Regional Sewerage Program
Policy Committee Meeting

Thursday, November 5, 2020
3:30 p.m.
Teleconference Call

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

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

Teleconference: 1-415-856-9169/Conference ID: 253 787 211#

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

Call to Order/Flag Salute

Roll Call

Public Comment

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

Additions/Deletions to the Agenda

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

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

2. **Action Item**
   A. Meeting Minutes for October 1, 2020

3. **Informational Items**
   A. Regional Contract Negotiations Update *(Oral)*
   B. Groundwater Recharge/Recycled Water Semi-Annual Update

4. **Receive and File**
   A. Annual Reports – Building Activity, Recycled Water & Energy
   B. Recycled Water Distribution – Operations Summary

5. **Other Business**
   A. IEUA General Manager's Update
   B. Committee Member Requested Agenda Items for Next Meeting
   C. Committee Member Comments
   D. Next Meeting – December 3, 2020

6. **Adjournment**

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Recording Secretary (909) 993-1926, 48 hours prior to the scheduled meeting so that the Agency can make reasonable arrangements.

DECLARATION OF POSTING

I, Sally H. Lee, 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 and posted in the foyer at the Agency's main office at 6075 Kimball Avenue, Building A, Chino, CA, on Monday, November 2, 2020.

Sally H. Lee

ACTION ITEM

2A

Regional Sewerage Program
Policy Committee Meeting

MINUTES OF OCTOBER 1, 2020 MEETING

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CALL TO ORDER

A meeting of the IEUA/Regional Sewerage Program Policy Committee was held via teleconference on Thursday, October 1, 2020. Chairwoman Debbie Stone, City of Upland, called the meeting to order at 3:30 p.m.

PLEDGE OF ALLEGIANCE

Eunice Ulloa/City of Chino led those present via teleconference in the Pledge of Allegiance. Recording Secretary Sally Lee took roll call to establish a quorum. A quorum was present.

ATTENDANCE via Teleconference

Committee Members:

Randall Reed	Cucamonga Valley Water District
Eunice Ulloa	City of Chino
Peter Rogers	City of Chino Hills
Kati Parker	Inland Empire Utilities Agency
Tenice Johnson	City of Montclair
Jesse Armendarez	City of Fontana
Debra Dorst-Porada (Alternate)	City of Ontario
Debbie Stone	City of Upland

Others Present:

Amanda Coker	City of Chino
Noel Castillo	City of Montclair
John Bosler	Cucamonga Valley Water District
Eduardo Espinoza	Cucamonga Valley Water District
Courtney Jones	City of Ontario
Christopher Quach	City of Ontario
Nicole deMoet	City of Upland
Scott Connor	Unknown
David Schwarmer	Unknown

Others Present (continued):

Kathy Besser	Inland Empire Utilities Agency
Christiana Daisy	Inland Empire Utilities Agency
Shivaji Deshmukh	Inland Empire Utilities Agency
Randy Lee	Inland Empire Utilities Agency
Christina Valencia	Inland Empire Utilities Agency
Jerry Burke	Inland Empire Utilities Agency
Javier Chagoyen-Lazaro	Inland Empire Utilities Agency
Denise Garzaro	Inland Empire Utilities Agency
Don Hamlett	Inland Empire Utilities Agency
Elizabeth Hurst	Inland Empire Utilities Agency
Sally H. Lee	Inland Empire Utilities Agency
Sylvie Lee	Inland Empire Utilities Agency
Jason Marseilles	Inland Empire Utilities Agency
Cathleen Pieroni	Inland Empire Utilities Agency
Craig Proctor	Inland Empire Utilities Agency
Scott Oakden	Inland Empire Utilities Agency
Jeanina Romero	Inland Empire Utilities Agency
Ken Tam	Inland Empire Utilities Agency
Wilson To	Inland Empire Utilities Agency
Teresa Velarde	Inland Empire Utilities Agency
Jeff Ziegenbein	Inland Empire Utilities Agency

PUBLIC COMMENTS

There were no public comments.

ADDITIONS/CHANGES TO THE AGENDA

There were no additions or changes to the agenda.

1. **TECHNICAL COMMITTEE REPORT**

   Nicole deMoet/City of Upland stated that the last Technical Committee meeting was held on September 24, where the only action item was the approval of the August 27 Technical Committee minutes. Under informational items, the Committee heard presentations on the following items: Operations Quarterly Update, Engineering Projects Update, Groundwater Recharge Basin Capital Project Update, FY 2019/20 Fourth Quarter Budget Variance Report, Federal Legislative Update, and Return to Sewer Pilot Study Update. She also shared that the Regional Contracting Agencies group met three times over the month of September. Prior to the first meeting in September, in the last week of August, a smaller group of representatives of the contracting agencies met with IEUA to discuss the property tax proposal. Those representatives then reported back to the contracting agencies for further discussions during the first meeting in September. The other item that was discussed by contracting agencies for the remainder of the month was the Santa Ana River (SAR) Obligation topics.

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2. ACTION ITEMS

A. APPROVAL OF THE SEPTEMBER 3, 2020 POLICY COMMITTEE MEETING MINUTES

Motion: By Randall Reed/Cucamonga Valley Water District and seconded by Peter Rogers/City of Chino Hills to approve the meeting minutes of the September 3, 2020 Regional Policy Committee meeting.

Motion carried by roll call vote: Ayes: 5, Absent: 2, Noes: 0

With the following roll call vote:

Ayes:	Reed, Rogers, Ulloa, Johnson, Stone
Noes:	None
Absent:	Armendarez, Dorst-Porada
Abstain:	None

3. INFORMATIONAL ITEMS

A. OPERATIONS DIVISION QUARTERLY UPDATE

Don Hamlett/IEUA gave an overview of the actions taken by the Operations division in response to the COVID-19 pandemic, incident rates compared to industry, total recordable injuries, and cybersecurity framework and progress. He presented on Integrated System Services' operations since implementing working from home protocols and improvements to the Chino Preserve Lift Station, such as implementing an automated cleaning cycle and schedule, independent pump de-ragging function, and cleaning and de-ragging controllable from the RP-5 SCADA system to help provide sewage spills.

Eunice Ulloa/City of Chino asked what causes the clogs that require de-ragging. She asked if there were any specific items that she can remind citizens not to use. Randy Lee/IEUA stated that there have been experiences of ragging on the pumps due to "flushable" wipes that are received out of the lift station. These automated de-ragging system improvements were implemented because of the issues the Agency has had with "flushable" wipes. The improvements also give the Agency staff the ability to remove the rags remotely. Ms. Ulloa asked if the Agency was still having trouble with the "flushable" wipes. Mr. Lee stated that the Agency has not had any issues since making these improvements. Ms. Ulloa asked if it would still be helpful to continue to remind citizens to not flush the wipes marketed as "flushable". Mr. Lee stated that is always appreciated and helpful. Mr. Shivaji Deshmukh stated that he will work with staff to collaborate with member agencies to help share and coordinate messaging regarding this matter.

Mr. Hamlett continued by highlighting the use and benefits of SmartCovers by the Collections team and smart bearing sensors by the Regional Compost Facility.

B. FY 2019/20 FOURTH QUARTER BUDGET VARIANCE REPORT

Javier Chagoyen-Lazaro/IEUA gave a summary of the Fiscal Year (FY) 2019/20 budget variance of the Regional Wastewater and the Recycled Water Programs funds. He shared that COVID-19 has had impacts on certain expenses and revenues of the Agency. He highlighted that even through the pandemic, the Agency was able to secure advantageous financing for the RP-5

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Expansion Project through the WIFIA loan, fixing-out the 2008B Variable Bonds, refinancing the 2010A Bonds and securing numerous SRF loans. Mr. Chagoyen-Lazaro gave a more detailed review on the sources and uses of funds, amended budgets, actual use, and percentage of the budget used for the Regional Wastewater and Recycled Water Program funds. He continued to provide an overview of the cost of service per monthly EDU and recycled water rate, projected and actual operations and maintenance costs, and rehabilitation and replacement project costs. He also shared the projected versus actual cost of service per acre foot (AF) for recycled water, imbalances in the rates and cost of service, and the need to remedy this imbalance to ensure future sustainability of the program.

Ms. Ulloa asked for the cost of MWD imported water per AF. Mr. Chagoyen-Lazaro stated that he would provide her with that information. Ms. Ulloa stated that she would like to compare the cost of MWD imported water to recycled water.

Mr. Deshmukh stated that in response to some Committee member comments and concerns regarding the Agency's debt program, staff suggests that they prepare a presentation for the Committee about how debt is being managed by balancing the issuance of debt for programs, working with the state for SRF loans, and the current debt portfolio. Chair Stone stated that a presentation on the subject would be appreciated.

Committee Member Jesse Armendarez/City of Fontana joined the meeting via teleconference.

C. FEDERAL LEGISLATIVE UPDATE

Kathy Besser/IEUA stated that at the last Technical/Policy Committee meetings, Manager of Grants Jesse Pompa gave a grants update. At the Technical Committee meeting, questions were raised about possible federal grants that may be available. She shared that with this year being a presidential election year, there is increased rhetoric from politicians on what they would like to do with no surety in execution. At the Technical Committee meeting, there was a question of federal stimulus funding as part of stimulus bills for water infrastructure projects or potential grants. She stated that currently there are no stimulus bills that have been signed into law that includes any funding for infrastructure. There was HR 2 Bill, Moving Forward Act, that was an infrastructure bill passed by the House of Representatives for $1.2 trillion. One of the provisions of the bill states funding will be made available for the modification or relocation of an existing, publicly owned treatment works that is at risk of being significantly impaired for damaged by manmade or natural disaster. Staff is keeping a close eye on this bill potentially for the RP-2 plant. The challenge with this bill is that the intent language when the bill was originally put together was for the money to be set aside for south eastern states, it was not intended for other parts of the country. The Senate has stated that they will do their own version of an infrastructure bill and come to a compromise. The Agency has help from consultant staff at the capitol, who are working with the house committee staff to ensure that funding is available to other states, not just for the southern eastern states. She also shared that there are no appropriation bills that have been signed into law this year. The President signed a continuing resolution that will keep the government operating beyond the federal FY, which ended yesterday. It will continue the funding levels at previous year's levels until December 11, 2020. IEUA's consultants are working with legislators to try to continue to bring funding to the region to help rate payers not have to pay as much for necessary projects.

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Committee Member Debra Dorst-Porada/City of Ontario joined the meeting via teleconference.

Ms. Debra Dorst-Porada/City of Ontario requested to go back to item IA – Technical Committee Report and Regional Contracts Negotiations Update.

1. TECHNICAL COMMITTEE REPORT

Ms. Dorst-Porada stated that she would like to see the Regional Contract negotiations complete by the end of 2021 so that Committee members will have time to review the contract with their partners. She stated her concern of running out of time. She requested a timeline for each portion of the Regional Contract that is left to discuss. Ms. deMoet gave an overview of what has been accomplished and items that still need to be addressed. She shared that at the end of the calendar year, the existing agreement with the facilitation group will come to an end. Three important items that have yet to be agreed are the Santa Ana River (SAR) obligation, governance and recycled water. These topics have been elevated to higher levels and discussed at General Managers meetings. She explained that the group is aiming to have term sheets on some of these larger items and added that while the timeline is a concern; the Committee is working through the various positions of the contracting agencies to account for all perspectives.

Ms. Dorst-Porada asked if the negotiations can be completed by the end of 2021. Ms. deMoet responded that is the goal and every contracting agency is diligently putting in a significant amount of staff time and effort to move these topics through, but many of these topics of higher importance have to be addressed in a very granular way. She stated that they are being addressed both technically and by each contracting agency.

Ms. Dorst-Porada asked for an update and timeline for each portion of the Regional Contract at the next meeting. She stressed the importance of the contract and it being completed in a timely manner. Ms. deMoet stated that we can potentially work with the facilitator to provide a report with that information. Mr. Deshmukh thanked Ms. deMoet for a thorough description of the process. He stated that all involved have done a great job addressing portions of the agreement and now, as mentioned, three big areas remain: governance, SAR obligations, and how they relate to recycled water. These topics have been discussed at General Managers meetings and it may be a good time to provide a more detailed update on what has been accomplished and what remains ahead to the Policy Committee members. Issues such as governance should be considered at the policy level, where items such as the authority of these Committees versus the responsibility and authority of the IEUA Board of Directors can be discussed. He suggested a joint presentation at the next meeting with Ms. deMoet and himself regarding what has been completed and what remains with the Regional Contract negotiations.

4. RECEIVE AND FILE

A. ENGINEERING & CONSTRUCTION MANAGEMENT PROJECT UPDATES

The Engineering & Construction Management Project updates was received and filed by the Committee.

B. BUILDING ACTIVITY REPORT

The Building Activity Report for July 2020 was received and filed by the Committee.

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C. RECYCLED WATER DISTRIBUTION – OPERATIONS SUMMARY

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

5. OTHER BUSINESS

A. IEUA GENERAL MANAGER'S UPDATE

Mr. Deshmukh stated that in response to Committee Member Reed's question regarding cost savings information on running an internal combustible engine onsite at the last Policy meeting, staff is recommending returning to the Committee in December 2020 or January 2021 with more detailed information. Staff needs to consider permitting restrictions from AQMD and the market for natural gas at any given time. The answer to the question of whether the Agency should run on natural gas or digester gas is always changing and needs to be evaluated on a continuing basis. Coming back to the Committee in December/January will allow staff to streamline discussions on the Energy Management Plan and show the Committee how this fits into the overall energy portfolio. Mr. Deshmukh stated that City of Chino and City of Ontario have deferred the purchase of recycled water for at least a portion of fiscal year 2020/21, making the purchase of water available to any of the contracting agencies. If there are multiple interests, the Agency will work with the agencies to accommodate the requests. Lastly, he introduced IEUA's new Board Secretary/Office Manager Denise Garzaro. He stated that Ms. Garzaro previously served at the County of San Bernardino as the Chief Deputy Clerk of the Board.

B. COMMITTEE MEMBER REQUESTED AGENDA ITEMS FOR NEXT MEETING

There were no Committee Member requests for agenda items for the next meeting.

COMMITTEE MEMBER COMMENTS

There were no Committee Member comments.

C. NEXT MEETING – NOVEMBER 5, 2020

6. ADJOURNMENT

The meeting was adjourned at 4:12 p.m.

Transcribed by:

Sally H. Lee, Executive Assistant

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INFORMATION ITEM

3B

Groundwater Recharge/Recycled Water Semi-Annual Update





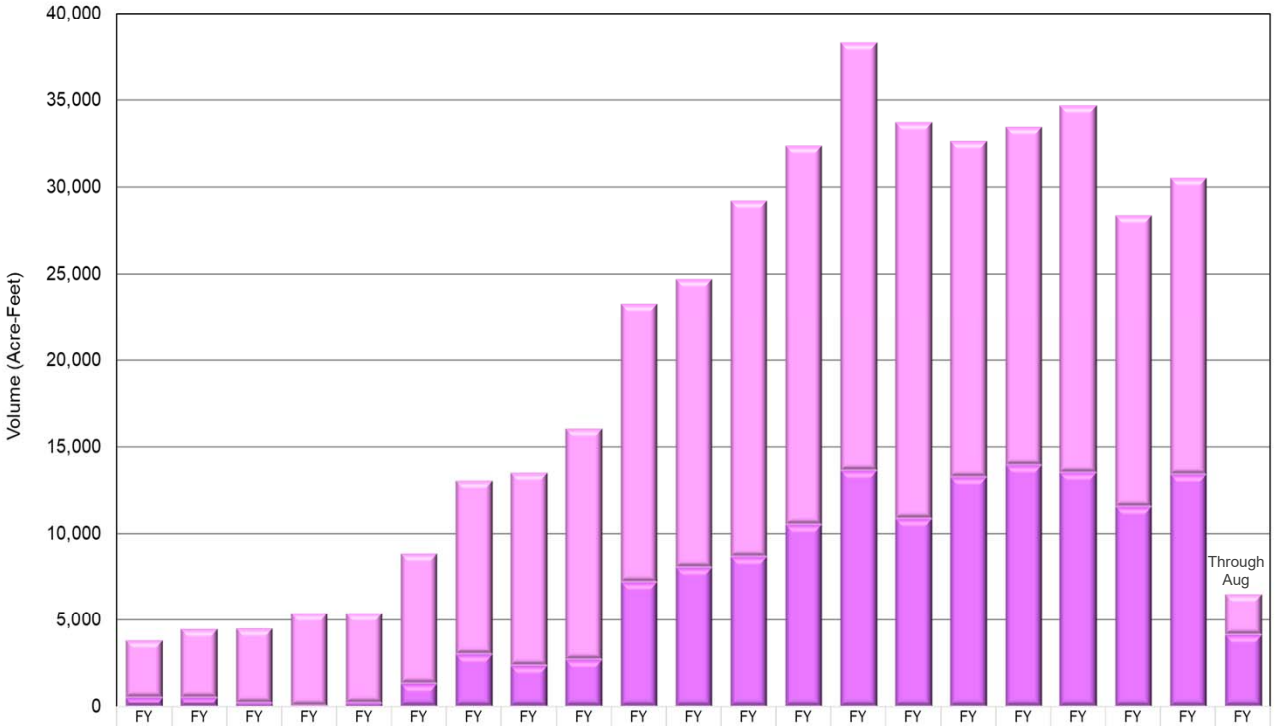


Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Andy Campbell
GWR Recharge Coordinator / Hydrogeologist
October 2020

Historical Recycled Water (RW) Demand

- Pre 2005 Customers
  - Prado Park
  - Whispering Lakes GC
  - Ely Basin
- 2005-2015 Growth
  - RW GWR
  - Direct Use
- 2015 to 2020
  - Decreased Ag Use
  - Steady RW GWR

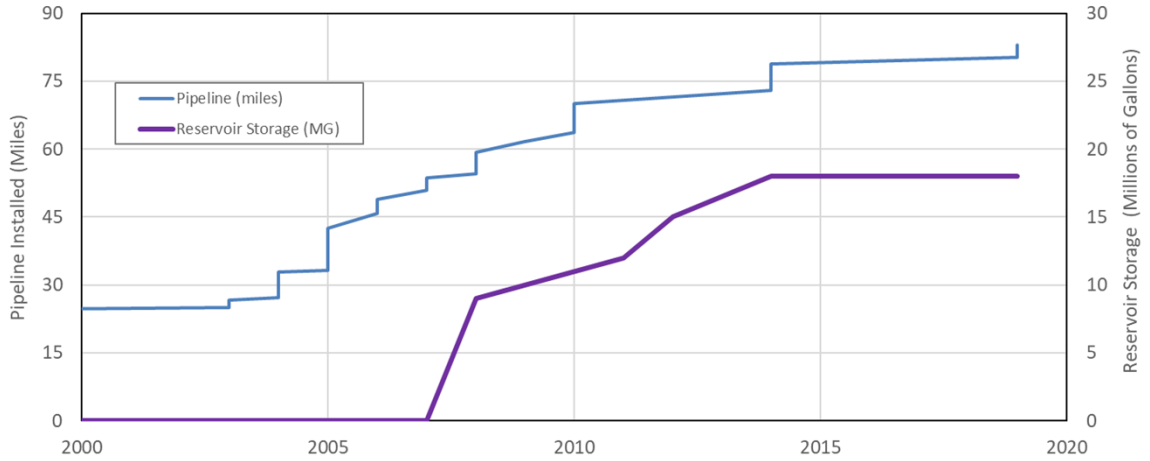


	FY 00/01	FY 01/02	FY 02/03	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21
RW Direct Use	3,296	3,937	4,308	5,348	5,204	7,539	10,040	11,153	13,361	16,057	16,656	20,556	21,840	24,659	22,850	19,397	19,477	21,132	16,803	17,115	2,397
RW Recharge	500	505	185	49	184	1,303	2,981	2,340	2,684	7,208	8,028	8,634	10,479	13,593	10,840	13,222	13,934	13,510	11,542	13,381	4,101

Inland Empire Utilities Agency
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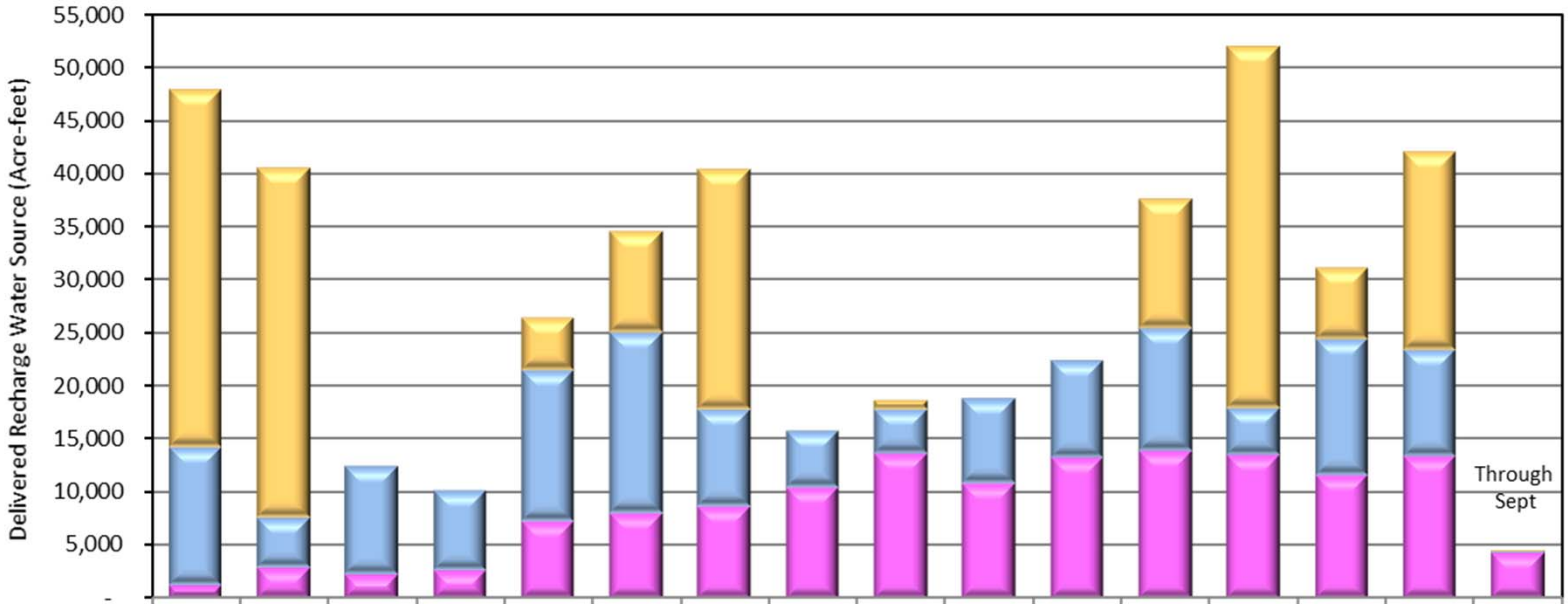
History of the RW Recharge Program

- 2002 - CBWM approved IEUA 30,000 AFY RW Recharge
- 2003 - Four Party Agreement for Recharge Program
- 2004 - Maximum Benefit Basin Plan Amendment for TDS
- 2004 - MOU with OCWD for Hydraulic Control
- 2005 - Recharge Facility Improvements Operational
- 2005, 2007, 2009 - Recharge Permits and Update



