



## **Regional Sewerage Program Technical Committee Meeting**

**Teleconference: 1-415-856-9169/Conference ID: 837 905 281#**

PURSUANT TO THE PROVISIONS OF EXECUTIVE ORDER N-25-20 ISSUED BY GOVERNOR GAVIN NEWSOM ON MARCH 12, 2020, AND EXECUTIVE ORDER N-29-20 ISSUED BY GOVERNOR GAVIN NEWSOM ON MARCH 17, 2020 ANY REGIONAL COMMITTEE MEMBER MAY CALL INTO THE MEETING WITHOUT OTHERWISE COMPLYING WITH ALL BROWN ACT'S TELECONFERENCE REQUIREMENTS.

TELECONFERENCE ACCESSIBILITY FOR THE GENERAL PUBLIC:

In all efforts to prevent the spread of COVID-19, until further notice, the Inland Empire Utilities Agency will be holding all Regional Committee meetings by teleconferencing.

### **AGENDA** **Thursday, April 30, 2020** **2:00 p.m.** **Teleconference Call**

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#### **Call to Order and Roll Call**

#### **Additions/Changes to the Agenda**

##### **1. Action Items**

- A. Meeting Minutes for January 30, 2020
- B. IEUA Ten Year Forecast

##### **2. Informational Items**

- A. FY 2020/21 Proposed Budget Amendment for Regional Wastewater and Recycled Water Programs and Rate Study Update
- B. Operations Division Quarterly Update
- C. Recycled Water Program Semi-Annual Update
- D. Return to Sewer Pilot Study (*Oral Update*)
- E. Technical Committee Chair Rotation

##### **3. Receive and File**

- A. Draft Regional Sewerage Program Policy Committee Meeting Agenda
- B. Recycled Water Distribution - Operations Summary
- C. Legislative Bill Matrix

(Continued)

## Regional Sewerage Program Technical Committee Meeting Agenda

April 30, 2020

Page 2 of 2

D. Mid-Year Building Activity Report

E. Pretreatment Committee Report

#### **4. Previous Technical Committee Items Requested**

A. IEUA Letter to State Water Resources Control Board – Chino Basin Recycled Water Groundwater Recharge Program: Source Evaluation & Corrective Actions Report

#### **5. Other Business**

A. IEUA General Manager's Update

B. Committee Member Requested Agenda Items for Next Meeting

C. Committee Member Comments

D. Next Regular Meeting – May 28, 2020

#### **6. Adjournment**

### **DECLARATION OF POSTING**

I, Laura Mantilla, Executive Assistant of the Inland Empire Utilities Agency, A Municipal Water District, hereby certify that a copy of this agenda has been posted to the IEUA Website at [www.ieua.org](http://www.ieua.org) and posted in the foyer at the Agency's main office at 6075 Kimball Avenue, Building A, Chino, CA, on Thursday, April 23, 2020.



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Laura Mantilla

**ACTION**

**ITEM**

**1A**



## **Regional Sewerage Program Technical Committee Meeting MINUTES OF JANUARY 30, 2020**

### **CALL TO ORDER**

A regular meeting of the IEUA/Regional Sewerage Program – Technical Committee was held on Thursday, January 30, 2020, at the Inland Empire Utilities Agency located at 6075 Kimball Avenue, Chino, California. Committee Chairman Noel Castillo called the meeting to order at 2:00 p.m.

### **ATTENDANCE**

#### **Committee Members:**

David Crosley	City of Chino
Eduardo Espinoza (Alternate)	Cucamonga Valley Water District
Ron Craig	City of Chino Hills
May Atencio (Alternate)	City of Fontana
Noel Castillo	City of Montclair
Courtney Jones (Alternate)	City of Ontario
Nicole deMoet	City of Upland
Shivaji Deshmukh	Inland Empire Utilities Agency

### **OTHERS PRESENT**

Kathy Besser	Inland Empire Utilities Agency
Jerry Burke	Inland Empire Utilities Agency
Amanda Coker	City of Chino
Christiana Daisy	Inland Empire Utilities Agency
Elizabeth Hurst	Inland Empire Utilities Agency
Sylvie Lee	Inland Empire Utilities Agency
Liza Muñoz	Inland Empire Utilities Agency
Steve Nix	City of Upland
Cathleen Pieroni	Inland Empire Utilities Agency

### **ADDITIONS/CHANGES TO THE AGENDA**

There were none.



**1. ACTION ITEMS****A. APPROVAL OF THE MEETING MINUTES OF OCTOBER 31, 2019**

**Motion:** By Nicole deMoet/City of Upland and seconded by May Atencio/City of Fontana to approve the revised meeting minutes of October 31, 2019.

**Motion carried:** Unanimously.

**B. RP-4 PRIMARY CLARIFIER AND PROCESS REHABILITATION CONSTRUCTION CONTRACT AWARD**

Jerry Burke/IEUA gave a presentation on the RP-4 Primary Clarifier and Process Rehabilitation Construction Contract Award. He presented the project's location, scope of work, contractor selection process, budget and schedule, and recommendation for the Regional Committee. Mr. Burke stated that the Agency is recoating the influent pump station at RP-4. Courtney Jones/City of Ontario asked why the engineer's estimate was significantly higher than bids received. Mr. Burke stated that the Agency has been the low bidder on many of the recent bids and the Agency asked Carollo to be conservative for this project. Ms. Jones also asked to explain what will be included in the engineering services during construction section. Mr. Burke stated that it would be assistance with submittal review and any unforeseen conditions that will require redesign. Ron Craig/City of Chino Hills asked if all the construction and management will be done with Agency staff members. Mr. Burke stated that it will all be completed with Agency staff members and a contract inspector will be hired. Mr. Craig confirmed that all the lessons learned from the lab construction was being applied to this project and the RP-5 expansion project.

**Motion:** By May Atencio/City of Fontana and seconded by Ron Craig/City of Chino Hills to recommend the IEUA Board of Directors to award the construction contract for the RP-4 Primary Clarifier and Process Rehabilitation, Project Nos. EN17043/EN17110, to the lowest, responsive bidder for the not-to-exceed amount of \$10,553,000.

**Motion carried:** Unanimously.

**C. PILOT RETURN TO SEWER FLOW STUDY**

Ken Tam/IEUA gave a historical background to the Pilot Return to Sewer Flow Study. In November 2019, the Regional Contract Negotiation group agreed to move forward pending an approval by the Regional Technical Committee today. He discussed the pilot study for the city of Montclair and the Monte Vista Water District service area, calculation of Return to Sewer factor, the RCN subcommittee's involvement, and the timeline for completion. He stated that the CASA study is being completed in tandem with this study and will be complete approximately in December 2020. He also shared that the Land Use Demand Model's RFP is planned to be issued in March 2020. He stated that the Agency will coordinate with the RCN group to request participation from interested representatives from the RCAs to serve as part of the technical group to work with ARGO on the review of the data and results of the pilot study.

Mr. Tam went through some questions regarding the ARGO Return to Sewer Study. Mr. Craig asked if the recommendation is inclusive of the operational data purchase. Mr. Tam stated that it is optional and in the Technical Group there was discussion of the possibility of having enough data from the cities. Mr. Craig asked if that decision needs to be made with this authorization or can it be made at a later time. Mr. Tam stated that the contract being asked to be approved has the optional data purchase included.

**Motion:** By Ron Craig/City of Chino Hills and seconded by Dave Crosley/City of Chino to recommend to the IEUA Board of Directors to initiate the Pilot Return to Sewer Flow Study.

**Motion carried:** Unanimously.

## **2. INFORMATIONAL ITEMS**

### **A. 2020 LAND USE DEMAND MODEL**

Mr. Tam spoke regarding the 2020 Land Use Demand Model and how this model will be used for projections in recycled water, water, and wastewater. He asked the Technical Committee for feedback on the scope of work by mid-February 2020. He asked for all comments to be emailed to him or Liza Muñoz/IEUA. Ms. Jones asked if there are different factors for each city and each land use category. Sylvie Lee/IEUA stated that model will be consistent with each of the cities' general plans, similar to the model completed in 2015. Mr. Craig asked regarding the budget for this model and the current estimate. Mr. Muñoz stated that \$200,000 has been requested for the next coming fiscal year. Eduardo Espinoza/Cucamonga Valley Water District stated that this subsequent model should be significantly less than the cost of the model in 2015. Ms. Lee stated that the Land Use Demand Model was originally in the Urban Water Management Update. From the discussions with the RCN group, the interest is to also use the model for wastewater as well and the budget is being allocated appropriately.

### **B. RP-2 UPDATE**

Mr. Burke gave an update on RP-2's history, relocation, demolition cost estimate, and need for the RP-5 expansion preliminary design report (PDR). Mr. Castillo asked where the \$9 million for the decommissioning will come from. Christina Valencia/IEUA stated that there are two sources of revenue – EDU or property taxes. Discussion ensued regarding the timeline of the decommissioning.

### **C. DRAFT 2020 WATER RESILIENCE PORTFOLIO**

Cathleen Pieroni/IEUA gave an update on the draft 2020 water resilience portfolio. She shared the background and actions of the Governor's Executive Order, the Agency's meetings with key State agencies, proposed action items, recommended actions impacting the Agency, and discussion regarding the Water Storage Investment Program.

- 3D.** Ms. deMoet requested to pull item 3D - Regional Sewerage Pretreatment Subcommittee Minutes. She asked for clarification on a recycled water release occurrence and asked the Agency for better communication to member agencies regarding incidences like these. Discussion ensued regarding the occurrence and solutions implemented by the Agency. Ms. deMoet also asked about recent PFAS compliance and discussion ensued regarding the PFAS regulations and the Agency's plans. Mr. Espinoza requested for an information item to be brought back regarding how the Agency reports on spills. A follow up was also requested regarding monitoring impacts from PFAS.

**3. RECEIVE AND FILE****A. DRAFT REGIONAL SEWERAGE PROGRAM POLICY COMMITTEE MEETING AGENDA**

The draft Regional Sewerage Program Policy Committee Meeting agenda was received and filed by the Committee.

**B. BUILDING ACTIVITY REPORT**

The Building Activity Report was received and filed by the Committee.

**C. RECYCLED WATER DISTRIBUTION – OPERATIONS SUMMARY**

The Recycled Water Distribution - Operations Summary was received and filed by the Committee.

**D. REGIONAL SEWERAGE PRETREATMENT SUBCOMMITTEE MINUTES**

*Pulled for discussion.*

**E. PROPOSED 2020 IEUA LEGISLATIVE POLICY PRINCIPLES**

The proposed 2020 IEUA Legislative Policy Principles were received and filed by the Committee.

**F. STATE LEGISLATIVE REPORT**

The State Legislative Report was received and filed by the Committee.

**G. IEUA RATE STUDY WORKSHOP #6**

The IEUA Rate Study Workshop #6 was received and filed by the Committee.

**4. PREVIOUS TECHNICAL COMMITTEE ITEMS REQUESTED**

The RP-2 Update requested by Nicole deMoet was presented by Mr. Burke.

**5. OTHER BUSINESS****A. IEUA GENERAL MANAGER'S UPDATE**

Mr. Deshmukh stated that the Special Joint Workshop has been rescheduled to March 4, 2020. Staff will communicate this at the Regional Sewerage Program Policy Meeting the following week. Staff and JCSD presented the water resources partnership concept on January 23, 2020 to the Western Riverside County Regional Wastewater Authority engineering and operating committee. The partnership concept is to develop a mutually beneficial agreement between IEUA and JCSD, where investments in infrastructure are made in exchange for new recycled water to IEUA's service area.

**B. COMMITTEE MEMBER REQUESTED AGENDA ITEMS FOR NEXT MEETING**

None.

**C. COMMITTEE MEMBER COMMENTS**

None.

**D. NEXT MEETING – FEBRUARY 27, 2020**

6. **ADJOURNMENT** – Chairman Castillo adjourned the meeting at 3:13 p.m.

Transcribed

by:

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Sally Lee, Executive Assistant

DRAFT

**ACTION  
ITEM**

**1B**



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Date: April 30th, 2020

To: Regional Committees

From: Inland Empire Utilities Agency

Subject: IEUA Ten-Year Forecast

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### **RECOMMENDATION**

It is requested that the Regional Committees recommend the IEUA Board of Directors adopt the Fiscal Year 2020/21-2029/30 Ten-Year Forecast.

### **BACKGROUND**

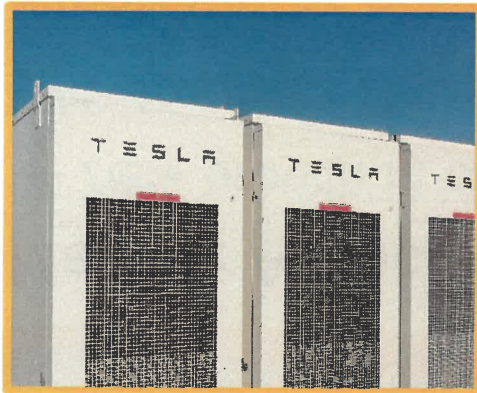
Each year, pursuant to the terms of the Regional Sewage Service Contract, the Inland Empire Utilities Agency submits a Ten-Year Forecast (TYF) of capacity demands and capital projects to the Regional Technical and Policy Committees. The current TYF identifies projects for the fiscal years of 2020/21 through 2029/30 and includes updated forecasts for new wastewater connection equivalent dwellings units, wastewater strengths and flows.

Although the TYF is a planning level document, it is instrumental for budget discussions; total project budgets for the ten-year period are consistent with the adopted Fiscal Year 2019/20 Biennial Budget. Major projects in the TYF include: the expansion of the liquids treatment and the construction of a wastewater solids handling facility at Regional Water Recycling Plant No. 5, which will replace Regional Water Recycling Plant No. 2 infrastructure located in a flood zone; rehabilitation and upgrades to Regional Water Recycling Plant No.4; the completion of the groundwater basin improvements per the 213 Recharge Master Plan Update; and the liquids capacity recovery and solids treatment expansion of the Water Recycling Plant No. 1. A summary of the ten-year forecast project costs by fund is summarized below.

Fund	FY 2020/21
Administrative Services Fund (GG)	\$ 10.3 M
Non-Reclaimable Wastewater Fund (NC)	\$ 32.2 M
Regional Capital Improvement Fund (RC)	\$ 678.0 M
Regional Operations and Maintenance (RO)	\$ 105.7 M
Recharge Water Fund (RW)	\$ 21.2 M
Recycled Water Fund (WC)	\$ 60.9 M
Water Resources Fund (WW)	\$12.4
<b>TOTAL</b>	<b>\$ 920.7 M</b>

The TYF covers many programs and projects that directly align with several Agency Business Goals, including *Water Reliability*, *Wastewater Management*, *Environmental Stewardship*, and *Fiscal Responsibility*.

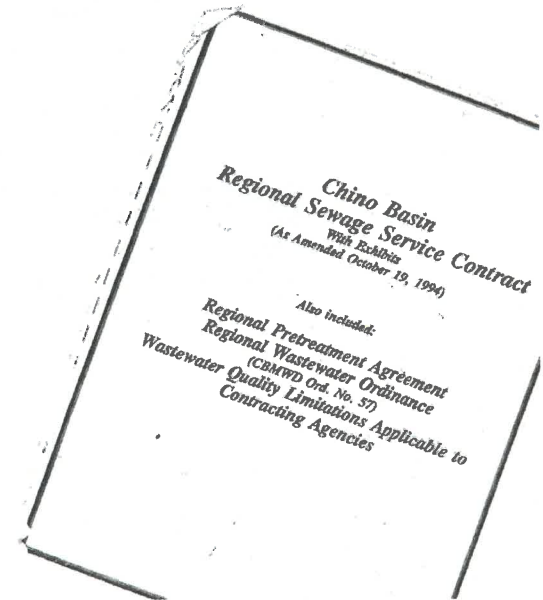
# IEUA Ten-Year Forecast





# IEUA's Contractual Requirements & Key Drivers

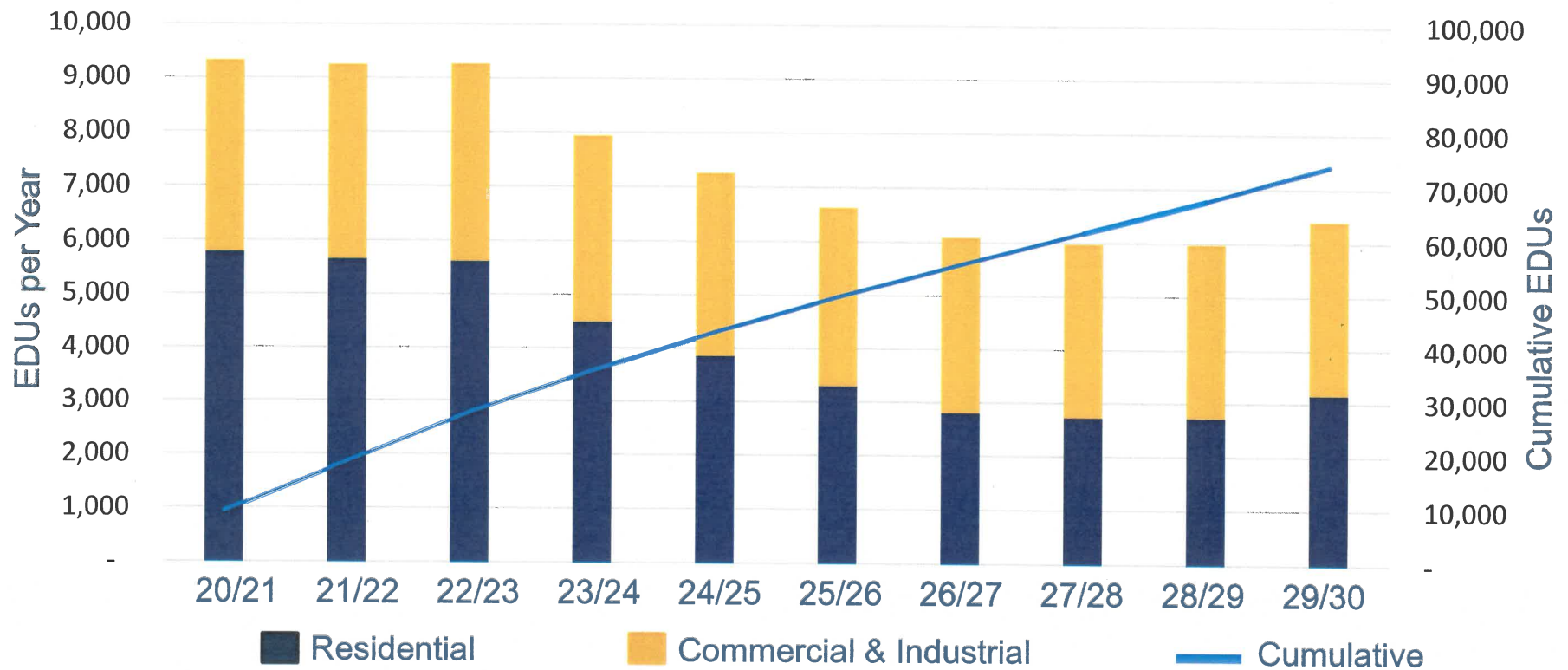
- Member Agency growth projections
  - 78% growth in cities of Fontana and Ontario
- Wastewater flow decreasing
- Wastewater concentrations increasing
- Project Drivers:
  - Safety and regulatory requirements
  - Repair and replacement projects
  - Growth and concentrations



## Regional Contract Section 9

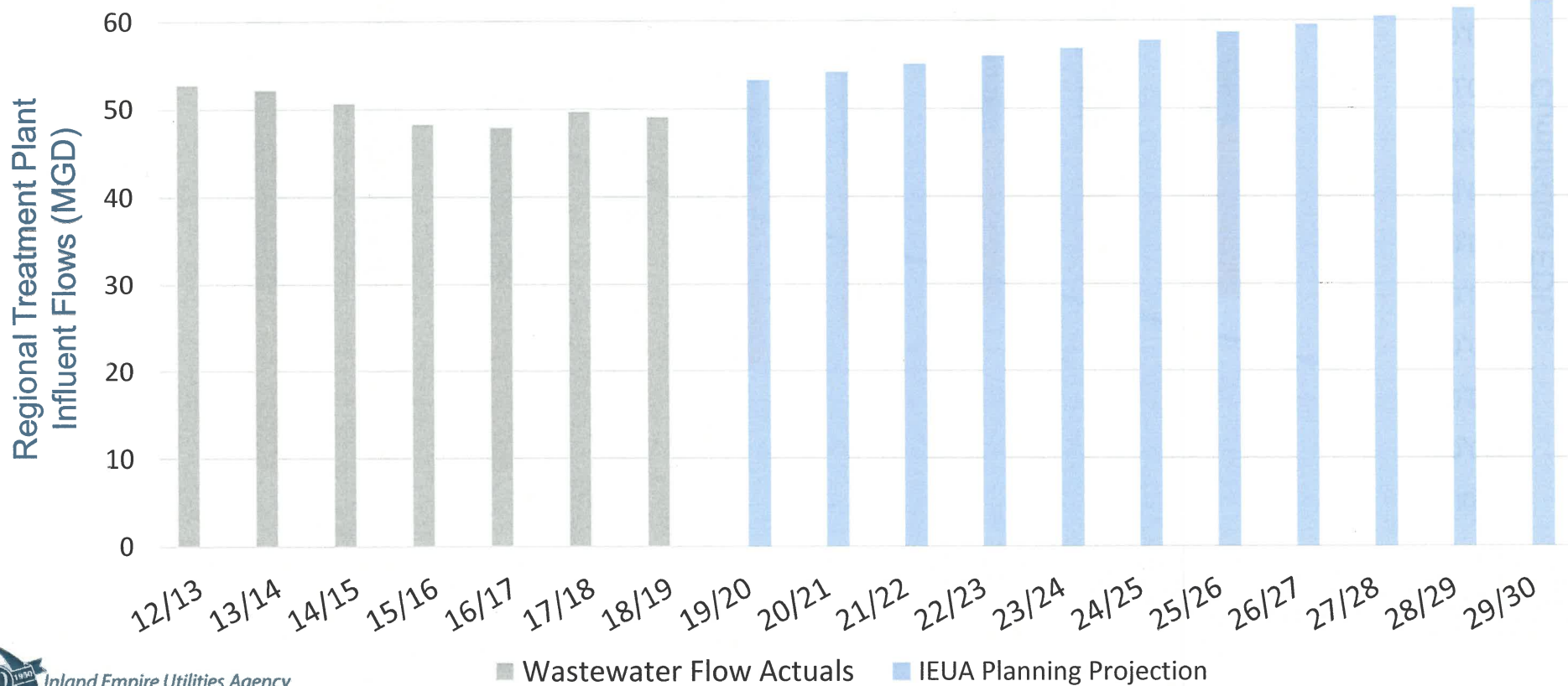
"CBMWD shall prepare and deliver... a ten-year forecast of the Capacity Demands of all Contracting Agencies and a forecast of the dates of commencement and completion of the design and construction of capital improvement projects which will be necessary to enable the Regional Sewerage System to meet the forecasted Capacity Demands...."

