items for future discussion were mentioned at the June Committee meeting.

The meeting was adjourned at 10:50 a.m.

James D. Ciampa

James D. Ciampa
Interim General Counsel

ITEM 1.2: UPDATE ON PROJECT DESIGN AND COST ESTIMATE

RESPONSIBLE/LEAD STAFF MEMBER:

Marguerite Patil, Interim Administrator

DISCUSSION:

CCWD staff will provide the Committee with an update on the status of ongoing design efforts for the Phase 2 Los Vaqueros Reservoir Expansion Project (LVE Project). The presentation will include a summary of the status of design on several key LVE Project components including the dam expansion and Contra Costa Canal Pumping Plant No. 1. Staff will also provide an overview of the recent updates to the LVE Project construction cost estimate that were incorporated in the Proforma model for the Water Infrastructure Finance and Innovation Act (WIFIA) Letter of Interest submitted to the U.S. Environmental Protection Agency earlier this month.

ALTERNATIVES:

For information only; no alternatives applicable.

FISCAL ANALYSIS:

Fiscal impact will depend on the final public benefits to be implemented.

ENVIRONMENTAL REQUIREMENTS:

Not applicable

EXHIBITS/ATTACHMENTS:

The slide presentation will be posted following the Committee meeting



**LOS
VAQUEROS
RESERVOIR
EXPANSION
PROJECT**

LVR Joint Powers Authority
Operations & Engineering Committee
Agenda Item 1.2 Update on Project Design and Cost Estimate

