



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

**AGENDA**  
**Thursday, June 25, 2020**  
**2:00 p.m.**  
**Teleconference Call**

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

Teleconference: 1-415-856-9169/Conference ID: 747 889 453#

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### **Call to Order**

### **Roll Call**

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

#### **1. Action Items –**

- A. Meeting Minutes for May 28, 2020
- B. IEUA FY 2020/21 Adoption of Regional Wastewater, Recycled Water, Recharge Water, Water Resources, and NRW Budget Amendments
- C. RP-4 Aeration Basin Wall Repair Construction Contract Award
- D. RP-5 Expansion Project Construction Contract Award
- E. 2020 Land Use Demand Model Update

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

- A. Return to Sewer Pilot Study Update
- B. Operations & Compliance Updates (*Oral*)

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

- A. Draft Regional Sewerage Program Policy Committee Meeting Agenda
- B. Building Activity Report
- C. Recycled Water Distribution - Operations Summary

#### **4. Technical Committee Items Distributed**

- A. Recycled Water Internal Audit Review

(Continued)

## Regional Sewerage Program Technical Committee Meeting Agenda

June 25, 2020

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### 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 – July 30, 2020 (to be chaired by City of Upland)

### 6. Adjournment

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Recording Secretary (909) 993-1944, 48 hours prior to the scheduled meeting so that the Agency can make reasonable arrangements.

## 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, June 18, 2020.



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Laura Mantilla

**ACTION  
ITEM**

**1A**



## Regional Sewerage Program Technical Committee Meeting MINUTES OF MAY 28, 2020

### **CALL TO ORDER**

A regular meeting of the IEUA/Regional Sewerage Program – Technical Committee was held via teleconference on Thursday, May 28, 2020. Committee Chairman Noel Castillo called the meeting to order at 2:00 p.m.

### **ATTENDANCE via Teleconference**

#### **Committee Members:**

David Crosley	City of Chino
Eduardo Espinoza (Alternate)	Cucamonga Valley Water District
Ron Craig	City of Chino Hills
Chuck Hays	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 via Teleconference**

May Atencio	City of Fontana
Randall Reed	Cucamonga Valley Water District
Kathy Besser	Inland Empire Utilities Agency
Christiana Daisy	Inland Empire Utilities Agency
Randy Lee	Inland Empire Utilities agency
Christina Valencia	Inland Empire Utilities Agency
Jerry Burke	Inland Empire Utilities Agency
Javier Chagoyen-Lazaro	Inland Empire Utilities Agency
Elizabeth Hurst	Inland Empire Utilities Agency
Sylvie Lee	Inland Empire Utilities Agency
Laura Mantilla	Inland Empire Utilities Agency
Jason Marseilles	Inland Empire Utilities Agency
Liza Munoz	Inland Empire Utilities Agency
Craig Proctor	Inland Empire Utilities Agency



Ken Tam	Inland Empire Utilities Agency
Teresa Velarde	Inland Empire Utilities Agency

**ADDITIONS/CHANGES TO THE AGENDA**

There were none.

**1. ACTION ITEMS****A. APPROVAL OF THE MEETING MINUTES OF APRIL 30, 2020**

**Motion:** By Chuck Hays/City of Fontana and seconded by Nicole deMoet/City of Upland to approve the meeting minutes of the April 30, 2020 Technical Committee meeting.

**Motion carried:** Unanimously

**B. IEUA TEN-YEAR FORECAST**

Elizabeth Hurst/IEUA presented the 2020/21-2029/30 Ten-Year Forecast (TYF). Ms. Hurst stated that the TYF was presented to the Committee on April 30 and it was requested by the Committee to delay this item for a month to address the comments received from the member agencies. Ms. Hurst stated that the TYF was prepared in accordance with the Regional Contract. She explained that the projects included are primarily driven by growth, wastewater flow trends, safety and regulatory requirements, and repair and replacement projects to maintain the system. Ms. Hurst stated that new equivalent dwellings unit (EDU) projections total 74,000 EDUs by 2030 and wastewater flow projections are expected to be 62.3 MGD by 2030. She then reviewed the costs of the ten-year program and stated that the comments received from member agencies were incorporated in the report.

Courtney Jones/City of Ontario asked if funding has been set aside for the next few years for the Chino Basin Program (CBP) portion of the TYF, and if the funding will be used regardless of whether the CBP goes forward or not. Ms. Hurst responded no and stated that it would be reevaluated once that decision is made. Eduardo Espinoza/CVWD asked if the CBP in the TYF is for planning purposes and if the TYF will go through a budget approval process. Ms. Hurst stated yes. Mr. Espinoza thanked IEUA for sending the responses promptly and for incorporating them in the TYF.

**Motion:** By Eduardo Espinoza/CVWD and seconded by Ron Craig/City of Chino Hills to recommend the IEUA Board of Directors adopt the Fiscal Year 2020/21-2029/30 Ten-Year Forecast.

**Motion carried:** Unanimously

**C. FY 2020/21 BUDGET REVIEW OF BUDGET AMENDMENTS AND RATES ON REGIONAL WASTEWATER AND RECYCLED WATER FUNDS**

Javier Chagoyen-Lazaro/IEUA reviewed the Fiscal Year (FY) 2020/21 proposed budget amendments for the Regional Wastewater and Recycled Water Programs, and the TYF for FY 2020-2029. Mr. Chagoyen-Lazaro stated this is a review of the second budget year that was adopted by the Board of Directors on June 19, 2019. He noted that the 12-month deferral of the adopted rates for FY 2020/21, the adjustment of the recycled water sales, and loans and grants is reflected in the budget amendment. Mr. Chagoyen-Lazaro stated that the major changes for uses of funds were related to

asset management and the RP-5 Expansion project. He further stated that based on the action from the Board on May 6 to defer the monthly EDU rate, and the proposed 12-month deferral of the rate increases for the connection fees and recycled water rates, the projected loss of revenues for the next fiscal year is approximately \$4 million. Mr. Chagoyen-Lazaro added that staff is continuing to review the budget to identify projects and activities that can be deferred to help offset the projected revenue shortfall.

Mr. Chagoyen-Lazaro noted that the overall total sources of funds adopted in FY 2020/21 was \$271.9 million; however due to the revised assumptions, this category will result in a decrease of \$17.2 million. The Agency anticipates the total uses of funds will decrease by approximately \$3 million, due to the adjusted TYF. Chuck Hays/City of Fontana asked if staff's recommendation for the June 17 Board meeting is to defer the capital connection fee until July 2020/2021. Mr. Chagoyen-Lazaro replied that the recommendation will be to maintain the current rates and fees for the FY 2021. General Manager added that staff will be recommending deferring all rates, similar to the monthly EDU rate, at the June 17 Board meeting.

**Motion:** By Chuck Hays/City of Fontana and seconded by Ron Craig/City of Chino Hills to recommend that the IEUA Board of Directors adopt the Fiscal Year 2020/21 Proposed Budget Amendment for the Regional Wastewater and Recycled Water Programs.

**Motion carried:** Unanimously

#### **D. REGIONAL CONNECTION POINT TO THE MONTCLAIR INTERCEPTOR**

Jerry Burke/IEUA stated that IEUA received a request from the City of Chino for one new connection point to the Regional System (Chino Regional Sewer Connection #C-41). The sewer connection is located at Philadelphia Avenue and Benson Avenue in the city of Ontario and the peak flow rate added will be 0.12 MGD, which is within capacity of the Montclair Interceptor.

**Motion:** By Dave Crosley/City of Chino and seconded by Nicole deMoet/City of Upland to approve the request by the City of Chino for one new connection point to the Regional System (Chino Regional Sewer Connection #C-41).

**Motion carried:** Unanimously

#### **E. REGIONAL FORCE MAIN CONSTRUCTION CONTRACT AWARD**

Jerry Burke/IEUA gave a presentation on the Regional Force Main Construction Contract Award. He stated that the project is in the vicinities of Rancho Cucamonga and Fontana, and the lift station pumps flow on two dual force mains to RP-4. The goal of the project is to conduct a condition assessment of the force mains after 17 access vaults are installed to perform preventative maintenance and periodic inspections. The Agency received four bids from prequalified contractors. The lowest, responsive bidder was Ferreira Construction Company Inc., for a bid price of \$3,786,070.

Mr. Burke explained why the four contractors' bids were higher than the engineer's estimate. He noted that the total project cost is \$4,789,307 and current project budget is \$4,173,000. Therefore, staff is requesting a budget amendment in the amount of \$627,000, which will revise the budget to

\$4,800,000. Mr. Espinoza/CVWD asked why 17 manholes are necessary. Mr. Burke replied that it is the length of the hoses on the sewer and stated currently there are no manways. Mr. Espinoza asked if there was any available equipment to be able to inspect and maintain longer reaches versus the addition of so many manholes. Mr. Burke stated this was based on the equipment that the Agency has.

**Motion:** By Courtney Jones/City of Ontario and seconded by Chuck Hays/City of Fontana to recommend the Inland Empire Utilities Agency (IEUA) Board of Directors award the construction contract for the Regional Sewage Force Main Improvements, Project No. EN19025, to the lowest, responsive bidder for the not-to-exceed amount of \$3,786,070.

**Motion carried:** Unanimously

**F. RP-1 FLARE IMPROVEMENTS CONSTRUCTION CONTRACT AWARD AND CONSULTANT CONTRACT AMENDMENT**

Jerry Burke/IEUA gave a presentation on the RP-1 Flare Improvements Construction project. He stated that the goal of the project is to increase efficiency safety and compliance by replacing the existing flare with a more robust flare system that is capable accommodating plant expansion as well as treating more stringent South Coast Air Quality Management District (SCAQMD) regulations. The Agency received five bids from pre-qualified contractors. W.M. Lyles Co. was the lowest, responsive bidder for a bid price of \$5,540,000. The construction cost is \$6,094,000 brings the total project cost to \$7,626,350. The total project budget was \$5,682,000. Staff is requesting a budget amendment of \$1,968,000 for a revised budget of \$7,650,000.

Mr. Burke stated that this project began in 2016 and was placed on hold due to SCAQMD preparing new regulations. Ms. Jones asked if the cost increase was due to the new SCAQMD regulations. Mr. Burke stated that the cost increased due to SCAQMD regulations and the lack of flare manufacturers.

**Motion:** By Ron Craig/City of Chino Hills and seconded by Chuck Hays/City of Fontana to recommend the IEUA Board of Directors award the construction contract for the RP-1 Flare System Improvements, Project No. EN18006, to the lowest, responsive bidder for the not-to-exceed amount of \$5,540,000.

**Motion carried:** Unanimously

**2. INFORMATIONAL ITEMS**

**A. ENGINEERING QUARTERLY PROJECT UPDATES**

Jerry Burke/IEUA provided an update on the following Engineering Projects: San Bernardino Lift Station Facility Improvements; Non-Reclaimable Wastewater System Manhole Upgrades; RP-4 Aeration Diffuser Replacement/Wall Reinforcement; Wineville/Jurupa/Force Main Improvements; and Collection System Asset Management.

**B. RETURN TO SEWER PILOT STUDY UPDATE**

Ken Tam/IEUA stated that the Return to Sewer Pilot Study had a technical subgroup meeting on May 21. Argo provided the subgroup with an update on the preliminary results for the single-family

residential water demands for Montclair and Monte Vista Water District service area. He further stated that Argo has the data analysis for the multi-family residential category as well. Argo noted that the analysis for the multi-family, was missing the unit counts. The information was later sent to Argo to complete the analysis. The next technical subgroup meeting is scheduled for June 29. Argo will continue to refine the water demand and calculate the return to sewer factor for the single family and multi-residential categories and will also look at the commercial categories for the water demand as well.

**C. OPERATIONS & COMPLIANCE UPDATES**

There were no Operations & Compliance updates.

**D. 2020 LAND USE DEMAND MODEL UPDATE**

Sylvie Lee/IEUA provided an update on the 2020 Land Use Demand Model (LUDM). She stated that a Request for Proposal (RFP) was issued for consulting services to update the 2015 Land Use based Water Demand Model. Based on the feedback received from the member agencies, and in coordination with Chino Basin Watermaster (CBWM), it was concluded that efficiencies can be achieved if the update of the LUDM is performed by CBWM's consultant Wildermuth Environmental Inc. Ms. Lee discussed the purpose of completing the update in coordination with CBWM, the scope of work, cost savings, efficiencies, and how the data will be used.

Ms. Lee explained that the effort proposed can be funded through a cost sharing agreement between IEUA and CBWM, currently assumed to be a 50/50 cost share. She further stated that the costs associated with two non-member agencies will be paid 100% by those agencies. Ms. Lee stated that CBWM will present this item at next month's meeting. Ms. Lee added that IEUA will bring this item back to the Technical Committee.

**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 for March 2020 was received and filed by the Committee.

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

The Recycled Water Distribution – Operations Summary for April 2020 was received and filed by the Committee.

**D. LEGISLATIVE BILL MATRIX**

The State Legislative Bill Matrix for April 2020 was received and filed by the Committee.

**4. TECHNICAL COMMITTEE ITEMS DISTRIBUTED**

**A. REGULATORY CHALLENGES MEMORANDUM**

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

IEUA General Manager Shivaji Deshmukh provided the following updates:

- On May 21, IEUA opened bids for the RP-5 Expansion project. General Manager Deshmukh stated that the Water Infrastructure Finance and Innovation Act (WIFIA) loan locked at a fixed rate of 1.36 percent and is payable over 35 years from the project construction completion date.
- IEUA's Internal Audit department completed a review of the Recycled Water revenues. The report will be distributed to the member agencies as an information item on June 8.

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

None.

**C. COMMITTEE MEMBER COMMENTS**

None.

**D. NEXT MEETING – JUNE 25, 2020****6. ADJOURNMENT** – Chairman Castillo adjourned the meeting at 3:14 p.m.

Transcribed  
by:

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Laura Mantilla, Executive Assistant

**ACTION  
ITEM**

**1B**

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Date: June 25/July 2, 2020

To: Regional Committees

From: Inland Empire Utilities Agency *SSD*

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

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## **RECOMMENDATION**

It is recommended that the Regional Technical and Policy Committees (Regional Committees) review and make a recommendation to the IEUA Board of Directors to approve the proposed:

1. Fees and Rates for the Agency's Regional Wastewater and Recycled Water Programs as follows:
  - A. Regional Wastewater connection fee for Fiscal Years (FYs) 2020/21 and 2021/22
  - B. One Water connection fee for FYs 2020/21 through 2024/25
  - C. Recycled Water rates for direct use and groundwater recharge for FYs 2020/21 and 2021/22, and
2. Approval of the updated FY 2020/21 Budget Amendment for the Regional Wastewater and Recycled Water Programs.

## **BACKGROUND**

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 (TYF) (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.

The FYs 2021-2030 TYF and FY 2020/21 Budget Amendment for the Regional Wastewater and Recycled Water programs were first presented to the Regional Technical Committee on April 29 and the Regional Policy Committee on May 7, 2020. Not included in the proposed FY 2020/21 Budget Amendment was the May 6 approval by the IEUA Board to defer the increase on the monthly equivalent dwelling unit (EDU) for FY 2020/21 adopted in November 2019 in response to the outbreak of the COVID-19 pandemic.

