

# ***ALAMEDA COUNTY WATER DISTRICT***

43885 So. Grimmer Boulevard  
Fremont, CA 94538

## **ENGINEERING & INFORMATION TECHNOLOGY COMMITTEE**

### **AGENDA**

Wednesday, February 4, 2026

4:15 p.m.

***ACCESSIBLE PUBLIC MEETINGS:*** Upon request, ACWD will provide written agenda materials in appropriate alternative formats, or disability-related modification or accommodation, including auxiliary aids or services, to enable individuals with disabilities to participate in public meetings. Please send a written request at least 72 hours before the meeting to the District Secretary, ACWD, 43885 S. Grimmer Blvd., Fremont, CA 94538, or to [marian.hsu@acwd.com](mailto:marian.hsu@acwd.com) stating your name, mailing address, phone number, and brief description of the requested materials and preferred alternative format or auxiliary aid or service.

Members of the public may participate in this meeting in person at the District office located at 43885 South Grimmer Boulevard, Fremont or via webinar or teleconference. In person meetings are the primary format for the District's Committee meetings. The District desires to accommodate remote participation by the public, therefore as a courtesy and technology permitting, the public will have the opportunity to fully participate in the meeting via zoom webinar. However, the District cannot guarantee that the public's remote access to any meeting will be uninterrupted before or during a meeting, and technical difficulties may occur from time to time. In those instances, so long as the public may attend the meeting in person, the meeting may be held or continue. Members of the public desiring to provide comments as a part of the meeting are encouraged to either submit written comments prior to the meeting or to attend the meeting in person.

To participate via webinar, use the following link: <https://us02web.zoom.us/j/81712115247?pwd=wkBEbmBZvtdQcK1nZdVQz2yV0nJydl.1> (passcode: **777582**). To make comments or ask questions during the meeting, "raise your hand" or use the chat or Q&A feature in the zoom app at any time, or unmute and speak when invited.

To participate via teleconference, call any of the following phone numbers: 1-669-900-9128 or 1-346-248-7799 or 1-301-715-8592 followed by **817 1211 5247** (passcode: **777582**). To make comments or ask questions during the meeting, type \*9 on your dial pad to "raise" or "lower" your "hand" at any time, or type \*6 to mute or unmute and speak when invited.

This agenda and all accompanying materials can be viewed on the Alameda County Water District website at: [www.acwd.org](http://www.acwd.org).

1. Public Comments
2. Update on the Distribution Programmable Logic Controller Replacement Project  
Presenter: Ricky Vera, Project Engineer
3. Overview of the Project Engineering Construction Management Platform (Procore)  
Presenter: Kerri Smith, Project Engineer