# New Equivalent Dwelling Unit (EDU) Forecast (2019 Regional Contracting Agency Data)

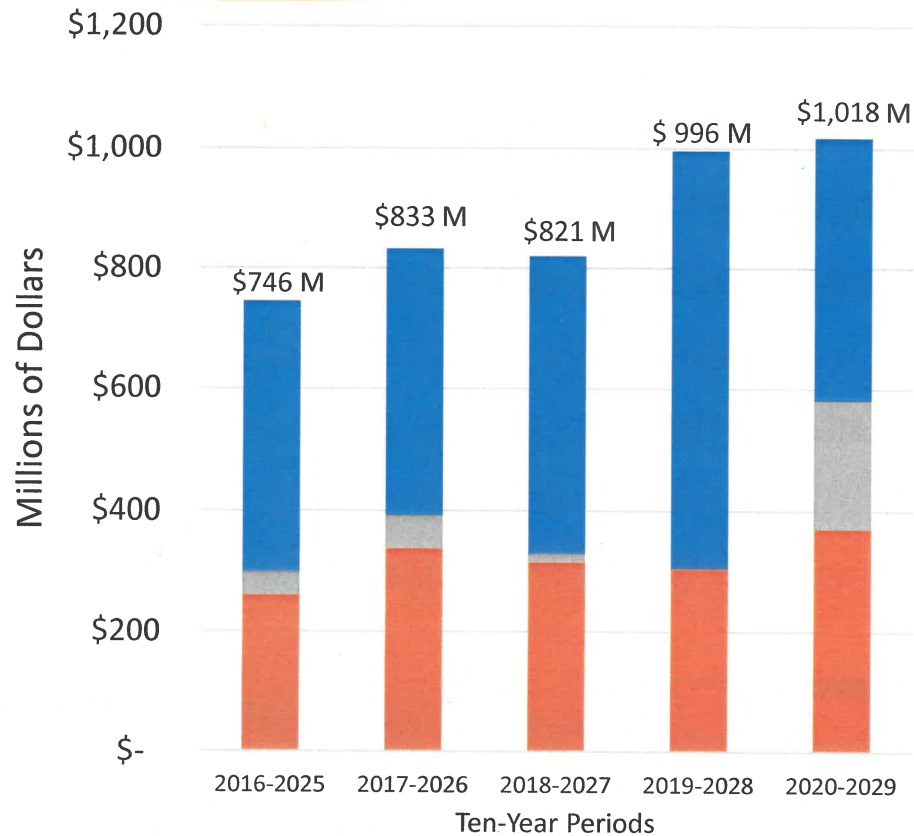


# 2020-2030 Wastewater Flow Projections

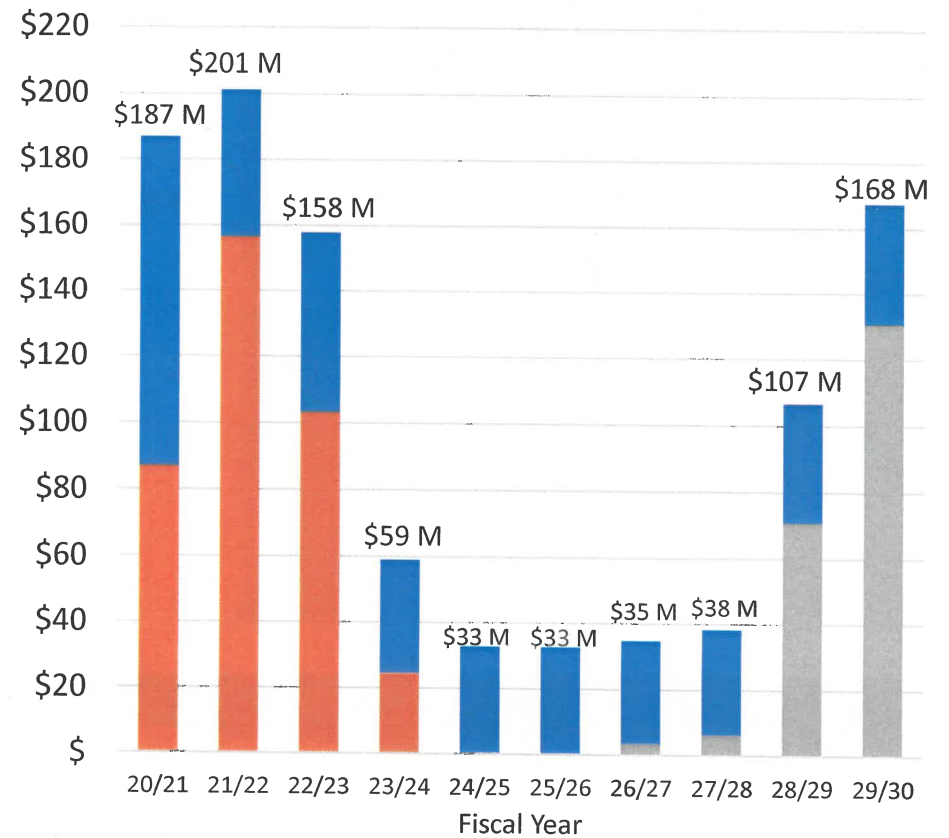
Projections based on 2015 wastewater master plan,  
adjusted per actual flows.



# Comparison of Prior Ten-Year Forecasts



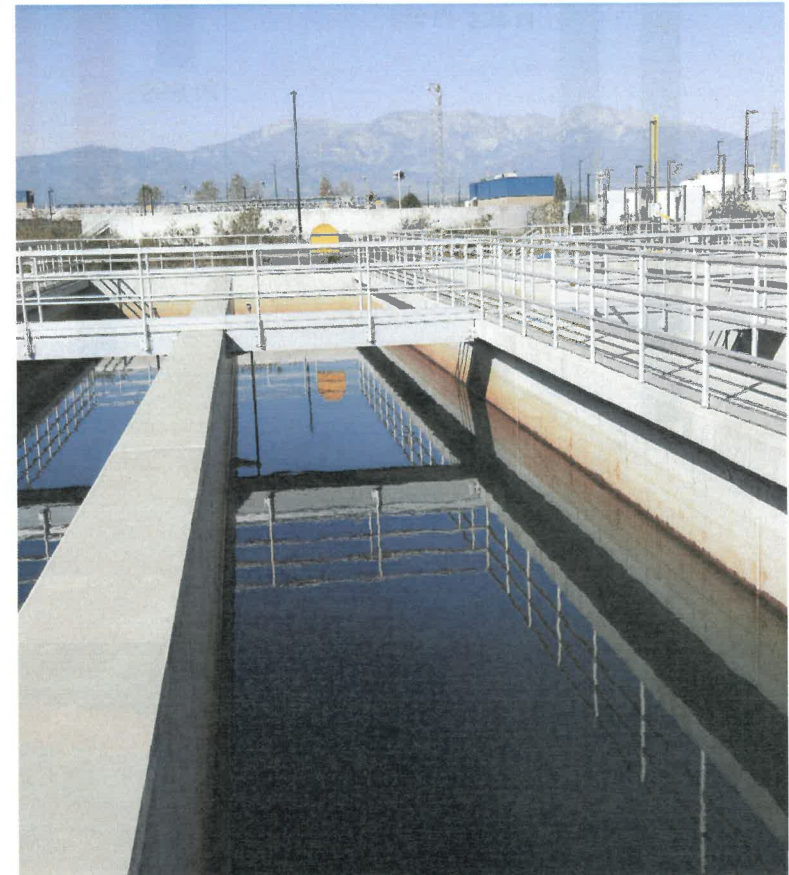
■ Other ■ RP-5 Expansion ■ RP-1 Capacity Improvement





# Fiscal Year 20/21 Ten Year Forecast Adoption Schedule

- ✓ 3/18/20: Info item to IEUA Board
- ✓ 3/26/20: Info item to Tech Committee
- ✓ 4/02/20: Info item to Policy Committee
- ✓ 4/09/20: Received Comments on TYF
  - 4/30/20: Action item to Tech Committees
  - 5/07/20: Action item to IEUA Policy Committees
  - 5/13/20: Action item to IEUA Committees
  - 5/20/20: Action item to IEUA Board



## Recommendation

- It is requested that the Regional Committees recommend the IEUA Board of Directors adopt the Fiscal Year 2020/21 – 2029/30 Ten Year Forecast.

The TYF covers many programs and projects that directly align with several Agency Business Goals, including ***Water Reliability, Wastewater Management, Environmental Stewardship, and Fiscal Responsibility.***

**INFORMATION**

**ITEM**

**2A**



6075 Kimball Avenue • Chino, CA 91708  
P.O. Box 9020 • Chino Hills, CA 91709  
TEL (909) 993-1600 • FAX (909) 993-1985  
[www.ieua.org](http://www.ieua.org)

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Date: April 30, 2020/May 7, 2020

To: Regional Sewerage Committees

From: Inland Empire Utilities Agency

Subject: Review of the Proposed FY 2020/21 Budget Amendment for Regional Wastewater and Recycled Water Programs

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### **RECOMMENDATION**

This is an information item for the Regional Committees to review.

### **BACKGROUND**

The item was presented as an information item at the IEUA Board of Directors meeting on April 15, 2020.

*Water Smart – Thinking in Terms of Tomorrow*

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**Kati Parker**  
President

**Jasmin A. Hall**  
Vice President

**Steven J. Elie**  
Secretary/Treasurer

**Michael E. Camacho**  
Director

**Paul Hofer**  
Director

**Shivaji Deshmukh**  
General Manager





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**Date:** April 15, 2020

**To:** The Honorable Board of Directors

**From:** Shivaji Deshmukh, General Manager

**Committee:**

**Executive Contact:** Christina Valencia, Executive Manager of Finance & Administration/AGM

**Subject:** FY 2020/21 Proposed Budget Amendment for Regional Wastewater and Recycled Water Programs

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**Executive Summary:**

On June 19, 2019 the Board of Directors approved the Agency's Biennial Budget for fiscal years (FY's) 2019/20 and 2020/21 and Ten Year Forecast (formerly called Ten Year Capital Improvement Plan) for FY's 2020-2029. As part of the biennial budget cycle, a review of the second budget year is done prior to the end of the first year to determine whether any adjustments are needed to meet changes in certain assumptions or conditions.

For the Regional Wastewater and Recycled Water programs, the Agency is projecting to spend an additional \$2.6 million over the FY 2020/21 adopted budget. The increase is primarily due to changes in the Ten Year Forecast and new PFAS testing requirements. Conversely, a decrease in sources of funds of \$12.8 million is due to reduced state loan and grant proceeds due to changes in related capital projects. If revenues and expenses occur as planned in FY 2020/21 amended budget for the Agency's the Regional Wastewater and Recycled Water program, the estimated gap of \$12.9 million between total funding sources and total uses of funds will be supported by fund reserves.

The proposed amended budget will be presented to the Regional Committees in April/May.

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**Staff's Recommendation:**

This is an informational item.

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

Account/Project Name:

*Fiscal Impact (explain if not budgeted):*

If revenues and expenses occur as planned, total fund reserves for the Regional Wastewater and Recycled Water programs are estimated to be \$232.1 million at the end of FY 2020/21; a decrease of approximately \$12.8 million from total projected fund reserves of \$245 million.

Full account coding (internal AP purposes only):

- - -  
- - -

Project No.:

**Prior Board Action:**

On June 19, 2019, the Board of Directors approved the Agency's biennial budget for FYs 2019/20 and 2020/21.

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**Environmental Determination:**

Not Applicable

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**Business Goal:**

The information item about the proposed amendment to the FY 2020/21 Adopted Budget for the Agency's programs is consistent with the IEUA Business Goals of Fiscal Responsibility, Water Reliability, Wastewater Management, Environmental Stewardship, and Business Practices to optimize investment earnings.

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**Attachments:**

Attachment 1 - Background  
Attachment 2 - PowerPoint

## Background

Subject: Fiscal Year 2020/21 Proposed Budget Amendment for the Regional Wastewater and Recycled Water Programs

### Fiscal Year 2020/2021 Proposed Budget Amendments

On June 19, 2019 the Board of Directors approved the Agency's Biennial Budget for fiscal years (FYs) 2019/20 and 2020/21, and Ten-Year Capital Improvement Plan (TYCIP) for FYs 2020-2029. As part of the biennial budget cycle, a review of the second budget year is done at the end of the first year to determine whether any adjustments are needed to meet changes in certain assumptions or conditions. Summarized below are the proposed amendments recommended for FY 2020/21 total Sources and Uses of funds.

**Table 1: FY 2020/21 Proposed Budget Amendments (\$Millions)**  
**Regional Wastewater and Recycled Water Programs**

Consolidated FY 2020/21	Adopted	Proposed	Amendment Amount
<b>Sources of funds</b>	\$271.9	\$ 259.1	<b>(\$12.8)</b>
<b>Uses of funds</b>	(\$269.3)	(\$271.9)	<b>\$2.6</b>
<b>Increase (Decrease) in Net Position</b>	<b>\$2.6</b>	<b>(\$12.8)</b>	<b>(\$15.4)</b>

### TOTAL SOURCES OF FUNDS

The \$12.8 million decrease to Sources of Funds is due to change in the assumptions reflecting a decrease in proceeds from federal and state loans, recycled water sales, and interest earnings. The distribution by program and major category of the proposed Sources of Funds is shown below in Table 2.

**Table 2: FY 2020/21 Proposed Amendment to Sources of Funds (\$Millions)**  
**Regional Wastewater and Recycled Water Programs**

Sources of Funds	Adopted	Proposed	Amendment Amount
<b>User Charges</b>	\$70.4	\$70.4	<b>\$0.0</b>
<b>Federal and State Loans</b>	85.4	70.8	<b>(14.6)</b>
<b>Property Tax</b>	46.8	46.8	<b>0.0</b>
<b>Connection Fees</b>	36.7	36.8	<b>0.1</b>
<b>Recycled Water Sales</b>	18.8	17.3	<b>(1.5)</b>
<b>Grants</b>	4.9	6.9	<b>2.0</b>
<b>Capital Reimbursement</b>	5.0	6.2	<b>1.2</b>
<b>*Other Sources</b>	3.9	3.9	<b>0.0</b>
<b>Total</b>	<b>\$271.9</b>	<b>\$259.1</b>	<b>\$12.8</b>

*\*Other Sources includes contract cost reimbursements, interest income, and miscellaneous revenue.*

**Connection Fees:** Wastewater connection units remain unchanged from the adopted 4,000 equivalent dwelling units (EDUs). Water connections units increased by 70-meter equivalent units (MEUs) to align with current pace of construction activity anticipated to continue in FY 2020/21.

**Recycled Water:** Projected recycled water direct and groundwater sales updated assumptions decreased from the adopted 36,000 acre-feet (AF) to 33,100 AF for FY 2020/21. The reduction is consistent with the current recycled water sales volume trend, resulting in a decrease in revenue projections by \$1.5 million.

**State Loans and Grants:** The decrease is the result of delays at the State Water Resources Control Board in securing State Revolving Fund (SRF) loans to support the RP-5 Expansion and Solids Handling Facility projects planned for FY 2020/21 in the Regional Wastewater program. Due to the uncertainty in the availability of SRF loan funding, a key assumption in the adopted and amended FY 2020/21 budget is pay-go funding of planned capital projects

## TOTAL USES OF FUNDS

The \$2.6 million change in total Uses of Funds is primarily due to an increase in non-capital project expenditures (Regional System Asset Management projects) offset by decrease in capital project spending. Table 3 below provides a summary by program and category.

**Table 3: FY 2020/21 Proposed Amendments to Uses of Funds (\$Millions)  
Regional Wastewater and Recycled Water Programs**

Uses of Funds	Adopted	Proposed	Amendment Amount
<b>Capital Projects</b>	\$147.6	\$142.6	<b>(\$5.0)</b>
<b>Operations &amp; Administration</b>	87.6	93.5	<b>5.9</b>
<b>Debt Service</b>	26.0	26.2	<b>0.2</b>
<b>Inter-Fund Transfers</b>	8.1	9.7	<b>1.5</b>
<b>Total</b>	<b>\$269.3</b>	<b>\$271.9</b>	<b>\$2.6</b>

**Operations & Administration:** Overall, the same level of expenditures for operations & administration cost was maintained. The only change in this category is in the non-capital project costs mainly due to the TCE Plume Cleanup projects and the acceleration of the Regional System Asset Management projects. Amendments to non-capital project costs are reflected at the latest Ten-Year Forecast (TYF) report.

**Capital Projects:** Decrease is primarily due to changes in project scope and project execution timelines. Amendments to capital project costs are reflected at the latest Ten-Year Forecast (TYF) report.

**Inter-Fund Transfers:** Increase was mainly due to support for Administrative Services program related projects like the PFAS and California Energy Commission (CEC) Testing and Headquarters Driveway improvements.

### Adopted Multi-Year Rates

In November 2019, the Board adopted the FY 2020/21 and 2021/22 *EDU monthly sewer rates*. FY 2019/20 is the final year of the five-year rates adopted by the Board for the Agency's Regional Wastewater Operations and Maintenance fund. The adopted rates for FYs 2020/21 and 2021/22 represent an increase of three percent each year to support the costs on the Regional Wastewater Operations & Maintenance fund.

The Regional Wastewater *connection fee rates* are proposed to increase at three percent each year for FYs 2020/21 and 2021/22. The proposed two-year rate will allow the Agency to complete pilot studies to develop an updated EDU methodology, the basis for the wastewater sewer rates and connection fees.

The Recycled Water *direct delivery volumetric rates* are proposed to increase at three percent each year for FYs 2020/21 and 2021/22. No increase to the groundwater recharge surcharge is proposed. Recycled water rates will continue to be evaluated and refined to ensure long-term program sustainability.

The multi-year rates support the Board's commitment to set rates and fees, is proven to be beneficial to both the Agency and its member agencies in terms of predictability, lessens the process to comply with the Proposition 218 requirements, provides revenue stability, and helps achieve rates closer to full cost of service recovery.

**Table 4: Adopted and Proposed Fees and Rates**

Fund	Adopted*	Proposed			
	Wastewater Operation	Wastewater Capital	Recycled Water		
As of July 1	Month Sewer (EDU)	Wastewater Connection Fee (EDU)	Recycled Water Direct Use (AF)	Recycled Water Recharge (AF)	One Water Connection Fee (MEU)
FY 2019/20	\$20.00	\$6,955	\$490	\$550	\$1,684
FY 2020/21	\$20.60	\$7,164	\$504	\$564	\$1,735
FY 2021/22	\$21.22	\$7,379	\$519	\$579	\$1,787
FY 2022/23	To be reviewed based on the sewer use evaluation results		To be determined after additional evaluation to ensure long-term program sustainability		\$1,841
FY 2023/24					\$1,896
FY 2024/25					\$1,953

\*Monthly EDU rates for FYs 2020/21 and 2021/22 adopted November 2019 as unanimously recommended by the Regional Committees.

## **Conclusion**

The proposed FY 2020/21 amendments will decrease the net position of the Regional Wastewater and Recycled Water programs to (\$12.8) million compared to FY 2020/21 Adopted Budget increase in net position of \$2.6 million. This reduction is primarily due to lower SRF loans secured to support capital projects in the Recycled Water and Regional Wastewater programs.

The proposed amendment to the FY 2020/21 Adopted Budget for the Agency's programs is consistent with the IEUA Business Goals of *Fiscal Responsibility, Water Reliability, Wastewater Management, Environmental Stewardship, and Business Practices*.



**INLAND EMPIRE UTILITIES AGENCY**  
**FISCAL YEAR 2020/21 MID-YEAR BUDGET**  
**REGIONAL WASTEWATER CAPITAL IMPROVEMENT FUND - SOURCES AND USES OF FUNDS (In Thousands)**

	2018/2019	2019/2020	2019/2020	2020/2021	2020/2021
	ACTUAL	ADOPTED BUDGET	AMENDED BUDGET	ADOPTED BUDGET	AMENDED BUDGET
<b>REVENUES</b>					
Interest Revenue	\$838	\$790	\$790	\$826	\$826
<b>TOTAL REVENUES</b>	<b>\$838</b>	<b>\$790</b>	<b>\$790</b>	<b>\$826</b>	<b>\$826</b>
<b>OTHER FINANCING SOURCES</b>					
Property Tax - Debt and Capital	\$34,476	\$34,037	\$34,037	\$35,058	\$35,058
Regional System Connection Fees	22,435	27,820	27,820	28,655	28,655
State Loans	-	9,800	9,800	80,250	65,293
Other Revenues	23	1	1	1	1
<b>TOTAL OTHER FINANCING SOURCES</b>	<b>\$56,938</b>	<b>\$71,658</b>	<b>\$71,658</b>	<b>\$143,963</b>	<b>\$129,006</b>
<b>EXPENSES</b>					
Employment Expenses	\$3,899	\$3,613	\$3,613	\$3,743	\$3,743
Contract Work/Special Projects	134	125	246	-	-
Operating Fees	263	267	267	275	275
Professional Fees and Services	295	407	705	420	420
Other Expenses	969	1,548	1,548	1,535	1,535
<b>TOTAL EXPENSES</b>	<b>\$5,560</b>	<b>\$5,960</b>	<b>\$6,378</b>	<b>\$5,973</b>	<b>\$5,973</b>
<b>CAPITAL PROGRAM</b>					
Work In Progress	\$24,845	\$24,824	\$24,824	\$102,243	\$98,645
IERCA investment	-	500	500	500	500
<b>TOTAL CAPITAL PROGRAM</b>	<b>\$24,845</b>	<b>\$25,324</b>	<b>\$25,324</b>	<b>\$102,743</b>	<b>\$99,145</b>
<b>DEBT SERVICE</b>					
Financial Expenses	\$211	\$139	\$139	\$256	\$256
Interest	2,786	3,017	3,017	2,656	2,656
Principal	8,922	9,370	9,370	9,630	9,630
<b>TOTAL DEBT SERVICE</b>	<b>\$11,919</b>	<b>\$12,526</b>	<b>\$12,526</b>	<b>\$12,543</b>	<b>\$12,543</b>
<b>TRANSFERS IN (OUT)</b>					
Capital Contribution	\$4,426	\$3,399	\$3,399	\$10,426	(\$805)
Debt Service	(3,174)	(3,299)	(3,299)	(3,327)	(3,192)
Capital - Connection Fees Allocation	(5,008)	(8,984)	(8,984)	(8,656)	(12,595)
<b>TOTAL INTERFUND TRANSFERS IN (OUT)</b>	<b>(\$3,755)</b>	<b>(\$8,883)</b>	<b>(\$8,883)</b>	<b>(\$1,556)</b>	<b>(\$16,591)</b>
<b>FUND BALANCE</b>					
Net Income (Loss)	\$11,697	\$19,755	\$19,336	\$21,974	(\$4,420)
Beginning Fund Balance July 01	84,996	88,794	88,794	108,548	108,130
<b>ENDING FUND BALANCE AT JUNE 30*</b>	<b>\$96,693</b>	<b>\$108,548</b>	<b>\$108,130</b>	<b>\$130,523</b>	<b>\$103,709</b>
<b>RESERVE BALANCE SUMMARY</b>					
Capital Construction	\$14,645	\$20,434	\$17,485	\$83,645	\$14,187
CCRA Capital Construction	66,474	72,262	75,294	30,916	73,948
Debt Service & Redemption	15,574	15,853	15,351	15,962	15,574
<b>ENDING BALANCE AT JUNE 30</b>	<b>\$96,693</b>	<b>\$108,548</b>	<b>\$108,130</b>	<b>\$130,523</b>	<b>\$103,709</b>

\*Numbers may not tie due to rounding

**INLAND EMPIRE UTILITIES AGENCY**  
**FISCAL YEAR 2020/21 MID-YEAR BUDGET**  
**REGIONAL WASTEWATER OPERATIONS & MAINTENANCE FUND - SOURCES AND USES OF FUNDS (In Thousands)**