The proposed FY 2020/21 Budget Amendment presented to the Regional Technical Committee on May 28 and the Regional Policy Committee on June 4 was updated to reflect the May 6 rate deferral for the monthly EDU sewer approved by the IEUA Board. Additionally, the presentation to Regional Committees also included a 12-month deferral of the proposed rate increases for the Regional Wastewater connection fee, One Water connection fee and Recycled Water rates, subject

to IEUA Board approval on June 17, 2020. The Regional Committees unanimously recommended the IEUA Board approve the proposed FY 2021-2030 TYF and FY 2020/21 Budget Amendment.

The staff report provided to the Regional Committees for the proposed FY 2020/21 Budget Amendment included the proposed rates and fees summarized in Table 1.

**Table 1: Adopted and Proposed Fees and Rates**  
**(Proposed Rates and Fees are Subject to Board Approval)**

Fund	Wastewater Operation	Wastewater Capital	Recycled Water		
As of July 1	Monthly 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
	<b>ADOPTED</b>	<b>PROPOSED</b>			
<b>FY 2020/21*</b>	<b>\$20.00</b>	<b>\$6,955</b>	<b>\$490</b>	<b>\$550</b>	<b>\$1,684</b>
FY 2021/22	\$21.22	\$7,379	\$520	\$580	\$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

*\*In November 2019, the monthly EDU rate of \$20.60 and \$21.22 were approved by the Board for FYs 2020/21 and 2021/22, respectively. On May 6, 2020, the Board approved to defer the rate increase for FY 2020/21 and maintain the rate unchanged at \$20.00 per EDU.*

The projected revenue shortfall of the proposed 12-month deferral in rates and fees was included in the reduction of \$17.2million to Total Sources of Funds reported in Table 2.

**Table 2: FY 2020/21 Proposed Budget Amendment (\$Millions)**  
**Regional Wastewater and Recycled Water Programs**  
**(Reported on May 28/June 4, 2020)**

Consolidated FY 2020/21	Adopted	Proposed	Amendment Amount
<b>Total Sources of Funds</b>	\$271.9	\$ 254.7	<b>(\$17.2)</b>
<b>Total Uses of Funds</b>	(\$269.3)	(\$271.9)	<b>\$2.6</b>
<b>Increase (Decrease) in Net Position</b>	<b>\$2.6</b>	<b>(\$17.2)</b>	<b>(\$19.8)</b>



However, staff's request for approval by the Regional Committees did not explicitly include a recommendation for approval of the proposed rates and fees for the Regional Wastewater and Recycled programs as summarized in Table 1.

To ensure full transparency, IEUA Board approval of the proposed rates and fees and FY 2020/21 Budget Amendment summarized in Tables 1 and 2, has been deferred to July 15, 2020 in order to return to the Regional Committees and request a recommendation to approve the proposed Regional Wastewater connection fee and Recycled Water rates for FYs 2020/21 and 2021/22, and the One Water connection fee for FYs 2020/21 – 2024/25 based on the 2020 Rate Study.

As reported at the May 28 and June 4 Regional Committee meetings, in order to offset the projected revenue shortfall from the proposed 12-month deferral of rate increases, staff was evaluating budgeted projects and activities to identify costs that could be deferred. This evaluation was still underway when the staff report for the proposed FY 2020/21 Budget Amendment was submitted to the Regional Committees. Since then, staff completed their evaluation and identified approximately \$3.5 million in costs budgeted in the Regional Wastewater and Recycled Water programs that will be deferred in FY 2020/21 and summarized in Table 3.

**Table 3: FY 2020/21 Proposed Deferral (\$Millions)  
Regional Wastewater and Recycled Water Programs**

Category	Adjustment	Description
<b>Capital Projects</b>	\$0.3	After TYF review, reclassification of non-capital project to capital
<b>Operating expenses</b>	(\$1.8)	Professional fees and non-capital projects
<b>Inter-fund transfers</b>	(\$2.00)	Capital projects, professional fees support to Administrative services fund.
<b>Total Deferral</b>	<b>(\$3.5)</b>	

The proposed change in net position after applying these adjustments is a decrease of \$13.7 million as shown in Table 4.

**Table 4: Updated FY 2020/21 Proposed Budget Amendment (\$Millions)  
Regional Wastewater and Recycled Water Programs**

Consolidated FY 2020/21	Presented at May/June Regional Committees	Proposed Amended Budget	Proposed vs Presented May/June
<b>Total Sources of Funds</b>	\$ 254.7	\$ 254.7	<b>\$0.0</b>
<b>Total Uses of Funds</b>	(\$271.9)	(\$268.4)	<b>(\$3.5)</b>
<b>Increase (Decrease) in Net Position</b>	<b>(\$17.2)</b>	<b>(\$13.7)</b>	

## **Conclusion**

If revenues and expenses occur as planned with the Board approved 12-month deferral of rate increases for FY 2020/21, the proposed amendments to total Sources and Uses of Funds will reduce the net position of the Regional Wastewater and Recycled Water programs by \$13.7 million compared to the increase in net position of \$2.6 million projected in the FY 2020/21 Adopted Budget, as summarized in Table 4 above.

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*.

# Proposed Rates and Fees and FY 2020/21 Budget Amendment Regional Wastewater and Recycled Water Programs



# Prior Review and Approval

## FY 2020/21 Budget Amendment, Rates and Fees

Date	Committee/ Board	Reviewed	Approved
October 31 / November 7	Regional Technical Advisory/Regional Policy	2020 Rate Study Update	Approved early adoption of the monthly EDU rate for Fiscal Years 2020/21 and 2021/22
April 29	Regional Technical Advisory	FY 2020/21 Budget Amendment for Regional Wastewater and Recycled Water Program, and Ten Year Forecast FYS 2021-2030	
May 6	IEUA Board		Deferred adopted increase to the monthly EDU rate for FY 2020/21
May 7	Regional Policy	FY 2020/21 Budget Amendment for Regional Wastewater and Recycled Water Program, and Ten Year Forecast FYS 2021-2030	
May 28 /June 4	Regional Technical Advisory/Regional Policy		FY 2020/21 Budget Amendment for Regional Wastewater and Recycled Water Program, and Ten Year Forecast FYS 2021-2030
June 10	IEUA Finance Committee		FY 2020/21 Budget Amendment, Rates and Fees for All Agency Programs, and Ten Year Forecast FYS 2021-2030

# Proposed Rates

Fund	Wastewater Operation	Wastewater Capital	Recycled Water		
As of July 1	Monthly 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
	ADOPTED	PROPOSED			
FY 2020/21	\$20.00	\$6,955	\$490	\$550	\$1,684
FY 2021/22	\$21.22	\$7,379	\$520	\$580	\$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

# Proposed Rates (Including Water Resources)

Fund	Wastewater Operation	Wastewater Capital	Recycled Water			Water Resources	
As of July 1	Monthly Sewer (EDU)	Wastewater Connection Fee (EDU)	Recycled Water Direct Use (AF)	Recycled Water Recharge (AF)	One Water Connection Fee (MEU)	Meter Equivalent Units (MEU)	RTS Recovery
FY 2019/20	\$20.00	\$6,955	\$490	\$550	\$1,684	\$1.04	60%
	<b>ADOPTED</b>	<b>PROPOSED</b>					
FY 2020/21*	<b>\$20.00</b>	\$6,955	\$490	\$550	\$1,684	\$1.04	75%
FY 2021/22	<b>\$21.22</b>	\$7,379	\$520	\$580	\$1,787	\$1.08	90%
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	\$1.10	100%
FY 2023/24					\$1,896	\$1.12	100%
FY 2024/25					\$1,953	\$1.14	100%

# FY 2020/21 Proposed Budget Amendment

## Regional Wastewater and Recycled Water

Proposed FY 2020/21 Budget Amendment updated to include \$3.5M in deferred projects and costs to offset projected revenue shortfall from the proposed 12-month deferral of rate increases in FY 2020/21

\$ Millions	FY 2020/21 Presented May/June	FY 2020/21 Proposed	Proposed vs Presented May/June
Total Sources of Funds*	\$254.7	\$254.7	\$0.0
Total Uses of Funds	<u>\$271.9</u>	<u>\$268.4</u>	<u>(\$3.5)</u>
Increase (decrease) net position	(\$17.2)	(\$13.7)	

\*12-month deferral of rate increases proposed for FY 2020/21 is subject to Board approval on July 15, 2020.

# Review and Approval Timeline

Month	Regional Technical Committee	Regional Policy Committee	IEUA Finance Committee	IEUA Board
June	06/25		06/10	Defer to 7/15
July		07/02	07/08	07/15



# Recommendations

1. Recommendation to the IEUA Board of Directors to adopt the proposed fees and rates for the Regional Wastewater and Recycled Water Programs effective July 1 of each fiscal year;
  - Regional Wastewater connection fee for FYs 2020/21 and 2021/22,
  - One Water connection fee for FYs 2020/21 through FY 2024/25,
  - Recycled Water rates for FYs 2020/21 and 2021/22
2. Approval of the updated FY 2020/21 Budget Amendment for the Regional Wastewater and Recycled Water Programs.

**ACTION  
ITEM**

**1C**

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Date: June 2020/July 2020

To: Regional Committees

From: Inland Empire Utilities Agency *ADD*

Subject: RP-4 Aeration Basin Diffuser Replacement and Wall Reinforcement  
Construction Contract Award

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### **RECOMMENDATION**

It is requested that the Regional Committees recommend the Inland Empire Utilities Agency (IEUA) Board of Directors award the construction contract for the Regional Water Recycling Plant No. 4 (RP-4) Aeration Basin Diffuser Replacement and Wall Reinforcement, Project No. EN17110.03, to the lowest, responsive bidder in the amount of \$4,102,444.

### **BACKGROUND**

During the 2005 expansion of the (RP-4), the three oxidation ditches were modified into six aeration basins by extending the center dividing walls of each of the basins in the north and south directions. During the recent RP-4 Rehabilitation Project design (EN17110), staff discovered the added walls could not support the differential pressure created by only having one side of the basin online during a seismic event. Due to the structurally deficient center basin walls, operations are only able to operate four basins resulting in less efficient treatment. The most efficient way to operate the plant is with five out of the six basins online.

This project will construct concrete counterforts on the center walls of all three basin to strengthen these walls and give operations staff the ability to operate an odd number of aeration basins. In addition, the existing aeration panel diffusers are nearing the end of their useful life, and the current panel diffuser manufacturer is no longer supporting the existing system or providing replacement parts; therefore, as part of this project the current panel diffuser will be replaced with new SSI Aeration disc style diffusers. In May 2020, the Board of Directors authorized the sole source procurement of these diffusers with a future price guarantee to the general contractor. This guaranteed price is included in the contractor's bid below. Furthermore, the existing recycled water piping on the aeration basins is inadequate and will be removed and replaced as part of this project. Finally, there is currently no efficient way to drain the basins for cleaning, so this project will add drainage sumps to facilitate this operation.

On May 5, 2020, a request for bids was advertised on *PlanetBids* to eleven prequalified contractors. On June 9, 2020, IEUA received eight (8) construction bids. Genesis Construction, was the lowest responsive, responsible bidder with a bid price of \$4,102,444; Engineer's estimate was \$4,620,000.

The following table presents the anticipated project cost:

<b>Description</b>	<b>Estimated Cost</b>
<b>Design Services</b>	<b><i>\$110,941</i></b>
Design Consultant Contract	\$78,063
IEUA Design Services (actuals)	\$32,878
<b>Construction Services</b>	<b><i>\$401,156</i></b>
Engineering Services During Construction	\$176,156
IEUA Construction Services (~5%)	\$225,000
<b>Construction</b>	<b><i>\$4,512,694</i></b>
Construction (This Action)	\$4,102,444
Contingency (~10%)	\$410,250
<b>Total Project Cost (This Project):</b>	<b><i>\$5,024,791</i></b>
<b>Total Project Cost (Trident Filter):</b>	<b><i>\$5,000,000</i></b>
<b>Total Project Cost (Process Improvements):</b>	<b><i>\$16,015,162</i></b>
<b>Total Project Cost:</b>	<b><i>\$26,039,953</i></b>
<b>Total Project Budget:</b>	<b><i>\$28,643,938</i></b>

The following is the project schedule:

<b>Project Milestone</b>	<b>Date</b>
Construction Contract Award	July 2020
Construction Completion	September 2021

The RP-4 Aeration Basin Diffuser Replacement and Wall Reinforcement Project is consistent with IEUA's business goal of Wastewater Management, specifically the Asset Management objective that IEUA will ensure the treatment facilities are well maintained, upgraded to meet evolving requirements, sustainability managed, and can accommodate changes in regional water use.

# RP-4 Aeration Basin Diffuser Replacement and Wall Reinforcement

## Construction Contract Award

Project No. EN17110.03





# Project Location



Aeration Basins



# The Project

- Replace panel diffusers with SSI disc diffusers
- Install new sprayers and RW piping
- Coat the ductile iron piping
- Install counterforts to strengthen aeration basin's center walls
- Install drainage sumps



Existing Panel Diffusers



Proposed Disc Diffuser System

# Contractor Selection

Eight bids were received on June 9, 2020, from prequalified contractors:

Bidder's Name	Final Bid Amount
Genesis Construction	\$4,102,444
Innovative Construction Solutions	\$4,380,400
Stanek Constructors	\$4,427,000
J.R. Filanc Construction Co., Inc.	\$4,455,982
Kiewit Infrastructure West Co.	\$4,667,000
J.F. Shea Construction, Inc.	\$4,860,000
PCL Construction, Inc.	\$5,190,000
W.A. Rasic Construction Company	\$5,588,855
<b>Engineer's Estimate</b>	<b>\$4,620,000</b>



# Project Budget and Schedule

Description	Estimated Cost
<b>Design Services</b>	<b>\$110,941</b>
Design Consultant Contract	\$78,063
IEUA Design Services (actuals)	\$32,878
<b>Construction Services</b>	<b>\$401,156</b>
Engineering Services During Construction	\$176,156
IEUA Construction Services (~5%)	\$225,000
<b>Construction</b>	<b>\$4,512,694</b>
Construction Contract (this action)	\$4,102,444
Contingency (~10%)	\$410,250
<b>Total Project Cost (This project):</b>	<b>\$5,024,791</b>
<b>Total Project Cost (Process Improvements):</b>	<b>\$16,015,162</b>
<b>Total Project Cost (Trident Filter):</b>	<b>\$5,000,000</b>
<b>Total Project Costs (All)</b>	<b>\$26,039,953</b>
<b>Total Project Budget:</b>	<b>\$28,643,938</b>

Project Milestone	Date
<b>Construction</b>	
Construction Contract Award	July 2020
Construction Completion	September 2021

# Recommendation

- It is requested that the Regional Committees recommend the IEUA Board of Directors award the construction contract for the RP-4 Aeration Basin Diffuser Replacement and Wall Reinforcement, Project No. EN17110.03, to the lowest, responsive bidder in the amount of \$4,102,444.