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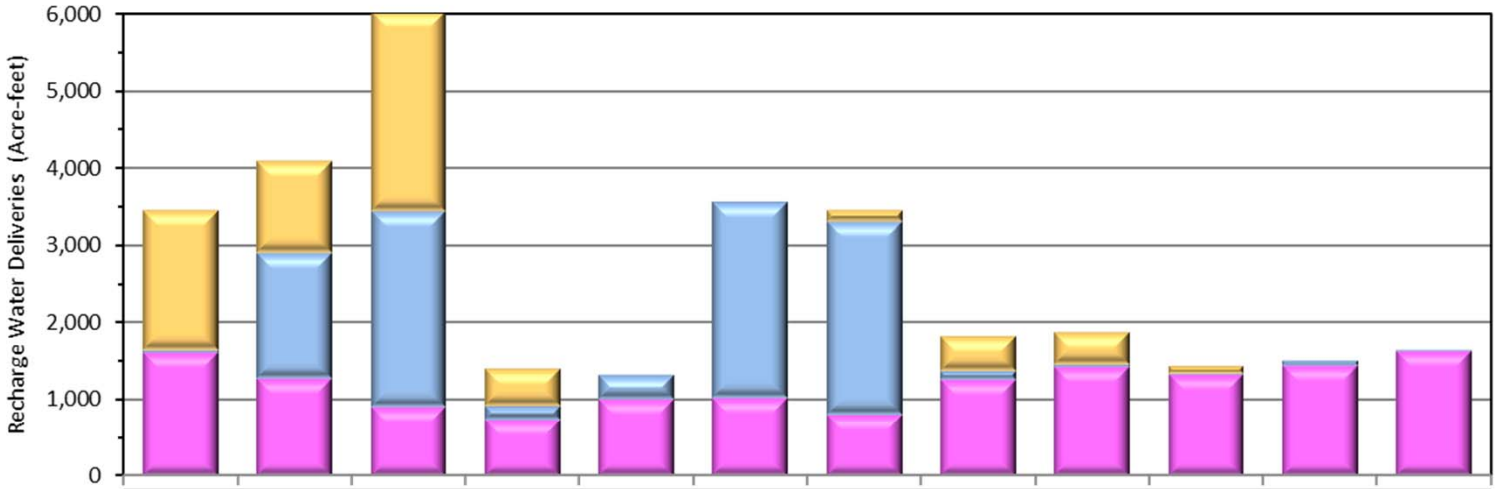
Groundwater Recharge Annual History



	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21
MWD and Other Imported Water	33,705	32,968	-	-	5,000	9,465	22,560	-	795	-	-	12,129	34,124	6,787	18,731	110
Stormwater and LR (excludes Non-Repl.	12,999	4,669	10,129	7,472	14,274	17,051	9,266	5,298	4,284	7,996	9,233	11,574	4,493	12,861	9,996	105
Recycled Water	1,304	2,989	2,340	2,684	7,210	8,065	8,634	10,479	13,593	10,840	13,222	13,934	13,510	11,542	13,381	4,406

Inland Empire Utilities Agency
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Groundwater Recharge Deliveries - Past 12 Months

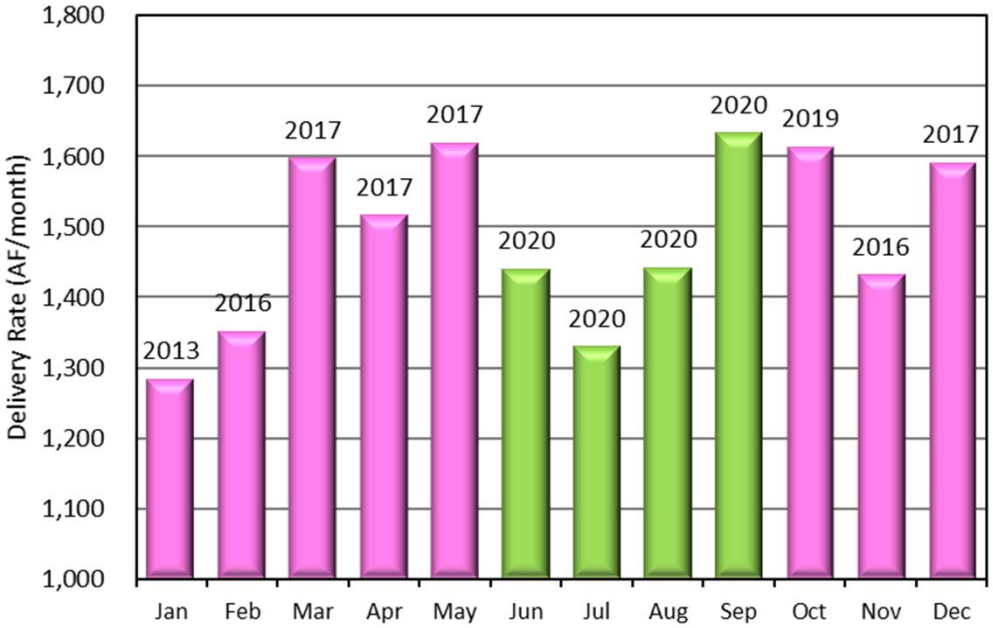


	Oct 2019	Nov 2019	Dec 2019	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020
MWD and other Imported Water	1,813	1,198	2,577	492	0	0	148	453	425	110	0	0
Stormwater and LR (excluded Non-Replenishment)	38	1,616	2,536	182	321	2,547	2,494	125	21	12	81	12
Recycled Water	1,614	1,290	918	748	1,008	1,025	820	1,266	1,440	1,330	1,442	1,634

Inland Empire Utilities Agency
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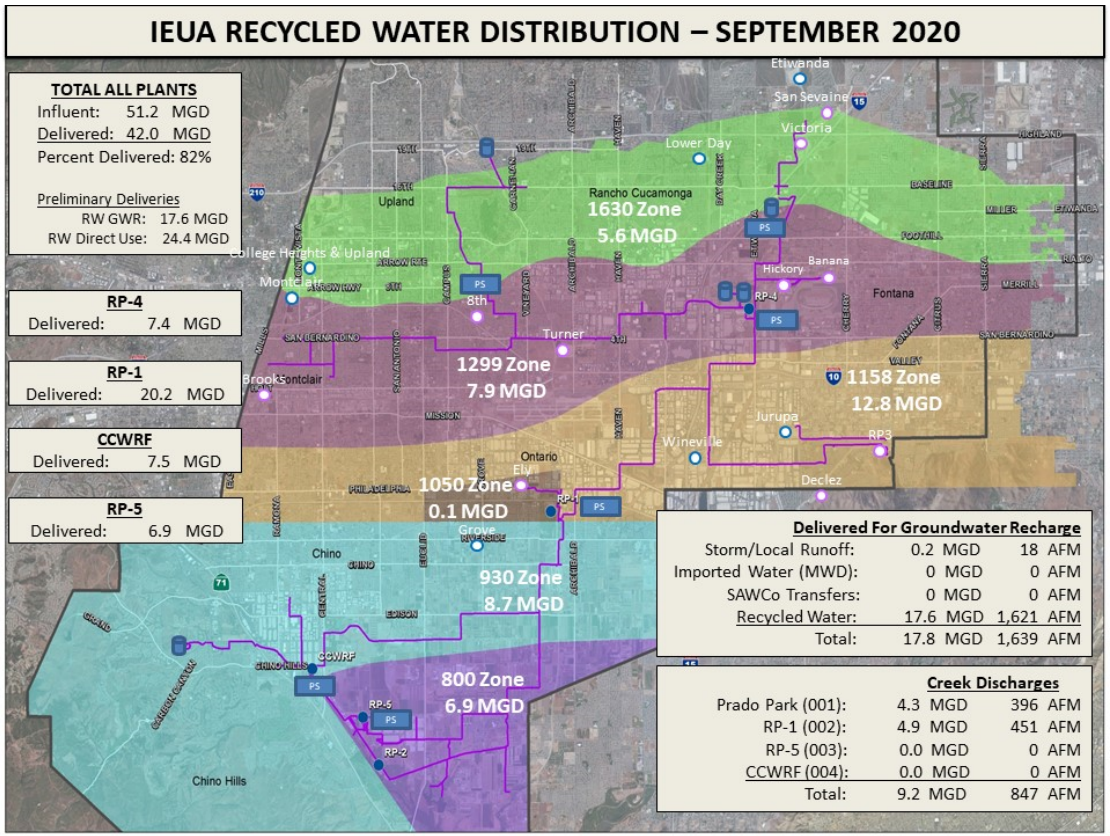
RW Recharge Deliveries - Historical Monthly Highs

Month	RW Recharge Deliveries - Historical Monthly Highs (AF)	Year of Occurrence
January	1,284	2013
February	1,352	2016
March	1,598	2017
April	1,517	2017
May	1,620	2017
June	1,440	2020
July	1,330	2020
August	1,442	2020
September	1,634	2020
October	1,614	2019
November	1,432	2016
December	1,591	2017



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IEUA Recycled Water Distribution – September 2020



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RECEIVE AND FILE

4A

FY 2019/2020 Annual Reports





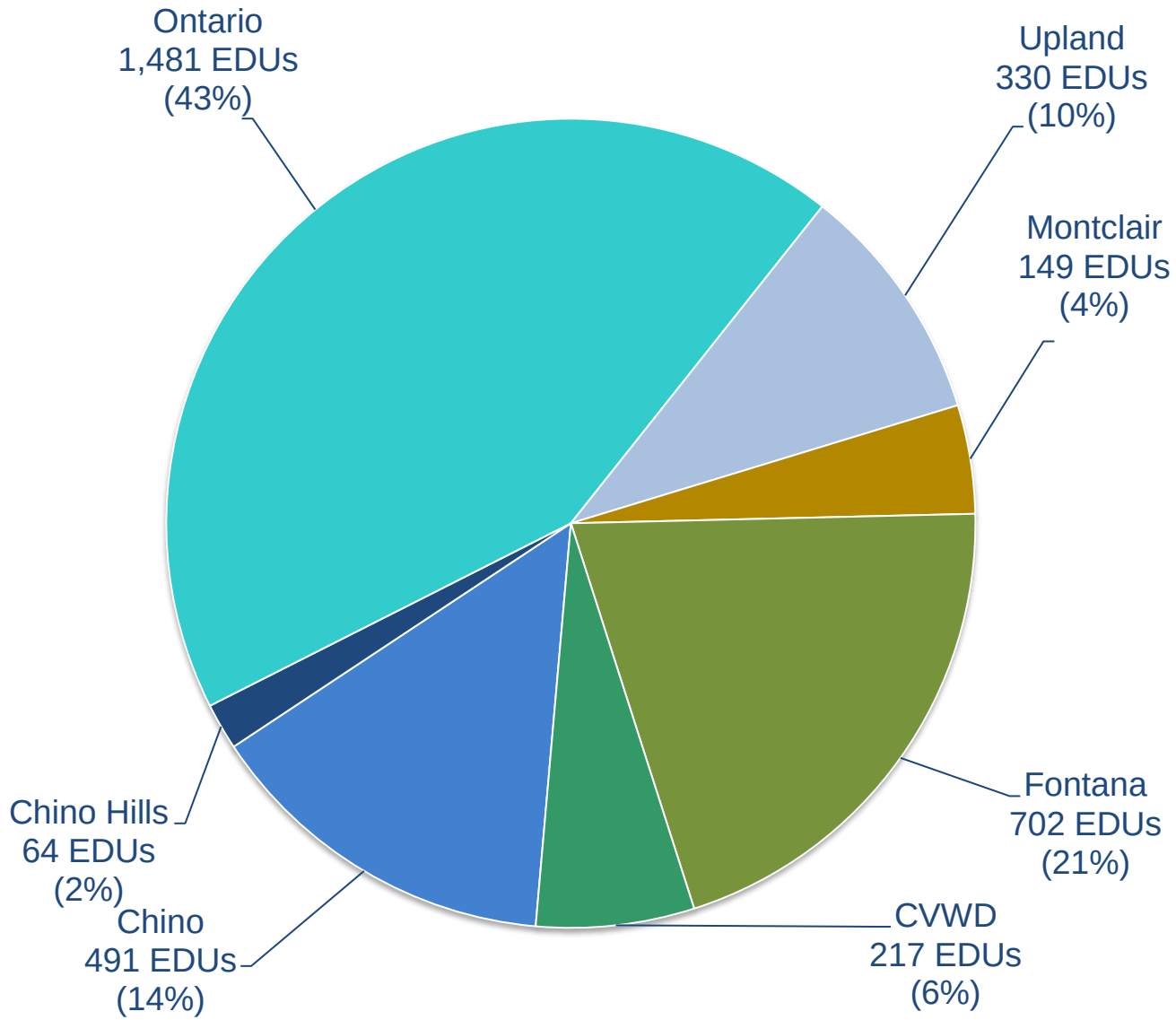


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Pietro Cambiaso
October 2020

FY19/20 Building Activity

3,434 EDUs Resulted in $23.9M Funding



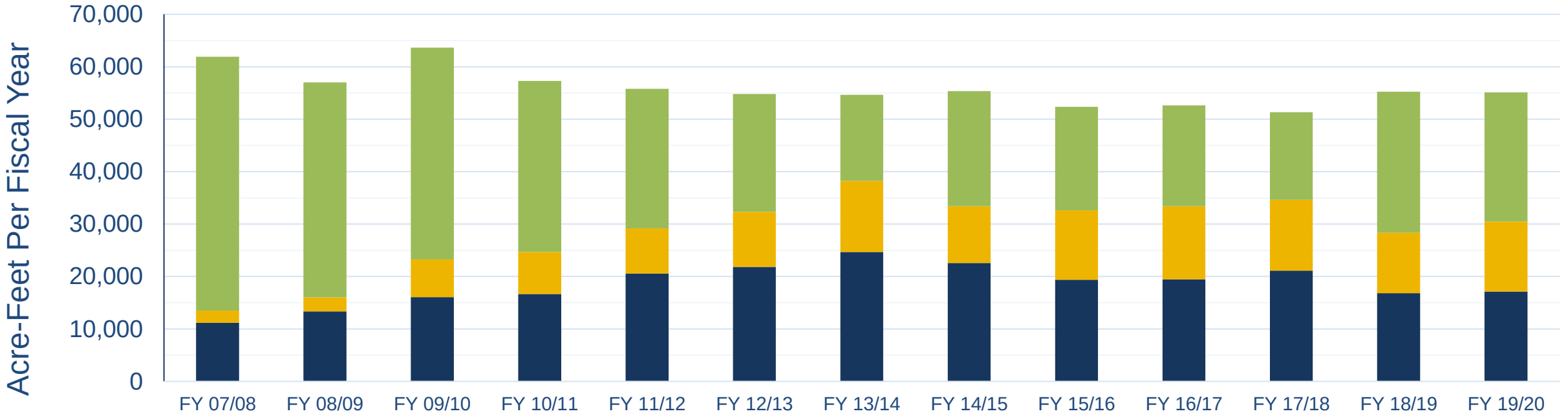
- EDU = Equivalent Dwelling Unit
- Partial EDU rounded to the nearest whole number

South Service Area
2,036 EDUs
(59%)

North Service Area
1,398 EDUs
(41%)

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

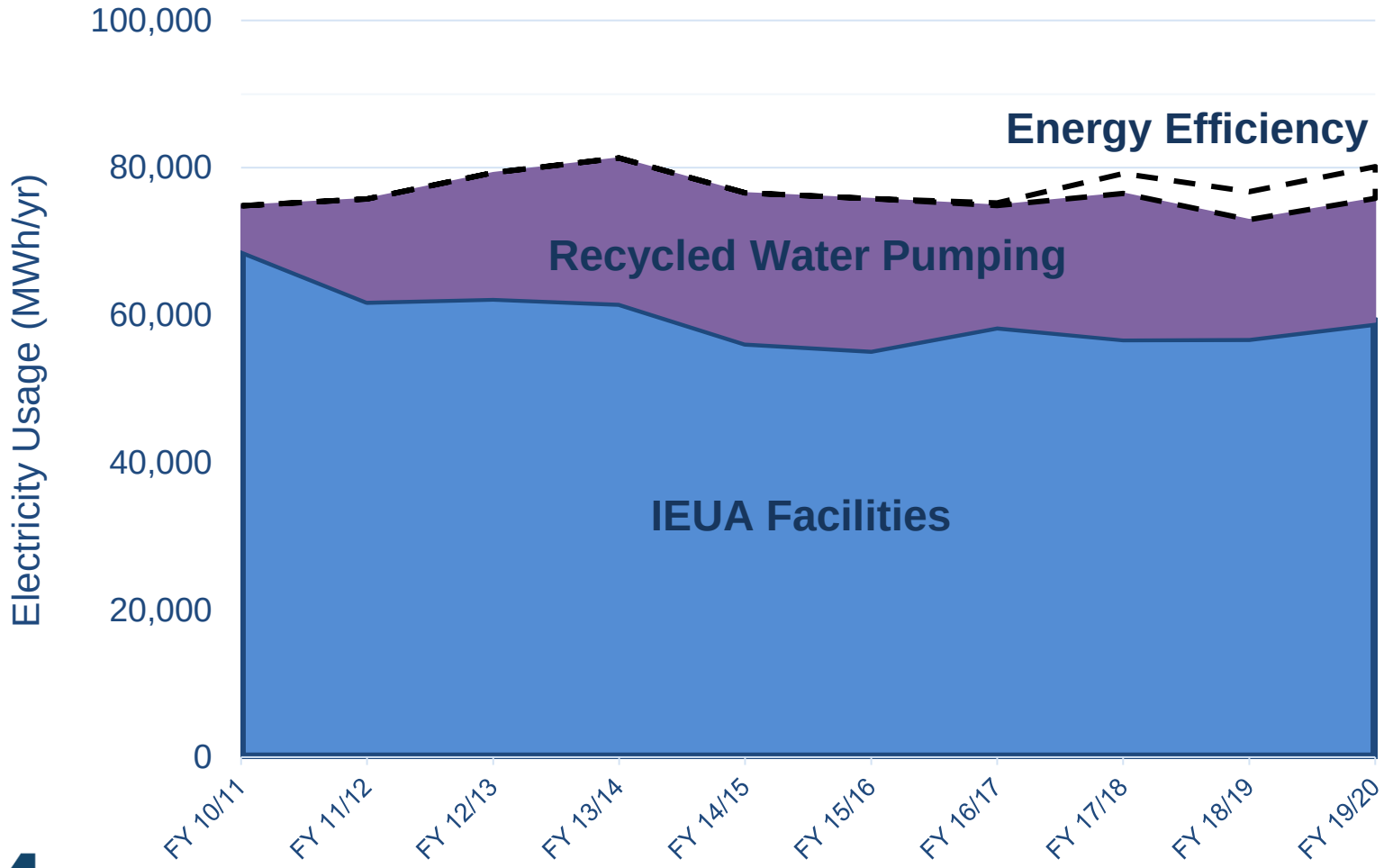
Recycled Water Deliveries



	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20
Direct	11,153	13,361	16,057	16,656	20,556	21,840	24,659	22,850	19,397	19,477	21,132	16,803	17,115
GWR	2,340	2,684	7,208	8,028	8,634	10,479	13,593	10,840	13,222	13,934	13,510	11,542	13,381
Effluent	48,412	40,962	40,379	32,607	26,607	22,487	16,399	21,961	19,752	19,226	16,707	26,888	24,635
Total	61,905	57,007	63,644	57,291	55,797	54,806	54,651	55,651	52,371	52,637	51,349	55,233	55,131

Inland Empire Utilities Agency
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Electricity Usage



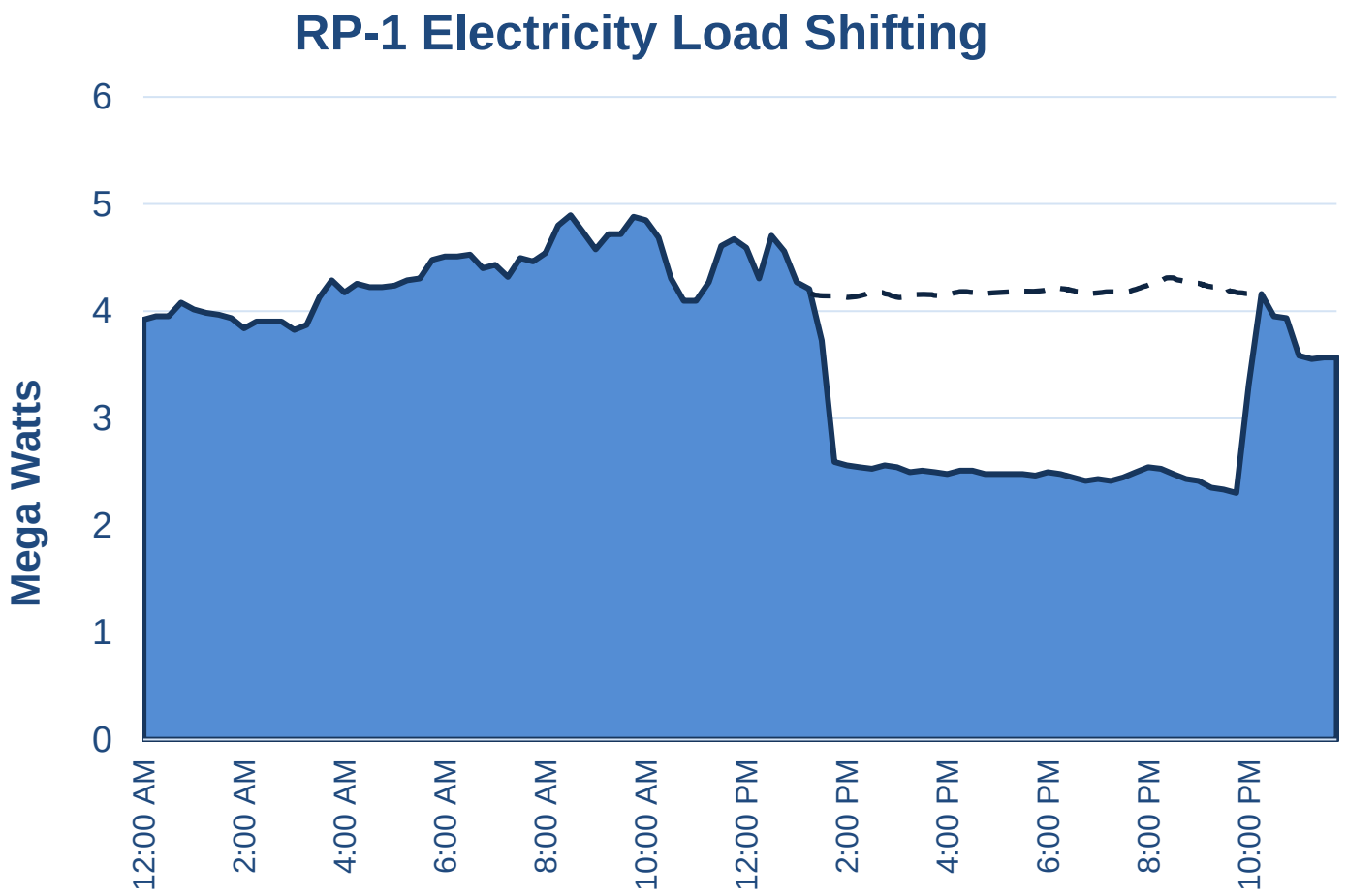
FY 2019/20 Energy Statistics

- 75,703 MWh of electricity consumption
- 10% of electricity from renewable energy
- Annual Cost: $7.6 M
- RP1 Energy efficiency project completed with projected annual savings of $41,000

Renewable Energy Projects
2008 – 2020 savings: $1,040,000

Inland Empire Utilities Agency
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Governor's Executive Order | Summer 2020 Heat Wave & Energy Shortage



- **Extreme heat event Aug 17, 18, and 19**
- **Governor actions**
  - State of Emergency Proclamation
  - Executive Order N-74-20
- **Rotating power interruptions**
- **IEUA response**
  - Load shifting (2 Mega Watts)
  - Energy storage (1 Mega Watt)

Inland Empire Utilities Agency
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Building Activity Report - YTD Fiscal Year 2020/21

Inland Empire Utilities Agency
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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)

0 | 0.5 | 1 | 15 | 30 | 45 | 75+

TOTAL EDU BY WASTEWATER CONNECTION TYPE (YTD)

Contracting Agency	YTD Actual				Projected
	Commercial (EDUs)	Industrial (EDUs)	Residential (EDUs)	Total (EDUs)	Total (EDUs)
Chino	2	0	58	60	430
Chino Hills	7	0	1	8	182
CVWD	12	0	0	12	1650
Fontana	11	4	205	220	2406
Montclair	6	0	0	6	407
Ontario	19	-1	121	139	3865
Upland	14	0	0	14	381
Total	71	3	385	459	9321

*

0 2.5 5 10 Miles

Fontana (Aug 2020)

Cucamonga Valley Water District (Aug 2020)

Upland (Aug 2020)

Chino Hills (Aug 2020)

Chino (Aug 2020)

Ontario (Aug 2020)

Montclair (Aug 2020)

2020

IEUA FY 2019-2020 Recycled Water Annual Report

Water Smart
Thinking in Terms of Tomorrow



Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

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INTRODUCTION

The 2019/20 Recycled Water Annual Report for the Inland Empire Utilities Agency (IEUA) recycled water program provides annual delivery data by IEUA retail agencies, by usage types, and by customers. The report also gives an overview of the IEUA treatment plants, describes recent construction, and summarizes the program history. The 2019/20 report is for IEUA's fiscal year, which runs from July 2019 to June 2020.

