



**AGENDA
REGULAR WORKSHOP OF THE
BOARD OF DIRECTORS**

**WEDNESDAY, MAY 3, 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: 169 113 791#**

The public may participate and provide public comment during the meeting by joining in-person or by calling 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 OF THE INLAND EMPIRE UTILITIES AGENCY BOARD OF DIRECTORS WORKSHOP

FLAG SALUTE

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. WORKSHOP ITEMS

A. CHINO BASIN PROGRAM UPDATE (POWERPOINT)

B. TEN-YEAR CAPITAL IMPROVEMENT PLAN AND TEN-YEAR SEWER CAPITAL FORECAST FISCAL YEAR 2023/24 – FISCAL YEAR 2032/33 (POWERPOINT)

C. 20TH ANNIVERSARY OF IEUA'S REGIONAL WATER USE EFFICIENCY PROGRAM (POWERPOINT)

2. GENERAL MANAGER'S COMMENTS

3. BOARD OF DIRECTORS' REQUESTED FUTURE AGENDA ITEMS

4. DIRECTORS' COMMENTS

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.

**WORKSHOP
ITEM**

1A



Chino Basin Program Update

Elizabeth Hurst

Chino Basin Program Manager

May 3, 2023



CBP Update Overview

- Preliminary Design
- Agreements Status
- Stakeholder Outreach
- Consultant Program Manager/Owner Engineer Solicitation
- Budget Status
- Next Steps