# Alameda County Water District

## ***Agenda Item 2: Update on Distribution Programmable Logic Controller (PLC) Replacements Project***

Presenter: Ricky Vera,  
Project Engineer

EIT Committee  
February 4, 2026

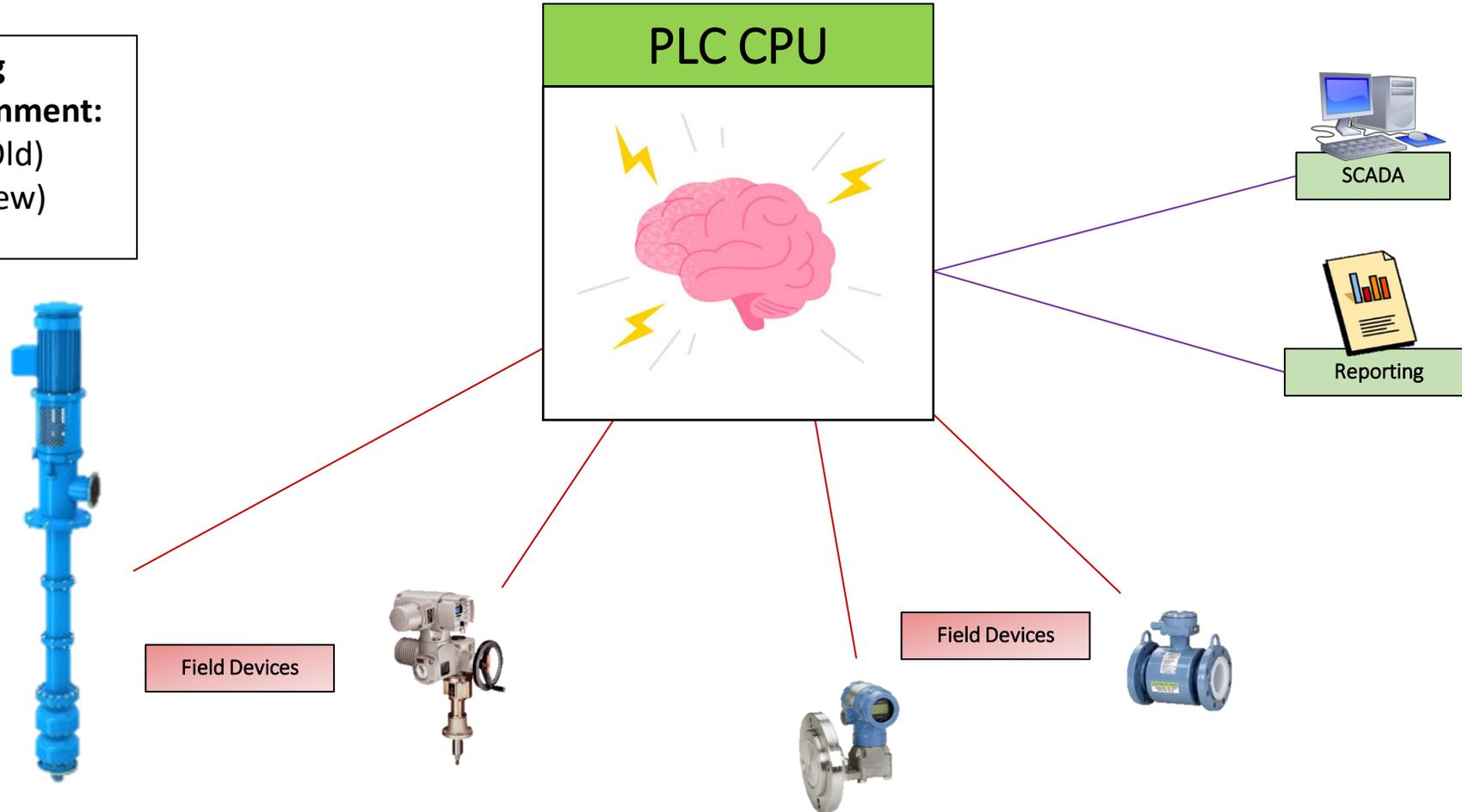
# Agenda

1. Project Background
2. Program Review
3. Project Approach
4. Review of Completed Sites
5. Next Steps

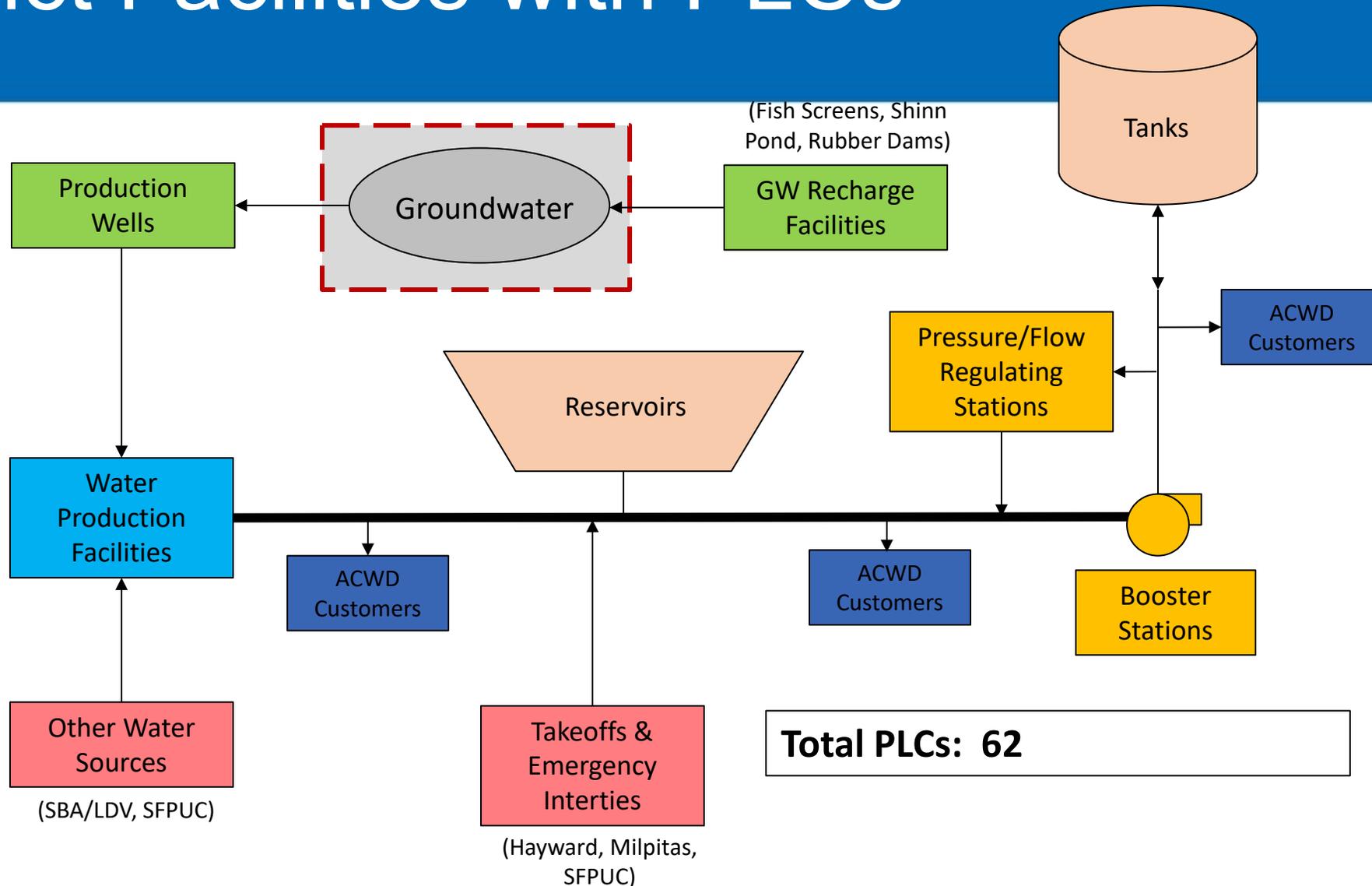
# What is a Programmable Logic Controller (PLC)?

**PLC Programming Language/Environment:**

- ProWORX 32 (Old)
- EcoStruxure (New)



# District Facilities with PLCs



# Program Driver

## Existing PLC Hardware is obsolete

- End of commercial life – 2000.
- End of support – 2008.
- Limited/depleted spares in stock.
- ~50% of all PLCs are older than 15 years
- All PLCs included in the Phase-3 Project were installed prior to 1999

## Existing PLC Software is obsolete

- End of commercial life – 2012.
- Not compatible with new PLC hardware (nor Windows 10)
- Training and support uncertainty.
- District has adopted a new software platform standard.

# Project Approach

## Outage Restrictions

- Scheduling is based on production needs and availability
- Outage is limited to one work week M-F

## Construction Process

- Facility shutdown
- Demolition of existing equipment
- Installation of new Equipment
- Testing and commissioning

# Scope of Work for Phase 3

Upgrade the following (8) PLCs:

- Scott Creek Booster Station
- Rancho Higuera Booster Station
- Avalon Tank
- Washington Booster Station
- Mayhew Reservoir
- PR-3 Regulator
- FR-2/PR-2 Regulator
- FR-1 Regulator