	2018/2019	2019/2020	2019/2020	2020/2021	2020/2021
	ACTUAL	ADOPTED BUDGET	AMENDED BUDGET	ADOPTED BUDGET	AMENDED MID YEAR
<b>REVENUES</b>					
User Charges	\$66,499	\$68,158	\$68,158	\$70,366	\$70,366
Cost Reimbursement JPA	4,024	4,065	4,065	4,227	4,227
Contract Cost Reimbursement	111	66	66	66	66
Interest Revenue	1,667	1,700	1,700	1,300	1,300
<b>TOTAL REVENUES</b>	<b>\$72,301</b>	<b>\$73,988</b>	<b>\$73,988</b>	<b>\$75,959</b>	<b>\$75,959</b>
<b>OTHER FINANCING SOURCES</b>					
Property Tax Revenues - Debt/Capital	\$9,549	\$9,549	\$9,549	\$9,549	\$9,549
State Loans	2,519	0	0	0	0
Grants	712	1,261	7,570	1,135	3,794
Other Revenues	385	909	909	909	909
<b>TOTAL OTHER FINANCING SOURCES</b>	<b>\$13,164</b>	<b>\$11,718</b>	<b>\$18,027</b>	<b>\$11,593</b>	<b>\$14,252</b>
<b>EXPENSES</b>					
Employment Expenses	\$28,726	\$33,985	\$33,985	\$35,261	\$35,261
Contract Work/Special Projects	4,744	5,800	13,409	6,425	11,744
Utilities	5,318	6,022	6,272	6,266	6,266
Operating Fees	1,613	1,953	1,953	2,015	2,015
Chemicals	4,572	4,867	5,235	5,013	5,013
Professional Fees and Services	2,971	4,723	5,171	4,226	4,226
Biosolids Recycling	4,305	4,384	4,389	4,515	4,515
Materials & Supplies	2,074	2,019	2,230	2,064	2,064
Other Expenses	2,728	4,277	4,277	4,231	4,231
<b>TOTAL EXPENSES</b>	<b>\$57,052</b>	<b>\$68,034</b>	<b>\$76,925</b>	<b>\$70,020</b>	<b>\$75,339</b>
<b>CAPITAL PROGRAM</b>					
Capital Construction & Expansion (WIF)	\$20,629	\$25,988	\$26,547	\$21,047	\$39,887
<b>TOTAL CAPITAL PROGRAM</b>	<b>\$20,629</b>	<b>\$25,988</b>	<b>\$26,547</b>	<b>\$21,047</b>	<b>\$39,887</b>
<b>DEBT SERVICE</b>					
Financial Expenses	\$0	\$0	\$0	\$0	\$0
Interest	819	655	655	641	627
Principal	728	756	756	771	754
<b>TOTAL DEBT SERVICE</b>	<b>\$1,548</b>	<b>\$1,412</b>	<b>\$1,412</b>	<b>\$1,412</b>	<b>\$1,381</b>
<b>TRANSFERS IN (OUT)</b>					
Capital Contribution	(\$3,559)	(\$4,598)	(\$4,598)	(\$11,010)	(\$1,368)
Debt Service		265		123	
Operation support to GG for Non-Cap	(320)	(2,176)	(2,176)	(1,307)	(1,987)
Capital - Connection Fees Allocation	4,481	5,717	5,717	4,785	10,378
<b>TOTAL INTERFUND TRANSFERS IN (OUT)</b>	<b>\$909</b>	<b>(\$792)</b>	<b>(\$792)</b>	<b>(\$7,409)</b>	<b>\$7,133</b>
<b>FUND BALANCE</b>					
Net Income (Loss)	\$7,163	(\$10,519)	(\$13,269)	(\$12,335)	(\$19,263)
Beginning Fund Balance July 01	76,837	76,428	84,000	65,909	70,731
<b>ENDING FUND BALANCE JUNE 30*</b>	<b>\$84,000</b>	<b>\$65,909</b>	<b>\$70,731</b>	<b>\$53,574</b>	<b>\$51,468</b>
<b>RESERVE BALANCE SUMMARY</b>					
Operating Contingies	\$17,701	\$21,323	\$24,156	\$21,931	\$23,704
Rehabilitation/Replacement	27,331	10,783	10,500	10,783	7,311
Debt Service	1,412	1,412	1,412	1,412	1,381
Sinking Fund	37,557	32,390	34,663	19,448	19,072
<b>ENDING BALANCE AT JUNE 30</b>	<b>\$84,000</b>	<b>\$65,909</b>	<b>\$70,731</b>	<b>\$53,574</b>	<b>\$51,468</b>

\* Numbers may not tie due to rounding



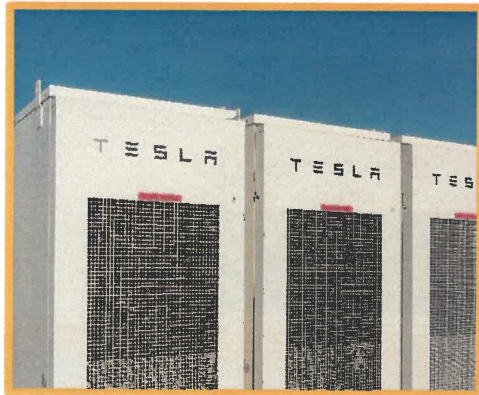
**INLAND EMPIRE UTILITIES AGENCY**  
**FISCAL YEAR 2020/21 MID-YEAR BUDGET**  
**RECYCLED WATER FUND - SOURCES AND USES OF FUNDS (In Thousands)**

	2018/2019	2019/2020	2019/2020	2020/2021	2020/2021
	ACTUAL	ADOPTED BUDGET	AMENDED BUDGET	ADOPTED BUDGET	AMENDED MID-YEAR
<b>REVENUES</b>					
Interest Revenue	\$769	\$983	\$983	\$949	\$857
Water Sales	13,902	18,120	18,120	18,752	17,289
<b>TOTAL REVENUES</b>	<b>\$14,670</b>	<b>\$19,103</b>	<b>\$19,103</b>	<b>\$19,701</b>	<b>\$18,145</b>
<b>OTHER FINANCING SOURCES</b>					
Property Tax - Debt /Capital	\$2,170	\$2,170	\$2,170	\$2,170	\$2,170
Connection Fees	5,916	7,915	7,915	8,032	8,154
State Loans	2,373	8,153	8,153	5,220	5,554
Grants	753	7,032	7,032	3,750	3,120
Capital Contract Reimbursement	88	2,075	2,075	702	1,875
Other Revenues	24	0	0	0	0
<b>TOTAL OTHER FINANCING SOURCES</b>	<b>\$ 11,324</b>	<b>\$ 27,345</b>	<b>\$ 27,345</b>	<b>\$ 19,875</b>	<b>\$ 20,873</b>
<b>EXPENSES</b>					
Employment Expenses	\$4,451	\$5,184	\$5,184	\$5,370	\$5,370
Contract Work/Special Projects	1,333	1,780	2,049	1,365	1,990
Utilities	2,240	2,801	2,721	2,885	2,885
Operating Fees	3	10	10	10	10
Chemicals	0	0	0	0	0
Professional Fees and Services	641	666	1,008	632	632
Office and Administrative expenses	4	3	3	3	3
Materials & Supplies	141	169	184	174	174
Other Expenses	805	1,132	1,185	1,122	1,122
<b>TOTAL EXPENSES</b>	<b>\$9,619</b>	<b>\$11,743</b>	<b>\$12,342</b>	<b>\$11,562</b>	<b>\$12,187</b>
<b>CAPITAL PROGRAM</b>					
Work In Progress	\$6,636	\$18,727	\$23,849	\$23,800	\$3,570
<b>TOTAL CAPITAL PROGRAM</b>	<b>\$6,636</b>	<b>\$18,727</b>	<b>\$23,849</b>	<b>\$23,800</b>	<b>\$3,570</b>
<b>DEBT SERVICE</b>					
Financial Expenses	\$2	\$3	\$3	\$3	\$3
Interest	2,870	2,657	2,657	2,881	2,933
Principal	5,256	5,367	5,367	6,232	6,309
Short Term Inter-Fund Loan	3,000	3,000	3,000	3,000	3,000
<b>TOTAL DEBT SERVICE</b>	<b>\$11,129</b>	<b>\$11,027</b>	<b>\$11,027</b>	<b>\$12,116</b>	<b>\$12,245</b>
<b>TRANSFERS IN (OUT)</b>					
Capital Contribution	(\$1,873)	(\$88)	(\$88)	(\$21)	(\$503)
Debt Service	2,394	2,400	2,400	2,542	2,547
Operation support	(526)	(836)	(836)	(755)	(623)
Water Connection Allocation	(454)	(2,021)	(2,021)	(950)	(1,614)
<b>TOTAL INTERFUND TRANSFERS IN (OUT)</b>	<b>(\$459)</b>	<b>(\$545)</b>	<b>(\$545)</b>	<b>\$816</b>	<b>(\$194)</b>
<b>FUND BALANCE</b>					
Net Income (Loss)	(\$1,848)	\$4,405	(\$1,315)	(\$7,086)	\$10,823
Beginning Fund Balance July 01	29,628	36,651	27,781	41,056	26,465
<b>ENDING BALANCE AT JUNE 30</b>	<b>\$27,781</b>	<b>\$41,056</b>	<b>\$26,465</b>	<b>\$33,970</b>	<b>\$37,288</b>
<b>RESERVE BALANCE SUMMARY</b>					
Operating Contingency	\$3,206	\$3,914	\$4,114	\$3,854	\$4,062
Capital Construction	1,932	15,511	(2,282)	4,664	5,437
Water Connection	14,615	12,516	15,518	14,478	16,646
Rehabilitation/Replacement (R&R)	0	0	0	1,500	1,500
Debt Service	8,027	9,116	9,116	9,475	9,643
<b>ENDING BALANCE AT JUNE 30</b>	<b>\$27,781</b>	<b>\$41,056</b>	<b>\$26,465</b>	<b>\$33,970</b>	<b>\$37,288</b>

\* Numbers may not total due to rounding

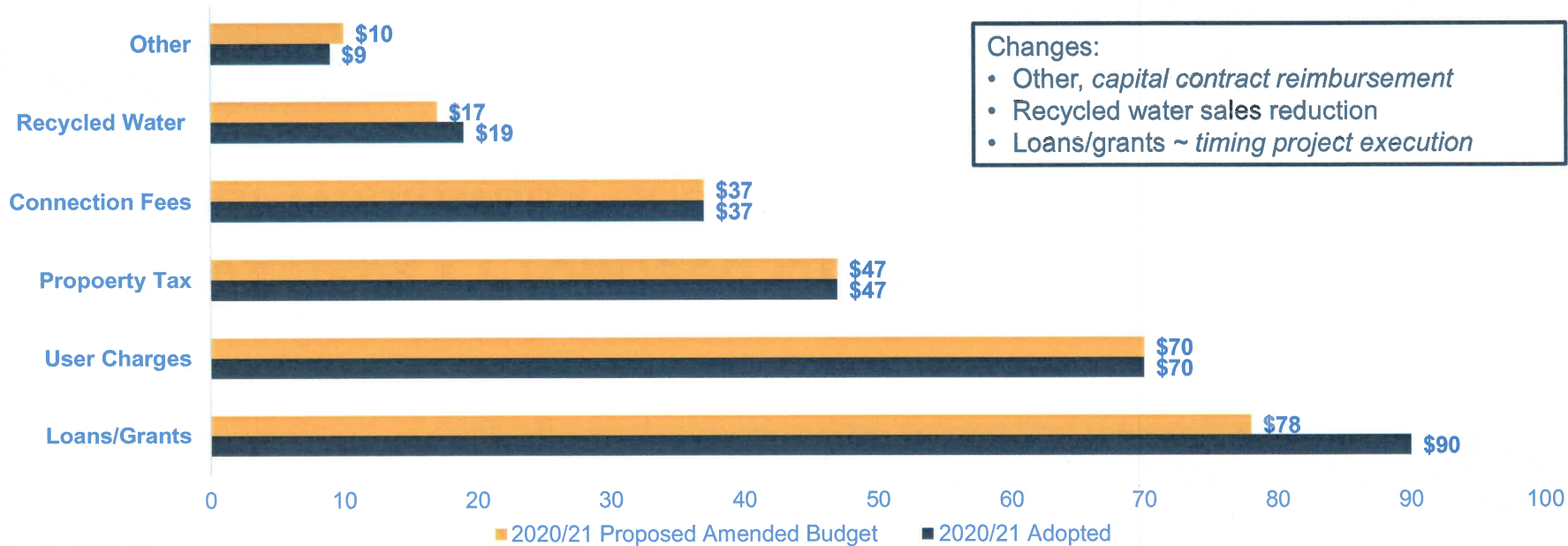
# FY 2020/2021 Proposed Budget Amendments

## Regional Wastewater and Recycled Water Programs



# Regional Wastewater and Recycled Water SOURCES OF FUNDS

\$ Millions	FY 2020/21 Adopted	FY 2020/21 Proposed	Amendments
Total Sources of Funds	\$271.9	\$259.1	(\$12.8)

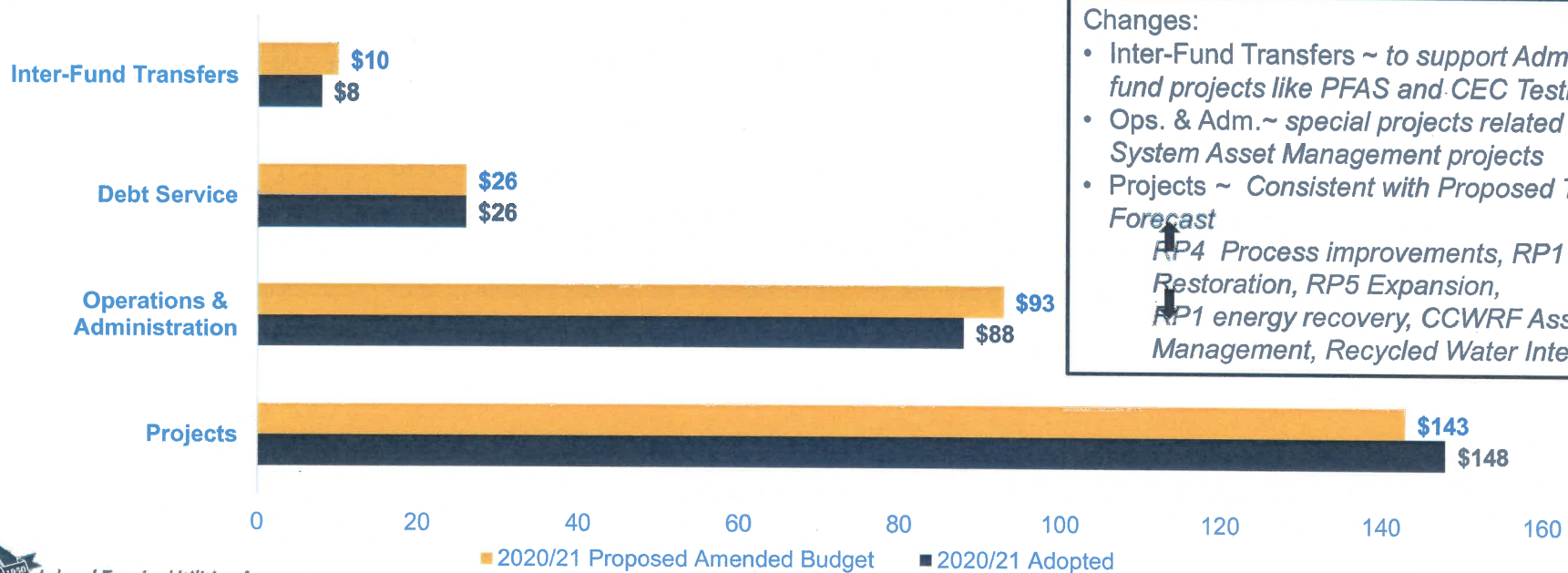




# REGIONAL PROGRAMS USES OF FUNDS

## Regional Wastewater and Recycled Water

\$ Millions	FY 2020/21 Adopted	FY 2020/21 Proposed	Amendments
Total Uses of Funds	\$269.3	\$271.9	\$2.6



### Changes:

- Inter-Fund Transfers ~ to support Admin Services fund projects like PFAS and CEC Testing
- Ops. & Adm. ~ special projects related to Regional System Asset Management projects
- Projects ~ Consistent with Proposed Ten-Year Forecast
  - RP4 Process improvements, RP1 Mechanical Restoration, RP5 Expansion, RP1 energy recovery, CCWRF Asset Management, Recycled Water Interties

# Summary Regional Wastewater and Recycled Water Programs

\$ Millions	FY 2020/21 Adopted	FY 2020/21 Proposed	Amendments
Total Sources of Funds	\$271.9	\$259.1	(\$12.8)
Total Uses of Funds	<u>\$269.3</u>	<u>\$271.9</u>	<u>\$2.6</u>
Increase (decrease) net position	\$2.6	(\$12.8)	(\$15.4)

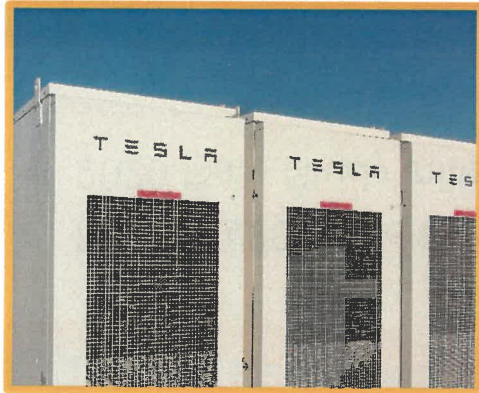
# Questions



The proposed amendments to the FY 2020/21 Adopted Budget are consistent with the IEUA Business Goals of *Fiscal Responsibility, Water Reliability, Wastewater Management, Environmental Stewardship and Business Practices.*



# 2020 Rate Study Update



# Rates Summary

- FY 2019/20 is the final year of the multi-year rates adopted in 2015-2016
- 2020 Rate Study initiated in March 2019 to adjust rates for the next 5 years

Program	Rates/Fees	Billing Unit	Status
Regional Wastewater	Monthly Sewage Charge	EDU	Completed
	Wastewater Connection Fee	EDU	
Water Resources	Monthly Water Charge	MEU	In Process
Recycled Water	Water Connection Fee	MEU	
	Direct Use	AF	
	Groundwater Recharge	AF	

AF: Acre-foot, EDU: Equivalent Dwelling Unit, MEU: Meter Equivalent Unit



# 2020 Rate Study

## Key Objectives



**Wastewater  
Management**



**Water  
Reliability**



**Fiscal  
Responsibility**



**Work  
Environment**



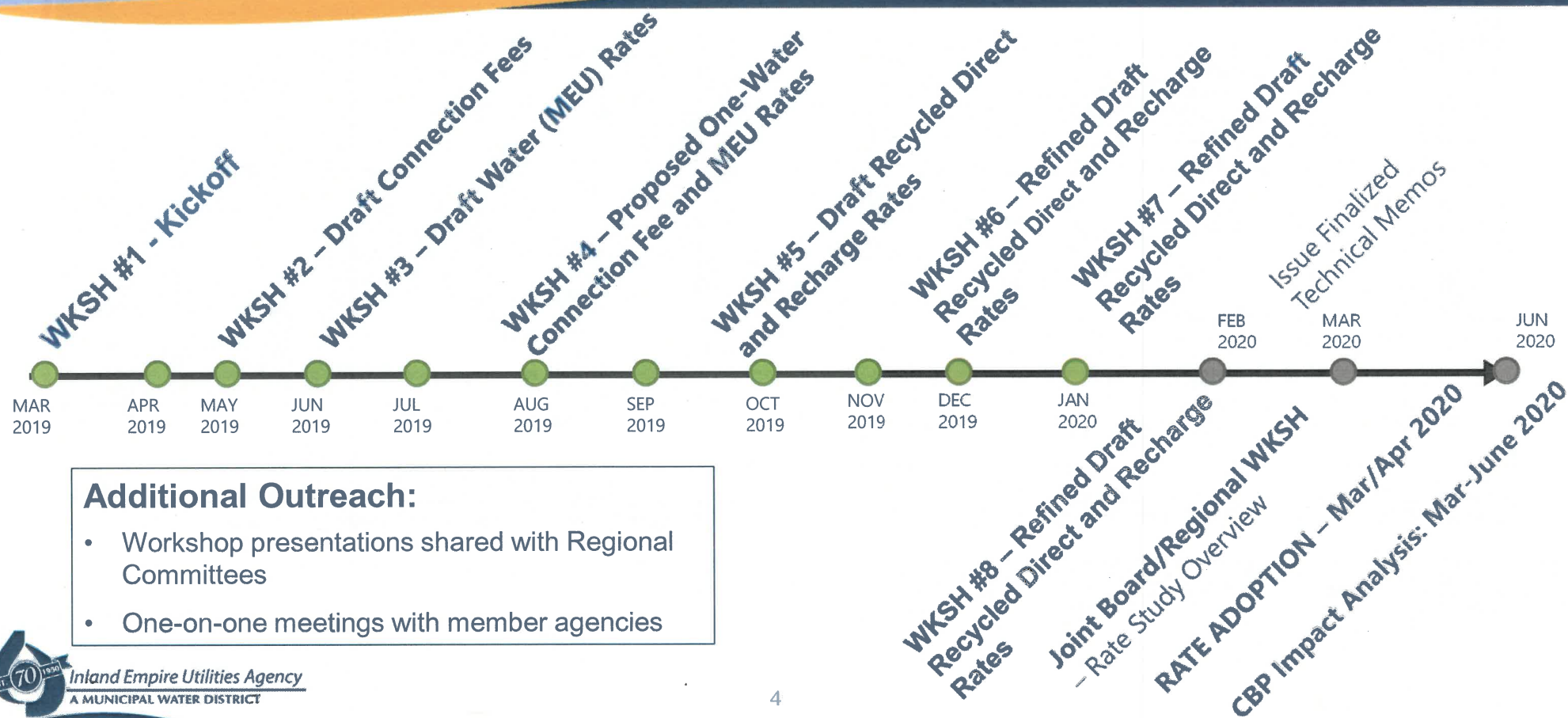
**Environmental  
Responsibility**



**Business  
Practices**



# 2020 Rate Study Review Process



# Regional Wastewater Program Rates

## ✓ Monthly EDU Sewage Charge

- ✓ Supports costs to maintain the regional wastewater system facilities, infrastructure, debt service costs and fund reserves
- ✓ Board adopted rates in November 2019 for the next two fiscal years as unanimously recommended by the Regional Committees

## • Wastewater Connection Fee

- One-time fee to support new connections to the regional wastewater system
- Proposed adjustments for the next two fiscal years

Rate Description	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
	Current	Proposed				
Wastewater Connection Fee	\$6,955	\$7,164	\$7,379	To be updated after completion of Flow and Load Sample Study		



# Water Resources Program

## Proposed Rates

- Monthly Meter Equivalent Unit (MEU) Rate
  - Supports regional water resource planning efforts and coordination with MWD and Watermaster
- MWD Pass-through
  - Readiness to Serve (RTS) and capacity charges

Rate Description	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Monthly MEU	Current	Proposed				
	\$1.04	\$1.06	\$1.08	\$1.10	\$1.12	\$1.14
RTS Pass-Through	60%	75%	90%	100%	100%	100%

MWD: Metropolitan Water District of Southern California

## Recycled Water Program Water Connection Fee

- One-time fee on new or upsized connections to the regional water system
  - Supports capital investment to optimize use of recycled water and associated debt service costs, and
  - Water use efficiency programs to enhance conservation efforts in the region
- Proposed fees based on 2020 Rate Study

Rate Description	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Water Connection Fee per *MEU	Current	Proposed				
	\$1,684	\$1,735	\$1,787	\$1,841	\$1,896	\$1,953

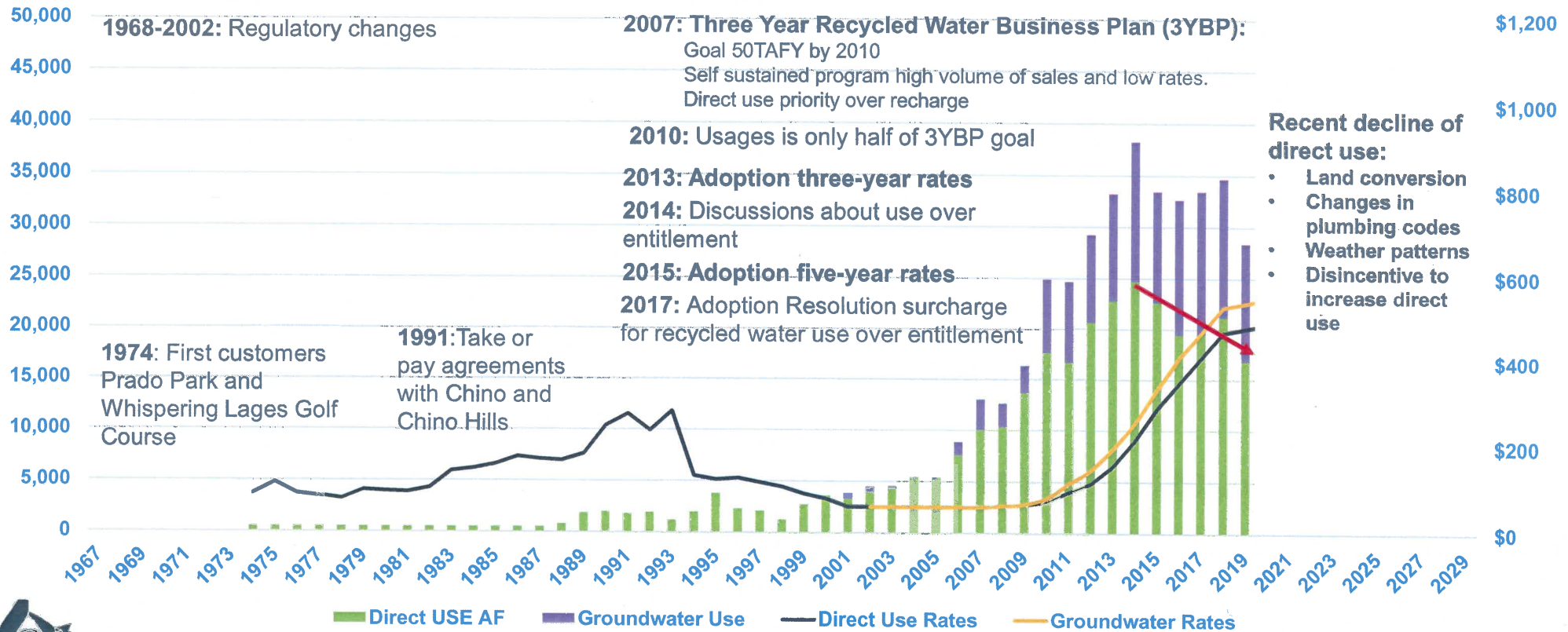
\*Meter equivalent unit: 1 MEU = ¾" or 5/8" average water meter size of a single- family residence