PUT- Infrastructure



RW Supply External

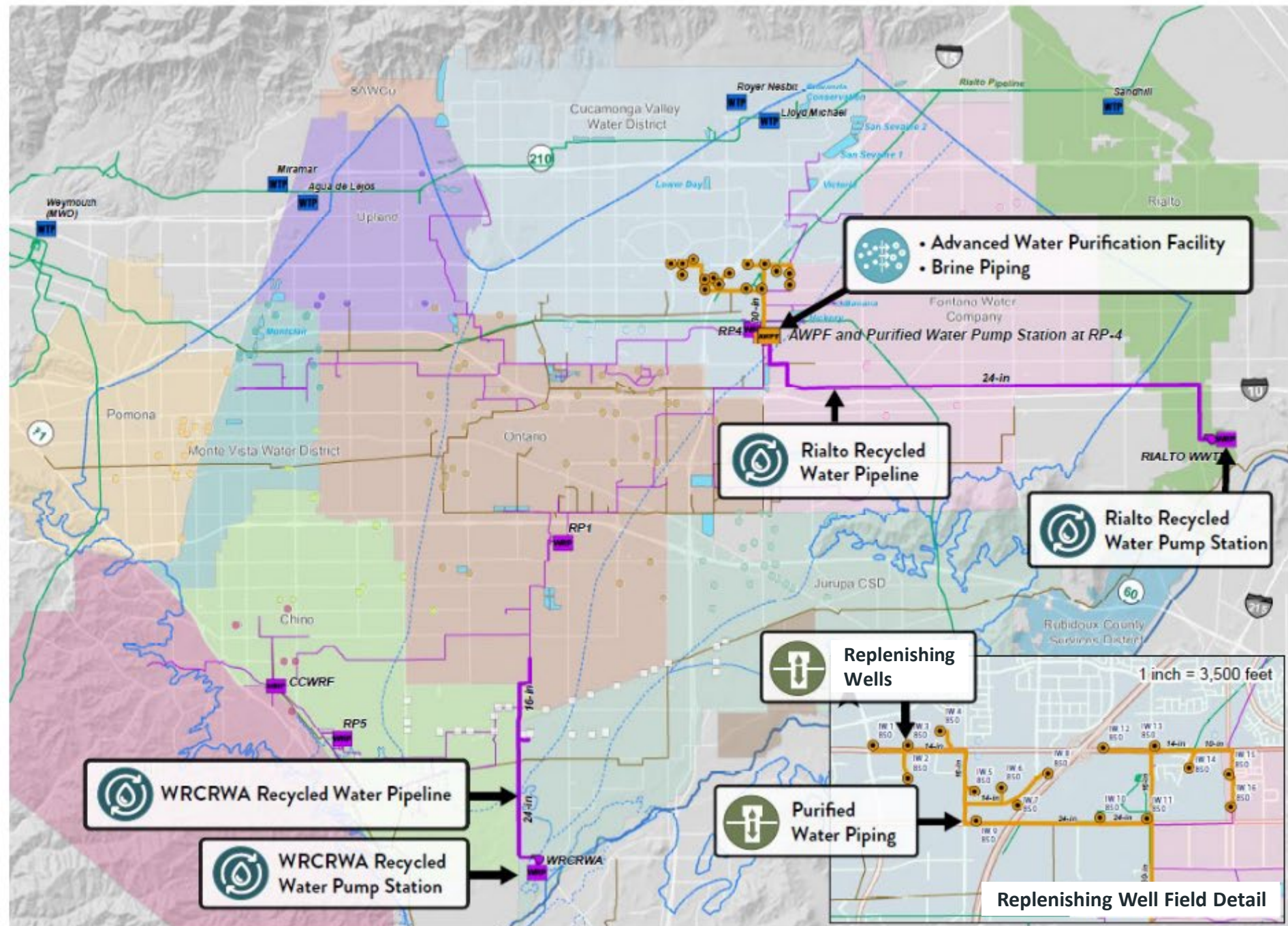
- City of Rialto
- WRCRWA



AWPF



Replenishing Wells



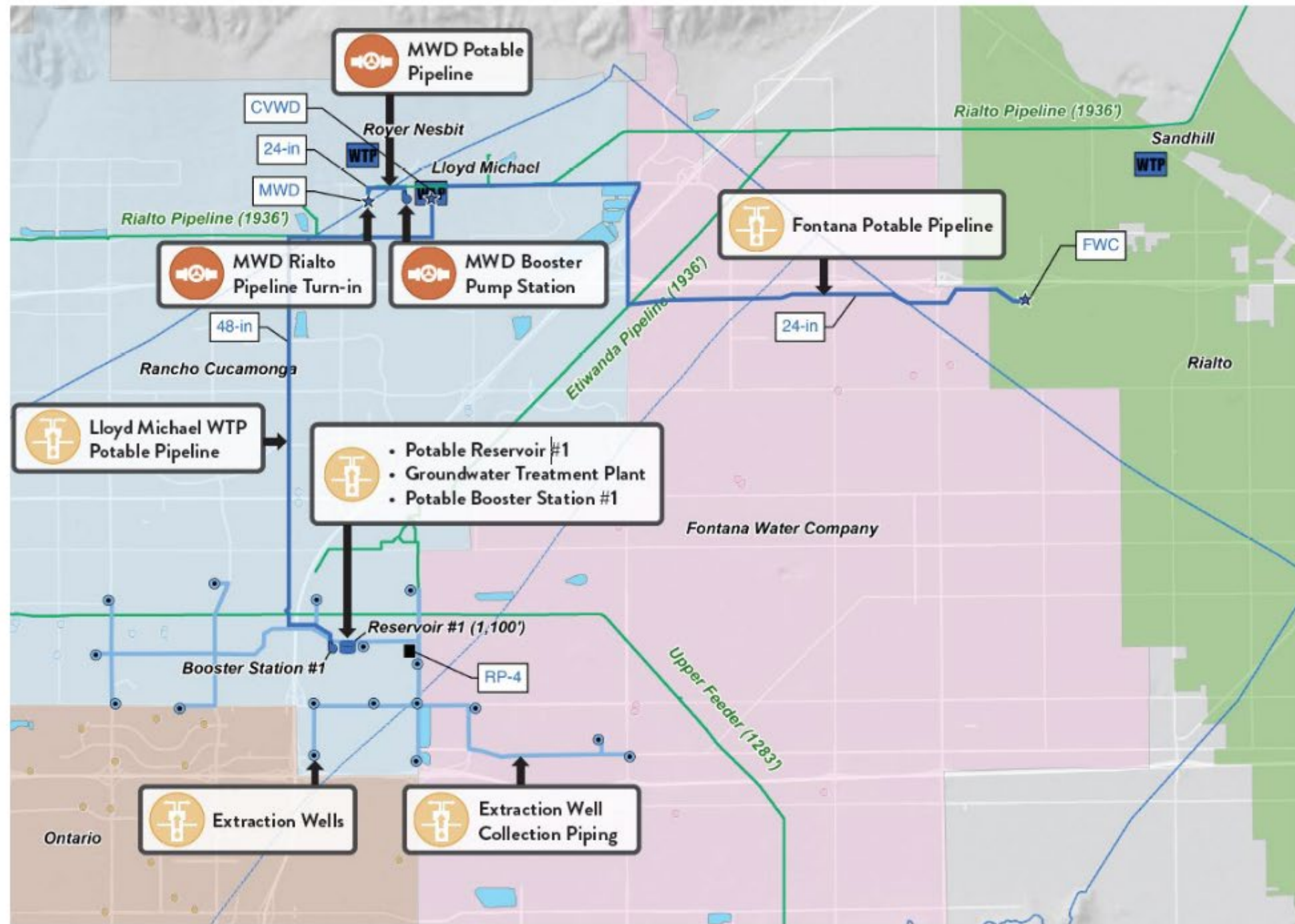
TAKE-Infrastructure



Extraction &
Regional
Distribution



MWD
Interconnection





CBP Update- Local Agreements

Major Activity	Schedule
Rialto Recycled Water Purchase Agreement (IEUA, City of Rialto)	Summer 2023
WRCRWA Recycled Water Purchase Term Sheet (IEUA, WRCRWA)	Fall 2023
CBP Performing Agency Term Sheet (CVWD, FWC, IEUA) <ul style="list-style-type: none">• Dedication of “right of first purchase” IEUA recycled water• Operations and performance criteria• Ownership and cost allocation• Establish CBP Operating Committee	December 2023
CBP Exchange Agreement (IEUA, MWD) <ul style="list-style-type: none">• Operations and performance criteria• Inter-agency coordination with State for exchange	December 2023



CBP Update- State Agreements

Major Activity	Schedule
Public Benefit Agreements: 1. Environmental (IEUA, CDFW) 2. Water Quality (IEUA, SWRCB) 3. Emergency Response (IEUA, DWR)	Draft templates from State Summer 2023
Pulse Flow Agreement (DWR, CDFW)	2024
Water Exchange Agreements (IEUA, MWD, DWR)	2024
CWC Final Funding Award (IEUA, CWC)	2025



Stakeholder Outreach

» Support by Arellano and Assoc. to conduct local community outreach

» 8 workshops held to date

- Brookfield Properties Development
- California State University of San Bernardino's Institute for Watershed Resiliency
- California Water Environmental Association
- Chino Valley Chamber of Commerce
- Greater Ontario Business Council
- Inland Empire Regional Economic Partnership
- Inland Empire Water Keeper and CA-NV Section of American Water Works Association
- The River Project

» Received 5 additional letters of support from:

- California State University of San Bernardino's Institute for Watershed Resiliency
- Chaffey College
- Chino Valley Chamber of Commerce
- Inland Empire Regional Economic Partnership
- Inland Empire WaterKeeper



Overview

The Chino Basin Program (CBP) is a series of innovative water treatment and storage projects structured to modernize regional water supplies, storage, and delivery systems. Through several water infrastructure improvement projects, the CBP will help address challenges caused by importing water supplies through the development of new, local water supplies, thus increasing local water supply resiliency and reliability.

Once implemented, these projects will address the immediate needs of the region while unlocking the potential for additional storage and water recycling projects in the future. The CBP includes an initial estimated cost of \$650 million, with the State of California investing \$215 million toward these costs with a potential for future investment.