# Existing Facilities

Washington Booster MCC



Washington Booster PLC



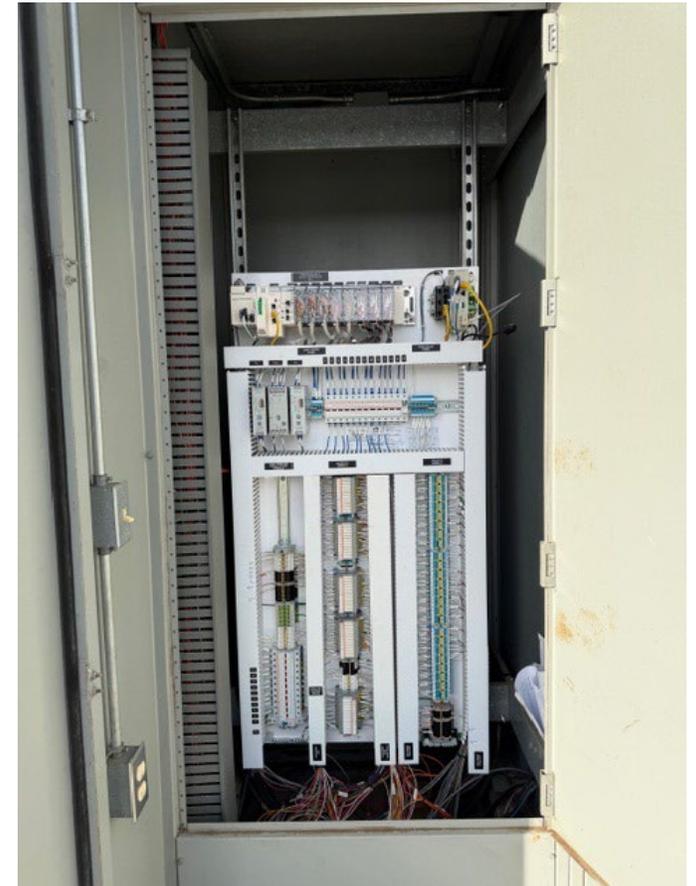
FR2/PR2 Regulator PLC



# Completed Sites – Booster Stations

- Only PLC replacement, minimal site work
- PLC Programs are much larger than other sites
- Longer commissioning process
  - Running pumps, pump lockouts in addition to all instrumentation
  - SCADA Control Testing

Rancho Booster PLC



# Completed Sites – Regulating Stations

- More site work than Booster Station PLCs
- Smaller PLC Programs
- Shorter Commissioning Process