## Recycled Water Program Regulations & IEUA Policies

- 1968: State anti-degradation policy (SWRCB 68-16)
- 1969: Porter-Cologne Water Quality Control Act by California EPA
- 1972: Clean Water Act by Federal EPA
- 1975: RWQCB|SWRCB adopt Basin Plan for Santa Ana River Basin
- 1994: Updated Basin Plan
- 1995: SAWPA's Task Force on TDS | Nitrogen
- 2000: Water Recycling Law [State Water Code Section 13500] | OBMP
- 2002: IEUA Ordinance 75 – Incentives & encourage use of recycled water**
- 2004: Basin Plan Amendment 001 ['Maximum Benefit' commitments]
- 2007: Three Year Recycled Water Business Plan**



# Recycled Water System Timeline



# Recycled Water Program

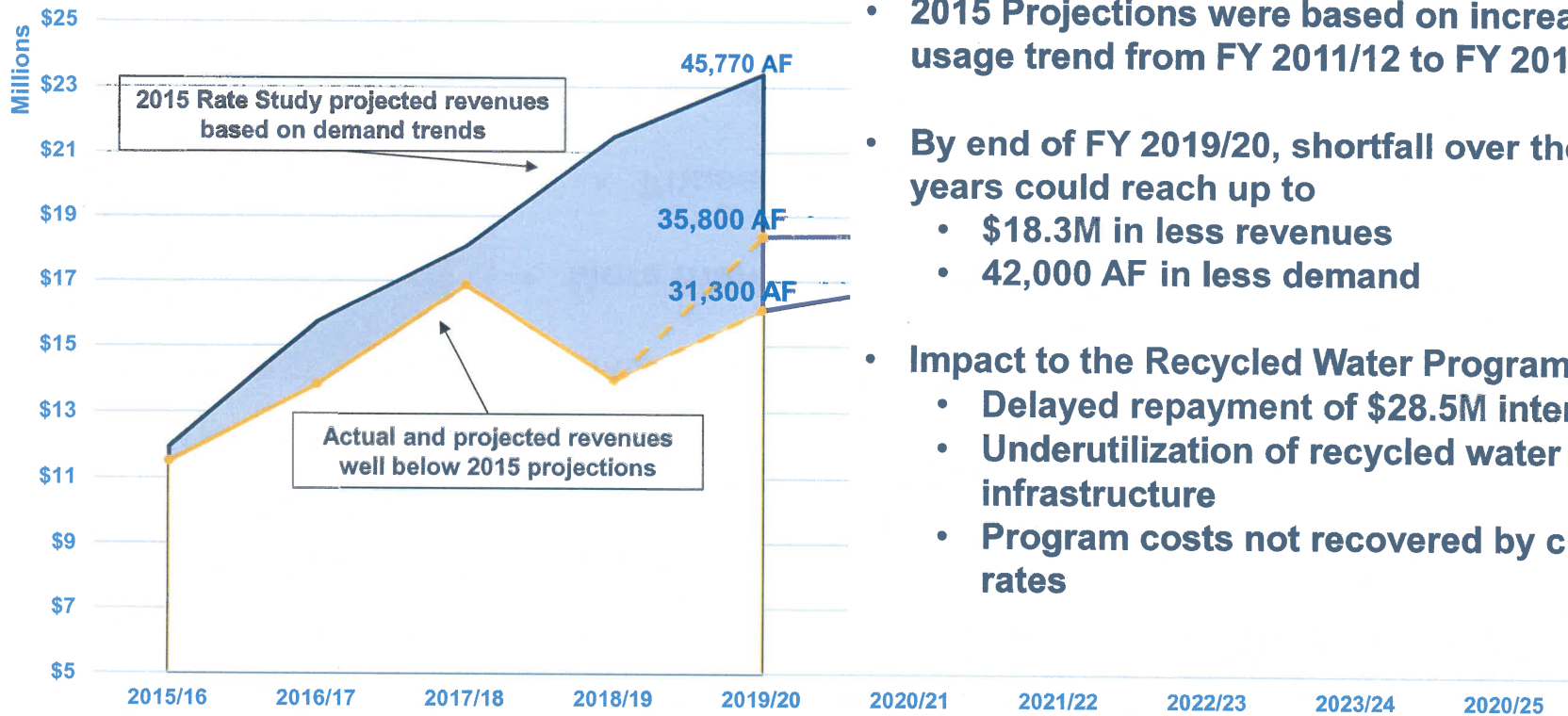
## Direct Use and Groundwater Rates

Support operational, capital, debt service costs and fund reserves

- Current rates are 100% volumetric
  - Fluctuation in demand directly impacts program revenues
    - 38,000 AF peak in FY 2013/14 to
    - 28,000 AF recent low in FY 2018/19
    - ~32,500 AF average over the last 5 years
- Need to transition to a Fixed/Volumetric rate structure
  - Most program costs are fixed in nature
  - Unpredictable weather patterns = demand fluctuations = uncertain revenue
  - 3YBP goal of 50,000 AFY has not been achieved
    - 50TAFY would have resulted in lower rates
    - Significantly lower demand has resulted in increasing rates



# Recycled Water Program Revenue Trend Last 5 Years



- 2015 Projections were based on increasing usage trend from FY 2011/12 to FY 2013/14
- By end of FY 2019/20, shortfall over the last 5 years could reach up to
  - \$18.3M in less revenues
  - 42,000 AF in less demand
- Impact to the Recycled Water Program:
  - Delayed repayment of \$28.5M interfund loans
  - Underutilization of recycled water infrastructure
  - Program costs not recovered by current rates

# Recycled Water Program

## Need for a More Sustainable Rate Structure

### Why a fixed component?

Most costs are fixed  
Increase reliability  
of funding sources

50 TAF goal is not  
achievable over the  
next 5 years

### Options evaluated to date to mitigate impact to member agencies:

- Fixed charge limited to debt service cost
- More than 7 rate alternatives evaluated, including
  - Phased-in implementation over 4 years starting FY 2023/24
  - Use of water connection fees to reduce fixed charge amount
  - Rate adjustments spread over 5 years to lessen year-to-year adjustments

## Feedback from Member Agencies

- Can property taxes be used to reduce recycled water rates?
- Implementation of fixed charge for recycled water is inequitable among the member agencies.
- Recycled water demand projections are too conservative.
- Justification for staffing levels supporting recycled water/groundwater recharge/water resources planning efforts.
- Menu-based approach for water use efficiency programs and water resources planning initiatives.
- What is the value of MWD Readiness-to-Serve (RTS) to retail agencies?

# Recycled Water Program

## Next Steps

- Need more time to carefully evaluate additional alternatives
  - Evaluation of beneficial use of recycled water by contracting agencies
  - Evaluation of adequate rate structure to support Recycled Water Program long-term sustainability
  - Agreement on AF demand projections
  - Evaluation of current property tax allocation

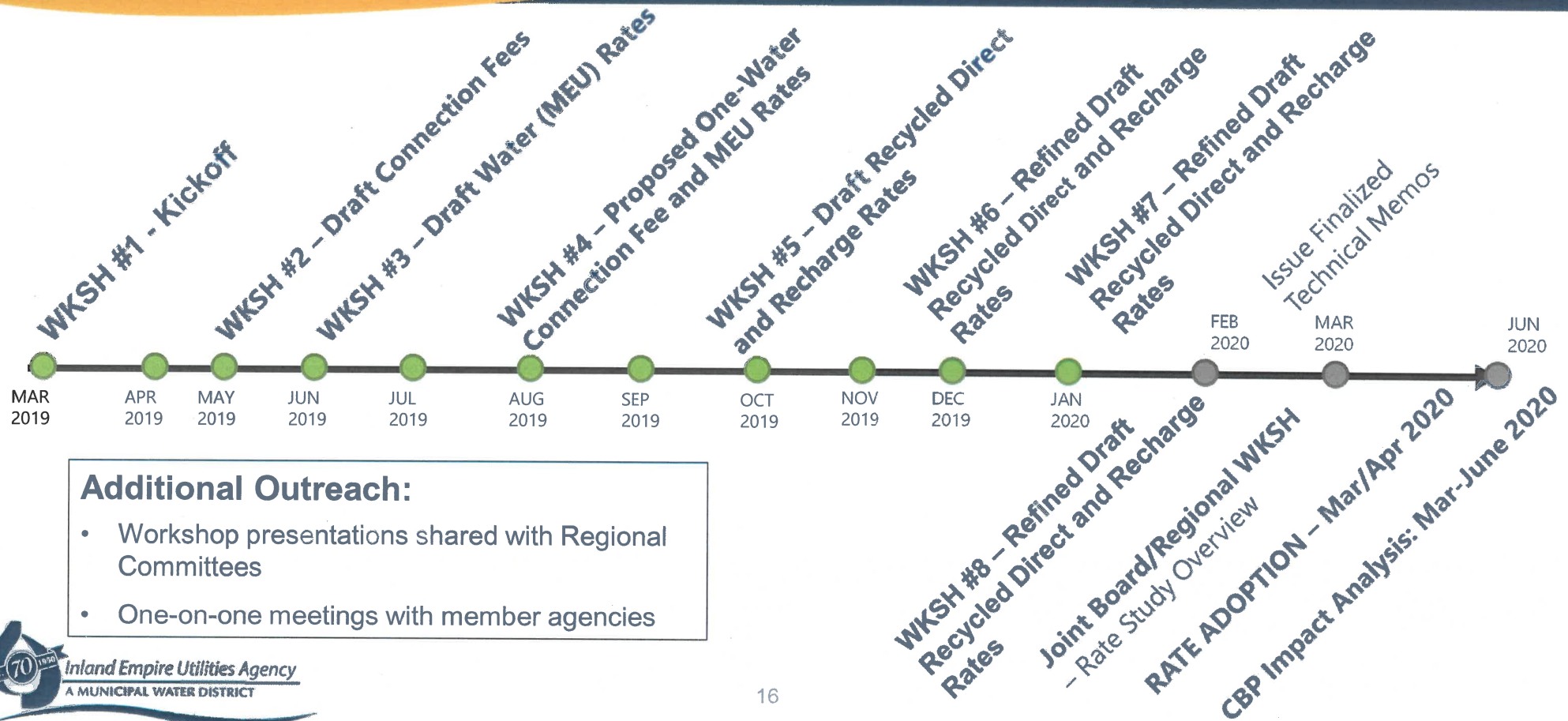


CV1

# Summary Proposed Rates

Program	Rate Description	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
		Current	<b>Adopted November 2019</b> Effective July 1, 2020		<b>Proposed</b>		
Regional Wastewater	Monthly EDU	\$20.00	\$20.60	\$21.22	To be updated after completion of Flow and Load Sample Study		
	Wastewater Connection Fee per EDU	\$6,955	\$7,164	\$7,379			
Water Resources	Monthly MEU	\$1.04	\$1.06	\$1.08	\$1.10	\$1.12	\$1.14
Recycled Water	Water Connection Fee per MEU	\$1,684	\$1,735	\$1,787	\$1,841	\$1,896	\$1,953
	Direct Delivery Use per AF	\$490	\$505	\$520	Continue evaluation with target completion date of September 2021		
	Groundwater Recharge per AF	\$550	\$565	\$580			

# 2020 Rate Study Review Process





## Questions?

2020 Rate Study Presentation and Technical Memorandums can be found at: <https://www.ieua.org/fees-rates/>

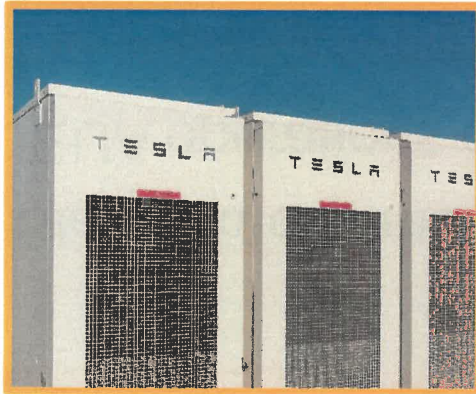


**INFORMATION**

**ITEM**

**2B**

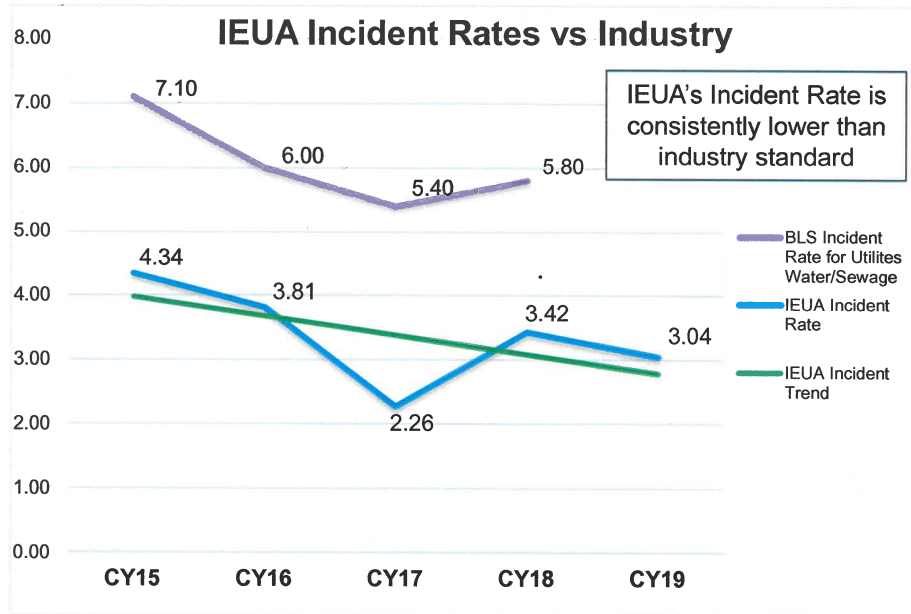
# Operations Division Quarterly Update



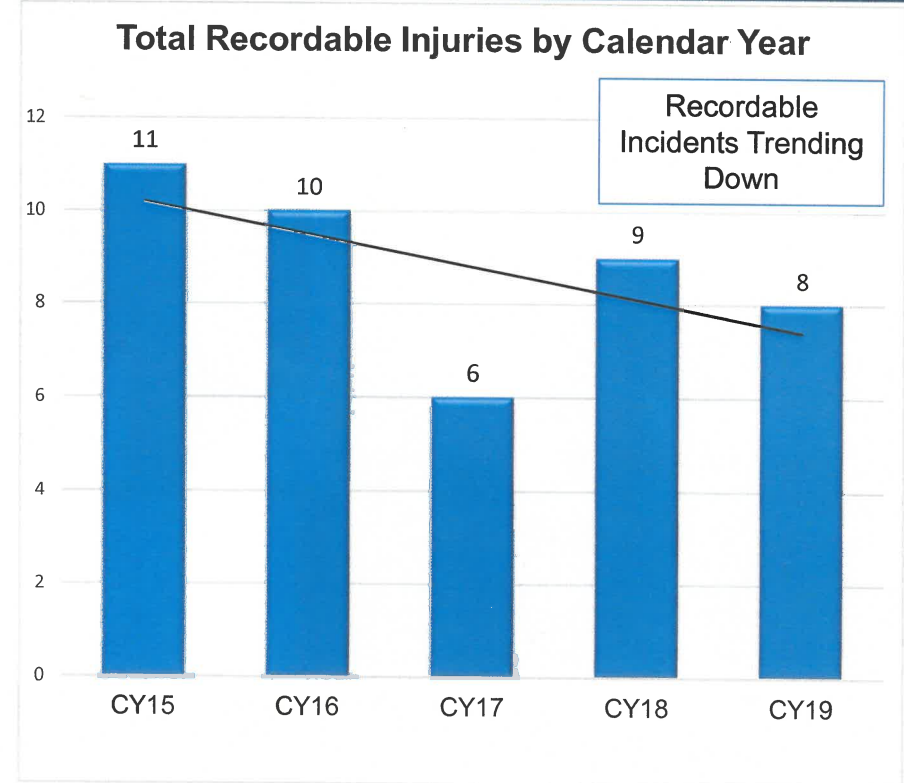
# COVID-19

- Staff and community safety are priority
- IEUA operations continuing to run at full capacity
- Maximizing social distancing and minimizing cross contamination
  - >30% O&M staff working remotely
  - Still completing all essential work including:
    - Permit compliance
    - Preventive and Corrective maintenance
    - Recycled water distribution and ground water recharge
    - Biosolids processing through composting and safe distribution

# IEUA Incident Rates vs Industry & Total Recordable Injuries



- Incident Rate= Recordable Incidents X 200,000 / Number of hours worked
- **RECORDABLE INCIDENT RATE** - Incident rates are a metric used to compare a company's safety performance against a national. This comparison is a safety benchmark to gauge performance with other companies in the same business group, so you can make an "apples to apples" comparison





# Collections

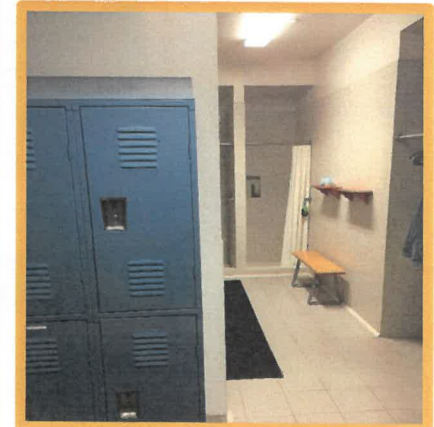
- Sanitary Sewer System
  - No SSOs
  - City of Chino Approves Prado Lift Station actions
- Manholes on Haven Ave.
- Mutual Aid Support
  - Semi-Annual Meeting:
    - @ Jurupa Community Services District (to be rescheduled)



# Facilities Management

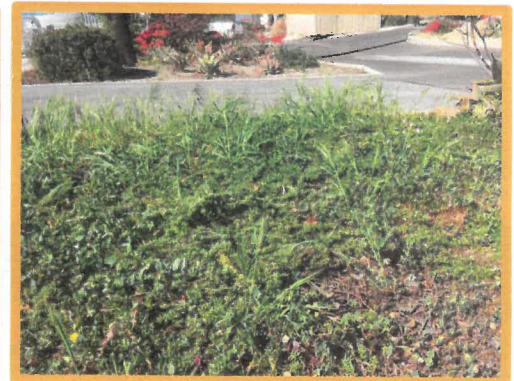
- Janitorial/Facilities

- Overall 80% positive feedback from customer survey (IEUA staff)
- Incorporate feedback into next contract
- Request for Proposal scheduled for later this year



- Landscape

- Addressing performance issues
- Request for Proposal scheduled for later this year





# Integrated System Services

## Information Security

Identify

Protect

Detect

Recover

Respond

## RP-4 SCADA Upgrade



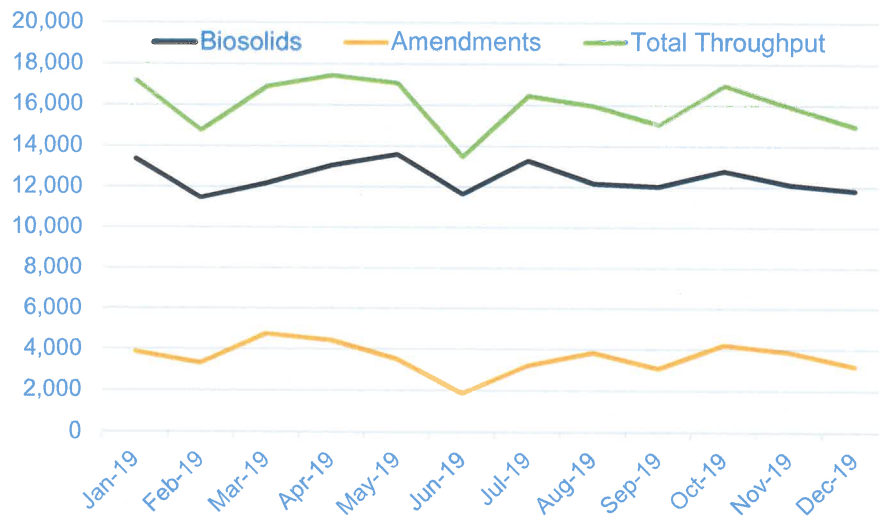
Upgraded Control Rooms



New Servers & Hardware

# IERCF in 2019

## Throughput



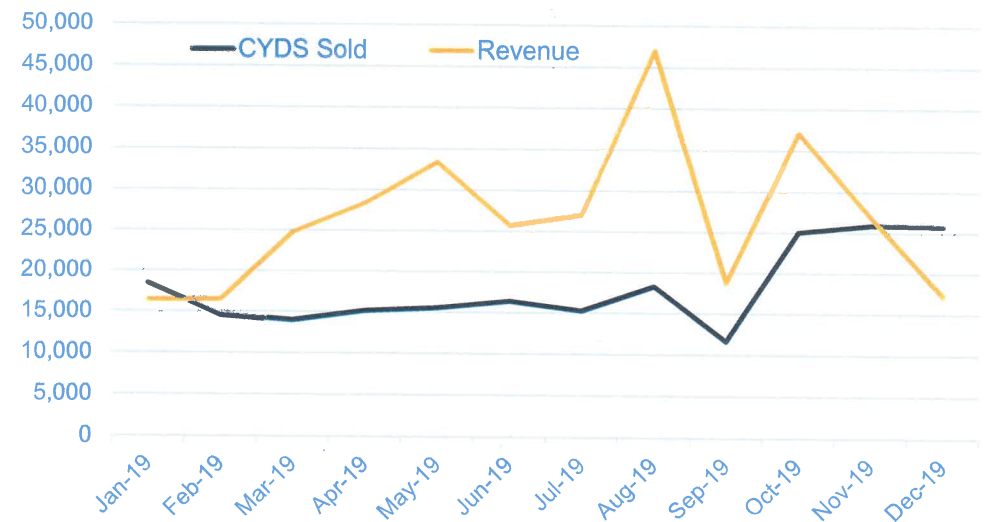
**Total Throughput:** 90% of facility capacity

**Total Revenue:** \$8,386,331

**Biosolids:** 99.6% of biosolids target



## Compost Sales



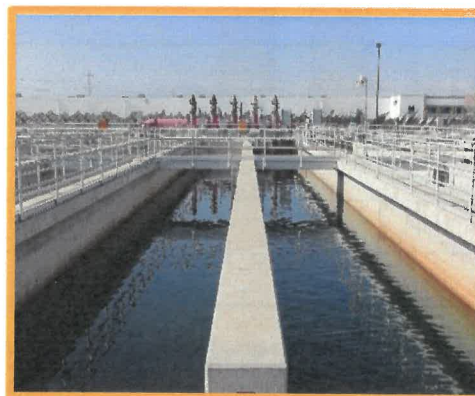
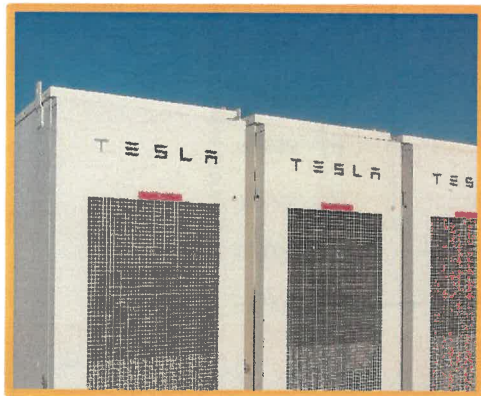
**Total Cubic Yards Sold:** 215,538.32