As a regional wastewater treatment agency, IEUA provides sewage utility services to seven contracting agencies under the Chino Basin Regional Sewage Service Contract: the cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Upland, and Cucamonga Valley Water District (CVWD) in the city of Rancho Cucamonga. Recycled water is generated through the water recycling process and delivered to its retail water agencies for use in the IEUA service area.

TREATMENT PLANTS

IEUA owns and operates five regional water recycling plants that serve over 875,000 people: Regional Water Recycling Plant No. 1 (RP-1), Regional Water Recycling Plant No. 2 (RP-2), Regional Water Recycling Plant No. 4 (RP-4), Regional Water Recycling Plant No. 5 (RP-5), and Carbon Canyon Water Recycling Facility (CCWRF). **Figure 1** below shows the IEUA service area, its contracting agencies, and the locations of IEUA's treatment plants. Of the five plants, four produce tertiary-treated, Title 22-quality recycled water; RP-2 does not have any liquid treatment processes and as such does not produce any recycled water. The combined hydraulic capacity of the four plants is approximately 85 million gallons per day (MGD). With the planned plant expansion of RP-5 over the coming years, up to 15 MGD of additional hydraulic capacity may be achieved.

Appendices A and **B** contain the recycled water effluent monitoring data and recycled water compliance data, respectively, for the 2019 calendar year for the four recycled water facilities.

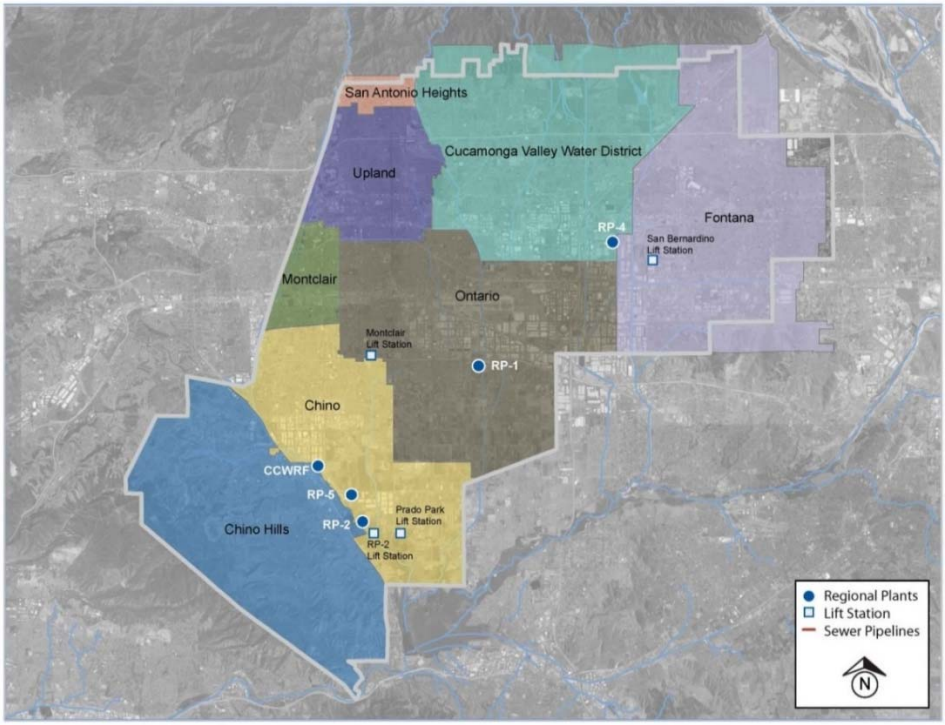


Figure 1 - IEUA Service Area

DEMANDS

During 2019/20, the average recycled water supply from IEUA's facilities was approximately 50 MGD, or 56,388 acre-feet per year (AFY). Recycled water groundwater recharge usage was 13,381 AFY and recycled water direct usage was 17,115 AFY. Total recycled water demands during 2019/20 were 30,495 AF (values throughout the report are rounded to the nearest acre-foot) an increase of 8% from the previous fiscal year. Recycled water recharge was up 16% and direct use was up 2%.

The recycled water delivery volumes of direct use and groundwater recharge can vary seasonally and annually based on a variety of factors (e.g. the rainfall intensity, rainfall duration, and recharge basin maintenance activities). **Figure 2** shows IEUA's historical direct use and groundwater recharge of recycled water for the past 10 years.

Recycled water demands for the combined direct use and recharge purposes were approximately 54 percent of the available supply. During the peak demand summer months (July through September), the total recycled water demands were approximately 75 percent of the available supply.

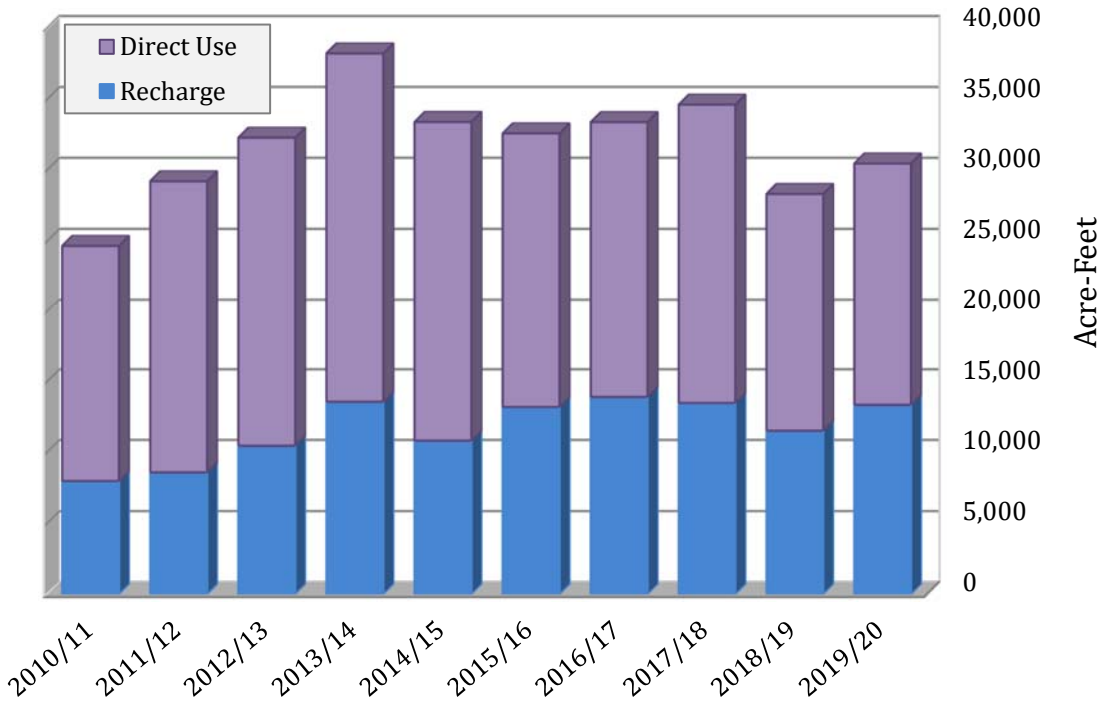


Figure 2 – Historical Recycled Water Direct Use and Groundwater Recharge

DEMANDS BY USE TYPE

Delivered recycled water was beneficially reused for a variety of applications including landscape irrigation, agricultural irrigation, industrial process water, construction, and groundwater recharge. **Table 1** and **Figure 3** show the 2019/20 recycled water demand by use type.

Table 1 – Recycled Water Demand by Use Type for 2019/20

Type of Use	Demand (AF)	Percent of Demand
Recharge	13,381	44%
Agriculture	5,757	19%
Landscape	9,716	32%
Industrial	1,004	3%
Construction	638	2%
Total Demand	**30,495**	**100%**

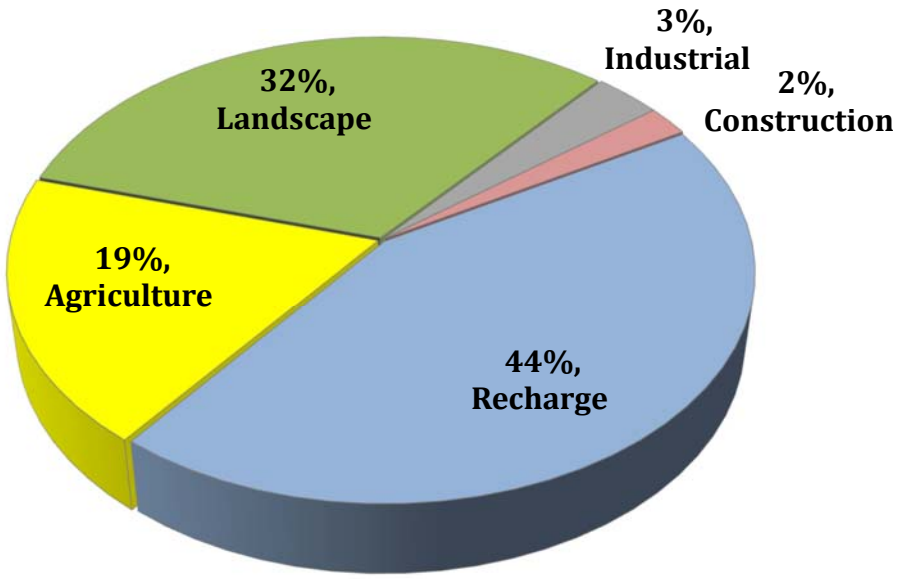


Figure 3 – Recycled Water Demand by Use Type for 2019/20

RETAIL DEMANDS

IEUA is the wholesale recycled water provider to its contracting agencies, which work as or with retail agencies to directly serve their customers. IEUA contracting/retail agencies which served recycled water in 2019/20 include:

- City of Chino,
- City of Chino Hills,
- Cucamonga Valley Water District (CVWD),
- City of Fontana (through FWC),
- City of Montclair (through MVWD),
- City of Ontario, and
- City of Upland

Fontana Water Company (FWC) and Monte Vista Water District (MVWD) are the water retailers in the Cities of Fontana and Montclair, respectively, but are not IEUA contracting agencies. FWC and MVWD retail recycled water obtained from their overlying cities, which are IEUA contracting agencies. San Bernardino County is currently a direct use customer of IEUA based on long standing historical contracts.

Table 2 shows the 2019/20 recycled water demand by agency. Each agency's total includes its direct use and its allocation from IEUA for recycled water groundwater recharge based on the Chino Basin Regional Sewage Service Contract.

Table 2 – Recycled Water Demand by Agency for 2019/20

Retail Agency	Direct Use (AF)	Recharge (AF)	Agency Total (AF)
Chino	4,795	0	4,795
Chino Hills	1,417	1,188	2,605
CVWD	1,038	4,458	5,496
Fontana/FWC	211	2,693	2,904
Montclair/MVWD	298	781	1,079
Ontario	7,817	3,017	10,834
Upland	703	1,243	1,946
IEUA	773	0	773
San Bernardino County	65	0	65
Subtotal	**17,115**	**13,381**	**30,495**

CUSTOMERS DEMANDS

Table 3 lists the top ten largest direct reuse customer sites for the fiscal year (excluding groundwater recharge sites). During 2019/20, eighty-seven (87) new connections were made to the recycled water system with a total new demand estimated at 199 AFY. Connected new demand is the anticipated annual usage based on land size and previous potable water usage history.

Table 3 – Top 10 Recycled Water Customers for 2019/20

Customer	Use (AF)	Type of Use	Retailer
Cleveland Farm	1,855	Agricultural	Chino/Ontario
Cal Poly Pomona	1,028	Agricultural	Chino
GH Dairy	931	Agricultural	Ontario
New Indy Ontario	870	Industrial	Ontario
Whispering Lakes Golf Course	631	Landscape	Ontario
IEUA Headquarters	630	Landscape	IEUA
Superior Sod	595	Agricultural	Chino
Weststeyn Dairy	473	Agricultural	Chino
City of Ontario	390	Landscape	Ontario
Upland Hills Country Club	389	Landscape	Upland
Subtotal	**7,792**		

ECONOMIC AND ENVIRONMENTAL IMPACTS

The 30,495 AF of recycled water used during the fiscal year is the equivalent of the water supply for roughly 40,945 homes. The use of recycled water reduces the need to pump State Water Project water over the Tehachapi Mountains, an equivalent net energy demand reduction of 1,940 kilowatt-hours (kWh) per AF, and an overall reduction of approximately 53 percent in carbon dioxide emissions.

IEUA's wholesale recycled water rate to its member agencies for 2019/20 was $490/AF for direct usage and $550/AF for recharge.

HISTORY

Early water recycling efforts in the 1970s by IEUA involved irrigation at the Whispering Lakes Golf Course adjacent to RP-1 in Ontario and at the El Prado Park and Golf Course in Chino. In the 1980s, recycled water continued to be an integral part of IEUA planning with implementation of the CCWRF and RP-4 recycling plants. These two recycling plants were sited specifically at higher elevations to reduce recycling plants water pumping costs. A backbone recycled water distribution system was installed in Chino and Chino Hills from CCWRF in 1997 and was initially operated by IEUA under Ordinance No. 63. This system was later turned over to the City of Chino and the City of Chino Hills and forms the core of the recycled water distribution network operated by these two cities.

The first major regional pipeline was constructed in 1995 and served the dual purpose of a regional recycled water distribution pipeline and an outfall allowing RP-4 effluent to be discharged with RP-1 effluent into Cucamonga Creek. The RP-4 outfall was designed as a pressurized system so that water could be pumped up from RP-1 to RP-4 as well as flow down in the opposite direction from RP-4 to RP-1 and the creek outfall.

In 1999, IEUA began groundwater recharge with recycled water at Ely Basin. The initial Ely Basin project was followed by the Chino Basin Watermaster's (CBWM) development of the Optimum Basin Management Program (OBMP) and the region's efforts (including IEUA's) to implement the OBMP. In 2000, the OBMP identified recycled water use as a critical component in drought-proofing and maintaining the region's economic growth. With imported water rates increasing and long-term supply reliability declining, the region committed to aggressively and proactively address regional impacts. The OBMP set the path for the development of a regional recycled water distribution system and a Recycled Water Implementation Plan.

The use of recycled water presented several advantages to IEUA and its member agencies: it is one of the most significant unused local water supplies; it is reliable during drought and climate change conditions; and it requires significantly less energy than imported water to deliver to customers and thus reduces greenhouse gas emissions. IEUA in partnership with its member agencies and CBWM invested approximately $625 million since 2000 to increase the availability of local water supplies through water recycling, conservation, recharge improvements, the MWD groundwater storage and recovery project, the Chino Desalter, and other water management programs.

In 2002, IEUA Board of Directors adopted Ordinance No. 75, the Mandatory Use Ordinance, to establish incentives and encourage recycled water use from the regional distributions system. Also in 2002, the CBWM, Chino Basin Water Conservation District (CBWCD), San Bernardino

County Flood Control District (SBCFCD) and IEUA combined efforts to greatly expand groundwater recharge capacity through the Chino Basin Facilities Improvement Program.

In 2005, IEUA was permitted by the Regional Water Quality Control Board (RWQCB) to operate its recycled water groundwater recharge programs at five additional recharge sites (Banana, Hickory, Etiwanda Conservation Ponds, Declez, RP3, and Turner Basins). In 2007, IEUA was permitted to operate its recycled water groundwater recharge program at seven more recharge sites (Brooks, 8th Street, Victoria, Lower Day, San Sevaine, Etiwanda Spreading Grounds (later reconfigured as the Etiwanda Debris Basin) and Ely Basins. The 2007 permit was amended in 2009 to modify how IEUA tracks diluent water and recycled water blending, which effectively increased IEUA's ability to recharge using recycled water.

In November 2007, IEUA and its member agencies unanimously adopted the Three-Year Recycled Water Business Plan. IEUA and its member agencies committed to implementing the plan, which laid out a focused and cost-effective approach to rapidly increase the availability and use of recycled water within IEUA's service area.

Based on the series of regional decisions since 2000, over $350 million was invested into the implementation of a robust Recycled Water Program. The region has achieved program success by leveraging heavily on grant funding and loans. With unanimous regional support, annual recycled water use grew from approximately 5,396 AF in 2004/05 to a peak of 38,251 AF in 2013/14. Over the past several years, recycled water demand has fallen slightly, which has been primarily driven by land use conversion from agriculture to urban.

APPENDIX A

RECYCLED WATER

EFFLUENT MONITORING DATA

FOR CALENDAR YEAR 2019

RP-1 (M-001A* & M-001B) Effluent Monitoring Data — **Table No. 3a**

	Flow			EC			pH			BOD_5				TSS				TOC			TDS*			TIN			TN			NH_3-N (grab)		
	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max
Date	MGD			µmhos/cm			unit			mg/L			%	mg/L			%	mg/L			mg/L			mg/L			mg/L			mg/L		
Limit>>>							6.5 -8.5			20			15	20			15													4.5		
Jan-19	2.0	1.5	2.3	997	942	1068	6.9	6.6	7.1	<2	<2	<2	0.4	<2	<2	<2	0.4	6.0	5.2	6.7	578	558	594	4.8	4.5	5.5	5.6	5.2	6.3	<0.1	<0.1	<0.1
Feb-19	3.0	1.8	4.0	1002	929	1065	6.9	6.6	7.1	<2	<2	<2	0.7	<2	<2	<2	0.5	6.5	5.4	7.5	553	522	576	4.4	3.7	5.0	5.2	4.1	6.1	<0.1	<0.1	<0.1
Mar-19	2.6	1.3	3.5	1043	830	1171	7.0	6.6	7.3	2	<2	2	0.6	<2	<2	2	0.5	7.9	6.6	9.6	593	558	638	5.0	3.8	6.1	5.8	5.0	6.8	<0.1	<0.1	<0.1
Apr-19	2.8	1.6	3.1	1002	929	1065	7.1	6.9	7.2	2	<2	4	0.5	<2	<2	<2	0.5	8.4	7.3	14.4	527	502	564	4.4	3.3	6.5	5.5	4.6	6.2	<0.1	<0.1	<0.1
May-19	2.4	1.9	3.0	900	854	957	7.0	6.8	7.2	<2	<2	2	0.5	<2	<2	<2	0.5	7.5	6.9	8.2	510	502	520	3.6	1.9	4.8	5.0	3.8	5.8	<0.1	<0.1	<0.1
Jun-19	1.9	1.2	2.1	944	892	980	7.1	6.8	7.2	<2	<2	2	0.5	<2	<2	2	0.5	7.4	6.9	8.2	545	524	562	2.3	0.8	4.1	3.8	2.2	5.0	<0.1	<0.1	<0.1
Jul-19	1.6	1.0	2.5	888	804	956	7.2	6.7	7.4	<2	<2	2	0.5	<2	<2	<2	0.5	7.2	6.0	8.6	496	468	524	3.2	2.3	4.6	4.6	4.1	5.6	<0.1	<0.1	<0.1
Aug-19	1.4	1.0	1.8	834	796	1013	7.3	6.9	7.4	<2	<2	<2	0.5	<2	<2	<2	0.4	6.8	6.0	7.4	468	460	478	3.1	2.4	4.1	4.4	3.9	5.0	<0.1	<0.1	<0.1
Sep-19	1.8	0.1	2.6	858	811	981	7.2	6.8	7.5	<2	<2	2	0.5	<2	<2	<2	0.4	6.9	5.6	7.7	532	464	612	2.9	2.1	4.2	4.0	3.7	4.4	<0.1	<0.1	<0.1
Oct-19	2.7	2.5	3.0	825	789	871	7.1	6.7	7.5	<2	<2	2	0.5	<2	<2	<2	0.5	6.8	5.8	7.7	498	454	590	2.8	1.5	3.8	4.6	4.1	5.0	<0.1	<0.1	<0.1
Nov-19	2.1	0.0	2.5	877	845	927	7.0	6.7	7.3	<2	<2	2	0.5	<2	<2	<2	0.5	7.2	6.3	7.9	478	456	500	3.4	2.1	4.2	4.9	4.5	5.2	<0.1	<0.1	0.2
Dec-19	1.9	1.5	2.5	889	783	922	6.9	6.7	7.1	<2	<2	2	0.5	<2	<2	<2	0.5	7.0	5.9	8.1	474	456	490	4.4	3.6	5.4	6.0	5.3	6.7	<0.1	<0.1	<0.1
Avg	**2.2**	**1.3**	**2.8**	**921**	**850**	**998**	**7.1**	**6.7**	**7.3**	**<2**	**<2**	**2**	**0.5**	**<2**	**<2**	**<2**	**0.5**	**7.1**	**6.2**	**8.5**	**521**	**494**	**554**	**3.7**	**2.7**	**4.9**	**5.0**	**4.2**	**5.7**	**<0.1**	**<0.1**	**<0.1**
Min	**1.4**	**0.0**	**1.8**	**825**	**783**	**871**	**6.9**	**6.6**	**7.1**	**<2**	**<2**	**<2**	**0.4**	**<2**	**<2**	**<2**	**0.4**	**6.0**	**5.2**	**6.7**	**468**	**454**	**478**	**2.3**	**0.8**	**3.8**	**3.8**	**2.2**	**4.4**	**<0.1**	**<0.1**	**<0.1**
Max	**3.0**	**2.5**	**4.0**	**1043**	**942**	**1171**	**7.3**	**6.9**	**7.5**	**2**	**<2**	**4**	**0.7**	**<2**	**<2**	**2**	**0.5**	**8.4**	**7.3**	**14.4**	**593**	**558**	**638**	**5.0**	**4.5**	**6.5**	**6.0**	**5.3**	**6.8**	**<0.1**	**<0.1**	**0.2**