Proposed Improvements & Benefits

- » **Improvement:** Construct a state-of-the-art Advanced Water Treatment Facility
Benefit: Significantly expand capacity to use recycled water and improve water quality
- » **Improvement:** Construct aquifer replenishing wells and production facilities
Benefit: Drastically increase access to and capacity to store recycled water
- » **Improvement:** Expand existing IEUA recycled water pipeline
Benefit: Efficiently utilize and access recycled water supplies and promote sustainability





Consultant Program Manager/ Owner Engineer Solicitation

- Interviews have been completed
 - ✓ Ardurra/GHD
 - ✓ Black & Veatch/CDM
 - ✓ Jacobs
 - ✓ Parsons/Atkins
- 4-party review and interview panel March-April
- Target award date: Summer 2023



Budget Status

- March 2019 IEUA Board budgeted \$15 M for CBP Planning and Preliminary Design Work
- August 2021 the California Water Commission awarded \$8.9 M in Early Funding
- To date, the program has expended \$7.9 M and received \$5.8 M in Early Funding reimbursement

	Project Budget	Contracts	Expenses	Contract Balance	Projections FY 22/23	Remaining Budget
Chino Basin Program Planning/PDR:	\$15 M					
<i>Institutional agreements</i>		\$3.8 M	\$2.9 M	\$0.9 M	\$0.3 M	\$0.5 M
<i>Technical Feasibility/PDR</i>		\$6.8 M	\$3.0 M	\$3.8 M	\$2.8 M	\$1.0 M
<i>Environmental Evaluation</i>		\$0.4 M	\$0.2 M	\$0.1 M	\$0.1 M	\$0.1 M
<i>Strategy development/communication</i>		\$0.9 M	\$0.5 M	\$0.4 M	\$0.1 M	\$0.3 M
<i>Other</i>			\$1.3 M			
TOTAL		\$11.9 M	\$7.9 M	\$5.2 M	\$3.3 M	\$1.9 M



Additional Grant Applications



\$43M for City of Rialto Recycled Water Interconnection



\$65M for City of Rialto Recycled Water Interconnection



\$2.8M for CBP Planning



\$1.8M for Exploratory Boreholes/Monitoring Wells



Next Steps

Complete PDR Work (PUT):

- *AWPF*
- *City of Rialto RW Interconnection*
- *Replenishing Wells*
- *Permitting and Regulatory Strategy*
- *Updated cost estimates*

Award PM/OE Contract

Finalize City of Rialto RW Term Sheet

Term Sheet Discussions with WRCRWA

Summer 2023

Replenishing Wells Exploratory Boreholes

Initiate PDR Work (TAKE):

- *MWD interconnection*
- *Extraction Wells*

Agreement Terms Local & State Agencies:

- *CVWD | FWC*
- *MWD*
- *CDFW*
- *DWR*
- *WRCRWA*

Fall/Winter 2023

Final Design PUT Facilities

Construction of Pilot AWPf

Complete PDR Work (TAKE)

- *Updated cost estimates*

Finalize Agreements

Initiate Final Design TAKE Facilities

CWC Final Funding Award

2024- 2025

Construction:

- *Rialto RW Interconnection*
- *AWPF*
- *Replenishing Wells*
- *MWD interconnection*
- *Extraction Wells*
- *WRCRWA RW Interconnection*

2026-2030



Discussion

**WORKSHOP
ITEM**

1B

Ten-Year Capital Improvement Plan Ten-Year Sewer Capital Forecast FY 2023/24 - FY 2032/33

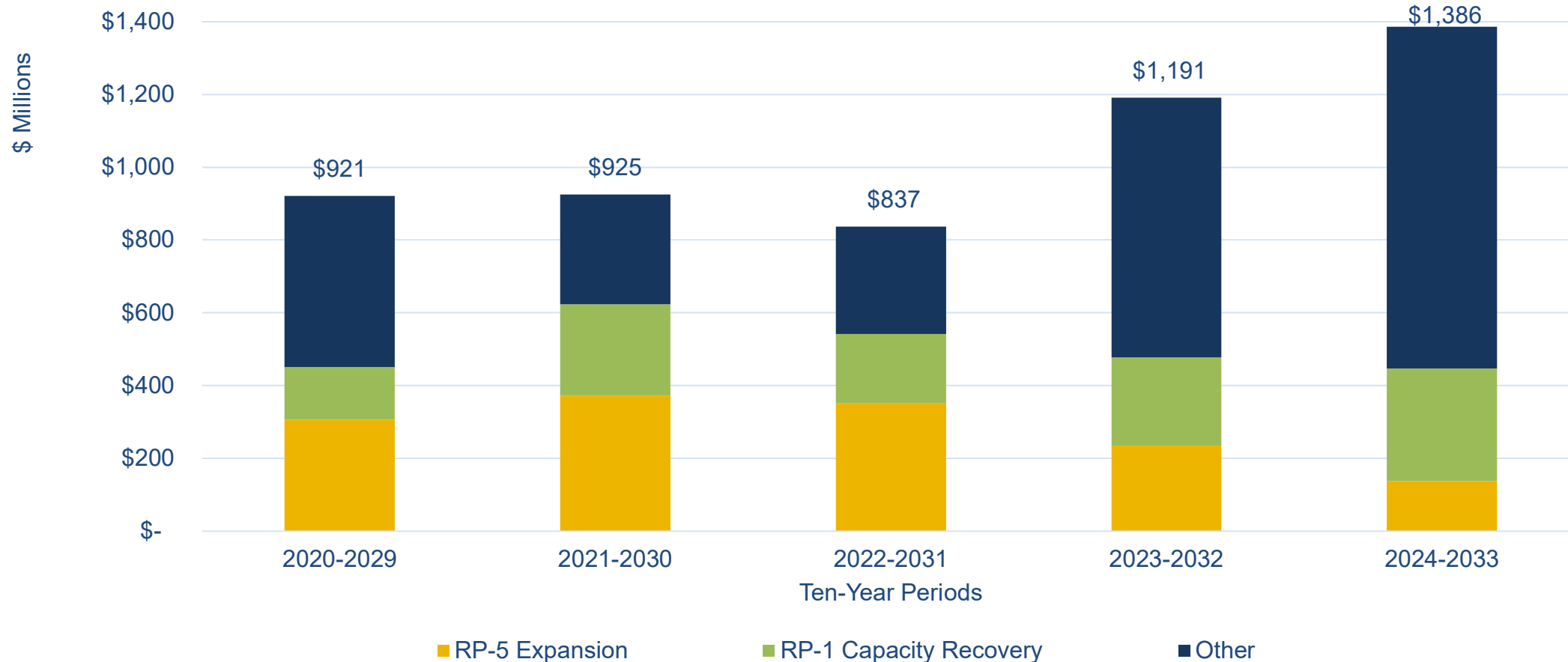
Jerry Burke, P.E.
Director of Engineering
May 2023

Ten-Year Capital Improvement Plan (TYCIP)

