



**AGENDA
ENGINEERING, OPERATIONS, AND WATER RESOURCES
COMMITTEE MEETING
OF THE BOARD OF DIRECTORS
INLAND EMPIRE UTILITIES AGENCY***

**WEDNESDAY, JULY 12, 2023
10:00 A.M.**

**AGENCY HEADQUARTERS
BOARD ROOM
6075 KIMBALL AVENUE, BUILDING A
CHINO, CALIFORNIA 91708
VIEW THE MEETING LIVE ONLINE AT IEUA.ORG
TELEPHONE ACCESS: (415) 856-9169 / Conf Code: 721 323 248#**

The public may participate and provide public comment during the meeting by dialing the number provided above. Comments may also be submitted by email to the Board Secretary/Office Manager Denise Garzaro at dgarzaro@ieua.org prior to the completion of the Public Comment section of the meeting. Comments will be distributed to the Board of Directors.

CALL TO ORDER

PUBLIC COMMENT

Members of the public may address the Board on any item that is within the jurisdiction of the Board; however, no action may be taken on any item not appearing on the agenda unless the action is otherwise authorized by Subdivision (b) of Section 54954.2 of the Government Code. Those persons wishing to address the Board on any matter, whether or not it appears on the agenda, are requested to email the Board Secretary/Office Manager prior to the public comment section or request to address the Board during the public comments section of the meeting. Comments will be limited to three minutes per speaker. Thank you.

ADDITIONS TO THE AGENDA

In accordance with Section 54954.2 of the Government Code (Brown Act), additions to the agenda require two-thirds vote of the legislative body, or, if less than two-thirds of the members are present, a unanimous vote of those members present, that there is a need to take immediate action and that the need for action came to the attention of the local agency subsequent to the agenda being posted.

*A Municipal Water District

1. **CONSENT ITEM**

A. **MINUTES**

Approve Minutes of the June 14, 2023, Engineering, Operations, and Water Resources Committee meeting.

2. **ACTION ITEMS**

A. **PRE-APPROVAL FOR HEAVY FLEET EQUIPMENT PURCHASES**

Staff recommends that the Committee/Board authorize the General Manager to execute the procurement of “off-the-lot” vehicles, up to \$1,000,000.

B. **SODIUM HYPOCHLORITE AND FERRIC CHLORIDE CHEMICAL CONTRACT AWARDS**

Staff recommends that the Committee/Board:

1. Approve the award to provide the supply of sodium hypochlorite chemicals, Contract No. 4600003367 to JCI Jones Chemicals Incorporated, for a one-year contract, with four one-year renewal options, for a potential total contract term of five years for a not-to-exceed amount of \$17,000,000;
2. Approve the award to provide the supply of ferric chloride chemicals, Contract No. 4600003373, to California Water Technologies, LLC for a one-year contract, with four one-year renewal options, for a potential total contract term of five years for a not-to-exceed amount of \$9,100,000; and
3. Authorize the General Manager to execute the contracts, subject to non-substantive changes.

C. **CONSULTING PROGRAM MANAGEMENT AND OWNER ENGINEERING SERVICES CONTRACT AWARDS**

Staff recommends that the Committee/Board:

1. Award a master services contract for the consulting program management and owner engineering services to the Jacobs Engineering Team Inc, in the amount of \$9,113,805; and
2. Authorize the General Manager to execute the contracts, subject to non-substantive changes.

3. **INFORMATION ITEMS**

A. **OPERATIONS AND MAINTENANCE DEPARTMENT QUARTERLY UPDATE (POWERPOINT)**

B. LAND LEASE AND DEVELOPMENT - RP-5 SOLIDS HANDLING FACILITY SITE REQUEST FOR PROPOSALS UPDATE (POWERPOINT)

C. GROUNDWATER RECHARGE UPDATE (POWERPOINT)

D. PLANNING AND RESOURCES DEPARTMENT UPDATE (POWERPOINT)

RECEIVE AND FILE INFORMATION ITEMS

E. RP-5 EXPANSION PROJECT UPDATE - JULY 2023 (POWERPOINT)

4. GENERAL MANAGER'S COMMENTS

5. COMMITTEE MEMBER COMMENTS

6. COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS

ADJOURN

DECLARATION OF POSTING

I, Denise Garzaro, CMC, Board Secretary/Office Manager of the Inland Empire Utilities Agency*, a Municipal Water District, hereby certify that, per Government Code Section 54954.2, a copy of this agenda has been posted at the Agency's main office, 6075 Kimball Avenue, Building A, Chino, CA and on the Agency's website at www.ieua.org at least seventy-two (72) hours prior to the meeting date and time above.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Board Secretary at (909) 993-1736 or dgarzaro@ieua.org, 48 hours prior to the scheduled meeting so that IEUA can make reasonable arrangements to ensure accessibility.

**CONSENT
ITEM
1A**



**MINUTES
ENGINEERING, OPERATIONS, AND WATER RESOURCES
COMMITTEE MEETING
INLAND EMPIRE UTILITIES AGENCY*
AGENCY HEADQUARTERS, CHINO, CA**

**WEDNESDAY, JUNE 14, 2023
10:00 A.M.**

COMMITTEE MEMBERS PRESENT

Michael Camacho, Chair
Marco Tule, Director

STAFF PRESENT

Shivaji Deshmukh, P.E., General Manager
Christiana Daisy, P.E., Deputy General Manager
Kristine Day, Assistant General Manager
Adham Almasri, Principal Engineer
Kevin Asprer, Senior Associate Engineer
Jerry Burke, Director of Engineering
Robert Delgado, Manager of Maintenance
Lucia Diaz, Manager of Facilities & Water System Programs
Michael Hurley, Director of Planning and Resources
Elizabeth Hurst, Chino Basin Program Manager
Alan Lau, Senior Associate Engineer
Scott Lening, Manager of Operations
Laura Mantilla, Executive Assistant
Jason Marseilles, Manager of Engineering
Alyson Piguee, Director of External & Government Affairs
Vicky Salazar, Senior Associate Engineer
Travis Sprague, Manager of Asset Management
Teresa Velarde, Manager of Internal Audit
Brian Wilson, Principal Engineer
Jeff Ziegenbein, Acting Director of Operations and Maintenance

STAFF PRESENT via Video/Teleconference

Tony Arellano, Safety Officer
Lisa Dye, Director of Human Resources
Filbert Fontejon, Intern
Julianne Frabizio, Project Manager
Brandon Gonzalez, Technology Specialist I
Warren Green, Manager of Contracts and Procurement
Don Hamlett, Director of Information Technology
Jennifer Hy-Luk, Executive Assistant
Bonnie Marseilles, Administrative Assistant II
Monica Nelson, Administrative Assistant II
Sushmitha Reddy, Manager of Laboratories
Kristian Saenz, Engineering Consultant

James Simpson, Engineering Consultant
Andrew Zarour, Intern

CALL TO ORDER

Committee Chair Michael Camacho called the meeting to order at 10:01 a.m. There were no public comments received or additions to the agenda.

1A. CONSENT ITEM

The Committee:

- ◆ Approved Minutes of the April 12, 2023, Engineering, Operations, and Water Resources Committee meeting.

2A – 2C. ACTION ITEMS

The Committee:

- ◆ Recommended that the Board:

1. Award a construction contract for the RP-1 Headworks Biofilter Construction Contract Award, Project No. EN23088.05, to T.E. Roberts, in the amount of \$479,100.70; and
2. Authorize the General Manager to execute the construction contract, subject to non-substantive changes;

- ◆ and

1. Award a construction contract for the Old Variable Frequency Drive Replacement (Recycled Water), Project No. AM23002, to Big Sky Electric Co., Inc., in the amount of \$242,600; and
2. Authorize the General Manager execute the construction contract, subject to non-substantive changes;

- ◆ and

1. Award three-year Emergency Master Contracts with four one-year extension options to the following 38 Contractors: Allison Mechanical, Arizona Pipeline Company, Athena Engineering, Inc., Best Contracting, Inc., Big Sky Electric, Inc., CertaPro Painters, Charles King Company, Inc., Davis Electric Inc., Diversified Thermal Services, Inc., E.J. Meyer Company, Ferreira Construction Co, Inc., FM Thomas Air Conditioning, Garney Pacific, Inc., GSE Construction Co., Inc., Hampton Tedder Electric Company, Hemet Mfg Co. Inc dba Genesis Construction, Henkels & McCoy, Horizons Construction Company Int'l, Inc., Howard Ridley Co., Inc., Innovative Construction Solutions, JF Shea, J.R. Filanc Construction Co, Inc., Kiewitt Infrastructure West Co., Kingmen Construction, Inc., Leed Electric, Inc., Mladen Buntich Construction Co., Inc., Norstar Plumbing and Engineering, Inc., Pacific Hydrotech Corporation, PCL Construction, Inc., Rite-Way Roof Corporation, Sancon Technologies, Inc., SCW Contracting Corporation, SoCal Pacific Construction Corp dba National Coating & Lining,

Southern Contracting Company, T.E. Roberts, Inc., Tony Painting, United Mechanical Contractors, Inc., W.A. Rasic Construction Company, Inc.; and

2. Award three-year Small Construction Project Master Contracts with four one-year extension options with an aggregate total of \$10,000,000 to the following 37 Contractors: Allison Mechanical, Arizona Pipeline Company, Athena Engineering, Inc., Best Contracting, Inc., Big Sky Electric, Inc., CertaPro Painters, Charles King Company, Inc., CSI Electrical Contractors, Inc., Davis Electric Inc., Diversified Thermal Services, Inc., E.J. Meyer Company, Ferreira Construction Co, Inc., FM Thomas Air Conditioning, Garney Pacific, Inc., GSE Construction Co., Inc., Hampton Tedder Electric Company, Hemet Mfg Co. Inc dba Genesis Construction, Henkels & McCoy, Horizons Construction Company Int'l, Inc., Howard Ridley Co., Inc., Innovative Construction Solutions, JF Shea, J.R. Filanc Construction Co, Inc., Kingmen Construction, Inc., Leed Electric, Inc., Mladen Buntich Construction Co., Inc., Norstar Plumbing and Engineering, Inc., Pacific Hydrotech Corporation, PCL Construction, Inc., Rite-Way Roof Corporation, Sancon Technologies, Inc., SCW Contracting Corporation, SoCal Pacific Construction Corp dba National Coating & Lining, Southern Contracting Company, T.E. Roberts, Inc., Tony Painting, United Mechanical Contractors, Inc., W.A. Rasic Construction Company, Inc.; and
3. Authorize the General Manager to execute the contracts, subject to non-substantive changes;

as Consent Calendar items on the June 21, 2023, Board meeting agenda.

3A – 3B. INFORMATION ITEMS

The following information items were presented or received and filed by the Committee:

- ◆ Engineering and Construction Management Department Project Updates
- ◆ RP-5 Expansion Project Update June 2023

4. GENERAL MANAGER'S COMMENTS

General Manager Shivaji Deshmukh stated that IEUA has been awarded a \$7.7M grant from the California Department of Water Resources (DWR) for the Turnkey Turf Transformation Project with an additional \$770,000 for grant administration, for a total grant of \$8.4M. This grant will allow IEUA to partner with three other State Water Project dependent agencies including Las Virgenes Municipal Water District, Upper San Gabriel Valley Municipal Water District, and Calleguas Water District to replace non-functional turf with drought-tolerant landscaping in underrepresented communities within the commercial, industrial, and institutional (CII) sector across the four service areas. General Manager Deshmukh recognized the collaboration between the IEUA Water Use Efficiency and Grants teams to develop an innovative, collaborative program that was able to make IEUA very competitive for funding. General Manager Deshmukh also expressed appreciation to DWR for the generous grant and to the partner agencies for their commitment to this important project.

5. COMMITTEE MEMBER COMMENTS

There were no Committee member comments.

6. COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS

There were no Committee member requested future agenda items.

ADJOURNMENT

With no further business, Committee Chair Camacho adjourned the meeting at 10:50 a.m.

Respectfully submitted,

Laura Mantilla
Recording Secretary

*A Municipal Water District

APPROVED: JULY 12, 2023

DRAFT

**ACTION
ITEM
2A**

Date: July 19, 2023

ADD

To: The Honorable Board of Directors

From: Shivaji Deshmukh, General Manager

Committee: Engineering, Operations & Water Resources

07/12/23

Finance & Administration

Staff Contact: Christiana Daisy, Deputy General Manager

Subject: Pre-Approval for Heavy Fleet Equipment Purchases

Executive Summary:

On May 2, 2023, the Agency posted a Request for Quotes (RFQ) on PlanetBids for multiple fleet vehicles previously Board approved under project FM23001 Heavy Equipment Replacement; however, no proposals were received. A second attempt was made where staff exercised several national procurement cooperatives with no successful results. Due to the lack of vehicles available in California, staff sought vehicle availability outside of California, finding several units for purchase. Purchasing vehicles outside of California will help alleviate the possibility of delays in sourcing each vehicle due to the lack of inventory in the market. Another complication is that dealerships place municipalities on waiting lists, adding challenging timelines for delivering heavy duty vehicle types over \$150,000.