**Total Revenue:** \$318,692

**Price:** \$1.55/yard<sup>3</sup> (average)

**INFORMATION  
ITEM  
2C**

# Groundwater Recharge/Recycled Water Semi-Annual Update

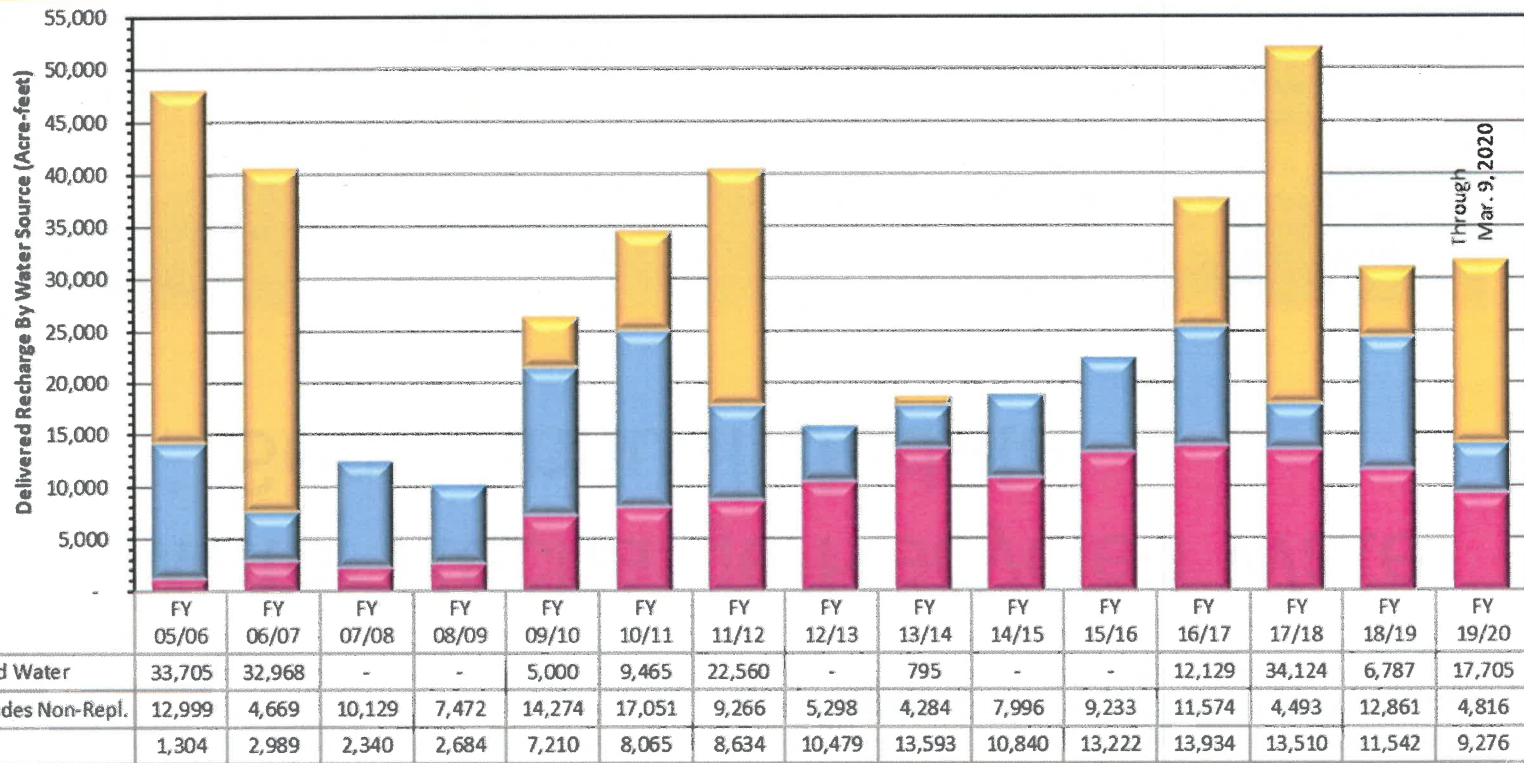


Regional Technical Committee – March 26, 2020  
Policy Committee - April 2, 2020

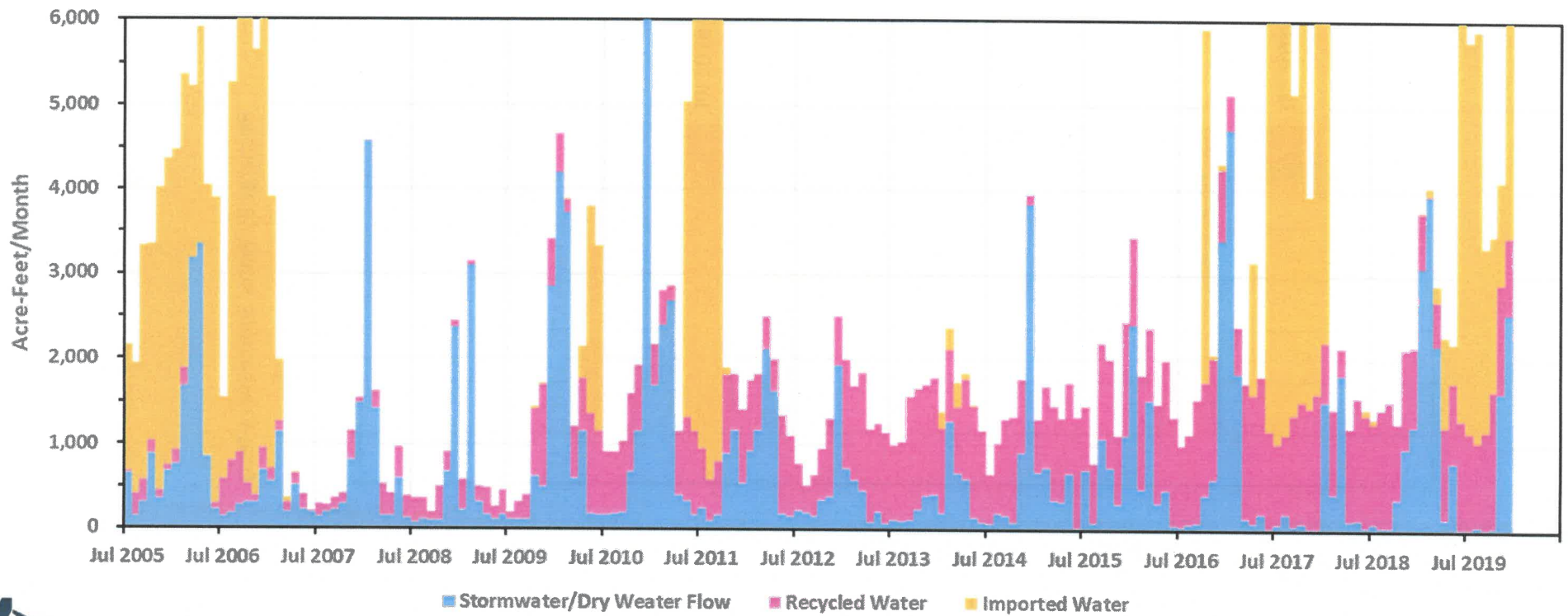
Andy Campbell  
GWR Recharge Coordinator / Hydrogeologist



# Groundwater Recharge Annual History

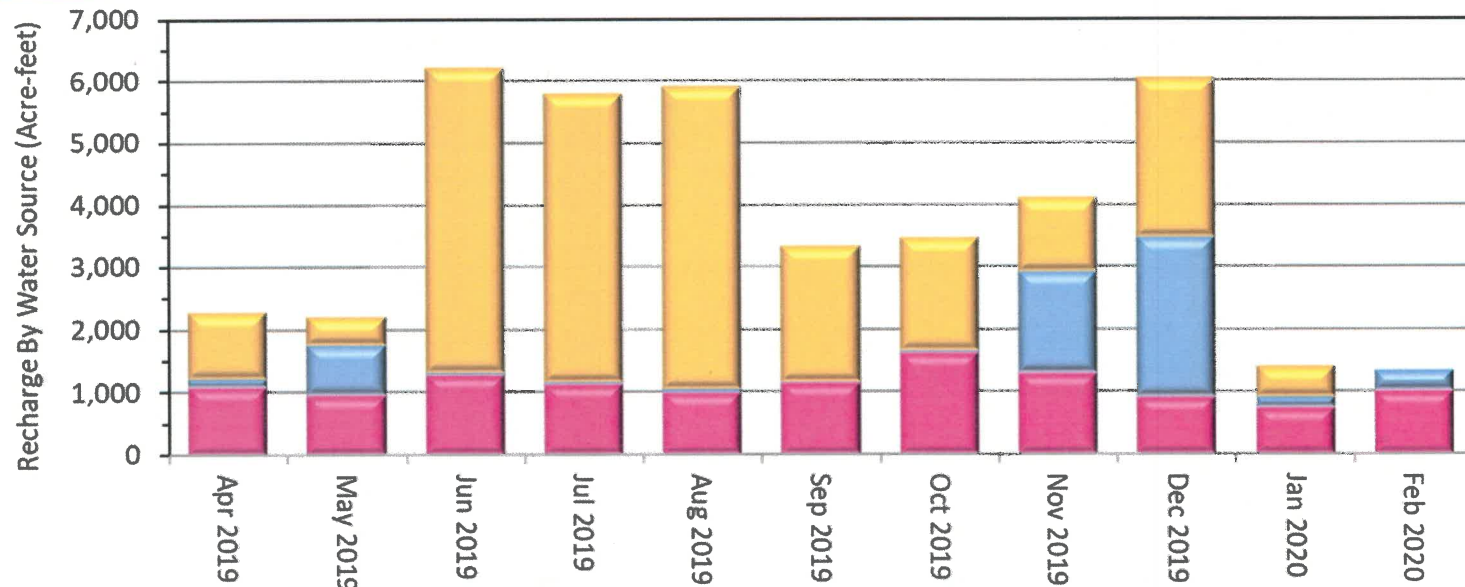


# Historical Monthly Deliveries (FY2005/06 to FY2019/20)



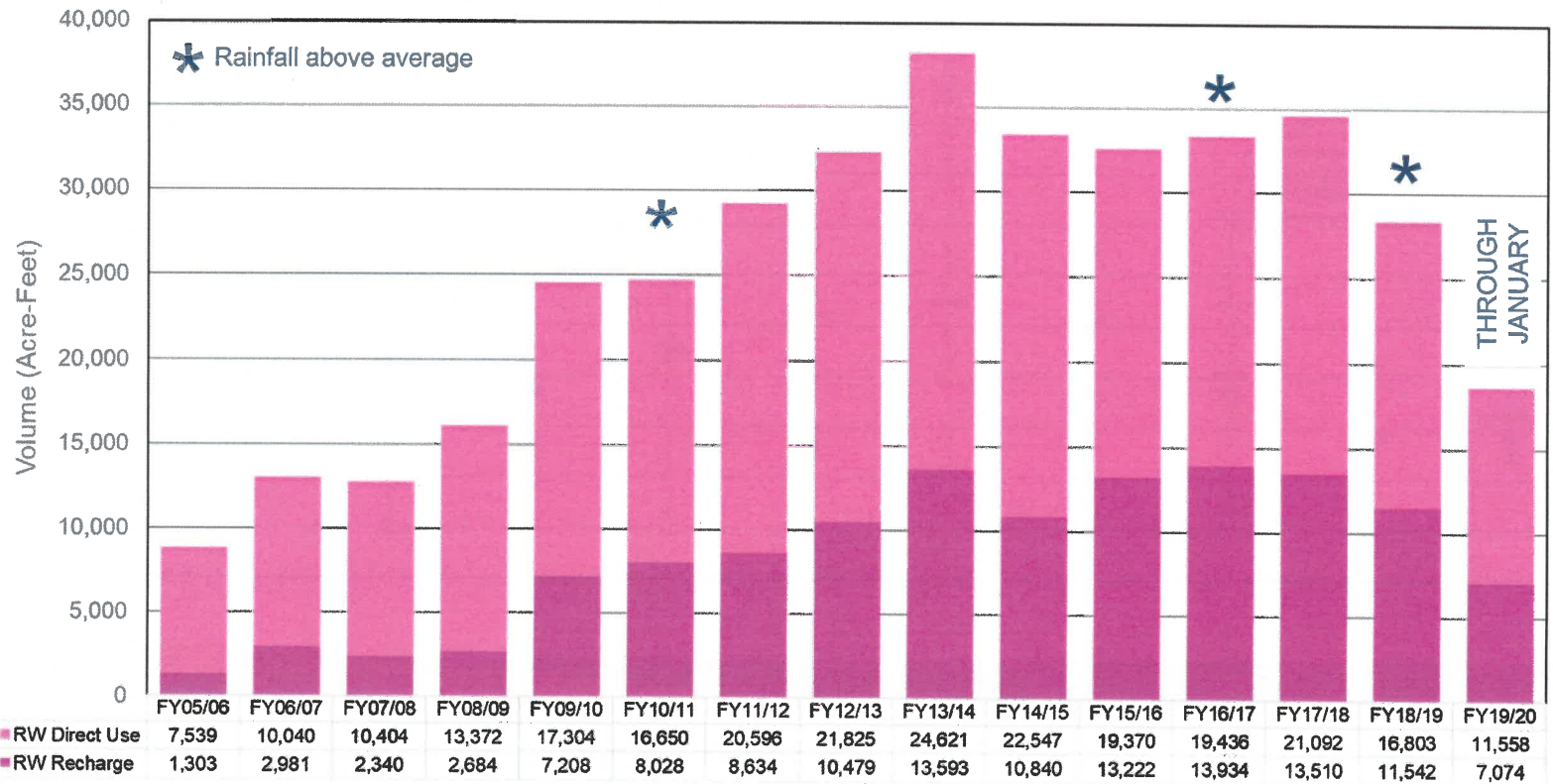


# Groundwater Recharge FY2018/19

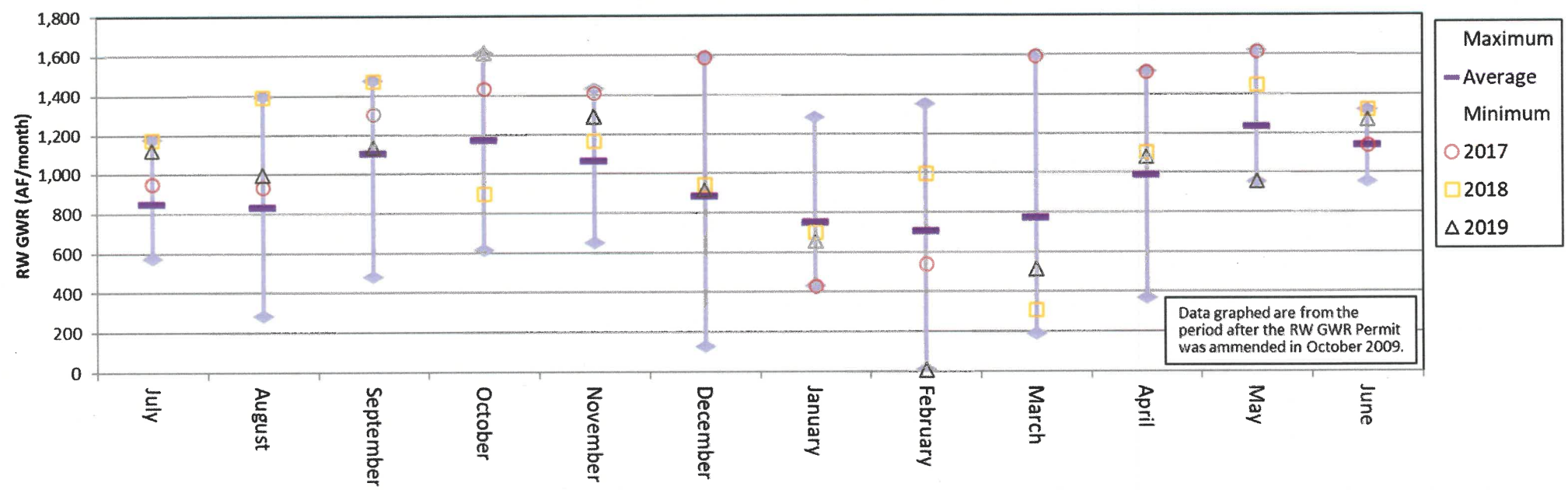


	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020
MWD and other Imported Water	192.2	1067.7	446.6	4895.5	4619.9	4841.2	2165.0	1812.8	1197.5	2577.0	491.7	0.0
Stormwater and LR (excluded Non-Replenishment)	2177.4	138.6	795.9	30.9	30.8	54.3	31.8	38.2	1615.8	2535.8	174.1	315.5
Recycled Water	511.8	1080.0	954.5	1270.1	1123.0	994.8	1134.0	1613.6	1290.4	917.9	742.6	1008.0

# Historical Recycled Water (RW) Demand



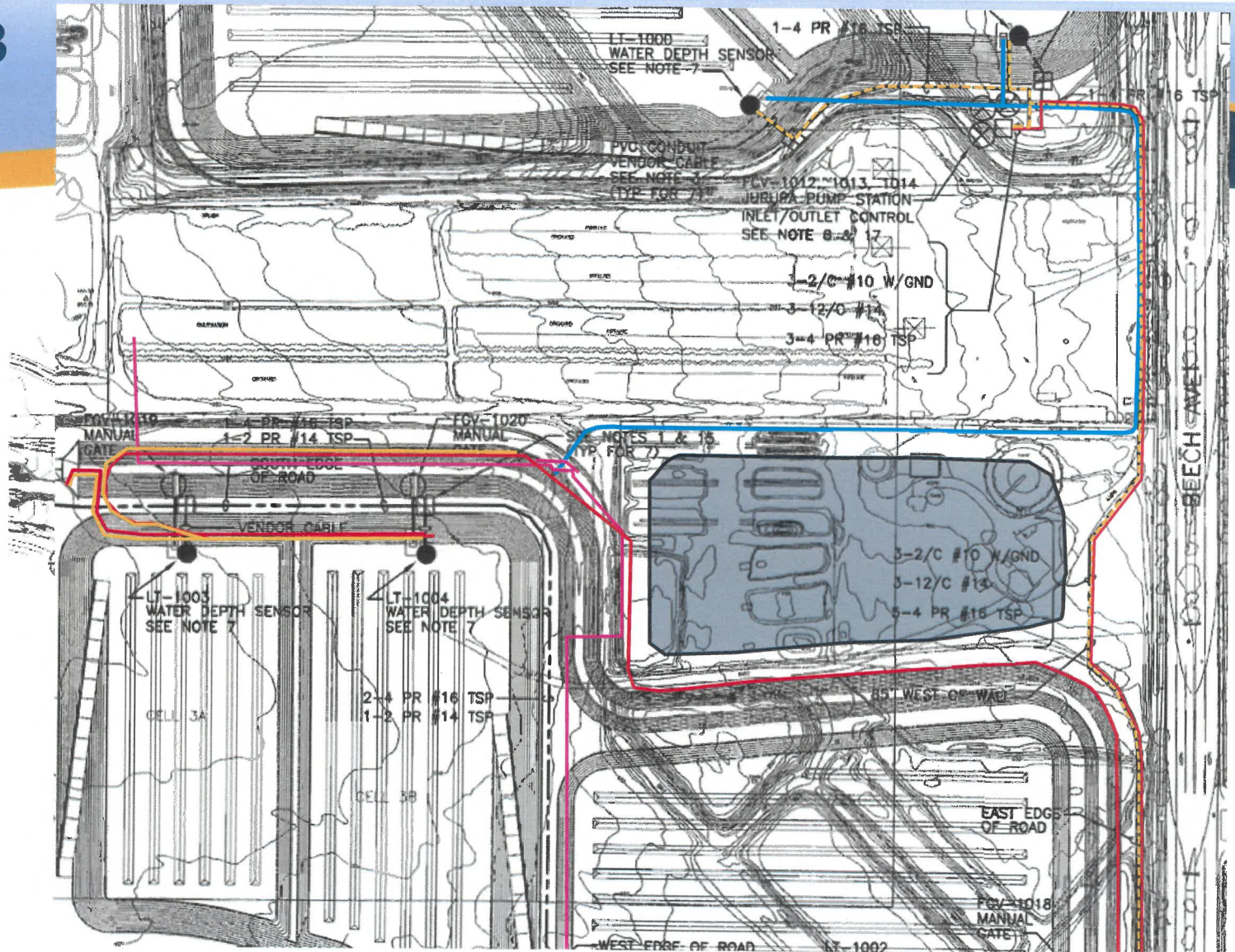
# RW GWR Month Variations





# New Cell at RP3

- Appr. 3 Acres
- Increases Recharge Area by 12% by Area





# RP3 New Recharge Cell Construction



Looking West



# RP3 New Recharge Cell Construction



# GWR/RW Semi-Annual Update

Questions?

**INFORMATION**

**ITEM**

**2E**





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Date: April 30/May 7, 2020

To: Regional Committees

From: Inland Empire Utilities Agency

Subject: Rotation of Chair for Monthly Regional Committee Meetings

---

### **RECOMMENDATION**

This is an informational item on the rotation of the host agency for the monthly Regional Committee meetings.

### **BACKGROUND**

Traditionally, one of the Regional Sewer Service Contracting Agencies chairs the monthly committee meetings for a two-year term. The City of Montclair has chaired since July 2018, and the chair agency is due to rotate in July 2020. The following are the agencies that have hosted over the last ten years:

CVWD	2008-2010
Chino Hills	2010-2012
Chino	2012-2014
Ontario	2014-2016
Fontana	2016-2018
Montclair	2018-2020

The next agency in the rotation is the City of Upland. Therefore, the Regional Sewerage Committee meetings will be chaired by the City of Upland, beginning with the July 2020 meetings.

REGIONAL TECHNICAL AND REGIONAL POLICY COMMITTEE  
CHAIR AGENCY

Ontario	1986-1988	
Fontana	1988-1990	
Montclair	1990-1992	
Upland	1992-1994	
CVWD	1994-1996	
Chino Hills	1996-1998	
Chino	1998-2000	
Ontario	2000-2002	
Fontana	2002-2004	
Montclair	2004-2006	
Upland	2006-2008	
CVWD	2008-2010	
Chino Hills	2010-2012	
Chino	2012-2014	
Ontario	2014-2016	
Fontana	2016-2018	
Montclair	2018-2020	– Current Chair until July 2020
Upland	2020-2022	– Current Co-Alternate Chair until July 2020, will be next Chair
CVWD	2022-2024	– Co-Alternate Chair if Upland is not present, will be next Alternate Chair
Chino Hills	2024-2026	
Chino	2026-2028	
Ontario	2028-2030	
Fontana	2030-2032	
Montclair	2032-2034	
Upland	2034-2036	
CVWD	2036-2038	
Chino Hills	2038-2040	
Chino	2040-2042	

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In effort to prevent the spread of COVID-19, the Regional Sewerage Program Policy Committee Meeting will be held remotely by teleconference

**Teleconference: 1-415-856-9169/Conference ID: 750 724 224#**

## **Special Regional Sewerage Program Policy Committee Meeting**

### **AGENDA**

**Thursday, May 7, 2020  
3:30 p.m.**

---

**Call to Order and Roll Call**

**Pledge of Allegiance**

**Public Comment**

**Changes/Additions/Deletions to the Agenda**

**1. Technical Committee Report (Oral)**

- Regional Contract Negotiations Update

**2. Action Item**

- A. Meeting Minutes for February 6, 2020
- B. IEUA Ten Year Forecast
- C. Proposed Policy Committee Meeting Time

**3. Informational Items**

- A. FY 2020/21 Proposed Budget Amendment for Regional Wastewater and Recycled Water Programs and Rate Study Update
- B. Operations Division Quarterly Update
- C. Recycled Water Program Semi-Annual Update
- D. Policy Committee Chair Rotation

*(Continued)*



**4. Receive and File**

- A. Mid-Year Building Activity Report
- B. Recycled Water Distribution – Operations Summary
- C. Legislative Bill Matrix

**5. Other Business**

- A. IEUA General Manager's Update
- B. Committee Member Requested Agenda Items for Next Meeting
- C. Committee Member Comments
- D. Next Meeting – June 4, 2020

**6. Adjournment**

**DECLARATION OF POSTING**

---

I, Laura Mantilla, Executive Assistant of the Inland Empire Utilities Agency, A Municipal Water District, hereby certify that a copy of this agenda has been posted to the IEUA Website at [www.ieua.org](http://www.ieua.org) and posted in the foyer at the Agency's main office at 6075 Kimball Avenue, Building A, Chino, CA, on Thursday, April 30, 2020.