***M-001A is the compliance point for continuous monitoring parameters, TDS, and toxicity.**

RP-1/RP-4 (M-002A) Effluent Monitoring Data — **Table No. 3b**

	Flow			EC			pH			BOD_5				TSS				TOC			TDS			TIN			TN			NH_3-N (grab)		
	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max
Date	MGD			µmhos/cm			unit			mg/L			%	mg/L			%	mg/L			mg/L			mg/L			mg/L			mg/L		
Limit>>>							6.5 -8.5			20			15	20			15													4.5		
Jan-19	25.5	13.2	41.3	740	676	805	6.8	6.6	7.1	<2	<2	2	0.5	<2	<2	5	0.6	6.1	5.0	7.8	481	428	508	6.1	6.1	6.1	6.9	6.9	6.9	<0.1	<0.1	<0.1
Feb-19	33.8	28.2	43.1	636	533	705	6.8	6.6	7.0	<2	<2	<2	0.6	<2	<2	<2	0.5	6.4	5.3	7.3	459	428	480	4.5	3.5	5.0	5.2	4.3	6.1	<0.1	<0.1	0.1
Mar-19	25.6	14.0	36.7	692	568	829	6.9	6.8	7.1	2	<2	2	0.6	<2	<2	2	0.5	7.8	6.7	9.4	465	424	480	5.0	3.5	6.1	6.6	6.5	6.7	<0.1	<0.1	<0.1
Apr-19	11.7	5.1	20.4	742	656	833	6.9	6.8	7.2	2	<2	3	0.5	<2	<2	<2	0.5	7.8	5.1	8.7	477	464	488	4.8	3.3	6.4	4.7	4.2	5.2	<0.1	<0.1	<0.1
May-19	14.2	4.4	28.4	773	707	834	7.0	6.8	7.4	<2	<2	2	0.5	<2	<2	<2	0.5	7.2	6.1	7.8	478	464	492	3.7	2.1	5.4	6.0	6.0	6.0	<0.1	<0.1	<0.1
Jun-19	9.2	3.8	12.0	866	747	936	7.0	6.6	7.2	<2	<2	2	0.6	<2	<2	<2	0.5	7.1	6.7	7.8	484	476	490	2.6	1.4	4.2	4.7	4.7	4.7	<0.1	<0.1	0.1
Jul-19	6.7	0.3	14.2	815	750	869	7.0	6.7	7.2	<2	<2	3	0.6	<2	<2	<2	0.5	6.9	6.0	8.5	458	434	480	3.4	2.5	4.3	5.3	5.3	5.3	<0.1	<0.1	<0.1
Aug-19	0.9	0.3	2.6	819	736	900	6.9	6.7	7.1	<2	<2	2	0.5	<2	<2	<2	0.5	6.7	5.7	9.1	472	456	498	3.2	2.4	4.2	5.4	5.4	5.4	<0.1	<0.1	<0.1
Sep-19	3.7	0.3	10.5	805	680	850	7.0	6.7	7.2	<2	<2	<2	0.5	<2	<2	<2	0.5	6.6	5.7	7.3	449	430	466	2.8	2.0	3.9	4.0	4.0	4.0	<0.1	<0.1	<0.1
Oct-19	2.3	0.3	8.9	720	626	803	6.9	6.6	7.2	<2	<2	<2	0.6	<2	<2	<2	0.5	6.6	5.6	7.4	452	448	458	3.1	1.6	4.5	4.7	4.7	4.7	<0.1	<0.1	<0.1
Nov-19	10.7	2.1	31.2	752	678	837	6.9	6.5	7.3	<2	<2	2	0.5	<2	<2	<2	0.5	6.8	6.0	7.9	471	456	484	3.3	2.2	4.9	3.8	3.8	3.8	<0.1	<0.1	0.2
Dec-19	22.7	9.7	33.7	705	576	793	6.8	6.6	7.1	<2	<2	2	0.5	<2	<2	<2	0.5	6.9	5.5	7.8	444	416	460	4.1	3.5	5.2	6.1	6.1	6.1	<0.1	<0.1	0.1
Avg	**13.9**	**6.8**	**23.6**	**755**	**661**	**833**	**6.9**	**6.7**	**7.2**	**<2**	**<2**	**2**	**0.5**	**<2**	**<2**	**<2**	**0.5**	**6.9**	**5.8**	**8.1**	**466**	**444**	**482**	**3.9**	**2.8**	**5.0**	**5.3**	**5.2**	**5.4**	**<0.1**	**<0.1**	**<0.1**
Min	**0.9**	**0.3**	**2.6**	**636**	**533**	**705**	**6.8**	**6.5**	**7.0**	**<2**	**<2**	**<2**	**0.5**	**<2**	**<2**	**<2**	**0.5**	**6.1**	**5.0**	**7.3**	**444**	**416**	**458**	**2.6**	**1.4**	**3.9**	**3.8**	**3.8**	**3.8**	**<0.1**	**<0.1**	**<0.1**
Max	**33.8**	**28.2**	**43.1**	**866**	**750**	**936**	**7.0**	**6.8**	**7.4**	**2**	**<2**	**3**	**0.6**	**<2**	**<2**	**5**	**0.6**	**7.8**	**6.7**	**9.4**	**484**	**476**	**508**	**6.1**	**6.1**	**6.4**	**6.9**	**6.9**	**6.9**	**<0.1**	**<0.1**	**0.2**

RP-5 (M-003) Effluent Monitoring Data — **Table No. 3c**

	Flow			EC			pH			BOD_5				TSS				TOC			TDS			TIN			TN			NH_3-N (grab)		
	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max
Date	MGD			µmhos/cm			unit			mg/L			%	mg/L			%	mg/L			mg/L			mg/L			mg/L			mg/L		
Limit>>>							6.5 -8.5			20			15	20			15													4.5		
Jan-19	5.8	4.2	8.0	914	866	966	6.8	6.6	6.9	<2	<2	<2	0.6	<2	<2	<2	0.6	5.0	4.6	5.2	572	556	596	8.2	8.2	8.2	8.9	8.9	8.9	<0.1	<0.1	<0.1
Feb-19	6.0	4.3	9.3	926	832	986	6.9	6.8	7.1	<2	<2	<2	0.5	<2	<2	<2	0.6	5.3	4.7	6.1	574	532	592	7.4	6.3	9.0	7.4	7.4	7.4	<0.1	<0.1	0.1
Mar-19	5.6	3.5	8.4	1005	946	1103	7.0	6.8	7.1	<2	<2	<2	0.9	<2	<2	3	0.9	5.6	4.9	6.3	600	566	646	10.5	7.3	17.2	12.4	12.4	12.4	<0.1	<0.1	<0.1
Apr-19	4.7	3.2	7.1	953	914	987	7.0	6.7	7.1	<2	<2	<2	0.6	<2	<2	<2	0.7	5.4	4.9	6.3	551	544	556	7.0	5.2	10.4	5.9	5.9	5.9	<0.1	<0.1	0.1
May-19	7.3	5.2	9.4	951	925	983	7.0	6.8	7.1	<2	<2	3	0.7	<2	<2	2	0.9	5.4	4.8	6.0	547	526	560	5.4	3.7	9.7	6.6	6.6	6.6	<0.1	<0.1	<0.1
Jun-19	3.8	2.1	6.8	992	970	1013	7.0	6.9	7.2	<2	<2	<2	0.7	<2	<2	<2	0.8	5.4	4.8	5.6	542	536	548	3.7	3.0	5.4	4.5	4.5	4.5	<0.1	<0.1	0.1
Jul-19	4.1	1.3	8.1	1003	982	1020	7.0	6.8	7.2	<2	<2	<2	0.5	<2	<2	7	0.4	5.7	5.3	6.6	515	500	530	2.7	1.3	3.9	3.5	3.5	3.5	<0.1	<0.1	<0.1
Aug-19	7.3	5.8	8.5	1016	977	1068	7.0	6.8	7.2	<2	<2	<2	0.7	<2	<2	3	0.6	5.5	4.6	6.2	513	492	530	4.0	2.1	5.9	2.9	2.9	2.9	<0.1	<0.1	<0.1
Sep-19	7.4	5.0	8.6	1030	985	1073	7.0	6.9	7.2	<2	<2	<2	0.8	<2	<2	<2	0.8	5.5	5.1	7.3	530	512	540	4.9	4.0	5.7	5.5	5.5	5.5	<0.1	<0.1	<0.1
Oct-19	6.7	5.1	8.8	946	897	1004	7.0	6.9	7.2	<2	<2	<2	0.6	<2	<2	<2	0.7	5.3	4.2	5.7	547	496	632	5.7	4.6	7.2	6.0	6.0	6.0	<0.1	<0.1	<0.1
Nov-19	7.7	4.8	9.8	918	841	940	6.9	6.7	7.2	<2	<2	2	0.5	<2	<2	<2	0.6	6.0	4.9	7.6	514	506	528	5.6	4.8	6.0	6.1	6.1	6.1	<0.1	<0.1	<0.1
Dec-19	9.4	8.0	11.0	869	798	909	6.8	6.6	7.0	<2	<2	<2	0.6	<2	<2	2	0.6	6.1	5.5	6.8	514	504	526	6.1	4.6	7.4	7.6	7.6	7.6	<0.1	<0.1	<0.1
Avg	**6.3**	**4.4**	**8.7**	**960**	**911**	**1004**	**7.0**	**6.8**	**7.1**	**<2**	**<2**	**<2**	**0.6**	**<2**	**<2**	**<3**	**0.7**	**5.5**	**4.9**	**6.3**	**543**	**523**	**565**	**5.9**	**4.6**	**8.0**	**6.4**	**6.4**	**6.4**	**<0.1**	**<0.1**	**<0.1**
Min	**3.8**	**1.3**	**6.8**	**869**	**798**	**909**	**6.8**	**6.6**	**6.9**	**<2**	**<2**	**<2**	**0.5**	**<2**	**<2**	**<2**	**0.4**	**5.0**	**4.2**	**5.2**	**513**	**492**	**526**	**2.7**	**1.3**	**3.9**	**2.9**	**2.9**	**2.9**	**<0.1**	**<0.1**	**<0.1**
Max	**9.4**	**8.0**	**11.0**	**1030**	**985**	**1103**	**7.0**	**6.9**	**7.2**	**<2**	**<2**	**3**	**0.9**	**<2**	**<2**	**7**	**0.9**	**6.1**	**5.5**	**7.6**	**600**	**566**	**646**	**10.5**	**8.2**	**17.2**	**12.4**	**12.4**	**12.4**	**<0.1**	**<0.1**	**0.1**

*Lab EC data used

CCWRF (M-004) Effluent Monitoring Data — **Table No. 3d**

	Flow			EC			pH			BOD_5				TSS				TOC			TDS			TIN			TN			NH_3-N (grab)		
	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg Dis	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max
Date	MGD			µmhos/cm			unit			mg/L			%	mg/L			%	mg/L			mg/L			mg/L			mg/L			mg/L		
Limit>>>							6.5 -8.5			20			15	20			15													4.5		
Jan-19	6.1	0.5	10.0	935	873	985	6.8	6.6	7.0	<2	<2	<2	0.5	<2	<2	<2	0.6	5.5	4.9	5.9	535	518	550	5.4	5.4	5.4	6.3	6.3	6.3	0.1	<0.1	0.2
Feb-19	7.4	5.5	11.4	942	835	986	6.9	6.7	7.1	<2	<2	2	0.4	<2	<2	2	0.6	6.5	5.3	7.7	523	478	546	5.1	4.3	5.6	6.6	6.3	6.8	<0.1	<0.1	0.1
Mar-19	5.5	0.7	8.0	959	908	1023	6.9	6.7	7.1	<2	<2	2	0.5	<2	<2	2	0.6	7.7	6.8	8.8	545	516	574	4.3	3.0	4.7	5.4	5.4	5.4	<0.1	<0.1	0.1
Apr-19	1.0	0.7	1.8	902	878	924	6.8	6.6	7.0	<2	<2	2	0.5	<2	<2	<2	0.6	6.8	6.3	7.6	511	506	514	4.3	3.0	5.1	4.9	4.9	4.9	<0.1	<0.1	<0.1
May-19	2.2	0.7	5.3	932	904	969	6.8	6.6	7.6	<2	<2	2	0.4	<2	<2	<2	0.5	7.0	6.2	7.7	535	508	548	4.0	2.7	4.8	4.7	4.7	4.7	<0.1	<0.1	<0.1
Jun-19	0.9	0.0	2.5	951	878	988	6.8	6.6	7.5	<2	<2	2	0.5	<2	<2	<2	0.5	7.1	6.4	7.7	542	532	550	4.9	3.5	5.8	6.5	6.5	6.5	<0.1	<0.1	<0.1
Jul-19	0.0	0.0	0.0	836	793	870	7.1	7.0	7.2	<2	<2	<2	0.6	<2	<2	<2	0.5	6.4	5.7	7.5				4.5	3.3	6.0	7.0	7.0	7.0			
Aug-19	0.0	0.0	0.0	815	794	854	7.1	7.0	7.2	<2	<2	2	0.5	<2	<2	<2	0.5	6.6	5.8	7.9				4.8	4.1	5.7	5.8	5.8	5.8			
Sep-19	0.0	0.0	0.0	825	798	861	7.0	6.6	7.2	<2	<2	<2	0.5	<2	<2	<2	0.6	6.9	6.4	7.5				5.1	4.3	5.8	6.0	6.0	6.0			
Oct-19	0.0	0.0	0.0	794	742	837	7.1	7.0	7.2	<2	<2	<2	0.4	<2	<2	<2	0.5	6.7	5.8	7.5				5.0	3.8	5.9	6.7	6.7	6.7			
Nov-19	1.5	0.0	8.3	878	800	924	6.8	6.5	7.1	<2	<2	<2	0.5	<2	<2	<2	0.5	6.6	5.7	7.1	519	502	530	5.6	4.7	6.7	7.7	7.7	7.7	0.2	<0.1	0.3
Dec-19	4.6	2.6	6.8	881	780	929	6.8	6.6	7.0	<2	<2	<2	0.4	<2	<2	<2	0.5	6.6	5.9	7.4	482	464	500	5.4	4.6	7.2	6.5	6.5	6.5	<0.1	<0.1	0.1
Avg	**2.4**	**0.9**	**4.5**	**888**	**832**	**929**	**6.9**	**6.7**	**7.2**	**<2**	**<2**	**2**	**0.5**	**<2**	**<2**	**<2**	**0.5**	**6.7**	**5.9**	**7.5**	**524**	**503**	**539**	**4.8**	**3.9**	**5.7**	**6.2**	**6.1**	**6.2**	**<0.1**	**<0.1**	**0.1**
Min	**0.0**	**0.0**	**0.0**	**794**	**742**	**837**	**6.8**	**6.5**	**7.0**	**<2**	**<2**	**<2**	**0.4**	**<2**	**<2**	**<2**	**0.5**	**5.5**	**4.9**	**5.9**	**482**	**464**	**500**	**4.0**	**2.7**	**4.7**	**4.7**	**4.7**	**4.7**	**<0.1**	**<0.1**	**<0.1**
Max	**7.4**	**5.5**	**11.4**	**959**	**908**	**1023**	**7.1**	**7.0**	**7.6**	**<2**	**<2**	**2**	**0.6**	**<2**	**<2**	**2**	**0.6**	**7.7**	**6.8**	**8.8**	**545**	**532**	**574**	**5.6**	**5.4**	**7.2**	**7.7**	**7.7**	**7.7**	**0.2**	**<0.1**	**0.3**

RP-1 (M-001A) Effluent Monthly Toxicity Data **Table No. 4a**

CHRONIC TOXICITY - SURVIVAL (*Ceriodaphnia Dubia*)						CHRONIC TOXICITY - REPRODUCTION (*Ceriodaphnia dubia*)			
START DATE		END DATE	NOEC	TUc	2-Mo Median TUc	NOEC	TUc	2-Mo Median TUc	IC_{25}
01/14/19*	thru	01/18/19	100	1.0	1.0	100	1.0	1.0	100
02/25/19*	thru	03/01/19	100	1.0	1.0	<100	>1.0	1.0	96.2
03/18/19*	thru	03/22/19	100	1.0	1.0	100	1.0	1.0	100
04/22/19*	thru	04/26/19	100	1.0	1.0	100	1.0	1.0	100
05/13/19*	thru	05/17/19	100	1.0	1.0	100	1.0	1.0	100
06/17/19*	thru	06/21/19	100	1.0	1.0	100	1.0	1.0	100
07/20/19*	thru	07/26/19	100	1.0	1.0	100	1.0	1.0	100
08/03/19	thru	08/09/19	100	1.0	1.0	60	1.7	1.3	87.0
08/17/19	thru	08/23/19	100	1.0	1.0	100	1.0	1.0	100
08/31/19	thru	09/06/19	100	1.0	1.0	100	1.0	1.0	100
10/05/19	thru	10/11/19	100	1.0	1.0	100	1.0	1.0	100
11/02/19	thru	11/08/19	100	1.0	1.0	60	1.7	1.3	100
11/16/19	thru	11/22/19	100	1.0	1.0	100	1.0	1.0	100
11/30/19	thru	12/06/19	100	1.0	1.0	100	1.0	1.0	100

RP-1 (M-002A) Effluent Monthly Toxicity Data **Table No. 4b**

CHRONIC TOXICITY - SURVIVAL (*Ceriodaphnia Dubia*)						CHRONIC TOXICITY - REPRODUCTION (*Ceriodaphnia dubia*)			
START DATE		END DATE	NOEC	TUc	2-Mo Median TUc	NOEC	TUc	2-Mo Median TUc	IC_{25}
01/14/19*	thru	01/18/19	100	1.0	1.0	100	1.0	1.0	100
02/25/19*	thru	03/01/19	100	1.0	1.0	100	1.0	1.0	100
03/18/19*	thru	03/22/19	100	1.0	1.0	100	1.0	1.0	100
04/22/19*	thru	04/26/19	100	1.0	1.0	100	1.0	1.0	100
05/13/19*	thru	05/17/19	100	1.0	1.0	100	1.0	1.0	100
06/17/19*	thru	06/21/19	100	1.0	1.0	90	1.1	1.1	96.3
06/26/19*	thru	07/01/19	100	1.0	1.0	100	1.0	1.0	100
07/13/19*	thru	07/19/19	100	1.0	1.0	100	1.0	1.0	100
08/10/19	thru	08/16/19	100	1.0	1.0	100	1.0	1.0	100
09/07/19	thru	09/13/19	100	1.0	1.0	100	1.0	1.0	100
10/12/19	thru	10/18/19	100	1.0	1.0	100	1.0	1.0	100
11/09/19	thru	11/14/19	100	1.0	1.0	100	1.0	1.0	100
12/14/19	thru	12/20/19	100	1.0	1.0	100	1.0	1.0	100
12/16/19*	thru	12/20/19	100	1.0	1.0	100	1.0	1.0	100

* MBC Laboratory

RP-5 (M-003) Effluent Monthly Toxicity Data **Table No. 4c**

			CHRONIC TOXICITY - SURVIVAL (*Ceriodaphnia Dubia*)			CHRONIC TOXICITY - REPRODUCTION (*Ceriodaphnia dubia*)			
START DATE		END DATE	NOEC	TUc	2-Mo Median TUc	NOEC	TUc	2-Mo Median TUc	IC_{25}
01/14/19*	thru	01/18/19	100	1.0	1.0	100	1.0	1.0	100
02/25/19*	thru	03/01/19	100	1.0	1.0	100	1.0	1.0	100
03/18/19*	thru	03/22/19	100	1.0	1.0	100	1.0	1.0	100
04/22/19*	thru	04/26/19	100	1.0	1.0	100	1.0	1.0	100
05/13/19*	thru	05/17/19	100	1.0	1.0	100	1.0	1.0	100
06/17/19*	thru	06/21/19	100	1.0	1.0	100	1.0	1.0	100
07/20/19*	thru	07/26/19	100	1.0	1.0	100	1.0	1.0	100
08/17/19	thru	08/23/19	100	1.0	1.0	100	1.0	1.0	100
08/31/19	thru	09/06/19	100	1.0	1.0	100	1.0	1.0	100
10/05/19	thru	10/11/19	100	1.0	1.0	100	1.0	1.0	100
11/02/19	thru	11/08/19	100	1.0	1.0	100	1.0	1.0	100
11/30/19	thru	12/06/19	100	1.0	1.0	100	1.0	1.0	100

CCWRF (M-004) Effluent Monthly Toxicity Data **Table No. 4d**

			CHRONIC TOXICITY - SURVIVAL (*Ceriodaphnia Dubia*)			CHRONIC TOXICITY - REPRODUCTION (*Ceriodaphnia dubia*)			
START DATE		END DATE	NOEC	TUc	2-Mo Median TUc	NOEC	TUc	2-Mo Median TUc	IC_{25}
01/14/19*	thru	01/18/19	100	1.0	1.0	100	1.0	1.0	100
01/21/19*	thru	01/25/19	100	1.0	1.0	100	1.0	1.0	100
02/25/19*	thru	03/01/19	100	1.0	1.0	100	1.0	1.0	100
03/18/19*	thru	03/22/19	100	1.0	1.0	100	1.0	1.0	100
04/22/19*	thru	04/26/19	100	1.0	1.0	100	1.0	1.0	100
05/13/19*	thru	05/17/19	100	1.0	1.0	100	1.0	1.0	100
06/17/19*	thru	06/21/19	100	1.0	1.0	100	1.0	1.0	100
					No Discharge During July 2019				
					No Discharge During August 2019				
					No Discharge During September 2019				
					No Discharge During October 2019				
11/23/19	thru	11/29/19	100	1.0	1.0	100	1.0	1.0	100
12/07/19	thru	12/12/19	100	1.0	1.0	100	1.0	1.0	100

* MBC Laboratory

RP-1 (M-001A & M-001B) & RP-1/RP-4 (M-002A) Effluent Monitoring and Coliform Data — **Table No. 5a**

	001 Turbidity		002 Turbidity		001 Temp		002 Temp		001 Daily Coliform		001 7-day Median		002 Daily Coliform*		002 7-day Median		001 FLR	001 DT	001 CT	002 FLR	002 DT	002 CT
	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Max	Min	Min	Max	Min	Min
Date	NTU		NTU		°C		°C		MPN / 100 mL								gpm/ft^2	min	mg-min/L	gpm/ft^3	min	mg-min/L
Jan-19	0.6	0.7	0.5	0.7	22.1	22.7	22.5	23.2	<2	29.2	<1	1.0	<2	29.2	<1	1.0	4	147	793	4	143	870
Feb-19	0.6	0.7	0.5	1.5	21.4	22.3	21.1	22.3	<1	2.0	<1	<1	<1	2.0	<1	<1	4	126	747	4	104	592
Mar-19	0.7	1.0	0.6	1.4	22.5	23.5	21.7	23.4	<1	2.0	<1	<1	<1	2.0	<1	<1	4	138	550	4	154	770
Apr-19	0.9	1.3	0.8	1.2	24.5	25.9	24.0	24.9	<1	10.9	<1	<1	<1	10.9	<1	<1	3	159	777	3	148	816
May-19	0.9	1.1	0.8	1.6	25.4	26.0	23.9	25.8	<1	2.0	<1	<1	<1	2.0	<1	<1	3	153	789	3	153	658
Jun-19	0.8	1.0	0.7	1.0	26.5	27.2	26.6	27.8	<1	6.3	<1	<1	<1	6.3	<1	<1	3	152	706	3	172	795
Jul-19	0.9	1.2	0.8	1.9	28.5	29.9	27.6	28.5	<1	14.5	<1	<1	<1	14.5	<1	<1	3	133	607	3	126	604
Aug-19	0.8	0.8	0.6	1.1	30.0	30.2	28.8	29.1	<1	2.0	<1	<1	<1	2.0	<1	<1	4	132	571	4	136	651
Sep-19	0.7	0.8	0.6	0.8	29.8	30.7	28.7	29.6	<10	261.3	<1	<1	<10	261.3	<1	<1	4	134	669	4	126	618
Oct-19	0.6	0.8	0.5	0.8	27.9	28.8	26.5	27.3	<1	5.2	<1	<1	<1	5.2	<1	<1	4	124	639	4	127	700
Nov-19	0.6	0.8	0.5	0.8	26.1	26.8	23.3	25.9	<1	5.0	<1	<1	<1	5.0	<1	<1	4	126	580	4	141	543
Dec-19	0.6	0.9	0.7	1.1	23.3	24.2	21.3	23.3	<1	4.1	<1	<1	<1	4.1	<1	<1	4	126	549	4	135	528
Avg	**0.7**	**0.9**	**0.6**	**1.2**	**25.7**	**26.5**	**24.7**	**25.9**	**<2**	**29**	**<1**	**<1**	**<2**	**29**	**<1**	**<1**	**4**	**138**	**670**	**4**	**139**	**679**
Min	**0.6**	**0.7**	**0.5**	**0.7**	**21.4**	**22.3**	**21.1**	**22.3**	**<1**	**2**	**<1**	**<1**	**<1**	**2**	**<1**	**<1**	**3**	**124**	**549**	**3**	**104**	**528**
Max	**0.9**	**1.3**	**0.8**	**1.9**	**30.0**	**30.7**	**28.8**	**29.6**	**<10**	**261**	**<1**	**1**	**<10**	**261**	**<1**	**1**	**4**	**159**	**793**	**4**	**172**	**870**

Requirements for disinfected tertiary-treated recycled water Title 22 Compliance: Min: 450 mg/L-min CT & 90 min DT

*Beginning August 2009, 002 effluent coliform compliance point at M-001B (splitter box).