Staff is recommending the pre-approval of "off-the-lot" vehicles to procure the following heavy duty vehicle types up to \$1,000,000, two 2023 F550 Crane Truck, one 2024 F450 Truck, four 2024 F350 Utility Trucks, and one 2024 Sewer Collections CTV Van.

Staff's Recommendation:

Authorize the General Manager to execute the procurement of "off-the-lot" vehicles, up to \$1,000,000.

Budget Impact Budgeted (Y/N): N Amendment (Y/N): N Amount for Requested Approval:

Account/Project Name:

FM23001 Heavy Equipment Replacements from Operations and Maintenance (RO) Fund, Professional Fees and Services.

Fiscal Impact (explain if not budgeted):

An amount of \$670,000 was budgeted from FY 2022-23 and another \$670,000 from FY 2023-24 was budgeted to procure heavy duty vehicles.

Prior Board Action:

June 15, 2022 - Approved project FM23001 Heavy Duty Replacements.

Environmental Determination:

Not Applicable

Business Goal:

Business Practices - IEUA will provide outstanding services that support our member agencies and region in a cost effective, efficient and reliable manner.

Attachments:

1. PowerPoint Presentation

Attachment 1



Pre-Approval for Heavy Fleet Equipment Purchases

Lucia Diaz

Manager of Facilities & Water Systems Programs

July 2023

Procurement Challenges

Heavy Duty Fleet Replacements

- Procurement of Vehicles
 - Submitted RFQ on May 2, 2023
 - No response
 - Low on inventory
 - Need to source out of state
 - Vehicles over \$150K
- CARB Regulations
 - 50% of purchases must be electric after 2024



Procurement Challenges

Heavy Duty Fleet Replacements

- Vehicles to be Sourced
 - Two 2023 Ford F550 Crane Trucks
 - One 2024 Ford F450 Utility Truck
 - Four 2024 Ford F350 Utility Trucks
 - One 2024 Sewer Collections CCTV



Staff's Recommendation

- Authorize the General Manager to execute the procurement of “off-the-lot” vehicles, up to \$1,000,000.

IEUA's Business Practices will provide outstanding services that support our member agencies and region in a cost effective, efficient and reliable manner.

**ACTION
ITEM
2B**

Date: July 19, 2023

SD

To: The Honorable Board of Directors

From: Shivaji Deshmukh, General Manager

Committee: Engineering, Operations & Water Resources

07/12/23

Staff Contact: Christiana Daisy, Deputy General Manager

Subject: Sodium Hypochlorite and Ferric Chloride Chemical Contract Awards

Executive Summary:

Sodium Hypochlorite is a chemical used at the Agency to disinfect tertiary filtered effluent. To maintain compliance with the Agency's National Pollutant Discharge Elimination System permit, tertiary filtered effluent must meet a total chlorine residual concentration time of at least 450 milligram-minutes per liter, a modal contact time of at least 90 minutes, and the disinfected water must be free of total coliform.

Ferric chloride is a chemical used at the Agency to control the hydrogen sulfide (H₂S) concentrations in the treatment process. The South Coast Air Quality Management District limits Agency facilities to emit five pounds per day or less of total sulfur compounds. The addition of ferric chloride is needed to maintain permit compliance. Ferric chloride also enhances settleability of solids in the primary treatment process.

Staff's Recommendation:

1. Approve the award to provide the supply of sodium hypochlorite chemicals, Contract No. 4600003367, to JCI Jones Chemicals Incorporated, for a one-year contract, with four one-year renewal options, for a potential total contract term of five years for a not-to-exceed amount of \$17,000,000;
2. Approve the award to provide the supply of ferric chloride chemicals, Contract No. 4600003373, to California Water Technologies, LLC for a one-year contract, with four one-year renewal options, for a potential total contract term of five years for a not-to-exceed amount of \$9,100,000; and
3. Authorize the General Manager to execute the contracts, subject to non-substantive changes.

Budget Impact *Budgeted (Y/N): Y Amendment (Y/N): N Amount for Requested Approval:*

Account/Project Name:

N/A

Fiscal Impact (explain if not budgeted):

N/A

Prior Board Action:

The IEUA Board approved a 5 year contract with Olin Corporation for sodium hypochlorite chemical on June 14, 2018.

The IEUA Board approved a contract with California Water Technologies for Ferric Chloride chemical for a one year on August 17, 2022.

Environmental Determination:

Not Applicable

N/A

Business Goal:

The IEUA sodium hypochlorite and ferric chloride chemical contracts is consistent with IEUA's Business Goal of Business Practices, specifically the Operations objective that IEUA is committed to sustainable cost containment of operating and capital costs.

Attachments:

Attachment 1 - Background

Attachment 2 - PowerPoint Presentation

Attachment 3 - JCI Jones Chemicals Incorporated Contract 4600003367 (Click to Download)

Attachment 4 - California Water Technologies, LLC Contract 4600003373 (Click to Download)

Attachment 1

Background

Subject: Sodium Hypochlorite and Ferric Chloride Chemical Contract Awards

The Agency's current sodium hypochlorite chemical contract expires August 1, 2023. A Request for Quote was issued on PlanetBids on May 15, 2023, to secure a sodium hypochlorite chemical supplier. There were two responsive bidders, JCI Jones Chemicals, Incorporated (JCI) and Olin Corporation. The proposals were reviewed, and it was determined that JCI was the lowest responsive and responsible bidder. JCI's bid is approximately 10% lower than the Agency's current rate. The Contract and Procurement Unit also benchmarked this bid with neighboring agencies and found the price to be consistent. Ferric chloride is a chemical used at the Agency to control the hydrogen sulfide (H₂S) concentrations in the treatment process. The South Coast Air Quality Management District limits Agency facilities to emit five pounds per day or less of total sulfur compounds. The addition of ferric chloride is needed to maintain permit compliance. Ferric chloride also enhances settleability of solids in the primary treatment process.

The Agency's current ferric chloride contract expires in August 2023. A Request for Quote was issued on PlanetBids on May 22, 2022, to secure a ferric chloride chemical supplier. There were three responsive bidders, California Water Technologies, LLC (CWT), Kemira Water Solutions, Incorporated, and Pencco, Incorporated. The proposals were evaluated, and it was determined that CWT was the most qualified and responsive bidder. CWT's bid is approximately 36% higher than the current rate, but the proposed rate aligns with recent chemical cost increases due to raw material shortages and increased freight costs. The Contract and Procurement Unit also benchmarked this bid with neighboring agencies and found the price to be consistent. CWT is the current ferric chloride supplier and has performed well in their current capacity.

Attachment 2



Sodium Hypochlorite and Ferric Chloride Chemical Contract Awards

Ryan Love
Deputy Manager of Operations
July 19, 2023

Purpose of Sodium Hypochlorite

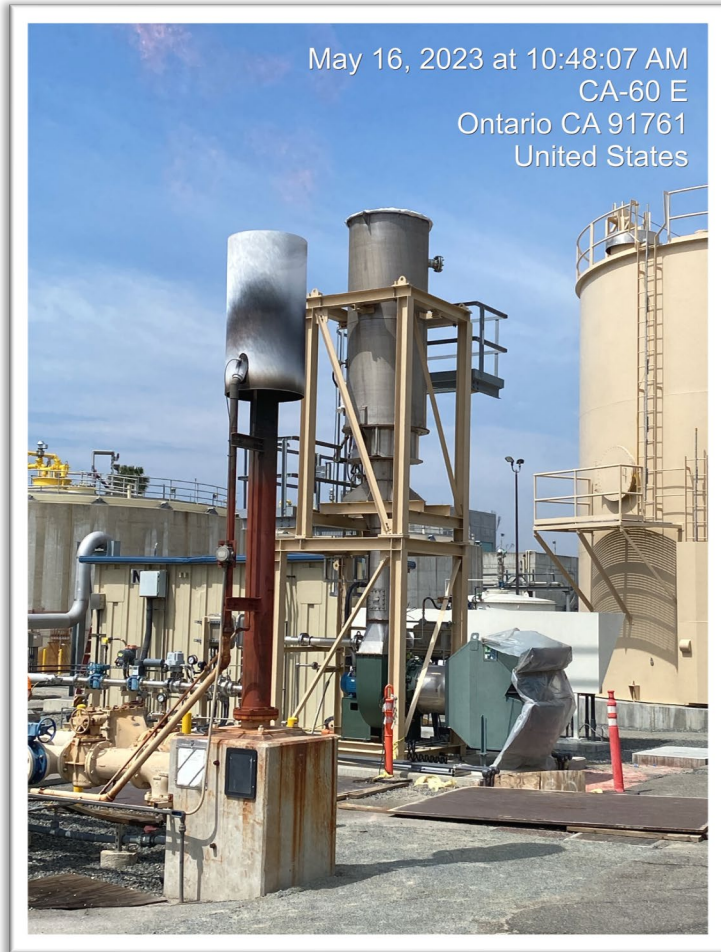


RP-1 Sodium Hypochlorite Storage Tanks

Permit requirement:

- Disinfection requirements are regulated by the National Pollutant Discharge Elimination System (NPDES) permit.
 - Total Chlorine Residual Concentration Time of at least 450 milligram-minutes per liter
 - Detention time of at least 90 minutes
 - Free of total coliform
- Title 22 division four of the California Code of Regulations guidelines for disinfected tertiary recycled water.

Purpose of Ferric Chloride



RP-1 Flare

- To meet South Coast Air Quality Management District Hydrogen Sulfide Emission Requirements.
 - Emit less than 5lb/day of total sulfur compounds
 - Anaerobic Digesters
 - Flare
 - Boiler
- Improve settleability in treatment process.
 - Primary Clarifiers



RP-2 Boiler

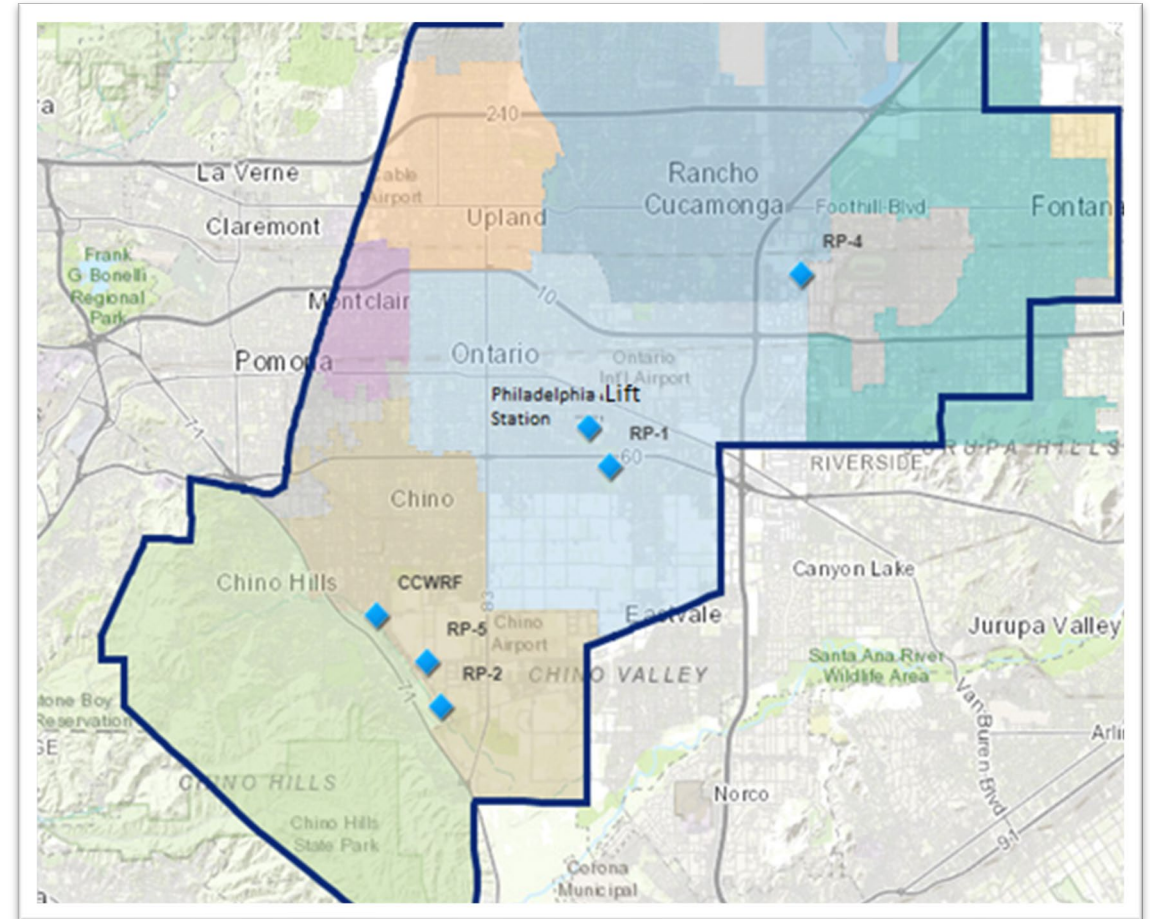
Background

Sodium hypochlorite is used at:

- Regional Water Recycling Plant No. 1 (RP-1)
- Regional Water Recycling Plant No. 4 (RP-4)
- Regional Water Recycling Plant No. 5 (RP-5)
- Carbon Canyon Water Recycling Facility (CCWRF)