The RP-4 Aeration Basin Diffuser Replacement and Wall Reinforcement Project is consistent with **IEUA's business goal of Wastewater Management**, specifically the Asset Management objective that IEUA will ensure the treatment facilities are well maintained, upgraded to meet evolving requirements, sustainability managed, and can accommodate changes in regional water use.

**ACTION  
ITEM**

**1D**



---

Date: June/July 2020

To: Regional Committees

From: Inland Empire Utilities Agency *ADD*

Subject: RP-5 Expansion Construction Contract Award

---

### **RECOMMENDATION**

It is requested that the Regional Committees recommend the Inland Empire Utilities Agency (IEUA) Board of Directors award the construction contract for the Regional Water Recycling Plant No. 5 (RP-5) Expansion, Project Nos. EN19001 and EN19006, to the lowest, responsive bidder in the amount of \$329,982,900.

### **BACKGROUND**

As part of IEUA's Wastewater Facilities Master Plan (WFMP), an analysis was conducted of the influent wastewater flow and quality data for IEUA's Regional Water Recycling Plants (RWRPs), including RP-5, to establish current average and peak influent flows, concentrations, and loads for the purpose of developing flow and load projections for the 2035 planning year. This analysis confirmed the following treatment needs:

1. Expand the RP-5 Liquids Treatment System to meet service area growth.
2. Relocate RP-2 Solids Treatment to RP-5 and build a new solids treatment plant at RP-5 to meet the solids handling requirements for future growth that is being projected for IEUA's service area.

The RP-5 Expansion will increase the liquid treatment capacity from 15 to 22.5 million gallons per day (MGD) and increase solids treatment to 30 MGD. RP-2 currently treats solids received from RP-5 and Carbon Canyon Water Reclamation Facility (CCWRF). The relocation of the RP-2 Solids Treatment Facility to RP-5 is required due to the facility being located on United States Army Corps of Engineers (USACE) property, which is located in a future flood plain upon completion of USACE project to raise the Prado Dam Spillway. The proposed RP-5 Solids Treatment Facility will be able to treat all solids generated from RP-5 and CCWRF.

The RP-5 Liquids Treatment Expansion and the RP-5 Solids Treatment Facility (RP-5 Expansion), Project Nos. EN19001 and EN19006, consists of the following major components:

- Expansion of Influent Pump Station enlarging the wet well
- Headworks improvements: coarse screens, grit chamber, fine screens, screenings/grit removal
- Two new primary clarifiers and four new primary clarifier covers

- Improvements to the existing aeration basin including new diffusers, mixed liquor pumps, and aeration blowers
- A 22.5 MGD Membrane Bioreactor (MBR) system
- Re-rating of the Chlorine Contact Basin
- New centralized odor control system for solids and liquids
- Emergency overflow and storm water system
- New Mountain Avenue Lift Station and Modifications to Butterfield Ranch Pump Station, including new pipelines for connection to IEUA's sewer system (Separate Project)
- Rotary drum thickening building for primary and secondary solids thickening
- Phased digestion including acid phase digesters, and methane digesters
- Digested sludge storage
- Centrifuge dewatering building, biosolids cake storage, and centrate equalization
- Digester gas treatment, digester gas flaring, and emissions control systems for the existing engines
- Food waste receiving station

On October 31, 2019, a request for bids was advertised on *PlanetBids* to four prequalified contractors. On May 21, 2020, IEUA received four construction bids. W.M. Lyles Co. was the lowest responsive, responsible bidder with a bid price of \$329,982,900. The Engineer's estimate was \$309,000,000. Due to the low bid being above the Consultant Engineer's estimate, IEUA and the Consultant Engineer conducted a cost evaluation and determined that changed site conditions discovered during the bid phase along with additional scope incorporated into the project resulted in a price increase of \$31,128,000 revising the estimate to \$340,128,000. Therefore, the W.M. Lyles Co. bid of \$329,982,900 is competitive and reasonable for the scope of the RP-5 Expansion project.

The following table presents the anticipated project cost:

Description	Estimated Cost
<b>Design Services</b>	<b>\$26,406,753</b>
Design Contract (actuals)	\$21,311,890
IEUA Design Services (actuals)	\$2,158,507
Other Design Services (actuals)	\$2,936,356
<b>Construction Services</b>	<b>\$43,361,716</b>
Construction Management Services	\$22,625,523
Engineering Services During Construction	\$11,346,349
Other Construction Services	\$7,325,000
Contingency (5%)	\$2,064,844
<b>Construction</b>	<b>\$376,181,190</b>
Construction Contract (This Action)	\$329,982,900
Offsite Facilities Construction (Separate package estimate)	\$12,000,000
Contingency (~10%)	\$34,198,290
<b>Total Project Cost:</b>	<b>\$445,949,659</b>
<b>Total Project Budget:</b>	<b>\$450,000,000</b>

The following is the project schedule:

<b>Project Milestone</b>	<b>Date</b>
Construction Contract Award	July 2020
RP-5 Solids Facility Completion	January 2024
RP-5 Liquids Treatment Expansion Completion	January 2025

The RP-5 Expansion Project is consistent with *IEUA's Business Goal of Wastewater Management*, specifically the Asset Management and Water Quality objectives that IEUA will ensure that systems are well maintained, upgraded to meet evolving requirements, sustainably managed, and can accommodate changes in regional water use to protect public health, the environment, and meet anticipated regulatory requirements.

# RP-5 Expansion Construction Contract Award

## Project Nos. EN19001 and EN19006





# Project Location – RP-5 Expansion

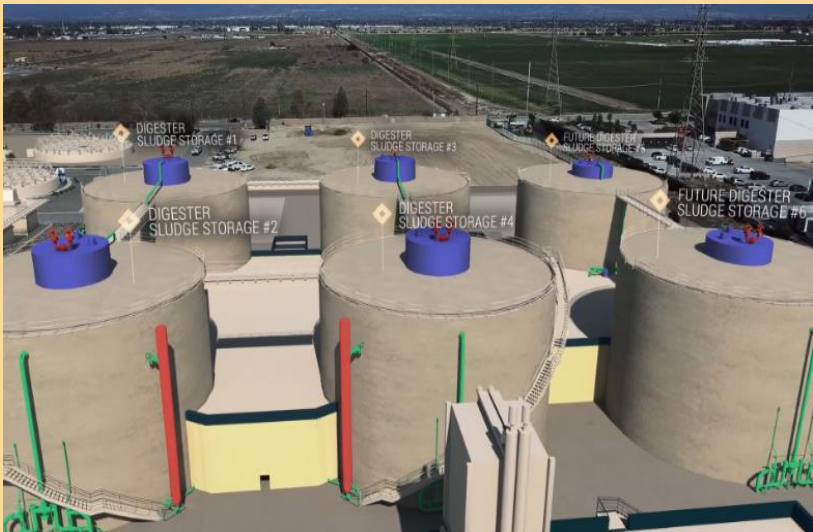


RP-5 Facility

Liquid Expansion



Biosolids Facility





# The Project

- **Expand RP-5 Liquids Treatment to 22.5 MGD (mechanical systems) and 30 MGD (structural systems)**
- **Relocate RP-2 to RP-5**
- **Construct RP-5 Solids Treatment Facility to treat 30 MGD of solids from both CCWRF and RP-5**

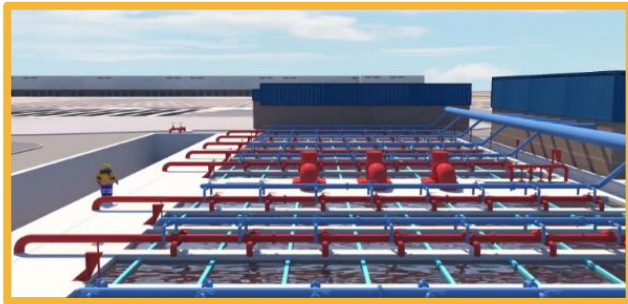


*RP-5 Expansion New Facilities*

# The Project - Continued

## RP-5 Liquid Expansion

- Influent pump station expansion
- Headworks improvements
- Two new primary clarifiers
- Existing aeration basin improvements
- New Membrane Bioreactor (MBR) system
- Rerating of the chlorine contact basin



New MBR Basin Model

## RP-5 Biosolids Facility

- Rotary drum thickening building
- Digester facilities
- Centrifuge dewatering building
- Boiler building
- Digester gas treatment and flaring
- REEP Energy Improvements



Digester Facilities Model

# The Bid Phase

- **November 2018:** Initial General Contractor Outreach
- **October 31, 2019:** Bid Documents Released
- **December 2, 2019 & February 3, 2020:** Two Half-Day Workshops
- **February 20, 2020:** Questions Due (~1,300 questions on ~30,000 pages of bid documents)
- **March 17, 2020:** CAEATFA approved RP-5 Expansion Sales Tax Exemption
- **March 26, 2020:** Bid delayed due to Coronavirus to allow IEUA and General Contractors to adjust to electronic bid submission
- **May 21, 2020:** Bids Received
- **Maintained open communication with all 4 pre-qualified contractors throughout bid phase**



# Contractor Bids

- Four bids received on May 21, 2020 from the Prequalified Contractors:

Bids Received	Bid Amount
W.M. Lyles	\$329,982,900
J.F. Shea	\$339,726,750
Kiewit	\$375,707,000
PCL	\$425,939,779
Engineer's Estimate:	\$309,000,000

- Explanation bid is above Engineer's Estimate:
  - Changed Site Conditions
  - Additional Scope Added through Addendum
  - COVID 19 Impacts



# Project Budget and Schedule

## EN19001 and EN19006

Description	Estimated Cost
<b>Design Phase Services</b>	<b>\$26,406,753</b>
<b>Construction Services</b>	<b>\$43,361,716</b>
Construction Management	\$22,625,523
Engineering Services During Construction	\$11,346,349
Other Construction Services	\$7,325,000
Contingency (5%)	\$2,064,844
<b>Construction</b>	<b>\$376,181,190</b>
RP-5 Expansion Bid (This Action)	\$329,982,900
Offsite Facilities Bid (estimate)	\$12,000,000
Contingency (~10%)	\$34,198,290
<b>Total Project Cost:</b>	<b>\$445,949,659</b>
<b>Total Requested Project Budget:</b>	<b>\$450,000,000</b>

Project Milestone	Date
<b>Construction</b>	
IEUA Board Construction Contract Award	July 15, 2020
Solids Facility Completion	January 2024
Liquids Construction Completion	January 2025

# Recommendation

- It is requested that the Regional Committees recommend the IEUA Board of Directors award the construction contract for the RP-5 Expansion Project, Project Nos. EN19001 and EN19006, to the lowest, responsive bidder in the amount of \$329,982,900.

The RP-5 Expansion Project is consistent with ***IEUA's Business Goal of Wastewater Management***, specifically the Asset Management and Water Quality objectives that IEUA will ensure that systems are well maintained, upgraded to meet evolving requirements, sustainably managed, and can accommodate changes in regional water use to protect public health, the environment, and meet anticipated regulatory requirements.

**ACTION  
ITEM**

**1E**



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Date: June 25, 2020

To: Regional Technical Committee

From: Inland Empire Utilities Agency *ADD*

Subject: 2020 Land Use Demand Model Update

---

### **RECOMMENDATION**

It is requested that the Regional Technical Committee recommend the IEUA Board of Directors approve the task with Chino Basin Watermaster for the 2020 Land Use Demand Model Update by Wildermuth Environmental Inc.

### **BACKGROUND**

In 2015, a land use-based water demand model (Model) was developed as part of the 2015 IEUA Urban Water Management Plan (UWMP). The Model was based on General Plan land use data of existing and future development in each city and retail agency boundaries within the IEUA service area. The various land use categories were grouped into 13 main categories that were utilized for the development of corresponding water unit use factors and demands. This Model was capable of forecasting water demands for each city and retail agency in order to be totaled as a regional demand for the IEUA service area. This year, IEUA intends to update the Model to reflect existing and future developments based on the current General Plans grouped within the 13 established land use categories. Based on the recommendations during the 2019 Regional Contract Negotiations, the 2020 Model will develop unit use factors to project demands for water, recycled water, and wastewater in 5-year increments to the furthest build-out date.

On January 30, 2020, an informational item was presented to the Regional Technical Committee describing the process IEUA staff would take to update the 2015 Model. A Request for Proposal (RFP), with a scope of work developed with input and feedback from the Regional Technical Committee, was issued in February 2020. Two proposals were received in April 2020 and evaluated by staff.

As a result of communications between IEUA and Chino Basin Watermaster (Watermaster) staff regarding land use category information for evaluations such as safe-yield, IEUA approached Watermaster to see if potential efficiencies could be gained if Watermaster's engineer were to develop the Model update. Based on these discussions, it was concluded if the Model update is performed by Watermaster's consulting engineer, Wildermuth Environmental Inc. (WEI), efficiencies would be gained by avoiding duplicate efforts in forecasting water demands and



wastewater generation within the Chino Basin. As a result, the RFP was cancelled with no further action taken and was reported to the Regional Technical Committee on April 30, 2020.

The scope of work provided to WEI is the same scope that was released in the RFP in February 2020 and includes updating the 2015 Model with 2020 conditions by collecting data from each retail agency within the IEUA service area with the addition of the City of Pomona and Jurupa Community Services District. The combined effort will provide water and wastewater demand forecasts for the next 25 years by individual agency and collectively for IEUA and Watermaster. The Model will be used in the preparation of planning documents such as the Ten-Year Forecasts, the Urban Water Management Plan, the Integrated Resources Plan and other forecasting efforts by Watermaster in its processes. If any additional details and data are needed for Watermaster, such efforts will be paid solely by Watermaster.

This effort is proposed to be funded through a cost sharing agreement between IEUA and Watermaster with a total project cost of \$232,277. The updated Model will require manual manipulation of both regional and individual agency data (as requested by the agencies). This data manipulation flexibility requires an update of the Model with a similar level of effort to that of development of the 2015 Model (Table 1). Moving forward, it is IEUA's recommendation the Model be updated every five years to coincide with the UWMP timelines.

Table 1 – Proposed Land Use Demand Model Costs

	Hours	Fees
2015 Land Use Demand Model (Arcadis/Karen Johnson)	1,248	\$202,440
2020 Land Use Demand Model Update (WEI)	1,046	\$200,286

The Model update is funded by IEUA Project No. PL20002 within the Water Resources Fund and consistent with the adopted IEUA Fiscal Year 2019/20 Biennial Budget. The project also directly aligns with several Agency Business Goals, including *Water Reliability*, *Wastewater Management*, and *Fiscal Responsibility*.