PR3 Regulator PLC

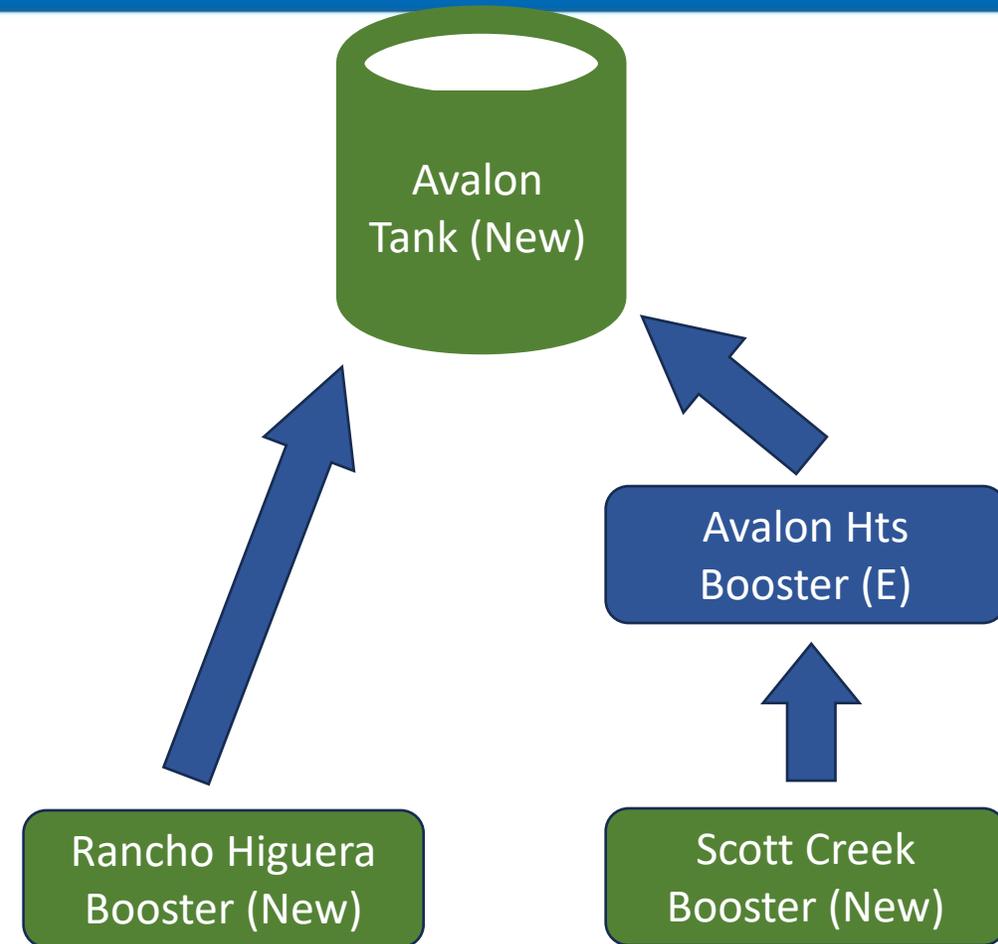


FR2/PR2 Regulator PLC



# Completed Sites – Avalon System

- Replaced Rancho Higuera, Scott Creek Booster Stations, and Avalon Tank
- Tank acts as the hub for Avalon PLCs
- PLCs had to be replaced sequentially
- No interruption in supply to Avalon Zone



# Next Steps

- One more site for Phase 3, to be completed Q3 FY25/26
- PLC Replacement Program is ongoing:
  - Goal of 4 replacements per year on average
  - Continue exploring & streamlining delivery approach
- Major Facility PLC Replacements are (e.g. Desal) under their own project, cause break in Distribution PLC Program

# Questions



Ricky Vera - Project Engineer

# Alameda County Water District

## ***Agenda Item 3: Overview of the Project Engineering Construction Management Platform (Procore)***

Presenter: Kerri Smyth,  
Associate Engineer

# Agenda

- Background
  - Construction management
  - Previous processes
- What is Procore
- Initial Implementation
  - Project Management tools
  - ACWD Implementation
  - Results
- 2025 Enhancement: Financial Management



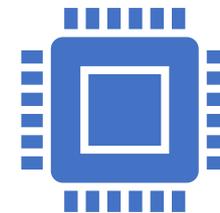
# Why Now?

## CIP Project Trends:

- Increasing Project Volumes
- Expanding Main Renewal Program
- Complex and Fast-Paced such as PFAS Treatment Project

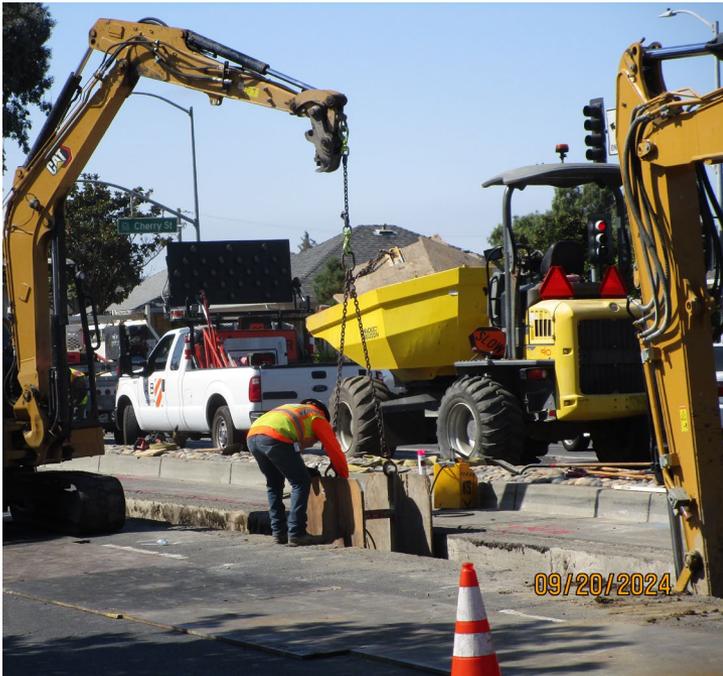


Importance of communication and timely action for high-quality construction outcomes.