Ferric Chloride is used at:

- Regional Water Recycling Plant No. 1 (RP-1)
- Regional Water Recycling Plant No. 2 (RP-2)
- Regional Water Recycling Plant No. 4 (RP-4)
- Regional Water Recycling Plan No. 5 (RP-5)
- Carbon Canyon Water Recycling Facility (CCWRF)
- Philadelphia Lift Station



IEUA Wastewater Chemicals

Chemical	Purpose
Sodium hypochlorite	• Disinfection
Ferric chloride	• H ₂ S management and primary clarifier settling
Aluminum sulfate	• Tertiary flocculation
Polymer 750E	• Centrifuge dewatering
Polymer 748E	• Dissolved air flotation thickener and belt press dewatering
Sodium bisulfite	• Neutralize residual chlorine
Anti-struvite	• Struvite prevention in centrate piping

Chemical Supplier Challenges

Chemical	Cost Justification	Agency Impact FY22/23
Sodium hypochlorite	<ul style="list-style-type: none">• Caustic• Chlorine• Freight	<ul style="list-style-type: none">• Increase of 114%
Ferric chloride	<ul style="list-style-type: none">• Hydrochloric acid• Freight	<ul style="list-style-type: none">• Increase of 32%
Aluminum sulfate	<ul style="list-style-type: none">• Sulfuric acid• Alumina trihydrate• Freight	<ul style="list-style-type: none">• Increase of 34%
Polymer 750E	<ul style="list-style-type: none">• Methyl acrylate• Freight	<ul style="list-style-type: none">• Increase of 11%
Polymer 748E	<ul style="list-style-type: none">• Methyl acrylate• Freight	<ul style="list-style-type: none">• Increase of 11%
Sodium bisulfite	<ul style="list-style-type: none">• Caustic soda• Molten sulfur• Freight	<ul style="list-style-type: none">• Increase of 69%

Quote Results Sodium Hypochlorite

Quotes Received

Olin Incorporated (Olin)

JCI Jones Chemicals Incorporated (JCI)

Award Criteria

Lowest responsive, responsible bidder

Quote Results

JCI would provide the best value to the Agency.

Previous supplier 2012-2015.

Manufacturing and Distribution center in
Torrance, CA.

Unit price decrease of approximately 10%.

Current Cost

Olin	\$1.96/gallon
------	---------------

Contract Terms	JCI	Olin
One-year fixed price	\$1.7765/gallon	\$2.055/gallon
Option year 1	0-10%	3-7%
Option year 2	0-25%	3-7%
Option year 3	0-50%	3-7%
Option year 4	0-50%	3-7%

Quote Results Ferric Chloride

Quotes Received

California Water Technologies, LLC (CWT)
Kemira Water Solutions, Incorporated (Kemira)
Pencco, Incorporated (Pencco)

Award Criteria

Lowest responsive, responsible bidder

Quote Results

CWT provides the best value to the Agency.
Manufactured in Sante Fe Springs, CA.
Lowest unit price increase at 36%.

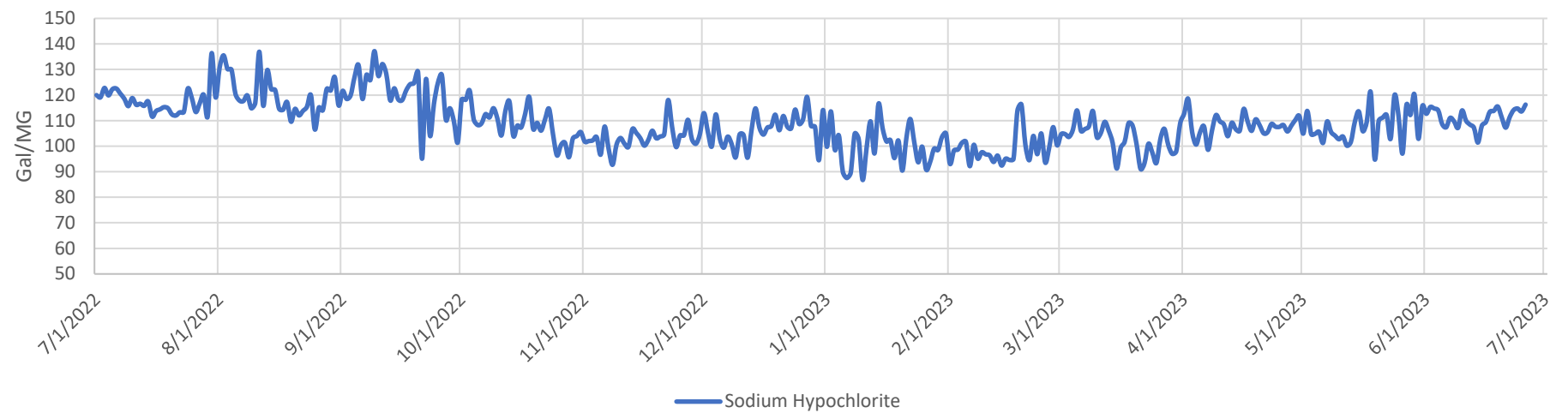
Current Cost

CWT	\$0.445/dry pound
-----	-------------------

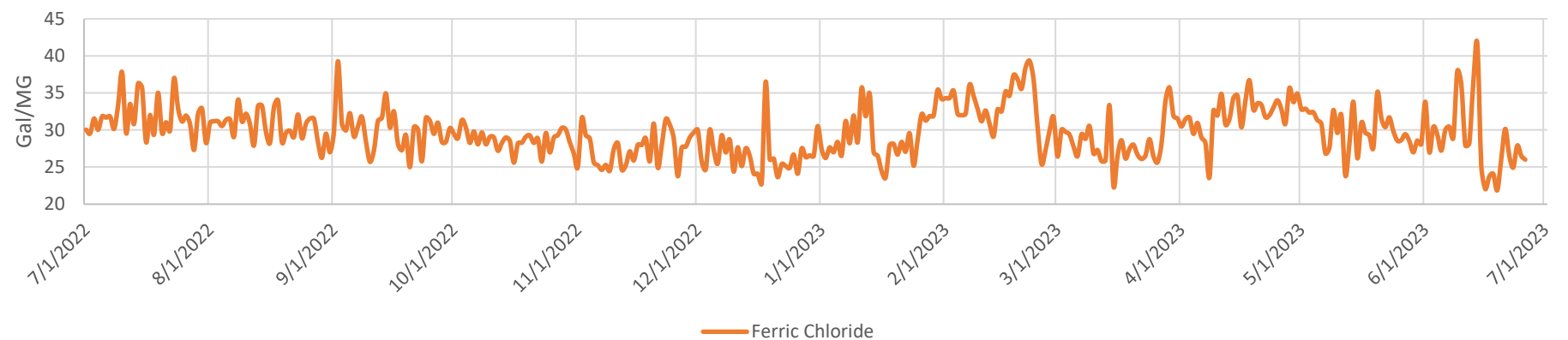
Contract Terms	CWT	Kemira	Pencco
One-year fixed price	\$0.604/dry pound	\$0.637/dry pound	\$0.754/dry pound
Option year 1	0-10%	0-7%	0-10%
Option year 2	0-20%	0-7%	0-10%
Option year 3	0-30%	0-7%	0-10%
Option year 4	0-30%	0-7%	0-10%

Agency-wide Usage FY22/23

Agency-wide Sodium Hypochlorite Usage FY22-23



Agency-wide Ferric Usage FY22-23



Staff's Recommendation

1. Approve the award to provide the supply of sodium hypochlorite chemicals, Contract No. 4600003367, to JCI Jones Incorporated, for a one- year contract, with four one-year renewal options, for a potential total contract term of five years for a not-to-exceed amount of \$17,000,000;
2. Approve the award to provide the supply of ferric chloride chemicals, Contract No. 4600003373, to California Water Technologies, LLC, for a one-year contract, with four one-year renewal options, for a potential total contract term of five years for a not-to-exceed amount of \$9,100,000; and
3. Authorize the General Manager to execute the contracts, subject to non-substantive changes.

The IEUA Sodium Hypochlorite and Ferric Chloride Chemical Contracts is consistent with **IEUA's Business Goal of Business Practices**, specifically the Operations objective that IEUA is committed to sustainable cost containment of operating and capital costs.

**ACTION
ITEM
2C**

Date: July 19, 2023

ADD

To: The Honorable Board of Directors

From: Shivaji Deshmukh, General Manager

Committee: Engineering, Operations & Water Resources

07/12/23

Finance & Administration

07/12/23

Staff Contact: Christiana Daisy, Deputy General Manager

Subject: Consulting Program Management and Owner Engineering Services Contract Award

Executive Summary:

The services by the consultant program manager and owner engineer (PM/OE) are needed to support the Inland Empire Utilities Agency (IEUA) in a variety of potential future projects but most immediately, to support the design and construction of the advanced water treatment system to meet the region's compliance needs in addition to the recycled water system expansion.

Soliciting for the PM/OE was established as a three-step process which started with a broadcast announcement of the PM/OE opportunity, followed by the request for qualifications from interested consulting teams, and finalized by the review of proposals from the short listed consulting teams. Based on the weighted average score by four panelists (internal and external), Jacobs Engineering Group, Inc. was deemed as the most qualified consultant. Staff negotiated the scope of services and confirmed the total fees of \$9,113,805 towards the services for the first two years utilizing the offered labor rates and mark-ups in the proposals.

Staff's Recommendation:

1. Award a master services contract for the consulting program management and owner engineering services to the Jacobs Engineering Team. Inc, in the amount of \$9,113,805; and
2. Authorize the General Manager to execute the contract, subject to non-substantive changes.

Budget Impact *Budgeted (Y/N): Y Amendment (Y/N): N Amount for Requested Approval:*

Account/Project Name:

Multiple Projects under the Recycled Water System Expansion Program: WR24002 6 TAFY AWP, WR23001 Injection Facilities, WR23002 RW Interconnection to the City of Rialto, EN16065 RW Connections to JCSD, and PL26001 Advanced Water Purification Facility

Fiscal Impact (explain if not budgeted):

The five projects have a combined approved FY23/24 budget of \$4,800,000, and a combined approved total projects' budget of \$330,180,905 in the Recycled Water Fund (10600) , and \$165,000,000 in the Wastewater (10800) Fund.

Prior Board Action:

None.

Environmental Determination:

Not Applicable

Business Goal:

The Recycled Water System Expansion Program supports IEUA's business goal of Water Reliability, of implementing an integrated water resources management plan providing a reliable and cost-effective water supply and promoting sustainable water use throughout the region.

Attachments:

Attachment 1 - PowerPoint

Attachment 2 - Master Services Contract ([Click to Download](#))

Attachment 1

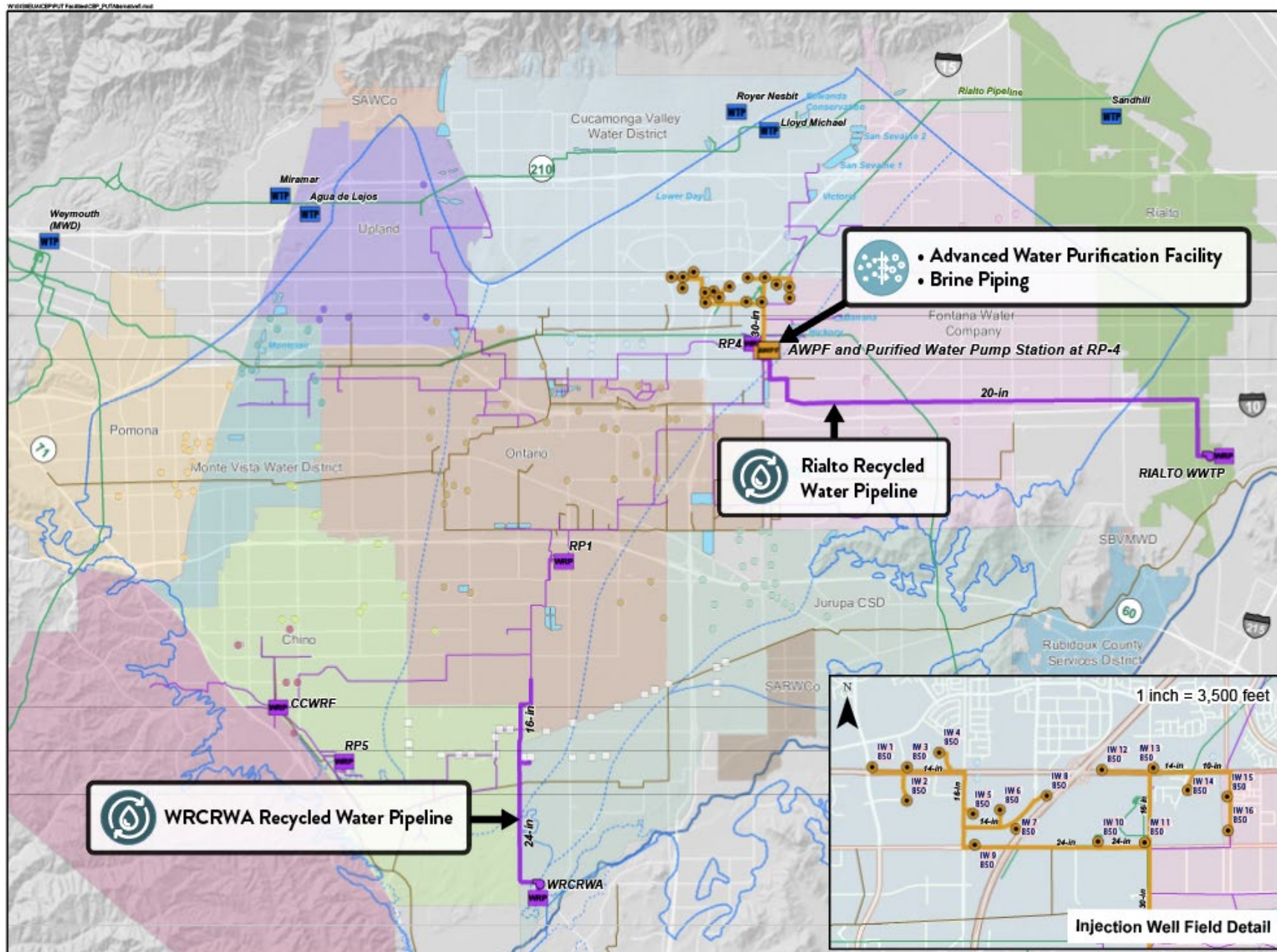
Consulting Program Management and Owner Engineering Services Contract Award