RP-5 (M-003) & CCWRF (M-004) Effluent Monitoring and Coliform Data — **Table No. 5b**

	003 Turbidity		004 Turbidity		003 Temp		004 Temp		003 Daily Coliform		003 7-day Median		004 Daily Coliform		004 7-day Median		003 FLR	003 DT	003 CT	004 FLR	004 DT	004 CT
	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Max	Min	Min	Max	Min	Min
Date	NTU		NTU		°C		°C		MPN / 100 mL								gpm/ft^2	min	mg-min/L	gpm/ft^3	min	mg-min/L
Jan-19	0.6	0.7	0.5	0.6	21.4	21.9	21.5	22.5	<1	2.0	<1	<1	<1	3.1	<1	<1	4	127	455	3	127	518
Feb-19	0.6	0.8	0.7	0.8	21.4	21.6	21.1	21.8	<1	1.0	<1	<1	<1	2.0	<1	<1	4	106	499	3	112	519
Mar-19	0.6	0.9	0.7	1.0	22.9	23.7	22.1	22.9	<1	2.0	<1	<1	<1	1.0	<1	<1	4	147	526	3	128	482
Apr-19	0.7	0.9	0.6	0.7	24.1	25.1	23.0	23.5	<1	2.0	<1	<1	<1	1.0	<1	<1	3	144	591	2	137	572
May-19	1.0	1.4	0.6	0.9	23.9	25.1	23.1	25.6	<1	4.1	<1	1	<1	1.0	<1	<1	3	135	580	2	115	497
Jun-19	0.8	1.1	0.7	0.8	25.7	26.1	25.4	27.6	<1	1.0	<1	<1	<1	1.0	<1	<1	3	134	531	2	129	517
Jul-19	1.0	1.3	0.6	0.9	27.6	30.1			<5	104.3	<1	<1	<6	145.0	<1	<1	3	138	558	2	127	538
Aug-19	1.0	1.6	0.6	0.7	29.1	29.4			<1	<1.0	<1	<1	<1	<1.0	<1	<1	3	151	550	2	128	568
Sep-19	0.9	1.2	0.5	0.6	27.6	28.1			<1	1.0	<1	<1	<1	<1	<1	<1	3	145	587	2	122	508
Oct-19	0.9	1.2	0.6	0.7	24.7	26.5			<1	<1	<1	<1	<1	1.0	<1	<1	3	126	598	2	136	579
Nov-19	0.9	1.5	0.6	1.0	24.0	25.0	20.0	23.3	<1	1	<1	<1	<1	1.0	<1	<1	4	119	511	2	110	578
Dec-19	1.0	1.4	0.7	0.8	21.6	23.0	20.5	21.6	<1	1	<1	<1	<1	2.0	<1	<1	3	133	507	2	116	480
Avg	**0.8**	**1.2**	**0.6**	**0.8**	**24.5**	**25.5**	**22.1**	**23.6**	**<1**	**10**	**<1**	**<1**	**<1**	**13**	**<1**	**<1**	**3**	**134**	**540**	**2**	**124**	**530**
Min	**0.6**	**0.7**	**0.5**	**0.6**	**21.4**	**21.6**	**20.0**	**21.6**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**3**	**106**	**455**	**2**	**110**	**480**
Max	**1.0**	**1.6**	**0.7**	**1.0**	**29.1**	**30.1**	**25.4**	**27.6**	**<5**	**104**	**<1**	**1**	**<6**	**145**	**<1**	**<1**	**4**	**151**	**598**	**3**	**137**	**579**

Requirements for disinfected tertiary-treated recycled water Title 22 Compliance: Min: 450 mg/L-min CT & 90 min DT

RP-1 (M-001A) & RP-1/RP-4 (M-002A) Effluent and Receiving Water (R-002U & R-002D) Data **Table No. 6a**

	M-001A Cl_2 Residual*		M-002A Cl2 Residual*		Upstream Cucamonga Creek (R-002U)										Downstream Cucamonga Creek (R-002D)							
					DO		Temp		pH		TDS	TIN	Total Hardness	TSS	DO		Temp		pH		Total Hardness	TSS
	Avg	Max	Avg	Max	Avg	Min	Avg	Max	Min	Max	Avg	Avg	Avg	Avg	Avg	Min	Avg	Max	Min	Max	Avg	Avg
Date	mg/L				mg/L		°C		unit		mg/L	mg/L	mg/L	mg/L	mg/L		°C		unit		mg/L	mg/L
Jan-19	0.0	0.0	0.0	0.0	10.0	8.5	13.5	16.9	9.1	9.7	254	0.3	126	9	9.2	7.8	19.5	19.9	7.4	8.1	152	7
Feb-19	0.0	0.0	0.0	0.0	10.4	9.0	10.7	12.4	8.8	9.7	154	0.8			9.8	9.1	17.3	19.0	7.7	8.0		
Mar-19	0.0	0.0	0.0	0.0	10.3	8.4	16.2	17.7	8.9	10.1	270	<0.2			11.5	10.2	20.2	21.3	8.1	8.6		
Apr-19	0.0	0.0	0.0	0.0	10.3	9.6	16.5	18.5	9.1	10.6	308	0.3	138	5	10.1	8.6	20.7	22.5	8.1	9.1	145	3
May-19	0.0	0.0	0.0	0.0	10.4	9.2	18.1	19.1	9.3	10.0	332	1.0			11.4	8.8	20.9	22.6	8.5	9.0		
Jun-19	0.0	0.0	0.0	0.0	10.2	9.8	19.0	20.1	9.2	9.9	544	<0.2			10.4	10.0	22.2	24.2	8.3	8.7		
Jul-19	0.0	0.0	0.0	0.0	10.3	10.0	24.8	29.1	9.6	10.3	382	1.8	193	18	12.7	10.6	27.0	29.7	8.8	9.9	161	8
Aug-19	0.0	0.0	0.0	0.0	9.7	9.1	23.2	24.3	9.7	10.0	382	1.2			11.4	7.5	23.5	24.6	9.0	9.6		
Sep-19	0.0	0.0	0.0	0.0	9.8	9.2	23.0	24.8	9.6	9.9	272	<0.2			10.7	8.6	25.3	26.6	9.1	9.3		
Oct-19	0.0	0.0	0.0	0.0	10.3	9.7	16.6	17.3	9.4	9.7	544	0.6	152	4	9.6	7.2	21.4	23.8	8.1	9.2	164	24
Nov-19	0.0	0.0	0.0	0.0	11.7	10.6	16.9	21.0	9.6	10.6	418	<0.2			10.5	8.4	21.4	24.9	8.7	9.4		
Dec-19	0.0	0.0	0.0	0.0	12.2	10.9	11.4	14.3	8.9	9.8	150	1.0			10.1	8.5	19.9	21.0	8.1	8.6		
Avg	**0.0**	**0.0**	**0.0**	**0.0**	**10.5**	**9.5**	**17.5**	**19.6**	**9.3**	**10.0**	**334**	**0.7**	**152**	**9**	**10.6**	**8.8**	**21.6**	**23.3**	**8.3**	**9.0**	**156**	**11**
Min	**0.0**	**0.0**	**0.0**	**0.0**	**9.7**	**8.4**	**10.7**	**12.4**	**8.8**	**9.7**	**150**	**<0.2**	**126**	**4**	**9.2**	**7.2**	**17.3**	**19.0**	**7.4**	**8.0**	**145**	**3**
Max	**0.0**	**0.0**	**0.0**	**0.0**	**12.2**	**10.9**	**24.8**	**29.1**	**9.7**	**10.6**	**544**	**1.8**	**193**	**18**	**12.7**	**10.6**	**27.0**	**29.7**	**9.1**	**9.9**	**164**	**24**

RP-5 (M-003) & CCWRF (M-004) Effluent and Receiving Water (R-003U, R-003D, & R-004U) Data **Table No. 6b**

	M-003 Cl_2 Residual*		M-004 Cl2 Residual*		Upstream Chino Creek (R-003U)										Downstream Chino Creek (R-003D)								Upstream Chino Creek (R-004U)									
					DO		Temp		pH		TDS	TIN	Total Hardness	TSS	DO		Temp		pH		Total Hardness	TSS	DO		Temp		pH		TDS	TIN	Total Hardness	TSS
	Avg	Max	Avg	Max	Avg	Min	Avg	Max	Min	Max	Avg	Avg	Avg	Avg	Avg	Min	Avg	Max	Min	Max	Avg	Avg	Avg	Min	Avg	Max	Min	Max	Avg	Avg	Avg	Avg
Date	mg/L				mg/L		°C		unit		mg/L	mg/L	mg/L	mg/L	mg/L		°C		unit		mg/L	mg/L	mg/L		°C		unit		mg/L	mg/L	mg/L	mg/L
Jan-19	0.0	0.0	0.0	0.0	12.7	8.9	22.0	22.7	7.0	9.7	554	3.6	176	7	8.2	7.7	17.2	18.3	7.0	7.9	288	6	14.7	9.5	16.9	22.8	8.6	10.4	748	<0.2	396	32
Feb-19	0.0	0.0	0.0	0.0	12.1	9.8	18.5	22.8	7.2	9.2	1140	3.9			8.6	8.6	16.8	17.8	7.6	8.3			13.7	11.6	15.9	22.5	7.6	10.5	1120	2.8		
Mar-19	0.0	0.0	0.0	0.0	9.6	7.5	20.6	22.6	7.0	11.0	406	3.7			8.0	7.3	19.4	19.9	7.6	7.7			15.0	13.1	15.3	21.0	8.4	9.6	336	2.1		
Apr-19	0.0	0.0	0.0	0.0	13.5	12.7	19.6	24.9	7.5	8.6	518	3.1	155	3	7.3	6.8	21.6	24.8	7.4	8.0	379	2	14.1	12.9	18.8	25.1	8.3	8.9	648	2.4	365	31
May-19	0.0	0.0	0.0	0.0	12.3	8.0	24.3	25.6	7.6	8.8	912	1.2			7.1	6.7	22.9	23.7	7.2	8.1			13.5	12.2	23.3	26.1	8.4	10.6	972	1.4		
Jun-19	0.0	0.0	0.0	0.0	16.3	15.0	27.2	28.4	7.8	8.6	556	4.0			7.0	6.0	23.9	24.7	7.5	7.8			13.4	9.9	28.1	30.6	8.5	10.2	650	<0.2		
Jul-19	0.0	0.0			12.4	9.3	30.2	31.6	8.5	9.3	486	3.5	308	10	7.3	6.8	26.7	29.7	7.2	7.9	578	11	13.6	12.5	29.5	31.8	8.8	9.5	512	3.7	319	8
Aug-19	0.0	0.0			13.3	9.7	25.6	28.6	8.1	9.3	716	5.0			7.3	7.1	27.9	28.1	7.2	7.7												
Sep-19	0.0	0.0			13.5	11.7	23.4	29.9	8.4	9.6					7.0	6.5	25.9	28.1	7.4	7.9												
Oct-19	0.0	0.0			14.1	11.2	25.2	31.0	8.3	10.3	624	<0.2	323	32	7.2	6.8	24.1	26.6	5.2	8.2	270	<5	14.1	11.2	25.2	31.0	8.3	10.3	646	<0.2	322	38
Nov-19	0.0	0.0	0.0	0.0	11.7	8.2	20.9	24.0	7.4	10.0	696	2.7			7.1	6.8	22.7	23.4	7.0	7.9			13.3	11.6	20.8	24.0	7.9	10.4	710	0.7		
Dec-19	0.0	0.0	0.0	0.0	14.6	11.8	18.4	22.3	7.8	8.6	334	3.1			7.4	7.1	19.3	21.1	7.0	7.8			16.4	14.0	14.3	17.4	8.4	10.1	646	2.7		
Avg	**0.0**	**0.0**	**0.0**	**0.0**	**13.0**	**10.3**	**23.0**	**26.2**	**7.7**	**9.4**	**631**	**3.1**	**241**	**13**	**7.5**	**7.0**	**22.4**	**23.9**	**7.1**	**7.9**	**379**	**6**	**14.2**	**11.8**	**20.8**	**25.2**	**8.3**	**10.1**	**699**	**1.6**	**351**	**27**
Min	**0.0**	**0.0**	**0.0**	**0.0**	**9.6**	**7.5**	**18.4**	**22.3**	**7.0**	**8.6**	**334**	**<0.2**	**155**	**3**	**7.0**	**6.0**	**16.8**	**17.8**	**5.2**	**7.7**	**270**	**2**	**13.3**	**9.5**	**14.3**	**17.4**	**7.6**	**8.9**	**336**	**<0.2**	**319**	**8**
Max	**0.0**	**0.0**	**0.0**	**0.0**	**16.3**	**15.0**	**30.2**	**31.6**	**8.5**	**11.0**	**1,140**	**5.0**	**323**	**32**	**8.6**	**8.6**	**27.9**	**29.7**	**7.6**	**8.3**	**578**	**11**	**16.4**	**14.0**	**29.5**	**31.8**	**8.8**	**10.6**	**1,120**	**3.7**	**396**	**38**

* A chlorine residual of 0.0 mg/L signifies a positive sodium bisulfite residual and a negative chlorine residual.

RP-1 (REC-001) & RP-4 (REC-002) Recycled Water Data **Table No. 7a**

	REC-001											REC-002										
	Flow	pH	Turbidity	CT	Daily Coliform		7-day Median		BOD	TSS	TDS	Flow	pH	Turbidity	CT	Daily Coliform		7-day Median		BOD	TSS	TDS
	Avg	Avg	Avg	Min	Avg	Max	Avg	Max	Avg	Avg	Avg	Avg	Avg	Avg	Min	Avg	Max	Avg	Max	Avg	Avg	Avg
Date	mgd	unit	NTU	mg-min/L	MPN / 100 mL				mg/L			mgd	unit	NTU	mg-min/L	MPN / 100 mL				mg/L		
Jan-19	2.3	6.9	0.6	793	<2	29.2	<1	1.0	<2	<2	475	5.8	6.8	0.5	884	<1	<1.0	<1	<1	<2	<2	469
Feb-19	0.1	6.9	0.6	747	<1	2.0	<1	<1.0	<2	<2	432	3.4	7.1	0.4	769	<1	3.1	<1	<1	<2	<2	427
Mar-19	2.8	7.0	0.7	550	<1	2.0	<1	<1.0	2	<2	452	5.9	7.1	0.4	841	<1	2.0	<1	<1	<2	<2	426
Apr-19	11.0	7.1	0.9	777	<1	10.9	<1	<1.0	2	<2	461	8.3	7.0	0.4	792	<1	<1.0	<1	<1	<2	<2	409
May-19	8.5	7.0	0.9	789	<1	2.0	<1	<1.0	<2	<2	469	7.2	7.0	0.3	919	<1	<1.0	<1	<1	<2	<2	424
Jun-19	12.5	7.1	0.8	706	<1	6.3	<1	<1.0	<2	<2	483	8.8	7.0	0.4	917	<1	<1.0	<1	<1	<2	<2	432
Jul-19	16.0	7.2	0.9	607	<1	14.5	<1	<1.0	<2	<2	438	9.0	7.1	0.5	754	<1	2.0	<1	<1	<2	<2	390
Aug-19	21.8	7.3	0.8	571	<1	2.0	<1	<1.0	<2	<2	438	9.0	7.1	0.5	755	<2	21.1	<1	<1	<2	<2	403
Sep-19	20.3	7.2	0.7	669	<10	261.3	<1	<1.0	<2	<2	434	9.0	7.2	0.5	824	<1	<1.0	<1	<1	<2	<2	411
Oct-19	21.1	7.1	0.6	639	<1	5.2	<1	<1	<2	<2	425	8.9	7.0	0.4	906	<1	<1	<1	<1	<2	<2	399
Nov-19	16.4	7.0	0.6	580	<1	5.0	<1	<1	<2	<2	445	7.4	7.0	0.6	817	<3	45.7	<1	<1	<2	<2	399
Dec-19	4.1	6.9	0.6	549	<1	4.1	<1	<1	<2	<2	430	7.5	6.8	0.9	1061	<13	365.4	<1	<1	<2	<2	449
Avg	**11.4**	**7.1**	**0.7**	**664**	**<2**	**29**	**<1**	**<1**	**<2**	**<2**	**448**	**7.5**	**7.0**	**0.5**	**856**	**<2**	**37**	**<1**	**<1**	**<2**	**<2**	**419**
Min	**0.1**	**6.9**	**0.6**	**549**	**<1**	**2**	**<1**	**<1**	**<2**	**<2**	**425**	**3.4**	**6.8**	**0.3**	**754**	**<1**	**<1**	**<1**	**<1**	**<2**	**<2**	**390**
Max	**21.8**	**7.3**	**0.9**	**793**	**<10**	**261**	**<1**	**1**	**2**	**<2**	**483**	**9.0**	**7.2**	**0.9**	**1061**	**<13**	**365**	**<1**	**<1**	**<2**	**<2**	**469**

RP-5 (REC-003) & CCWRF (REC-004) Recycled Water Data **Table No. 7b**

	REC-003											REC-004										
	Flow	pH	Turbidity	CT	Daily Coliform		7-day Median		BOD	TSS	TDS	Flow	pH	Turbidity	CT	Daily Coliform		7-day Median		BOD	TSS	TDS
	Avg	Avg	Avg	Min	Avg	Max	Avg	Max	Avg	Avg	Avg	Avg	Avg	Avg	Min	Avg	Max	Avg	Max	Avg	Avg	Avg
Date	mgd	unit	NTU	mg-min/L	MPN / 100 mL				mg/L			mgd	unit	NTU	mg-min/L	MPN / 100 mL				mg/L		
Jan-19	2.7	6.8	0.6	455	<1	2.0	<1	<1	<2	<2	543	1.4	6.8	0.5	518	<1	3.1	<1	<1	<2	<2	513
Feb-19	1.0	6.9	0.6	499	<1	1.0	<1	<1	<2	<2	557	0.6	6.9	0.7	519	<1	2.0	<1	<1	<2	<2	515
Mar-19	1.5	7.0	0.6	526	<1	2.0	<1	<1	<2	<2	590	1.9	6.9	0.7	482	<1	1.0	<1	<1	<2	<2	517
Apr-19	2.5	7.0	0.7	591	<1	2.0	<1	<1	<2	<2	519	6.0	6.8	0.6	572	<1	1.0	<1	<1	<2	<2	489
May-19	1.3	7.0	1.0	580	<1	4.1	<1	1	<2	<2	512	4.8	6.8	0.6	497	<1	1.0	<1	<1	<2	<2	508
Jun-19	5.4	7.0	0.8	531	<1	1.0	<1	<1	<2	<2	524	6.6	6.8	0.7	517	<1	1.0	<1	<1	<2	<2	504
Jul-19	4.7	7.0	1.0	558	<5	104.3	<1	<1	<2	<2	492	6.8	7.1	0.6	538	<6	145.0	<1	<1	<2	<2	453
Aug-19	1.0	7.0	1.0	550	<1	<1.0	<1	<1	<2	<2	503	7.0	7.1	0.6	568	<1	<1.0	<1	<1	<2	<2	449
Sep-19	0.6	7.0	0.9	587	<1	1.0	<1	<1	<2	<2	509	7.2	7.0	0.5	508	<1	<1	<1	<1	<2	<2	452
Oct-19	0.0	7.0	0.9	598	<1	<1	<1	<1	<2	<2	488	6.7	7.1	0.6	579	<1	1.0	<1	<1	<2	<2	441
Nov-19	0.5	6.9	0.9	511	<1	1	<1	<1	<2	<2	501	5.6	6.8	0.6	578	<1	1.0	<1	<1	<2	<2	476
Dec-19	0.3	6.8	1.0	507	<1	1	<1	<1	<2	<2	496	3.3	6.8	0.7	480	<1	2.0	<1	<1	<2	<2	458
Avg	**1.8**	**7.0**	**0.8**	**537**	**<1**	**10**	**<1**	**<1**	**<2**	**<2**	**519**	**4.8**	**6.9**	**0.6**	**532**	**<1**	**13**	**<1**	**<1**	**<2**	**<2**	**481**
Min	**0.0**	**6.8**	**0.6**	**455**	**<1**	**<1**	**<1**	**<1**	**<2**	**<2**	**488**	**0.6**	**6.8**	**0.5**	**480**	**<1**	**<1**	**<1**	**<1**	**<2**	**<2**	**441**
Max	**5.4**	**7.0**	**1.0**	**598**	**<5**	**104**	**<1**	**1**	**<2**	**<2**	**590**	**7.2**	**7.1**	**0.7**	**579**	**<6**	**145**	**<1**	**<1**	**<2**	**<2**	**517**

RP-1 (M-001B) Effluent Monthly Inorganic & Organic Data — **Table No. 8a**

	Total Hardness	HCO_3^{2-}	B	Ca	CO_3^{2-}	Cl	F	Mg	Na	SO_4	Cd, TR	Cr, Total	Cu, TR	Pb, TR	Hg, TR	Se, TR	Ag, TR	Zn, TR	Chlorodi-bromomethane	Bromodi-chloromethane	2,3,7,8-TCDD
Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pg/L
Limits																					
Jan-19	150			45				10			<0.5		<2	<0.5				36			
Feb-19	148	153	0.2	44	0	111	0.2	9	91	43	<0.25	<0.5	5	<0.5		<2	<0.25	40			
Mar-19	151	156	0.2	45	0	99	0.4	9	99	45	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	39			
Apr-19	143	162	0.3	43	0	98	0.2	9	95	49	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	44			
May-19	144	148	0.3	43	0	112	0.3	9	87	47	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	41	2	15	
Jun-19	149	123	0.3	43	0	123	0.2	10	99	48	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	41			
Jul-19	146	155	0.2	44	0	109	0.2	9	94	47	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	42	2	19	
Aug-19	150	178	0.2	47	0	94	0.2	8	96	40	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	39			
Sep-19	138	166	0.2	42	0	100	0.2	8	91	44	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	32			
Oct-19	137	162	0.2	41	0	96	0.2	8	93	41	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	36	2	18	
Nov-19	152	164	0.3	46	0	112	0.2	9	100	45	<0.25	<0.5	4	<0.5	<0.025	<2	<0.25	32			0.000
Dec-19	142	135	0.3	43	0	103	0.2	10	92	46	<0.25	<0.5	4	<0.5	<0.025	<2	<0.25	48			
Avg	**146**	**155**	**0.2**	**44**	**0**	**105**	**0.2**	**9**	**94**	**45**	**<0.27**	**<0.5**	**4**	**<0.5**	**<0.05**	**<2**	**<0.25**	**39**	**2**	**17**	**0.000**
Min	**137**	**123**	**0.2**	**41**	**0**	**94**	**0.2**	**8**	**87**	**40**	**<0.25**	**<0.5**	**<2**	**<0.5**	**<0.03**	**<2**	**<0.25**	**32**	**2**	**15**	**0.000**
Max	**152**	**178**	**0.3**	**47**	**0**	**123**	**0.4**	**10**	**100**	**49**	**<0.50**	**<0.5**	**6**	**<0.5**	**<0.05**	**<2**	**<0.25**	**48**	**2**	**19**	**0.000**

