

# **NOTICE OF MEETING**

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**OF THE  
REGULAR REGIONAL SEWERAGE PROGRAM  
TECHNICAL COMMITTEE MEETING**

**OF THE**



**WILL BE HELD ON  
THURSDAY, APRIL 26, 2018  
2:00 P.M.**

**AT THE OFFICE OF THE AGENCY  
BOARDROOM  
6075 KIMBALL AVENUE  
CHINO, CA 91710**



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

### **AGENDA**

**Thursday, April 26, 2018**

**2:00 p.m.**

#### **Location**

Inland Empire Utilities Agency  
Boardroom  
6075 Kimball Avenue  
Chino, CA 91708

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

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

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

- A. Approval of the March 29, 2018 Meeting Minutes
- B. FY 2018/19 Ten Year Capital Improvement Plan

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

- A. Regional Pretreatment Program Local Limits Adoption
- B. Sewer Fee Evaluation
- C. FY 2018/19 Regional Programs Budget Review
- D. Engineering & Construction Project Updates
- E. Technical Committee Chair Rotation
- F. Regional Contract Update (Oral)

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

- A. Draft Regional Policy Committee Agenda
- B. Building Activity Report
- C. Recycled Water Distribution - Operations Summary
- D. Legislative Update

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

- A. Napa Project Response on CSI/Speedway Recycled Water

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

- A. IEUA General Manager's Update
- B. Committee Member Requested Agenda Items for Next Meeting
- C. Committee Member Comments
- D. Next Workshop Meeting – May 31, 2018 at 2:00pm

##### **6. Adjournment**

## DECLARATION OF POSTING

I, Laura Mantilla, Executive Assistant of the Inland Empire Utilities Agency, A Municipal Water District, hereby certify that a copy of this agenda has been posted to the IEUA Website at [www.ieua.org](http://www.ieua.org) and posted in the foyer at the Agency's main office at 6075 Kimball Avenue, Building A, Chino, CA, on Monday, April 23, 2018.

  
Laura Mantilla

Laura Mantilla

**ACTION  
ITEM**

**1A**



## **Special Regional Sewerage Program Workshop and Technical Committee Meeting MINUTES OF MARCH 29, 2018**

### **CALL TO ORDER**

A special workshop and regular meeting of the IEUA/Regional Sewerage Program – Technical Committee were held on Thursday, March 29, 2018, at the Inland Empire Utilities Agency located at 6075 Kimball Avenue, Chino, California. Committee Chairman Chuck Hays called the meeting to order at 12:12 p.m.

### **ATTENDANCE**

#### **Committee Members:**

|                           |                                 |
|---------------------------|---------------------------------|
| Dave Crosley              | City of Chino                   |
| Ron Craig (Alternate)     | City of Chino Hills             |
| John Bosler               | Cucamonga Valley Water District |
| Chuck Hays                | City of Fontana                 |
| Mike Hudson               | City of Montclair               |
| Katie Glenger (Alternate) | City of Ontario                 |
| Rosemary Hoerning         | City of Upland                  |
| Halla Razak               | Inland Empire Utilities Agency  |

#### **Others Present:**

|                    |                                 |
|--------------------|---------------------------------|
| Amanda Coker       | City of Chino                   |
| Eduardo Espinoza   | Cucamonga Valley Water District |
| Braden Yu          | Cucamonga Valley Water District |
| Tony Mata          | City of Fontana                 |
| Nicole deMoet      | City of Montclair               |
| Brent Caldwell     | Caldwell Land Solutions         |
| Pierce Rossum      | Carollo Engineering             |
| Toby Weissert      | Carollo Engineering             |
| Graham Juby        | Carollo Engineering             |
| Chris Berch        | Inland Empire Utilities Agency  |
| Randy Lee          | Inland Empire Utilities Agency  |
| Christina Valencia | Inland Empire Utilities Agency  |
| Sylvie Lee         | Inland Empire Utilities Agency  |
| Laura Mantilla     | Inland Empire Utilities Agency  |
| Shaun Stone        | Inland Empire Utilities Agency  |
| Craig Proctor      | Inland Empire Utilities Agency  |
| Ken Tam            | Inland Empire Utilities Agency  |

**ADDITIONS/CHANGES TO THE AGENDA**

There were none.

**1. CAROLLO SEWER FEE EVALUATION WORKSHOP**

Craig Proctor introduced Pierce Rossum from Carollo Engineering. Mr. Rossum gave a presentation on the Equivalent Dwelling Unit (EDU) Evaluation Analysis. He discussed the following: Changes in flows and loads; Connection Fees vs. Monthly Billings; Water Consumption Data; Revised EDU Equation; Results based on the proposed Updated EDU Equation (changing Multi Family Residential to 0.7 from 1.0 EDU). Mr. Rossum asked the Committee if they would feel comfortable changing the flow gpd/EDU from 270 to 180. Discussions ensued, and no consensus was made on changing the formula.

Mr. Proctor stated that a handout was provided and emailed to the Committee. He reported that the commercial component with fixture count has not been completed by Carollo. Mr. Proctor asked the Committee which option they would prefer with the sewer connection fee study path forward from the following three options: (1) Continue study with Carollo; (2) IEUA and Technical Committee (TC) working group; or (3) Carollo is retained and IEUA and TC Working Group Directs. After a lengthy discussion the Committee was in consensus with Option 3 – Carollo is to be continued to be retained with IEUA and TC working group directing the work and with a six-month delay. Chris Berch asked the Committee to let Mr. Proctor know their comments from today's presentation. IEUA will work with Carollo on obtaining a timeline, scope of work and cost of study. Halla Razak added that Mr. Proctor inquire on when the statewide study will be finished. Rosemary Hoerning and Katie Gienger requested that IEUA provide an update on the statewide study in a future meeting.

**2. ACTION ITEMS****A. APPROVAL OF THE MINUTES OF NOVEMBER 30, 2017, JANUARY 18, AND FEBRUARY 22, 2018 MEETING MINUTES**

**Motion:** By Halla Razak/Inland Empire Utilities Agency and seconded by Ron Craig/City of Chino Hills to approve the minutes of the November 30, 2017, January 18, 2018, and February 22, 2018 Technical Committee meeting minutes.

**Motion carried:** Unanimously, with Mike Hudson/City of Montclair abstaining on the November and January meeting minutes and Katie Gienger/City of Ontario abstaining on the November 30, 2017 meeting minutes.

Mr. Hays stated if there is no objection, he would like to move Action Item C – City of Ontario Regional Connection Request to Item B. There was no objection.

**B. CITY OF ONTARIO REGIONAL CONNECTION REQUEST**

**Motion:** By Mike Hudson/City of Montclair and seconded by Chuck Hays/City of Fontana to approve the request by the City of Ontario for one new connection point to the regional System (Ontario Regional Sewer Connection (#O-97)).

**Motion carried:** Unanimously.

**C. NAPA LATERAL DESIGN BUILD CONTRACT AWARD**

Shaun Stone/IEUA gave a presentation on the Napa Lateral Design Build Contract Award project. He stated that the project is located in the City of Fontana. He reviewed the project background stating that IEUA coordinated with the City of Fontana, Fontana Water Company, California Steel Industries (CSI) and Auto Club Speedway to provide recycled water for delivery to CSI and Speedway for industrial and irrigation use. Mr. Stone reported that in April 2016, IEUA submitted a Prop 1 Application and received notification from the State Water Resources Control Board in November 2017 for financial assistance of funding.

The project consists of the design and construction of 10,000 linear feet of 12", 16", and 24" pipelines at Napa Street and San Bernardino Avenue. On December 13, 2017 a request for bids was advertised to the prequalified contractors. On March 15, 2018, four bids were received with Ferreira Construction Company being the lowest responsive and responsible bidder in the amount of \$5,332,122, slightly below engineers estimate. Mr. Stone stated that they went through the bid with Ferreira Construction Company and they have the required experience having performed similar projects.

Mr. Stone reviewed the project cost and schedule. The total project budget is slightly over \$6 million. CSI and Speedway are funding partners to the project and IEUA will also receive a principal forgiveness grant for \$2.5 million. Chris Berch explained the history of the agreements between the parties, discussed cost recovery fees, and terms. A lengthy discussion ensued. Ms. Gienger requested that IEUA make a commitment that third party service agreements come through TAC; Ms. Razak responded yes, IEUA will make the commitment.

**Motion:** By Katie Gienger/City of Ontario and seconded by Ron Craig/City of Chino Hills to recommend to the IEUA Board of Directors to award the design-build contract for Napa Lateral to Ferreira Construction Company in the amount of \$5,332,122, and that it be noted that the TAC is approving of IEUA sale of excess recycled water to the customers if available after base entitlement use.

**Motion carried:** Unanimously.

**3. INFORMATIONAL ITEMS****A. FY 2018/19 TEN YEAR CAPITAL IMPROVEMENT PLAN (TYCIP)**

Elizabeth Hurst/IEUA presented on the FY 2018/19 TYCIP. Ms. Hurst stated that the key drivers are: member agency growth projections, current wastewater influent flows and concentrations and master planning documents. The new Equivalent Dwelling Unit (EDU) forecast is based on the data received from the Member Agencies totaling approximately 56,000 EDUs over the ten-year period. Ms. Hurst reported that wastewater flow projections show an increase from 50 MGD in 2017/18 to about 61 MGD in FY 2027/28 based on the Member Agency EDU projections.

Ms. Hurst reviewed the TYCIP planning window for the following projects: RP-1 Liquids Capacity Recovery and Solids Treatment Expansion, RP-5 Liquid Treatment Expansion and Solids Treatment Facility and noted that RP-2 Decommission is outside the TYCIP window. Ms. Hurst stated that the TYCIP budget is similar to FY 17/18, which was \$717 million compared to \$716 million for FY 18/19.

Ms. Hurst stated that the project for RP-1 was pushed outside the ten-year window due to some optimization of the existing program. She also mentioned that asset repair and replacement program for all systems are now included within the TYCIP and will continue to be a bigger part of the program as assets require additional rehabilitation and replacement. She asked the Committee to provide her with comments by April 16.

**4. RECEIVE AND FILE**

**A. DRAFT REGIONAL POLICY COMMITTEE AGENDA**

The draft Regional Policy Committee Agenda was received and filed by the Committee.

**B. BUILDING ACTIVITY REPORT**

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

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

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

**D. PRETREATMENT MEETING MINUTES**

The Pretreatment Meeting Minutes were received and filed by the Committee.

**E. LEGISLATIVE UPDATE**

The Legislative Update was received and filed by the Committee

**5. PREVIOUS TECHNICAL COMMITTEE ITEMS REQUESTED**

None

**6. OTHER BUSINESS**

**A. IEUA GENERAL MANAGER'S UPDATE**

- Ms. Razak reminded the Committee that a Technical Committee Workshop is scheduled on April 11, with Kearns & West on the Regional Contract Negotiations. The Policy Committee members were also welcomed to join the workshop.
- Ms. Razak updated the Committee on Senate Bill 831 which bans additional connection fees added to ADUs also known as granny flats. She stated that CSDA, ACWA and CASA have voted against this bill (handout was provided and attached).

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

Ms. Gienger requested a summary on the development of the agreements that led to the recycled water pipeline action item. Mr. Berch will email the information to the Committee.

**C. COMMITTEE MEMBER COMMENTS**

None.

**D. NEXT MEETING – APRIL 26, 2018**

**7. ADJOURNMENT – The meeting adjourned at 2:32 p.m.**



Transcribed  
by:

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Laura Mantilla



California Special  
Districts Association  
*Districts Stronger Together*

A PROUD CALIFORNIA SPECIAL DISTRICTS ALLIANCE PARTNER

# e-News



## New Bill Would Ban Local Fees on Accessory Dwellings

Senator Bob Wieckowski (D-Fremont) recently introduced [Senate Bill 831](#) to ban all fees placed by local agencies, including special districts, on accessory dwelling units (ADUs). ADUs, also

known as “granny flats”, are secondary housing units built on an existing lot. Historically, ADUs are built to accommodate additional family on the grounds of a traditional single-family home. Some suggest ADUs place burdens on limited community resources like parking, roads, parks, and public safety services, while other suggest they may be part of the solution to California’s growing housing demand.

SB 831 would eliminate all fees charged by a local agency, school district, special district, or water corporation for an ADU. These one-time fees are paid by developers to local agencies to account for the cost of installing water and sewer connections, impact on the capacity of the local water systems, as well as impacts on the usage of local parks, fire station services, and other public services that will be used by the new residents.

Under the legislation, local agencies would still be required to provide services to new ADU developments, but would be prohibited from collecting reimbursement. This proposed statutory prohibition would conflict with the proportionality requirements of Proposition 218 in the State Constitution. Proposition 218 prohibits local agencies from imposing assessments that exceed the reasonable cost of service to a specific parcel. This means that local agencies are Constitutionally precluded from passing along the impact costs of an ADU to the whole system by simply raising rates on other users. How local agencies will pay for services provided to ADUs under SB 831 is unclear.

CSDA will consider its formal position on SB 831 at its March 2 Legislative Committee meeting. If you have any questions or comments on SB 831, please contact Rylan Gervase at [rylang@csla.net](mailto:rylang@csla.net).

**ACTION  
ITEM**

**1<sup>B</sup>B**

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Date: April 26, 2018/May 3, 2018

To: Regional Committees

From: Inland Empire Utilities Agency *HLR*

Subject: Fiscal Year 2018/19-2027/28 Ten Year Capital Improvement Plan Adoption

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### **RECOMMENDATION**

It is requested that the Regional Committees recommend the IEUA Board of Directors adopt the Fiscal Year 2018/19-2027/28 Ten Year Capital Improvement Plan.

### **BACKGROUND**

Each year the Inland Empire Utilities Agency submits a ten year forecast of capacity demands and capital projects called the Ten Year Capital Improvement Plan (TYCIP) to the Regional Technical and Policy Committees. The current TYCIP identifies projects for the fiscal years of 2018/19 through 2027/28 and includes new equivalent dwelling unit forecasts for wastewater connections, wastewater strength and flow forecasts, a description of planned capital projects, including any necessary facility expansions, major asset replacement and rehabilitation, and major capital equipment purchases.