\_\_\_\_\_  
Laura Mantilla

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# IEUA RECYCLED WATER DISTRIBUTION – FEBRUARY 2020

## TOTAL ALL PLANTS

Influent: 45.8 MGD  
 Delivered: 19.7 MGD  
 Percent Delivered: 43%

## RP-4

Delivered: 5.9 MGD

## RP-1

Delivered: 7.2 MGD

## CCWRF

Delivered: 3.9 MGD

## RP-5

Delivered: 2.7 MGD

1299 Zone  
4.0 MGD

Rancho Cucamonga  
1630 Zone  
1.7 MGD

1158 Zone  
6.7 MGD

1050 Zone  
1.9 MGD

930 Zone  
2.7 MGD

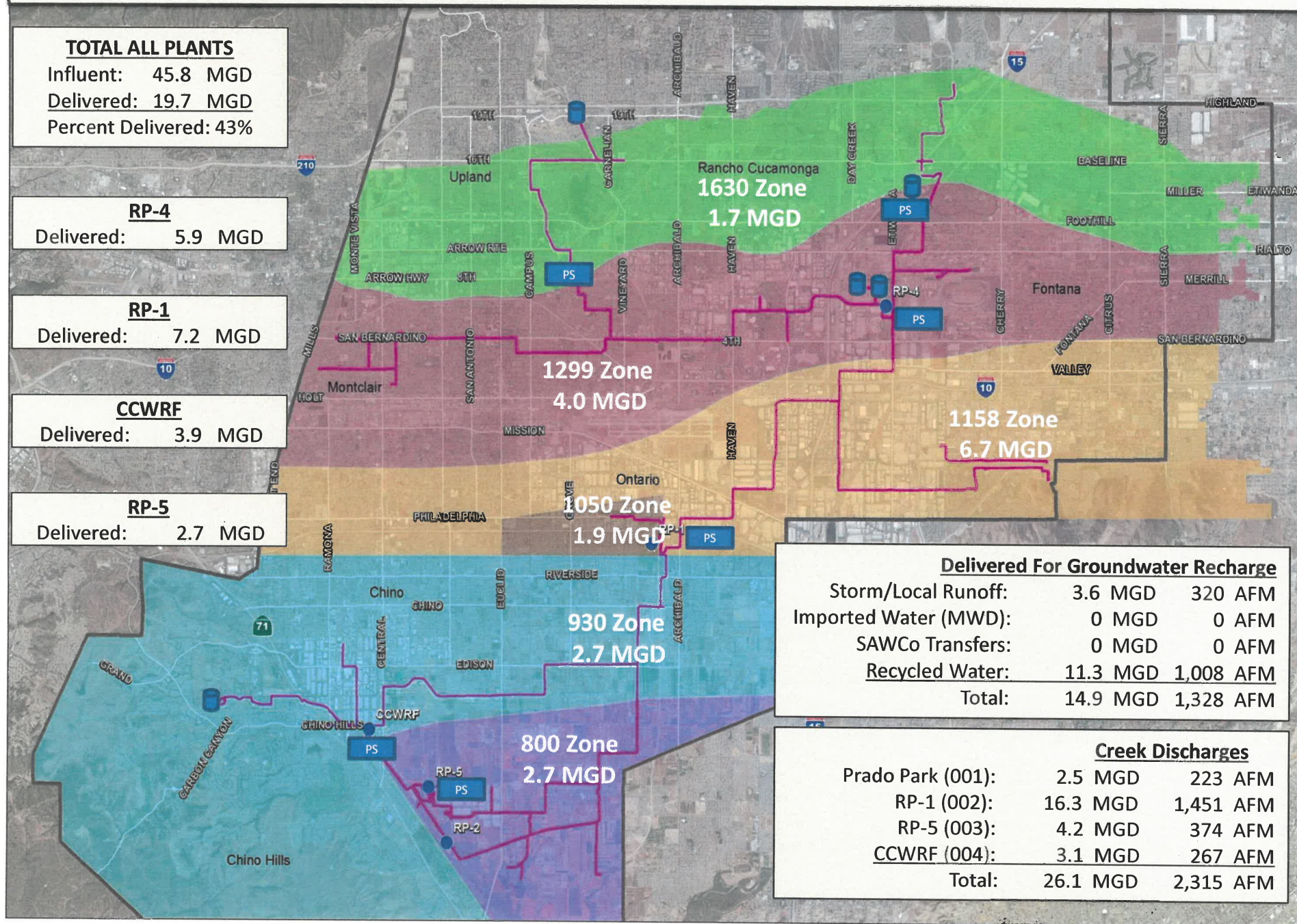
800 Zone  
2.7 MGD

## Delivered For Groundwater Recharge

Storm/Local Runoff:	3.6 MGD	320 AFM
Imported Water (MWD):	0 MGD	0 AFM
SAWCo Transfers:	0 MGD	0 AFM
Recycled Water:	11.3 MGD	1,008 AFM
<b>Total:</b>	<b>14.9 MGD</b>	<b>1,328 AFM</b>

## Creek Discharges

Prado Park (001):	2.5 MGD	223 AFM
RP-1 (002):	16.3 MGD	1,451 AFM
RP-5 (003):	4.2 MGD	374 AFM
CCWRF (004):	3.1 MGD	267 AFM
<b>Total:</b>	<b>26.1 MGD</b>	<b>2,315 AFM</b>





# IEUA RECYCLED WATER DISTRIBUTION – MARCH 2020

## TOTAL ALL PLANTS

Influent: 49.7 MGD  
 Delivered: 17.4 MGD  
 Percent Delivered: 35%

## RP-4

Delivered: 7.5 MGD

## RP-1

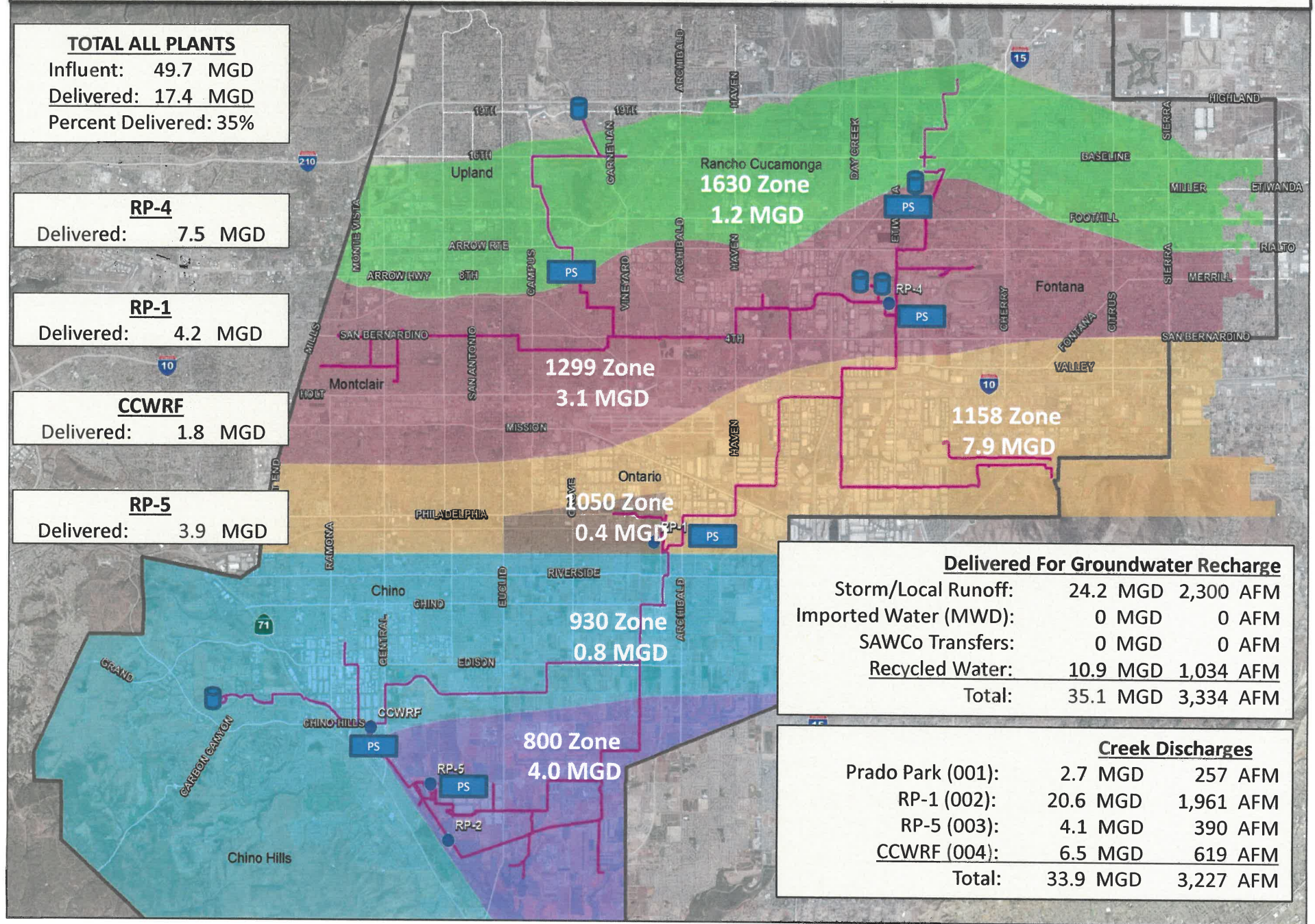
Delivered: 4.2 MGD

## CCWRF

Delivered: 1.8 MGD

## RP-5

Delivered: 3.9 MGD



## Delivered For Groundwater Recharge

Storm/Local Runoff:	24.2 MGD	2,300 AFM
Imported Water (MWD):	0 MGD	0 AFM
SAWCo Transfers:	0 MGD	0 AFM
Recycled Water:	10.9 MGD	1,034 AFM
<b>Total:</b>	<b>35.1 MGD</b>	<b>3,334 AFM</b>

## Creek Discharges

Prado Park (001):	2.7 MGD	257 AFM
RP-1 (002):	20.6 MGD	1,961 AFM
RP-5 (003):	4.1 MGD	390 AFM
CCWRF (004):	6.5 MGD	619 AFM
<b>Total:</b>	<b>33.9 MGD</b>	<b>3,227 AFM</b>



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**March 26, 2020**

**To:** Inland Empire Utilities Agency

**From:** Michael Boccadoro  
Beth Olhasso  
Maddie Munson

**RE:** March Report

---

**Overview:**

Recent storms have helped the snowpack recover a little bit, but the “Miracle March” water managers were hoping for never materialized. Currently, the statewide snowpack has improved to 51 percent of normal, up from 47 percent last month. The Sierras continue to receive sporadic storms with enough snow to maintain current levels, but not make a significant dent in making up for the abnormally dry February the state experienced.

The CA Independent System Operator (CAISO), National Renewable Energy Laboratory and General Electric recently released a study on Avangrid Renewables’ 132 MW capacity Tule Wind Farm in eastern San Diego County. The report claims that the results affirm that wind could be a key player in integrating the high amounts of renewable energy needed to meet the state’s ambitious carbon reduction targets.

As required by SB 350 (2015, de Leon), the CPUC’s Energy Division issued a Transportation Electrification framework establishing a new process for IOUs to develop 10-year electrification plans. Since 2016, the CPUC has authorized more than one billion in ratepayer funds for EV infrastructure. In the last two years, the IOUs have filed applications with the CPUC for nearly one billion more for similar infrastructure programs. The framework calls for the IOUs to file their plans in 2021 with approval by 2023.

In an unprecedented action, the state legislature recessed until at least April 13, and there is still significant uncertainty if they will be able to come back at that time. It is currently unknown how this will affect the overall legislative session, but as the COVID-19 crisis worsens, conventional wisdom around the Capitol is predicting that some form of an abbreviated session would have to be instituted to pass a budget and a handful of public health and recovery-related bills.

# Inland Empire Utilities Agency

## Status Report – March 2020

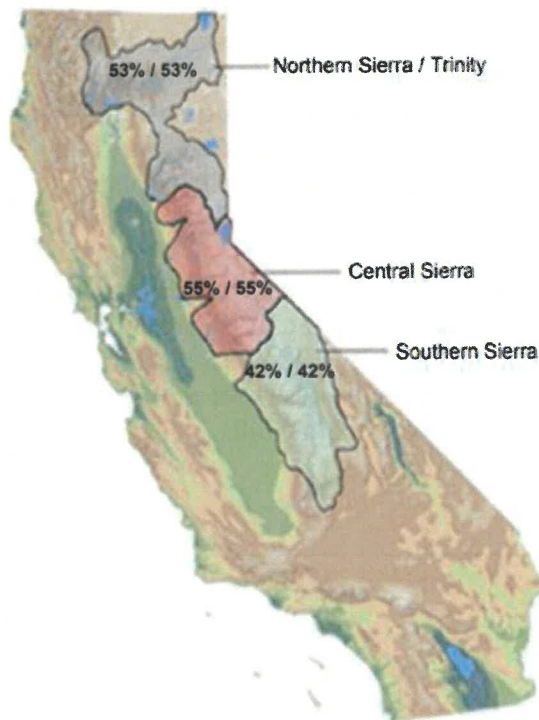
### Water Supply Conditions

Recent storms have helped the snowpack recover a little bit, but the “Miracle March” water managers were hoping for never materialized. Currently, the statewide snowpack has improved to 51 percent of normal, up from 47 percent last month. The Sierras continue to receive sporadic storms with enough snow to maintain current levels, but not make a significant dent in making up for the abnormally dry February the state experienced.

Drought conditions have also worsened with the lack of precipitation. At the start of the year, 97 percent of the state was free from any drought conditions. Today, close to 70 percent of the state is experiencing abnormally dry conditions, with over 40 percent of those in moderate drought conditions, and for the first time, severe drought reported in the far northern portion of the state.

Good news is that most of California’s reservoirs remain in fairly good shape resulting from a wet 2019. San Luis Reservoir, the main south-of-Delta storage facility for the State Water Project, is at 80 percent of average and 72 percent capacity for this time of the year. Oroville is at 86 percent of average and 64 percent capacity.

% of April 1 Average / % of Normal for This Date



NORTH	
Data as of March 25, 2020	
Number of Stations Reporting	30
Average snow water equivalent (Inches)	15.5
Percent of April 1 Average (%)	53
Percent of normal for this date (%)	53

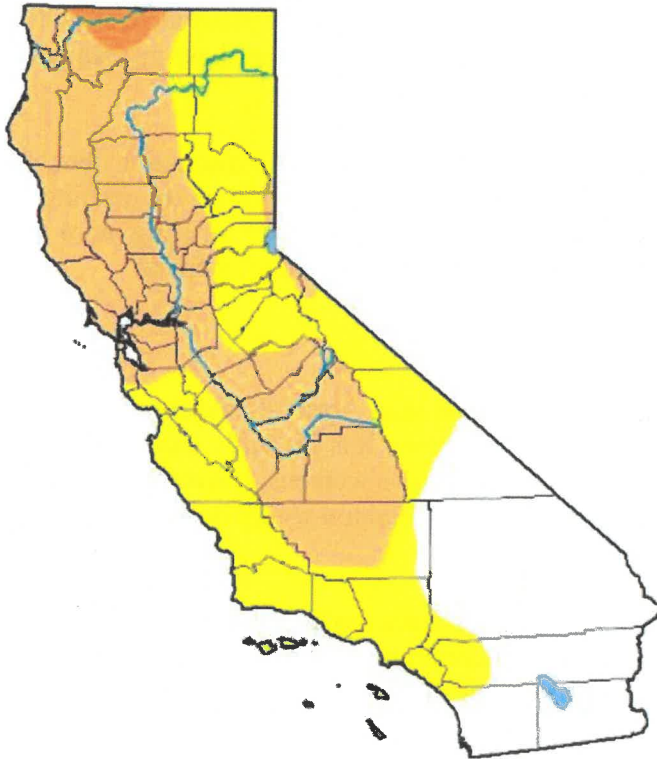
CENTRAL	
Data as of March 25, 2020	
Number of Stations Reporting	41
Average snow water equivalent (Inches)	16.4
Percent of April 1 Average (%)	55
Percent of normal for this date (%)	55

SOUTH	
Data as of March 25, 2020	
Number of Stations Reporting	28
Average snow water equivalent (Inches)	10.7
Percent of April 1 Average (%)	42
Percent of normal for this date (%)	42

STATE	
Data as of March 25, 2020	
Number of Stations Reporting	99
Average snow water equivalent (Inches)	14.5
Percent of April 1 Average (%)	51
Percent of normal for this date (%)	51

## U.S. Drought Monitor California

**March 24, 2020**  
(Released Thursday, Mar. 26, 2020)  
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	24.86	75.14	40.42	1.30	0.00	0.00
Last Week 03-17-2020	24.64	75.36	47.59	1.26	0.00	0.00
3 Months Ago 12-24-2019	96.43	3.57	0.00	0.00	0.00	0.00
Start of Calendar Year 12-31-2019	96.43	3.57	0.00	0.00	0.00	0.00
Start of Winter Year 10-01-2019	95.29	4.71	2.05	0.00	0.00	0.00
One Year Ago 03-25-2019	93.42	6.58	0.00	0.00	0.00	0.00

### Intensity

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

### Author

Brad Rippey  
U.S. Department of Agriculture



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

### ***CAISO reports that wind power can bolster renewable integration- meeting same needs as natural gas***

The CA Independent System Operator (CAISO), National Renewable Energy Laboratory and General Electric recently released a study on Avangrid Renewables' 132 MW capacity Tule Wind Farm in eastern San Diego County. The report suggests that the results affirm that wind could be a key player in integrating the high amounts of renewable energy needed to meet the state's ambitious carbon reduction targets.

Specifically, the study showed that a commercial wind plant with a "smart inverter-based controller" can provide "regulation up and down, voltage regulation control, active power control and frequency response—all important services to maintain grid services." These services are currently only being provided by conventional sources, such as natural gas plants, according to CAISO.

One of the goals of the study was to investigate if wind plants can help balance energy demand and help meet the state's energy policies regardless of where the wind plant is located, either within the CAISO footprint or out of state. This study and its conclusions will be used to help further the CAISO's desire for a Western power grid, featuring regional resources. They claim that one of the benefits of regionalization would be that California could import cheaper wind power from nearby states to help integrate other renewables and to provide much-needed electricity during peak evening demand times that cannot be served by solar.



### ***Transportation Electrification Framework Released***

As required by SB 350 (2015, de Leon), the CPUC's Energy Division issued a Transportation Electrification framework establishing a new process for IOUs to develop 10-year electrification plans. Since 2016, the CPUC has authorized more than one billion in ratepayer funds for EV infrastructure. In the last two years, the IOUs have filed applications with the CPUC for nearly one billion more for similar infrastructure programs. The framework calls for the IOUs to file their plans in 2021 with approval by 2023. Commercial and industrial ratepayers are starting to question these investments are their impact on electricity rates.

On a separate path at the California Air Resources Board (CARB), there is still discussion about how fast to accelerate medium and heavy-duty truck replacement. Environmental groups are pushing for an accelerated timeframe, where some regulators and the regulated community are focusing more on what types of trucks can be sold in the state in the future, rather than require fleet replacement.

### ***Legislative Update***

In an unprecedented action, the state legislature recessed until at least April 13, and there is still significant uncertainty if they will be able to come back at that time. It is currently unknown how this will affect the overall legislative session, but as the COVID-19 crisis worsens, conventional wisdom around the Capitol is predicting that some form of an abbreviated session would have to be instituted to pass a budget and a handful of recovery-related bills.

There were over 2,500 new bills introduced this session and all have passed the 30-day in print rule and are slowly making amendments, even in the absence of committee hearings. WCA is working with the IEUA Board and staff to implement IEUA's goals and objectives as we navigate this unique session.

On the budget front, the state budget is constitutionally mandated to be passed by June 15. Both the Legislative Analyst's Office and the Department of Finance have opined that it will be a very different budget process. They have proposed adopting a "workload budget," basically keeping things in place from the 2019-2020 budget with only major changes considered for COVID response and recovery funding.

The WCA team is still operating as if all legislation and budget actions will be moving forward, until official word alters that course. We will be sure to keep you updated as the situation in the Capitol unfolds.

### ***Climate Resilience Bond Update***

WCA recently obtained a copy of amendments for of Assemblymember Eduardo Garcia's, chair of the Water, Parks and Wildlife Committee, AB 3256-the Assembly \$6.9 billion version of the climate resilience bond.

The highlights of the Assembly bond include:

- \$1.6 billion- Wildfire Prevention and Climate Risk Reduction
- \$1.1 billion- Protecting Coastal Lands, Bays and Oceans from Sea Level Rise and other Climate Risks
- \$1.3 billion- Protecting CA's Water Supply During Drought, Enhancing State Flood Protection and Ensuring Safe Drinking Water
  - \$395 million for SGMA
  - \$360 million for safe drinking water

- \$400 million for protection of rivers, lakes and streams
  - \$150 million for flood management
  - \$50 million for Central Valley Flood Protection Board
- \$1.3 billion- Protecting Fish, Wildlife, Natural Areas, Working Lands and Agriculture from Climate Risks
- \$1.6 billion- Strengthening CA's Regional Climate Resilience
  - For the reduction in the risk of climate impacts to communities, including, but not limited to, wildfire, sea level rise and extreme heat. Goal is to encourage development and implementation of multi-benefit, cross-sector projects that respond to the region's greatest climate vulnerabilities.

WCA and IEUA staff are still going through all the newly introduced bills and will soon make recommendations for positions to the Board of Directors.

**IEUA BILL POSITIONS—March 26, 2020**

Bill Number	Author/Sponsor	Title and/or Summary	Summary	IEUA Position
AB 1672	Bloom  CASA	Product labeling: flushable products	Current law regulates the labeling requirements on various consumer products. This bill would express the intent of the Legislature to enact legislation to prohibit the sale or advertisement of any nonwoven disposable product labeled as “flushable” or “sewer and septic safe” if that product fails to meet specified performance standards.	SUPPORT  Senate Rules Committee
AB 2093	Gloria	Public records: writing transmitted by electronic mail: retention	Would, unless a longer retention period is required by statute or regulation, or established by the Secretary of State pursuant to the State Records Management Act, require a public agency, for purposes of the California Public Records Act, to retain and preserve for at least 2 years every public record, as defined, that is transmitted by electronic mail.	OPPOSE  Assembly Appropriations Committee
ACA 1	Aguiar-Curry	Local government financing: affordable housing and public infrastructure: voter approval	The California Constitution prohibits the ad valorem tax rate on real property from exceeding 1% of the full cash value of the property, subject to certain exceptions. This measure would create an additional exception to the 1% limit that would authorize a city, county, city and county, or special district to levy an ad valorem tax to service bonded indebtedness incurred to fund the construction, reconstruction, rehabilitation, or replacement of public infrastructure, affordable housing, or permanent supportive housing, or the acquisition or lease of real property for those purposes, if the proposition proposing that tax is approved by 55% of the voters.	SUPPORT  Assembly Floor- first vote failed, can be acted upon Jan 2020
SB 414	Caballero  Eastern MWD/ CMUA	Small System Water Authority Act of 2019	Would create the Small System Water Authority Act of 2019 and state legislative findings and declarations relating to authorizing the creation of small system water authorities that will have powers to absorb, improve, and competently operate noncompliant public water systems. The bill, no later than March 1, 2020, would require the state board to provide written notice to cure to all public agencies, private water companies, or mutual water companies that operate a public water system that has either less than 3,000 service connections or that serves less than 10,000 people, and are not in compliance, for the	SUPPORT  2- year bill  Assembly

[illegible]



SB 1052	Hertzberg  CASA/CA Coastkeeper	Water Quality: Municipal Wastewater Agencies	Would establish municipal wastewater agencies and would authorize a municipal wastewater agency, among other things, to enter into agreements with entities responsible for stormwater management for the purpose of managing stormwater and dry weather runoff, to acquire, construct, expand, operate, maintain, and provide facilities for specified purposes relating to managing stormwater and dry weather runoff, and to levy taxes, fees, and charges consistent with the municipal wastewater agency's existing authority in order to fund projects undertaken pursuant to the bill. The bill would require the exercise of any new authority granted under the bill to comply with the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000.	SUPPORT  Sen. Env. Quality Committee
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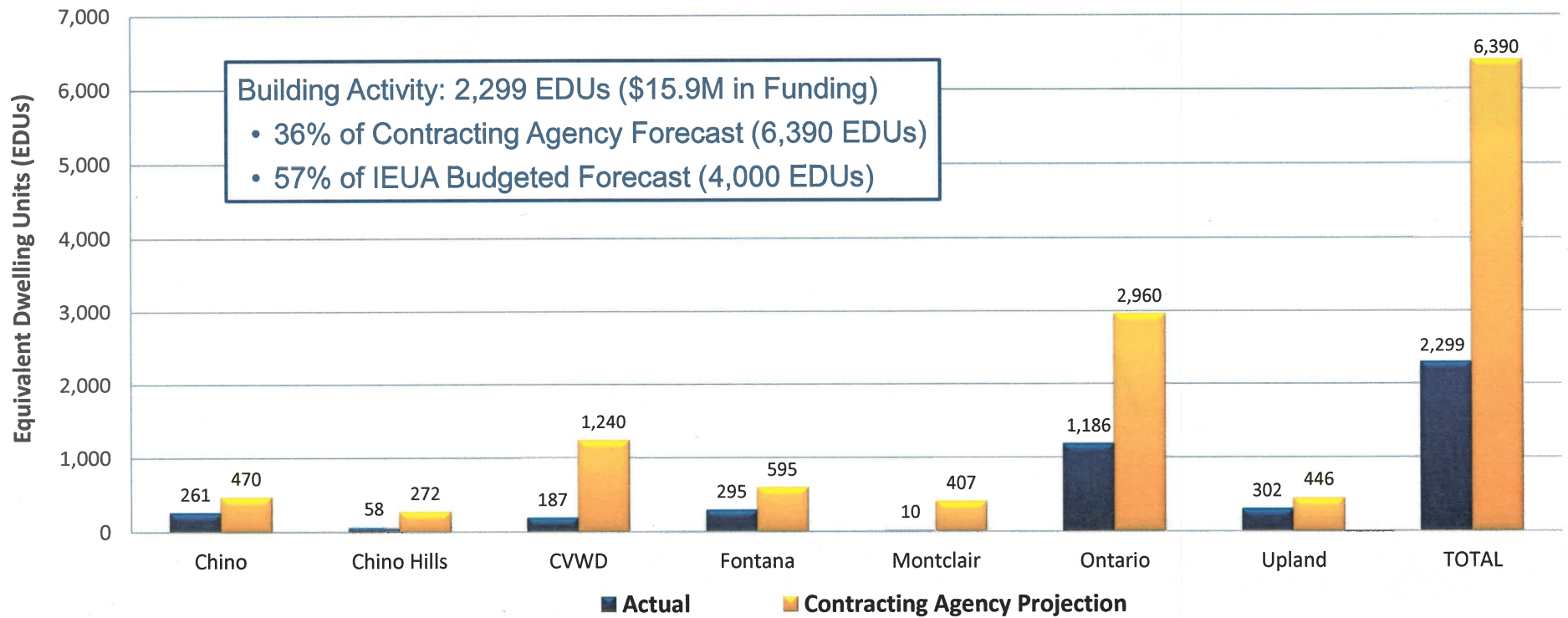
**3D**

# Mid-Year Building Activity Report

(July – December 2019)



# Mid-Year 19/20 Building Activity Summary





# Mid-Year 19/20 Building Activity Summary

Contracting Agency	Commercial	Industrial	Residential	Total
Chino	24	5	232	261
Chino Hills	41	0	17	58
CVWD	52	1	134	187
Fontana	43	0	252	295
Montclair	10	0	0	10
Ontario	116	85	985	1,186
Upland	13	0	289	302
<b>Mid-Year Total</b>	<b>299</b>	<b>91</b>	<b>1,909</b>	<b>2,299</b>

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# REGIONAL SEWERAGE PROGRAM PRETREATMENT SUBCOMMITTEE

March 3, 2020

1:30 PM

IEUA HQ Building A, Raines Conference Room  
6075 Kimball Avenue  
Chino, CA 91710

## Minutes

### Members Present

Andy Zummo.....	City of Chino Hills
Tere Worsham.....	CVWD
Abigail Gomez.....	City of Fontana
Marissa Pereyda (by phone) .....	City of Montclair
Craig Proctor.....	IEUA
Robert Herbster (by phone) .....	City of Upland

### Others Present

Ken Tam.....	IEUA
Michael Barber.....	IEUA
Nathan Marlinski.....	City of Chino
Wendy Hsiao.....	City of Ontario
Kimberly Lopez.....	City of Ontario
Nicole deMoet (by phone) .....	City of Upland

### 1. Introductions

Introductions of those present were given.