Adham Almasri, P.E., PMP
Principal Engineer
July 2023

Capital Project Alternatives- *Facility Comparison*

Facility	Baseline Compliance		Recycled Water Program Expansion (15 TAFY)	CBP WSIP (15 TAFY)
	Salinity (9 TAFY)	PFAS (15 TAFY)		
Advanced Water Purification Facility [AWPF]	✓	✓	✓	✓
External Supplies <ul style="list-style-type: none"> • City of Rialto RW • WRCRWA RW 		✓ ✓	✓ ✓	✓ ✓
Aquifer Replenishing Wells			✓	✓
Extraction and Regional Distribution System <ul style="list-style-type: none"> • Wells and Laterals • Backbone Distribution System 				✓ ✓
MWD Interconnection				✓



Recycled Water Program Expansion

- AWPf
- Rialto RW
- WRCRWA RW
- Aquifer Replenishing Wells

Consultant Program Manager's Solicitation and Funding

- Three steps (broadcast, RFQ, RFP)
- Jacobs Team deemed as the most qualified
- Staff negotiated an initial 2-year contract
- Contract can be expanded to support CBP
- Fees will be covered using 2019 property taxes
- Task orders will be executed against the individual projects in the TYCIP



Rendering of the Advanced Water Purification Facility

Consultant Program Manager's First Two Years Services

- Staff Augmentation
- Owner Engineering: Subject matter experts
- Coordination with a third-party legal team
- Support IEUA with land acquisition
- Support with funding applications, public outreach, and compliance
- Quick start program



Example Site for Aquifer Replenishment Well

Staff's Recommendation:

1. Award a master services contract for the consulting program management and owner engineering services to the Jacobs Engineering Group, Inc. in the amount of \$9,113,805; and
2. Authorize the General Manager to execute the contract, subject to non-substantive changes.

Water System Expansion Program supports **IEUA's business goal of Water Reliability**, of implementing an integrated water resources management plan providing a reliable and cost-effective water supply and promoting sustainable water use throughout the region.

**INFORMATION
ITEM
3A**

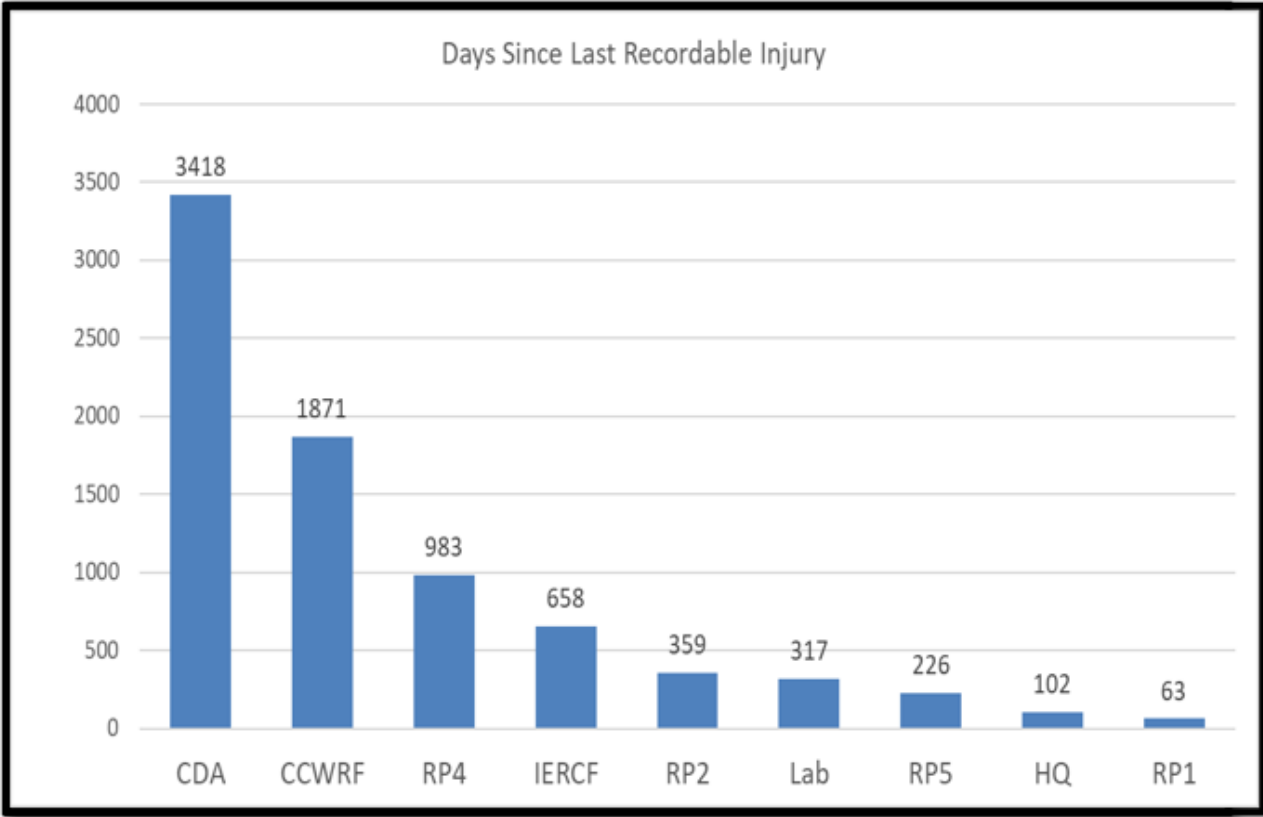
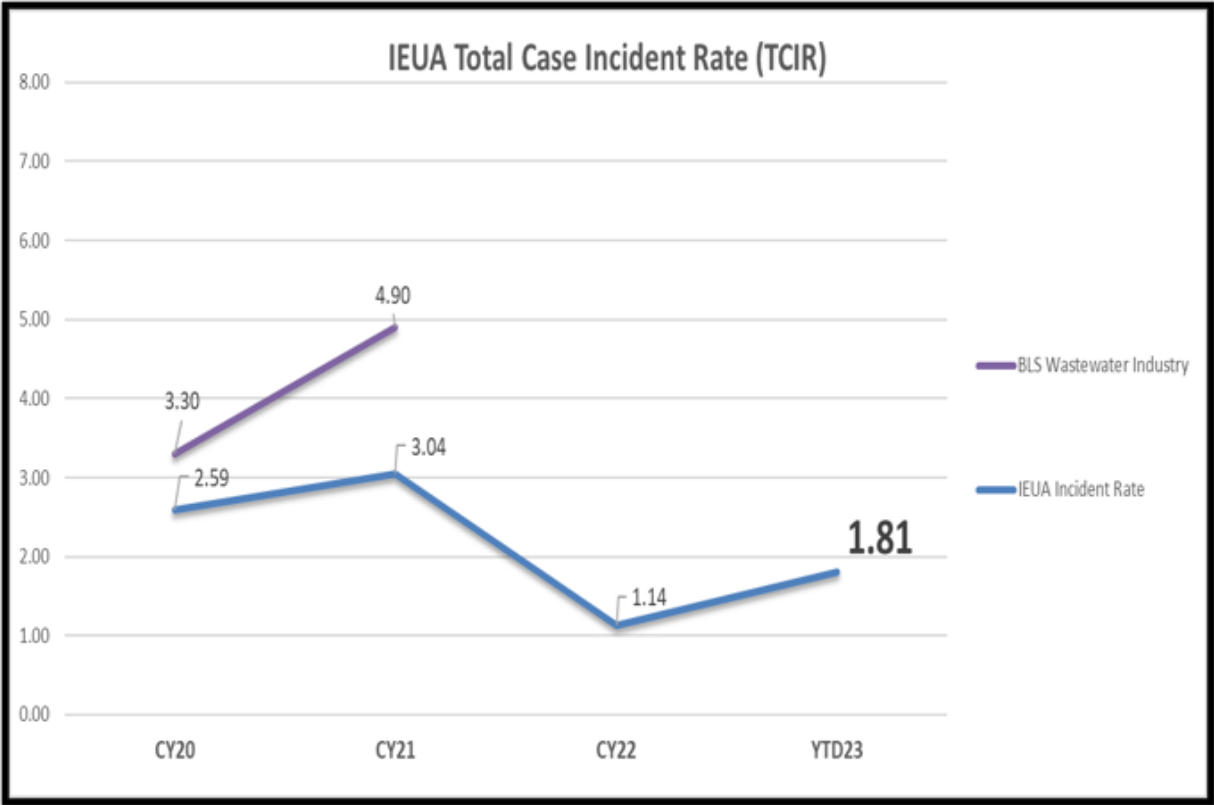
Operations & Maintenance Department Quarterly Update

Lucia Diaz

Manager of Facilities & Water System Programs

July 2023

IEUA Incident Rates vs. Industry & Total Recordable Injuries



* Incident Case Rate does not include June hours



Facilities & Water System Programs

- Unit Overview
 - Facilities Management
 - Facility Services
 - Security
 - Fleet Management
 - Hazardous Waste Management
 - Groundwater Recharge & Recycled Water
 - Sewer Collection Management



Operational Challenges Increasing

- Fats, Oils & Grease

- Additional cleaning at the regional plants
- Wet well cleaning due to grease build up
- Equipment failures due to the rags
- Time away from pipeline inspections and cleaning



Operational Challenges

- Security Incidents
 - 1158 Reservoir Security Breach
 - Theft at HQ-B Utility Truck
 - Two theft incidents at RP-2 for catalytic converters
 - Theft at Carbon Canyon HVAC Van
 - Vandalism in HQ-B parking lot



Operational Challenges

- Fleet Management
 - Procuring of vehicles
 - CARB
 - Outsourced new F-550 in Arizona
 - Submitted RFP for 6 Heavy Equipment vehicles (no response)



Mutual Aid Partners Update

- Class instruction
 - Expectations of responders
 - Calculations of spills
- Received 6 hours of CEUs
- Sanitary Sewer Overflow (SSO) Simulations
- New WDR Categories for spills
- Lunch hosted by City of Ontario
 - Vendor booths
- A total of 10 agencies from the Inland Empire Region