September 15, 2022



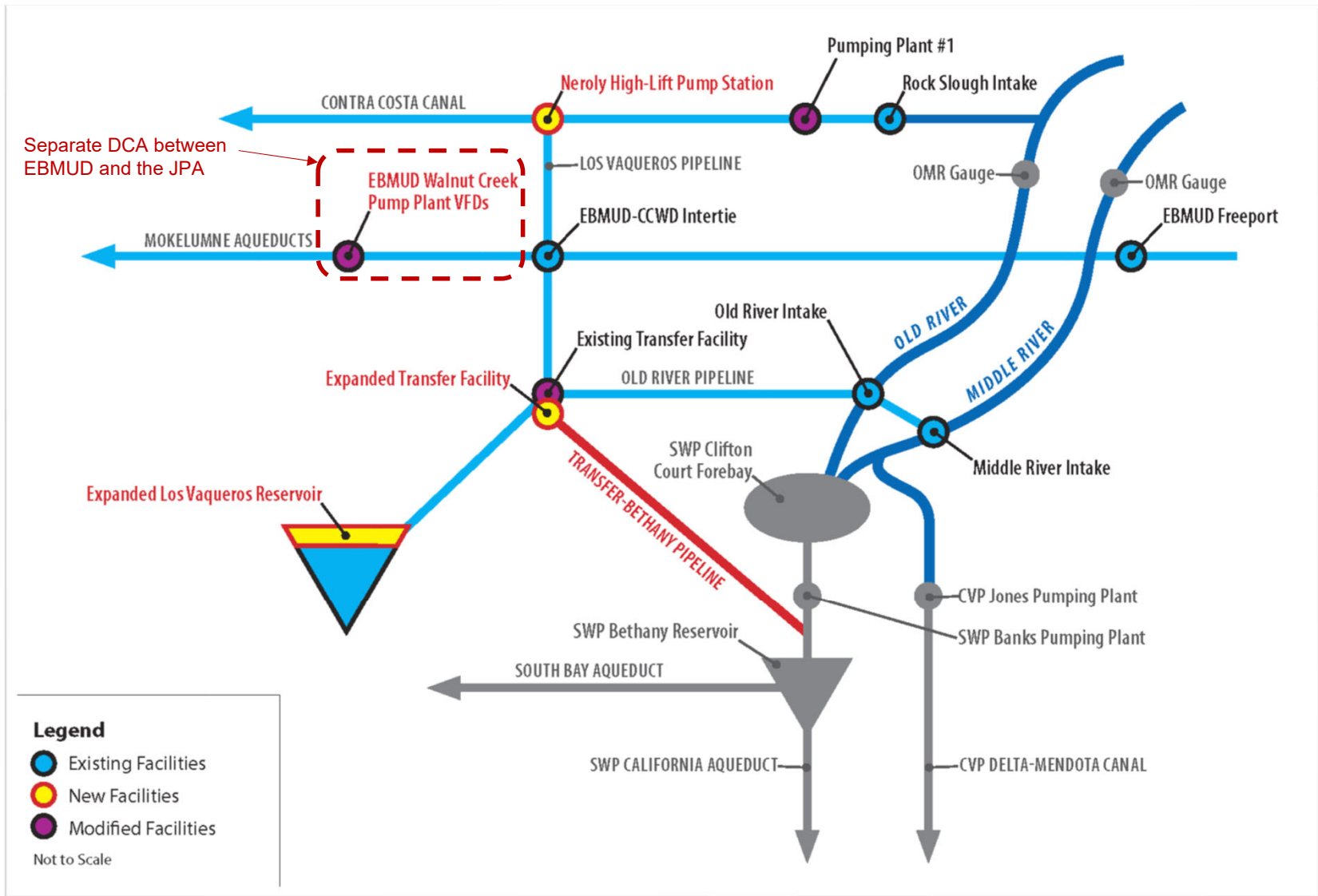
Background

- CCWD continues to plan and develop designs for facilities consistent with the Multi-Party Cost Share Agreement
- Future Design and Construction Agreements (DCA) will further define roles and responsibilities for Project implementation
- A briefing to the JPA Operations & Engineering Committee (JPA O&E) on the draft DCA principles will be provided in October



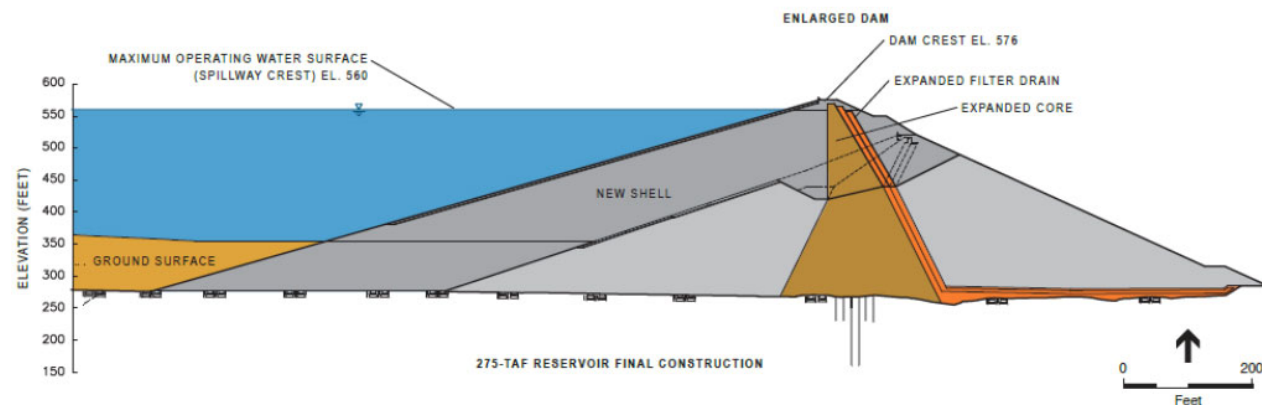
Introduction

- Design efforts are focused on priority facilities needed for project approvals (permits, funding, critical path construction)
 - LV Dam Enlargement
 - PP1 Replacement Project
 - Transfer-Bethany Pipeline
 - Transfer Pipeline Inspection
- Project cost estimate was updated to support Water Infrastructure Financing Innovation Act (WIFIA) financing



LV Dam Enlargement

- Expand reservoir 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



LVE Dam Design Update

- Final plans and specifications were submitted to DSOD in July
- Final technical reports were submitted to DSOD, including:
 - Basis of design report
 - Spillway underdrain inspection report
 - Draft dam break inundation analysis
- DSOD approval to construct is anticipated as early as November