- Comprehensive planning document that lists capital projects planned over the next 10-years
 - Administrative Services
 - Non-Reclaimable Wastewater
 - Regional Wastewater Capital Improvement
 - Regional Wastewater Operations and Maintenance
 - Groundwater Recharge
 - Recycled Water
 - Water Administration
- Agencywide effort
- Promotes transparency of Agency capital activities



Proposed TYCIP \$1,386M FYs 2024- 2033



Major TYCIP Projects

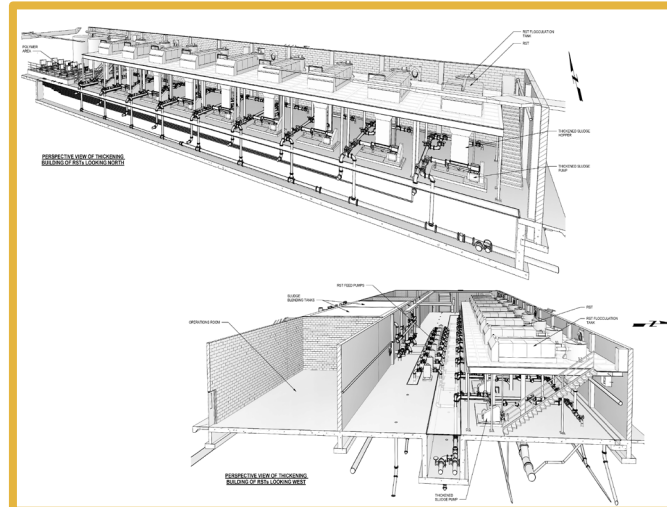
- Completion of RP-5 Expansion
- Advanced Water Purification
- Recycled Water Program Expansion (Replenishment Wells & External Supplies)
- RP-1 Thickening Building & Acid Phase Digester
- RP-1 Liquid Treatment Capacity Recovery
- Recycled Water Interconnection City of Rialto
- 6 Thousand Acre Feet Year AWPf



Completion of RP-5 Expansion



Advanced Water Treatment



RP-1 Thickening Building & Acid Phase Digester



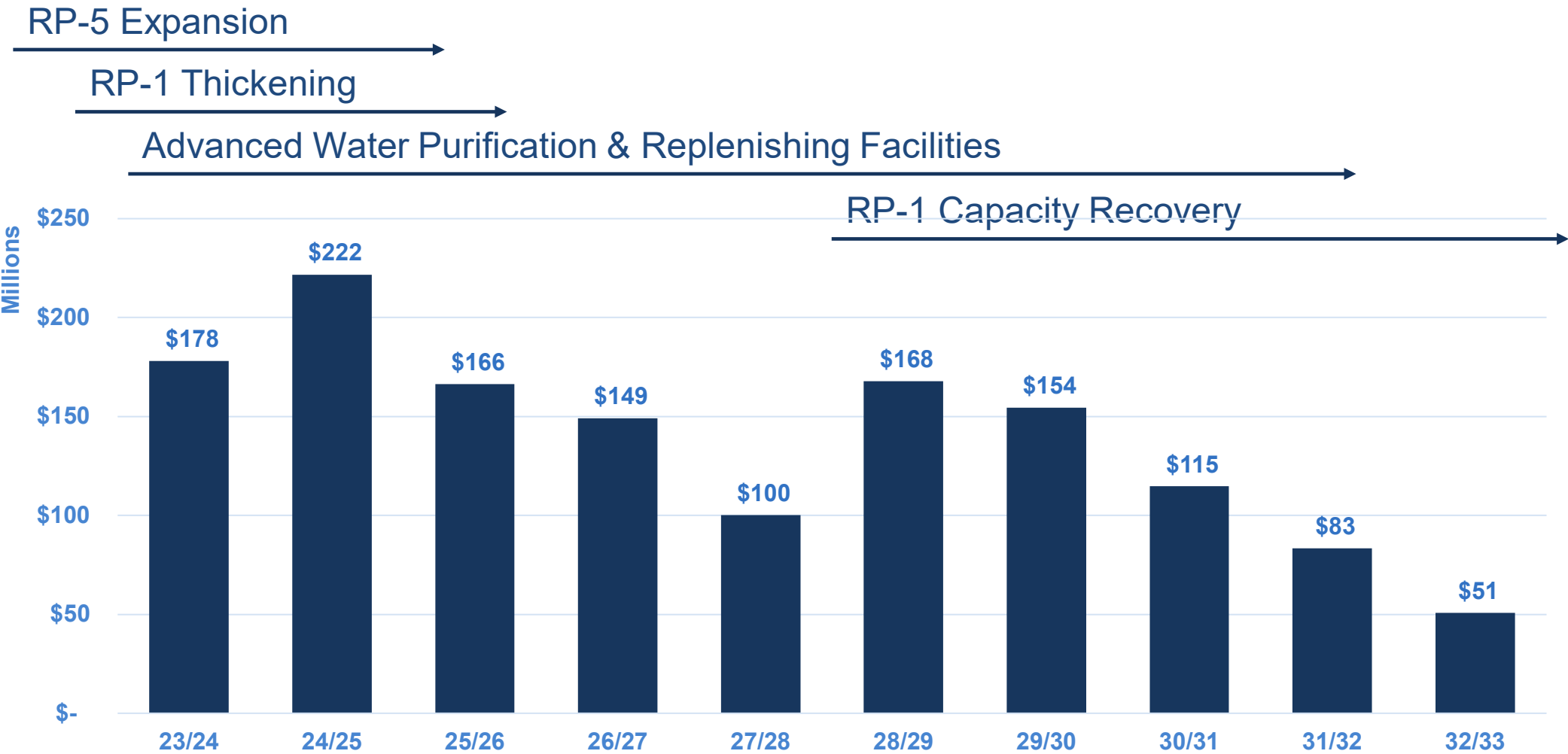
RP-1 Liquid Treatment Capacity Recovery

Major Capital Improvement Projects over \$50 million

- List of major wastewater capital improvement projects
 - 8 out of 30 total projects
 - Over \$50 million in ten-year spending