Mutual Aid Partners



Class sessions



Simulation



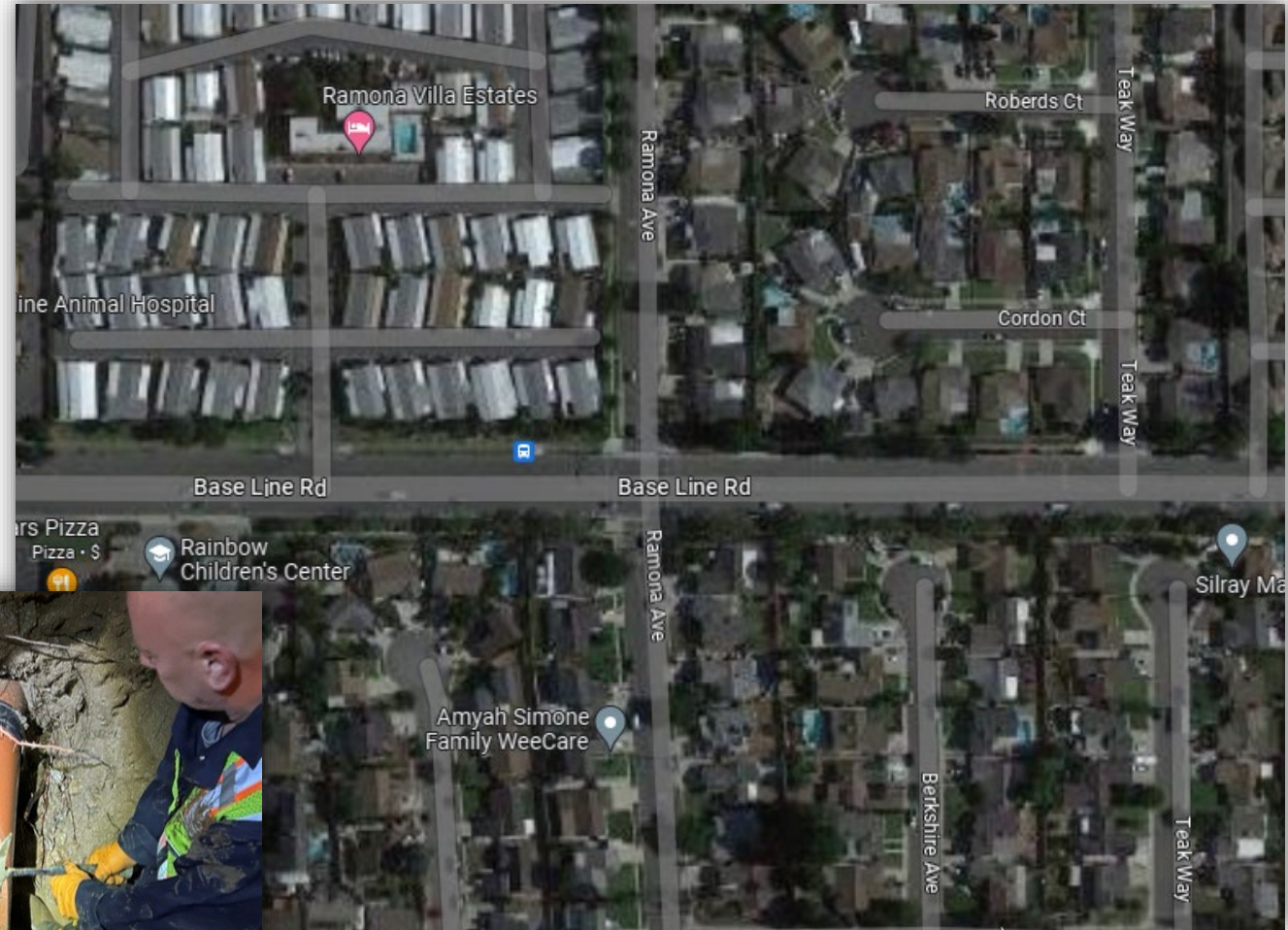
Simulation

Mutual Aid Event Video



Mutual Aid Support

- June 8, 2023 – Provided mutual aid support to Cucamonga Valley Water District (CVWD)
 - A sewer line break off Ramona and Baseline shutting down the community's water and began investigating the potential causes.



Thank you to our partners!



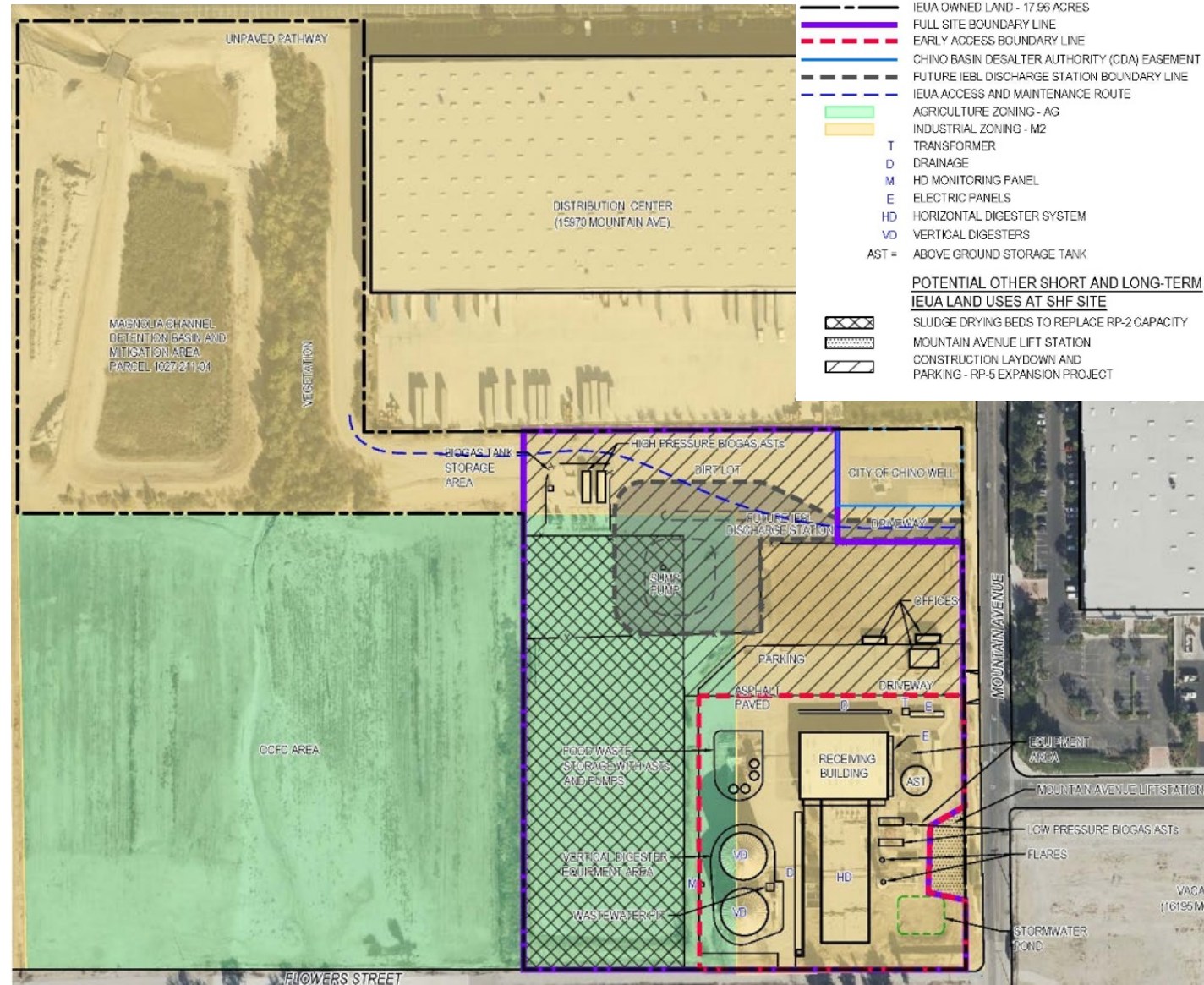
**INFORMATION
ITEM
3B**

Land Lease and Development RP-5 Solids Handling Facility Site RFP Update

Project No. EN20034.03

Kristian Saenz
Assistant Engineer
July 2023

RP-5 Solids Handling Facility Project Location/Map



The Background

- RP-5 Solids Handling Facility (SHF)
 - Idle since April 2019
 - Site partially used for RP-5 Expansion
 - Potential partial site use for IEUA drying beds (future)
- Consultant: GHD Inc.
 - Comprehensive evaluation report in 2021
 - Future viable alternatives for site utilization
 - Potential land use, half site or full site
 - 20-year lease or 50-year lease
 - Organics Processing
 - Logistics Hub
 - Request for Proposals (RFP) for 3rd party development



Aerial View Showing Laydown/Parking Lot

Request for Proposals Progress

- RFP released on October 11, 2022
 - Solicit comments/input from private ventures
 - Held two site walks and one virtual briefing
 - Received comments on draft RFP
- Type of respondents
 - Organics Processors
 - Land Developers (Logistics hub)
- Responses coordinated with:
 - IEUA Stakeholders
 - Contracts and Procurement/Risk Management
 - Legal Counsel
- Responses to questions issued March 2, 2023



Aerial View of RP-5 SHF

Current Issues/Concerns in RFP

- Bid Bond
 - Bid Bond is required
 - Negotiate bonding/financial guarantees with successful lessee
- Air Quality Management District (AQMD) Permit
 - Respondents will be liable for possible violations
 - Transfer of existing permit to lessee
- Santa Ana Watershed Project Authority (SAWPA)
 - Lessee will be responsible for their own allowable discharge quantity and quality via SAWPA agreement
- Delegation of Assets After Contract Completion
 - Negotiate site restoration
- Environmental Site Assessment (ESA)
 - Completed by GHD in 2021; included with RFP
 - Respondent will be responsible for hazardous elements and contamination remediation



Street View

Current Issues/Concerns

- Community Input
 - Future type of lessee and site utilization
- Zoning
 - Portion of the facility is zoned agriculture (AG)
 - Define rezoning requirements



RP-5 SHF Zoning per City of Chino

Next Steps

- Release final RFP
 - Hold virtual preproposal conference
 - Conduct site walks
- Compose proposals review panel including City of Chino, GHD and IEUA staff
- Receive and evaluate proposals
- Shortlist respondents
- Conduct interviews and negotiations with shortlisted respondents
- Select respondent offering best value to IEUA and community



Front View of Food Waste Tanks
and Digester

Evaluation Criteria

- Proposals initially evaluated as “Pass/Fail” scale:
 - Completeness of Proposal
 - Exceptions taken
 - Safety history
 - Financial and legal standing
- “Passing” Proposals Evaluation:
 - Benefits to IEUA and community
 - Environmental Impact
 - Experience in similar projects
 - Experience with similar facilities in California
 - Experience of personnel
- Prepare Internal Weighted Scoresheet for Evaluation and Ranking



View of Flare

Schedule

Activity	Date
Release of RFP	August 2023
Pre-Proposal Conference and Site Walk	September 2023
Deadline for Inquiries	October 2023
Proposal Closing	December 2023
Select Shortlist of Respondents	February 2024
Additional Due Diligence Period for Shortlisted Respondents	February 2024 – April 2024
Conduct Interviews with Shortlisted Respondents	May 2024
Selection of Preferred Respondent	June 2024
IEUA Board Award and Execution of Lease Agreement	July 2024