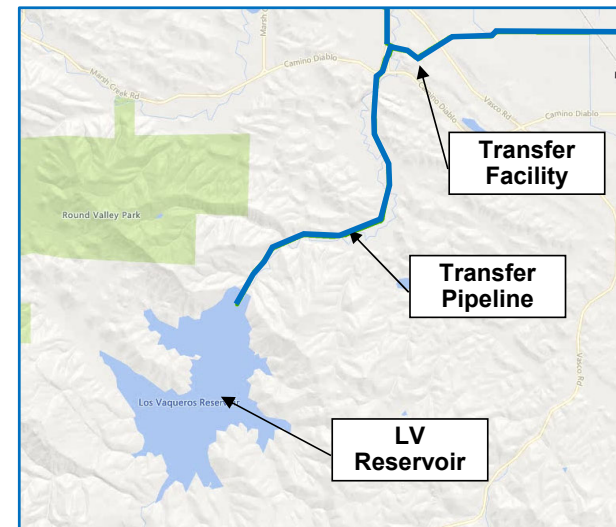
LV Dam Cost Update

- 90% Design cost estimate updated February 2022
 - Class 2 Estimate, AACE
 - Accuracy: High 5%; low -15%
 - 10% Change Order Allowance
- Construction cost estimate: \$253M (May 2022 dollars)



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 are currently underway and ~50% complete
- Inspection report is expected in October