### 2. Informational Items & Updates

#### a. Tech Meeting Report

- IEUA provided an update on the Pilot Return to Sewer Flow Study.

#### b. Treatment Plants

### RP-1/RP-4:

- RP-1 met all the NPDES requirements during the months of December 2019 and January 2020.

- On December 31, 2020, an RP-4 effluent (REC-002) grab sample collected and tested for total coliform had a confirmed result of 365.4 MPN/100mL. The NPDES permit specifies that “no total coliform sample shall exceed an MPN of 240 total coliform bacteria per 100 mL.”

RP-5:

- RP-5 met all the NPDES requirements during the months of December 2019 and January 2020.

CCWRF:

- CCWRF met all the NPDES requirements during the months of December 2019 and January 2020.

Agency-wide:

- The Agency-Wide 12-month running average TDS for the months of December 2019 and January 2020 were 471 and 468 mg/L respectively, which did not exceed the 550 mg/L Agency-wide 12-month running average limit.
- The Agency-wide 12-month running average incremental increase between secondary effluent and water supply TDS for the months of December 2019 and January 2020 were both 202 mg/L, which did not exceed the 250 mg/L Agency-wide 12-month running average limit.

Collections System:

- No SSOs occurred during the months of December 2019 and January 2020.

Recycled Water:

- No unauthorized discharges of more than 50,000 gallons of disinfected tertiary recycled water into the waters of the state occurred during the months of December 2019 and January 2020.
- No agricultural runoff events were reported to IEUA by member agencies during the months of December 2019 and January 2020.

c. Pretreatment Programs

Aquamar in the City of Rancho Cucamonga was issued a Notice of Violation and Order for Corrective Action in February for repeatedly failing to submit its self-monitoring report by the required due date. Industry response to the NOV is pending.

Cliffstar California, LLC in the City of Fontana was issued a Notice of Violation and Order for Corrective Action in February for exceeding the local limit for TDS



by Summation in December. Results of industries investigation found that high TDS wastewater was going directly to sewer from clean-in-place of the pasteurizers. As a corrective action industry rerouted the discharges from the clean-in-place process to the BOD tank for offsite disposal. Resampling has been conducted. Results are pending.

DSM Nutritional Products in the City of Ontario was granted an extension to its Compliance Schedule Agreement in February. Due dates set forth in the Compliance Schedule have been extended to allow for the completion of the pretreatment system pilot study and submittal of drawings for permit authorization to construct.

### 3. Discussion Items

#### a. Regional Wastewater Ordinance Updates

IEUA provided the committee a status update on the revision of the Regional Wastewater Ordinance. Key draft revisions include new prohibitions for Hydrolysate, medical waste, bromide, 2,3,7,8 – TCDD (Dioxin), unused, unwanted or expired pharmaceuticals, 1,2,3-Trichloropropane (1,2,3 TCP), and Affirmative Defenses for discharge violations or upset conditions. Language has also been added for notification of the discharge of hazardous waste. Next steps will include final internal review of draft Ordinance and routing to the RWQCB and Technical Committee for comment. Ordinance adoption is expected to be in the fall of 2020.

#### b. 1,2,3 TCP

IEUA provided the committee with a copy of the February 13, 2020 Source Evaluation and Corrective Actions Report for 1,2,3-Trichloropropane (1,2,3-TCP), Perfluorooctanoic Acid (PFOA), and Carbon Tetrachloride that was sent to the State Water Resources Control Board – Division of Drinking Water and the Regional Water Quality Control Board – Santa Ana Region.

#### c. US EPA and RWQCB Pretreatment Compliance Inspection Audit

The committee was informed that representatives from US EPA, RWQCB and EPA Contractors (PG Environmental) will be conducting a Pretreatment Compliance Inspection Audit of IEUA's pretreatment program the week of March 16<sup>th</sup>.

#### d. Dental Amalgam Rule

IEUA updated the committee on the status of the inventory list of active dental offices. The one-time dental compliance certification forms have been mailed to 450 dental offices within the IEUA service area. To date, IEUA and the member

agencies have received 195 completed forms representing a 43% response rate. A second round of certification mailings was recently completed. The committee discussed following up with the dental offices that have been non-responsive. IEUA requested the member agencies continue to provide information on any new dental facilities that locate within their service area and provide copies of completed certifications to IEUA.

e. CASA Study Non-Residential Site Sampling Update

IEUA provided an update on the CASA non-residential sampling program study. Carollo Engineering and its sub-contractor V&A are finalizing the non-residential site locations for Southern California. Several of the locations provided by the member agencies have been selected for the study. Based on the schedule, it is expected sampling will be completed by late June. The complete study is still on track to be finalized by end of 2020.

f. Local Limits – FOG

The Committee continued its discussion on the pretreatment program local limits. IEUA's recommendation is to defer any updates to the local limits until after IEUA receives its revised NPDES permit in October 2020 or after completion of the RP-5 expansion project.

The next pretreatment meeting is tentatively scheduled for June 2, 2020.

The meeting adjourned at 2:20 p.m.

**REQUESTED  
ITEM**

**4A**



6075 Kimball Avenue • Chino, CA 91708  
P.O. Box 9020 • Chino Hills, CA 91709  
TEL (909) 993-1600 • FAX (909) 993-1985  
[www.ieua.org](http://www.ieua.org)

February 13, 2020

State Water Resources Control Board - Division of Drinking Water  
Attention: Mr. Faraz Asad - Recycled Water Unit  
[Faraz.Asad@waterboards.ca.gov](mailto:Faraz.Asad@waterboards.ca.gov)

Santa Ana Regional Water Quality Control Board  
Attention: Mr. Julio Lara  
[santaana@waterboards.ca.gov](mailto:santaana@waterboards.ca.gov)

Subject: Chino Basin Recycled Water Groundwater Recharge Program:  
Source Evaluation & Corrective Actions Report

IEUA is hereby submitting the Chino Basin Recycled Water Groundwater Recharge Program Source Evaluation & Corrective Actions Reports for 1,2,3- Trichloropropane (1,2,3-TCP), Perfluorooctanoic Acid (PFOA), and Carbon Tetrachloride. These reports are being submitted in accordance with Title 22, Division 4, Chapter 3, Article 5.1, §60320.112.(d)(2)(A) for maximum contaminants level (MCL) exceedances of 1,2,3-TCP and Carbon Tetrachloride; and §60320.120(b)(1) for notification level (NL) exceedances of PFOA. These two sections state that if the running four-week average exceeds the MCL or NL, "a project sponsor shall describe the reason(s) for the exceedance and provide a schedule for completion of corrective actions in a report submitted to the Department and Regional Board no later than 45 days following the quarter in which the exceedance occurred."

Please feel free to contact me if you have any questions.

Respectfully submitted,

Pietro Cambiaso, P.E.  
Deputy Manager of Planning & Environmental Resources

Enclosures:

- 1) 1,2,3-TCP Corrective Actions Report
- 2) PFOA Corrective Actions Report
- 3) Carbon Tetrachloride Corrective Actions Report

*Water Smart – Thinking in Terms of Tomorrow*

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Jasmin A. Hall  
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Steven J. Elle  
Secretary/Treasurer

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Director

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Director

Shivaji Deshmukh  
General Manager



INLAND EMPIRE UTILITIES AGENCY  
Chino Basin Recycled Water Groundwater Recharge Program  
1,2,3-Trichloropropane Source Evaluation & Corrective Actions Report  
February 15, 2020

Background

1,2,3-Trichloropropane (1,2,3-TCP) is a chlorinated hydrocarbon with high chemical stability that is very persistent in groundwater. It is a manmade chemical found at industrial or hazardous waste sites. It has been used as a cleaning and degreasing solvent and is associated with pesticide products. The State Water Resources Control Board – Division of Drinking Water (DDW) established a maximum contaminant level (MCL) of 0.005 µg/L that became effective on December 14, 2017. A Federal MCL has not yet been established for 1,2,3-TCP in drinking water.

The Chino Basin Recycled Water Groundwater Recharge (GWR) program has been monitoring 1,2,3-Trichloropropane in the RP-1/RP-4 Recycled Water (RW Blend) using the low detection level method, Purge and Trap GC/MS (SRL 524M-TCP), with a method detection limit of 0.005 µg/L since the fourth quarter of 2009 (4Q09). During the review of IEUA's Compliance Assessment Report (CAR) for the 2014 Groundwater Replenishment Reuse Projects (GRRPs) regulations under Title 22, Division 4, Chapter 3, Article 5.1, the DDW identified RP-1 001B Effluent as a second recycled water monitoring location that was not previously tested. Ely Basin can only receive 001B Effluent due to the proximity to RP-1 and the recycled water pressure zone. This is unlike all the other basins in the GWR program, which can receive the RW Blend. 1,2,3-TCP monitoring started at 001B Effluent during 2Q19. Additionally, DDW clarified that an MCL exceedance in a single sample, not a four-quarter average, would trigger weekly monitoring and that the compliance with the MCL would need to be met in the recycled water and not at a lysimeter or monitoring well.

Discussion

In accordance with §60320.112. Regulated Contaminants and Physical Characteristics Control.(d)(2):

*“For a contaminant whose compliance with its MCL is based on a running annual average, if the average of the initial and confirmation sample exceeds the contaminant's MCL, or a confirmation sample is not collected and analyzed pursuant to this subsection, the GRRP shall initiate weekly monitoring for the contaminant until the running four-week average no longer exceeds the contaminant's MCL.*

- (A) If the running four-week average exceeds the contaminant's MCL, a project sponsor shall describe the reason(s) for the exceedance and provide a schedule for completion of corrective actions in a report submitted to the Department and Regional Board no later than 45 days following the quarter in which the exceedance occurred.*
- (B) If the running four-week average exceeds the contaminant's MCL for sixteen consecutive weeks, a project sponsor shall notify the Department and Regional Board within 48 hours of knowledge of the exceedance and, if directed by the Department or Regional Board, suspend application of the recycled municipal wastewater.”*

As part the review of the CAR, the DDW identified that IEUA was using the downgradient monitoring location as the compliance point, similar to some disinfection byproducts that are allowed to meet compliance in this manner. However, MCLs (aside from disinfection byproducts) must be met in the recycled water. Additionally, DDW clarified that a single sample exceedance would trigger the accelerated monitoring and that accelerated monitoring was not triggered by a four-quarter average.

During 2Q19, an RW Blend sample collected on May 23, 2019 triggered the accelerated weekly monitoring. The following four weeks of sample resulted in all non-detects and monitoring returned to a quarterly frequency.

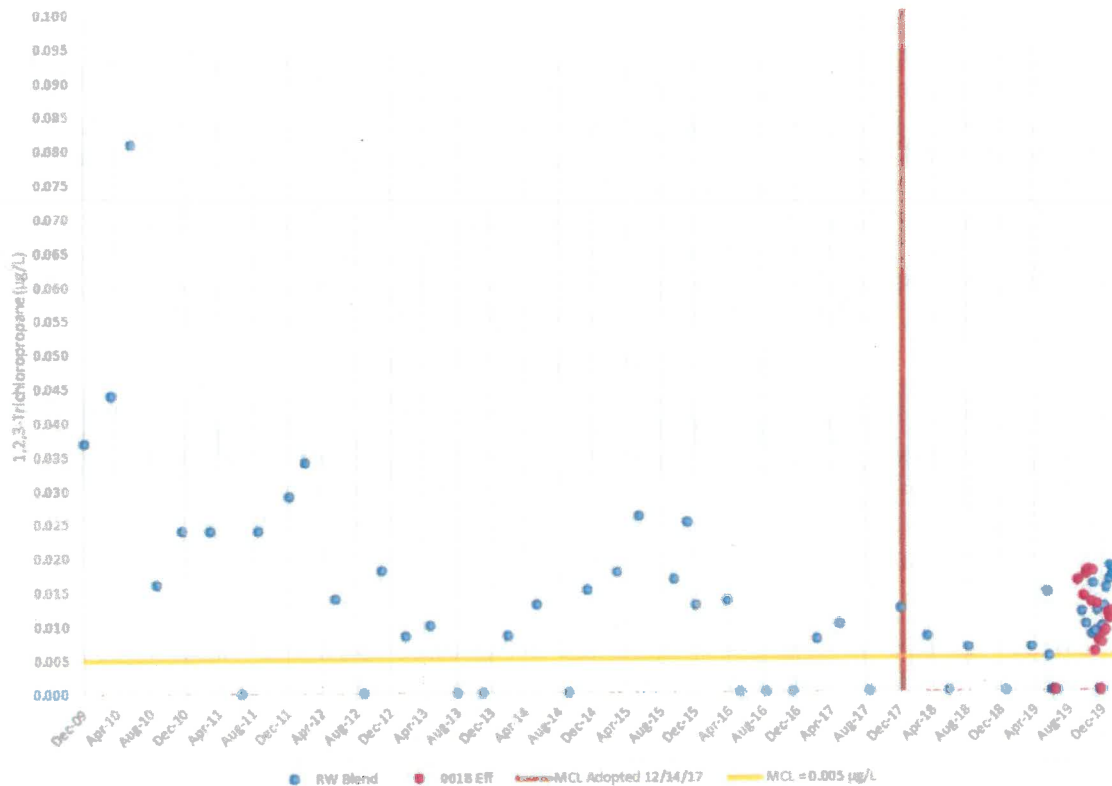
In September 2019, single sample MCL exceedances triggered accelerated monitoring at both the RW Blend and 001B Effluent. IEUA has completed the 16 consecutive weeks of 1,2,3-TCP monitoring at RW Blend and 001B Effluent and has provided the required notification to the DDW and the Regional Board within 48 hours of knowledge of the exceedance of the four-week average for 16 consecutive weeks. IEUA notified the Division of Drinking Water and the Regional Board regarding the exceedances of 1,2,3-Trichloropropane (1,2,3-TCP) in the 001B Effluent on January 22, 2020. The formal notification for the RW Blend will occur within 48 hours of the knowledge of the result of the 16th sample. The results of the 16 consecutive weeks of sampling are presented in Table 1. Figure 1 shows all the RW Blend and 001B Effluent data since 4Q09.

**Table 1. Accelerated Monitoring Results**

Sample	Date	RW Blend (µg/L)	Compliance Determination (µg/L)	Sample	Date	001B Eff (µg/L)	Compliance Determination (µg/L)
Original	09/18/19	0.012	0.011	Original	09/04/19	0.016	0.015
Confirmation	10/02/19	0.010		Confirmation	09/26/19	0.014	
Week 1	10/24/19	0.008	--	Week 1	10/02/19	0.017	--
Week 2	10/29/19	0.016	--	Week 2	10/08/19	0.018	--
Week 3	11/06/19	0.009	--	Week 3	10/16/19	0.018	--
Week 4	11/12/19	0.012	0.011	Week 4	10/24/19	0.013	0.017
Week 5	11/19/19	<0.005	0.009	Week 5	10/29/19	0.018	0.017
Week 6	11/26/19	<0.005	0.005	Week 6	11/06/19	0.006	0.014
Week 7	12/03/19	0.010	0.006	Week 7	11/12/19	0.013	0.013
Week 8	12/10/19	0.012	0.006	Week 8	11/19/19	0.007	0.011
Week 9	12/17/19	0.015	0.009	Week 9	11/26/19	<0.005	0.007
Week 10	12/26/19	0.016	0.013	Week 10	12/03/19	0.007	0.007
Week 11	12/31/19	0.018	0.015	Week 11	12/10/19	0.009	0.006
Week 12	01/07/20	0.017	0.017	Week 12	12/17/19	0.009	0.006
Week 13	01/14/20	0.018	0.017	Week 13	12/24/19	0.012	0.009
Week 14	01/21/20	0.017	0.018	Week 14	12/31/19	0.011	0.010
Week 15	01/28/20	0.016	0.017	Week 15	01/07/20	0.012	0.011
Week 16	02/04/20		—	Week 16	01/14/20	0.011	0.012

The four-week average exceeded the 1,2,3-TCP MCL of 0.005 µg/L during the majority of the 16 weeks of sampling at both monitoring locations, with only three single samples that were non-detect. IEUA has prepared this report in accordance with §60320.112(d)(2)(A).

Figure 1. 1,2,3-Trichloropropane in Recycled Water (2009 to current)



### Source Evaluation & Corrective Actions

- 1) As part of the diluent water monitoring program, local runoff and stormwater have been tested for 1,2,3-TCP from 3Q15 to current with all results showing non-detect for 1,2,3-TCP. Although, the diluent water is not a source of the 1,2,3-TCP found in the recycled water, it could be a source that once blended with the recycled water would have a diluting effect prior to reaching the groundwater.

More 1,2,3-TCP samples will be collected at the mound and intermediate monitoring wells to assess if the 1,2,3-TCP is being diluted. Upgradient non-municipal monitoring wells may also need to be sampled to see the background levels of 1,2,3-TCP in the groundwater.

- 2) Several of the member agencies in IEUA's service area opted to preemptively take wells offline that were above 0.005 µg/L in the Chino Basin prior to the adoption of the MCL. Leading up to the adoption of the MCL, the RW Blend showed some lower concentrations of 1,2,3-TCP starting in 2Q16. We thought that once the wells were taken offline the 1,2,3-TCP would eventually decrease to non-detectable levels in the recycled water. However, this has proven to not be the case and is rather the opposite as the 1,2,3-TCP concentrations are consistently elevated and back to pre-MCL levels.

Some wells have added wellhead treatment with granulated activated carbon (GAC). However, there are opportunities for errors to occur, such as inadequate blending if using

a contaminated source to blend to non-detect levels, GAC breakthrough from spent media, and GAC backwash disposal to IEUA's regional sewer system.

IEUA will reach out to member agencies to determine if they are blending their drinking water to non-detect levels; if they are operating GAC treatment, that they are measuring at a high enough frequency to guarantee there is no 1,2,3-TCP making it through the GAC; and if they are operating GAC that they are not disposing of any of the treatment waste streams into IEUA's regional sewer system.

- 3) Privately-owned contaminated wells with unsewered homes that haul their septic waste to RP-1 could be a contributing factor to the 1,2,3-TCP in the recycled water. However, based on a sample collected in October 2019, RP-4 effluent also has a similar concentration of 1,2,3-TCP at 0.010 µg/ and RP-4 does not receive septic hauler waste.

This could warrant further investigation but is not currently a priority in the source identification since we are finding similar levels of 1,2,3-TCP in both plant effluents.

- 4) IEUA's source control program can help identify if any industries in IEUA's service area is using 1,2,3-TCP either directly (highly unlikely).

Source Control staff will investigate this further and identify any industries that discharge into the regional system.

- 5) Movement of plumes was identified when several Chino Basin Desalter I (CDA I) wells were shut down due to 1,2,3-TCP while awaiting a GAC treatment system that is slated for installation in mid-2020. Following the shutdown of the wells, 1,2,3-TCP was detected in a nearby well (water goes through reverse osmosis at CDA 1) that had previously never shown detectable levels.

Drinking water wells that have been shut down due to 1,2,3-TCP will be identified, and nearby wells will be checked to see if they have been impacted by the non-pumping.

- 6) Pressure changes in the drinking water pipeline can allow contaminants from the groundwater to enter the drinking water pipeline according to *Fox, Sam, W. J. Shepherd, Richard Collins and Joby Boxall. "Experimental quantification of contaminant ingress into a buried leaking pipe during transient events."* (2016).

This should not warrant further investigation as the soil surrounding the drinking water pipelines is not saturated due to the depth to groundwater in the northern IEUA service area being several hundred feet deep.

- 7) Possible intrusion of 1,2,3-TCP into the regional sewer system through cracks in the pipeline.

Similar to the reason discussed above for the drinking water pipelines, the sewer pipelines are not located in saturated soil and would only be subject to moderate saturation during rain events, which do not occur at a high enough frequency or duration to warrant further investigation.

- 8) Interference may occur when using a drinking water laboratory method for analysis of recycled water that is wastewater in origin.

Recycled water should not have interference with a drinking water method. However, if there is another method that can detect down to 0.005 µg/L that does not show the recycled water has detectable levels of 1,2,3-TCP, interference may be an issue.

- 9) Review data on cleanup sites in the Chino Basin to see if there is unidentified contamination occurring.

#### Compliance Schedule

This investigation into the sources of 1,2,3-TCP in the Chino Basin will not be an easy task that can be accomplished in a short period of time. We know that surface water and approved drinking water sources do not have 1,2,3-TCP at detectable levels. We also know that IEUA's facilities are not producing, concentrating, and likely not removing 1,2,3-TCP. The only known sources at this point in time is the groundwater. However, if no municipality knowingly serves water that has detectable levels of 1,2,3-TCP to its customers, it is possible that some previously unidentified source or a source that was identified as uncontaminated, has become contaminated over time and it may reach customers and water recycling facilities.

1,2,3-TCP is not a new issue in the Chino Basin, rather it has been brought out to the forefront because of the MCL adopted in 2017. Significant data exists about 1,2,3-TCP plumes in the Chino Basin and is tracked by the Chino Basin Watermaster (CBWM). Due to the complexity of the 1,2,3-TCP issue, IEUA will likely hire a consultant to investigate the possible sources listed above and perhaps identify other sources that are not listed. IEUA will need to collaborate with member agencies, CBWM, and other surface applicators of recycled water.