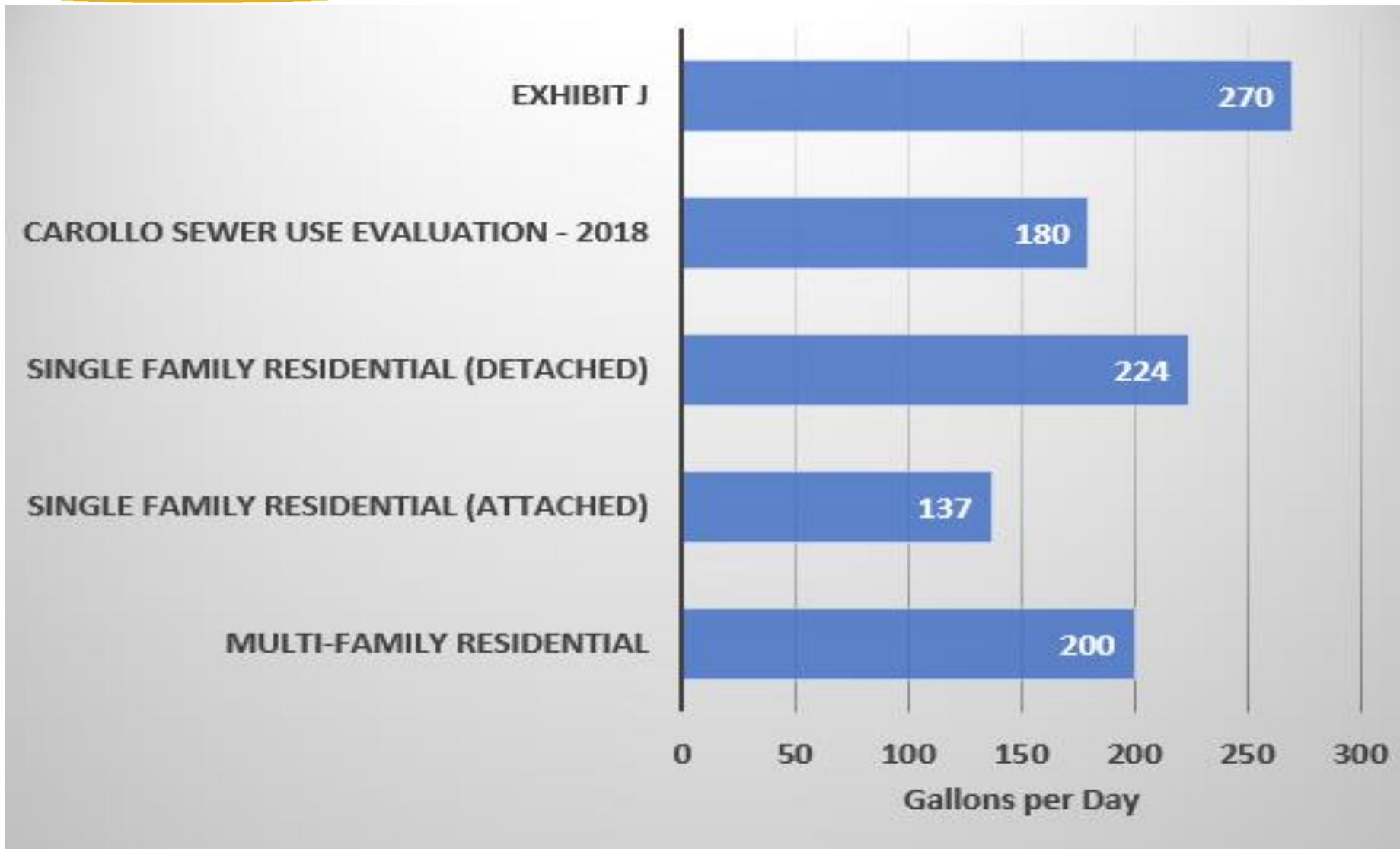
**INFORMATION  
ITEM**

**2A**

# Pilot Return to Sewer Flow Study Update



# Pilot Study Preliminary Findings



- Preliminary Results are based on Winter Month Demands
- Next Steps – Commercial Category Evaluation

# Timeline/Schedule

## CASA Study

- Statewide Flow & Wastewater Monitoring Study

*Residential Handbook*

*Non-Residential Monitoring on Hold*

*Jan – Jun 2020*

*Residential Handbook*

*Non-Residential Monitoring (Jul – Nov)*

*Non-Residential Handbook*

*July – Dec 2020*

*Completion of CASA Study*

*Issuance of Residential & Non-Residential Handbooks (Jun)*

*Jan – Jun 2021*

*Jul 2021 – Mar 2023*

## IEUA EDU Study

- Pilot Return to Sewer Flow Study
- IEUA Service Area Return to Sewer Study
- EDU methodology & Rate Structure

*Approval of Pilot Return to Sewer Flow Study (Jan)*

*Kick-off Pilot Return to Sewer Flow Study (April)*

*Completion of Pilot Return to Sewer Flow Study (Oct)*

*Evaluation & Field Verification of MVWD/Montclair Service area (Nov – Dec)*

*Evaluation/Field Verification of Pilot Study Service Area (Jan – Feb)*

*Initiation of IEUA Service Area Return to Sewer Study (Mar – Jun)*

*IEUA Service Area Return to Sewer Study (Jul 2021 – May 2022)*

*EDU Methodology & Rate Structure (Mar 2022 – Mar 2023)*

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**3A**



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

### **AGENDA Thursday, July 2, 2020 3:30 p.m. Teleconference Call**

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 COMMITTEE MEMBER MAY CALL INTO THE COMMITTEE MEETING WITHOUT OTHERWISE COMPLYING WITH ALL BROWN ACT'S TELECONFERENCE REQUIREMENTS.

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#**

This meeting is being conducted virtually by video and audio conferencing. There will be no public location available to attend the meeting; however, the public may participate and provide public comment during the meeting by calling into the number provided above. Alternatively, you may email your public comments to the Recording Secretary Laura Mantilla at [lmantilla@ieua.org](mailto:lmantilla@ieua.org) no later than 24 hours prior to the scheduled meeting time. Your comments will then be read into the record during the meeting.

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**Call to Order/Flag Salute**

**Roll Call**

**Public Comment**

Members of the public may address the Committee on any item that is within the jurisdiction of the Committee; however, no action may be taken on any item not appearing on the agenda unless the action is otherwise authorized by Subdivision (b) of Section 54954.2 of the Government Code. Comments will be limited to three minutes per speaker.

## Additions/Deletions to the Agenda

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

- 1. Technical Committee Report (Oral)**
  - Regional Contract Negotiations Update
- 2. Action Item**
  - A. Meeting Minutes for June 4, 2020
  - B. IEUA FY 2020/21 Adoption of Regional Wastewater, Recycled Water, Recharge Water, Water Resources, and NRW Budget Amendments
  - C. RP-4 Aeration Basin Wall Repair Construction Contract Award
  - D. RP-5 Expansion Project Construction Contract Award
- 3. Informational Items**
  - A. Return to Sewer Pilot Study Update
- 4. Receive and File**
  - A. Building Activity Report
  - B. Recycled Water Distribution – Operations Summary
- 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 – August 6, 2020 (to be chaired by City of Upland)
- 6. Adjournment**

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Recording Secretary (909) 993-1944, 48 hours prior to the scheduled meeting so that the Agency can make reasonable arrangements.

## 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, June 25, 2020.

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



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**3B**



# Building Activity Report - YTD Fiscal Year 2019/20



## Legend

- Service Area
- Unincorporated

## EDU (YTD)

### Residential

- <=1.0
- 1.0 - 10.0
- >10.0

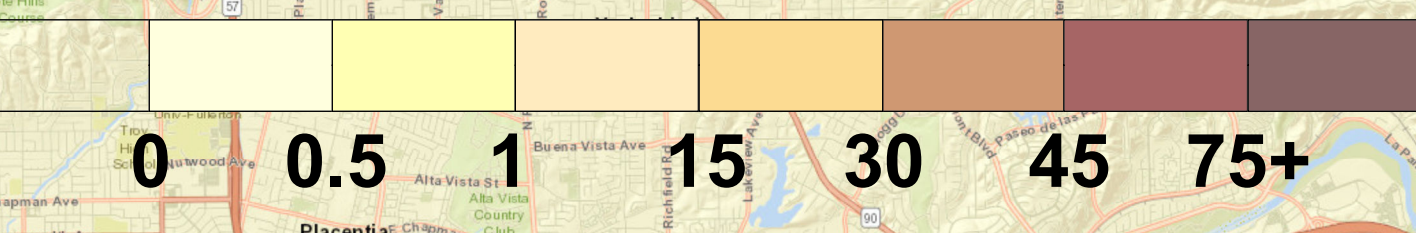
### Commercial

- <=1.0
- 1.0 - 10.0
- >10.0

### Industrial

- <=1.0
- 1.0 - 10.0
- >10.0

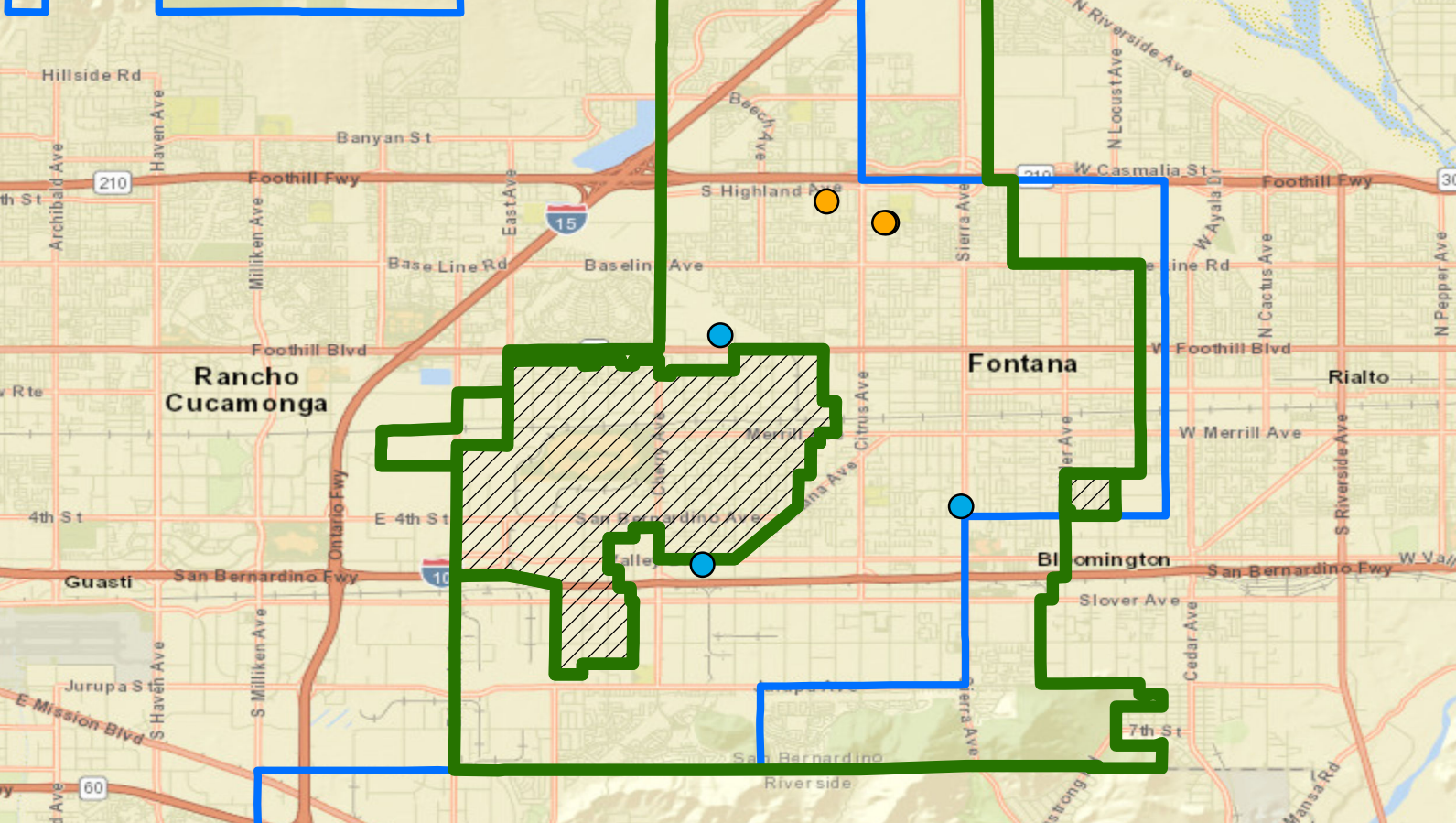
## HALF MILE GRID: TOTAL EDU's (YTD)



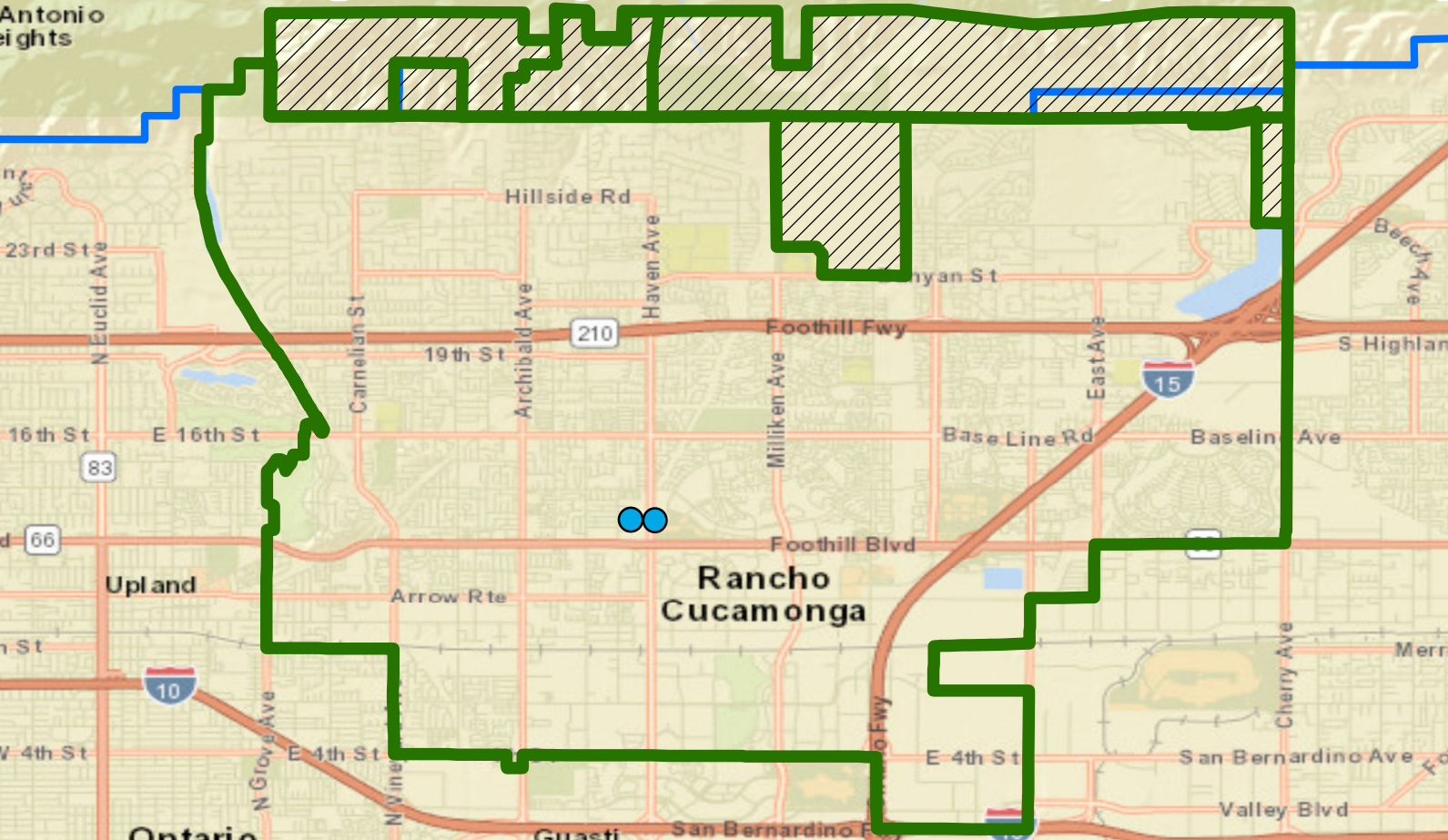
## TOTAL EDU BY WASTEWATER CONNECTION TYPE (YTD)