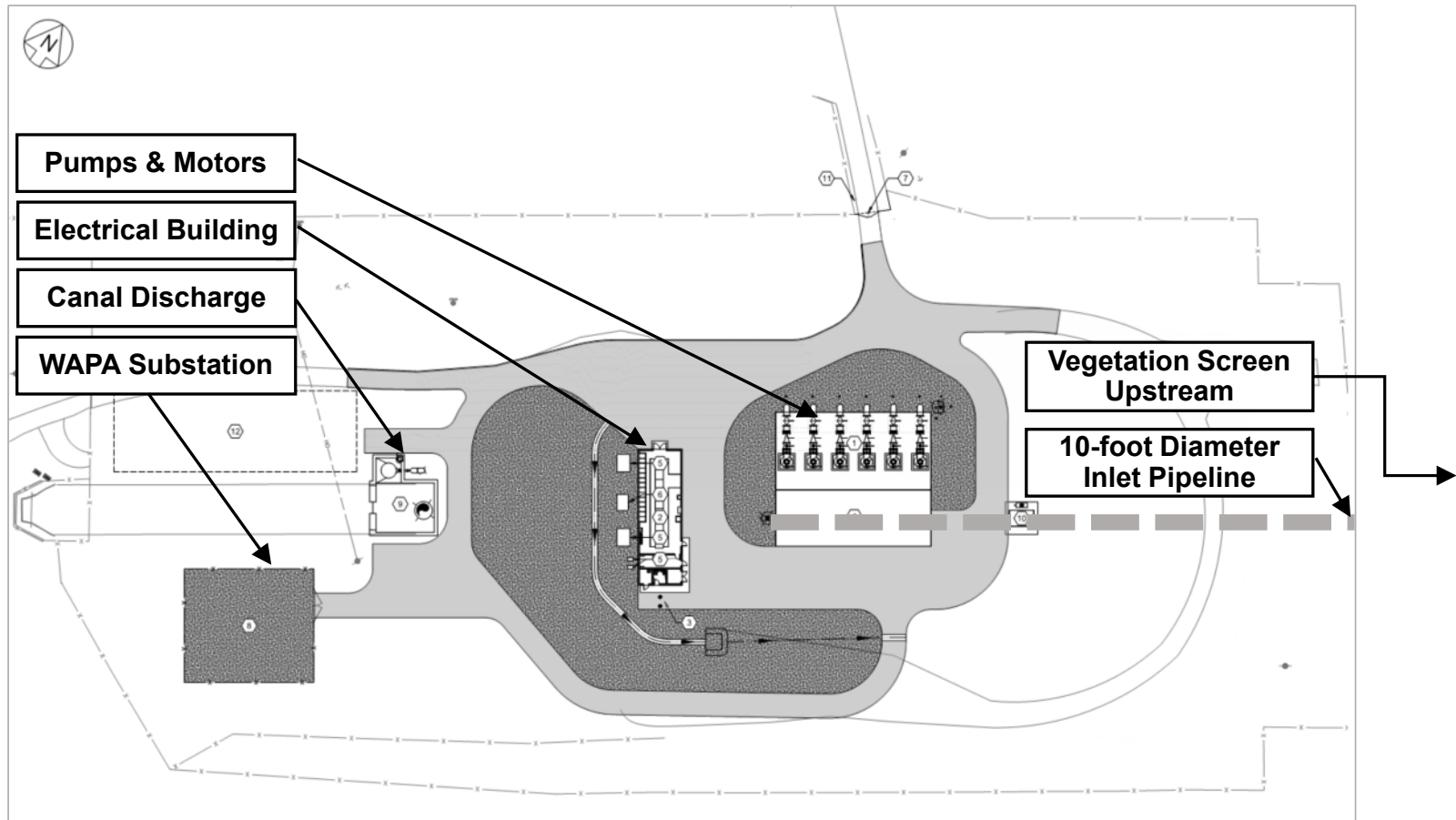




Pumping Plant #1 (PP1) Replacement

- Deliver 350 cfs to meet CCWD demands and supply JPA Member benefits
- First Project facility to be constructed; maintains CCWD supplies during LVE construction
- Conveys to Neroly High Lift Pump Station (NHLPS) for deliveries to partners or to storage
- Includes a screen facility upstream to protect the pumps from aquatic vegetation
- CCWD will assess Canal facilities upstream of NHLPS to confirm reliability