Although the TYCIP is a planning level document, it is instrumental for budget discussions; total project budgets for the ten year period are consistent with the Fiscal Year 2017/18 Adopted Biennial Budget. Major projects in the TYCIP include: construction of wastewater solids handling facility and expansion of liquids treatment at Regional Water Recycling Facility No. 5; asset management projects at Carbon Canyon Wastewater Recycling Facility, Regional Water Recycling Facility No. 4, and throughout the regional sewer system; and groundwater basin improvements per the 2013 Recharge Master Plan Update. A summary of the ten year capital project costs by fund is summarized below.

| Fund Description                                    | Fiscal Year 2018/19-2027/28 Total |
|---|-----------------------------------|
| Administrative Services                             | \$13.5 M                          |
| Non-Reclaimable Wastewater Fund                     | \$18.1 M                          |
| Regional Capital Wastewater Improvement Fund        | \$472.5 M                         |
| Regional Wastewater Operations and Maintenance Fund | \$89.1 M                          |
| Recharge Water Fund                                 | \$27.3 M                          |
| Recycled Water Fund                                 | \$95.0 M                          |
| <b>TOTAL</b>  | <b>\$715.5 M</b>                  |

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

# Fiscal Year 18/19 Ten Year Capital Improvement Plan



# Key Drivers of the Fiscal Year 18/19 Ten Year Capital Improvement Plan

- Member Agency growth projections
- Current wastewater influent flows and concentrations
- Contributing Documents:
  - 2013 Recharge Master Plan Update
  - 2015 Wastewater Facilities Master Plan Update
  - 2015 Recycled Water Program Strategy Update
  - 2015 Energy Management Plan
  - 2016 Integrated Resources Plan
  - 2016 Water Use Efficiency Business Plan

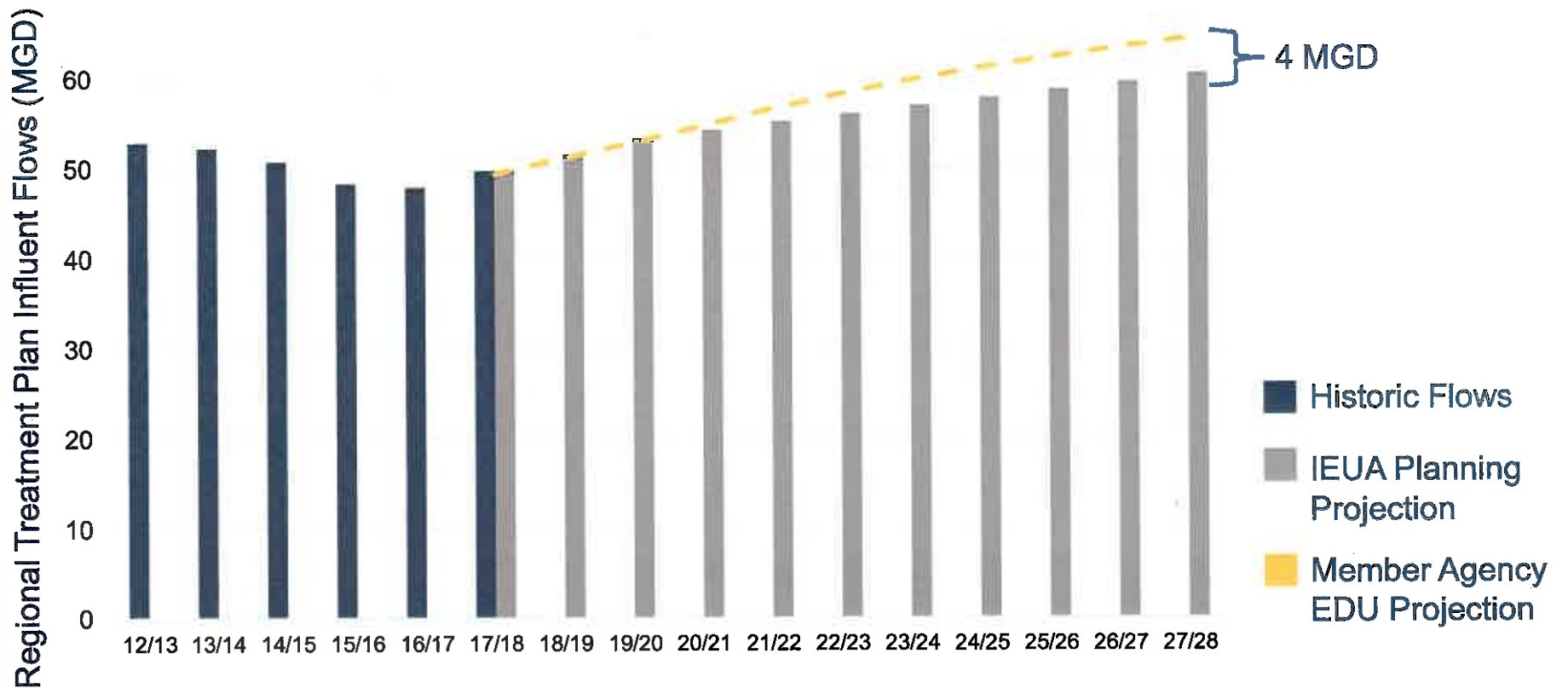
# New Equivalent Dwelling Unit (EDU) Forecast

(2017 Member Agency Forecast Data - Cumulative)





# Fiscal Year 18/19-27/28 Wastewater Flow Projections



# Major Treatment Facility Capacity/Expansion Project

## Estimated Treatment Plant Expansion Schedule

Ten Year Capital Improvement  
Planning Window

| Description                     | 15/20 | 20/25 | 25/30 | 30/35 | Total Cost |
|---------------------------------|-------|-------|-------|-------|------------|
| RP-1 Liquids Capacity Recovery  |       |       |       |       | \$182 M    |
| RP-1 Solids Treatment Expansion |       |       |       |       | \$45 M     |
| RP-2 Decommissioning            |       |       |       |       | \$30 M     |
| RP-5 Liquid Treatment Expansion |       |       |       |       | \$160 M    |
| RP-5 Solids Treatment Facility  |       |       |       |       | \$165 M    |

# Ten Year Capital Improvement Plan Budget Summary

- Fiscal Year 17/18 TYCIP: \$717 Million
- Fiscal Year 18/19 TYCIP: \$716 Million
- No major deviations in capital improvement projects
- Major Capital Projects in the TYCIP:
  - Construction of Regional Treatment Plant No. 5 Solids & Liquids Expansion
  - Regional Treatment Plant No. 1 Capacity Recovery/Expansion Design completion by 2028
  - Includes asset repair and replacement program for all systems

# Ten Year Capital Improvement Plan Budget Summary by Fund

| Fund Description                               | FY 18/19 TYCIP Total |
|--|----------------------|
| Administrative Services Fund                   | \$13.5 M             |
| Non-Reclaimable Wastewater Fund                | \$18.1 M             |
| Regional Capital Wastewater Improvement Fund   | \$472.5 M            |
| Regional Wastewater Operations and Maintenance | \$89.1 M             |
| Recharge Water Fund                            | \$27.3 M             |
| Recycled Water Fund                            | \$95.0 M             |
| <b>TOTAL</b>                                   | <b>\$715.5 M</b>     |

# Fiscal Year 18/19 Ten Year Capital Improvement Plan Adoption Schedule

- ✓ 3/29/18 Info Item to Tech Committee
- ✓ 4/04/18 Info item to IEUA Committees
- ✓ 4/05/18 Info Item to Policy Committee
- ✓ 4/11/18 Info item to IEUA Board
- 4/26/18 Action item to Tech Committee
- 5/03/18 Action item to Policy Committee
- 5/09/18 Action item to IEUA Committees
- 5/16/18 Action item to IEUA Board



# Recommendation

- It is requested that the Regional Committees recommend the IEUA Board of Directors adopt the Fiscal Year 2018/19 – 2027/28 Ten Year Capital Improvement Plan.

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

**INFORMATION  
ITEM.**

**2A**



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Date: April 26, 2018  
To: Regional Technical Committee  
From: Inland Empire Utilities Agency *HHH*  
Subject: Regional Pretreatment Program Local Limits Adoption

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### **RECOMMENDATION**

This is an informational item on the Regional Pretreatment Program Local Limits Adoption for the Regional Technical Committee to receive and file.

### **BACKGROUND**

Inland Empire Utilities Agency's (IEUA) Regional Pretreatment Program is designed to protect the regional water recycling plants, personnel, effluent and sludge from pass-through or interference from pollutants discharged by Significant Industrial Users (SIUs). The pretreatment program includes certain required elements, including a system of administering legal authority (ordinance), a control mechanism (wastewater discharge permit), and local limits (permit discharge limits).

Local limits are site specific discharge limits to regulate SIUs developed per 40 CFR 403.5 (c) and 403.8 (f)(4). SIUs are defined as those businesses subject to federal categorical pretreatment regulations or industries that discharge a volume greater than 25,000 gallons per day or excessive loading defined in specific numeric terms by federal regulations. IEUA's Regional Pretreatment Program is required to regulate SIUs or any industry that has the potential to upset the regional water recycling plants. All other residential, commercial, non-permitted industrial dischargers or pollutant sources are considered background level and uncontrolled sources when developing local limits.

IEUA's current local limits for the Regional Pretreatment Program were adopted in 2006. In 2013, the Regional Water Quality Control Board (RWQCB) required IEUA to reevaluate its local limits based on the results of a Pretreatment Compliance Audit. This requirement was made based on findings that the IEUA had not reevaluated its local limits in several years. Additionally, changes in the National Pollutant Discharge Elimination System (NPDES) permit limits, groundwater recharge regulations, improvements in the regional pretreatment program, reduction in permitted industries, and enhancement of the treatment processes at the IEUA's regional water recycling plants also justified the need to reevaluate the local limits.

In May 2014, IEUA retained Arcadis U.S. Inc. to provide consulting services to reevaluate and develop logical, technically based and defensible local limits that would be effective, enforceable, and applicable to all SIUs within the IEUA's service area.



The local limits evaluation process involves calculating the pollutant loading that can be received at each of the water recycling plant headworks, without exceeding specified criteria, such as NPDES permit limits, and then allocating the loading among controllable sources (SIUs) and uncontrollable sources (residential, commercial, and non-permitted industries).

The development of local limits involves the following steps:

- Identify potential pollutants of concern (POCs)
- Analyze historical wastewater and flow data
- Calculate maximum allowable headworks loadings (MAHLs) for each potential POC
- Perform sensitivity analyses to refine potential POCs
- Calculate allowable SIU loadings and determine allocation strategies for each POC

Based on the screening criteria above, data evaluation, and EPA guidance documents the consultant determined there were 29 potential POCs.

In April 2015, the draft local limits report was distributed to the Regional Pretreatment Committee members for review and comment. The comments received from the committee members were incorporated into the final report in June 2015.

In August 2015, IEUA submitted its local limits report to the RWQCB. Subsequently, in September 2015, IEUA received its draft NPDES permit from the RWQCB which included new limits for 2,3,7,8-TCDD (Dioxin). As a thorough review of Dioxin was not originally included in the local limits study, IEUA requested the RWQCB to delay its review of the local limits report until IEUA could conduct a thorough evaluation for Dioxin including sampling and source identification. IEUA has completed this evaluation and determined that Dioxin will not need to be assigned a local limit.

Additionally, the RWQCB raised concerns with IEUA using fixed Total Dissolved Solids (TDS), for compliance determination. It is the opinion of the RWQCB that fixed TDS may underestimate the TDS concentration in discharges from SIUs with organic TDS in their wastewater. As part of the local limits addendum, IEUA proposes that the method for determining compliance for TDS at food processing industries be changed to TDS by summation.

IEUA also incorporated additional treatment plant and industry monitoring data from January 2015 through October 2016 to account for any impact from more recent monitoring data on the limits proposed in 2015. The 2016 updates are incorporated in the Table 1 addendum below.

Beginning in February 2017, IEUA experienced several daily and monthly average violations for two trihalomethane (THM) compounds Chlorodibromomethane and Bromodichloromethane at the Carbon Canyon Water Recycling Facility (CCWRF). As the precursor to these THM compounds is Bromide, IEUA conducted an extensive source control investigation which identified and eliminated Bromide discharges from several industries. Further assessment determined that once these sources were eliminated, a local limit for Bromide was not needed. The review of the need for a local limit for Bromide further delayed the local limits addendum to the RWQCB.

# Regional Pretreatment Program Local Limits Adoption

April 26, 2018

Page 3 of 4

Table 1 summarizes the POCs, current local limits, and proposed local limits after completion of the sensitivity analyses. For those POCs where a local limit is not recommended, pollutant monitoring will be conducted as part of the pretreatment compliance monitoring program.

In January 2018, IEUA submitted the addendum to the local limits report to the RWQCB as required by 40 CFR 403.18. In March 2018, the RWQCB notified IEUA that they consider the local limits submission a “Non-Substantial Pretreatment Program Modification” and that IEUA can adopt its revised local limits.

**Table 1: Current Local Limits vs. Proposed Local Limits**

| Pollutants of Concern (POC)   | Current Limits (mg/L) | Arcadis Proposed Limits (mg/L) | Updated Proposed Limits (mg/L) | Comments  |
|-------------------------------|-----------------------|--------------------------------|--------------------------------|---|
| Cadmium                       | 2.8                   | --                             | 2.8                            | Current Local Limit maintained to provide continued protection to the water recycling plants.   |
| Chromium                      | 60                    | 2.79                           | 2.52                           | Daily max; Based on CCWRF UCL   |
| Copper                        | 45                    | 2.29                           | 0.36                           | Daily max; Based on CCWRF UCL   |
| Cyanide (free)                | 1.2                   | --                             | 1.2                            | Current Local Limit maintained to provide continued protection to the water recycling plants.   |
| Lead                          | 14                    | 1.38                           | 1.26                           | Daily max; Based on CCWRF CFL (applied to contributory SIUs, Net Shapes and Envision Plastics); set alert level of 0.02 mg/L for other SIUs   |
| Nickel                        | 45                    | 12.5                           | 3.89                           | Daily max; Based on CCWRF CFL (applied to contributory SIUs, Evolution Fresh, Inland Powder, Jewlland-Freya, Net Shapes, OW Lee, Parco, Schlosser Forge, Sun Badge, and Envision Plastics); set alert level of 0.19 mg/L for other SIUs |
| Selenium                      | --                    | --                             | --                             | Monitor via IEUA monitoring program; work with Sun Badge to assess BMPs   |
| Zinc                          | 50                    | 3.74                           | 3.25                           | Daily max; Based on CCWRF UCL   |
| Bis(2-Ethylhexyl) phthalate   | --                    | --                             | --                             | Monitor via IEUA monitoring program   |
| Chloride                      | --                    | --                             | --                             | Monitor via IEUA monitoring program   |
| Hardness                      | --                    | --                             | --                             | Monitor via IEUA monitoring program   |
| Manganese                     | --                    | --                             | --                             | Monitor via IEUA monitoring program   |
| pH                            | >5.0 and <12.5        | >5.0 and <12.5                 | >5.0 and <12.5                 | Instantaneous limit based on pH standard unit   |
| Sodium                        | --                    | --                             | --                             | Monitor via IEUA monitoring program   |
| Sulfate                       | --                    | --                             | --                             | Monitor via IEUA monitoring program   |
| Total Dissolved Solids (TDS)* | 800/550               | 800/550                        | 800/550                        | Monthly average and measured as TDS (by summation)  |
| 2,3,7,8-TCDD (equivalents)    | --                    | --                             | --                             | Monitor via IEUA monitoring program   |
| Bromide**                     | --                    | --                             | --                             | Monitor via IEUA monitoring program   |

## Regional Pretreatment Program Local Limits Adoption

April 26, 2018

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### Notes:

mg/L = milligrams per liter;

\* = TDS limits for existing SIUs and new SIUs, an industry in operation and discharging to the Regional Sewerage System at the time of the Local Limits Resolution 2006-11-4 adoption is considered existing.

Industries not meeting the Existing Industry definition shall be considered a New Industry.

TDS by summation shall be calculated as follows:  $(\text{Alkalinity} * 0.6) + \text{Na} + \text{K} + \text{Ca} + \text{Mg} + \text{Cl} + \text{SO}_4 + \text{Silica} + (\text{NO}_3\text{-N} * 4.43) + \text{F}$

\*\* = Bromide as surrogate for parameter for Chlorodibromomethane and Dichlorobromomethane

# Regional Pretreatment Program Local Limits Adoption



# Why Reevaluate Local Limits

- Pretreatment program requirement
- Current local limits adopted in 2006
- EPA pretreatment program audit requirement
- Local limits revision needed due to changes in:
  - Pretreatment Program
  - NPDES permit regulations
  - Groundwater recharge regulations

## Local Limit Objectives

- Protects Regional Water Recycling Plants and beneficial reuse
- Technically based/defensible
- Supplement federal categorical limits & ordinance prohibitions
- Minimize impact on industrial users
- Easy to administer

## Proposed Local Limits

- Identified 31 Pollutants of Concern (POC)
- Calculate maximum loadings for POC entering treatment plants
- Allowance for safety and growth
- Refine POC & calculate limit for industries
- Applicable to Significant Industrial Users (SIUs)

# Proposed Local Limits

| Pollutant of Concern          | Current Limit (mg/L) | Proposed Limit (mg/L) |
|-------------------------------|----------------------|-----------------------|
| Cadmium                       | 2.8                  | 2.8                   |
| Chromium                      | 60                   | 2.52                  |
| Copper                        | 45                   | 0.36                  |
| Cyanide (free)                | 1.2                  | 1.2                   |
| Lead                          | 14                   | 1.26                  |
| Nickel                        | 45                   | 3.89                  |
| Zinc                          | 50                   | 3.25                  |
| pH                            | >5.0 and <12.5       | >5.0 and <12.5        |
| Total Dissolved Solids (TDS)* | 800/550              | 800/550               |

\* TDS limits for existing and new SIUs



## Next Steps

- Board Adoption (May 2018)
- Update Significant Industrial User Permits (June 2018)

**INFORMATION  
ITEM**

**2B**

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Date: April 26, 2018  
To: Regional Technical Committee  
From: Inland Empire Utilities Agency *HR*  
Subject: Sewer Fee Evaluation

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### **RECOMMENDATION**

This is an information item for the Regional Committees to receive and file.