Ten-Year Forecast Projected Spending (\$ in Millions)											
Project Name	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29	FY 29/30	FY 30/31	FY 31/32	FY 32/33	Total TYCIP FY 2024-2033
RP-1 Thickening Building & Acid Phase Digester	\$ 15.0	\$ 35.0	\$ 60.0	\$ 42.0	\$ 0.3						\$ 152.3
Advanced Water Purification	\$ 1.5	\$ 7.5	\$ 9.3	\$ 19.5	\$ 19.5	\$ 46.5	\$ 35.7	\$ 18.3	\$ 7.2		\$ 165.0
Replenishing Facilities	\$ 2.5	\$ 3.5	\$ 6.8	\$ 10.5	\$ 12.5	\$ 16.5	\$ 17.0	\$ 16.5	\$ 5.2		\$ 91.0
RP-5 Expansion to 30 mgd	\$ 46.6	\$ 33.1	\$ 7.0								\$ 86.7
RC Asset Management	\$ 0.3	\$ 2.4	\$ 8.0	\$ 8.0	\$ 8.0	\$ 8.0	\$ 8.0	\$ 8.0	\$ 8.0	\$ 8.0	\$ 66.7
RP-1 Liquid Treatment Capacity Recovery						\$ 2.0	\$ 13.0	\$ 13.0	\$ 13.0	\$ 13.0	\$ 54.0
6 TAFY AWPf	\$ 1.0	\$ 5.0	\$ 6.0	\$ 13.0	\$ 13.0	\$ 31.0	\$ 24.0	\$ 12.0	\$ 5.0		\$ 110.0
Recycled Water Interconnection City of Rialto	\$ 0.7	\$ 7.0	\$ 7.0	\$ 11.5	\$ 11.5	\$ 14.5	\$ 5.5	\$ 1.0	\$ 0.5		\$ 59.2

Ten-Year Capital Improvement Plan



**All values rounded to nearest million (\$)*

Ten-Year Forecast (TYF)

- Ensures compliance with Regional Sewage Service Ordinance 111
- Planning document
- Contains supplemental wastewater information



Wastewater Capital Spending Comparison

- Approved FY 2022/23 Ten-Year Regional Wastewater Capital Spending **\$544 Million**
- Projected FY 2023/24 Ten-Year Regional Wastewater Capital Spending **\$522 Million**



RP-5 Expansion (Picture from February 2022)

TYCIP

IEUA Board
Info (5/3/23)

Technical
Committee
Info (5/25/23)

Policy Committee
Info (6/1/23)

IEUA Board
Action (6/21/23)

Questions?

**WORKSHOP
ITEM**

1C

20th Anniversary of IEUA's Regional WUE Program

Chris Garcia

Environmental Resources Planner II

May 3, 2023

20 Years of Accomplishments

Collaborative partnerships



Efficient workgroups



Innovative programs



Award recognition



Effective drought response



Excellent customer service



Key Historic Drivers and Regulations

CA Urban Water Conservation Council MOU (1991)

- IEUA Regional Programming (2002)

AB 1420 (2007): Urban Water Management Plans

- Include Best Management Practices implementation
- Required for state grants and loans eligibility

Water Conservation Act SBx7-7 (2008)

- UWMP (2010, 2015, 2020)

New WUE Regulatory Framework

- SB 606/AB 1668 (2018)
- Rulemaking completed in 2023 and goes into effect in 2024