Pumping Plant #1 (PP1) Replacement



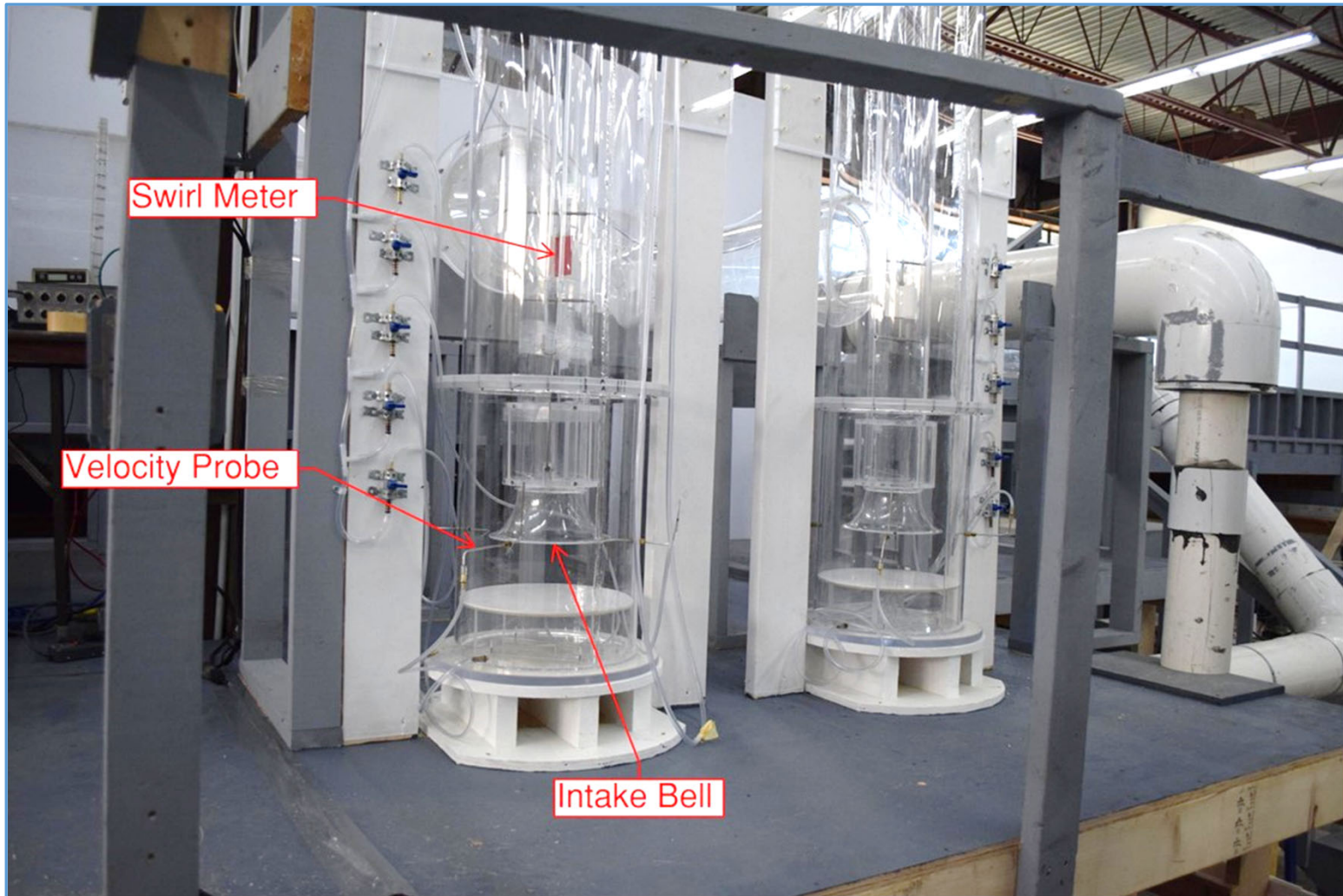
PP1 Physical Model

- Physical modeling is underway to demonstrate hydraulics
 - Required by Hydraulic Institute Standards
 - Confirm uniform flow to each pump
 - Simulate upstream tidal fluctuations
 - Test in a variety of operating modes & conditions
 - Identify improvements if needed to avoid instability
- Located in Vancouver by Northwest Hydraulic Consultants
- Status:
 - Model has been constructed
 - Shakedown and initial model design test runs completed



SEPTEMBER 06, 2022

12



SEPTEMBER 06, 2022



PP1 Design Status

- 60% Design submittal September
- Physical Model Report November
- Advertise for bidding Fall 2023
 - Requires DCA between CCWD and JPA
 - Timing dependent upon completing service agreements and CWC full funding award



PP1 Cost Estimate Update

- PP1 30% Design Cost estimate
 - Class 3 Estimate, AACE
 - 30% Design & Construction Contingency
 - Construction cost: \$52M (May 2022 dollars)
- Screen Facility
 - Class 4 Estimate, AACE
 - 30% Design & Construction Contingency
 - Construction Cost: \$14M (May 2022 dollars)
- Total Construction Cost: \$66M (May 2022 dollars)



Other LVE Facilities: Pump Stations

- LVE includes three other pump stations:
 - Neroly High Lift Pump Station
 - Transfer Pump Station Upgrades (TPS Upgrades)
 - Expanded Transfer Pump Station (ETPS)
- Kickoff for consultant selection to complete designs is slated to begin in 2024



Other Pump Station Costs

- Transfer PS Upgrades and Expanded Transfer PS conceptual costs were updated in 2021
- Transfer PS Upgrades: \$40M (May 2022 dollars)
- Expanded Transfer PS: \$56.4M (May 2022 dollars)