### **BACKGROUND**

On March 29, 2018, a special Technical Committee (TC) workshop was held with Carollo Engineers Inc. (Carollo) to review the work completed on the Sewer Fee Evaluation study and the results of the Equivalent Dwelling Unit (EDU) formula assessment. At the workshop, Carollo discussed their analysis of the customer water consumption data and EDU data provided by the member agencies, the current changes in flow and loading at the treatment plants and impacts of changing multi-family residential from 0.7 to 1.0 EDU for monthly billing. Carollo explained why the current formula for an EDU should be updated and provided a revised equation for determining EDUs moving forward. While the committee agreed that the EDU equation needs to be revised, no consensus was reached on changing the EDU equation.

After the meeting with Carollo, discussion ensued on the next steps for completing the project. As the project has taken much longer than originally anticipated, IEUA provided a handout to the TC that provided four options on a path forward.

- Option 1 - Continue study with Carollo
- Option 2 - IEUA and TC work group
- Option 3 - Carollo is retained and IEUA/TC work group directs
- Option 4 - TC path forward suggestions

Following a lengthy discussion, the TC reached consensus with Option 3, whereby Carollo is retained and will be directed by the IEUA/TC work group. The TC also agreed to place the project on hold for six months while the Regional Contract scoping sessions are completed. IEUA will work with Carollo on obtaining a revised scope of work and timeline.

As part of the path forward, IEUA is considering initiating the pilot study proposed by Argo (mentioned in Option 2) which would evaluate the land use categories for various commercial types and calculate a return to sewer flow based on estimated indoor water use. The proposed scope of work for the Argo pilot study is included as part of Attachment A.

**ATTACHMENTS**

1. Sewer Connection Fee Study Path Forward

## **Sewer Connection Fee Study Path Forward**

### **Background:**

In 2015, an IEUA audit of the Regional Contracting Agencies (RCAs) found inconsistencies in the interpretation of Exhibit J. IEUA initiated a request for proposal for a Sewer Connection Fee Study (SCFS) with the goal of evaluating Exhibit J to propose a new method of calculating the connection fee. The study would also review revenue collection methodologies, evaluate fee collection for public service facilities, sewer connection fee lease options and revenue impacts. In 2016, IEUA entered into a contract with Carollo Engineers (Carollo) to complete the SCFS. Carollo has completed a technical memorandum that completes portions of the current project scope. IEUA seeks comments from the Technical Committee (TC) on a path forward to complete the SCFS.

### **Option 1 – Continue Study with Carollo**

Under this option, Carollo will continue with the SCFS. Carollo has provided IEUA a proposed updated scope in Attachment 1 based on their challenges they have encountered during the study. IEUA and TC to consider updated scope and remaining budget for the SCFS.

### **Option 2 – IEUA and Technical Committee (TC) Working Group**

Under this option, Carollo's work on the SCFS would be considered complete and the contract would be allowed to expire. IEUA and the TC to form a working group which would meet regularly and determine the next steps to complete the SCFS study. IEUA has identified several outstanding issues that need to be addressed (as attached in Attachment 2) in order to move forward with the SCFS. The data analysis, report drafting, potential site-specific monitoring would be completed by members of the IEUA/TC working group.

One of the options for the commercial category to consider is a pilot study with Argo that would evaluate land use categories for various commercial types to calculate a return to sewer flow based on estimated indoor water use. The IEUA/TC workgroup would determine monitoring based on the evaluated commercial category methodologies.

### **Option 3 – Carollo is Retained and IEUA and TC Working Group Directs**

Under this option, IEUA and the TC would form a working group similar to Option 2. However, in this scenario, Carollo would be retained to assist in only a data analysis, review, and report drafting capacity. All decisions on the SCFS would be made by the IEUA/TC work group.

### **Option 4 – TC Path Forward Suggestions**

The TC consider results of Carollo technical memorandum and propose a path forward for the SCFS.

## **Attachment 1: Proposed Updated Scope from Carollo**

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# SCOPE OF WORK

*Revised – September 2017*

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## BACKGROUND

Carollo and IEUA have been working together over that past year to evaluate the Agency's methodology for determination, calculation, and collection of sewer rates and fees. This evaluation includes a review of the current Exhibit J and Monthly Sewer Billing Procedures as well as potential shortcomings of the existing structure.

At the study onset, Carollo conducted a review of other wastewater agencies business models for calculating and collecting sewer connection fees and monthly sewer bills. Carollo also met with each Contracting Agency to develop an understanding of the status-quo and to seek input on what modifications could be performed to streamline the process. Based on this review and by accounting for IEUA's unique attributes, Carollo is currently working to provide several alternatives including the advantages and disadvantages of each alternative and recommendations for a new business model that will streamline and improve the work process that will work for both IEUA and the Contracting Agencies.

## SCOPE OF WORK

Based on the last year of effort and input from both IEUA staff and the Contracting Agencies, this scope of work reflects our revised approach for completing the Sewer Use Fee evaluation. Work to-date largely encompassed the data collection process necessary to more fully evaluate potential alternatives and to identify any potential conflicts or challenges that may arise during implementation. The originally scoped three (3) agency sample was expanded to include all Contract Agencies to eliminate the potential for sample bias.

As IEUA is nearly mid-way through its adopted a five-year rate plan, this scope of work does not include the recalculation of said charges, but rather focuses on the feasibility and operational impacts of redefining an EDU. A preliminary rate will be calculated solely for illustrating proposed changes and to expand the discussion of potential customer and Contracting Agency impacts.

### Task 1. Calculation of an EDU

Based on IEUA's Internal Audit (IA) report and recommendations, Carollo will create an EDU methodology that is internally consistent across applications (connection fees and monthly billings), more streamlined, and equitable than the current methodology.

Based on the analysis performed under the original scope, Carollo will explain why the existing methodology should be revised and present a revised formula and methodology for determining EDUs moving forward. The updated definition will be calculated based on available data, updated water use assumptions, and use of a mass-balance equation.

Task 1 will solely focus on the definition of a single EDU, rather than the calculation or methodology for defining commercial factors (see Task 2). Carollo will explain in detail the entire analysis to-date and how the updated definition impacts various customers and Contract Agencies, in aggregate. This is the first step necessary to apportioning equity.

Carollo will seek consensus of the EDU definition through presentation of information at a workshop with the Contract Agencies, prior to moving forward with later tasks.

#### Deliverables:

Carollo will develop a draft and final Technical Memo that delineates the existing EDU methodology, available and utilized data, analysis, and preliminary EDU outcomes. The draft memo will be shared with the Contract Agencies ahead of a workshop presentation that will cover the same topics and seek to receive input and consensus. It is assumed that following the workshop, the Technical Memo will be finalized to incorporate input from the workshop.

## Task 2. Available Commercial EDU Methodologies

With the EDU defined in Task 1, Carollo will present three (3) alternative methodologies for determining the number of commercial EDUs. One of these methodologies will ultimately replace the current Exhibit J and Monthly Sewer Billing Procedures.

#### Methodology Survey

Carollo will build on the existing analysis and continue to evaluate the current method being used to collect monthly sewer charges, evaluate how other wastewater agencies collect these fees and their business models, and provide alternatives and considerations for IEUA. It is critical that any recommended program provides both transparency and auditability of the billing process. As such, Carollo will perform a survey of other wastewater utilities to review the basis of their EDU calculations. We will use a combination of available online data and personal communication to gather current information for a representative sample of California agencies similar to IEUA. Up to eight (8) agencies will be incorporated into the survey.

#### Presentation of Available Methodologies

Each alternative stems from the availability or source of data, the correlation of that data to approximate system use, and ease of implementation. Carollo has spent the last year collecting and analyzing data from each Contract Agency as well as IEUA and the County of San Bernardino. Carollo will present the results of that data analysis, including three (3) potential alternatives for moving forward.

1. Use of the Contract Agencies billing data
2. Use of the County parcel data
3. Hybrid Use of both County and Contract Agency data sets (*Given the additional analysis necessary to perform this alternative, future efforts related to this alternative are separately identified as an optional Task.*)

Carollo will introduce each alternative methodology, data and implementation requirements, and benefits and challenges associated with each. Carollo will prepare a draft Technical memo to outline the alternatives and make up to two (2) presentations to the Contracting Agencies to discuss the alternatives and gain consensus.

Based on input gained from staff and the Contracting Agencies, Carollo will finalize the technical memo to reflect the agreed direction as to which alternative or alternatives should be selected for further review.

#### Deliverables:

Carollo will prepare a draft and final Technical Memo outlining the three potential methodologies for calculating commercial EDU factors. A draft memo will be shared with the Contract Agencies ahead of up to two presentations that will cover the same topics and seek to receive input and consensus. It is expected that this discussion will take place over two workshops, after which the final Technical Memo will be prepared and submitted.



### Task 3. Update to Exhibit J – Connection Fee Methodology

Carollo will assess the efficacy of the existing method of determining EDUs based on assumed flow rates and number of fixture units. Carollo will build from the existing analysis and Agency interviews to review existing shortfalls and challenges. Carollo will present alternative calculations based on direction received from Task 2. Based on the results of the IA report, Carollo will work to harmonize the connection fee methodology with that of the monthly billings to further streamline the process and eliminate confusion.

For each selected alternative, Carollo will discuss the advantages, disadvantages, potential costs shifts between customer classes, and any associated revenue risk. Carollo will also evaluate the feasibility of using and future availability of data necessary to update the EDUs over time. Depending on the alternative selected in Task 2, Carollo will develop factors based on square footage, county use code, meter size, water usage, etc. The developed factor or factors will be dependent on the approach selected in Task 2.

The sewer connection fee was updated in 2015. The charge is based on flow, BOD, and TSS and accounts for buildout needs based on the current EDU calculations. Carollo will evaluate how the change in the EDU calculation might alter the total number of EDUs into the system and how it could impact the total revenues to be collected from the sewer connection fees for the selected alternative(s).

For budgeting purposes, Carollo assumes that the Contract Agencies will request to advance the analysis by reviewing alternatives 1 and 2 (Agency billing data and County data). Should a single direction be proposed in Task 2, the budget would be adjusted accordingly. The optional task will be included if the Agencies want to further define the “hybrid” methodology.

#### Deliverable:

Carollo will develop a draft and final Technical Memo that delineates the existing commercial factors, available and utilized data, analysis, and resulting updates or modifications to Exhibit J. The draft memo will be shared with the Contract Agencies ahead of a presentation that will cover the same topics and seek to receive input and consensus.

### Task 4. Update to Monthly Billing Procedures Methodology

Similar to Task 3, Carollo will assess the efficacy of the existing method of calculating billed EDUs based on the definition and categories as defined in the Monthly Billing Procedures. For each reviewed alternative, Carollo will discuss the advantages, disadvantages, potential costs shifts between customer classes, and any associated revenue risk. Depending on the alternative selected in Task 2, Carollo will develop factors based on square footage, county use code, meter size, water usage, etc. The developed factor or factors is dependent on the approach authorized in Task 2.

Carollo will also evaluate the feasibility of using and future availability of data necessary to update the EDUs over time. Whenever changing the underlying EDU basis or calculations, there could be a potential change in monthly sewer charge revenues and shifts of costs between customer classes. Specifically related to IEUA, the Agency might experience shifts between Contract Agencies. For each proposed methodology, Carollo will evaluate the potential revenue impacts to the extent that data is available.

#### Deliverables:

Carollo will develop a draft and final Technical Memo that defines the current billing procedures and challenges, defines feasible collection alternatives, including the advantages and disadvantages of each alternative, a planning-level cost estimate to implement these programs, and implementation considerations and next steps. A draft of the memo will be shared with the Contract Agencies ahead of up to two presentations that will cover the same topics and seek to receive input and consensus. It is expected

that this discussion will take place over two workshops. After obtaining consensus, the draft memo will be updated with input from the workshop(s) and a final memo will be prepared and submitted.

#### **Task 6 Miscellaneous Fees, Implementation Impact, & Transition**

Carollo will work with IEUA to develop a high-level transition plan for implementing the proposed changes to the EDU methodology. The plan will outline potential phasing alternatives, changes in business practices, and review of key documents or policies to be updated.

In addition, Carollo will evaluate the exclusion of Public Service Facilities from the charge for connection fees and monthly sewer charges, the financial impact if these charges are apportioned to other customers of the Regional System, and compliance to regulatory or statutes, such as Propositions 26 and 218. Carollo will meet with IEUA staff and legal counsel to discuss the implications and considerations of CGC §54999.

Finally, Carollo will examine the process that governmental buildings are approved in order to develop a process that allows IEUA to appropriately collect fees from public service facilities as allowed under Government Code §54999, as described in the scope below.

*While this study will produce a redefined EDU based on updated metrics for consistency, transparency, and auditability, the true revenue impact and cost shifts will not be fully known until all customers are transitioned. Where the above tasks provide IEUA with the necessary foundation to evaluate and assess the potential EDU changes (based on sample data), customer shifts, and revenue impacts may necessitate further evaluation when applied in full to all customers and Contract Agencies. This is anticipated to take place in parallel with IEUA's next rate setting process.*

#### **Deliverable:**

Report chapter that outlines implications of the selected alternatives, implementation considerations, and transition options to mitigate administrative or Contract Agency impacts. The chapter will address the potential of assessing fees to Public Service Facilities or governmental buildings. The chapter will reference statutory guidelines, such as CGC §54999. Finally, if IEUA wishes to modify its current practice, the chapter will outline a preliminary transition plan and the cost impacts to these customers as a class.

#### **Task 7. Draft and Final Report**

Building from the previously developed Technical Memos, Carollo will provide IEUA with a draft and final report that summarizes the analysis and findings of the proposed sewer use fees. IEUA comments on the draft report will be incorporated and a final report will be prepared. The report will provide IEUA with the necessary information to support the recommended changes and create a sound administrative record.

#### **Deliverable:**

Carollo will provide IEUA with an electronic copy and ten (10) hard copies of the draft report for review. Carollo will also provide IEUA with both electronic and ten (10) hard copies of the final report and an electronic copy of any developed Microsoft® Excel model.

## Task 8. Meetings and Presentations

To provide regular communications for delivery of a successful project, we will meet with IEUA to discuss the project, verify data, and discuss the draft report. Key anticipated meetings include the following:

- **Bi-weekly Meetings.** A bi-weekly meeting will be conducted between the Agency project manager and Carollo's project manager to review the status of action items and deliverables. The meeting will be conducted by telephone conference or WebEx.
- **Monthly Meetings.** Once a month, a bi-weekly meeting will be replaced by a monthly face-to-face meeting. Carollo's project manager will lead the meeting and provide updates on the progress of the feasibility study, milestones achieved, any decisions required to maintain the progress of the project, and any potential issues that may affect the project schedule. Carollo's core project team and Agency's core project team may be in attendance, as needed. The meeting shall be conducted onsite at the Agency's Headquarters Building. In addition, to facilitate acceptance of the study results, stakeholders can be invited to these meetings to help with the development process.
- **Project Workshops.** As detailed throughout the scope, Carollo identified up to six (6) workshop presentations with the Contract Agencies
- **Board Presentation.** Preparation for and attendance at two (2) Board presentation is included in the scope of work.