**INFORMATION
ITEM
3C**



Groundwater Recharge Update

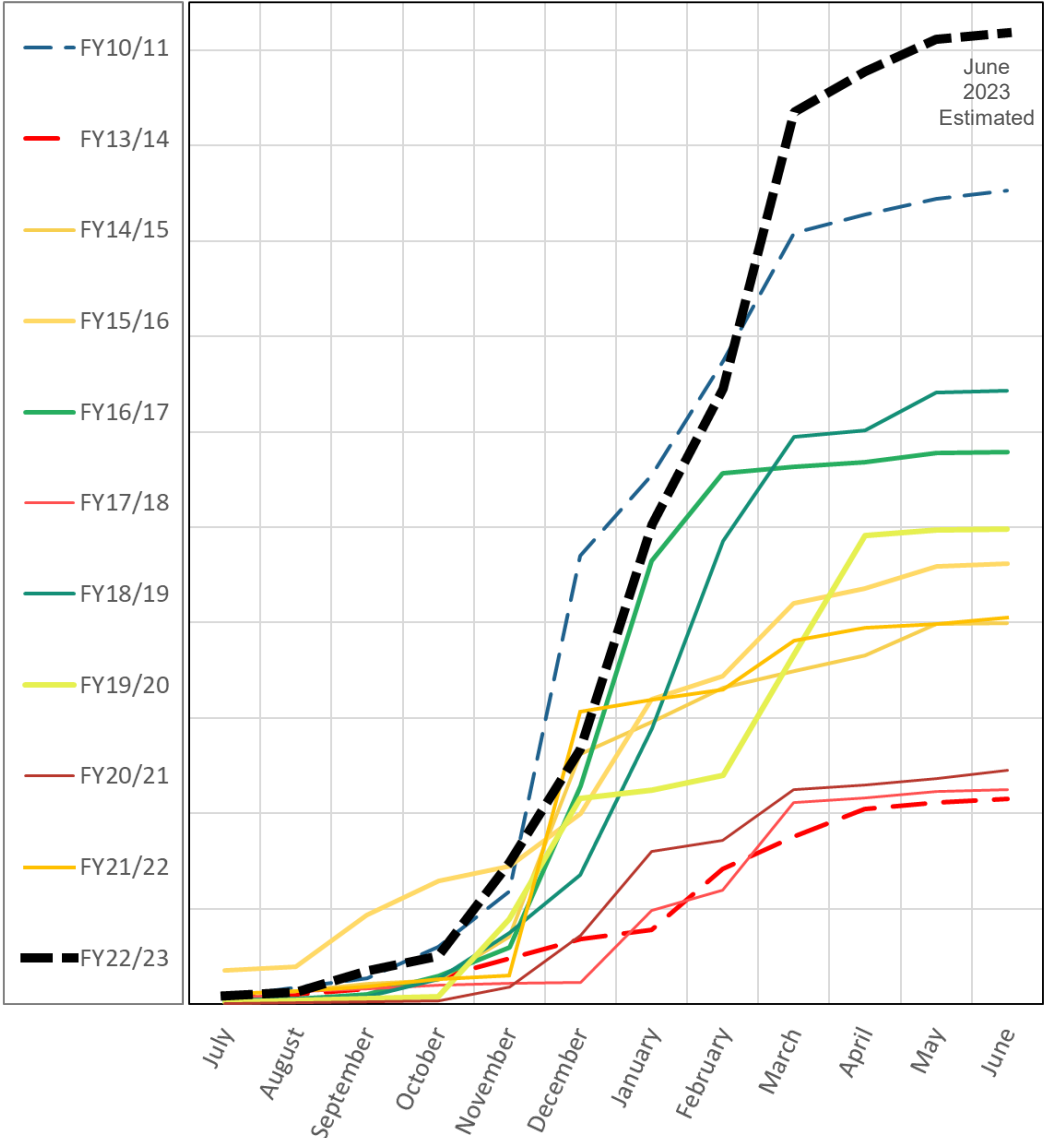
Steven Smith, PE

Acting Groundwater Recharge Coordinator

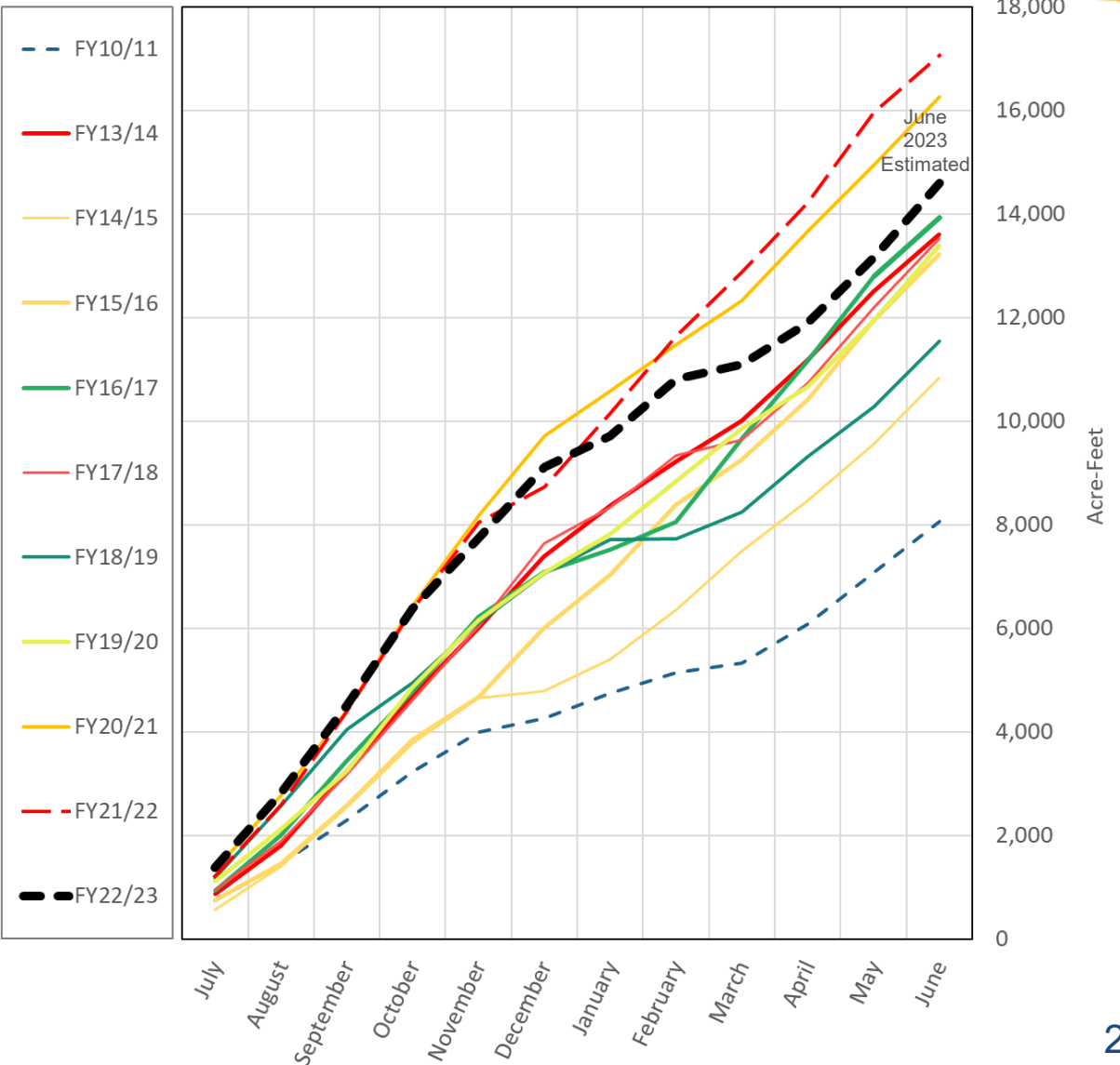
July 2023

Annual Recharge Monthly Accumulation

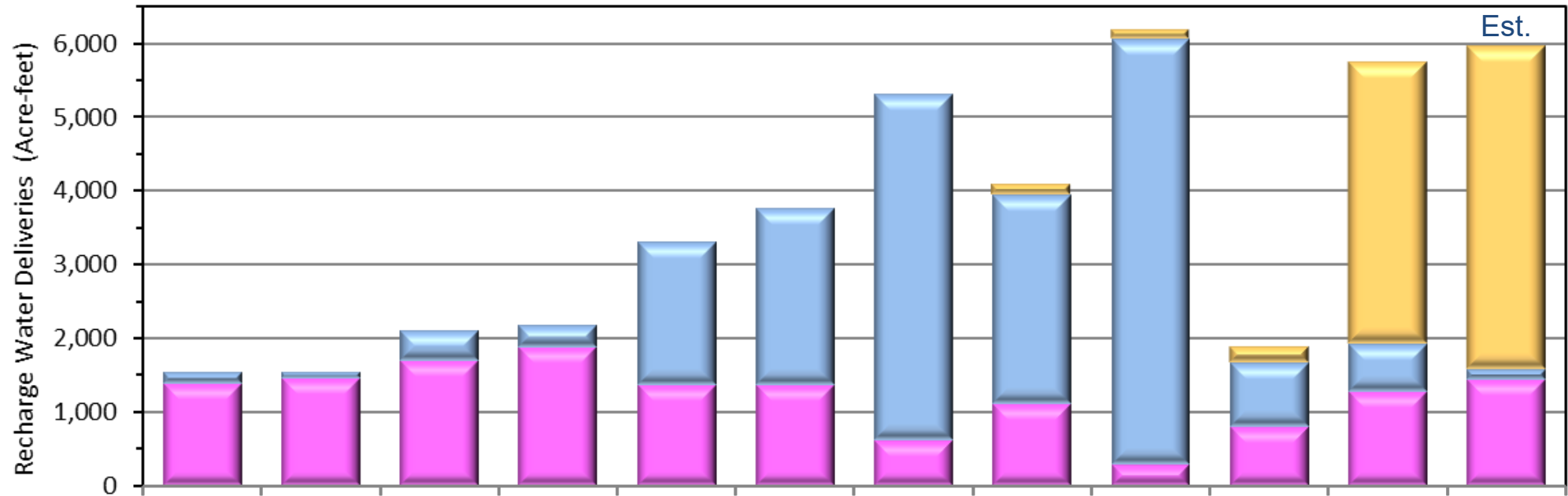
Stormwater Monthly Accumulation



Recycled Water Monthly Accumulation



Groundwater Recharge Deliveries – Past 12 Months



	Jul 2022	Aug 2022	Sep 2022	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	June 2023
■ MWD and other Imported Water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	155.2	127.4	215.5	3,820.9	4,395.1
■ Stormwater and Local Runoff (excluding Non-Replenishment)	166.0	94.4	429.0	325.4	1,941.8	2,391.2	4,708.2	2,845.2	5,797.0	865.0	659.9	148.7
■ Recycled Water	1,379.8	1,448.3	1,680.7	1,862.6	1,366.1	1,368.7	606.0	1,104.3	275.0	800.0	1,273.0	1,423.9

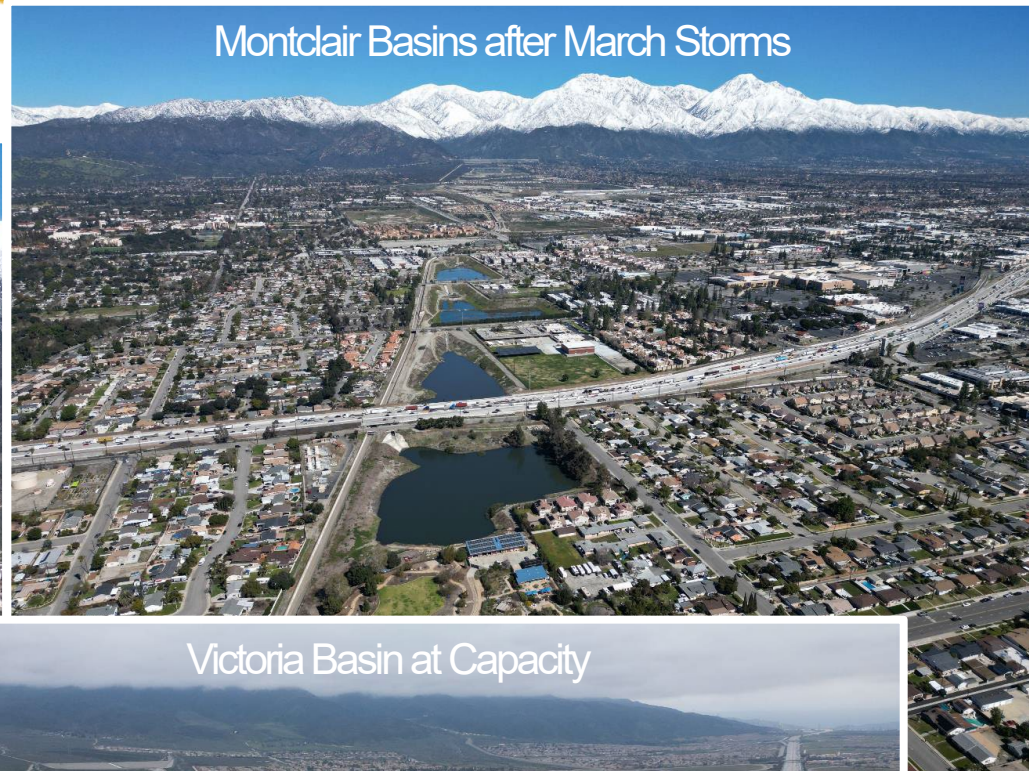
Stormwater Capture

Snowmelt into Etiwanda Debris Basin



03/02/2023

Montclair Basins after March Storms



Victoria Basin at Capacity



03/16/2023

DYY Delivery in MZ-1 San Antonio Creek

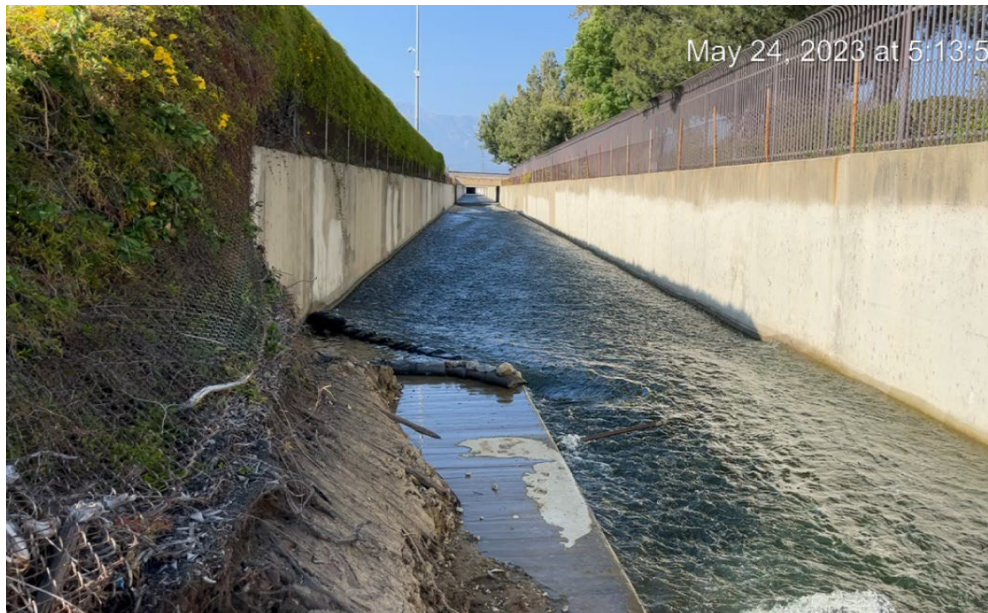
DYY Diversion to College Heights and Upland Basins



DYY Delivery to Montclair Basins



DYY Delivery past wall collapse at Arrow Hwy



DYY Delivery to San Sevaine Basins



MWD Deliveries and New Infrastructure

- Obermeyer Dam on Day Creek operated manually during MWD deliveries to Lower Day Basin
- Final Testing Awaits Completion of Communications Hardware



Upcoming Maintenance Projects

- Infiltration Restoration
 - San Sevaine Basin 3
 - Banana Basin
 - Hickory Basin
 - Ely Basin
 - Declez Basin
 - Turner Basin 3
- Erosion Repair
 - Lower Day Basin
 - San Sevaine Basin 5
 - Turner Basin 4
- Rubber Dam Replacement
 - RP-3 Basin
 - Turner Basin



Questions?