Manual processes and workflows in need of modernization, automation and streamlining.

# Background



- What is Construction Management?
  - Planning, coordinating and overseeing a construction project.
  - Apply Project Management principles.
  - Control of Project scope, cost, schedule, quality and safety.
  - Successful Project delivery on time and within budget.
- Construction Management at ACWD
  - In-house and consultants.
  - Consultants have used their Procore licenses on ACWD projects.
  - In-house CM historically performed manually via email & spreadsheets.

# The Procore Construction Management Platform

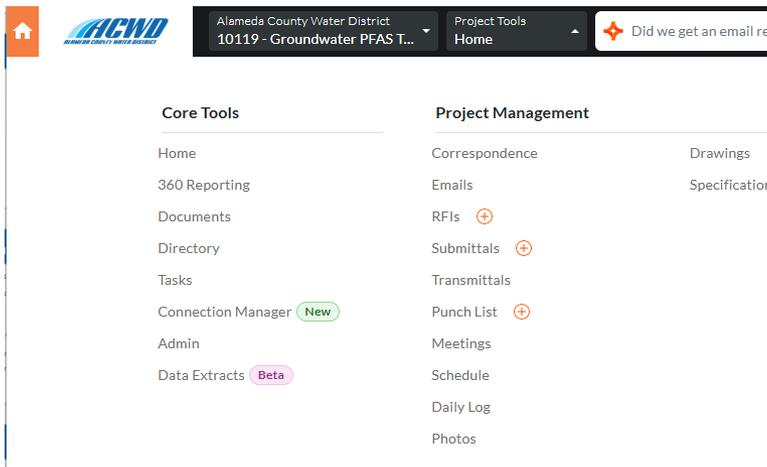
- PE evaluated construction management platforms, adoption rates, and references from other utilities.
- Procore is a construction management software as a service
- It is the most widely used in the construction industry for Contractors and Owners, as well as most taught in academic settings.



# Initial Procore Implementation



- Core & Project Management tools
- “Procore Admin” training & system configuration
- PE team training
- High engagement rates & project performance transparency



# Procore Implementation Results

- Internal Survey:
  - 8 construction projects managed with Procore.
  - Pros: Document exchange, organization, RFIs, submittals, Docusign integration
  - Room for improvement: Additional SOPs/training, change order process, progress payments, & Procore tool integrations.
- Action Items:
  - Procore Enhancement: Financial Management
  - Training session & SOPs
  - Tool configuration updates
  - User feedback for Procore's roadmap



# 2025 Procore Enhancement: Financial Management



Alameda County Water District  
12345 - Sandbox Test Project

Project Tools  
Change Events

What are my subcontractor invoices from the last month by budget code?

Favorite Tasks Correspondence

You are currently viewing a test project. This is intended for learning purposes so you can get to know Procore.

### Change Events

Line Items No Line Items RFQs Recycle Bin

Search [ ] Filters

Add to Send Requests for Quote

Change Event	Cost	
	Cost RCM	RFQ Title
014 - Test with no origin selected	\$500.00	\$500.00
013 - Test with RFI origin	\$5,000.00	\$5,000.00
012 - Install temporary transformer	\$14,254.85	\$14,254.85
011 - Trenching for 42" RW line	\$75,304.61	\$75,304.61
010 - Mutch piles	\$11,454.03	\$11,454.03
009 - Expand sidewalk	\$500.00	\$0.00
008 - Flowers	\$1,000.00	\$1,000.00
007 - Chocolate	\$300.00	\$0.00
006 - sky is not blue enough	\$14,000.00	\$0.00
005 - Sky is too blue	\$5,500.00	\$0.00
004 - Grant CO	\$0.00	\$0.00
003 - Board authorization of CCO8123	\$40,000.00	\$40,000.00

- Features include commitment administration, change management, and progress payments
- Completed configuration and training
- Expected benefits:
  - Automated documentation & reporting
  - Pre-built workflows
  - Increased efficiency
    - Less manual processing
    - Streamlined approvals

# Questions?