Each of these meetings will result in a critical project milestone in that key decisions will be made and results finalized based on the outcome of these meetings. Carollo will prepare and distribute meeting notes for all meetings.

### Option Task Hybrid Methodology

For budgeting purposes, this task is optional as the selected methodologies may not necessitate the effort. However, if requested, Carollo would identify and perform a method for aggregating the Contract Agencies' billing records with the County's parcel records. As there is no consistent common identifier between the datasets, Carollo will utilize various techniques to combine the data were applicable. Based on initial analysis, nearly 50 percent of the records require additional data analysis or database management. For consistency in application, Carollo will also develop procedures for auditing the data and reconciling discrepancies.

Where the other alternatives would utilize a single and self-contained dataset, the hybrid methodology would utilize information from both datasets. For example, the Contract Agency data may have meter size with a customer class designation of "commercial." When combined with the County Parcel data, the County Use code could be utilized to further delineate "commercial" between one of a hundred different codes. This additional granularity could be used to create more specific and tailored assumptions. However, as the datasets are generated from various Contract Agencies and the County, parsing and validating the data is a unique challenge. While effort will be made to verify the accuracy of the data, additional steps and analysis will need to be exercised ahead of actual implementation by IEUA and the Contract Agencies.

### Deliverables:

Carollo will develop draft and final versions of a Technical Memo that walks-through the hybrid methodology, including the advantages and disadvantages of each alternative, a planning-level cost estimate to implement these programs, and implementation considerations and next steps. It will also outline the results and steps of the additional analysis performed to aggregate the data. A draft of the memo will be shared with the Contract Agencies ahead of a presentation that will cover the same topics and seek to receive input and potential consensus. The final memo will include input from the workshop.

## Budget

This budget reflects the amended scope of work discussed at the September 6th meeting between Carollo and IEUA. The hours and tasks reflect work effort from the beginning of September 2017 through anticipated completion. These hours and tasks will supersede the remaining hours and tasks identified in the original scope of work.

| Tasks   | Carroll July | Carroll August | Carroll September | Analyst    | Support & Clerical Staff | Labor Cost       | WTCE            | Expenses       | Total            |
|---|--------------|----------------|-------------------|------------|--------------------------|------------------|-----------------|----------------|------------------|
|   | \$273        | \$273          | \$196             | \$165      | \$106                    |                  | \$11,70         |                |                  |
| <b>Task 1. Calculation of an EDU (Single Family Residential)</b>  | 3            | 7              | 26                | 44         | 0                        | \$15,086         | \$986           | \$200          | \$16,222         |
| Calculation and Definition of an EDU  |              |                |                   |            |                          |                  |                 |                |                  |
| - Mass balance and technical analysis   |              | 1              | 12                | 24         |                          |                  |                 |                |                  |
| - Technical Memo  | 1            | 2              | 8                 | 12         |                          |                  |                 |                |                  |
| - Contract Agency Presentation (1)  | 2            | 4              | 6                 | 8          |                          |                  |                 | \$200          |                  |
| <b>Task 2. Available Commercial EDU Methodologies</b>   | 8            | 16             | 26                | 58         | 0                        | \$21,218         | \$1,263         | \$400          | \$22,881         |
| Present multiple EDU methodologies and associated implementation/transition plans   |              |                |                   |            |                          |                  |                 |                |                  |
| - Define Available Data   |              |                | 2                 | 2          |                          |                  |                 |                |                  |
| - Review of Three (3) available alternatives  | 2            | 4              | 4                 | 20         |                          |                  |                 |                |                  |
| - Technical Memo  | 2            | 4              | 8                 | 20         |                          |                  |                 |                |                  |
| - Contract Agency Presentations (2)   | 4            | 8              | 12                | 16         |                          |                  |                 | \$400          |                  |
| <b>Task 3. Update to Exhibit J - Connection Fee Methodology</b>   | 7            | 18             | 78                | 136        | 0                        | \$44,553         | \$2,796         | \$400          | \$47,749         |
| Develop an update to Exhibit J for use in calculation of the connection fees  |              |                |                   |            |                          |                  |                 |                |                  |
| - Creation of Schedule based on Parcel Data   | 2            | 4              | 24                | 40         |                          |                  |                 |                |                  |
| - Creation of Schedule based on Contracting Agency Data   | 2            | 4              | 24                | 40         |                          |                  |                 |                |                  |
| - Revenue Risk and Impacts  |              | 2              | 8                 | 24         |                          |                  |                 |                |                  |
| - Implementation Impact & Transition  |              | 2              | 8                 | 12         |                          |                  |                 |                |                  |
| - Technical Memo  | 1            | 2              | 8                 | 12         |                          |                  |                 |                |                  |
| - Contract Agency Presentation (1)  | 2            | 4              | 6                 | 8          |                          |                  |                 | \$400          |                  |
| <b>Task 4. Update to "Monthly Billing Procedures" Methodology</b>   | 12           | 25             | 92                | 164        | 8                        | \$56,041         | \$3,521         | \$400          | \$59,962         |
| Develop an update to Monthly Billing procedures   |              |                |                   |            |                          |                  |                 |                |                  |
| - Creation of Schedule based on Parcel Data   | 2            | 4              | 24                | 40         |                          |                  |                 |                |                  |
| - Creation of Schedule based on Contracting Agency Data   | 2            | 4              | 24                | 40         |                          |                  |                 |                |                  |
| - Revenue Risk and Impacts  |              | 1              | 8                 | 24         |                          |                  |                 |                |                  |
| - Implementation Impact & Transition  | 2            | 4              | 16                | 24         |                          |                  |                 |                |                  |
| - Technical Memo  | 2            | 4              | 8                 | 20         |                          |                  |                 |                |                  |
| - Contract Agency Presentations (2)   | 4            | 8              | 12                | 16         |                          |                  |                 | \$400          |                  |
| <b>Task 5. Miscellaneous Fee &amp; Implementation Discussion</b>  | 2            | 12             | 40                | 24         | 8                        | \$16,470         | \$1,006         | \$0            | \$17,476         |
| Identify additional items to review ahead of future implementation (i.e., Public Facilities, Billing Systems, and future rate study analysis) |              |                |                   |            |                          |                  |                 |                |                  |
| <b>Task 6. Draft and Final Report</b>   | 4            | 4              | 48                | 32         | 8                        | \$17,720         | \$1,123         | \$0            | \$18,843         |
| Develop draft and final study report  |              |                |                   |            |                          |                  |                 |                |                  |
| <b>Task 7. Meetings &amp; Presentations</b>   | 16           | 42             | 58                | 42         |                          | \$34,132         | \$1,848         | \$1,600        | \$37,580         |
| Prep and meeting time associated with the identified tasks  |              |                |                   |            |                          |                  |                 |                |                  |
| - Bi-Weekly Conference Calls (24 weeks assumed)   | 4            | 12             | 16                | 12         |                          |                  |                 |                |                  |
| - Monthly Staff Meetings (6 assumed)  | 12           | 24             | 30                | 24         |                          |                  |                 | \$1,200        |                  |
| - Board Presentation 1 (2 assumed)  | 0            | 6              | 12                | 6          |                          |                  |                 | \$400          |                  |
| <b>Total</b>  | <b>52</b>    | <b>124</b>     | <b>368</b>        | <b>500</b> | <b>24</b>                | <b>\$205,220</b> | <b>\$12,493</b> | <b>\$3,000</b> | <b>\$220,713</b> |

1) Additional stakeholder support and outreach can be determined in collaboration with IEUA staff

## Optional Task

|  |          |           |            |            |  |                 |                |              |                 |
|--|----------|-----------|------------|------------|--|-----------------|----------------|--------------|-----------------|
| <b>Hybrid Methodology - Creation and Validation of Combined Data Set</b>                                     |          |           |            |            |  |                 |                |              |                 |
| <b>If selected dependent on Selection of Hybrid Methodology (Task 2)</b>                                     | <b>8</b> | <b>22</b> | <b>152</b> | <b>320</b> |  | <b>\$90,782</b> | <b>\$5,873</b> | <b>\$400</b> | <b>\$97,055</b> |
| Development of a single database that combines the Contract Agency's Billing Data and the County Parcel Data |          |           |            |            |  |                 |                |              |                 |
| - Hybrid methodology (Parcel Data on City Billings) - Task 3   | 2        | 4         | 24         | 40         |  |                 |                |              |                 |
| - Hybrid methodology (Parcel Data on City Billings) - Task 4   | 2        | 4         | 24         | 40         |  |                 |                |              |                 |
| - Collection of remaining Data   |          |           | 8          | 20         |  |                 |                |              |                 |
| - Compilation of Data  |          | 2         | 24         | 80         |  |                 |                |              |                 |
| - Audit/Error Control  |          | 4         | 40         | 80         |  |                 |                |              |                 |
| - Technical Memo   | 2        | 4         | 8          | 20         |  |                 |                |              |                 |
| - Contract Agency Presentation (1)   | 2        | 4         | 24         | 40         |  |                 |                | \$400        |                 |

## **Attachment 2: Topics for IEUA/TC Working Group to Address for SCFS**

- **Residential Category:**

- Single-Family v. Multi-Family: Based on the conclusions from the Carollo TM1, working group to decide whether 1 EDU to represent Single-Family Residence (SFR) and Multi-Family Residence (MFR).
- Site Specific Wastewater Monitoring: Working group to decide whether site specific residential monitoring be monitored to support the proposed EDU equation provided by Carollo TM1.
  - Sites to consider might be previous locations from the Salinity Study.
  - Selected residential areas to have large number of homes (100+) and include both new and old development and SFR/MFR.
  - Discussion on sample monitoring performed by IEUA/RCA staff.
  - Discussion on contracting out strength and flow monitoring.
- Strength Considerations:
  - Current components are BOD & TSS. Evaluate and consider NH<sub>3</sub> as an additional component as this is where treatment costs really lie.

- **Commercial Category:**

- Methodology Consideration: IEUA/TC work group to discuss new methodology for calculating fees for commercial category.
  - Remain with drainage fixture units and expand 7 categories in Exhibit J
  - Establish high-medium-low categories with ranges of loading
  - Square-footage and land use categories
  - Water Meter Size (Proposed by Carollo)
  - Others?
- Site-Specific Monitoring: The methodology chosen for determining the commercial categories will need to be technically based. This will likely be supported by both wastewater and flow monitoring data.
  - Wastewater Monitoring: IEUA/TC work group to determine how wastewater monitoring data will be collected. There are several challenges that may need to be considered (as follows):
    - Appropriate Monitoring Location: Representative location is needed. At the clean out? Separate downstream connections?
    - Number of samples: How many samples need to be collected such that the data is technically defensible?
    - Monitoring by Groups: If method of high/med/low categories is chosen, is it feasible or do locations exist where representative samples can be obtained?
    - RCA Service Areas: Contracting Agency service area specific monitoring may also be needed as one commercial site in the southern service area may be different than the northern service area.
    - "Light Industrial" – Evaluate the feasibility of separating out "light industrial" and group into commercial category. This would possibly be industries that discharge flows less than 25,000GPD.
- Flow Monitoring: IEUA/TC work group to determine how the flow data for the commercial methodology will be obtained.

- Direct Measurement: Work group to determine whether it is feasible to measure wastewater flow from commercial categories in support of the methodology chosen.
- Water Use Assumption: IEUA/TC workgroup to consider proposal by Argo which involves data analysis and pilot study of Monte Vista Water District data to evaluate land use categories for various commercial types to estimate indoor water use. This water use would then be calculated and used for return to sewer factors for the different commercial types.
- Depending on the results of the pilot study, an expanded study throughout the service area would be performed.



Inland Empire Utilities Agency

# Sewer Return Flow Estimation

## Proposed Scope of Work

January 2018



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| <b>Cost of service</b>                        | <b>Error! Bookmark not defined.</b> |

## Project Overview

In collaboration with the Inland Empire Utilities Agency (IEUA) and Monte Vista Water District (MVWD), Advanced Research in Government Operations (ARGO) proposes to estimate indoor sewer flows in the IEUA service area. The goal is to research the potential need to update Exhibit J “Equivalent Dwelling Unit Computations” utilized to calculate sewer fees.<sup>1</sup> The intended outcome of this preliminary research and development study is to offer recommendations and scope a potential full study to update the rates in Exhibit J.

This novel research is important particularly in light of Governor Brown’s framework to make conservation a California way of life, which sets new standards for indoor and outdoor water use. Team ARGO which staffs the California Data Collaborative was funded by the Water Foundation to conduct the first ever rapid assessment of residential water budgets statewide. That planning tool and parcel level landscape area measurements will be invaluable in supporting this study.

The proposed methodology uses a land use based demand model provided by IEUA in concert with creative external customer categorization tools. Those classifications of commercial and other sewer customers will be integrated with water use (where available), vegetation, and evapotranspiration information maintained by ARGO to establish return to sewer factors by land use type and business category. These estimated sewer flows will be broken down by subcategories of commercial and industrial use to enable easy and straightforward fees.

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<sup>1</sup> <https://www.ieua.org/download/equivalent-dwelling-unit-computations-regional-contract-exhibit-j/>



**NOTE ON EXPERIMENTAL NATURE OF THIS APPROACH:** This research and development project leverages novel data integration and new methodological approaches. As an experiment, the final results may not reach the level of accuracy required to update return to sewer flow specifications. The goal of this study is to 1) identify whether a full study is needed to update Exhibit J and 2) leverage the results of this applied research and development to scope that study.

## Project goals

- Integrate IEUA land use categories with novel data on commercial customers to explore appropriate categories for sewer fee setting.
- Estimate return to sewer flows through a more granular understanding of customer demand utilizing CaDC data.
- Collaborate with IEUA staff to incorporate return to sewer flow estimation in IEUA planning and operations.
- Develop reusable tools so the estimation methodology developed in this study can serve as an ongoing resource for IEUA and the larger California water community.

## Data Assets

- Maintained by ARGO:
  - Bi-Monthly meter reads from customers in the Monte Vista Water District (MVWD), geocoded and matched to parcel data
    - Use of this data in this study will require written permission from MVWD
    - Additional IEUA retailers may provide their data by becoming SCUBA subscribers: <http://californiadatacollaborative.org/join-us/>
  - Parcel polygons for IEUA from San Bernardino County Assessor
  - Aerial measurements of Photosynthetically Active Vegetation (PSAV) areas for each parcel
  - Evapotranspiration data from the DWR CIMIS program
- To be developed as part of this project:
  - Categorization of commercial and industrial customers
    - Integration of Yelp and other available categorizations of IEUA customers within a defined shapefile
    - OPTIONAL integration of Factual data (this would require additional funds to purchase the data) <http://developer.factual.com/places/categories/>
- Provided by IEUA
  - Land use types for all properties in the IEUA service area

- The SAWPA commercial and industrial NCAIS code integration would be useful to obtain as well
- Estimated annual unit water demands for each land use type and retail service area in IEUA
- Measured sewers flows at IEUA treatment facilities (coarse grained and to be utilized as an order of magnitude check).
  - If possible, it would be highly useful for IEUA or IEUA's engineering firm consultants to measure sewer flows at regional sewer trunks
- Wastewatershed shapefile indicating the area provided service by each wastewater treatment plant.

## Proposed Approach to Categorize Commercial

**Goal:** analytical foundation of granular commercial entity linkages to enable return to sewer flow analysis.

The category of “commercial” encompasses a wide variety of customer types and water use patterns. ARGO proposes to tackle that by linking various novel data sources that have subcategories of commercial types. Such data sources will include Yelp, County Assessor and other useful linkages. A presentation describing this approach is provided here:

[https://docs.google.com/presentation/d/1OjMr7GgNbQqW0iVEyfT8pNNCMqx4a4na7pvsp2ZOqeA/edit#slide=id.g24b20221c9\\_2\\_4](https://docs.google.com/presentation/d/1OjMr7GgNbQqW0iVEyfT8pNNCMqx4a4na7pvsp2ZOqeA/edit#slide=id.g24b20221c9_2_4)

That ongoing study has only matched about ¼ of commercial customers in MNWD's service area. Note in addition to issues with granular classification, it is often challenging to correctly and precisely assign landscape area to commercial customers. This is a known issue with many remote sensing vendors. Shopping centers for example with many business entities are an outstanding area of open research. The goal is to leverage and improve upon that commercial entity classification pipeline in conjunction with IEUA provided land use information to develop best available customer categorizations. Those granular categories will be integrated with estimates of indoor use and return to sewer volumes to scope prospective categories.