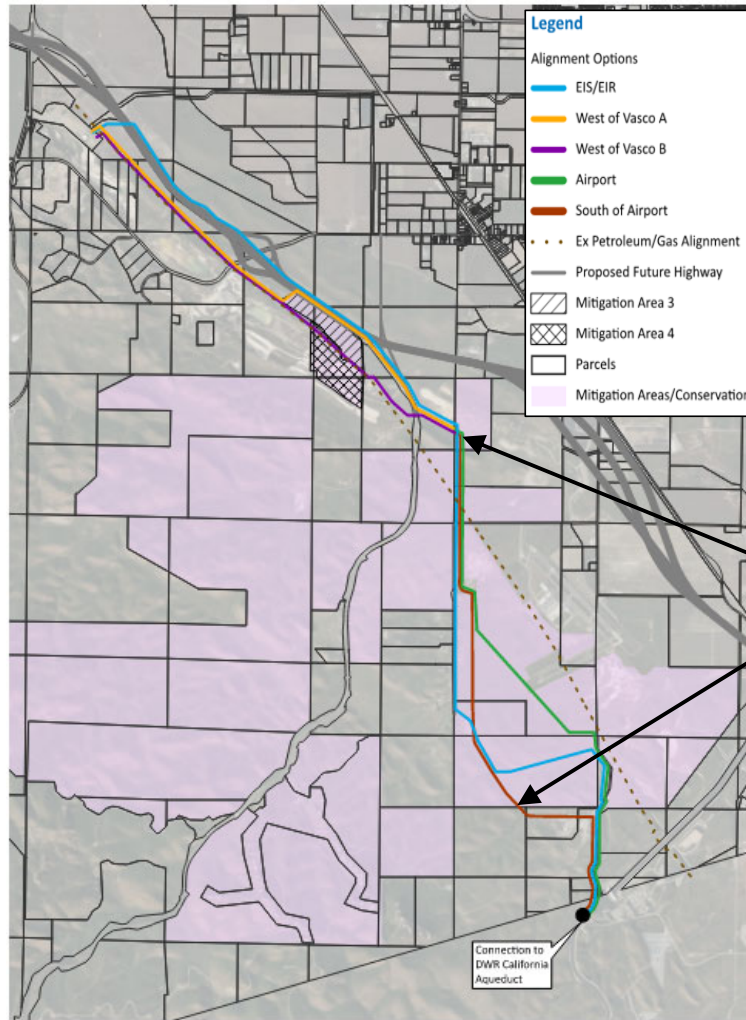
Transfer-Bethany Pipeline

- Supplies water from the LV system to the California Aqueduct
 - Pump from the new Expanded Transfer Facility
 - Release from the expanded LV Reservoir
- ~ 8-mile-long pipeline
- 90-inch diameter
- 300 cfs pumped capacity

TBPL Alignment Selection

- Completed a pipeline alignment study to balance interests, impacts and costs
- ~2.9 miles of the pipeline is located within lands encumbered with conservation protections
 - Evaluated options to avoid conservation areas in 2019
 - Coordinated with regional agencies to minimize impacts
 - CA Department of Fish and Wildlife (DFW) has asked to review options to minimize or avoid conserved properties
- Timing of final alignment selection depends on continued coordination with DFW