RP-1/RP-4 (M-002A) Effluent Monthly Inorganic & Organic Data — **Table No. 8b**

	Total Hardness	HCO_3^{2-}	B	Ca	CO_3^{2-}	Cl	F	Mg	Na	SO_4	Cd, TR	Cr, Total	Cu, TR	Pb, TR	Hg, TR	Se, TR	Ag, TR	Zn, TR	Chlorodi-bromomethane	Bromodi-chloromethane	2,3,7,8-TCDD
Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pg/L
Limits											1 mo avg; 2 max daily		14 mo avg; 20 max daily	8 mo avg; 15 max daily				120 mo avg; 150 max daily			
Jan-19	140			40		115		10			<0.5		<2	<0.5				44			
Feb-19	147	143	0.2	44	0	110	0.2	9	96	60	<0.25	<0.5	6	<0.5		<2	<0.25	42			
Mar-19	150	149	0.2	45	0	103	0.3	9	94	61	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	40	2	14	
Apr-19	149	156	0.2	45	0	100	0.2	9	102	63	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	45			
May-19	150	140	0.3	45	0	114	0.2	9	94	60	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	44	2	15	
Jun-19	145	119	0.3	42	0	119	0.2	10	100	61	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	41			
Jul-19	144	150	0.2	43	0	107	0.2	9	97	62	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	43	2	14	
Aug-19	151	163	0.2	48	0	94	0.2	8	104	64	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	40			
Sep-19	134	150	0.2	40	0	101	0.2	8	97	68	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	33			
Oct-19	137	153	0.2	41	0	95	0.2	8	98	54	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	35	2	16	
Nov-19	149	160	0.2	45	0	112	0.3	9	107	72	<0.25	<0.5	4	<0.5	<0.025	<2	<0.25	31			0.000
Dec-19	139	135	0.3	43	0	105	0.2	10	95	58	<0.25	<0.5	4	<0.5	<0.025	<2	<0.25	45			
Avg	**145**	**147**	**0.2**	**43**	**0**	**106**	**0.2**	**9**	**99**	**62**	**<0.27**	**<0.5**	**5**	**<0.5**	**<0.05**	**<2**	**<0.25**	**40**	**2**	**15**	**0.000**
Min	**134**	**119**	**0.2**	**40**	**0**	**94**	**0.2**	**8**	**94**	**54**	**<0.25**	**<0.5**	**<2**	**<0.5**	**<0.03**	**<2**	**<0.25**	**31**	**2**	**14**	**0.000**
Max	**151**	**163**	**0.3**	**48**	**0**	**119**	**0.3**	**10**	**107**	**72**	**<0.50**	**<0.5**	**6**	**<0.5**	**<0.05**	**<2**	**<0.25**	**45**	**2**	**16**	**0.000**

*Free Cyanide is analyzed using ASTM-D7237 for analysis of free cyanide in accordance with R8-2016-0036

RP-5 (M-003) Effluent Monthly Inorganic Data — **Table No. 8c**

	Total Hardness	HCO_3^{2-}	B	Ca	CO_3^{2-}	Cl	F	Mg	Na	SO_4	Cd, TR	Cr, Total	Cu, TR	Pb, TR	Hg, TR	Se, TR	Ag, TR	Zn, TR	Chlorodi-bromomethane	Bromodi-chloromethane	2,3,7,8-TCDD
Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pg/L
Limits																			34 mo avg; 68 max daily		0.014 mo avg; 0.028 max
Jan-19	210			59				15			<0.5		4	<0.5				52	3	13	0.000
Feb-19	244	144	0.2	69	0	167	0.1	17	103	74	<0.25	<0.5	7	<0.5		<2	<0.25	40	3	13	0.000
Mar-19	240	155	0.2	67	0	163	0.1	17	104	72	<0.25	<0.5	7	<0.5	<0.05	<2	<0.25	47			0.000
Apr-19	210	139	0.2	61	0	148	0.2	14	103	67	<0.25	<0.5	7	<0.5	<0.05	<2	<0.25	53	4	24	0.000
May-19	189	118	0.2	54	0	151	0.1	13	92	55	<0.25	<0.5	8	<0.5	<0.05	<2	<0.25	56	3	15	0.000
Jun-19	192	143	0.3	55	0	161	0.1	14	98	59	<0.25	<0.5	8	0.6	<0.05	<2	<0.25	46	3	15	0.000
Jul-19	194	137	0.2	59	0	166	0.1	11	107	63	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	33	3	17	0.000
Aug-19	181	138	0.3	54	0	148	0.1	11	104	50	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	41	2	16	0.000
Sep-19	176	130	0.2	51	0	155	0.1	12	100	54	<0.25	<0.5	7	<0.5	<0.05	<2	<0.25	50	3	17	0.000
Oct-19	187	127	0.2	54	0	155	0.1	13	106	54	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	56	8	23	0.000
Nov-19	183	129	0.3	52	0	153	0.2	13	101	56	<0.25	<0.5	7	<0.5	<0.025	<2	<0.25	53	3	14	NA*
Dec-19	183	116	0.3	53	0	157	0.1	14	104	58	<0.25	<0.5	7	<0.5	<0.025	<2	<0.25	47	3	16	0.000
Avg	**199**	**134**	**0.3**	**57**	**0**	**157**	**0.1**	**14**	**102**	**60**	**<0.27**	**<0.5**	**7**	**<0.5**	**<0.05**	**<2**	**<0.25**	**48**	**3**	**17**	**0.000**
Min	**176**	**116**	**0.2**	**51**	**0**	**148**	**0.1**	**11**	**92**	**50**	**<0.25**	**<0.5**	**4**	**<0.5**	**<0.03**	**<2**	**<0.25**	**33**	**2**	**13**	**0.000**
Max	**244**	**155**	**0.3**	**69**	**0**	**167**	**0.2**	**17**	**107**	**74**	**<0.50**	**<0.5**	**8**	**0.6**	**<0.05**	**<2**	**<0.25**	**56**	**8**	**24**	**0.000**

NA* - Not reported due to the effluent being higher than the influent. Highly suspect that the samples may have been switched. Since the original samples were disposed of, the sub lab is not able to confirm.

CCWRF (M-004) Effluent Monthly Inorganic Data — **Table No. 8d**

	Total Hardness	HCO_3^{2-}	B	Ca	CO_3^{2-}	Cl	F	Mg	Na	SO_4	Cd, TR	Cr, Total	Cu, TR	Pb, TR	Hg, TR	Se, TR	Ag, TR	Zn, TR	Chlorodi-bromomethane	Bromodi-chloromethane	2,3,7,8-TCDD
Date	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pg/L
Limits																			34 mo avg; 68 max daily	46 mo avg; 67 max daily	
Jan-19	160			45				12			<0.5		4	<0.5				58	5	20	0.000
Feb-19	170	125	0.2	48	0	153	0.1	12	112	73	<0.25	<0.5	7	<0.5		<2	<0.25	59	4	18	
Mar-19	192	125	0.2	53	0	158	0.1	14	112	80	<0.25	<0.5	9	<0.5	<0.05	<2	<0.25	58			
Apr-19	159	120	0.2	46	0	128	0.2	11	108	81	<0.25	<0.5	7	<0.5	<0.05	<2	<0.25	54	5	26	0.000
May-19	151	134	0.3	44	0	139	0.1	10	112	86	<0.25	<0.5	8	<0.5	<0.05	<2	<0.25	50	3	20	
Jun-19	157	112	0.3	44	0	148	0.1	11	110	91	<0.25	<0.5	9	<0.5	<0.05	<2	<0.25	53	3	17	
Jul-19	149	111	0.2	43	0	134	0.1	10	101	54	<0.25	<0.5	8	<0.5	<0.05	<2	<0.25	47	4	23	0.000
Aug-19	137	109	0.3	39	0	125	<0.1	9	97	47	<0.25	<0.5	8	<0.5	<0.05	<2	<0.25	51	3	22	
Sep-19	141	119	0.2	36	0	125	<0.1	10	94	53	<0.25	<0.5	8	<0.5	<0.05	<2	<0.25	49	4	22	
Oct-19	144	114	0.2	41	0	120	0.1	10	97	47	<0.25	<0.5	7	<0.5	<0.05	<2	<0.25	63			
Nov-19	140	102	0.3	39	0	132	0.1	10	123	110	<0.25	<0.5	8	<0.5	<0.025	<2	<0.25	60	4	20	0.000
Dec-19	144	109	0.3	44	0	136	0.2	11	108	74	<0.25	<0.5	6	<0.5	<0.025	<2	<0.25	50	3	15	
Avg	**154**	**116**	**0.2**	**44**	**0**	**136**	**0.1**	**11**	**107**	**72**	**<0.27**	**<0.5**	**7**	**<0.5**	**<0.05**	**<2**	**<0.25**	**54**	**4**	**20**	**0.000**
Min	**137**	**102**	**0.2**	**36**	**0**	**120**	**0.1**	**9**	**94**	**47**	**<0.25**	**<0.5**	**4**	**<0.5**	**<0.03**	**<2**	**<0.25**	**47**	**3**	**15**	**0.000**
Max	**192**	**134**	**0.3**	**53**	**0**	**158**	**0.2**	**14**	**123**	**110**	**<0.50**	**<0.5**	**9**	**<0.5**	**<0.05**	**<2**	**<0.25**	**63**	**5**	**26**	**0.000**

RP-1 (M-001B) Effluent Quarterly Data — **Table No. 9a**

Date	Al, TR µg/L	Sb, TR µg/L	As, TR µg/L	Ba, TR µg/L	Co, TR µg/L	Ni, TR µg/L
Jan-19	NR	NR	NR	NR	NR	NR
Feb-19	65	<1	<2	14	<1	3
Mar-19	91	<1	<2	15	<1	3
Apr-19	84	<1	<2	20	<1	3
May-19	73	<1	<2	19	<1	3
Jun-19	68	<1	<2	20	<1	3
Jul-19	57	<1	<2	14	<1	3
Aug-19	110	<1	<2	20	<1	14
Sep-19	109	<1	<2	20	<1	3
Oct-19	105	<1	<2	16	<1	14
Nov-19	70	<1	2	23	<1	3
Dec-19	80	<1	<2	11	<1	3
Avg	**83**	**<1**	**<2**	**17**	**<1**	**5**
Min	**57**	**<1**	**<2**	**11**	**<1**	**3**
Max	**110**	**<1**	**2**	**23**	**<1**	**14**

RP-1/RP-4 (M-002A) Effluent Quarterly Data — **Table No. 9b**

Date	Al, TR µg/L	Sb, TR µg/L	As, TR µg/L	Ba, TR µg/L	Co, TR µg/L	Ni, TR µg/L
Jan-19	NR	NR	NR	NR	NR	NR
Feb-19	100	<1	<2	14	<1	3
Mar-19	98	<1	<2	15	<1	3
Apr-19	87	<1	<2	20	<1	3
May-19	72	<1	<2	19	<1	3
Jun-19	72	<1	<2	20	<1	3
Jul-19	59	<1	<2	14	<1	3
Aug-19	108	<1	<2	21	<1	13
Sep-19	104	<1	<2	20	<1	3
Oct-19	108	<1	2	17	<1	14
Nov-19	72	<1	2	24	<1	3
Dec-19	92	<1	<2	11	<1	3
Avg	**88**	**<1**	**<2**	**18**	**<1**	**5**
Min	**59**	**<1**	**<2**	**11**	**<1**	**3**
Max	**108**	**<1**	**2**	**24**	**<1**	**14**

RP-5 (M-003) Effluent Quarterly Data — **Table No. 9c**

Date	Al, TR µg/L	Sb, TR µg/L	As, TR µg/L	Ba, TR µg/L	Co, TR µg/L	Ni, TR µg/L
Jan-19	NR	NR	NR	NR	NR	NR
Feb-19	<25	<1	<2	33	<1	4
Mar-19	<25	<1	<2	38	<1	4
Apr-19	<25	<1	<2	37	<1	3
May-19	<25	<1	<2	34	<1	4
Jun-19	<25	<1	2	30	<1	4
Jul-19	<25	<1	<2	35	<1	4
Aug-19	<25	<1	<2	24	<1	3
Sep-19	<25	<1	2	47	<1	3
Oct-19	<25	<1	3	34	<1	4
Nov-19	<25	<1	3	31	<1	3
Dec-19	<25	<1	<2	31	<1	4
Avg	**<25**	**<1**	**<2**	**34**	**<1**	**4**
Min	**<25**	**<1**	**<2**	**24**	**<1**	**3**
Max	**<25**	**<1**	**3**	**47**	**<1**	**4**

CCWRF (M-004) Effluent Quarterly Data — **Table No. 9d**

Date	Al, TR µg/L	Sb, TR µg/L	As, TR µg/L	Ba, TR µg/L	Co, TR µg/L	Ni, TR µg/L
Jan-19	NR	NR	NR	NR	NR	NR
Feb-19	131	<1	<2	11	<1	3
Mar-19	108	<1	<2	10	<1	4
Apr-19	127	<1	<2	10	<1	3
May-19	112	<1	<2	11	<1	4
Jun-19	104	<1	2	11	<1	4
Jul-19	64	<1	<2	8	<1	3
Aug-19	107	<1	<2	9	<1	3
Sep-19	43	<1	2	7	<1	4
Oct-19	81	<1	2	7	<1	4
Nov-19	87	<1	2	8	<1	3
Dec-19	83	<1	2	10	<1	3
Avg	**95**	**<1**	**<2**	**9**	**<1**	**3**
Min	**43**	**<1**	**<2**	**7**	**<1**	**3**
Max	**131**	**<1**	**2**	**11**	**<1**	**4**

Table No. 10

	Flow				TIN								Agency-wide TIN				
	DP 001	DP 002	DP 003	DP 004	M-001B		M-002A		RP5		CC		Discharge		Limit		**12-MRA**
Mo-Yr													flow wt.	total	flow wt.	total	flow-wt.
	MGD				mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	mg/L
Jan-19	2.0	25.5	5.8	6.1	4.8	80	6.1	1,290	8.2	390	5.4	270	6.2	2,030	8	5,338	5.0
Feb-19	3.0	33.8	6.0	7.4	4.4	110	4.5	1,270	7.4	370	5.1	320	4.9	2,070	8	5,338	5.0
Mar-19	2.6	25.6	5.6	5.5	5.0	110	5.0	1,070	10.5	490	4.3	200	5.7	1,870	8	5,338	5.1
Apr-19	2.8	11.7	4.7	1.0	4.4	100	4.8	460	7.0	270	4.3	40	5.2	870	8	5,338	5.1
May-19	2.4	14.2	7.3	2.2	3.6	70	3.7	440	5.4	330	4.0	70	4.2	910	8	5,338	5.0
Jun-19	1.9	9.2	3.8	0.9	2.3	40	2.6	200	3.7	120	4.9	40	3.0	400	8	5,338	4.9
Jul-19	1.6	6.7	4.1	0.0	3.2	40	3.4	190	2.7	90	NA	0	3.2	320	8	5,338	4.8
Aug-19	1.4	0.9	7.3	0.0	3.1	40	3.2	20	4.0	240	NA	0	3.8	300	8	5,338	4.4
Sep-19	1.8	3.7	7.4	0.0	2.9	40	2.8	90	4.9	300	NA	0	4.0	430	8	5,338	4.7
Oct-19	2.7	2.3	6.7	0.0	2.8	60	3.1	60	5.7	320	NA	0	4.5	440	8	5,338	4.6
Nov-19	2.1	10.7	7.7	1.5	3.4	60	3.3	300	5.6	360	5.6	70	3.9	790	8	5,338	4.6
Dec-19	1.9	22.7	9.4	4.6	4.4	70	4.1	780	6.1	480	5.4	200	4.1	1,530	8	5,338	4.4
12-Mo Avg	2.2	13.9	6.3	2.4	3.7	70	3.9	510	5.9	310	4.9	100	4.4	1,000	8	5,338	**4.8**
Min	1.4	0.9	3.8	0.0	2.3	40	2.6	20	2.7	90	4.0	0	3.0	300	8	5,338	**4.4**
Max	3.0	33.8	9.4	7.4	5.0	110	6.1	1,290	10.5	490	5.6	320	6.2	2,070	8	5,338	**5.1**

NA: Not Analyzed, due to no discharge

Agency-wide TDS 12-Month Running Averages **Table No. 11**

	Flows								Total Dissolved Solids (TDS)								Agency-wide TDS				
	001 [1]	RP-1 RW	002	RP-4 RW	RP-5	RP-5 RW	CC	CC RW	001	RP-1 RW [2]	002	RP-4 RW	RP-5	RP-5 RW [2]	CC	CC RW [2]	Discharge		Limit		12-MRA
Mo-Yr	MGD								mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	flow wt. mg/L	total lbs/day	flow wt. mg/L	total lbs/day	flow wt. mg/L
Jan-19	2.0	2.3	25.5	5.8	5.8	2.7	6.1	1.4	578	475	481	469	572	543	535	513	503	216,860	550	366,960	490
Feb-19	3.0	0.1	33.8	3.4	6.0	1.0	7.4	0.6	553	432	459	427	574	557	523	515	485	223,550	550	366,960	490
Mar-19	2.6	2.8	25.6	5.9	5.6	1.5	5.5	1.9	593	452	465	426	600	590	545	517	495	211,930	550	366,960	489
Apr-19	2.8	11.0	11.7	8.3	4.7	2.5	1.0	6.0	527	461	477	409	551	519	511	489	476	190,620	550	366,960	489
May-19	2.4	8.5	14.2	7.2	7.3	1.3	2.2	4.8	510	469	478	424	547	512	535	508	487	195,100	550	366,960	488
Jun-19	1.9	12.5	9.2	8.8	3.8	5.4	0.9	6.6	545	483	484	432	542	524	542	504	489	199,960	550	366,960	488
Jul-19	1.6	16.0	6.7	9.0	4.1	4.7	0.0	6.8	496	438	458	390	515	492	NA	453	447	181,920	550	366,960	485
Aug-19	1.4	21.8	0.9	9.0	7.3	1.0	0.0	7.0	468	438	472	403	513	503	NA	449	447	180,140	550	366,960	482
Sep-19	1.8	20.3	3.7	9.0	7.4	0.6	0.0	7.2	532	434	449	411	530	509	NA	452	452	188,380	550	366,960	481
Oct-19	2.7	21.1	2.3	8.9	6.7	0.0	0.0	6.7	498	425	452	399	547	488	NA	441	445	179,360	550	366,960	477
Nov-19	2.1	16.4	10.7	7.4	7.7	0.5	1.5	5.6	478	445	471	427	514	501	519	476	465	201,020	550	366,960	473
Dec-19	1.9	4.1	22.7	7.5	9.4	0.3	4.6	3.3	474	430	444	449	514	496	482	458	461	206,940	550	366,960	471
Avg	**2.2**	**11.4**	**13.9**	**7.5**	**6.3**	**1.8**	**2.4**	**4.8**	**521**	**448**	**466**	**422**	**543**	**519**	**524**	**481**	**471**	**197,980**	**550**	**366,960**	**484**
Min	**1.4**	**0.1**	**0.9**	**3.4**	**3.8**	**0.0**	**0.0**	**0.6**	**468**	**425**	**444**	**390**	**513**	**488**	**482**	**441**	**445**	**179,360**	**550**	**366,960**	**471**
Max	**3.0**	**21.8**	**33.8**	**9.0**	**9.4**	**5.4**	**7.4**	**7.2**	**593**	**483**	**484**	**469**	**600**	**590**	**545**	**517**	**503**	**223,550**	**550**	**366,960**	**490**

NOTES: [1] Prior to April 2010, 001 effluent flow included recycled water flow.

[2] Flow and TDS added to flow-weight for RP-1, RP-5, and CCWRF recycled water (May 2010)

NA: Not Analyzed, due to no discharge

APPENDIX B

RECYCLED WATER

COMPLIANCE DATA

FOR CALENDAR YEAR 2019

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2019 NPDES Annual Report

RP-5 (M-INF 3C) RP-2 Recycle Flow Remaining Priority Pollutants

Table 15a

RP-5 (M-INF 3C) RP-2 Recycle Flow Remaining Priority Pollutant Metals & CN, mg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)			<0.02			<0.02	<0.02			<0.02			**<0.02**
Arsenic (As)			<0.01			<0.01	<0.01			<0.01			**<0.01**
Beryllium (Be)			<0.01			<0.01	<0.01			<0.01			**<0.01**
Cadmium (Cd)			<0.01			<0.01	<0.01			<0.01			**<0.01**
Chromium (Cr)			<0.01			<0.01	0.03			<0.01			**0.03**
Copper (Cu)			0.04			0.09	0.54			0.03			**0.54**
Lead (Pb)			<0.02			<0.02	<0.02			<0.02			**<0.02**
Mercury (Hg)			<0.0005			<0.0005	0.0010				0.0006		**0.001**
Nickel (Ni)			<0.01			<0.01	0.02			<0.01			**0.02**
Selenium (Se)			<0.02			<0.02	<0.02			<0.02			**<0.02**
Silver (Ag)			<0.01			<0.01	<0.01			<0.01			**<0.01**
Thallium (Tl)			<0.05			<0.05	<0.05			<0.05			**<0.05**
Zinc (Zn			0.13			0.19	1.44			0.13			**1.44**
CN, Aquatic Free		<2		3					<2	<2			**3**

RP-5 (M-INF 3C) RP-2 Recycle Flow Volatile Organics (EPA Methods 624, 601/602), µg/L

1,1,1-Trichloroethane										<5			**<5**
1,1,2,2-Tetrachloroethane										<2.5			**<2.5**
1,1,2-Trichloroethane										<5			**<5**
1,1-Dichloroethane										<2.5			**<2.5**
1,1-Dichloroethene										<5			**<5**
1,2-Dichlorobenzene										<5			**<5**
1,2-Dichloroethane										<2.5			**<2.5**
1,2-Dichloropropane										<2.5			**<2.5**
1,3-Dichlorobenzene										<5			**<5**
1,4-Dichlorobenzene										<5			**<5**
2-Chloroethyl vinyl ether										<5			**<5**
Benzene										<5			**<5**
Bromodichloromethane										<5			**<5**
Bromoform										<5			**<5**
Bromomethane										<5			**<5**
Carbon tetrachloride										<2.5			**<2.5**
Chlorobenzene										<5			**<5**
Chloroethane										<5			**<5**
Chloroform										29			**29**
Chloromethane										<5			**<5**
cis-1,3-Dichloropropene										<2.5			**<2.5**
Dibromochloromethane										<5			**<5**
Ethylbenzene										<5			**<5**
Methylene chloride										<5			**<5**
Tetrachloroethene										<5			**<5**
Toluene										<5			**<5**
trans-1,2-Dichloroethene										<2.5			**<2.5**
trans-1,3-Dichloropropene										<2.5			**<2.5**
Trichloroethene										<5			**<5**
Trichlorofluoromethane										<10			**<10**
Vinyl chloride										<2.5			**<2.5**
Acrolein										<10			**<10**
Acrylonitrile										<1.25			**<1.25**

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RP-5 (M-INF 3C) RP-2 Recycle Flow Remaining Priority Pollutants

Table 15b

RP-5 (M-INF 3C) RP-2 Recycle Flow Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene										<10			**<10**
1,2-Dichlorobenzene										<10			**<10**
1,3-Dichlorobenzene										<10			**<10**
1,4-Dichlorobenzene										<10			**<10**
2,4,6-Trichlorophenol										<10			**<10**
2,4-Dichlorophenol										<20			**<20**
2,4-Dimethylphenol										<10			**<10**
2,4-Dinitrophenol										<30			**<30**
2,4-Dinitrotoluene										<10			**<10**
2,6-Dinitrotoluene										<20			**<20**
2-Chloronaphthalene										<10			**<10**
2-Chlorophenol										<10			**<10**
2-Methyl-4,6-dinitrophenol										<20			**<20**
2-Nitrophenol										<10			**<10**
3,3-Dichlorobenzidine										<50			**<50**
4-Bromophenyl phenyl ether										<10			**<10**
4-Chloro-3-methylphenol										<10			**<10**
4-Chlorophenyl phenyl ether										<10			**<10**
4-Nitrophenol										<30			**<30**
Acenaphthene										<10			**<10**
Acenaphthylene										<10			**<10**
Anthracene										<10			**<10**
Azobenzene										<10			**<10**
Benzidine										<50			**<50**
Benzo(a)anthracene										<50			**<50**
Benzo(a)pyrene										<10			**<10**
Benzo(b)fluoranthene										<10			**<10**
Benzo(g,h,i)perylene										<20			**<20**
Benzo(k)fluoranthene										<10			**<10**
Bis(2-chloroethoxy)methane										<20			**<20**
Bis(2-chloroethyl)ether										<10			**<10**
Bis(2-chloroisopropyl)ether										<10			**<10**
Bis(2-ethylhexyl)phthalate			<15		<15		<15			<15			**<15**
Butyl benzyl phthalate										<7.5			**<7.5**
Chrysene										<10			**<10**
Dibenzo(a,h)anthracene										<10			**<10**
Diethyl phthalate										<15			**<15**
Dimethyl phthalate										<10			**<10**
Di-n-butyl phthalate										<10			**<10**
Di-n-octyl phthalate										<10			**<10**
Fluoranthene										<10			**<10**
Fluorene										<10			**<10**
Hexachlorobenzene										<10			**<10**
Hexachlorobutadiene										<10			**<10**
Hexachlorocyclopentadiene										<50			**<50**
Hexachloroethane										<10			**<10**
Indeno(1,2,3-cd)pyrene										<20			**<20**
Isophorone										<10			**<10**
Naphthalene										<10			**<10**
Nitrobenzene										<10			**<10**
N-Nitrosodimethylamine										<10			**<10**
N-Nitroso-di-n-propylamine										<10			**<10**
N-Nitrosodiphenylamine										<10			**<10**
Pentachlorophenol										<20			**<20**
Phenanthrene										<10			**<10**
Phenol										<10			**<10**
Pyrene										<10			**<10**