Conservation Highlights over 20 Years

150K AF lifetime water savings

1K rain barrels

13K weather-based irrigation controllers

25K clothes washers

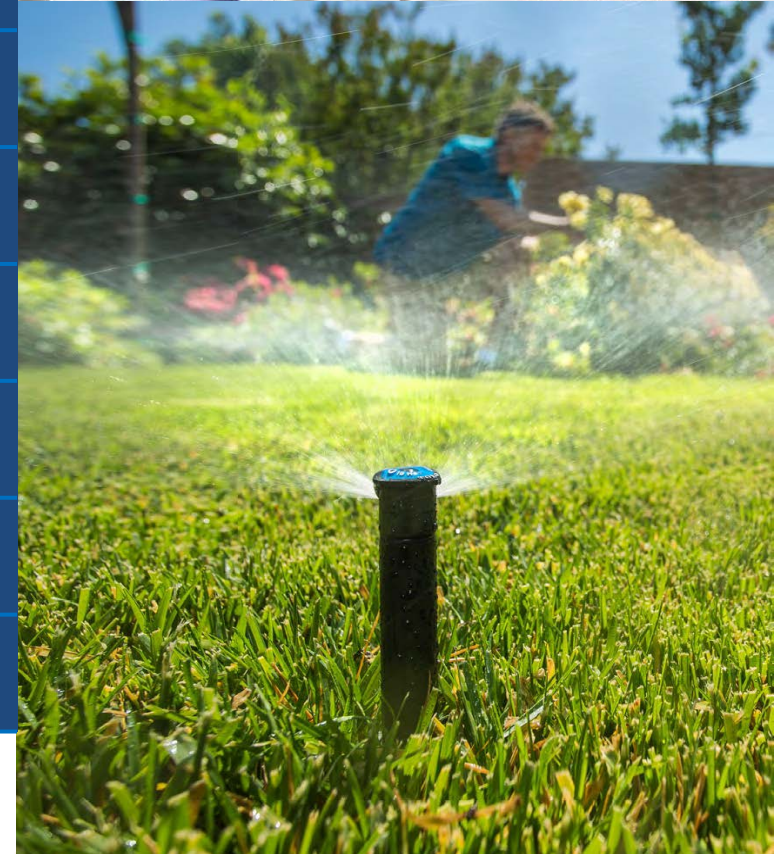
50K toilets

400K sprinkler nozzles

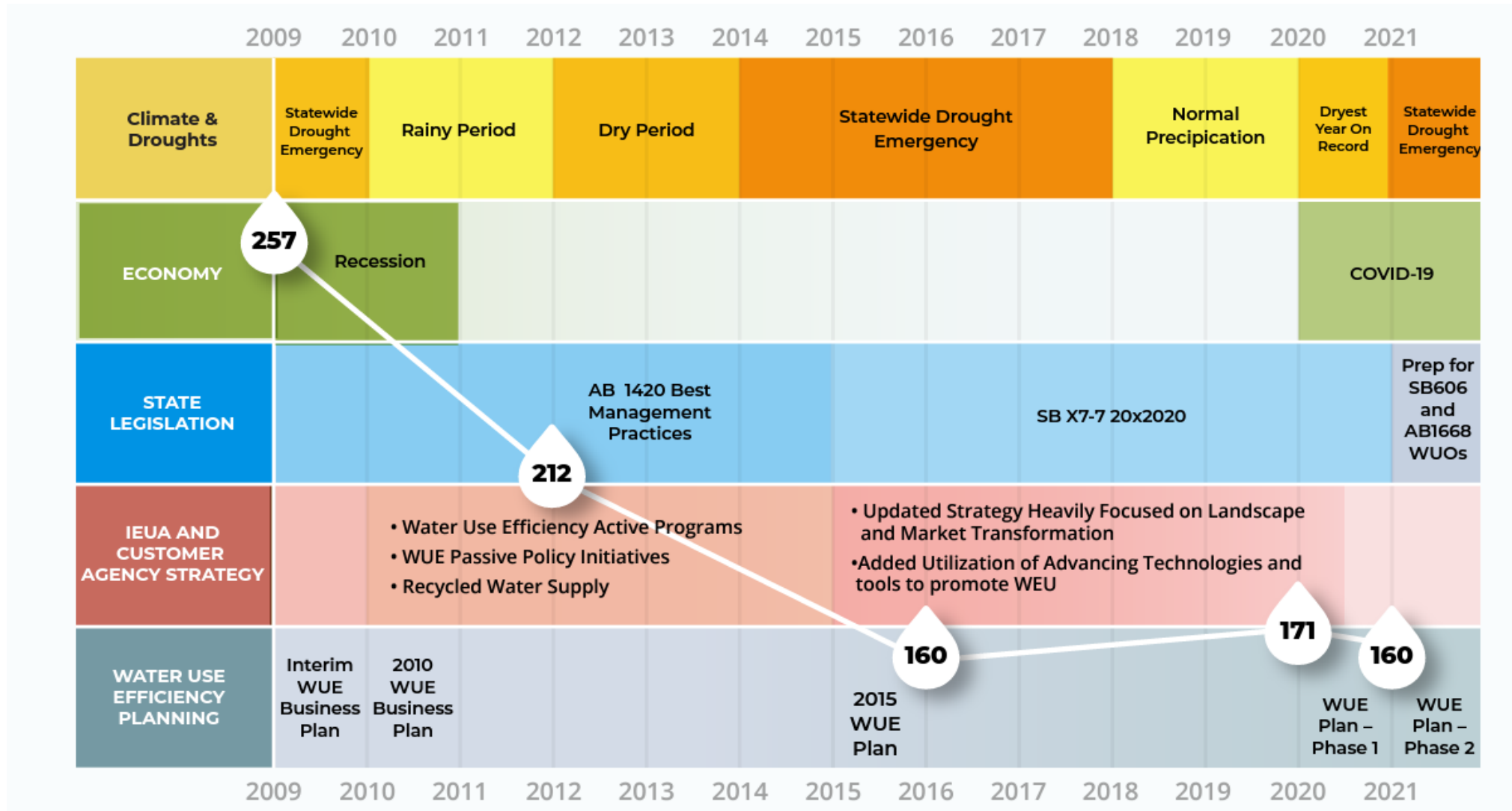
9M square feet of turf removed

\$50M total program cost (IEUA, MWD, Others)

\$333 total cost to save an acre-foot of water



Per Capita Water Use Declined by 38% since 2009



Metropolitan Water District Partnership

Rebates
Water Savings Incentive Program
Turf Dashboard
Outreach
MAAP Funding



City of Chino – Before and after installing soil moisture sensors and controllers at the parks



Leveraged over \$30M in WUE benefits to date!

Regional Water Saving Programs

Landscape Irrigation Tune-ups

🏆 Small Site Controller Retrofits

🏆 Large Site Controller Retrofits

🏆 Landscape Audit & Evaluations

Pressure Regulation Valves

Residential Toilet Installs

[Freesprinklernozzles.com](https://www.freesprinklernozzles.com)

Landscape Transformations



Regional Education and Support

Landscape Workshops

K-6 School Performances

 Garden in Every School

WUE Device Distributions

Landscape Designs

CA Irrigation Management Info System Maintenance

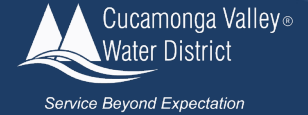




Conservation
Based Rates



WUE Activity
Mapping



Water Usage
App



School Retrofits
and Upgrades

Local WUE Initiatives Examples



Indoor Leak
Repairs

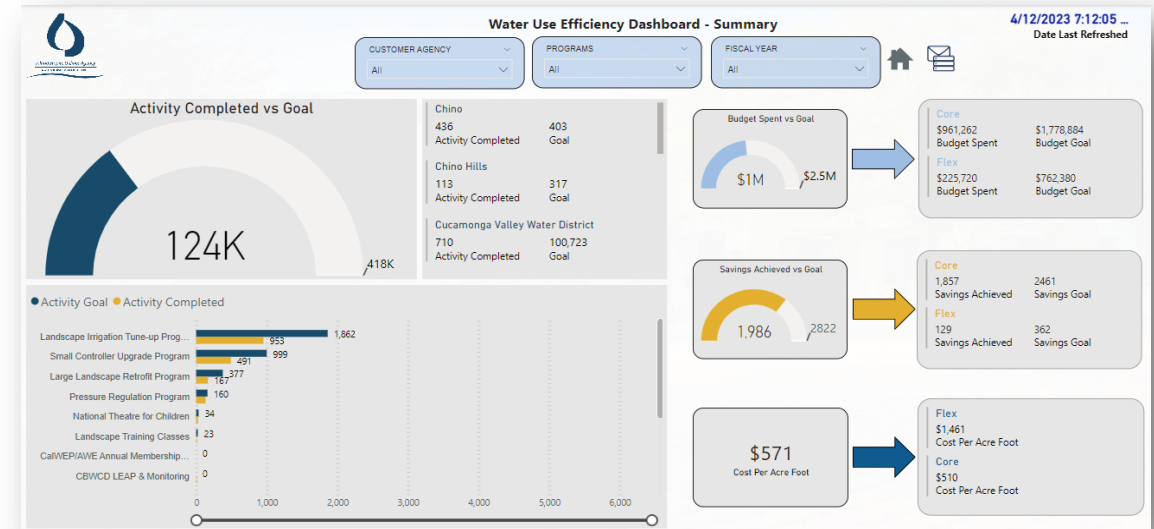
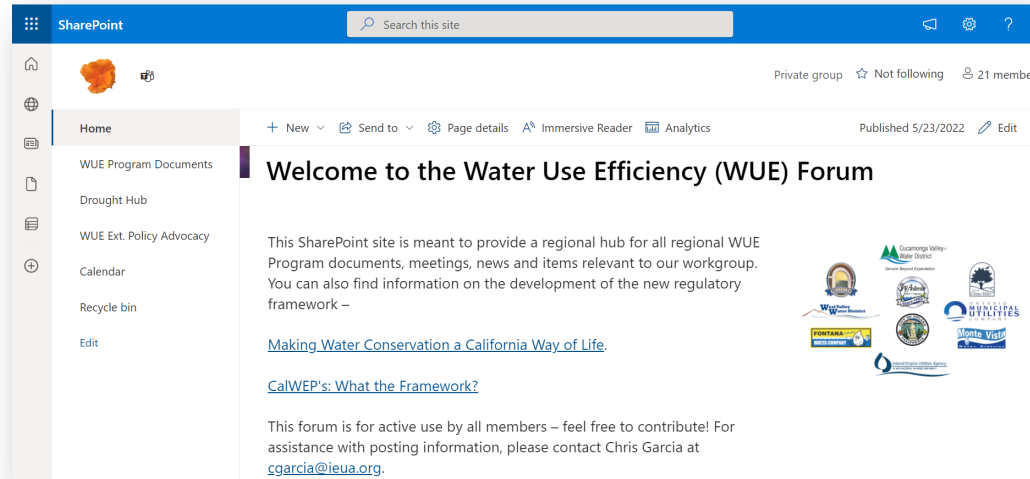