INFORMATION
ITEM
3D

Planning & Resources Department Update

Eddie Lin, PE
Senior Engineer
July 19, 2023

IEUA's Wide-Ranging Services Start with Defining and Planning for the Region's Water and Wastewater Needs

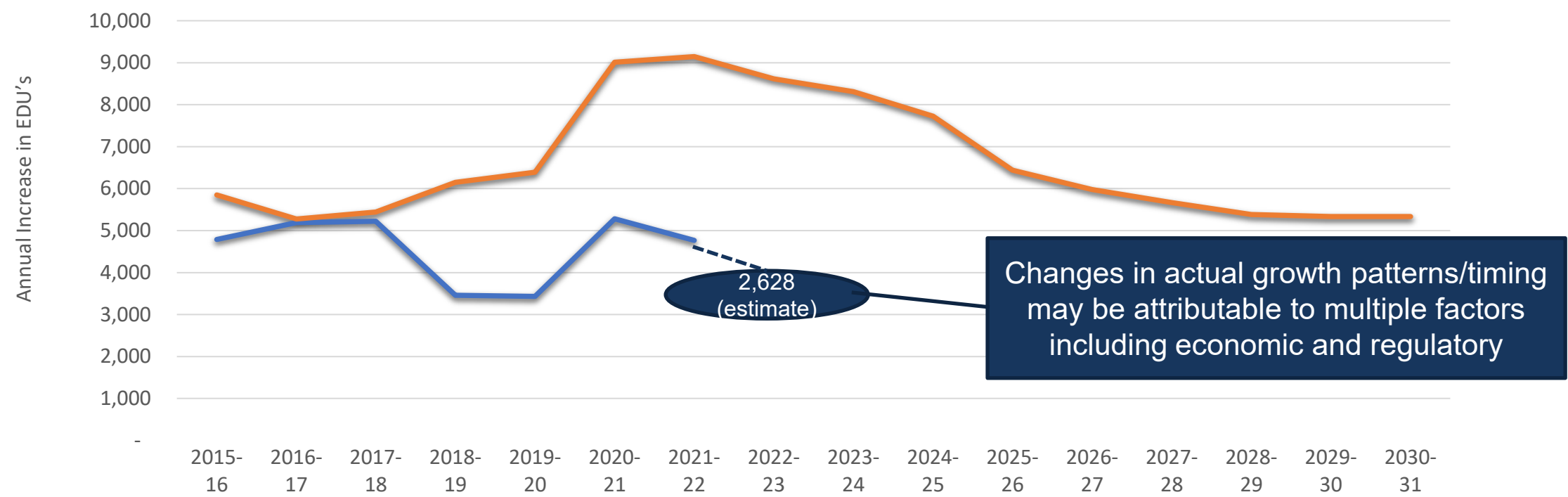
Key Areas of Service

- Securing and supplying **imported** water
- Collecting and treating **wastewater**
- Development of **recycled water** supplies
- Promoting sustainable use of **groundwater**

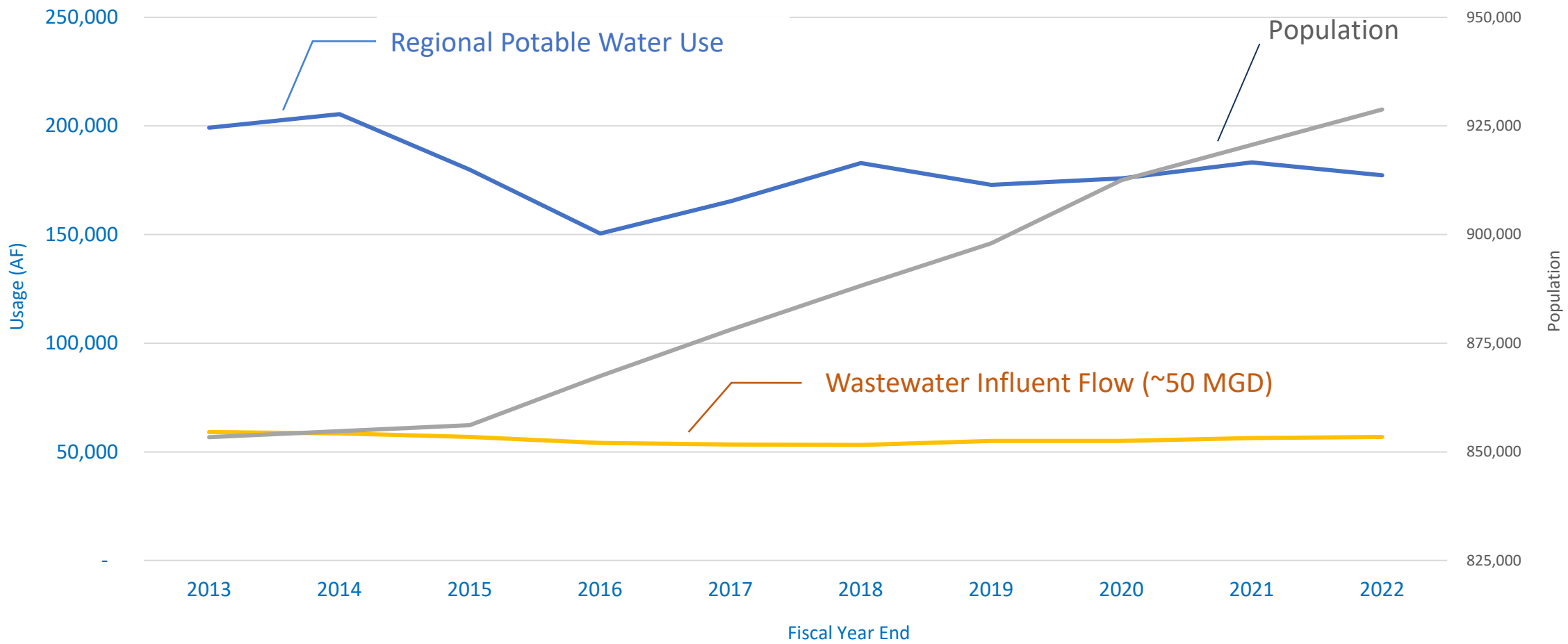


Rates of Growth (i.e., EDUs) Are Lower Than Anticipated, but Population Expected To Increase

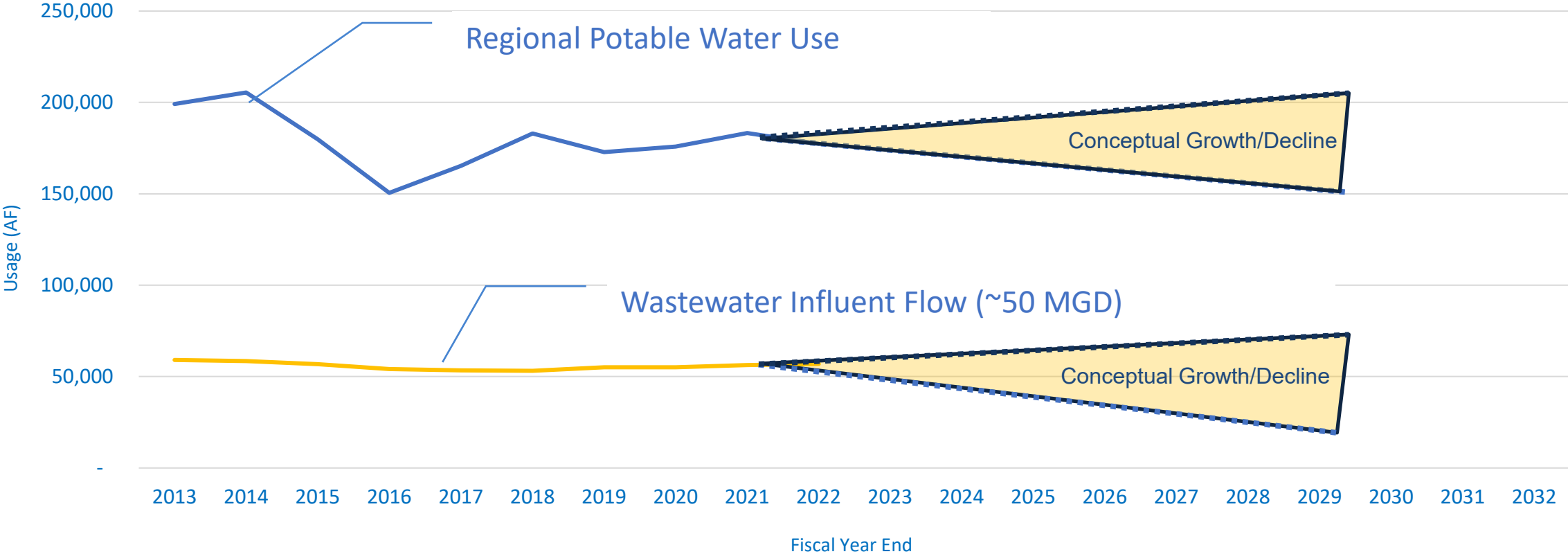
Actual vs SCA's Projected New EDU's



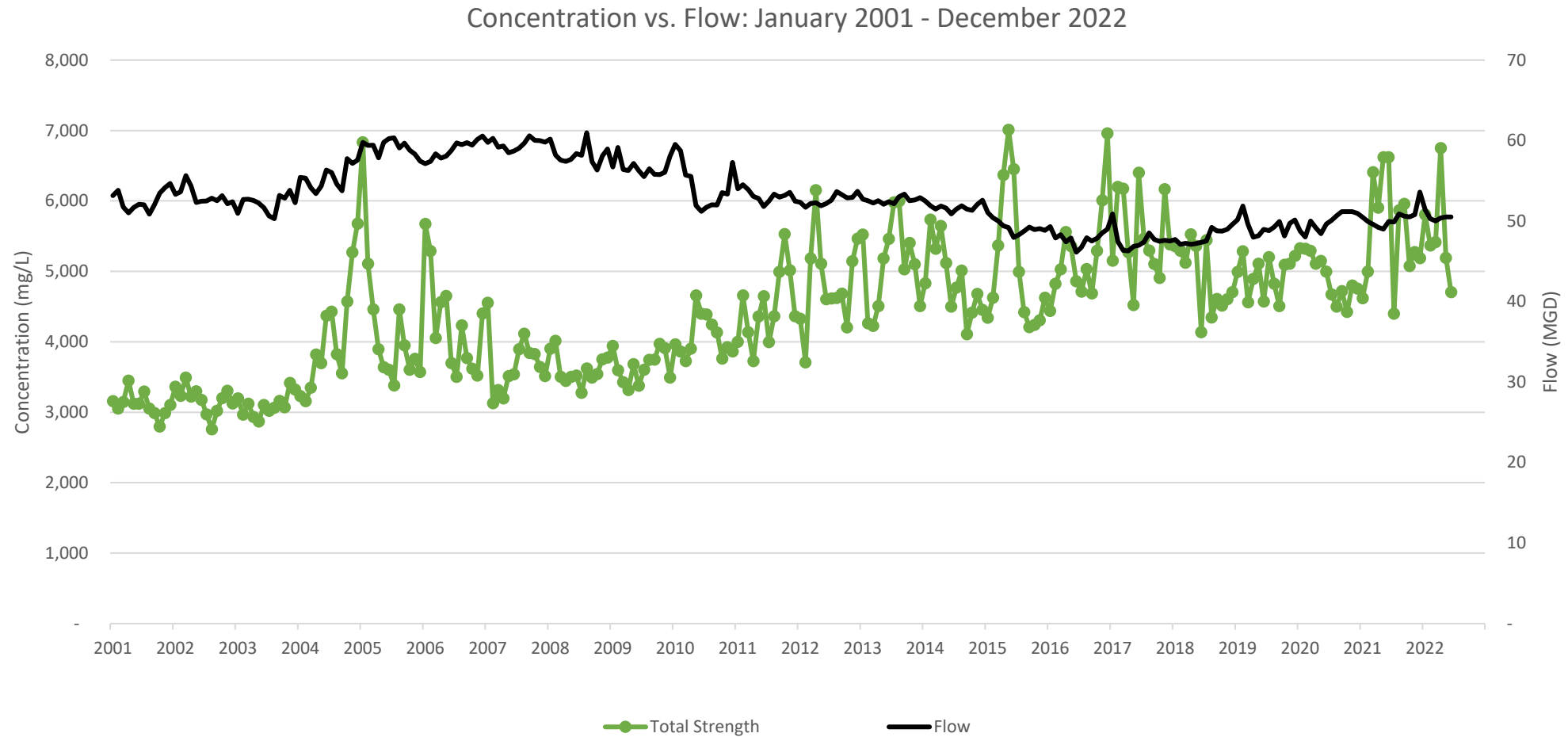
Steady Wastewater Influent Flows Suggest Indoor Water Use Efficiency is Offsetting Population Growth Demands