## Proposed Methodologies to Estimate Indoor Use

**Goal:** estimates of indoor use returned to sewer flow broken down by commercial subcategories developed through an iterative process incorporating the linkages described above.

Isolating indoor consumption from total consumption is a complex problem, and in the absence of dedicated indoor and outdoor metering, any approach is bound to be inexact. To get the most robust estimates possible, ARGO proposes to use a combination of different methods, each with distinct benefits and drawbacks. These different methods can then be compared and integrated to show the return to sewer flows by subcategory of commercial customer. The

following sections details the different proposed methodologies and their expected benefits and drawbacks.

## Method 1: Subtract Estimated Outdoor Demands from Outdoor Allocations

The first method will subtract estimates of annual outdoor water use from estimates of total water use for each retail agency and land use type. The estimated sewer flow per acre using Method 1 for a given land use and retail agency is then

$$\text{Indoor Sewer Flow} = LUD - \text{Outdoor allocation per acre}$$

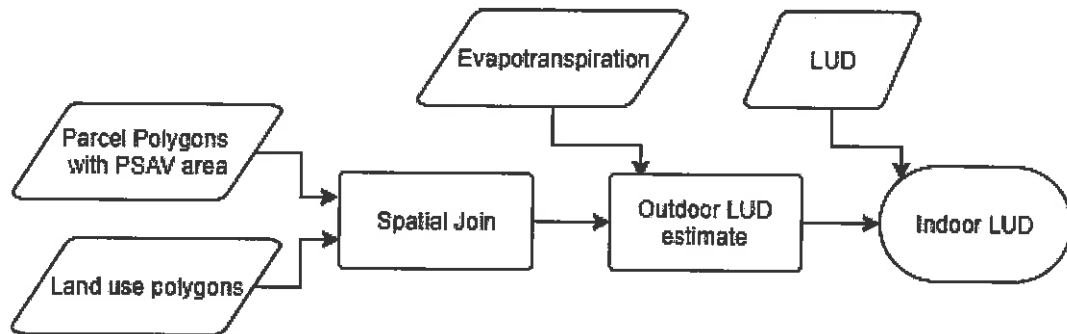
Where *LUD* is the Land Use Unit Demand from the IEUA demand model (af/ac/year) and

$$\text{Outdoor allocation per acre} = ET \text{ Factor} \times \text{evapotranspiration} \times \text{PSAV Area} \times C$$

Is an estimate of outdoor water use under an assumption about the intensity of watering. Specifically,

- *ET Factor* (also called a crop coefficient, or landscape factor) is a coefficient capturing our assumptions about both the average water needs of vegetation in the IEUA service area and the irrigation efficiency of customers in the area. These factors often range from 1.2 for heavily trafficked turf with low irrigation efficiency, to 0.5 for drought tolerant plants with efficient irrigation
- *evapotranspiration* is the (yearly) reference evapotranspiration for the area
- *PSAV Area* is the area of photosynthetically active turf and shrubs/trees in the area. This value is derived from 4-band aerial imagery and provided to ARGO through a partnership with Claremont Graduate University
- *C* is a unit conversion factor to convert to af/ac/year

This process is shown in Figure 1. Assessor parcel polygons with PSAV area are joined with land use data shapefiles. The average PSAV area per acre for each retailer and land use is combined with evapotranspiration data as specified above to calculate outdoor LUDs. These outdoor LUDs are then subtracted from total LUDs in the IEUA demand model to obtain estimates of the indoor LUD.



**Figure 1. Indoor land use unit demand calculation using Method 1.**

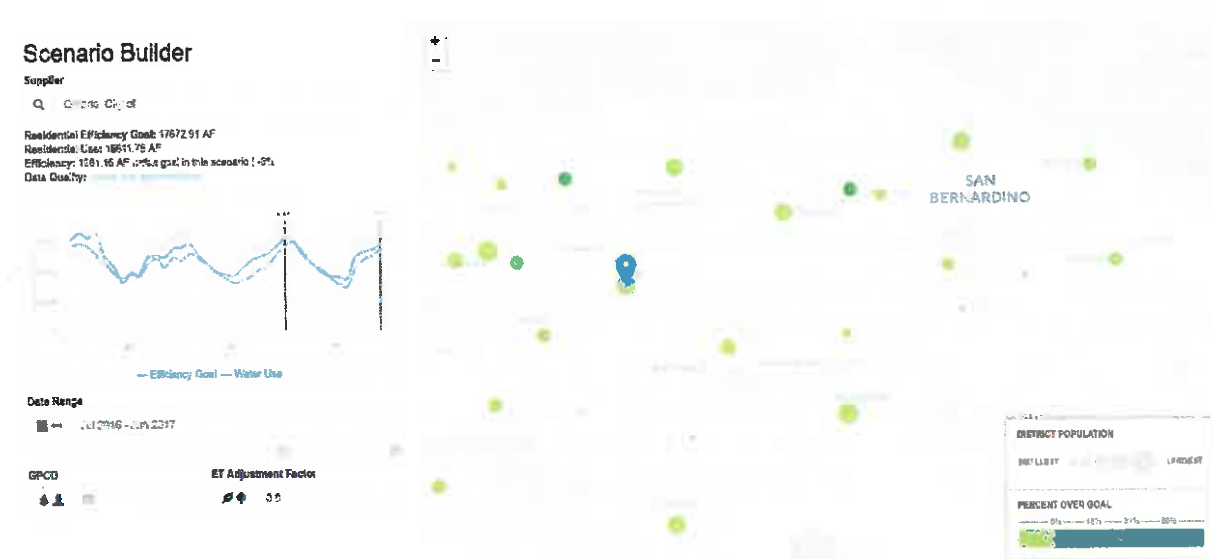
## Benefits and Drawbacks

**Simplicity** - Method 1 benefits from conceptual simplicity and fits neatly into the existing framework of the IEUA demand model. Calculations can be done at the aggregate level for each land use type and retailer without resorting to customer-level calculations.

**Accuracy (under assumptions)** - To the extent that, on average, vegetation is irrigated as indicated by the ET factor, then this method should produce an accurate estimate of indoor sewer flows.

**Assumptions** - This method relies on empirically estimated vegetation area that is classified as commercial and an assumed ET factor, and therefore has a higher level of uncertainty. Fortunately, we can build confidence in this approach by looking at agency-wide efficiency targets in the Statewide Efficiency Explorer (SEE). The SEE uses the same efficiency framework used here and produces highly accurate estimates of residential water production for most IEUA retailers using an ET factor of 0.8.

## Sewer Return Flow Estimation - Proposed Scope of Work



**Figure 2. IEUA retailer water production is well-approximated using an efficiency budget framework.**

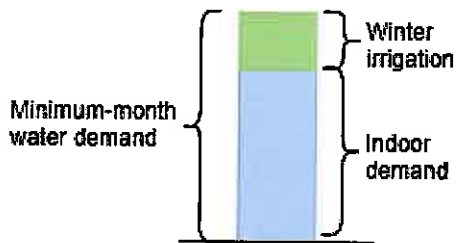
The SEE also opens the possibility of tailoring the ET factor to specific circumstances of each retail agency by selecting an ET factor that best fits the observed water production trends in the SEE.

Method 1 may produce a slight overestimate of indoor sewer flows because both the LUDs and the SEE budgets are estimates of water production, not consumption. This can be compensated for by subtracting reported distribution system water loss from the IEUA 2015 Urban Water Management Plan ("UWMP") to develop estimates of consumption.

## Method 2: Extrapolate Minimum-Month from MVWD to subtract estimated outdoor demands

The second method aims to make use of meter-level consumption data from the Monte Vista Water District to estimate indoor sewer flows using the minimum-month method. These estimates can then be converted to unit demands and extrapolated to other retailers in the IEUA service area. This process is shown in Figure 3.

First, MVWD customers will be matched with IEUA land use types, and indoor sewer flows will be estimated for each customer using meter reads from the lowest month of water use available, which should correspond to the month with the most precipitation, and therefore the least demand for outdoor irrigation. The customer-level estimates of indoor sewer flows can then be summed within each land use type and divided by the area devoted by that land use to obtain indoor unit demands (indoor LUDs) for each land use type in MVWD.



At this point the indoor LUD is almost certain to be an overestimate of true sewer flows due to the presence of small amounts of outdoor irrigation even in periods of high precipitation (due to sprinkler timers, moderate climate, etc). An approach that has been used in Orange County is to directly account for this winter irrigation and subtract it away. This is done by deriving irrigation intensities (*volume water / vegetation area*) from dedicated irrigation meters during the minimum month. The average irrigation intensity can then be subtracted from each indoor LUD to obtain an adjusted indoor LUD.

From here, there are several possibilities. One is to assume that differences in indoor sewer flows are negligible across retailers, and that most inter-agency variation in unit demands comes from differences in outdoor irrigation. In this case, no extrapolation is necessary. A second approach assumes that while total LUDs vary across retailers, the ratio of water for indoor use remains fixed across retailers. In this case, an *indoor ratio* can be calculated for each land use in MVWD, and this can be used to estimate indoor LUDs for the same land use in a different retailer as follows:

$$\text{indoor LUD for retailer} = \text{MVWD indoor ratio} \times \text{LUD}$$

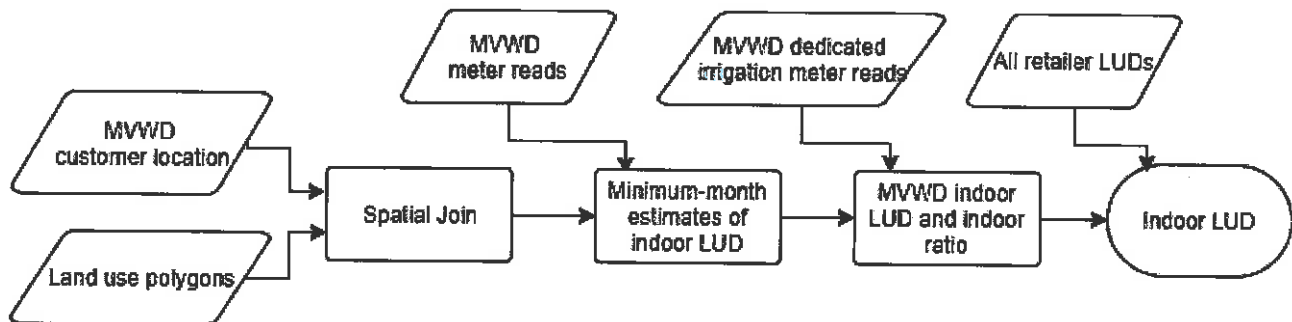


Figure 3. Indoor land use unit demand calculation using Method 2.

## Benefits and Drawbacks

**Directness** - Method 2 estimates indoor sewer flows directly, so it is able to avoid the uncertainty in PSAV area estimates and ET factor assumptions used by Method 1.

**Inaccuracy** - As state above, Method 2 without an adjustment for winter irrigation is likely an overestimate. In one respect this is a benefit as well as a drawback because it allows one to place a hard upper bound on what realistic indoor flows may be.

**Generalizability** - There are several assumptions made in this approach. One is the assumption that winter irrigation for dedicated irrigation accounts can accurately model winter irrigation for other customer types. Another is that customer behavior in MVWD can accurately be extrapolated to other retail service areas.

## Method 3: Regression model of residential water demand

This method approaches the problem of sewer flow estimation by estimating per-capita water use as it is influenced by factors like evapotranspiration, income, and education. This could be done using a regression model of water use at the level of census block groups, for example:

$$\begin{aligned} \text{water use} &= \beta_1 * \text{population} + \beta_2 * \text{income} * \text{population} + \dots + \beta_n * \text{PSAVarea} + \dots \\ &= (\beta_1 + \beta_2 * \text{income} + \beta_3 * \text{education} + \dots) * \text{population} + \dots + \beta_n * \text{PSAVarea} + \dots \end{aligned}$$

In a model like this, the value  $(\beta_1 + \beta_2 * \text{income} + \beta_3 * \text{education} + \dots)$  can be interpreted as a per-capita water use that is modulated by income, education, etc. If outdoor water use is properly controlled for by including factors like vegetation area and evapotranspiration in the model, then this per-capita value should capture only indoor use.

This per-capita value can then be customized to individual census blocks in the IEUA service area by providing the correct values of income, education, etc. Multiplying by population and dividing by the area of residential land use in each area can then create residential unit demands for each census block.

Note: this section of the analysis could benefit from data from other CaDC utilities and could incorporate accordingly.

## Accuracy and Quality Control

There are a number of quality control steps that should be taken to ensure that the estimates provided by the methods above are realistic.

- The simplest check is to compare LUDs derived from MVWD customers to the LUDs provided by IEUA. This will serve as a baseline to ensure that data from multiple sources is compatible.

## Sewer Return Flow Estimation - Proposed Scope of Work

- The second natural check is to compare the results from the multiple estimation methods used above. The estimates will probably differ, but there should be rough consensus between approaches, and the differences should be explicable.
- Finally, aggregate indoor sewer flows can be computed for each of IEUA's sewer catchment basins using the LUD estimates derived during the study. These values can then be compared against "ground-truth" sewer flow measurements for each catchment provided by IEUA to gain another estimate of the accuracy of each method.