CARES CA
Friendly



CA Native Plant
Workshops

Added Enhanced Program Data Accessibility



WUE Forum

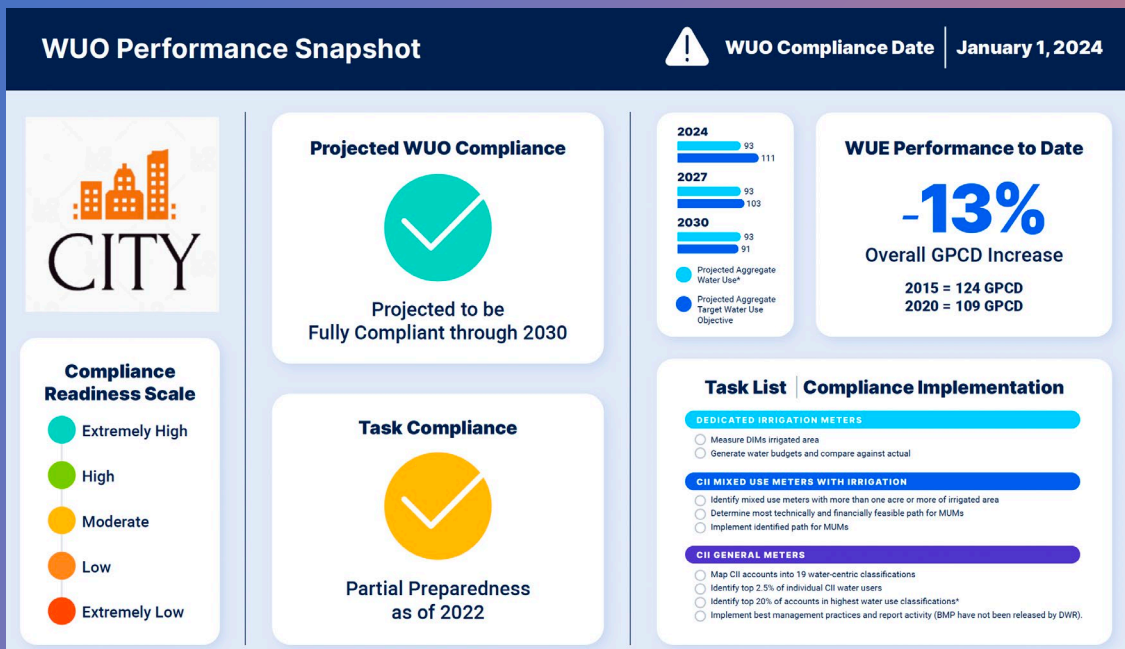
- Monthly/ annual file sharing
- Multi-department access
- External resources

WUE Dashboard

- Program performance
- Data transparency
- Ongoing development

A close-up photograph of several bright yellow poppies with orange centers. A semi-transparent dark blue rectangular box is centered over the image, containing the word "Questions?".

Questions?



Framework Compliance Readiness Assessment Tool

- Helps Customer Agency understand their level of readiness
- Presented in visual “snapshot” format
- Rates projected compliance level based on Current Aggregated Water Use vs Target Aggregated Water Objective
- Identifies high-level Task List required to meet Water Use Objective (WUO)
- Provides Snapshot for Each Component



Projected WUO Compliance



Projected to be Fully Compliant through 2030

2024



2027



2030



Projected Aggregate Water Use*

Projected Aggregate Target Water Use Objective

WUE Performance to Date

-13%

Overall GPCD Increase

2015 = 124 GPCD

2020 = 109 GPCD

Compliance Readiness Scale

- Extremely High
- High
- Moderate
- Low
- Extremely Low

Task Compliance



Partial Preparedness as of 2022

Task List | Compliance Implementation

DEDICATED IRRIGATION METERS

- Measure DIMs irrigated area
- Generate water budgets and compare against actual

CII MIXED USE METERS WITH IRRIGATION

- Identify mixed use meters with more than one acre or more of irrigated area
- Determine most technically and financially feasible path for MUMs
- Implement identified path for MUMs

CII GENERAL METERS

- Map CII accounts into 19 water-centric classifications
- Identify top 2.5% of individual CII water users
- Identify top 20% of accounts in highest water use classifications*
- Implement best management practices and report activity (BMP have not been released by DWR).