Contracting Agency	YTD Actual				Projected
	Commercial (EDUs)	Industrial (EDUs)	Residential (EDUs)	Total (EDUs)	
Chino	50	38	333	421	470
Chino Hills	43	0	17	60	272
CVWD	78	1	134	213	1240
Fontana	57	3	521	581	595
Montclair	17	0	90	107	407
Ontario	142	93	1154	1389	2960
Upland	15	0	315	330	446
Total	403	135	2564	3102	6390

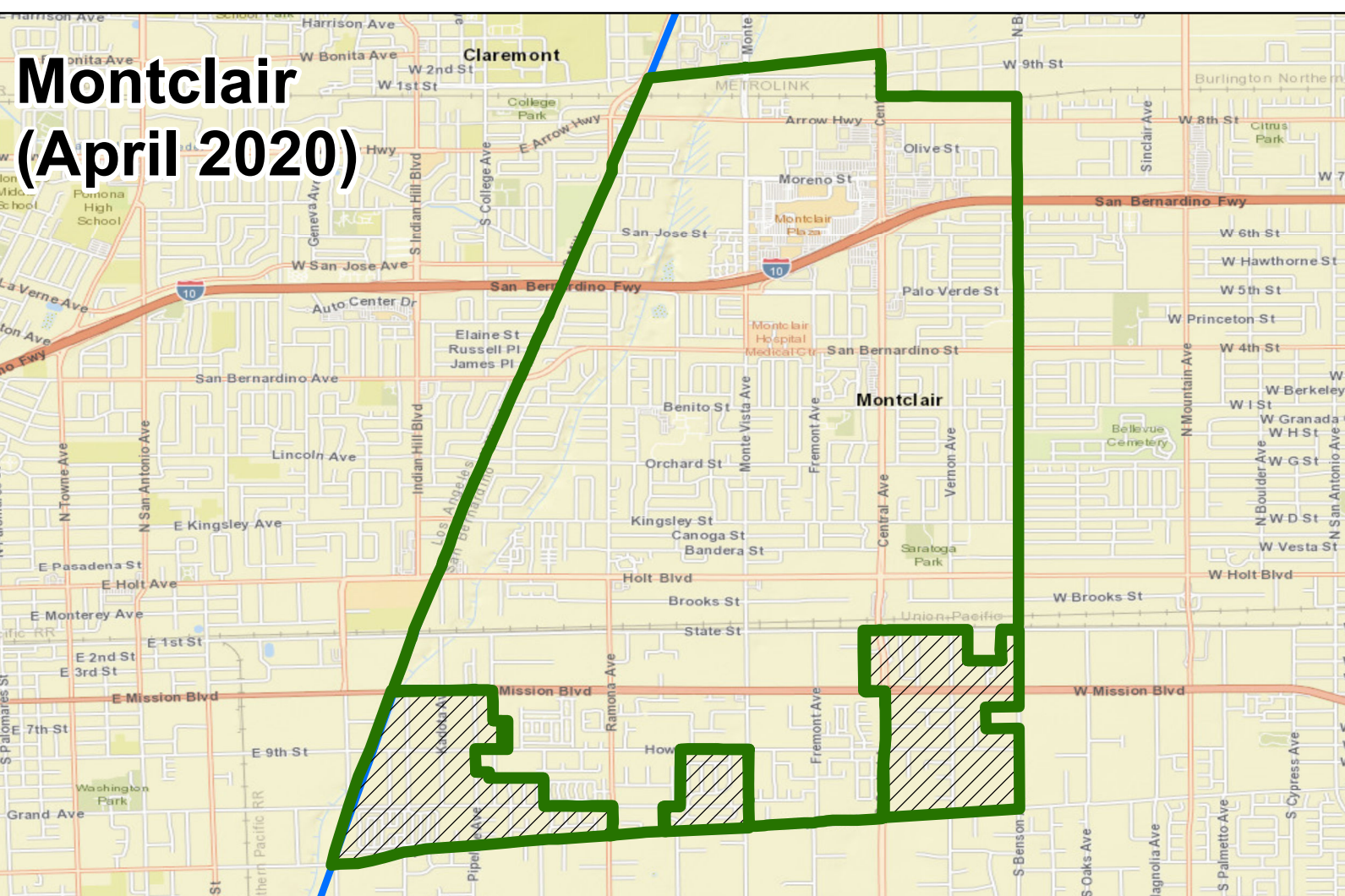
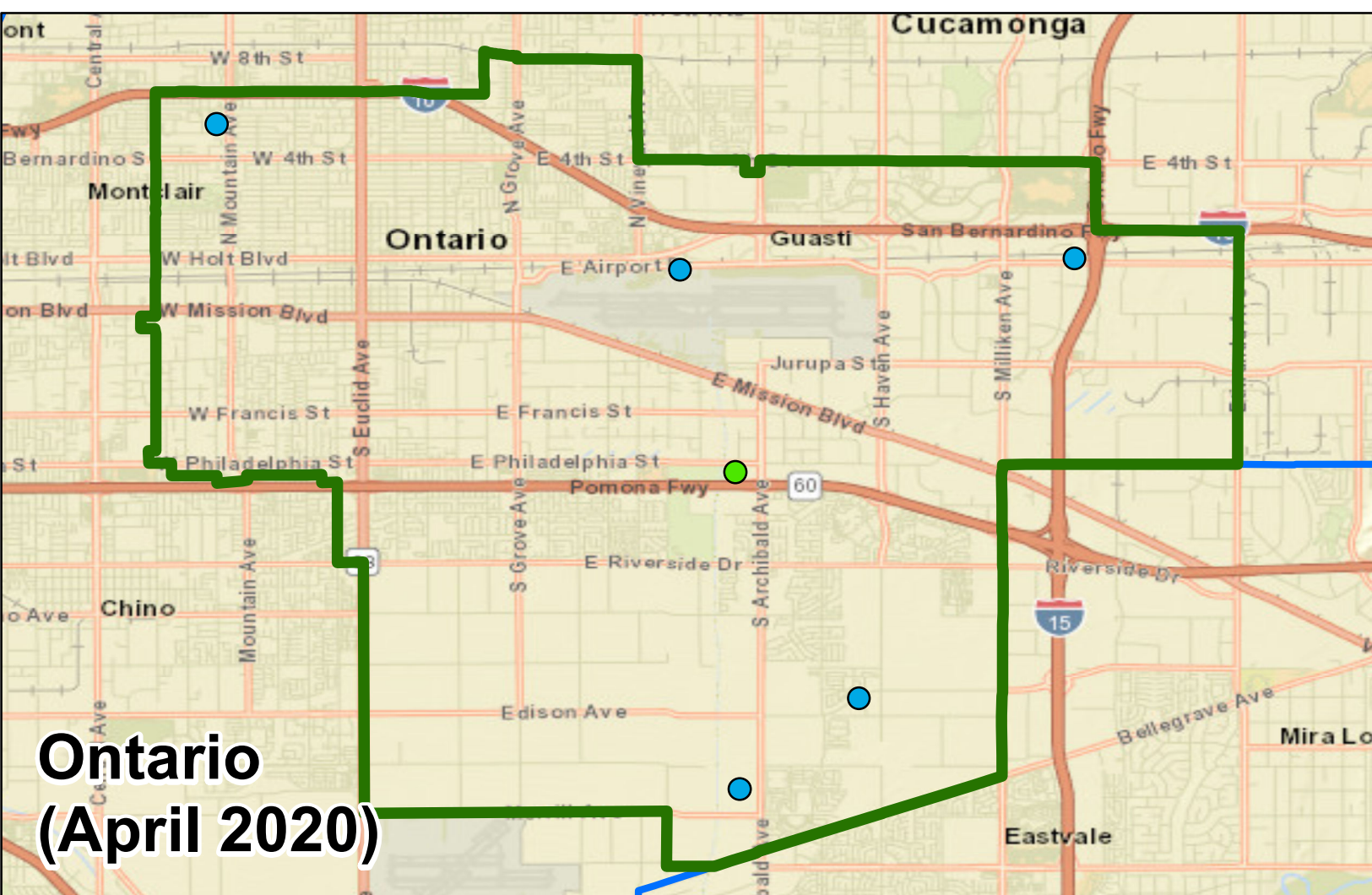
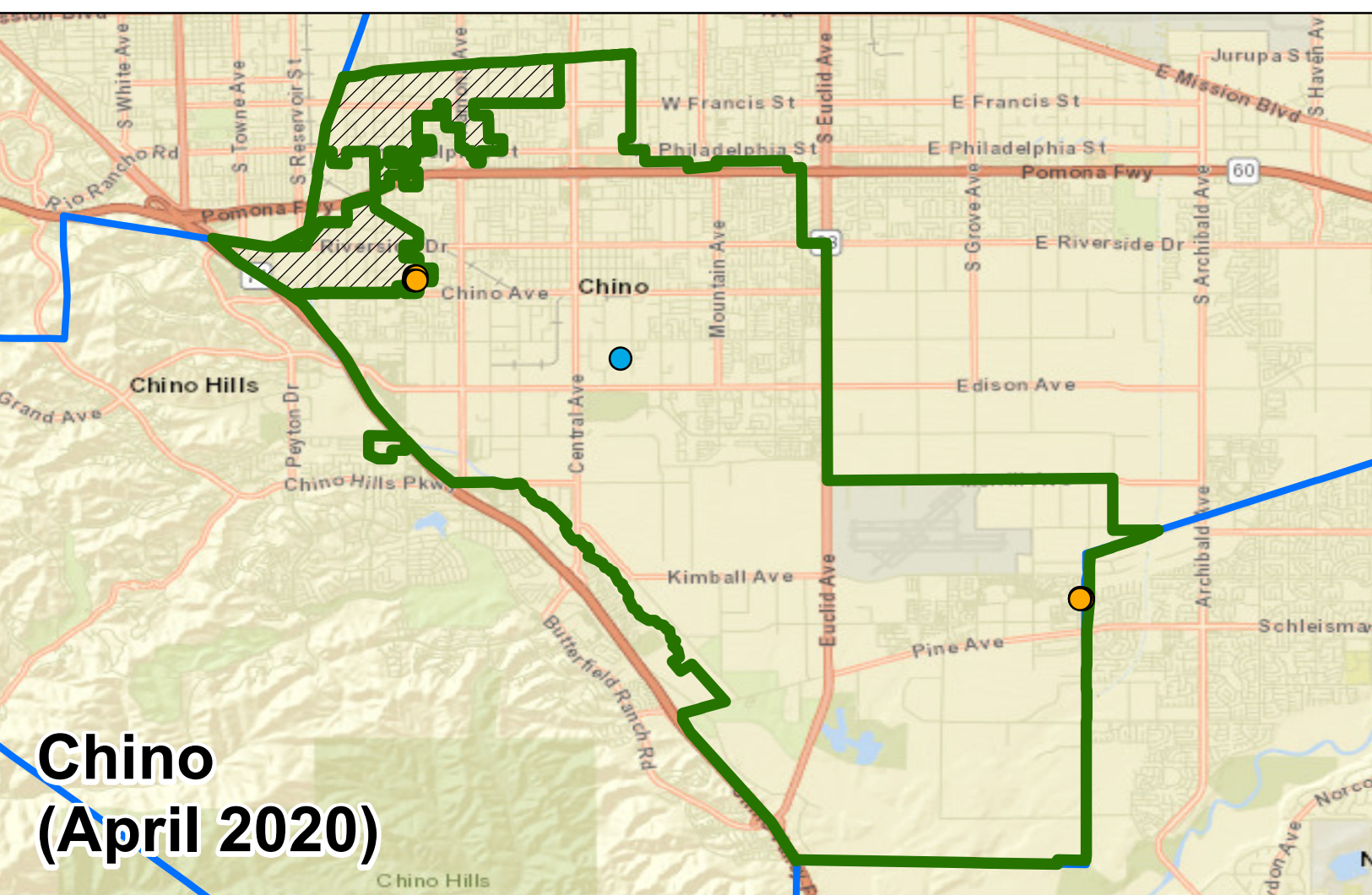
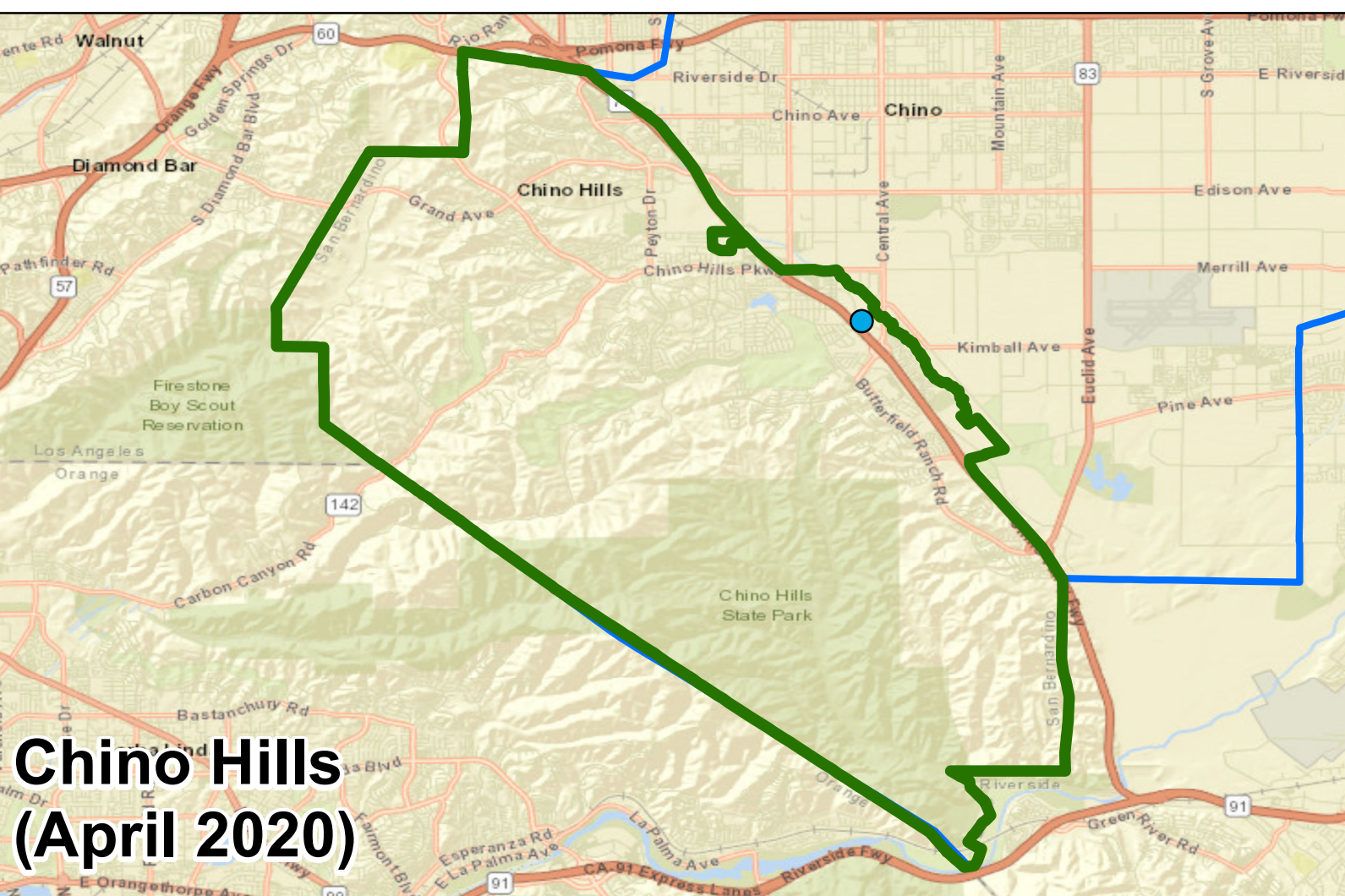
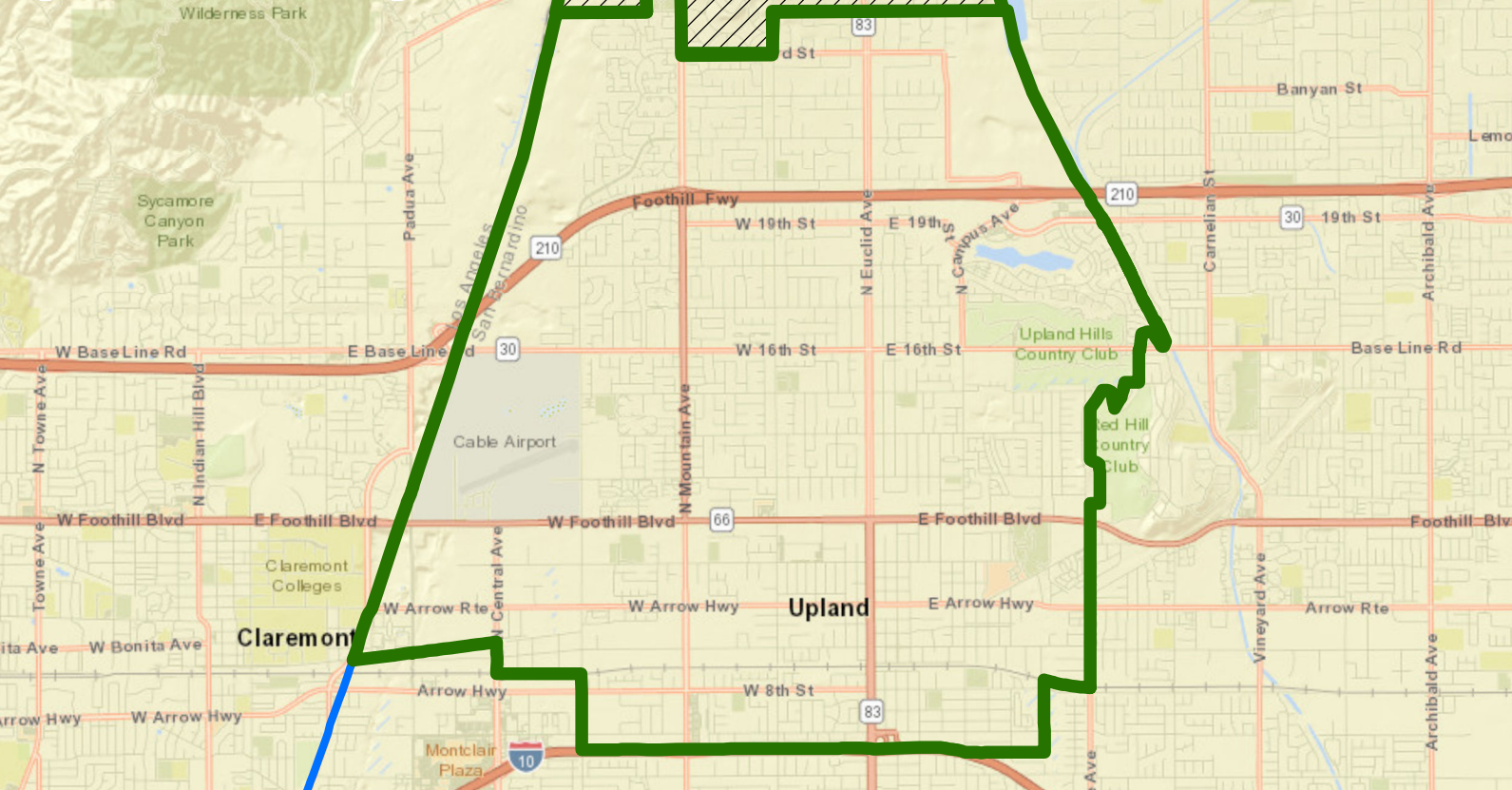
## Fontana (April 2020)