## Cost of Service

Given the exploratory nature of this project, ARGO proposes to investigate the three methodologies discussed above. That exploratory analysis, cost of potential external data and integration of IEUA land use is costed out below:

| Item Type  | Item  | Task Description   | Cost    |
|--|---|--|---------|
| Necessary Foundational Data Integration and Exploratory Analysis | <b>Incorporating IEUA Land Use Information</b>                          | Aligning IEUA land use data formats to make compatible with SCUBA data infrastructure  | \$2,500 |
|  |   |  |         |
|  | <b>Integrate data to categorize commercial and industrial customers</b> | Integrate publicly available information to categorize commercial entities (such as Yelp and County Assessor information) along with IEUA provide CII categorization (from for example SAWPA). | \$2,500 |
|  |   | OPTIONAL Factual commercial entity classifications (purchase from technology vendor)   | \$9,000 |
|  | <b>Investigate three proposed methodologies</b>                         | Method 1: Subtract estimated outdoor demands from outdoor allocations  | \$4,500 |
|  |   | Method 2: Utilize metered use data and minimum month method to subtract estimated outdoor demands  | \$4,500 |
|  |   | Method 3: Regression model of residential water demand   | \$4,500 |



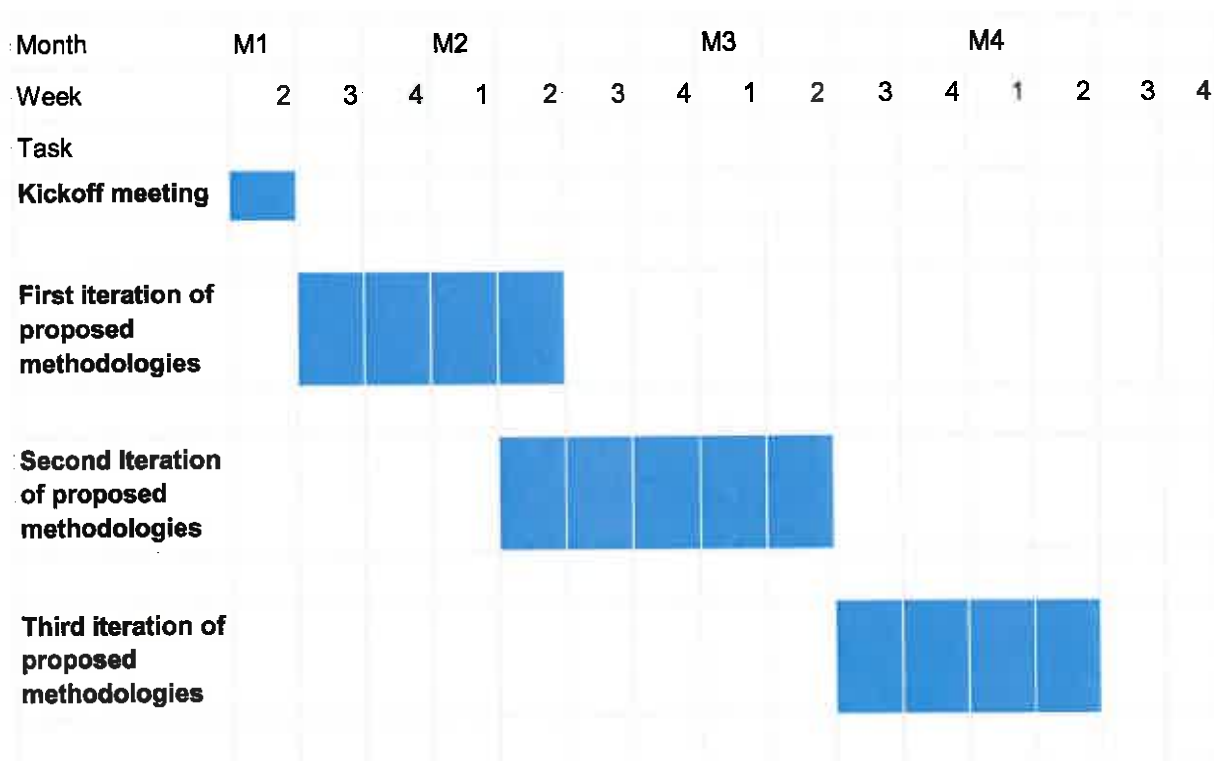
## Sewer Return Flow Estimation - Proposed Scope of Work

|                          |  |   |                 |
|--------------------------|--|---|-----------------|
| Dissemination of Results | Monthly webinars and/or in person meetings to update and collaborate with IEUA staff | Aligning IEUA land use data formats to make compatible with SCUBA data infrastructure | \$2,500         |
|                          |  | Final report summarizing results from this analysis and next steps                    | \$8,000         |
|                          |  |   |                 |
| <b>TOTAL</b>             |  |   | <b>\$38,000</b> |

This work will be collaboratively developed with IEUA staff through three month-long iterations to test and refine the methodologies proposed above. That work will result in reusable code as a resource for IEUA and the larger water community (particularly CaDC utilities) and a final report summarizing results of the project for senior management. In addition this work can be included in the CaDC statewide efficiency data action team at IEUA's discretion.

## Project Timeline

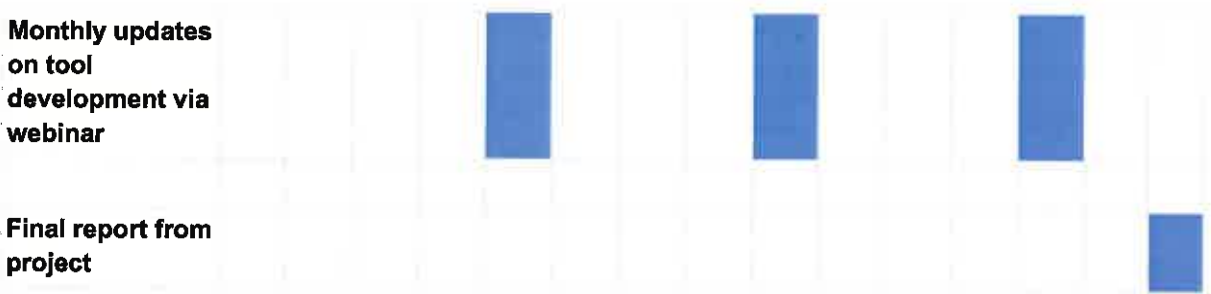
The following timeline provides ARGO staff's estimation of the time required to complete the work. We estimate 3-6 months to conduct the study with monthly check-ins and focused research iterations developed in conjunction with IEUA staff.



Sewer Return Flow Estimation - Proposed Scope of Work

Monthly updates  
on tool  
development via  
webinar

Final report from  
project



**INFORMATION  
ITEM**

**2C**



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Date: April 26, 2018/May 3, 2018  
To: Regional Committee  
From: Inland Empire Utilities Agency *HEU*  
Subject: FY 2018/19 Regional Programs Budget Review

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**RECOMMENDATION**

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

**BACKGROUND**

This item was presented to the IEUA Board of Directors at the meeting held on April 11, 2018.

**Date:** April 11, 2018

**To:** The Honorable Board of Directors

**Committee:** Finance & Administration

**From:** Halla Razak, General Manager

04/04/18

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

**Subject:** FY 2018/19 Proposed Budget Amendment for Regional Wastewater, Recycled Water, and Groundwater Recharge Programs

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**Executive Summary:**

On June 21, 2017 the Board of Directors approved the Agency's second Biennial Budget for fiscal years (FYs) 2017/18 and 2018/19, and Ten Year Capital Improvement Plan (TYCIP) for FYs 2018-2027. As part of the biennial budget cycle, a review of the second budget year is done at the end of the first year to determine whether any adjustments are needed to meet changes in certain assumptions or conditions.

The increase of \$4.9 million in total Uses of Funds is primarily due to the inter-fund loan repayment from the Recycled Water to the Non-Reclaimable Wastewater (NRW) program to support the NRW Philadelphia Lift Station Force Main capital project. The increase to Sources of Funds of \$26.1 million is a combination of higher state loan and grant proceeds to support capital projects in the Regional Wastewater and Recycled Water program, as well higher connection fees in alignment with the current pace of new development. Should the economy slowdown or take a downturn as some economists forecast, this will significantly reduce collection of future connections fees. No changes to the adopted multi-year rates are proposed for FY 2018/19.

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**Staff's Recommendation:**

Amend the FY 2018/19 Adopted Budget to increase total Sources and Funds by \$26.1 million and total Uses of Funds by \$4.9 million which includes the advanced repayment of the inter-fund loan from the Recycled Water to the Non-Reclaimable Wastewater program.

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

**Account/Project Name:**

**Fiscal Impact** (explain if not budgeted):

The proposed net increase of \$21.2 million to the FY 2018/19 Adopted Budget will increase total Agency fund reserves

**Prior Board Action:**

On June 21, 2017, the Board of Directors approved the Agency's biennial budget for FYs 2017/18 and 2018/19.

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**Environmental Determination:**

Not Applicable

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**Business Goal:**

The proposed amended to the FY 2018/19 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.o optimize investment earnings.

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**Attachments:**

Attachment B - Background

Attachment C - Powerpoint

Attachment D - Regional Program Sources and Uses of Funds Report

## Background

Subject: FY 2018/19 Budget Amendment

### Fiscal Year 2018/2019 Proposed Budget Amendments

On June 21, 2017 the Board of Directors approved the Agency's second Biennial Budget for fiscal (FYs) 2017/18 and 2018/19, and Ten-Year Capital Improvement Plan (TYCIP) for FYs 2018-2027. As part of the biennial budget cycle, a review of the second budget year is done at the end of the first year to determine whether any adjustments are needed to meet changes in certain assumptions or conditions. Summarized below are the proposed amendments recommended for FY 2018/19 total Sources and Uses of funds.

**Table 1: FY 2018/19 Proposed Budget Amendments (\$Millions)**

| Consolidated<br>FY 2018/19          | Adopted   | Proposed  | Amendment<br>Amount |
|-------------------------------------|-----------|-----------|---------------------|
| Sources of funds                    | \$248.5   | \$277.1   | \$28.6              |
| Uses of funds                       | (\$251.5) | (\$254.8) | \$3.3               |
| Increase (Decrease) in Net Position | (\$3.0)   | \$22.3    |                     |

### TOTAL SOURCES OF FUNDS

Total increase to Sources of Funds of \$28.6 million is supported by an increase in connection fees, state loan proceeds, grants, inter-fund loan repayment, user charges and interest earnings. These increases are partially offset by a reduction in capital contributions. The distribution by program and major category is shown in Table 2:

**Table 2: FY 2018/19 Proposed Amendment to Sources of Funds by Program (\$Millions)**

| Sources of Funds         | Regional<br>Wastewater | Recycled<br>Water | Non-<br>Reclaimable<br>Wastewater | Groundwater<br>Recharge | Water<br>Resources<br>& Admin<br>Services | TOTAL  |
|--------------------------|------------------------|-------------------|-----------------------------------|-------------------------|---|--------|
| User Charges             | -                      | -                 | \$1.2                             | -                       | \$0.1                                     | \$1.3  |
| Connection Fees          | 6.5                    | 2.0               | -                                 | -                       | -   | 8.5    |
| State Loans              | 3.2                    | 8.0               | -                                 | (1.7)                   | -   | 9.5    |
| Grants                   | 1.5                    | 6.7               | -                                 | 0.7                     | (2.3)                                     | 6.6    |
| Capital<br>Reimbursement |                        |                   | -                                 | (1.9)                   | -   | (1.9)  |
| Inter-fund Loan          |                        |                   | 3.0                               | -                       | -   | 3.0    |
| *Other Sources           | 0.6                    | 0.4               | 0.2                               | 0.1                     | 0.3                                       | 1.6    |
| Total                    | \$11.8                 | \$17.1            | \$4.4                             | (\$2.8)                 | (\$1.9)                                   | \$28.6 |

\*Other Sources includes adjustments in property taxes and interest earnings.

**User Charges:** Estimated increases in user charges from the County Sanitation District of Los Angeles. These charges are passed through to customers in the Non-Reclaimable Wastewater North system.

**Connection Fees:** Wastewater connections units increased by 1,000 equivalent dwelling units (EDUs) and water connections increased by 1,200-meter equivalent units (MEUs) to align with current pace of construction activity anticipated to continue in FY 2018/19.

**State Loans and Grants:** Increases are the result of Agency efforts in securing State Revolving Fund (SRF) loans to support capital projects for the Recycled Water and Regional Wastewater programs planned for FY 2018/19. Due to uncertainty in the availability of SRF loan funding, a key assumption in the adopted FY 2018/19 budget was pay-go funding of planned capital projects. The reduction in grants for the Groundwater Recharge and Water Resources programs is due to a change in the project execution timeline, such as the Recharge Master Plan Update (RMPU).

**Inter-fund Loan:** Advance the repayment of the inter-fund loan from the Recycled Water program to the Non-Reclaimable Wastewater program scheduled to begin in FY 2019/20. Acceleration of the first installment in the amount of \$3 million will support the Non-Reclaimable Wastewater capital improvement of the force main at the Philadelphia lift station. Inter-fund loans currently outstanding in the Recycle Water program of \$28.5 million include \$15 million due to the Non-Reclaimable Wastewater program and \$13.5 million due to the Regional Wastewater Capital Improvement fund. The final installment is currently scheduled for FY 2022/23.

## TOTAL USES OF FUNDS

The increase of \$3.3 million in total Uses of Funds is primarily due to an increase in capital project expenditures and advancement of the inter-fund loan repayment from the Recycled Water to the Non-Reclaimable Wastewater program. The table below provides a summary by program and major category.

**Table 3: FY 2018/19 Proposed Amendments to Uses of Funds by Program (\$Millions)**

| Uses of Funds               | Regional Wastewater | Recycled Water | Non-Reclaimable Wastewater | Groundwater Recharge | Water Resources & Admin Services | TOTAL        |
|-----------------------------|---------------------|----------------|----------------------------|----------------------|----------------------------------|--------------|
| Operations & Administration | \$1.7               | (\$0.3)        | \$1.0                      | \$0.0                | (\$3.7)                          | (\$1.3)      |
| Capital Projects            | 0.3                 | 1.0            | 2.1                        | (2.3)                | 0.4                              | 1.5          |
| Debt Service                |                     | 3.1            | -                          | -                    | -                                | 3.1          |
| Inter Fund Transfers        | 1.0                 | 2.0            | (0.5)                      | (1.7)                | (0.8)                            | (0.0)        |
| <b>Total</b>                | <b>\$3.0</b>        | <b>\$5.8</b>   | <b>\$2.6</b>               | <b>(\$4.0)</b>       | <b>(\$4.1)</b>                   | <b>\$3.3</b> |

**Operations & Administration:** Includes an increase in operating fees, mainly due to higher pass-through fees from County Sanitation District of Los Angeles, and non-capital project costs. These



are offset by a reduction in utilities, professional fees and services, materials and supplies, and other expenses.

**Capital Projects:** Increase is primarily due the acceleration of the force main for the Philadelphia lift station capital project in the Non-Reclaimable Wastewater program. The increase is offset by the adjustment of the RMPU project execution timeline, and other minor adjustments to the Ten-Year Capital Improvement Plan (TYCIP).

**Debt Service:** The increase is associated to the acceleration of inter-fund loan repayment to the Non-Reclaimable Wastewater from the Recycled Water program.

**Inter Fund Transfers:** Increases in the Regional Wastewater and Recycled Water programs are related to the adjustment in the transfer of respective connection fees due to changes in the Recharge Master Plan Update capital project execution timeline and related capital contributions.

### **Adopted Multi-Year Rates**

In May 2015, the Board adopted multi-year rates for the wastewater connection fee, EDU monthly sewer rate, water connection fee, and recycled water rates. The multi-year rates support the Board's commitment to set rates and fees that fully recover the cost of service. No change is proposed for the adopted multi-year rates for the Regional Wastewater and Recycled Water programs for FY 2018/19.

**Table 4: Adopted Fees and Rates**

|  | FY<br>2017/18 | FY<br>2018/19 | FY<br>2019/20 |
|--|---------------|---------------|---------------|
| <i>Effective Date</i>                                    | 7/01/17       | 7/01/18       | 7/01/19       |
| Wastewater Connection Fee/Equivalent Dwelling Unit (EDU) | \$6,309       | \$6,624       | \$6,955       |
| EDU Monthly Sewer Rate                                   | \$18.39       | \$19.59       | \$20.00       |
| Water Connection Fee /Meter Equivalent Unit (MEU)        | \$1,527       | \$1,604       | \$1,684       |
| Recycled Water Direct Delivery/Acre Feet (AF)            | \$470         | \$480         | \$490         |
| Recycled Water Groundwater Recharge/AF                   | \$530         | \$540         | \$550         |

### **Conclusion**

The proposed net increase of \$25.3 million in total Sources of funds for FY 2018/19 Adopted Budget is primarily due to a higher projection in wastewater and water connection fees and SRF loans secured to support capital projects in the Recycled Water and Regional Wastewater programs, offset by the advanced repayment of the inter-fund loan from the Recycled Water to the Non-Reclaimable Wastewater program. No changes to the adopted multi-year rates are proposed for FY 2018/19.

The proposed amendment to the FY 2018/19 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*.