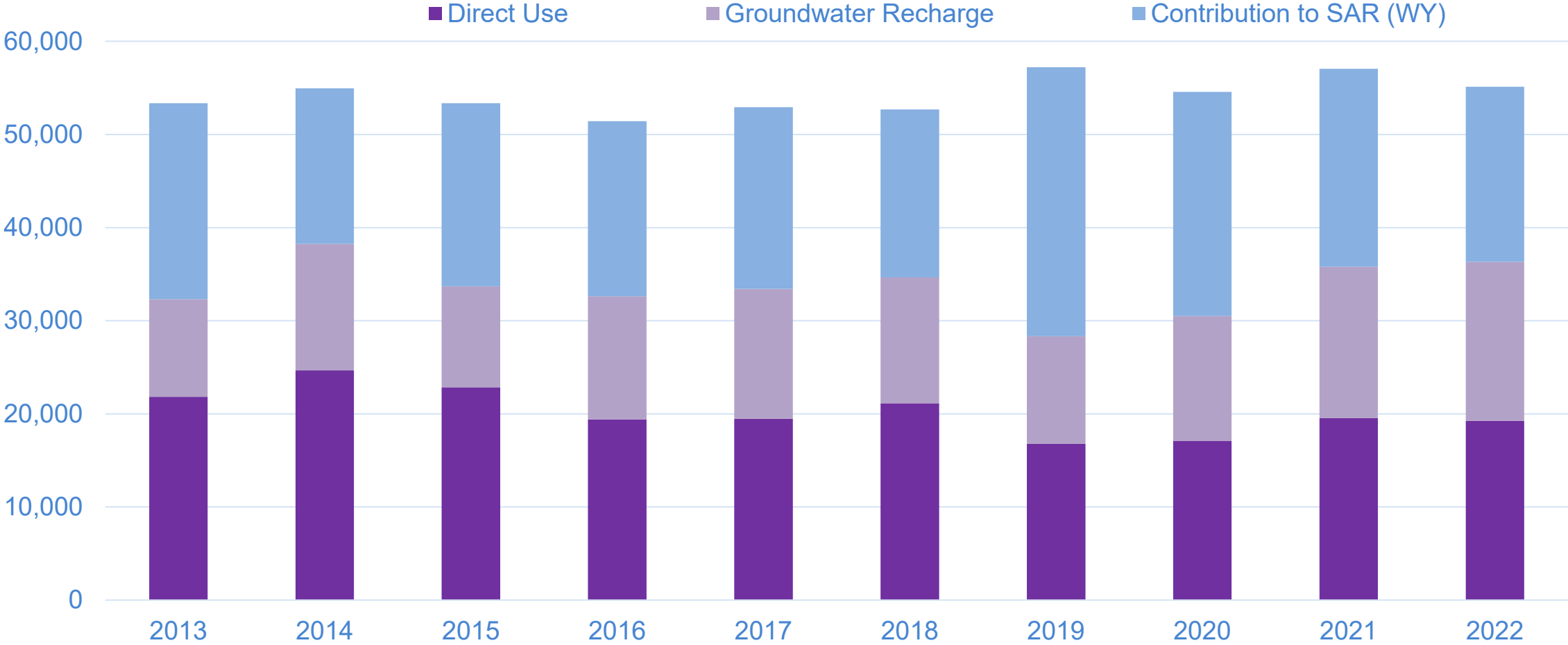
Regional Potable Water Use and Influent Not Expected to Significantly Increase with Population Growth



Wastewater Influent Flows Have Remained Steady in Recent Years, but Influent Strength Continues to Increase



Recycled Water Continues to be an Important Resource but Faces Growing Challenges



Emerging Water Quality Regulations May Impact Treatment Requirements of IEUA's Supply Portfolio

In 1962 there were a total of 28 substances under regulation.

Today, the U.S. EPA has a list of 126 "Priority Pollutants" that are regulated and for which analytical test methods have been developed.

Upcoming Board Workshops Will Review Challenges Facing Multiple IEUA Services

Growth has slowed recently coming in far below regional and internal projections

New Water-Use Efficiency Regulations will mandate continued reductions in per capita water use

- Likely to result in reduced influent into treatment plants and increase solids loading

Increasing regulatory compliance and combination of lower influent, higher solids loading create numerous issues for treatment and recycled water planning

- Drive the need for further treatment facility expansions
- Increasingly require advanced treatment technology
- Higher costs could further drive down water consumption

INFORMATION
ITEM
3E

RP-5 Expansion Project Update July 2023

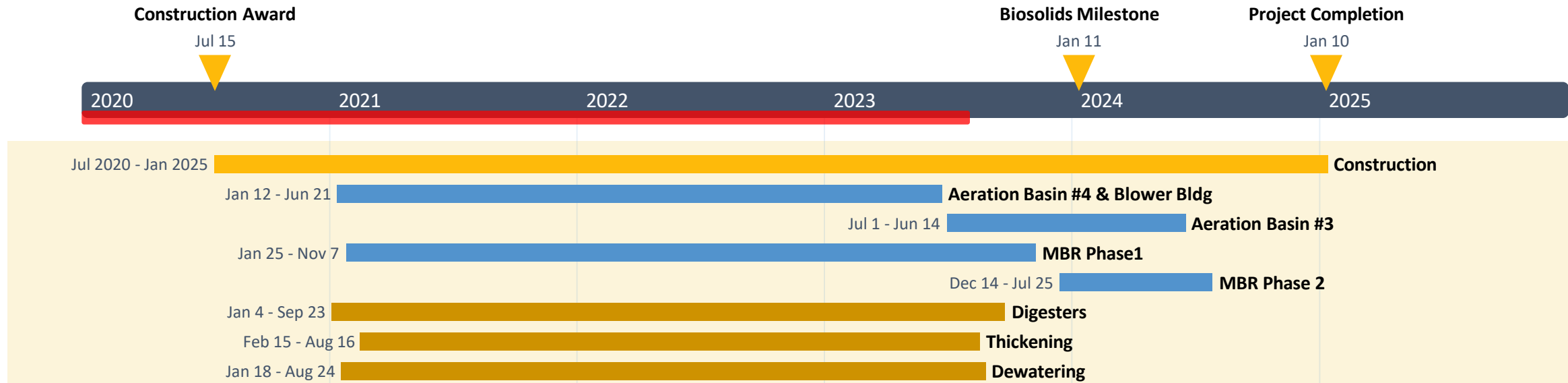
Project Nos. EN19001 and EN19006

Vicky Salazar
Senior Associate Engineer

July 2023

RP-5: Project Status

Day 1078 of 1640 = 65%



Role	Firm	Contract	This Month's Payment	Total Paid	% Complete
Contractor	WM Lyles	\$337,291,367	\$8,500,000	\$230,879,439	68%
Designer	Parsons	\$36,833,185	\$706,346	\$34,797,351	93%
Construction Management	Arcadis	\$21,125,523	\$363,554	\$12,566,798	59%

Data date: 6/30/2023

RP-5: Major Activity Areas



Construction Staff

- **WML Craft:** 115
- **WML Project:** 35
- **IEUA & CM:** 15
- **Total:** 165

Electrical and SCADA Status Update



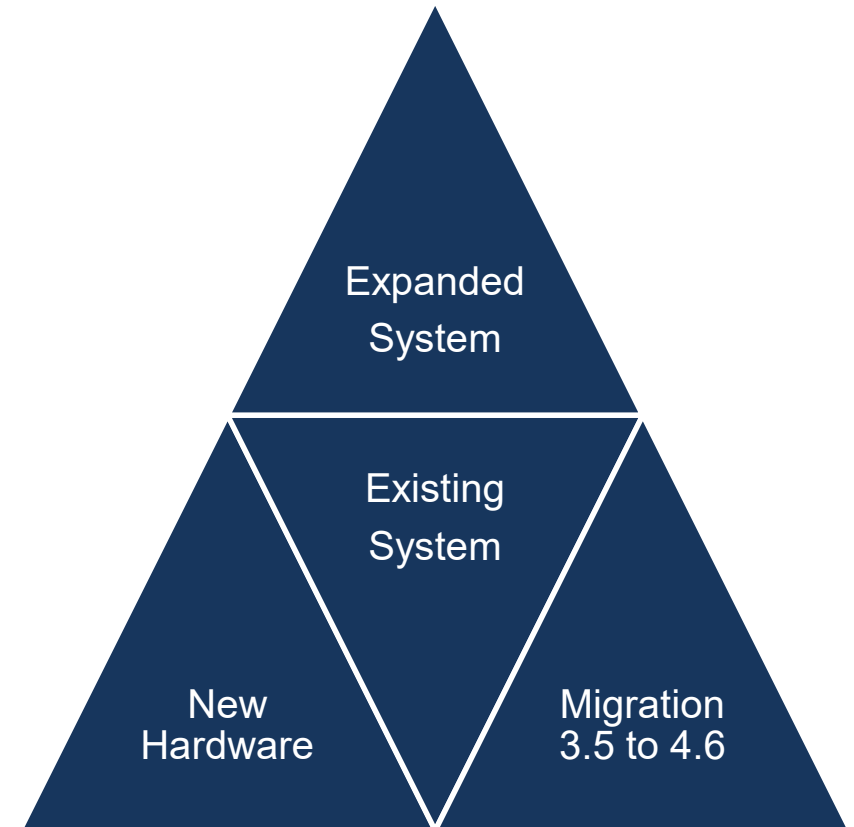
COMPLETED

- HMI Graphics & PLC Programming Workshops for PRI, SEC, TER completed June 2023
- Delivery and installation of Generator 1



CHALLENGES AHEAD

- Electrical Subcontractor
 - New SCE power feed expected by August 2023
 - Factory acceptance & delivery of Generator 2
- SCADA Integrator
 - PlantPAX 3.5 to 4.6 Migration
 - Interactive staff training prior to migration
 - Control system parts delays
 - Programming and factory testing
 - Commissioning



RP-5: Major Activities



Emergency Storage Basin (ESB)

RP-5: Major Activities



Membrane Bioreactor

RP-5 Major Activities



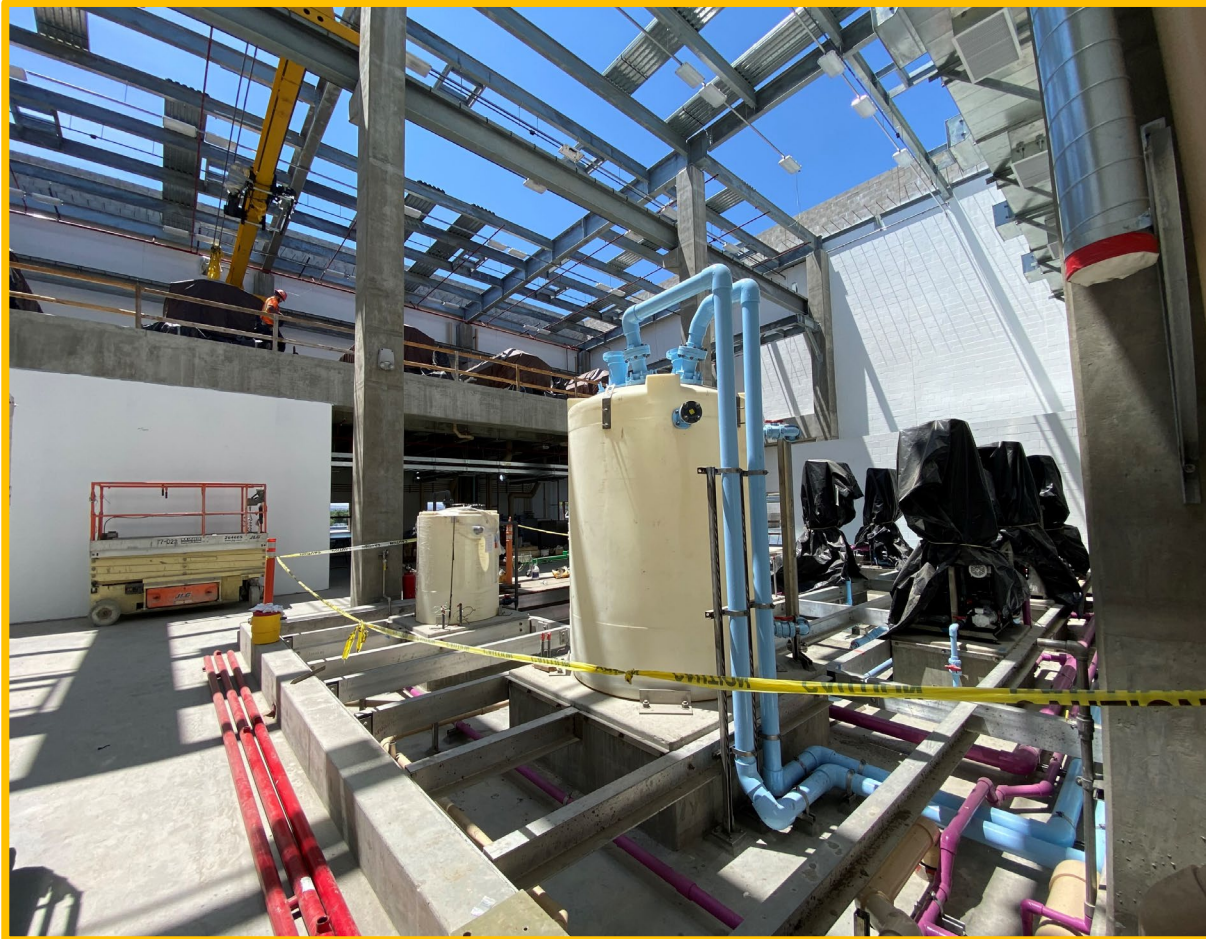
Thickening Building

RP-5: Major Activities



Gas Phase Digester Tank and Building

RP-5: Major Activities



Dewatering Building

RP-5: Major Activities



Emergency Overflow Pond (EOP)

RP-5: Major Activities



Generator Delivery



Questions?