TBPL Alignment Evaluation



Alignment encumbered with Conservation Protections

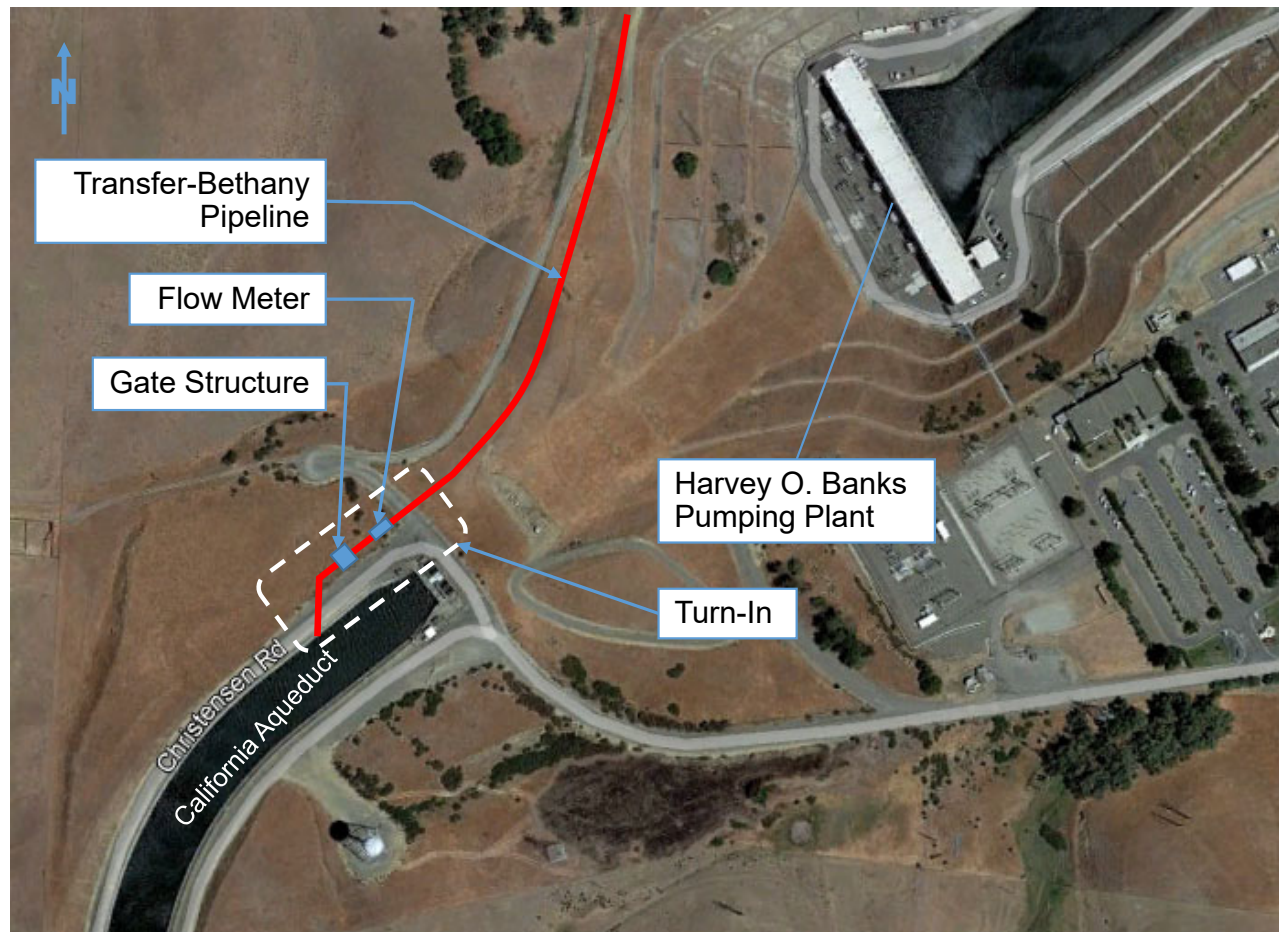
TBPL Design Status

- Topographic surveys planned for September
- A geotechnical work plan is being prepared to support pursuing access rights in Spring 2023
- Geotechnical investigations planned for summer 2023
- Preliminary Design Report anticipated in Fall 2024
- Land acquisition plan will define acquisition needs
- Land acquisition actions will follow CWC approval of full funding

CA Aqueduct Turn-in

- DWR approval of a Turn-In Agreement is required for CWC Funding
- Turn-In Agreement addresses responsibilities for O&M, rights-of-way, etc.
- DWR approval of final design is required in advance
 - 30% Design Review Complete
 - 90% Design submittal October 2023
 - Final Design submittal January 2023
 - Turn-In Agreement Spring 2023