## Cucamonga Valley Water District (April 2020)



## Upland (April 2020)





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**3C**

# IEUA RECYCLED WATER DISTRIBUTION – MAY 2020

## TOTAL ALL PLANTS

Influent: 48.5 MGD

Delivered: 31.9 MGD

Percent Delivered: 66%

## RP-4

Delivered: 7.9 MGD

## RP-1

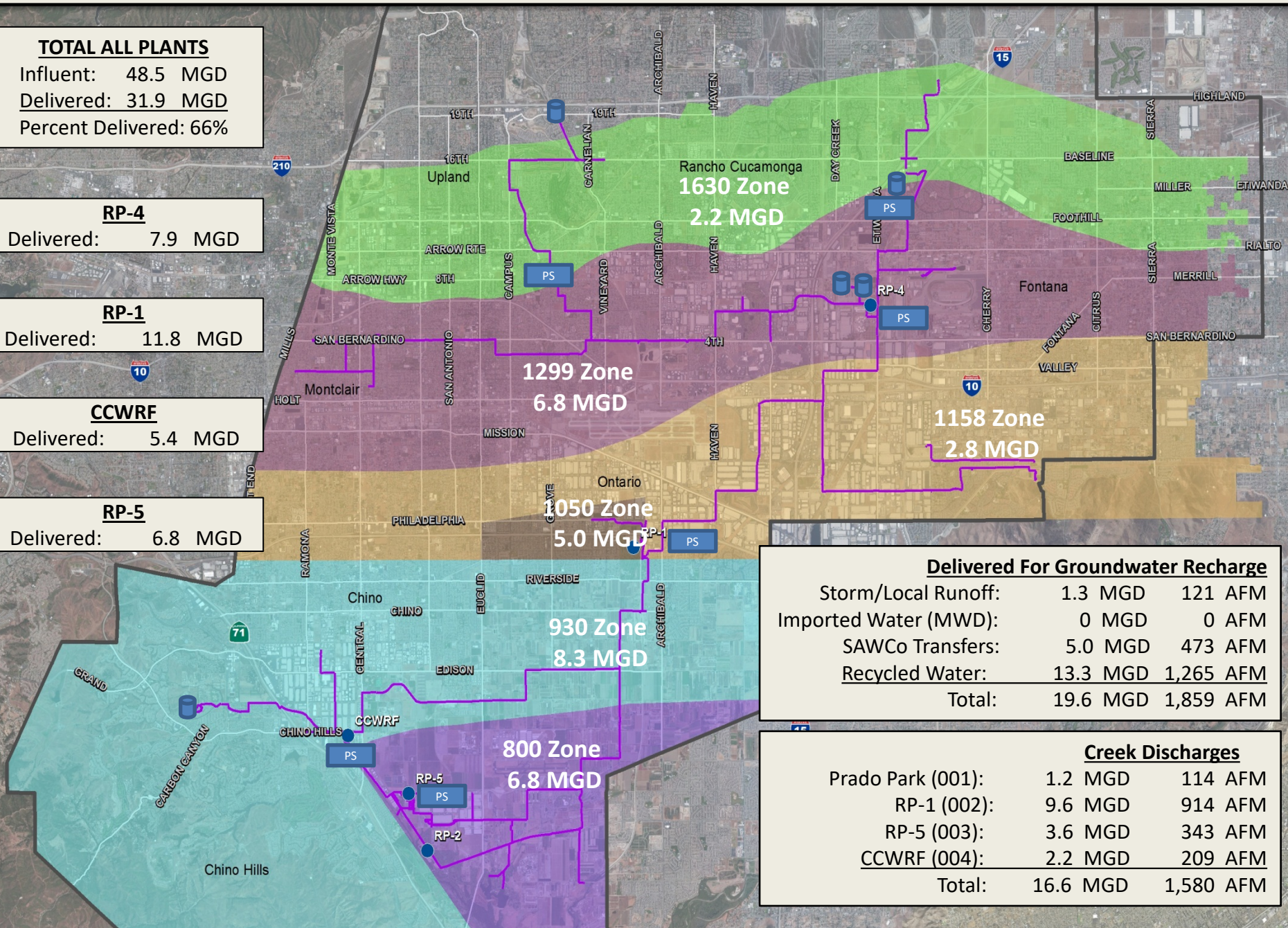
Delivered: 11.8 MGD

## CCWRF

Delivered: 5.4 MGD

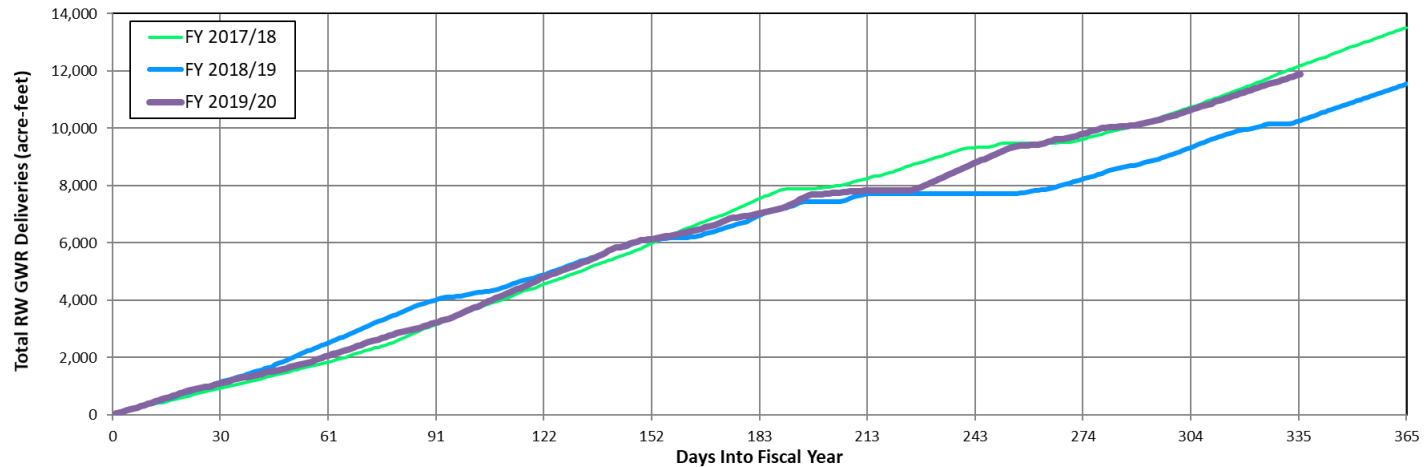
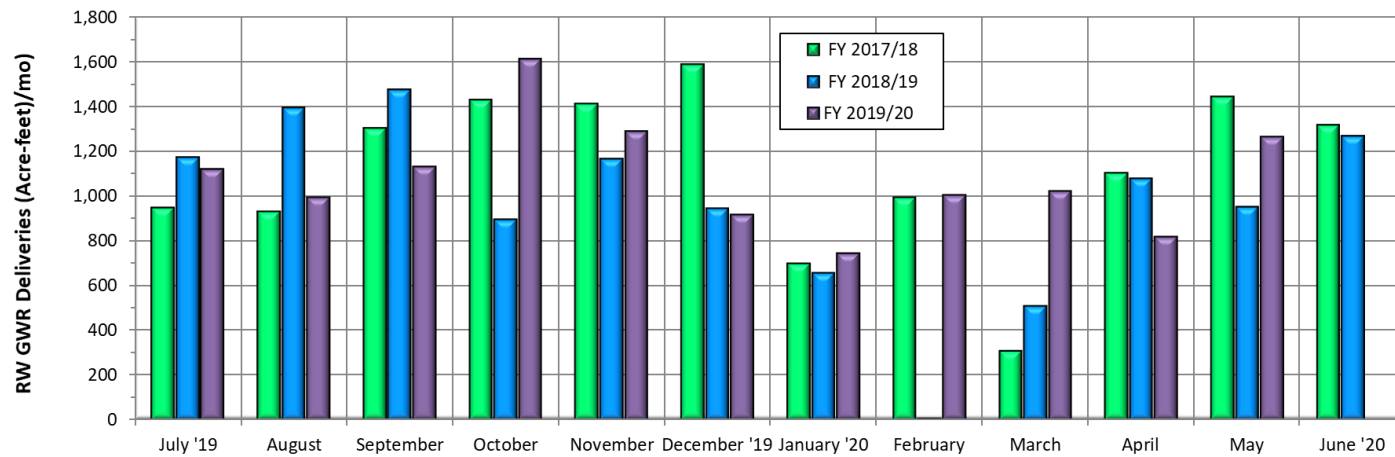
## RP-5

Delivered: 6.8 MGD



**Recycled Water Recharge Deliveries - May 2020 (Acre-Feet)**

Basin	5/1-5/9	5/10-5/17	5/18-5/25	5/26-5/31	Month Actual	FY To Date Actual	Deliveries are draft until reported as final.	
Ely	138.3	113.3	90.2	147.2	489.0	1700		
Banana	0.0	0.0	23.4	13.3	36.7	910		
Hickory	17.2	18.6	24.2	15.1	75.1	372		
Turner 1 & 2	0.0	0.0	0.0	0.0	0.0	199		
Turner 3 & 4	0.0	0.0	0.0	0.0	0.0			
8th Street	36.1	22.0	11.8	17.7	87.5	847		
Brooks	9.3	44.7	21.6	43.3	118.9	825		
RP3	159.4	87.9	64.6	78.0	389.9	5471		
Declez	0.0	0.0	0.0	0.0	0.0	672		
Victoria	7.5	10.0	29.3	22.1	68.9	947		
San Sevaine	0.0	0.0	0.0	0.0	0.0	0		
<b>Total</b>	<b>367.8</b>	<b>296.5</b>	<b>265.0</b>	<b>336.7</b>	<b>1265.9</b>	<b>11,940</b>	<b>10,272</b>	<b>AF previous FY to day actual</b>



## TECHNICAL COMMITTEE ITEMS DISTRIBUTED

**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)

DATE: May 28, 2020

TO: Shivaji Deshmukh  
General Manager

FROM:   
Teresa V. Velarde  
Manager of Internal Audit

**SUBJECT: Recycled Water Revenues Audit**

**Audit Authority**

The Inland Empire Utilities Agency Internal Audit Department (IA) has performed a limited review under the authority given by the Board of Directors (Board), the Fiscal Year 2019/20 Annual Audit Plan and the IA Charter.