# FY 2018/19 Proposed Budget Amendments

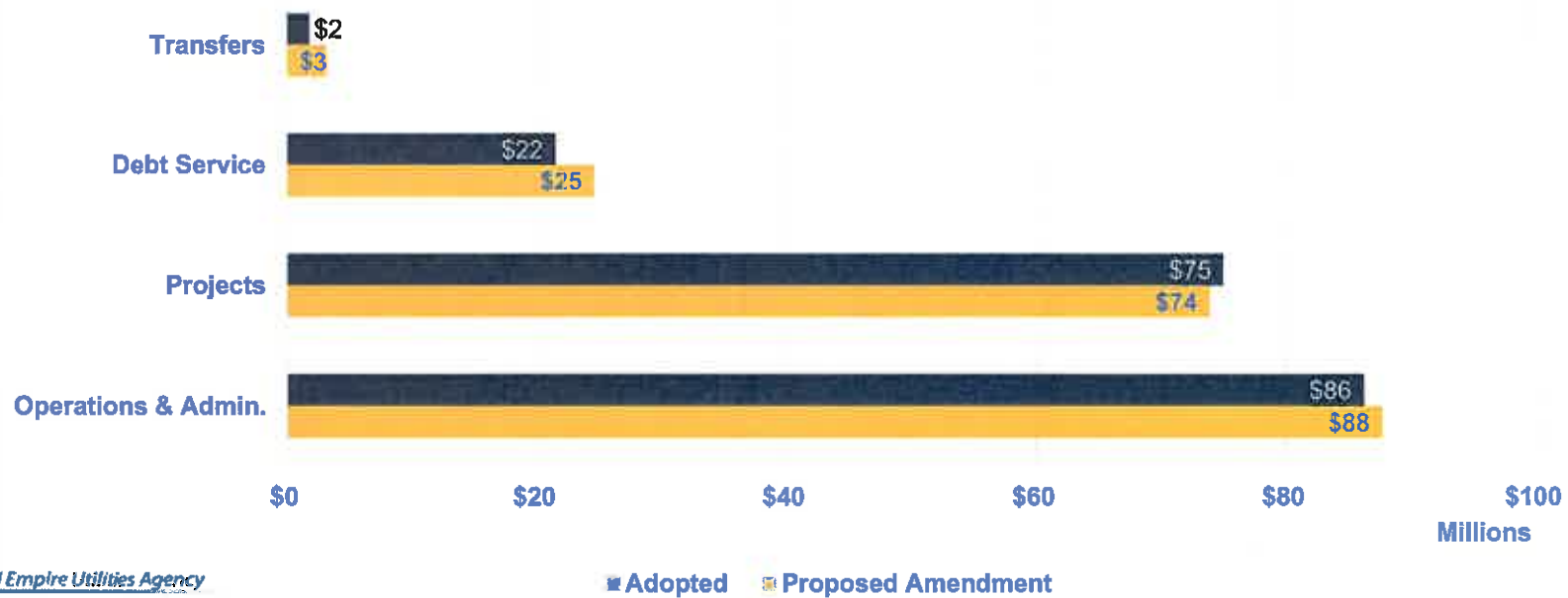
## Regional Wastewater, Recycled Water, and Groundwater Recharge



# REGIONAL PROGRAMS USES OF FUNDS

## Regional Wastewater, Recycled Water, and Groundwater Recharge

| \$ Millions                | FY 2018/19<br>Adopted | FY 2018/19<br>Proposed | Amendments   |
|----------------------------|-----------------------|------------------------|--------------|
| <b>Total Uses of Funds</b> | <b>\$184.5</b>        | <b>\$189.4</b>         | <b>\$4.9</b> |



# REGIONAL PROGRAMS SOURCES OF FUNDS

## Regional Wastewater, Recycled Water, and Groundwater Recharge

| \$ Millions            | FY 2018/19<br>Adopted | FY 2018/19<br>Proposed | Amendments |
|------------------------|-----------------------|------------------------|------------|
| Total Sources of Funds | \$182.7               | 208.8                  | \$26.1     |



# Questions



The proposed amendments to the FY 2018/19 Adopted Budget are consistent with the IEUA Business Goals of *Fiscal Responsibility, Water Reliability, Wastewater Management, Environmental Stewardship and Business Practices.*

**INFORMATION  
ITEM  
2D**



# Engineering and Construction Management Project Updates



Jerry Burke, P.E.  
April 2018



# EN18036 – Carbon Canyon Water Recycling Facility Asset Management and Improvements - III

- **Project Goal:** Provide process improvements to the tertiary treatment, storage lagoon, site grading, and drainage
- **Current Phase:** Predesign
- **Design Engineer:** GHD
- **Contract Amount:** \$249 K
  - Amendments: \$0/0.0%
- **Total Project Budget:** \$2.4 M
- **Project Completion:** November 2020
- **Percentage Complete:** 15%
- **Current Activities:**
  - Predesign
  - Site investigations and assessments



Corroded Isolation Gates at the Filters



Surface Cracks and Drainage Issues

# EN15012 – Regional Water Recycling Plant No. 1 Primary Effluent Conveyance Improvements

- **Project Goal:** Rehabilitate concrete structure and piping
- **Current Phase:** Design
- **Design Engineer:** Stantec Consulting, Inc.
- **Contract Amount:** \$461 K
  - Amendments: \$41,718/9.4%
- **Total Project Budget:** \$3 M
- **Project Completion:** April 2019
- **Percentage Complete:** 100% (design phase)
- **Current Activities:**
  - Advertise bids - April 2018
  - Award construction contract - July 2018



Exposed Rebar in Grating at Support Beam



Project Location

# EN18055 – Headquarters Roofing Replacement

- **Project Goal:** Replace existing roofs and skylights which are at the end of their service life
- **Current Phase:** Construction
- **Contractor:** Best Contracting
- **Contract Amount:** \$1 M
- **Change Orders:** \$0/0%
  - Agency Requested: \$0/0%
  - Changed Conditions: \$0/0%
- **Total Project Budget:** \$1.3 M
- **Project Completion:** July 2018
- **Percentage Complete:** 60%
- **Current Activities:**
  - Removal/Replacement of roof/skylights on Building A



Mobilization to Site



Moving Materials to Roof



# EN13028 - Preserve Lift Station

- **Project Goal:** Convey City of Chino's southern sewer flows to the Kimball Interceptor
- **Current Phase:** Construction
- **Contractor:** Pacific Hydrotech
- **Contract Amount:** \$0 (funded by City of Chino)
- **Change Orders:** \$0
  - Agency Requested: \$0/0%
  - Changed Conditions: \$0/0%
- **Total Project Budget:** \$335 K (staff support \$50 K)
- **Project Completion:** July 2018
- **Percentage Complete:** 70%
- **Current Activities:**
  - The wet well is constructed and the platform framing is underway
  - The lower level mechanical piping is under construction



Wet Well Construction



Platform Construction

# EN14019 – Regional Water Recycling Plant No. 1 Headworks Primary and Secondary Upgrades

- **Project Goal:** Rehabilitate headworks
- **Current Phase:** Construction
- **Contractor:** Myers & Sons
- **Contract Amount:** \$5.7 M
- **Change Orders:** \$0/0%
  - Agency Requested: \$0/0%
  - Changed Conditions: \$0/0%
- **Total Project Budget:** \$9.7 M
- **Project Completion:** February 2019
- **Percentage Complete:** 5%
- **Current Activities:**
  - Potholing existing utilities
  - Submittals and procurement



Contractor Mobilization at RP-1 Headworks



Potholing for Scum Piping

# EN15008 - Water Quality Laboratory

- **Project Goal:** Construct central lab to provide enhanced sampling and analytical support to all IEUA facilities
- **Current Phase:** Construction
- **Contractor:** Kemp Bros Construction, Inc.
- **Contract Amount:** \$17.5 M
- **Change Orders:** \$230,547/1.3%
  - Agency Requested: \$0/0.0%
  - Changed Conditions: \$230,547/1.3%
- **Total Project Budget:** \$24.6 M
- **Project Completion:** August 2018
- **Percentage Complete:** 85%
- **Current Activities:**
  - Installation of fume hoods, casework, and cabinets
  - Installation of solar panels on roof
  - Start-up and testing of new central plant equipment



Lab Building Main Entrance



Lab Building Roof – HVAC and Solar Panels

**INFORMATION  
ITEM**

**2E**

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Date: April 26/May 3, 2018  
To: Regional Committees  
From: Inland Empire Utilities Agency *HR*  
Subject: Rotation of Chair for Monthly Regional Committee Meetings

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### **RECOMMENDATION**

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

### **BACKGROUND**

Traditionally, one of the Regional Sewer Service Contracting Agencies chairs the monthly committee meetings for a two-year term. The City of Fontana has chaired since July 2016, and the chair agency is due to rotate in July 2018. The following are the agencies that have hosted over the last ten years:

|             |           |
|-------------|-----------|
| Upland      | 2006-2008 |
| CVWD        | 2008-2010 |
| Chino Hills | 2010-2012 |
| Chino       | 2012-2014 |
| Ontario     | 2014-2016 |
| Fontana     | 2016-2018 |

The next agency in the rotation is the City of Montclair. Therefore, the Regional Sewerage Committee meetings will be chaired by the City of Montclair, beginning with the July 2018 meetings.



**REGIONAL TECHNICAL AND REGIONAL POLICY COMMITTEE  
CHAIR AGENCY**

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

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**3A**



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

### **AGENDA** **Thursday, May 3, 2018** **4:00 p.m.**

#### **Location**

Inland Empire Utilities Agency  
Boardroom  
6075 Kimball Avenue  
Chino, CA 91708

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#### **Call to Order**

#### **Pledge of Allegiance**

#### **Public Comment**

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

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

##### **2. Action Item**

- A. Approval of the April 5, 2018 Meeting Minutes
- B. FY 2018/19 Ten Year Capital Improvement Plan

##### **3. Informational Items**

- A. Regional Contract Update/Renewal (*Oral*)
- B. FY 2018/19 Regional Programs Budget Review
- C. Policy Committee Chair Rotation
- D. Legislative Update

##### **4. Receive and File**

- A. Building Activity Update
- B. Recycled Water Distribution – Operations Summary
- C. Engineering Quarterly Project Updates

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

- A. IEUA General Manager's Update
- B. Committee Member Requested Agenda Items for Next Meeting
- C. Committee Member Comments
- D. Next Meeting – June 7, 2018

## **6. Adjournment**

### **DECLARATION OF POSTING**

---

I, Laura Mantilla, Executive Assistant of the Inland Empire Utilities Agency, A Municipal Water District, hereby certify that a copy of this agenda has been posted by 5:30 p.m. in the foyer at the Agency's main office, 6075 Kimball Avenue, Building A, Chino, CA on Monday, April 30, 2018.

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Laura Mantilla

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**3B**

# Building Activity Report - YTD Fiscal Year 2017/18



## 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

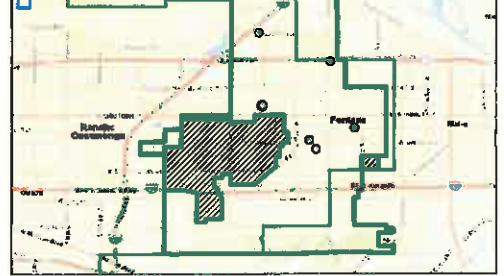
## HALF MILE GRID: TOTAL EDU's (YTD)



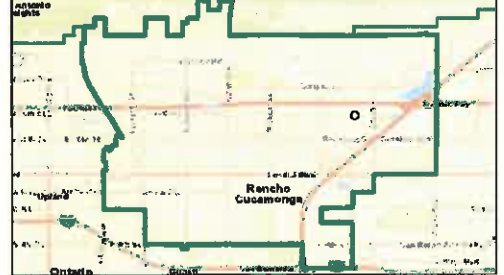
## TOTAL EDU BY WASTEWATER CONNECTION TYPE (YTD)

| Contracting Agency | YTD Actual        |                  |                  | Total (EDU) | Proposed |
|--------------------|-------------------|------------------|------------------|-------------|----------|
|                    | Residential (EDU) | Commercial (EDU) | Industrial (EDU) |             |          |
| Chino              | 453               | 32               | 1                | 486         | 725      |
| Chino Hills        | 174               | 23               | 0                | 197         | 702      |
| CVWD               | 272               | 78               | 0                | 350         | 364      |
| Fontana            | 320               | 36               | 0                | 356         | 960      |
| Montclair          | 39                | 6                | 0                | 45          | 115      |
| Ontario            | 609               | 70               | 7                | 686         | 2350     |
| Upland             | 59                | 34               | 0                | 93          | 226      |
| Total              | 1926              | 279              | 8                | 2213        | 5442     |

Fontana (Feb 2018)



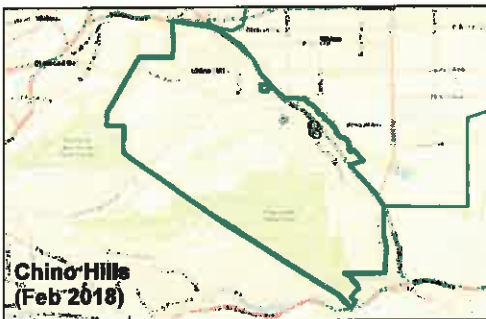
Cucamonga Valley Water District (Feb 2018)



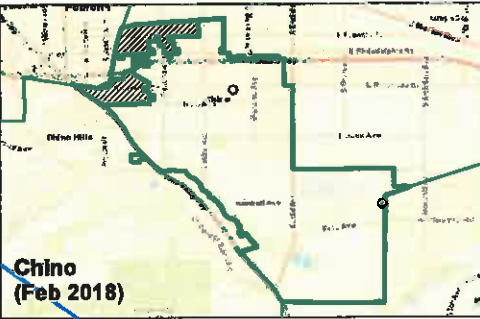
Upland (Feb 2018)



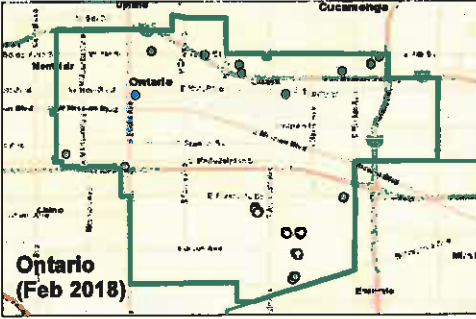
Chino Hills (Feb 2018)



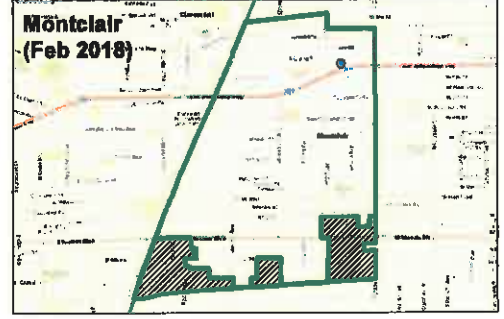
Chino (Feb 2018)



Ontario (Feb 2018)



Montclair (Feb 2018)