Turn-In Vicinity Map





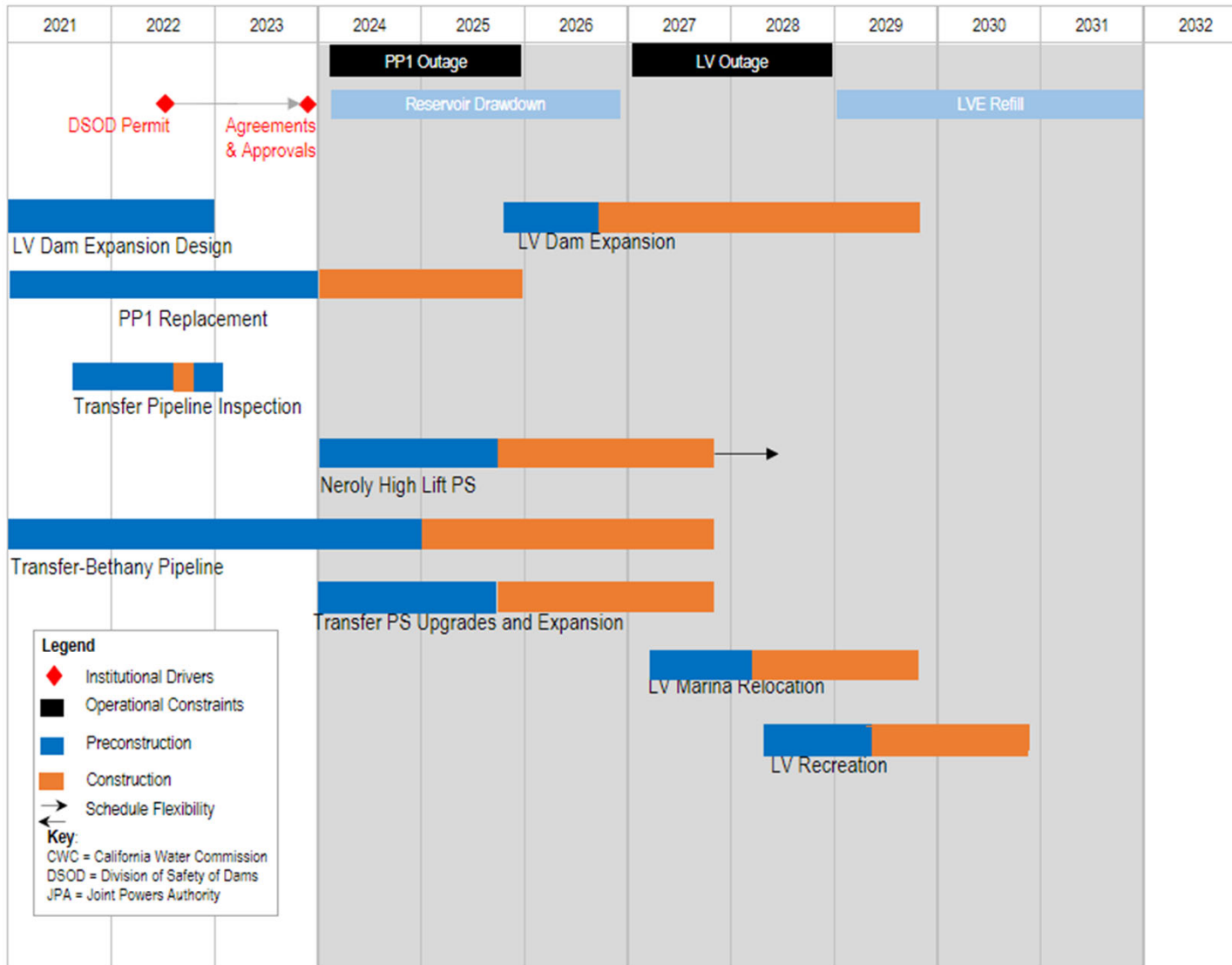
TBPL Cost Estimate Update

- Conceptual cost estimate update in June 2022
 - Class 4 Estimate, AACE
 - 30% Design & Construction Contingency
 - Construction cost May 2022 dollars: \$137M



Total Project Cost Update

- Update was prepared to support Water Infrastructure Financing and Innovation Act (WIFIA) financing
- Development and Construction costs: \$980M (May 2022 dollars)
- Costs escalated based on the latest Project schedule assuming 4.2 percent annual escalation
- Estimated Development and Construction cost: \$1,245M



Questions?