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RP-5 (M-INF 3C) RP-2 Recycle Flow Remaining Priority Pollutants

Table 15c

RP-5 (M-INF 3C) RP-2 Recycle Flow Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD										<0.06			**<0.06**
4,4-DDE										<0.06			**<0.06**
4,4-DDT										<0.08			**<0.08**
Aldrin										<0.04			**<0.04**
Alpha-BHC										<0.08			**<0.08**
Beta-BHC										<0.05			**<0.05**
Delta-BHC										<0.07			**<0.07**
Dieldrin										<0.06			**<0.06**
Endosulfan I										<0.1			**<0.1**
Endosulfan II										<0.07			**<0.07**
Endosulfan Sulfate										<0.09			**<0.09**
Endrin										<0.09			**<0.09**
Endrin aldehyde										<0.06			**<0.06**
Gamma-BHC										<0.1			**<0.1**
Heptachlor										<0.06			**<0.06**
Heptachlor epoxide										<0.07			**<0.07**
Chlordane										<1			**<1**
PCB-1016										<5			**<5**
PCB-1221										<5			**<5**
PCB-1232										<5			**<5**
PCB-1242										<5			**<5**
PCB-1248										<5			**<5**
PCB-1254										<5			**<5**
PCB-1260										<5			**<5**
Toxaphene										<5			**<5**

RP-5 (M-INF 3C) RP-2 Recycle Flow Dioxins & Furans, pg/L (reported values based on detection limit)

PCDD/PCDF Congeners*										0.000			**0.000**

*TEQ is calculated based on congener concentrations below the reporting limit (RL) set to zero

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RP-5 (M-INF 3D) RP-2 Lift Station Remaining Priority Pollutants

Table 16a

RP-5 (M-INF 3D) RP-2 Lift Station Remaining Priority Pollutant Metals & CN, mg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)			<0.02			<0.02	<0.02			<0.02			**<0.02**
Arsenic (As)			<0.01			<0.01	<0.01			<0.01			**<0.01**
Beryllium (Be)			<0.01			<0.01	<0.01			<0.01			**<0.01**
Cadmium (Cd)			<0.01			<0.01	<0.01			<0.01			**<0.01**
Chromium (Cr)			<0.01			<0.01	0.01			<0.01			**0.01**
Copper (Cu)			0.03			0.08	0.23			0.04			**0.23**
Lead (Pb)			<0.02			<0.02	<0.02			<0.02			**<0.02**
Mercury (Hg)			<0.0005			<0.0005	0.0006				<0.0005		**0.0006**
Nickel (Ni)			<0.01			<0.01	<0.01			<0.01			**<0.01**
Selenium (Se)			<0.02			<0.02	<0.02			<0.02			**<0.02**
Silver (Ag)			<0.01			<0.01	<0.01			<0.01			**<0.01**
Thallium (Tl)			<0.05			<0.05	<0.05			<0.05			**<0.05**
Zinc (Zn			0.09			0.17	0.65			0.14			**0.65**
CN, Aquatic Free		<2		<2					8	<2			**8**

RP-5 (M-INF 3D) RP-2 Lift Station Volatile Organics (EPA Methods 624, 601/602), µg/L

1,1,1-Trichloroethane										<5			**<5**
1,1,2,2-Tetrachloroethane										<2.5			**<2.5**
1,1,2-Trichloroethane										<5			**<5**
1,1-Dichloroethane										<2.5			**<2.5**
1,1-Dichloroethene										<5			**<5**
1,2-Dichlorobenzene										<5			**<5**
1,2-Dichloroethane										<2.5			**<2.5**
1,2-Dichloropropane										<2.5			**<2.5**
1,3-Dichlorobenzene										<5			**<5**
1,4-Dichlorobenzene										<5			**<5**
2-Chloroethyl vinyl ether										<5			**<5**
Benzene										<5			**<5**
Bromodichloromethane										<5			**<5**
Bromoform										<5			**<5**
Bromomethane										<5			**<5**
Carbon tetrachloride										<2.5			**<2.5**
Chlorobenzene										<5			**<5**
Chloroethane										<5			**<5**
Chloroform										34			**34**
Chloromethane										<5			**<5**
cis-1,3-Dichloropropene										<2.5			**<2.5**
Dibromochloromethane										<5			**<5**
Ethylbenzene										<5			**<5**
Methylene chloride										<5			**<5**
Tetrachloroethene										<5			**<5**
Toluene										<5			**<5**
trans-1,2-Dichloroethene										<2.5			**<2.5**
trans-1,3-Dichloropropene										<2.5			**<2.5**
Trichloroethene										<5			**<5**
Trichlorofluoromethane										<10			**<10**
Vinyl chloride										<2.5			**<2.5**
Acrolein										<10			**<10**
Acrylonitrile										<1.25			**<1.25**

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RP-5 (M-INF 3D) RP-2 Lift Station Remaining Priority Pollutants

Table 16b

RP-5 (M-INF 3D) RP-2 Lift Station Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene										<10			**<10**
1,2-Dichlorobenzene										<10			**<10**
1,3-Dichlorobenzene										<10			**<10**
1,4-Dichlorobenzene										<10			**<10**
2,4,6-Trichlorophenol										<10			**<10**
2,4-Dichlorophenol										<20			**<20**
2,4-Dimethylphenol										<10			**<10**
2,4-Dinitrophenol										<30			**<30**
2,4-Dinitrotoluene										<10			**<10**
2,6-Dinitrotoluene										<20			**<20**
2-Chloronaphthalene										<10			**<10**
2-Chlorophenol										<10			**<10**
2-Methyl-4,6-dinitrophenol										<20			**<20**
2-Nitrophenol										<10			**<10**
3,3-Dichlorobenzidine										<50			**<50**
4-Bromophenyl phenyl ether										<10			**<10**
4-Chloro-3-methylphenol										<10			**<10**
4-Chlorophenyl phenyl ether										<10			**<10**
4-Nitrophenol										<30			**<30**
Acenaphthene										<10			**<10**
Acenaphthylene										<10			**<10**
Anthracene										<10			**<10**
Azobenzene										<10			**<10**
Benzidine										<50			**<50**
Benzo(a)anthracene										<50			**<50**
Benzo(a)pyrene										<10			**<10**
Benzo(b)fluoranthene										<10			**<10**
Benzo(g,h,i)perylene										<20			**<20**
Benzo(k)fluoranthene										<10			**<10**
Bis(2-chloroethoxy)methane										<20			**<20**
Bis(2-chloroethyl)ether										<10			**<10**
Bis(2-chloroisopropyl)ether										<10			**<10**
Bis(2-ethylhexyl)phthalate			<15		<15		<15			<15			**<15**
Butyl benzyl phthalate										<7.5			**<7.5**
Chrysene										<10			**<10**
Dibenzo(a,h)anthracene										<10			**<10**
Diethyl phthalate										<15			**<15**
Dimethyl phthalate										<10			**<10**
Di-n-butyl phthalate										<10			**<10**
Di-n-octyl phthalate										<10			**<10**
Fluoranthene										<10			**<10**
Fluorene										<10			**<10**
Hexachlorobenzene										<10			**<10**
Hexachlorobutadiene										<10			**<10**
Hexachlorocyclopentadiene										<50			**<50**
Hexachloroethane										<10			**<10**
Indeno(1,2,3-cd)pyrene										<20			**<20**
Isophorone										<10			**<10**
Naphthalene										<10			**<10**
Nitrobenzene										<10			**<10**
N-Nitrosodimethylamine										<10			**<10**
N-Nitroso-di-n-propylamine										<10			**<10**
N-Nitrosodiphenylamine										<10			**<10**
Pentachlorophenol										<20			**<20**
Phenanthrene										<10			**<10**
Phenol										<10			**<10**
Pyrene										<10			**<10**

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RP-5 (M-INF 3D) RP-2 Lift Station Remaining Priority Pollutants

Table 16c

RP-5 (M-INF 3D) RP-2 Lift Station Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD										<0.06			**<0.06**
4,4-DDE										<0.06			**<0.06**
4,4-DDT										<0.08			**<0.08**
Aldrin										<0.04			**<0.04**
Alpha-BHC										<0.08			**<0.08**
Beta-BHC										<0.05			**<0.05**
Delta-BHC										<0.07			**<0.07**
Dieldrin										<0.06			**<0.06**
Endosulfan I										<0.1			**<0.1**
Endosulfan II										<0.07			**<0.07**
Endosulfan Sulfate										<0.09			**<0.09**
Endrin										<0.09			**<0.09**
Endrin aldehyde										<0.06			**<0.06**
Gamma-BHC										<0.1			**<0.1**
Heptachlor										<0.06			**<0.06**
Heptachlor epoxide										<0.07			**<0.07**
Chlordane										<1			**<1**
PCB-1016										<5			**<5**
PCB-1221										<5			**<5**
PCB-1232										<5			**<5**
PCB-1242										<5			**<5**
PCB-1248										<5			**<5**
PCB-1254										<5			**<5**
PCB-1260										<5			**<5**
Toxaphene										<5			**<5**

RP-5 (M-INF 3D) RP-2 Lift Station Dioxins & Furans, pg/L (reported values based on detection limit)

PCDD/PCDF Congeners*	0.028	0.000	0.000	0.031	0.000	0.040	0.000	0.000	0.000	0.000	0.000	0.082	**0.082**

*TEQ is calculated based on congener concentrations below the reporting limit (RL) set to zero

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RP-1 (M-001B) Effluent Remaining Priority Pollutants

Table 18a

RP-1 (M-001B) Effluent Remaining Priority Pollutant Metals & CN, µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Arsenic (As)		<2	<2	<2	<2	<2	<2	<2	<2	<2	2	<2	**2**
Beryllium (Be)		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**<0.5**
Cadmium (Cd)		<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**<0.25**
Chromium (Cr)		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**<0.5**
Copper (Cu)		5.1	5.8	5.1	4.4	6.1	4.9	3.9	4.4	4.2	3.7	4.4	**6.1**
Lead (Pb)		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**<0.5**
Mercury (Hg)			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**<0.05**
Nickel (Ni)		2.9	3.0	2.9	3.3	3.2	3.4	13.5	3.1	14.2	3.1	2.8	**14.2**
Selenium (Se)		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	**<2**
Silver (Ag)		<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**<0.25**
Thallium (Tl)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**<1**
Zinc (Zn)	36	40	39	44	41	41	42	39	32	36	32	48	**48**
CN, Free		<2		<2					<2	<2			**<2**

RP-1 (M-001B) Effluent Volatile Organics (EPA Methods 624, 601/602), µg/L

1,1,1-Trichloroethane										<1			**<1**
1,1,2,2-Tetrachloroethane										<0.5			**<0.5**
1,1,2-Trichloroethane										<1			**<1**
1,1-Dichloroethane										<0.5			**<0.5**
1,1-Dichloroethene										<1			**<1**
1,2-Dichlorobenzene										<1			**<1**
1,2-Dichloroethane										<0.5			**<0.5**
1,2-Dichloropropane										<0.5			**<0.5**
1,3-Dichlorobenzene										<1			**<1**
1,4-Dichlorobenzene										<1			**<1**
2-Chloroethyl vinyl ether									<1	<1			**<1**
Benzene										<1			**<1**
Bromodichloromethane			<1		15		19			18			**19**
Bromoform			<1		<1		<1			<1			**<1**
Bromomethane										<1			**<1**
Carbon tetrachloride										<0.5			**<0.5**
Chlorobenzene										<1			**<1**
Chloroethane										<1			**<1**
Chloroform			<1		65		96			75			**96**
Chloromethane										<1			**<1**
cis-1,3-Dichloropropene										<0.5			**<0.5**
Dibromochloromethane			<1		2		2			2			**2**
Ethylbenzene										<1			**<1**
Methylene chloride										<1			**<1**
Tetrachloroethene										<1			**<1**
Toluene										<1			**<1**
trans-1,2-Dichloroethene										<0.5			**<0.5**
trans-1,3-Dichloropropene										<0.5			**<0.5**
Trichloroethene										<1			**<1**
Trichlorofluoromethane										<2			**<2**
Vinyl chloride										<0.5			**<0.5**
Acrolein									<2	<2			**<2**
Acrylonitrile									<0.25	0.58			**0.58**

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RP-1 (M-001B) Effluent Remaining Priority Pollutants

Table 18b

RP-1 (M-001B) Effluent Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene									<1			<1	**<1**
1,2-Dichlorobenzene									<1			<1	**<1**
1,3-Dichlorobenzene									<1			<1	**<1**
1,4-Dichlorobenzene									<1			<1	**<1**
2,4,6-Trichlorophenol									<1			<1	**<1**
2,4-Dichlorophenol									<2			<2	**<2**
2,4-Dimethylphenol									<1			<1	**<1**
2,4-Dinitrophenol									<3			<3	**<3**
2,4-Dinitrotoluene									<1			<1	**<1**
2,6-Dinitrotoluene									<2			<2	**<2**
2-Chloronaphthalene									<1			<1	**<1**
2-Chlorophenol									<1			<1	**<1**
2-Methyl-4,6-dinitrophenol									<2			<2	**<2**
2-Nitrophenol									<1			<1	**<1**
3,3-Dichlorobenzidine									<5			<5	**<5**
4-Bromophenyl phenyl ether									<1			<1	**<1**
4-Chloro-3-methylphenol									<1			<1	**<1**
4-Chlorophenyl phenyl ether									<1			<1	**<1**
4-Nitrophenol									<3			<3	**<3**
Acenaphthene									<1			<1	**<1**
Acenaphthylene									<1			<1	**<1**
Anthracene									<1			<1	**<1**
Azobenzene									<1			<1	**<1**
Benzidine									<5			<5	**<5**
Benzo(a)anthracene									<5			<5	**<5**
Benzo(a)pyrene									<1			<1	**<1**
Benzo(b)fluoranthene									<1			<1	**<1**
Benzo(g,h,i)perylene									<2			<2	**<2**
Benzo(k)fluoranthene									<1			<1	**<1**
Bis(2-chloroethoxy)methane									<2			<2	**<2**
Bis(2-chloroethyl)ether									<1			<1	**<1**
Bis(2-chloroisopropyl)ether									<1			<1	**<1**
Bis(2-ethylhexyl)phthalate			<2		<2		<2		9	<2		<2	**9**
Butyl benzyl phthalate									<1			2	**2**
Chrysene									<1			<1	**<1**
Dibenzo(a,h)anthracene									<1			<1	**<1**
Diethyl phthalate									<2			<2	**<2**
Dimethyl phthalate									<1			<1	**<1**
Di-n-butyl phthalate									<1			<1	**<1**
Di-n-octyl phthalate									<1			<1	**<1**
Fluoranthene									<1			<1	**<1**
Fluorene									<1			<1	**<1**
Hexachlorobenzene									<1			<1	**<1**
Hexachlorobutadiene									<1			<1	**<1**
Hexachlorocyclopentadiene									<5			<5	**<5**
Hexachloroethane									<1			<1	**<1**
Indeno(1,2,3-cd)pyrene									<2			<2	**<2**
Isophorone									<1			<1	**<1**
Naphthalene									<1			<1	**<1**
Nitrobenzene									<1			<1	**<1**
N-Nitrosodimethylamine									<1			<1	**<1**
N-Nitroso-di-n-propylamine									<1			<1	**<1**
N-Nitrosodiphenylamine									<1			<1	**<1**
Pentachlorophenol									<2			<2	**<2**
Phenanthrene									<1			<1	**<1**
Phenol									<1			<1	**<1**
Pyrene									<1			<1	**<1**

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RP-1 (M-001B) Effluent Remaining Priority Pollutants

Table 18c

RP-1 (M-001B) Effluent Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD													
4,4-DDE													
4,4-DDT													
Aldrin													
Alpha-BHC													
Beta-BHC													
Delta-BHC													
Dieldrin													
Endosulfan I													
Endosulfan II													
Endosulfan Sulfate													
Endrin													
Endrin aldehyde													
Gamma-BHC													
Heptachlor													
Heptachlor epoxide													
Chlordane													
PCB-1016													
PCB-1221													
PCB-1232													
PCB-1242													
PCB-1248													
PCB-1254													
PCB-1260													
Toxaphene													

RP-1 (M-001B) Effluent Dioxins & Furans, pg/L (reported values based on detection limit)

PCDD/PCDF Congeners*											0.000		**0.000**

*TEQ is calculated based on congener concentrations below the reporting limit (RL) set to zero

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RP-1/RP-4 (M-002A) Effluent Remaining Priority Pollutants

Table 19a

RP-1/RP-4 (M-002A) Effluent Remaining Priority Pollutant Metals & CN, µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.0
Arsenic (As)		<2	<2	<2	<2	<2	<2	<2	<2	2	2	<2	**2**
Beryllium (Be)		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**<0.5**
Cadmium (Cd)		<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**<0.25**
Chromium (Cr)		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**<0.5**
Copper (Cu)		5.7	5.4	5.3	4.6	6.0	6.5	4.2	4.8	4.6	4.0	4.4	**6.5**
Lead (Pb)		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**<0.5**
Mercury (Hg)			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**<0.05**
Nickel (Ni)		3.0	3.1	3.0	3.3	3.3	3.5	13.3	3.4	14.1	3.2	2.9	**14.1**
Selenium (Se)		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	**<2**
Silver (Ag)		<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**<0.25**
Thallium (Tl)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**<1**
Zinc (Zn)	44	42	40	45	44	41	43	40	33	35	31	45	**45**
CN, Free		<2		<2					4	<2			**4**

RP-1/RP-4 (M-002A) Effluent Volatile Organics (EPA Methods 624, 601/602), µg/L

1,1,1-Trichloroethane										<1			**<1**
1,1,2,2-Tetrachloroethane										<0.5			**<0.5**
1,1,2-Trichloroethane										<1			**<1**
1,1-Dichloroethane										<0.5			**<0.5**
1,1-Dichloroethene										<1			**<1**
1,2-Dichlorobenzene										<1			**<1**
1,2-Dichloroethane										<0.5			**<0.5**
1,2-Dichloropropane										<0.5			**<0.5**
1,3-Dichlorobenzene										<1			**<1**
1,4-Dichlorobenzene										<1			**<1**
2-Chloroethyl vinyl ether										<1			**<1**
Benzene										<1			**<1**
Bromodichloromethane			14		15		14			16			**16**
Bromoform			<1		<1		<1			<1			**<1**
Bromomethane										<1			**<1**
Carbon tetrachloride										<0.5			**<0.5**
Chlorobenzene										<1			**<1**
Chloroethane										<1			**<1**
Chloroform			55		63		69			65			**69**
Chloromethane										<1			**<1**
cis-1,3-Dichloropropene										<0.5			**<0.5**
Dibromochloromethane			2		2		2			2			**2**
Ethylbenzene										<1			**<1**
Methylene chloride										<1			**<1**
Tetrachloroethene										<1			**<1**
Toluene										<1			**<1**
trans-1,2-Dichloroethene										<0.5			**<0.5**
trans-1,3-Dichloropropene										<0.5			**<0.5**
Trichloroethene										<1			**<1**
Trichlorofluoromethane										<2			**<2**
Vinyl chloride										<0.5			**<0.5**
Acrolein										<2			**<2**
Acrylonitrile										0.53			**0.53**

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RP-1/RP-4 (M-002A) Effluent Remaining Priority Pollutants

Table 19b

RP-1/RP-4 (M-002A) Effluent Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene					<1							<1	**<1**
1,2-Dichlorobenzene					<1							<1	**<1**
1,3-Dichlorobenzene					<1							<1	**<1**
1,4-Dichlorobenzene					<1							<1	**<1**
2,4,6-Trichlorophenol					<1							<1	**<1**
2,4-Dichlorophenol					<2							<2	**<2**
2,4-Dimethylphenol					<1							<1	**<1**
2,4-Dinitrophenol					<3							<3	**<3**
2,4-Dinitrotoluene					<1							<1	**<1**
2,6-Dinitrotoluene					<2							<2	**<2**
2-Chloronaphthalene					<1							<1	**<1**
2-Chlorophenol					<1							<1	**<1**
2-Methyl-4,6-dinitrophenol					<2							<2	**<2**
2-Nitrophenol					<1							<1	**<1**
3,3-Dichlorobenzidine					<5							<5	**<5**
4-Bromophenyl phenyl ether					<1							<1	**<1**
4-Chloro-3-methylphenol					<1							<1	**<1**
4-Chlorophenyl phenyl ether					<1							<1	**<1**
4-Nitrophenol					<3							<3	**<3**
Acenaphthene					<1							<1	**<1**
Acenaphthylene					<1							<1	**<1**
Anthracene					<1							<1	**<1**
Azobenzene					<1							<1	**<1**
Benzidine					<5							<5	**<5**
Benzo(a)anthracene					<5							<5	**<5**
Benzo(a)pyrene					<1							<1	**<1**
Benzo(b)fluoranthene					<1							<1	**<1**
Benzo(g,h,i)perylene					<2							<2	**<2**
Benzo(k)fluoranthene					<1							<1	**<1**
Bis(2-chloroethoxy)methane					<2							<2	**<2**
Bis(2-chloroethyl)ether					<1							<1	**<1**
Bis(2-chloroisopropyl)ether					<1							<1	**<1**
Bis(2-ethylhexyl)phthalate			<2		<2		<2			<2		<2	**<2**
Butyl benzyl phthalate					<1							<1	**<1**
Chrysene					<1							<1	**<1**
Dibenzo(a,h)anthracene					<1							<1	**<1**
Diethyl phthalate					<2							<2	**<2**
Dimethyl phthalate					<1							<1	**<1**
Di-n-butyl phthalate					<1							<1	**<1**
Di-n-octyl phthalate					<1							<1	**<1**
Fluoranthene					<1							<1	**<1**
Fluorene					<1							<1	**<1**
Hexachlorobenzene					<1							<1	**<1**
Hexachlorobutadiene					<1							<1	**<1**
Hexachlorocyclopentadiene					<5							<5	**<5**
Hexachloroethane					<1							<1	**<1**
Indeno(1,2,3-cd)pyrene					<2							<2	**<2**
Isophorone					<1							<1	**<1**
Naphthalene					<1							<1	**<1**
Nitrobenzene					<1							<1	**<1**
N-Nitrosodimethylamine					<1							<1	**<1**
N-Nitroso-di-n-propylamine					<1							<1	**<1**
N-Nitrosodiphenylamine					<1							<1	**<1**
Pentachlorophenol					<2							<2	**<2**
Phenanthrene					<1							<1	**<1**
Phenol					<1							<1	**<1**
Pyrene					<1							<1	**<1**