**Audit Scope**

This review was limited to evaluating controls and reports over recycled water revenues. The objectives of the Recycled Water Revenues Audit were to:

- Determine if adequate internal controls are in place over revenues
- Determine compliance with the Agency's Ordinances and Resolutions
- Evaluate the collection and recognition of revenue
- Determine whether there are procedures to reconcile revenues collected
- Determine compliance with Agency policies and procedures
- Identify opportunities for improvements

The recycled water revenues review is considered a limited review since audit procedures were limited to reviewing responses to an internal control questionnaire completed by the Planning and Environmental Compliance Department (Planning), reviewing the written procedures in the Engineering and Construction Management Department's (Engineering) Standard Operating Procedure (SOP), analyzing revenues and the related supporting documentation maintained in the Agency's accounting records in SAP and considering responses to e-mailed questions. IA also recently met with Planning representatives and obtained spreadsheets documenting annual reconciliations of recycled water entitlements and of comparisons of recycled water production to the total of amounts billed, creek discharges and ground water recharge. IA did not observe Engineering's current monthly procedures for processing recycled water activity to compare to the department's SOP and IA did not review the reconciliation activity maintained by Planning to any source documents.

***Water Smart - Thinking in Terms of Tomorrow***

Kati Parker  
President

Jasmin A. Hall  
Vice President

Steven J. Elie  
Secretary/Treasurer

Michael E. Camacho  
Director

Paul Hofer  
Director

Shivaji Deshmukh  
General Manager

### **Executive Summary**

Actual recycled water demands/usage are reported to Engineering by the contracting agencies. Using this information, revenues are processed, recorded and collected in the Agency's financial records by the Finance and Accounting Department (FAD). The audit found that the Agency has effective controls in place over collecting recycled water revenues. IA identified opportunities to improve and strengthen processes and controls. The details of IA's observations and recommendations are presented in the report that follows this summary. IA noted:

- Recycled Water Ordinance #63 (dated 1998) establishes procedures for examining contracting agency and retail customer records, including verifying meters and obtaining calibration data. Planning noted that when discrepancies in the amount of recycled water reported by the member agencies have been observed in the past, they have coordinated with Operations to perform inspections/examinations. IA recommends Planning consider whether a formal review and verification of contracting agency records and processes would be beneficial and appropriate as allowed under the Ordinance. This would provide additional assurance of the completeness and accuracy of information provided to the Agency and potentially prevent and/or correct any discrepancies noted. Planning noted that the contracting agencies have been cooperative about providing original documentation when needed for other audits. Planning agreed to consider adopting an oversight/verification process in the future.
- Planning prepares and documents periodic review and reconciliation processes as a tool to compare Agency metered records to information reported by the contracting agencies. IA recommends Planning maintain additional documentation to show that the reconciliations have been properly reviewed by a supervisor and provide clear written descriptions of the reasons for variances, if any, and how they were resolved. The documented reconciliations should be kept on file for future reference to demonstrate oversight over the information obtained from contracting agencies and as a reference tool. IA also makes a "soft recommendation" for Planning to document the reconciliation and review procedures in a departmental Standard Operating Procedure or desk procedure to serve as a guide for staff to follow.
- IA's limited review evaluated Engineering's SOP that describes the process of collecting, collating and reporting the monthly recycled water usage information received from contracting agencies. According to staff, additional aspects of the process have been updated, but contracting agencies still report their usage information in more than one way; each agency may have a different approach to reporting the information. This approach differs from the ways that the Agency obtains information for other types of revenues. For instance, Planning has collaborated with contracting agencies to provide a consistent, automated method for reporting Wastewater Connection Fees on a monthly basis. Another example is Planning's successful collaboration with BIS to automate and simplify the collection and reporting of Water Connection Fees. Similarly, Planning should take



the lead to work with Agency staff and the contracting agencies to develop standardized information reporting of recycled water usage to the Agency. Standardized and automated reports and methods of providing information would create efficiencies and ensure accuracy of the information. Planning agrees that further standardizing and automating the information received from the contracting agencies is an appropriate long-term goal.

- Engineering should update their Standard Operating Procedure (attached Exhibit #1: Work Instruction for Preparing Recycled Water Billing) to provide current detailed step-by-step instructions and contact information for recording and reporting recycled water information received from the member agencies. Engineering plans to update their SOP to use position titles and not individual contacts and to remove tasks that are now obsolete due to newer processes.

### **Acknowledgements**

IA would like to extend our appreciation to Planning, Engineering and FAD staff for their cooperation and assistance during this review.

### **Discussion with Management**

IA provided the results of this review to Christiana Daisy, Executive Manager of Engineering/Assistant General Manager and Sylvie Lee, Manager of Planning and Environmental Resources on April 29, 2020 and received initial responses on May 5, 2020. IA provided a revised draft on May 19, 2020 and obtained additional information and responses on May 26, 2020. Where possible, comments have been incorporated prior to finalizing the report.

If you have any questions or need additional information, please contact me at Extension 1521 or at [tvelarde@ieua.org](mailto:tvelarde@ieua.org).

*The Recycled Water Revenues Audit is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment, and Business Practices by ensuring that IA's evaluations provide recommendations that foster a strong control environment, safeguard assets, promote a safe work environment and assist management in achieving organizational goals and objectives.*

## **Recycled Water Revenues Audit – Limited Review**

### **Background**

The parameters for recycled water (effluent) distribution and use in the Agency's service area were first established in the Regional Sewage Service Contract from 1972 and as subsequently amended. Agency Ordinances #63, 69 and 75 provided further guidelines, incentives and procedures for the expansion of recycled water distribution in the Agency's service area.

The Recycled Water Business Plan (RWBP) was then adopted in December 2007 to maximize the beneficial use of recycled water and develop climate resilient local supplies. The RWBP was updated in 2015 with the Recycled Water Program Strategy (RWPS). The primary objective of the RWPS is to update supply and demand forecasts and prioritize projects to maximize the beneficial use of recycled water throughout the year and through the planning period ending in 2035. Recycled water provides a cost effective and more reliable local water supply and is a key part of the Agency's goal of drought proofing its service area by 2030.

The Agency publishes several reports about Recycled Water each year. These include an annual "Recycled Water Quality Report" and the "Recycled Water Annual Report". Both reports include information about water quality: Effluent monitoring data and water compliance data. According to the Recycled Water Annual Report, the Agency's recycled water revenues have varied from year to year depending on hydrologic conditions and the amount of rainfall in the region.

<b>Description</b>	<b>2014/15</b>	<b>2015/16</b>	<b>2016/17</b>	<b>2017/18</b>	<b>2018/19</b>
Recycled Water – Direct Use	\$6,267,821	\$6,035,896	\$7,681,448	\$9,717,408	\$7,671,217
Ground Water Recharge	\$3,700,343	\$5,353,286	\$6,624,157	\$7,160,349	\$6,230,569
<b>TOTAL REVENUES</b>	<b>\$9,968,164</b>	<b>\$11,389,182</b>	<b>\$14,305,605</b>	<b>\$16,877,757</b>	<b>\$13,901,786</b>

The annual report also provides additional information about customers and historical demands. Some of the data included is:

Direct use and Recharge statistics for the past 10 years:

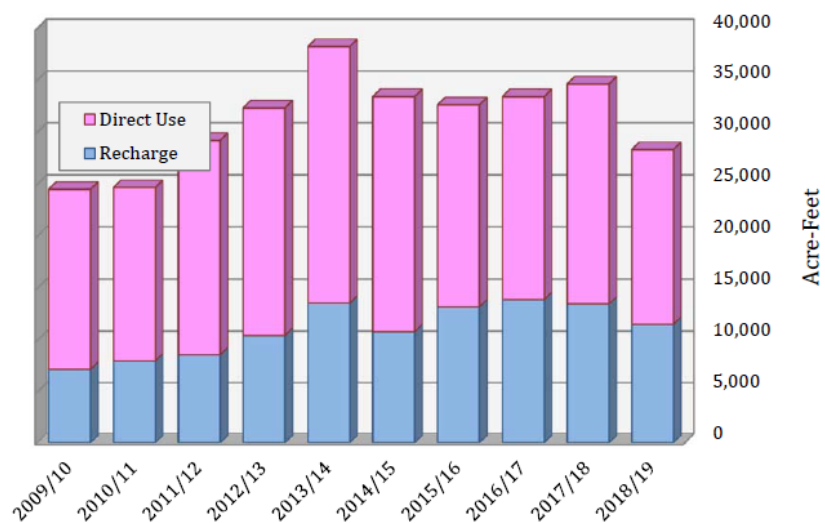


Figure 2 – Historical Recycled Water Direct Use and Groundwater Recharge

Recycled water demand by use type:

**Table 1 – Recycled Water Demand by Use Type for 2018/19**

Type of Use	Demand (AF)	Percent of Demand
Recharge	11,542	41%
Agriculture	5,850	21%
Landscape	9,469	33%
Industrial	1,078	4%
Construction	406	1%
<b>Total Demand</b>	<b>28,345</b>	<b>100%</b>

Recycled water usage by contracting agency:

**Table 2 – Recycled Water Demand by Agency for 2018/19**

Retail Agency	Direct Use (AF)	Recharge Allocation (AF)	Agency Total (AF)
Chino	4,760	1,240	6,000
Chino Hills	1,548	1,018	2,566
CVWD	996	2,837	3,833
Fontana/FWC	143	2,233	2,377
Montclair/MVWD	289	495	784
Ontario	7,511	2,634	10,145
Upland	709	1,084	1,793
IEUA	685	0	685
San Bernardino County	162	0	162
<b>Subtotal</b>	<b>16,803</b>	<b>11,542</b>	<b>28,345</b>

Top 10 customers:

**Table 3 – Top 10 Recycled Water Customers for 2018/19**

Customer	Use (AF)	Type of Use	Retailer
Cleveland Farm	2,203	Agricultural	Ontario
New Indy Ontario	907	Industrial	Ontario
Cal Poly Pomona	875	Agricultural	Chino
Murai Farm	596	Agricultural	Ontario
Whispering Lakes Golf Course	554	Landscape	Ontario
IEUA Headquarters	529	Landscape	IEUA
GH Dairy	485	Agricultural	Ontario
Superior Sod	448	Agricultural	Chino
Weststeyn Dairy	409	Agricultural	Chino
Los Serranos Golf Course	385	Landscape	Chino Hills
<b>Subtotal</b>	<b>7,390</b>		

Recycled Water Rates:

	2015/16		2016/17	2017/18	2018/19	2019/20	2020/21*
<b>Effective Date</b>	7/1/15	10/1/2015	7/1/2016	7/1/2017	7/1/2018	7/1/2019	7/1/2020
Direct Delivery AF Rate	\$290	\$350	\$410	\$470	\$480	\$490	\$500
Recharge Delivery AF Rate	\$335	\$410	\$470	\$530	\$540	\$550	\$560

\*Fee subject to change pending 2019 rate study results

Because of the amount and variety of information collected about Recycled Water revenues, the Agency can spot trends, missing information and other anomalies.

### **Process**

IA obtained an understanding from FAD about the method and process for recording recycled water revenues for direct use. Additionally, IA reviewed the responses received by Planning staff to the Internal Control Questionnaire, followed up with e-mailed questions and most recently met with Planning staff on May 26, 2020. The recycled water revenue recognition process has multiple steps:

1. The process is initiated when Engineering staff receive monthly recycled water usage information from the contracting agencies. Each contracting agency reports their monthly usage with an e-mail (although some contracting agencies utilize a bi-monthly billing cycle). The information is provided to the Agency on the "honor system", meaning that there is no information available to independently verify the individual contracting agency's reports. Some agencies provide reports with beginning and ending meter usage readings and others report only monthly usage per meter without providing beginning and ending meter readings.
2. Engineering staff creates a monthly summary report of contracting agency reported recycled water usage and Operations reported recycled water recharge usage. This report is forwarded by e-mail to FAD staff for billing purposes each month.
3. Engineering staff also maintain and update a Recycled Water Database each month from the information submitted by the contracting agencies and Operations. This provides information to track recycled water usage and to update the Agency's GIS system and facilitate future statistical analysis.
4. Based on the information received from Engineering, accounts receivable staff in FAD prepare a billing to each of the contracting agencies which is sent to each contracting agency by e-mail and regular mail. This entry credits the revenues to the recycled water fund and debits accounts receivable from each contracting agency.
5. Contracting agencies can remit their payments electronically directly to the Agency's bank account or by check. Checks are received and logged at the Agency's front desk which provides segregation of duties. When FAD is made aware of a check being received at the front desk, one of the General Ledger accountants collects the check, prepares the deposit slip and makes the accounting entry to clear the receivable and recognize the cash receipt.
6. The deposit slip is reviewed and approved by a FAD supervisor. The deposit is then scanned, and an online deposit is made to the Agency's main bank account.
7. The bank accounts are reconciled monthly.

## **Evaluation**

In order to evaluate the recycled water process, IA performed the following steps:

1. Reviewed the Agency's Ordinances that govern Recycled Water activities:
  - *Ordinance #63: "Regulating the availability and use of recycled water; approved February 18, 1998:* This Ordinance establishes the rules and regulations for wholesale and retail recycled water distribution. The Ordinance also establishes the regulations for oversight and inspection of resale agencies and direct retail recycled water users.

Inspection and entry authorization of indirect and resale recycled water users includes:

### SECTION 111 - INSPECTION AND ENTRY

- (A) The District, the RWQCB and/or DOHS shall be authorized at any reasonable time and/or hours of operations to enter the Premises of all Indirect Recycled Water Users or Resale Agency to determine compliance with all applicable requirements, to inspect the Districts facilities and monitoring equipment, and/or take photographs. Reasonable hours shall include hours when irrigation is occurring. Such inspection shall also include the right to inspect and copy records required to be maintained by the Indirect Recycled Water User under Federal, State, local or Recycled Water Use Permit requirements. The District shall provide a 24-hour notice to the Resale Agency and the Indirect Recycled Water User prior to inspection.
- (B) Inspection may include every facility that is directly or indirectly involved with the use of recycled water as determined by the District, and the respective Indirect Recycled Water User and/or Resale Agency. Authorized personnel of the District shall be provided immediate access to all of the above facilities at reasonable times and/or hours of operation. No Person shall interfere with, delay, resist or refuse entrance to authorized District's personnel attempting to inspect any facility involved directly or indirectly with the use of recycled water.