We would recommend a compliance schedule of two years to investigate and identify the 1,2,3-TCP sources in the Chino Basin. Based on the results of the investigation, we will provide a schedule for mitigation.



INLAND EMPIRE UTILITIES AGENCY  
Chino Basin Recycled Water Groundwater Recharge Program  
Carbon Tetrachloride Source Evaluation & Corrective Actions Report  
February 15, 2020

Background

Carbon tetrachloride is a clear, colorless, volatile and very stable chlorinated hydrocarbon. Carbon tetrachloride is used as a solvent for oils and fats, as a refrigerant and as a dry-cleaning agent. In 1989, the State Water Resources Control Board – Division of Drinking Water (DDW) (formerly California Department of Health Services) established a maximum contaminant level of 0.5 µg/L for carbon tetrachloride.

The Chino Basin Recycled Water Groundwater Recharge (GWR) program has been monitoring carbon tetrachloride in the RP-1/RP-4 Recycled Water (RW Blend) using EPA Method 524.2: Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectrometry, with a method detection limit of 0.5 µg/L, since the beginning of the GWR program in 2005. During the review of IEUA's Compliance Assessment Report (CAR) for the 2014 Groundwater Replenishment Reuse Projects (GRRPs) regulations under Title 22, Division 4, Chapter 3, Article 5.1, the DDW identified a second recycled water monitoring location that was previously not tested at RP-1 001B Effluent. Ely Basin can only receive 001B Effluent due to the proximity to RP-1 and the recycled water pressure zone. This is unlike all the other basins in the GWR program, which can receive the RW Blend. Carbon tetrachloride monitoring started at 001B Effluent during 2Q19.

Discussion

In accordance with §60320.112. Regulated Contaminants and Physical Characteristics Control.(d)(2):

*"For a contaminant whose compliance with its MCL is based on a running annual average, if the average of the initial and confirmation sample exceeds the contaminant's MCL, or a confirmation sample is not collected and analyzed pursuant to this subsection, the GRRP shall initiate weekly monitoring for the contaminant until the running four-week average no longer exceeds the contaminant's MCL.*

- (A) If the running four-week average exceeds the contaminant's MCL, a project sponsor shall describe the reason(s) for the exceedance and provide a schedule for completion of corrective actions in a report submitted to the Department and Regional Board no later than 45 days following the quarter in which the exceedance occurred.*
- (B) If the running four-week average exceeds the contaminant's MCL for sixteen consecutive weeks, a project sponsor shall notify the Department and Regional Board within 48 hours of knowledge of the exceedance and, if directed by the Department or Regional Board, suspend application of the recycled municipal wastewater."*

DDW clarified that a single sample exceedance would trigger the accelerated monitoring and that accelerated monitoring was not triggered by a four-quarter average.

During 2Q19, an 001B Effluent sample collected on June 27, 2019 triggered the accelerated weekly monitoring. While putting together the 2Q19 report, we noticed that a single sample for 001B Effluent had a carbon tetrachloride result of 1.7 µg/L, thus exceeding the MCL of 0.5 µg/L. The result was not flagged in LIMS (laboratory database) as an MCL exceedance because the notification emails were not set up in the wastewater matrix; 001B Effluent data is located outside of the GWR portion of the database. The first accelerated monitoring sample was collected on August 13, 2019. The carbon tetrachloride monitoring results are show in Table 1.

**Table 1. 001B Effluent Carbon Tetrachloride Results**

Sample	Parameter	Sample Date	Result	Units	Ely Basin Status
001B Effluent	Carbon tetrachloride	06/27/19	1.7	µg/L	No RW delivery
001B Effluent	Carbon tetrachloride	08/13/19	<0.5	µg/L	No RW delivery
001B Effluent	Carbon tetrachloride	08/20/19	<0.5	µg/L	No RW delivery
001B Effluent	Carbon tetrachloride	08/27/19	3.7	µg/L	No RW delivery
001B Effluent	Carbon tetrachloride	09/03/19	9.5	µg/L	RW delivery
001B Effluent	Carbon tetrachloride	09/04/19	<0.5	µg/L	RW delivery
001B Effluent	Carbon tetrachloride	09/12/19	<0.5	µg/L	No RW delivery
001B Effluent	Carbon tetrachloride	09/17/19	<0.5	µg/L	No RW delivery
001B Effluent	Carbon tetrachloride	09/26/19	<0.5	µg/L	No RW delivery
001B Effluent	Carbon tetrachloride	11/13/19	<0.5	µg/L	RW Delivery

However, we did realize after several weeks into the accelerated monitoring that the exceedances on the samples collected on June 27 and August 27, 2019 were sampled when Ely Basin was still undergoing maintenance and was not receiving recycled water. No one had communicated to RP-1 operations staff to not collect 001B effluent while the basin was offline.

The only day that a carbon tetrachloride MCL exceedance and Ely Basin recycled water deliveries overlapped was on September 3, 2019. The following day's sample was non-detect and all subsequent sample collected thereafter were all non-detect. IEUA proactively shut off recycled water deliveries while we investigated and came up with a plan of monitoring surfactants (precursor to carbon tetrachloride formation) pre- and post-chlorination and explored the possibility of moving the recycled water monitoring location to Ely Basin, if the 001B effluent shows detection in future samples. After four non-detect samples values, recycled water deliveries to Ely Basin were resumed on October 8, 2019.

Based on the carbon tetrachloride discussion with DDW staff after the February 6, 2020 meeting, it was a misunderstanding that had resulted in the premature termination of the 16 weeks of sampling requested for carbon tetrachloride. The statement "we will accept the 9/4-9/26 samples for Carbon Tetrachloride for Ely Basin even though no deliveries were made to Ely basin" was misinterpreted that we would not need to continue sampling because the 4-week average was non-detect. The IEUA lab has scheduled 16 consecutive weeks of sample for carbon tetrachloride starting the week of February 10 through the week of May 25, 2020.

Ely Basin MW1 (mound monitoring well) and Ely Basin MW2 (intermediate well) carbon tetrachloride results for the last several years is presented in Table 2. Please note that Ely MW1 has been offline since 3Q18 due to an inoperable pump. Carbon tetrachloride is not expected to be found in the groundwater.

**Table 2. Carbon Tetrachloride Monitoring Well Results**

Parameter	Site	Result	Units	Date Collected	Rep. Limit	Method
Carbon tetrachloride	Ely Basin MW1	<0.5	µg/L	03/28/16	0.5	EPA 624
Carbon tetrachloride	Ely Basin MW1	<0.5	µg/L	05/17/16	0.5	EPA 524.2
Carbon tetrachloride	Ely Basin MW1	<0.5	µg/L	08/16/16	0.5	EPA 624
Carbon tetrachloride	Ely Basin MW1	<0.5	µg/L	11/07/16	0.5	EPA 624
Carbon tetrachloride	Ely Basin MW1	<0.5	µg/L	02/14/17	0.5	EPA 624
Carbon tetrachloride	Ely Basin MW1	<0.5	µg/L	04/24/17	0.5	EPA 624
Carbon tetrachloride	Ely Basin MW1	<0.5	µg/L	08/28/17	0.5	EPA 524.2

Parameter	Site	Result	Units	Date Collected	Rep. Limit	Method
Carbon tetrachloride	Ely Basin MW1	<0.5	µg/L	12/19/17	0.5	EPA 624
Carbon tetrachloride	Ely Basin MW1	<0.5	µg/L	02/28/18	0.5	EPA 624
Carbon tetrachloride	Ely Basin MW1	<0.5	µg/L	05/30/18	0.5	EPA 624
Carbon tetrachloride	Ely Basin MW2	<0.5	µg/L	02/28/17	0.5	EPA 624
Carbon tetrachloride	Ely Basin MW2	<0.5	µg/L	04/25/17	0.5	EPA 624
Carbon tetrachloride	Ely Basin MW2	<0.5	µg/L	08/17/17	0.5	EPA 524.2
Carbon tetrachloride	Ely Basin MW2	<0.5	µg/L	12/07/17	0.5	EPA 624
Carbon tetrachloride	Ely Basin MW2	<0.5	µg/L	02/21/18	0.5	EPA 624
Carbon tetrachloride	Ely Basin MW2	<0.5	µg/L	05/24/18	0.5	EPA 624
Carbon tetrachloride	Ely Basin MW2	<0.5	µg/L	03/18/19	0.5	EPA 524.2
Carbon tetrachloride	Ely Basin MW2	<0.5	µg/L	06/06/19	0.5	EPA 524.2
Carbon tetrachloride	Ely Basin MW2	<0.5	µg/L	09/12/19	0.5	EPA 624
Carbon tetrachloride	Ely Basin MW2	<0.5	µg/L	10/30/19	0.5	EPA 624.1

#### Source Evaluation & Corrective Actions

Carbon tetrachloride has never been previously found in the 001B Effluent for all the years that it has been sampled as a Priority Pollutant for NPDES discharge monitoring using the wastewater method, EPA Method 624. Chlorine could possibly cause interference if the sample was not completely dechlorinated.

In 2008, a study of common cleaning products found the presence of carbon tetrachloride in "very high concentrations" (up to 101 mg/m<sup>3</sup>) as a result of manufacturers' mixing of surfactants or soap with sodium hypochlorite. *Mustafa Odabasi, "Halogenated Volatile Organic Compounds from the Use of Chlorine-Bleach-Containing Household Products" (2008).*

If carbon tetrachloride levels exceed MCL, confirmation sampling includes:

- Collect secondary effluent (pre-chlorination) for surfactants and carbon tetrachloride analysis.
- Collect 001B effluent sample (post-chlorination) for surfactants and carbon tetrachloride analysis.
- Collect recycled water sample at Ely Basin prior to mixing with diluent water and possible relocation to Ely Basin for 001B Effluent monitoring.

#### Compliance Schedule

Once the 16 weeks of sampling has been completed, it will be determined if a compliance schedule is needed. IEUA will implement the surfactants and carbon tetrachloride monitoring pre- and post- chlorination and Ely Basin recycled water monitoring, as necessary.

INLAND EMPIRE UTILITIES AGENCY  
Chino Basin Recycled Water Groundwater Recharge Program  
PFOA Source Evaluation & Corrective Actions Report

February 15, 2020

Background

Perfluorooctanoic acid (PFOA) is a manufactured chemical that is part of a larger group of chemicals called per- and polyfluoroalkyl substances (PFAS). PFOA has been used in stain-resistant carpets and fabrics, nonstick cookware, and other products that resist heat, oil, stains, grease, and water. The State Water Resources Control Board – Division of Drinking Water (DDW) established a Notification Level (NL) of 5.1 ng/L on August 23, 2019.

The Chino Basin Recycled Water Groundwater Recharge (GWR) program has been monitoring PFAS in the RP-1/RP-4 Recycled Water (RW Blend) using Method 537.1: Determination of Selected Per- and Polyfluorinated Alkyl Substances in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS), with a method detection limit of 2 ng/L since the fourth quarter of 2018 (4Q18). During the review of IEUA's Compliance Assessment Report (CAR) for the 2014 Groundwater Replenishment Reuse Projects (GRRPs) regulations under Title 22, Division 4, Chapter 3, Article 5.1, the DDW identified RP-1 001B Effluent as a second recycled water monitoring location that was not previously tested. Ely Basin can only receive 001B Effluent due to the proximity to RP-1 and the recycled water pressure zone. This is unlike all the other basins in the GWR program, which can receive the RW Blend. PFAS monitoring started at 001B Effluent during 2Q19. Additionally, DDW clarified that an NL exceedance in a single sample, not a four-quarter average, would trigger weekly monitoring.

Discussion

In accordance with §60320.120. Additional Chemical and Contaminant Monitoring.(b):

*"If a result exceeds a NL, within 72 hours of notification of the result a project sponsor shall collect another sample, and have it analyzed for the contaminant as confirmation. If the average of the initial and confirmation sample exceeds the contaminant's NL, or a confirmation sample is not collected and analyzed pursuant to this subsection, the GRRP shall initiate weekly monitoring for the contaminant until the running four-week average no longer exceeds the NL.*

*(1) If the running four-week average exceeds the contaminant's NL, a project sponsor shall describe the reason(s) for the exceedance and provide a schedule for completion of corrective actions in a report submitted to the Regional Board no later than 45 days following the quarter in which the exceedance occurred, with a copy concurrently provided to the Department.*

*(2) If the running four-week average exceeds the contaminant's NL for sixteen consecutive weeks, a project sponsor shall notify the Department and Regional Board within 48 hours of knowledge of the exceedance.*

During 2Q19, DDW clarified that a single sample exceedance would trigger the accelerated monitoring and that accelerated monitoring was not triggered by a four-quarter average.

During 3Q19 after the revised NL of 5.1 ng/L for PFOA was issued, single sample NL exceedances triggered accelerated monitoring at both the RW Blend and 001B Effluent. IEUA has completed the 16 consecutive weeks of PFOA monitoring at RW Blend and 001B Effluent at the time this report is being submitted but is still awaiting results for some of the most recent samples. IEUA will provide the required notification to the DDW and the Regional Board in accordance with §60320.120(b)(2). The results we have of the 16 consecutive weeks of sampling

are presented in Table 1. Figure 1 shows all the RW Blend and 001B Effluent data since 4Q18. The recycled water results range for 5.6 to 14 ng/L.

**Table 1. Accelerated Monitoring Results**

Sample	Date	RW Blend (ng/L)	Compliance Determination (ng/L)	Sample	Date	001B Eff (ng/L)	Compliance Determination (ng/L)
Original	09/18/19	6.5	--	Original	08/28/19	6.2	--
Confirmation	--	--	--	Confirmation	--	--	--
Week 1	10/24/19	7.8	--	Week 1	10/24/19	6.9	--
Week 2	10/29/19	11	--	Week 2	10/29/19	6.3	--
Week 3	11/12/19	13	--	Week 3	11/06/19	8.6	--
Week 4	11/12/19	13	11	Week 4	11/12/19	7.8	7.4
Week 5	11/19/19	11	12	Week 5	11/19/19	7.7	7.6
Week 6	11/26/19	12	12	Week 6	11/26/19	7.3	7.9
Week 7	12/03/19	10	12	Week 7	12/03/19	9.0	8.0
Week 8	12/10/19	11	11	Week 8	12/10/19	11	8.8
Week 9	12/17/19	10	11	Week 9	12/17/19	7.0	8.6
Week 10	12/26/19	8.7	9.9	Week 10	12/24/19	6.4	8.4
Week 11	12/31/19	9.5	9.8	Week 11	12/31/19	6.0	7.6
Week 12	01/09/20	9.1	9.3	Week 12	01/09/20	6.1	6.4
Week 13	01/14/20	12	9.8	Week 13	01/14/20	5.6	6.0
Week 14	01/21/20	10	10	Week 14	01/21/20	5.0	5.7
Week 15	01/28/20	11	11	Week 15	01/28/20		
Week 16				Week 16			

The four-week average exceeded the NL of 5.1 ng/L during the entire 16 weeks sampling at both monitoring locations (anticipate that remaining results will continue to exceed). IEUA has prepared this report in accordance with §60320.120(b)(1).

Figure 2 shows the PFOA results in the stormwater and local runoff used as diluent water in the GWR Program. Stormwater results range from <2 to 31 ng/L and local runoff results range from 8.6 to 76 ng/L.

Figure 3 shows the 3Q19 PFOA results in the mound and intermediate monitoring wells in the GWR Program. The monitoring well results range from <2 to 24 ng/L. This monitoring was conducted voluntarily and was not required by existing permit or regulations.



Figure 1. PFOA in Recycled Water

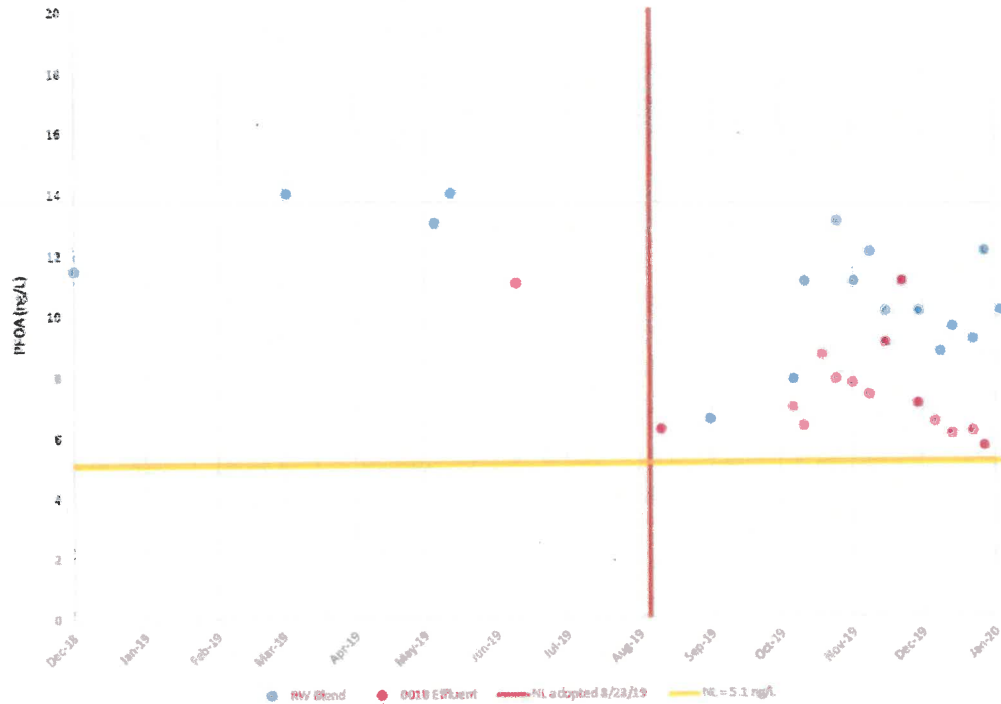


Figure 2. PFOA in Stormwater / Local Runoff (ng/L)

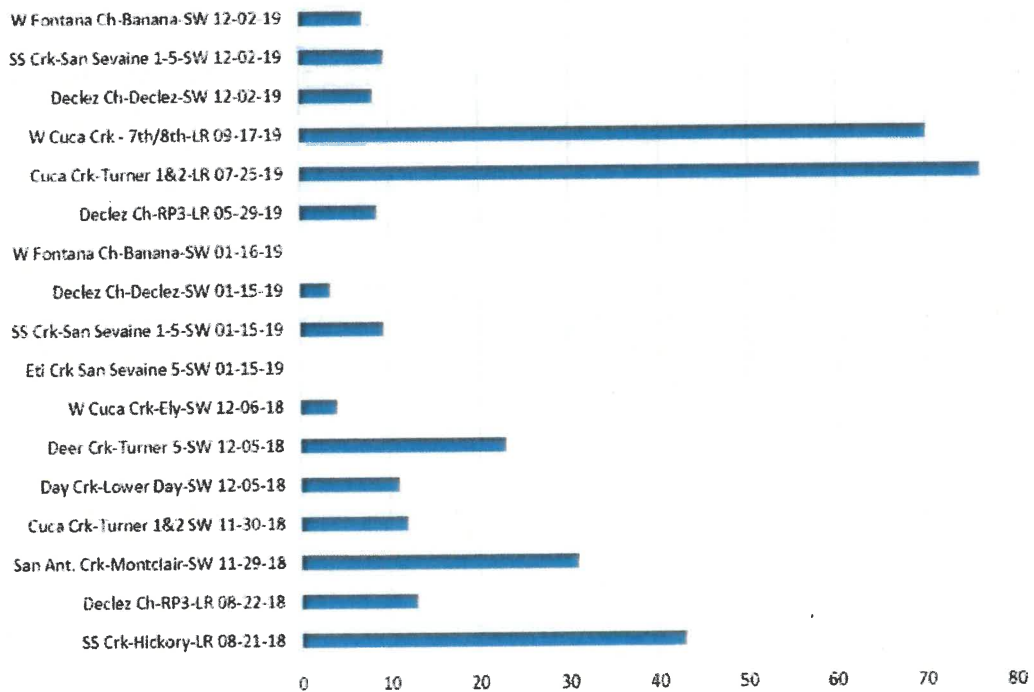
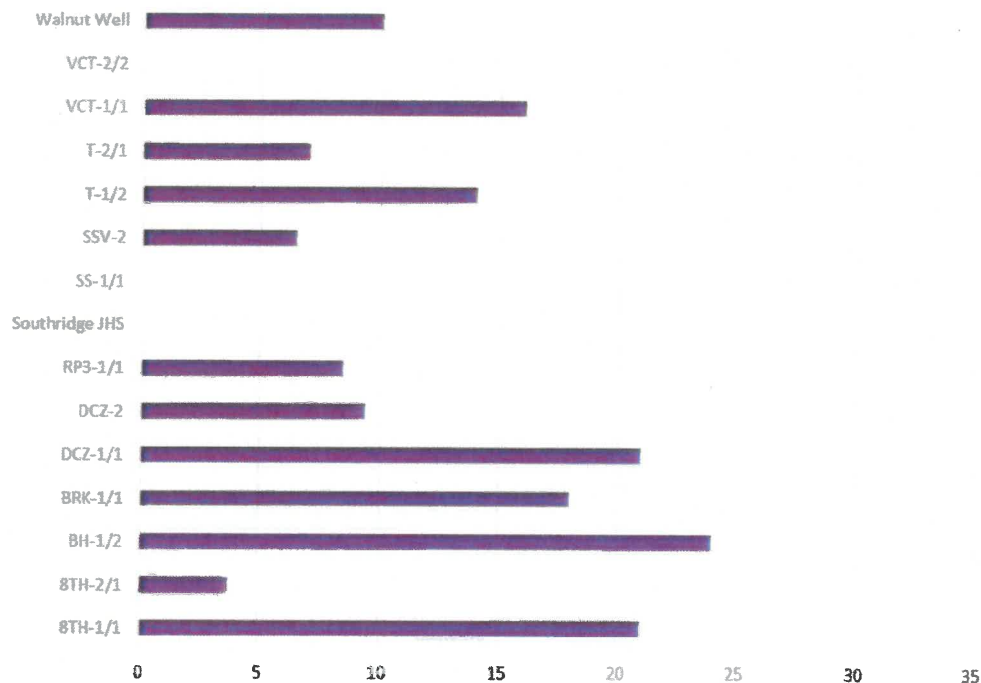


Figure 3. PFOA in GWR Monitoring Wells - 3Q19 (ng/L)



#### Source Evaluation & Corrective Actions

- 1) IEUA's source control program can help identify if any industries in IEUA's service area that manufacture textiles, chrome plating, paper products, or other known manufacturers producing primary products with PFOA that discharge into the regional sewer system.

Evaluation Required: Source Control staff will need to investigate this further and identify any industries that manufacture products containing PFAS or any industries discharging into the regional system.

- 2) Fingerprinting of recycled water and groundwater. PFAS compounds vary at different concentrations in recycled water and ambient groundwater. By fingerprinting the PFAS compounds we can identify how much recycled water is impacting the groundwater.
- 3) We are not a participant in an upcoming Water Research Foundation Study on PFAS in wastewater treatment plants (WRF 5031 "Occurrence of PFAS Compounds in US Wastewater Treatment Plants"), however we may use the same methodology and protocols to run a similar program in parallel. This will allow IEUA to assess our facilities against a larger data set once the WRF study is completed.
- 4) Purchase of LC/MS/MS will make it easier for IEUA to test for PFAS in Fiscal Year 2020/21.

### Compliance Schedule

This investigation into the sources of PFOA in the Chino Basin will not be an easy task that can be accomplished in a short period of time due to the ubiquitous nature of PFOA in the environment and lack of data. We know that the local runoff and monitoring wells have PFOA that exceed the recycled water concentration that are being recharged. We suspect that domestic waste stream may be the primary source of PFOA, and we also know that IEUA's facilities are not producing, concentrating, and likely not removing PFOA. In addition, if no municipality knowingly serves water that has detectable levels of PFOA to its customers, it is possible that some previously unidentified source or a source that was identified as uncontaminated, has become contaminated and it may reach the water recycling facilities.

PFAS is a new issue in the Chino Basin, that has been brought out to the forefront because of the lower notification level established in August 2019. The PFAS data is very limited. Due to the complexity of the PFOA issue, IEUA may consider hiring a consultant to investigate the possible sources listed above and perhaps identify other sources that are not listed. IEUA will need to collaborate with member agencies, CBWM, and other surface applicators of recycled water.

We would recommend a compliance schedule of two years to investigate and identify the PFAS sources in the Chino Basin. Based on the results of the investigation, we will provide a schedule for mitigation.