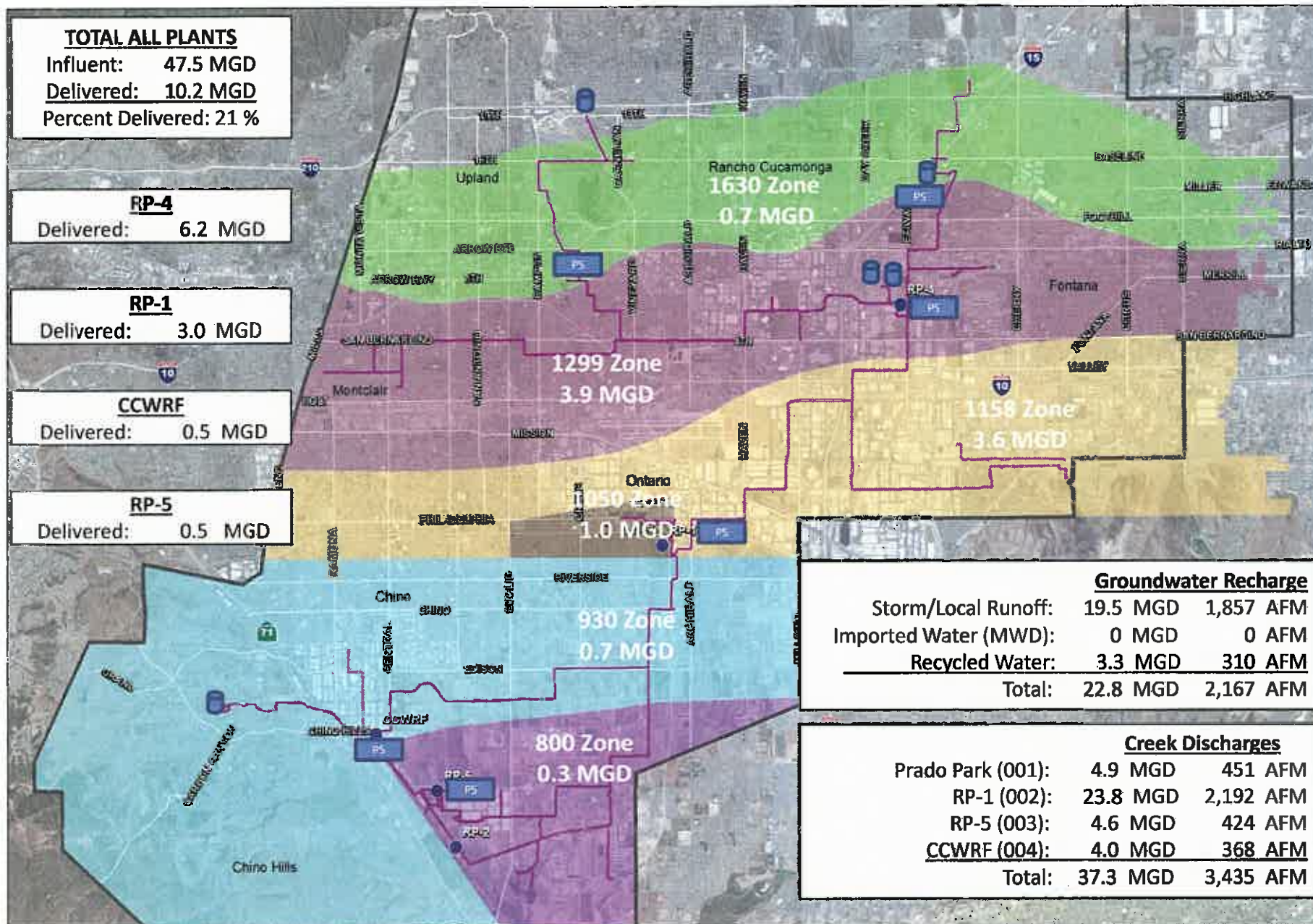


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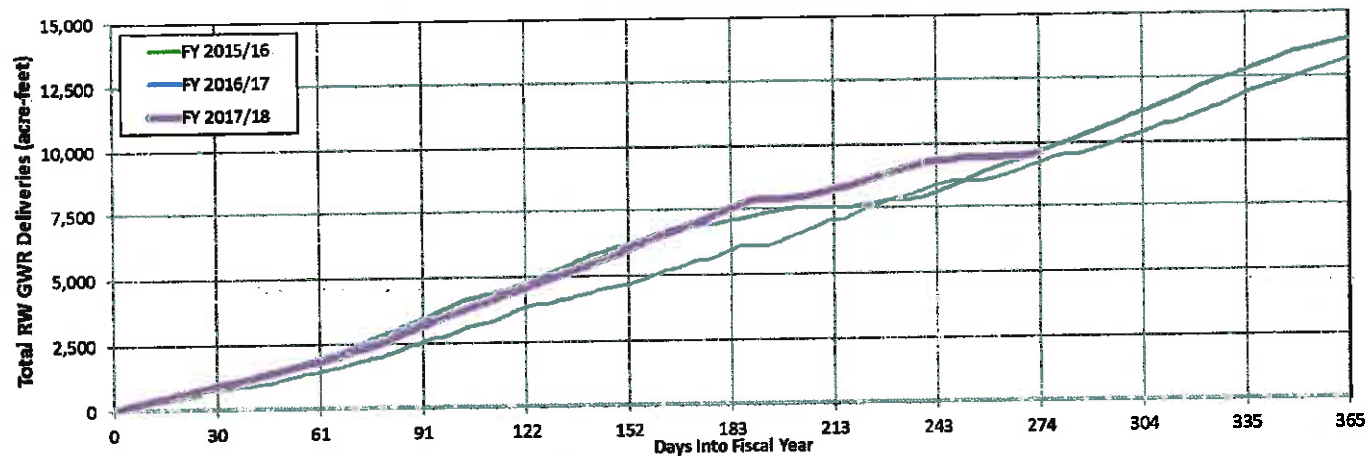
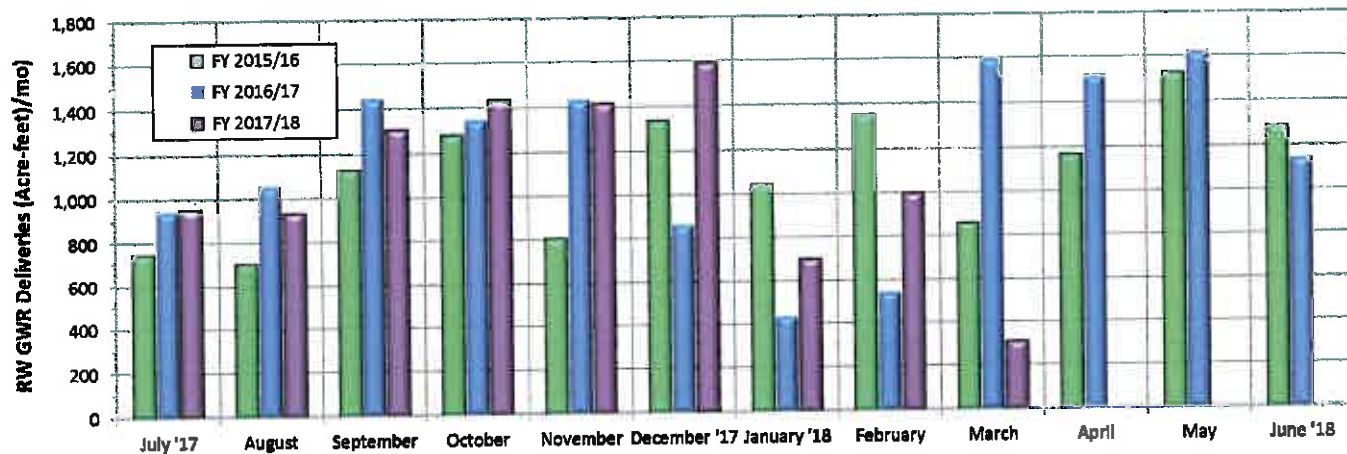
# IEUA RECYCLED WATER DISTRIBUTION – MARCH 2018





# Recycled Water Recharge Deliveries - March 2018 (Acre-Feet)

| Basin        | 3/1-3/10 | 3/11-3/17 | 3/18-3/24 | 3/25-3/31 | Month Actual | FY To Date Actual | Deliveries are draft until reported as final. |                                |
|--------------|----------|-----------|-----------|-----------|--------------|-------------------|---|--------------------------------|
| Ely          | 0.0      | 0.0       | 0.0       | 0.0       | 0.0          | 842               |   |                                |
| Banana       | 41.9     | 0.0       | 0.0       | 47.0      | 88.9         | 1695              |   |                                |
| Hickory      | 18.5     | 0.0       | 0.0       | 0.0       | 16.5         | 1004              |   |                                |
| Turner 1 & 2 | 0.0      | 0.0       | 0.0       | 15.2      | 15.2         | 983               |   |                                |
| Turner 3 & 4 | 0.0      | 0.0       | 0.0       | 38.9      | 38.9         |                   |   |                                |
| 8th Street   | 8.7      | 0.0       | 0.0       | 0.0       | 8.7          | 1048              |   |                                |
| Brooks       | 0.0      | 0.0       | 0.0       | 12.7      | 12.7         | 1049              |   |                                |
| RP3          | 57.8     | 0.0       | 27.0      | 18.9      | 103.7        | 2218              |   |                                |
| Decler       | 0.0      | 0.0       | 0.0       | 0.0       | 0.0          | 0                 |   |                                |
| Victoria     | 25.1     | 0.0       | 0.0       | 0.0       | 25.1         | 798               |   |                                |
| San Sevaline | 0.0      | 0.0       | 0.0       | 0.0       | 0.0          | 0                 |   |                                |
| Total        | 150.0    | 0.0       | 27.0      | 132.6     | 309.6        | 9,636             | 9,656   | AF, Previous FY To Date Actual |



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## IEUA Bill Matrix

| Year | IEUA Action    | Bill No.              | Author                | Bill Name   | Final Status       | Comments  |
|------|----------------|-----------------------|-----------------------|---|--------------------|---|
| 2017 | <u>Support</u> | <u>Prop 68 (SB 5)</u> | de León               | Water Bond  | Ballot in June '18 | Joined Californians for Clean Water and Safe Parks Coalition - Prop 68 (2/18) |
| 2018 | <u>Support</u> | <u>SB 606</u>         | Skinner and Hertzberg | Water Management Planning   |                    | Implementing the Gov. Exec. Order   |
| 2018 | <u>Support</u> | <u>AB 1668</u>        | Friedman              | Water Management Planning   |                    | Implementing the Gov. Exec. Order   |
|      |                |                       |                       | Sacramento-San Joaquin Delta: Delta Stewardship Council                         |                    |   |
| 2018 | <u>Oppose</u>  | <u>AB 1876</u>        | Frazier               | Small System Water Authority Act of 2018  |                    | MWD Coalition Letter  |
| 2018 | <u>Support</u> | <u>SB 2050</u>        | Caballero             | Water quality: Safe and Affordable Drinking Water Fund                          |                    | Eastern MWD Bill  |
|      |                |                       |                       |   |                    | Public goods charge, also included in a budget trailer                        |
| 2018 | Watch          | <u>SB 623</u>         | Monning               |   |                    | Signatures still being verified for inclusion on the November ballot.         |
| 2018 | Watch          | Water Bond            | Jerry Merrill         | <u>Water Supply and Water Quality Act of 2018</u>                               | -                  | CSDA  |
| 2018 | Watch          | <u>AB 3037</u>        | Chul, Holden          | Community Redevelopment Law of 2018   | -                  | CSDA  |
| 2018 | Watch          | <u>AB 1778</u>        | Holden                | Transit-Oriented Redevelopment Law of 2018                                      | -                  | Signed on to MWD Coalition  |
| 2018 | Oppose         | <u>AB 2697</u>        | Gallagher             | Idled Ag Land and Water Transfers   | -                  | Concerns for partnering agencies  |
| 2018 | Watch          | <u>SB 831</u>         | Wieckowski            | Land use: accessory dwelling units  | -                  |   |
|      |                |                       |                       | Discontinuation of residential water service: urban and community water systems | -                  | Concerns for partnering agencies  |
| 2018 | Watch          | <u>SB 998</u>         | Dodd                  |   | -                  |   |

**REQUESTED  
ITEM**

**4A**

## Chris Berch

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**From:** Chris Berch  
**Sent:** Wednesday, April 4, 2018 11:42 AM  
**To:** 'Katie Gienger'; 'Amanda Coker'; 'Braden Yu'; Chuck Hayes; 'Dave Crosley'; 'Harrison Nguyen'; 'Jesus Plasencia'; 'John Bosler'; 'Mike Hudson'; 'Nadeem Majaj'; 'Nicole deMoet'; 'Ron Craig'; 'Rosemary Hoerning'; Scott Burton  
**Cc:** Halla Razak; Christina Valencia; Randy Lee; Kathy Besser; Shaun Stone; Javier Chagoyen-Lazaro  
**Subject:** RE: Technical Committee Information RE: Recycled Water Pipeline Action Item

Katie,

Below are responses to your questions – in red.

Thanks,  
Chris

**From:** Katie Gienger [mailto:KGienger@ontarioca.gov]  
**Sent:** Tuesday, April 3, 2018 4:17 PM  
**To:** Chris Berch <cberch@ieua.org>; 'Amanda Coker' <acoker@cityofchino.org>; 'Braden Yu' <bradeny@cvwdwater.com>; Chuck Hayes <chays@fontana.org>; 'Dave Crosley' <dcrosley@cityofchino.org>; 'Harrison Nguyen' <hnguyen@ci.upland.ca.us>; 'Jesus Plasencia' <jplasencia@cityofchino.org>; 'John Bosler' <johnb@cvwdwater.com>; 'Mike Hudson' <mudson@cityofmontclair.org>; 'Nadeem Majaj' <nmajaj@chinohills.org>; 'Nicole deMoet' <ndemoet@cityofmontclair.org>; 'Ron Craig' <ronc@mbakerintl.com>; 'Rosemary Hoerning' <rhoerning@ci.upland.ca.us>; Scott Burton <SBurton@ontarioca.gov>  
**Cc:** Halla Razak <hrazak@ieua.org>; Christina Valencia <cvalencia@ieua.org>; Randy Lee <rlee@ieua.org>; Kathy Besser <kbesser@ieua.org>  
**Subject:** RE: Technical Committee Information RE: Recycled Water Pipeline Action Item

Chris,

Thank you for providing this information. Could you expand on the funding arrangement with Auto Club Speedway? In the TAC Meeting we talked about some of the details, such as:

- Pumping rights may be leased/sold by Speedway, with the proceeds turned over to IEUA as payments. Yes
- Over the life of the agreement (60 years), IEUA anticipates the proceeds from the pumping rights to be \$xxxx, which exceeds the upfront financial contribution (and accrued interest) by \$xxxx. Based on projected revenues from ACS groundwater, IEUA anticipates covering all costs within the first 20 years of the 60-year term. Any revenues received after this date would be returned to IEUA reserves.
- This provides a net cash benefit to IEUA and the member agencies, to be returned to the regional funds per the Regional Contract. Any net benefit will be tracked and returned to the Regional Capital and Recycled Water fund based on actual revenues/costs.

Please incorporate this information into the summary, and correct me if any of the statements above are not accurate.

Sincerely,

Katie Gienger, P.E.

**From:** Laura Mantilla [<mailto:lmantilla@ieua.org>] **On Behalf Of** Chris Berch

**Sent:** Tuesday, April 03, 2018 4:09 PM

**To:** 'Amanda Coker'; 'Braden Yu'; Chuck Hayes; 'Dave Crosley'; 'Harrison Nguyen'; 'Jesus Plasencia'; 'John Bosler'; Katie Gienger; 'Mike Hudson'; 'Nadeem Majaj'; 'Nicole deMoet'; 'Ron Craig'; 'Rosemary Hoerning'; Scott Burton

**Cc:** Halla Razak; Christina Valencia; Randy Lee; Kathy Besser; Chris Berch

**Subject:** Technical Committee Information RE: Recycled Water Pipeline Action Item

All,

As requested at last week's Technical Committee meeting, the following are some bullet points regarding the development of the agreements that led to the recycled water pipeline action item.

- Project agreements executed in December 2015 – Parties include: California Steel Industries (CSI), Auto Club Speedway (ACS), Prologis, Fontana Water Company (FWC), the City of Fontana and IEUA
- Goals of Project:
  - Connect sewer flows from unincorporated San Bernardino County (within IEUA service area) into the regional system (CSI, ACS and Prologis)
  - Convert ACS/CSI non-potable water use from groundwater to recycled water
    - Reduce groundwater pumping in Management Zone 3 (Watermaster goal for region)
    - Expand regional recycled water system and groundwater recharge capabilities
- Service Providers:
  - Sewer: City of Fontana is retail sewer service provider
  - Recycled water: FWC is retail recycled water provider (approximately 1,000 AFY)
    - IEUA to secure recycled water source (excess of member agency entitlement or alternative source)
    - IEUA wholesale rate plus any applicable surcharges
    - Priority for recycled water remains river obligation and member agency entitlement (direct and groundwater recharge) first, then use for this project second
- Project Funding:
  - Prologis – funding partner (direct payment)
  - CSI – funding partner (direct payment)
  - ACS - funding partner (payment through pumping rights)
    - Assignment of pumping rights to IEUA for 60 years
  - IEUA – Regional system capacity (payment through grants)
- Project Phasing:
  - Phase 1 – Temporary sewer system (complete January 2016)
  - Phase 2 – Permanent sewer system (complete January 2017)
  - Phase 3 – Recycled water system (this action)

If you have any questions, please let us know.

Thanks,  
Chris