Inspection and entry authorization of direct recycled water users includes:

### SECTION 212 - DUTY TO PROVIDE INFORMATION

The Direct Recycled Water User shall furnish to the District, within a reasonable time, any documents or records maintained by the Direct Recycled Water User which may be requested to determine whether cause exists for modifying, revoking, reissuing, or to determine compliance with the Recycled Water User Permit. The Direct Recycled Water User shall also furnish to the Chief Executive Officer/General Manager upon request, copies of records required to be kept by the Direct Recycled Water User.

### SECTION 213 - INSPECTION AND ENTRY

- (A) The District, the RWQCB and/or DOHS shall be authorized at any reasonable time and/or hours of operation to enter the Premises of all Direct Recycled Water Users to determine compliance with all applicable requirements, to inspect the Districts facilities and monitoring equipment, and/or take photographs. Reasonable hours shall include hours when irrigation is occurring. Such inspection shall also include the right to inspect and copy records required to be maintained by the Direct Recycled Water User under Federal, State, local or Recycled Water Use Permit requirements.
- (B) Inspection may include every facility that is directly or indirectly involved with the use of recycled water as determined by the District, and the respective Direct Recycled Water User. Authorized personnel of the District shall be provided immediate access to all of the above facilities at reasonable times and/or hours of operation. No Person shall interfere with, delay, resist or refuse entrance to authorized District's personnel attempting to inspect any facility involved directly or indirectly with the use of recycled water.



- *Ordinance #69: "Regulating the availability and use of recycled water; approved May 18, 2000:* This Ordinance establishes billing procedures to retail agencies and customers supplied directly by IEUA (customers whose property falls outside a retail agency's service area).
  - *Ordinance #69: "Establishing incentives and encouraging the use of recycled water; approved May 15, 2002:* This Ordinance provides for using recycled water in new development where possible and provides for reviewing parcels in the service area for suitability for mandatory use of recycled water and provides for surcharges for failure to use recycled water.
2. Performed a walkthrough of the steps in the Recycled Water revenue recognition process.
  3. Reviewed Engineering's Standard Operating Procedure (and the attached Exhibit #1: Work Instruction for Preparing Recycled Water Billing) that provides detailed step-by-step instructions and contact information for recording and reporting recycled water information received from the contracting agencies. IA did not observe Engineering's current monthly procedures for processing recycled water activity to compare to the department's SOP.
  4. Obtained and reviewed information and responses from Planning to questions included in an IA prepared "Internal Control Questionnaire":
    - Responses received April 13, 2020
    - Additional comments provided to first draft audit report, dated May 5, 2020
    - Additional comments received, examples of reconciliations provided and meeting with Planning staff on May 26, 2020
  5. Compared the pdf, excel, e-mail and other information provided by Engineering to the financial information in SAP and the financial statements and to the annual Recycled Water Annual Report.
  6. Analyzed the information to ensure consistency in the various Agency documents.

### **Summary of Results**

Based on the steps performed by IA, the limited review found that the Agency has effective controls in place over collecting recycled water revenues. IA's review identified opportunities to improve and strengthen processes and controls to ensure information received is verified for accuracy of reporting and recording revenues.

### **Contracting Agency Reporting**

The Agency relies on the "honor system" for reporting recycled water revenue by the contracting agencies to IEUA. The information is reported in various e-mail reports by the contracting agencies. Currently, there is no verification or cross check done by IEUA staff

to verify that what is reported by the contracting agencies is accurate; for example, requesting additional supporting information. Further, the Agency is not provided meter readings, logs, or other reports to support/validate the totals reported to IEUA. According to Planning staff, if the monthly recycled water usage is within historic trends, no further monitoring is done by staff. If individual months are not within historic trends, Engineering works with the contracting agency to confirm the accuracy of abnormal reading deviations. Planning staff also performs a review of the overall results reported by the member agencies annually and compares these to the Agency's own metered distribution information. The review is documented in Planning's files and involves tracking total annual contracting agency reported recycled water direct use data and comparing this to the Agency's total recycled water production data. This is stored in an internal spreadsheet and according to Planning, staff has averaged an approximate 3% difference with the Agency's metered data over the last 10 years. IA has not validated this data as part of this limited review and IA is available to review if the evaluation is requested. Without redundant meters at major recycled water distribution connection points, the Agency does not have the means to more formally review/compare/verify the data. If there are deviations from industry standard for meter accuracy (+/- 5 – 10%), Planning described a process that is initiated to work with Operations and member agencies to identify the sources of variation and work to a resolution.

*Planning staff suggested to IA (in the initial Internal Control Questionnaire responses) that a review of how member agencies are collecting and reporting recycled water usage - including how often their meters are checked, maintained, and calibrated would provide additional assurance about the reliability of the information received from the member agencies. IA supports Planning and reinforces their suggestion with a recommendation in this report. IA has performed similar evaluations as part of the periodic EDU audits performed to validate wastewater connection fees and monthly sewerage charges. IA agrees with Planning staff that a validation would provide additional assurance.*

Several of IEUA's other revenue sources also rely on information provided by the Agency's contracting agencies on the "honor system" with no additional supporting documentation. These include Wastewater Connection Fees and Monthly Sewerage Fees. Recycled water revenues are similarly dependent on information provided by the member agencies. The Agency's recycled water Ordinance #63 has specific provisions for inspecting and validating information provided by member agencies and by individual retail customers.

To verify Wastewater Connection Fees and Monthly Sewerage Fees, the Agency has performed "EDU audits" every few years that include reviewing and testing records and processes at the individual contracting agencies to ensure completeness of information provided to the Agency.

**RECOMMENDATION #1:**

***IA recommends implementing a process to review and verify recycled water records and processes (including how meters are checked, maintained and calibrated) at the individual contracting agencies to ensure completeness and***

***accuracy of information provided to the Agency as provided in Agency Ordinance #63. An internal or external audit and/or review of contracting agency reporting of recycled water would provide an independent analysis of the information received from the contracting agencies to verify the data reported to the Agency. At a minimum, Planning staff should request additional supporting documentation from the contracting agencies periodically, to verify the information reported. This would potentially prevent, detect and/or correct any discrepancies to minimize any potential risk of error in reporting.***

*DEPARTMENT RESPONSE: The Metropolitan Water District (MWD) has performed occasional audits over the years in connection with their incentive programs and in other instances. The Agency has served as MWD's contact point and the contracting agencies (resale agencies) have been cooperative about providing original documentation when needed. Although Planning is aware that the Agency's Ordinance #63 allows for periodic audits and inspection of "resale agencies" Planning has determined that there is no need at this time for additional verification and is currently focusing on higher priority recycled water issues. At a future date, Planning will consider adopting an oversight control that provides for obtaining calibration and other supporting information from the resale agencies from time to time.*

#### *Reconciliations*

Planning has noted that there is an annual overall review of recycled water distribution reported by contracting agencies as compared to the Agency's own internal reports of recycled water production as well as an annual reconciliation of contracting agency reported usage to their recycled water entitlements.

*According to Planning staff, the Agency knows how much recycled water is produced from each of the plants, sent to each pressure zone, and discharged to the Santa Ana River, however specific contracting agency use is self-reported and there are no checks in place to determine accuracy of their readings other than the annual data review. The installation of redundant meters at major member agency connection points would minimize risks of unintentional under-reporting but has been found to be cost-prohibitive. Overall annual recycled water use reported by the Agency in its annual permit reports is compared to the annual billings to ensure that the discrepancies, if observed, are within industry standards.*

***Planning comment and suggestion:*** *An annual reconciliation process was collaboratively developed with the contracting agencies. The final annual recycled water use data is reviewed and confirmed with the contracting agencies before a final adjustment bill is issued. This process occurs within 90 days after the close of the fiscal year and involves Engineering, Operations, Planning, and Accounting. This process is formal and allows the Chino Basin Watermaster to finalize an annual assessment package which reports each stakeholder's recycled water use and quantities recharged/drawn.*

*Engineering also performs a comparison between reported recycled water use data and historical reported recycled water use data each month and Planning compares total reported recycled water use (external data) to total reported recycled water production (internal data reported for regulatory compliance) each year. Discrepancies in the monthly data are checked with the member agencies. Discrepancies in the annual metered data is logged for tracking purposes and thus far has averaged an approximate 3% difference with the Agency's metered data over the last 10 years.*

IA agrees with the steps being taken to compare and reconcile recycled water use data for accuracy. IA's recommendation is intended to ensure a complete, documented record of these steps is maintained and to support staff's suggestion.

Based on responses received from Planning and this evaluation, IA understands that Planning prepares and documents periodic review and reconciliation processes that are complete and well-documented. Based on IA's evaluation of the information provided, IA provides the following "soft recommendation":

***RECOMMENDATION #2 (soft recommendation):***

***IA suggests that Planning staff maintain additional documentation that shows that the reconciliations have been properly reviewed by a supervisor and provide clear written descriptions of the reasons for any variances and how they were resolved. These should be kept on file for future reference to ensure oversight over the information obtained from the contracting agencies. Additionally, Planning should consider documenting the review/reconciliation procedures in a departmental SOP or desk procedure to serve as a guide for staff.***

*DEPARTMENT RESPONSE: Planning prepares an annual reconciliation of recycled water entitlements that compares the total available recycled water entitlement for each contracting agency based on their total purchased Equivalent Dwelling Units (EDU's) to the amount of recycled water billed to their retail customers plus their total Groundwater Recharge (GWR) amounts. This entitlement reconciliation serves as the basis for determining any "entitlement exceedance" which is used to determine the annual GWR adjustment allocation credit to contracting agencies with surplus entitlement.*

*The Department also performs a comparison of recycled water production from the Agency's treatment plants to the total amounts used by the contracting agencies, the Agency and San Bernardino County as well as for GWR and the amount of creek discharge. The Department ensures that these differences are limited to a 3% to 5% average variance attributable to water meter accuracy limitations and other natural phenomena. Additionally, Planning works with Operations to investigate any discrepancies exceeding the 5% average variance threshold, should there be any.*

Tracking and Billing

As a wholesaler, the Agency relies on its contracting agencies to self-report recycled water usage to the Agency Engineering Department's "water-data email list" on a monthly basis, the contracting agencies have some differences in the methods with which data is reported:

**Report beginning and ending usage meter readings:** Planning reported that Cucamonga Valley Water District (CVWD), The Fontana Water Company, Monte Vista Water District (MVWD) and the City of Upland each report beginning and ending usage meter readings. With this information, IEUA staff can review prior reports to check that the new beginning balance matches the ending balance from the prior period.

**Report monthly usage:** The Cities of Ontario, Chino, and Chino Hills report only monthly usage per meter and do not submit beginning and ending usage readings. With this information, IEUA staff cannot verify beginning balance to ending balance to verify total meter reading amounts.

Additionally, the Agency's Operations Department reports the amount of recycled water that was recharged at the region's basins each month.

Engineering collects the data from the contracting agencies and from Operations and organizes it into a recycled water database and billing spreadsheet to be sent to FAD for billing purposes. After the billing spreadsheet is sent to FAD, a file with all active meters is sent to GIS where it is coded and placed on the recycled water GIS map. Lastly, the BIS dashboard/application is updated with the new usage data.

Because each contracting agency maintains their own billing system (including some contracting agencies that bill on a bi-monthly basis), the format of what they extract to submit to the Agency depends on their individual systems. The multiple methods used to e-mail reports of recycled water usage to Engineering cause Engineering staff to "cut and paste" the relevant information from their e-mail submittals and then input the information into a standardized format which is then uploaded into the RW database, resulting in multiple e-mails and documents saved on the Agency's server every month. Additional manual processes are then performed by Accounting to create the bills that are sent back to the contracting agencies each month.

In contrast, IA notes that the monthly wastewater connection fee submissions from the contracting agencies to Planning are now all submitted on a standard format and multiple, redundant data entry and "cutting and pasting" has been eliminated.

Planning stated Engineering has previously attempted to standardize the way data is reported to the Agency. This has resulted in complaints from the contracting agencies claiming this results in an undue training burden to contracting agency staff. Additionally, much like the monthly sewerage information that the Agency requests from contracting agencies, recycled water meter information is collected differently by different contracting agencies, including every two months by some agencies. Having to report information

that is not consistent with their current billing processes has caused discussion and issues with contracting agencies about the Agency's monthly billing methodology.

Although Engineering and FAD staff provide reliable information and billings, the potential exists for errors as a result of the way the information must be processed. After the 2015 EDU audit, the Planning department streamlined contracting agency reporting of monthly wastewater connection fees and created additional automation in the way the fees are reported to the Agency. Planning has also successfully collaborated with BIS to automate and simplify the collection and reporting of Water Connection Fees to eliminate redundant data entry. In both cases the Agency's workload has been reduced and the accuracy of the information enhanced.

**RECOMMENDATION #3:**

***Planning should take the lead to work together with Agency staff and the contracting agencies to develop standardized information reporting. Standardized and automated reports and methods of providing information would create efficiencies, make the process consistent and ensure accuracy.***

*DEPARTMENT RESPONSE: Planning and Engineering have made attempts to automate the reporting of recycled water billings from the contracting agencies in the same way that Planning successfully standardized and automated the Building Activity Reports and the Water Connection Fees billings. However, due to differences between the way each of the seven contracting agencies maintains their own records, it is not practical to create a reporting tool that is acceptable for all the contracting agencies to use at this time. Instead, the Department has worked with Engineering and the Agency's own Business Information Systems Department to develop greater quality control when monthly usage information is received from the contracting agencies. Engineering is able to process and upload the information into the Recycled Water Database.*

*Planning agrees that further standardizing and automating the information received from the contracting agencies is appropriate and will work towards this as a long-term goal.*

**Standard Operating Procedure (SOP) and Exhibit #1: Work Instruction for Preparing Recycled Water Billing**

In 2015 Engineering staff developed SOP #79 to document the steps involved in collecting and reporting recycled water usage. The SOP provides an outline of the different steps in the process and who has responsibility for them. Exhibit #1 of the SOP provides comprehensive and detailed step-by-step "work instructions" to perform the monthly information collection.

Since this valuable information was documented some of it has become obsolete as contact information and roles have changed. IA was also informed that some additional automation of processes has occurred.

Having up-to-date information is important to ensure job continuity and to provide cross-training resources. Therefore, IA suggests that the Engineering staff update SOP #79 and the related work instructions.

**RECOMMENDATION #4:**

***Engineering should update the Standard Operating Procedure and attached Exhibit #1: Work Instruction for Preparing Recycled Water Billing (last updated in 2015) to provide current detailed instructions and information for recording and reporting the recycled water information received from the contracting agencies.***

***Engineering response:*** *The 2015 SOP will be updated to use position and not individual contacts and to remove tasks that are now obsolete.*

**Overall Conclusion**

Based on the results of recycled water revenues audit overall the Agency provides effective oversight of the program. IA provides recommendations to enhance controls and processes and to support Planning's suggestions.

IA is available to discuss or perform additional audit procedures, if requested. Please contact Internal Audit for additional information or questions.