CII/Dedicated Irrigation Meters WUO Compliance

Compliance Readiness Scale



**2024
Compliance
Readiness
Level**



**2030
Compliance
Readiness
Level**

2024 Compliance Performance

Target: 11 GPCD

Estimated Compliance Standard*

RPU projected to be in compliance



2030 Compliance Performance

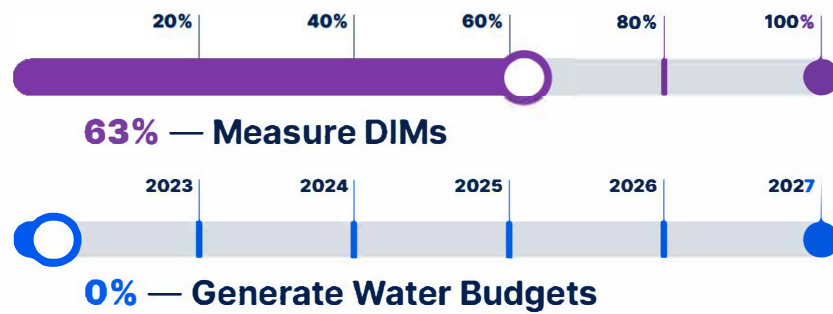
Target: 11 GPCD

Estimated Compliance Standard*

RPU projected to be in compliance



2024 Implementation Requirements Status



Compliance Requirement Tasks

Measure DIMs irrigated area
190 out of 516 DIMs currently being measured through SAWPA/NV5

Generate water budgets and compare against actual
Report annual WUO starting in January 2024



Program Enhancement Opportunities

Target inefficient water users for programs
Implement large landscape optimization services for entire service area
Maximize turf replacement incentives

*At present there are two unknowns that factor into the final compliance standard. 1. Currently RPU has not calculated a water budget for the total irrigated area of dedicated irrigation meter accounts. In order to calculate the standard, it will be necessary for RPU to include the amount of irrigated area as a component of the equation.

Water Loss Compliance (must comply with SB555)

Compliance Readiness Scale



**2024
Compliance
Readiness
Level**



**2030
Compliance
Readiness
Level**

Water Loss

	2016	2017	2018	2019	2020	2021
Apparent Losses (MGY)	34.308	34.962	33.894	16.442	17.523	21.768
Real Losses (MGY)	109.015	145.472	129.802	87.656	176.685	79.506
Number of Connections	6,288	6,285	6,279	6,326	6,332	6,434
Apparent Losses (GPCD)	14.95	15.24	14.79	7.12	7.58	9.27
Real Losses (GPCD)	47.50	63.41	56.64	37.96	76.45	33.86
Amount below/above Standard (GPCD)	26	42	36	17	55	13
Percent below/above Standard	124%	200%	171%	81%	262%	62%

2021 Water Loss Audit

414 Current Real Loss (AF/yr)
72.4 Length of Mains (mi)
6,434 Number of Connections
\$1,640.70 Variable Production Cost (\$)
85 Avg Operating Pressure (psi)
66.8 Apparent Loss (AF/yr)



Compliance Requirement Tasks

Conduct Water Loss Audit review
Continue annual water audit & reporting

2024 Compliance Performance

33.9 GPC*

Current Leakage

21.0 GPC*

Current Standard

*Gallons per Connection



Current Leakage vs. Standard Leakage



CII Mixed Use Meters with Irrigation Compliance

Compliance Readiness Scale



**2024
Compliance
Readiness
Level**



**2030
Compliance
Readiness
Level**

2027 Compliance Performance



**No performance
standard
set by State**

Requirement is to install DIMs or
In-lieu technology for mixed use meters with
1+ acre of irrigated area

In-lieu Technologies

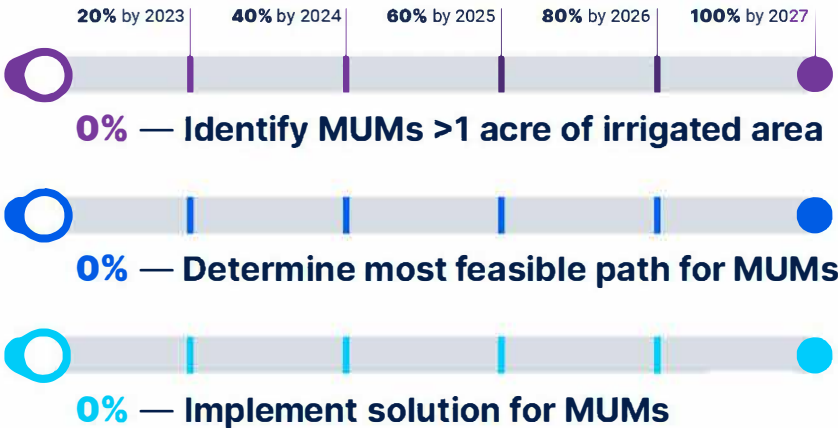
If In-lieu technology chosen,
must implement complementary
BMPs along with the technology.

The required BMPs include:

communications,
irrigation system inspections,
repair and maintenance and proper
irrigation scheduling

- **Water budget-based rate structure**
- **Water budget-based management (no rate structure)**
- **Hardware improvements**
- **Remote sensing combined with other available information**
- **Other technologies meeting the burden of proof**

2024 Implementation Requirements Status



Compliance Requirement Tasks

Identify mixed use meters with more than
one acre or more of irrigated area.
Determine most technically and financially
feasible path for MUMs
Implement identified path for MUMs
Annually report activities and performance results



Questions?



The invitation card features a light beige circular center on a dark blue background. The text is centered within the circle. The title 'Water-Use Efficiency 20th Celebration' is in a large, dark blue serif font. Below it, the date 'Wednesday, May 3rd' is in a smaller, dark blue sans-serif font. The location 'IEUA's Board room at 10 a.m. 6075 Kimball Avenue, Chino, CA 91708' is in a small, dark blue sans-serif font. The RSVP information 'RSVP by Monday, May 1st to Chris Garcia cgarcia@ieua.org' is in a small, dark blue sans-serif font. The closing text 'Join us for a celebratory cake reception immediately following the Board meeting.' is in a small, dark blue sans-serif font.

Water-Use Efficiency 20th Celebration

Wednesday, May 3rd

IEUA's Board room at 10 a.m.
6075 Kimball Avenue, Chino, CA 91708

RSVP by Monday, May 1st to Chris Garcia
cgarcia@ieua.org

Join us for a celebratory cake
reception immediately following
the Board meeting.



A person wearing a white long-sleeved shirt and a dark blue denim apron is standing in a garden. In the foreground, there are several potted plants, including a large snake plant with yellow and green variegated leaves and a smaller pot with pink flowers. The background is slightly blurred, showing more of the garden setting.

Recognition