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RP-1/RP-4 (M-002A) Effluent Remaining Priority Pollutants

Table 19c

RP-1/RP-4 (M-002A) Effluent Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD											<0.006		**<0.006**
4,4-DDE											<0.006		**<0.006**
4,4-DDT											<0.008		**<0.008**
Aldrin											<0.004		**<0.004**
Alpha-BHC											<0.008		**<0.008**
Beta-BHC											<0.005		**<0.005**
Delta-BHC											<0.007		**<0.007**
Dieldrin											<0.006		**<0.006**
Endosulfan I											<0.01		**<0.01**
Endosulfan II											<0.007		**<0.007**
Endosulfan Sulfate											<0.009		**<0.009**
Endrin											<0.009		**<0.009**
Endrin aldehyde											<0.006		**<0.006**
Gamma-BHC											<0.01		**<0.01**
Heptachlor											<0.006		**<0.006**
Heptachlor epoxide											<0.007		**<0.007**
Chlordane											<0.1		**<0.1**
PCB-1016											<0.5		**<0.5**
PCB-1221											<0.5		**<0.5**
PCB-1232											<0.5		**<0.5**
PCB-1242											<0.5		**<0.5**
PCB-1248											<0.5		**<0.5**
PCB-1254											<0.5		**<0.5**
PCB-1260											<0.5		**<0.5**
Toxaphene											<0.5		**<0.5**

RP-1/RP-4 (M-002A) Effluent Dioxins & Furans, pg/L (reported values based on detection limit)

PCDD/PCDF Congeners*											0.000		**0.000**

*TEQ is calculated based on congener concentrations below the reporting limit (RL) set to zero

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RP-5 (M-003) Effluent Remaining Priority Pollutants

Table 20a

RP-5 (M-003) Effluent Remaining Priority Pollutant Metals & CN, µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.0
Arsenic (As)		<2	<2	<2	<2	2	<2	<2	2	3	3	<2	**3**
Beryllium (Be)		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**<0.5**
Cadmium (Cd)		<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**<0.25**
Chromium (Cr)		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**<0.5**
Copper (Cu)		7.1	7.3	6.5	7.8	8.3	5.0	4.8	7.5	6.3	6.9	6.8	**8.3**
Lead (Pb)		<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6**
Mercury (Hg)			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**<0.05**
Nickel (Ni)		4.2	4.1	3.5	3.8	3.7	3.5	3.5	3.3	3.9	3.4	3.6	**4.2**
Selenium (Se)		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	**<2**
Silver (Ag)		<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**<0.25**
Thallium (Tl)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**<1**
Zinc (Zn)	52	40	47	53	56	46	33	41	50	56	53	47	**56**
CN, Free		<2		<2					<2	<2			**<2**

RP-5 (M-003) Effluent Volatile Organics (EPA Methods 624, 601/602), µg/L

1,1,1-Trichloroethane										<1			**<1**
1,1,2,2-Tetrachloroethane										<0.5			**<0.5**
1,1,2-Trichloroethane										<1			**<1**
1,1-Dichloroethane										<0.5			**<0.5**
1,1-Dichloroethene										<1			**<1**
1,2-Dichlorobenzene										<1			**<1**
1,2-Dichloroethane										<0.5			**<0.5**
1,2-Dichloropropane										<0.5			**<0.5**
1,3-Dichlorobenzene										<1			**<1**
1,4-Dichlorobenzene										<1			**<1**
2-Chloroethyl vinyl ether										<1			**<1**
Benzene										<1			**<1**
Bromodichloromethane	13	13		24	15	15	17	16	17	23	14	16	**24**
Bromoform	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	**<1**
Bromomethane										<1			**<1**
Carbon tetrachloride										<0.5			**<0.5**
Chlorobenzene										<1			**<1**
Chloroethane										<1			**<1**
Chloroform	38	36		66	48	47	52	62	47	39	43	41	**66**
Chloromethane										<1			**<1**
cis-1,3-Dichloropropene										<0.5			**<0.5**
Dibromochloromethane	3	3		4	3	3	3	2	3	8	3	3	**8**
Ethylbenzene										<1			**<1**
Methylene chloride										<1			**<1**
Tetrachloroethene										<1			**<1**
Toluene										<1			**<1**
trans-1,2-Dichloroethene										<0.5			**<0.5**
trans-1,3-Dichloropropene										<0.5			**<0.5**
Trichloroethene										<1			**<1**
Trichlorofluoromethane										<2			**<2**
Vinyl chloride										<0.5			**<0.5**
Acrolein										<2			**<2**
Acrylonitrile										0.29			**0.29**

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RP-5 (M-003) Effluent Remaining Priority Pollutants

Table 20b

RP-5 (M-003) Effluent Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene										<1			**<1**
1,2-Dichlorobenzene										<1			**<1**
1,3-Dichlorobenzene										<1			**<1**
1,4-Dichlorobenzene										<1			**<1**
2,4,6-Trichlorophenol										<1			**<1**
2,4-Dichlorophenol										<2			**<2**
2,4-Dimethylphenol										<1			**<1**
2,4-Dinitrophenol										<3			**<3**
2,4-Dinitrotoluene										<1			**<1**
2,6-Dinitrotoluene										<2			**<2**
2-Chloronaphthalene										<1			**<1**
2-Chlorophenol										<1			**<1**
2-Methyl-4,6-dinitrophenol										<2			**<2**
2-Nitrophenol										<1			**<1**
3,3-Dichlorobenzidine										<5			**<5**
4-Bromophenyl phenyl ether										<1			**<1**
4-Chloro-3-methylphenol										<1			**<1**
4-Chlorophenyl phenyl ether										<1			**<1**
4-Nitrophenol										<3			**<3**
Acenaphthene										<1			**<1**
Acenaphthylene										<1			**<1**
Anthracene										<1			**<1**
Azobenzene										<1			**<1**
Benzidine										<5			**<5**
Benzo(a)anthracene										<5			**<5**
Benzo(a)pyrene										<1			**<1**
Benzo(b)fluoranthene										<1			**<1**
Benzo(g,h,i)perylene										<2			**<2**
Benzo(k)fluoranthene										<1			**<1**
Bis(2-chloroethoxy)methane										<2			**<2**
Bis(2-chloroethyl)ether										<1			**<1**
Bis(2-chloroisopropyl)ether										<1			**<1**
Bis(2-ethylhexyl)phthalate			<2		3		<2			<2			**3**
Butyl benzyl phthalate										<1			**<1**
Chrysene										<1			**<1**
Dibenzo(a,h)anthracene										<1			**<1**
Diethyl phthalate										<2			**<2**
Dimethyl phthalate										<1			**<1**
Di-n-butyl phthalate										<1			**<1**
Di-n-octyl phthalate										<1			**<1**
Fluoranthene										<1			**<1**
Fluorene										<1			**<1**
Hexachlorobenzene										<1			**<1**
Hexachlorobutadiene										<1			**<1**
Hexachlorocyclopentadiene										<5			**<5**
Hexachloroethane										<1			**<1**
Indeno(1,2,3-cd)pyrene										<2			**<2**
Isophorone										<1			**<1**
Naphthalene										<1			**<1**
Nitrobenzene										<1			**<1**
N-Nitrosodimethylamine										<1			**<1**
N-Nitroso-di-n-propylamine										<1			**<1**
N-Nitrosodiphenylamine										<1			**<1**
Pentachlorophenol										<2			**<2**
Phenanthrene										<1			**<1**
Phenol										<1			**<1**
Pyrene										<1			**<1**

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RP-5 (M-003) Effluent Remaining Priority Pollutants

Table 20c

RP-5 (M-003) Effluent Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD										<0.006			**<0.006**
4,4-DDE										<0.006			**<0.006**
4,4-DDT										<0.008			**<0.008**
Aldrin										<0.004			**<0.004**
Alpha-BHC										<0.008			**<0.008**
Beta-BHC										<0.005			**<0.005**
Delta-BHC										<0.007			**<0.007**
Dieldrin										<0.006			**<0.006**
Endosulfan I										<0.01			**<0.01**
Endosulfan II										<0.007			**<0.007**
Endosulfan Sulfate										<0.009			**<0.009**
Endrin										<0.009			**<0.009**
Endrin aldehyde										<0.006			**<0.006**
Gamma-BHC										<0.01			**<0.01**
Heptachlor										<0.006			**<0.006**
Heptachlor epoxide										<0.007			**<0.007**
Chlordane										<0.1			**<0.1**
PCB-1016										<0.5			**<0.5**
PCB-1221										<0.5			**<0.5**
PCB-1232										<0.5			**<0.5**
PCB-1242										<0.5			**<0.5**
PCB-1248										<0.5			**<0.5**
PCB-1254										<0.5			**<0.5**
PCB-1260										<0.5			**<0.5**
Toxaphene										<0.5			**<0.5**

RP-5 (M-003) Effluent Dioxins & Furans, pg/L (reported values based on detection limit)

PCDD/PCDF Congeners*	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NA*	0.000	**0.000**

*TEQ is calculated based on congener concentrations below the reporting limit (RL) set to zero

NA* - Not reported due to the effluent being higher than the influent. Highly suspect that the samples may have been switched. Since the original samples were disposed of, the sub lab is not able to confirm

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CCWRF (M-004) Effluent Remaining Priority Pollutants

Table 21a

CCWRF (M-004) Effluent Remaining Priority Pollutant Metals & CN, µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1.0
Arsenic (As)		<2	<2	<2	<2	2	<2	<2	2	3	2	2	**3**
Beryllium (Be)		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**<0.5**
Cadmium (Cd)		<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**<0.25**
Chromium (Cr)		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**<0.5**
Copper (Cu)		7.2	9.1	7.0	8.3	8.8	8.4	8.4	8.0	7.3	8.0	6.3	**9.1**
Lead (Pb)		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**<0.5**
Mercury (Hg)			<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**<0.05**
Nickel (Ni)		3.4	3.8	3.4	3.5	4.1	3.4	3.2	3.6	3.7	3.2	3.1	**4.1**
Selenium (Se)		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	**<2**
Silver (Ag)		<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	**<0.25**
Thallium (Tl)		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	**<1**
Zinc (Zn)	58	59	58	54	50	53	47	51	49	63	60	50	**63**
CN, Free		<2		<2					<2	<2			**<2**

CCWRF (M-004) Effluent Volatile Organics (EPA Methods 624, 601/602), µg/L

1,1,1-Trichloroethane											<1		**<1**
1,1,2,2-Tetrachloroethane											<0.5		**<0.5**
1,1,2-Trichloroethane											<1		**<1**
1,1-Dichloroethane											<0.5		**<0.5**
1,1-Dichloroethene											<1		**<1**
1,2-Dichlorobenzene											<1		**<1**
1,2-Dichloroethane											<0.5		**<0.5**
1,2-Dichloropropane											<0.5		**<0.5**
1,3-Dichlorobenzene											<1		**<1**
1,4-Dichlorobenzene											<1		**<1**
2-Chloroethyl vinyl ether											<1		**<1**
Benzene											<1		**<1**
Bromodichloromethane	20	18		26	20	17	23	22	22		20	15	**26**
Bromoform	<1	<1		<1	<1	<1	<1	<1	<1		<1	<1	**<1**
Bromomethane											<1		**<1**
Carbon tetrachloride											<0.5		**<0.5**
Chlorobenzene											<1		**<1**
Chloroethane											<1		**<1**
Chloroform	50	41		50	63	51	78	82	64		52	44	**82**
Chloromethane											<1		**<1**
cis-1,3-Dichloropropene											<0.5		**<0.5**
Dibromochloromethane	5	4		5	3	3	4	3	4		4	3	**5**
Ethylbenzene											<1		**<1**
Methylene chloride											<1		**<1**
Tetrachloroethene											<1		**<1**
Toluene											<1		**<1**
trans-1,2-Dichloroethene											<0.5		**<0.5**
trans-1,3-Dichloropropene											<0.5		**<0.5**
Trichloroethene											<1		**<1**
Trichlorofluoromethane											<2		**<2**
Vinyl chloride											<0.5		**<0.5**
Acrolein											<2		**<2**
Acrylonitrile											0.42		**0.42**

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CCWRF (M-004) Effluent Remaining Priority Pollutants

Table 21b

CCWRF (M-004) Effluent Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene											<1	<1	**<1**
1,2-Dichlorobenzene											<1	<1	**<1**
1,3-Dichlorobenzene											<1	<1	**<1**
1,4-Dichlorobenzene											<1	<1	**<1**
2,4,6-Trichlorophenol											<1	<1	**<1**
2,4-Dichlorophenol											<2	<2	**<2**
2,4-Dimethylphenol											<1	<1	**<1**
2,4-Dinitrophenol											<3	<3	**<3**
2,4-Dinitrotoluene											<1	<1	**<1**
2,6-Dinitrotoluene											<2	<2	**<2**
2-Chloronaphthalene											<1	<1	**<1**
2-Chlorophenol											<1	<1	**<1**
2-Methyl-4,6-dinitrophenol											<2	<2	**<2**
2-Nitrophenol											<1	<1	**<1**
3,3-Dichlorobenzidine											<5	<5	**<5**
4-Bromophenyl phenyl ether											<1	<1	**<1**
4-Chloro-3-methylphenol											<1	<1	**<1**
4-Chlorophenyl phenyl ether											<1	<1	**<1**
4-Nitrophenol											<3	<3	**<3**
Acenaphthene											<1	<1	**<1**
Acenaphthylene											<1	<1	**<1**
Anthracene											<1	<1	**<1**
Azobenzene											<1	<1	**<1**
Benzidine											<5	<5	**<5**
Benzo(a)anthracene											<5	<5	**<5**
Benzo(a)pyrene											<1	<1	**<1**
Benzo(b)fluoranthene											<1	<1	**<1**
Benzo(g,h,i)perylene											<2	<2	**<2**
Benzo(k)fluoranthene											<1	<1	**<1**
Bis(2-chloroethoxy)methane											<2	<2	**<2**
Bis(2-chloroethyl)ether											<1	<1	**<1**
Bis(2-chloroisopropyl)ether											<1	<1	**<1**
Bis(2-ethylhexyl)phthalate			<2		<2						<2	<2	**<2**
Butyl benzyl phthalate											<1	<1	**<1**
Chrysene											<1	<1	**<1**
Dibenzo(a,h)anthracene											<1	<1	**<1**
Diethyl phthalate											<2	<2	**<2**
Dimethyl phthalate											<1	<1	**<1**
Di-n-butyl phthalate											<1	<1	**<1**
Di-n-octyl phthalate											<1	<1	**<1**
Fluoranthene											<1	<1	**<1**
Fluorene											<1	<1	**<1**
Hexachlorobenzene											<1	<1	**<1**
Hexachlorobutadiene											<1	<1	**<1**
Hexachlorocyclopentadiene											<5	<5	**<5**
Hexachloroethane											<1	<1	**<1**
Indeno(1,2,3-cd)pyrene											<2	<2	**<2**
Isophorone											<1	<1	**<1**
Naphthalene											<1	<1	**<1**
Nitrobenzene											<1	<1	**<1**
N-Nitrosodimethylamine											<1	<1	**<1**
N-Nitroso-di-n-propylamine											<1	<1	**<1**
N-Nitrosodiphenylamine											<1	<1	**<1**
Pentachlorophenol											<2	<2	**<2**
Phenanthrene											<1	<1	**<1**
Phenol											<1	<1	**<1**
Pyrene											<1	<1	**<1**

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CCWRF (M-004) Effluent Remaining Priority Pollutants

Table 21c

CCWRF (M-004) Effluent Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD					<0.006			<0.006			<0.006		**<0.006**
4,4-DDE					<0.006			<0.006			<0.006		**<0.006**
4,4-DDT					<0.008			<0.008			<0.008		**<0.008**
Aldrin					<0.004			<0.004			<0.004		**<0.004**
Alpha-BHC					<0.008			<0.008			<0.008		**<0.008**
Beta-BHC					<0.005			<0.005			<0.005		**<0.005**
Delta-BHC					<0.007			<0.007			<0.007		**<0.007**
Dieldrin					<0.006			<0.006			<0.006		**<0.006**
Endosulfan I			0.05		<0.01			<0.01			<0.01		**0.05**
Endosulfan II					<0.007			<0.007			<0.007		**<0.007**
Endosulfan Sulfate					<0.009			<0.009			<0.009		**<0.009**
Endrin					<0.009			<0.009			<0.009		**<0.009**
Endrin aldehyde					<0.006			<0.006			<0.006		**<0.006**
Gamma-BHC					<0.01			<0.01			<0.01		**<0.01**
Heptachlor					<0.006			<0.006			<0.006		**<0.006**
Heptachlor epoxide					<0.007			<0.007			<0.007		**<0.007**
Chlordane											<0.1		**<0.1**
PCB-1016											<0.5		**<0.5**
PCB-1221											<0.5		**<0.5**
PCB-1232											<0.5		**<0.5**
PCB-1242											<0.5		**<0.5**
PCB-1248											<0.5		**<0.5**
PCB-1254											<0.5		**<0.5**
PCB-1260											<0.5		**<0.5**
Toxaphene											<0.5		**<0.5**

CCWRF (M-004) Effluent Dioxins & Furans, pg/L (reported values based on detection limit)

PCDD/PCDF Congeners*	0.000			0.000			No Discharge				0.000		**0.000**

*TEQ is calculated based on congener concentrations below the reporting limit (RL) set to zero

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RP-1 Cucamonga Creek Upstream (R-002U) Remaining Priority Pollutants

Table 22a

RP-1 Cucamonga Creek Upstream (R-002U) Remaining Priority Pollutant Metals & Cyanide, µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Hg, Total Recoverable											<0.05		**<0.05**
Ag, Total Dissolved											<0.25		**<0.25**
As, Total Dissolved											<2		**<2**
Be, Total Dissolved											<0.5		**<0.5**
Cd, Total Dissolved											<0.25		**<0.25**
Cr, Total Dissolved											1.8		**1.8**
Cu, Total Dissolved											5.9		**5.9**
Ni, Total Dissolved											3		**3**
Pb, Total Dissolved											<0.5		**<0.5**
Sb, Total Dissolved											<1		**<1**
Se, Total Dissolved											<2		**<2**
Tl, Total Dissolved											<1		**<1**
Zn, Total Dissolved											8		**8**
CN, Free											<2		**<2**

Table 22b

RP-1 Cucamonga Creek Upstream (R-002U) Volatile Organics (EPA Methods 624, 601/602), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,1,1-Trichloroethane											<1		**<1**
1,1,2,2-Tetrachloroethane											<0.5		**<0.5**
1,1,2-Trichloroethane											<1		**<1**
1,1-Dichloroethane											<0.5		**<0.5**
1,1-Dichloroethene											<1		**<1**
1,2-Dichlorobenzene											<1		**<1**
1,2-Dichloroethane											<1		**<1**
1,2-Dichloropropane											<0.5		**<0.5**
1,3-Dichlorobenzene											<1		**<1**
1,4-Dichlorobenzene											<1		**<1**
2-Chloroethyl vinyl ether											<1		**<1**
Benzene											<1		**<1**
Bromodichloromethane											<1		**<1**
Bromoform											<1		**<1**
Bromomethane											<1		**<1**
Carbon tetrachloride											<1		**<1**
Chlorobenzene											<1		**<1**
Chloroethane											<1		**<1**
Chloroform											<1		**<1**
Chloromethane											<1		**<1**
cis-1,3-Dichloropropene											<1		**<1**
Dibromochloromethane											<1		**<1**
Ethylbenzene											<1		**<1**
Methylene chloride											<1		**<1**
Tetrachloroethene											<1		**<1**
Toluene											<1		**<1**
trans-1,2-Dichloroethene											<0.5		**<0.5**
trans-1,3-Dichloropropene											<1		**<1**
Trichloroethene											<1		**<1**
Trichlorofluoromethane											<2		**<2**
Vinyl chloride											<1		**<1**
Acrolein											<2		**<2**
Acrylonitrile											<2		**<2**

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RP-1 Cucamonga Creek Upstream (R-002U) Remaining Priority Pollutants

Table 22c

RP-1 Cucamonga Creek Upstream (R-002U) Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene											<1		**<1**
1,2-Dichlorobenzene											<1		**<1**
1,3-Dichlorobenzene											<1		**<1**
1,4-Dichlorobenzene											<1		**<1**
2,4,6-Trichlorophenol											<1		**<1**
2,4-Dichlorophenol											<2		**<2**
2,4-Dimethylphenol											<1		**<1**
2,4-Dinitrophenol											<3		**<3**
2,4-Dinitrotoluene											<1		**<1**
2,6-Dinitrotoluene											<2		**<2**
2-Chloronaphthalene											<1		**<1**
2-Chlorophenol											<1		**<1**
2-Methyl-4,6-dinitrophenol											<2		**<2**
2-Nitrophenol											<1		**<1**
3,3-Dichlorobenzidine											<5		**<5**
4-Bromophenyl phenyl ether											<1		**<1**
4-Chloro-3-methylphenol											<1		**<1**
4-Chlorophenyl phenyl ether											<1		**<1**
4-Nitrophenol											<3		**<3**
Acenaphthene											<1		**<1**
Acenaphthylene											<1		**<1**
Anthracene											<1		**<1**
Azobenzene											<1		**<1**
Benzidine											<5		**<5**
Benzo(a)anthracene											<5		**<5**
Benzo(a)pyrene											<1		**<1**
Benzo(b)fluoranthene											<1		**<1**
Benzo(g,h,i)perylene											<2		**<2**
Benzo(k)fluoranthene											<1		**<1**
Bis(2-chloroethoxy)methane											<2		**<2**
Bis(2-chloroethyl)ether											<1		**<1**
Bis(2-chloroisopropyl)ether											<1		**<1**
Bis(2-ethylhexyl)phthalate											<2		**<2**
Butyl benzyl phthalate											<1		**<1**
Chrysene											<1		**<1**
Dibenzo(a,h)anthracene											<1		**<1**
Diethyl phthalate											<2		**<2**
Dimethyl phthalate											<1		**<1**
Di-n-butyl phthalate											<1		**<1**
Di-n-octyl phthalate											<1		**<1**
Fluoranthene											<1		**<1**
Fluorene											<1		**<1**
Hexachlorobenzene											<1		**<1**
Hexachlorobutadiene											<1		**<1**
Hexachlorocyclopentadiene											<5		**<5**
Hexachloroethane											<1		**<1**
Indeno(1,2,3-cd)pyrene											<2		**<2**
Isophorone											<1		**<1**
Naphthalene											<1		**<1**
Nitrobenzene											<1		**<1**
N-Nitrosodimethylamine											<1		**<1**
N-Nitroso-di-n-propylamine											<1		**<1**
N-Nitrosodiphenylamine											<1		**<1**
Pentachlorophenol											<2		**<2**
Phenanthrene											<1		**<1**
Phenol											<1		**<1**
Pyrene											<1		**<1**
TCDD Scan											ND		**ND**

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RP-1 Cucamonga Creek Upstream (R-002U) Remaining Priority Pollutants

Table 22d

RP-1 Cucamonga Creek Upstream (R-002U) Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD											<0.006		**<0.006**
4,4-DDE											<0.006		**<0.006**
4,4-DDT											<0.008		**<0.008**
Aldrin											<0.004		**<0.004**
Alpha-BHC											<0.008		**<0.008**
Beta-BHC											<0.005		**<0.005**
Delta-BHC											<0.007		**<0.007**
Dieldrin											<0.006		**<0.006**
Endosulfan I											<0.01		**<0.01**
Endosulfan II											<0.007		**<0.007**
Endosulfan Sulfate											<0.009		**<0.009**
Endrin											<0.009		**<0.009**
Endrin aldehyde											<0.006		**<0.006**
Gamma-BHC											<0.01		**<0.01**
Heptachlor											<0.006		**<0.006**
Heptachlor epoxide											<0.007		**<0.007**
Chlordane											<0.1		**<0.1**
PCB-1016											<0.5		**<0.5**
PCB-1221											<0.5		**<0.5**
PCB-1232											<0.5		**<0.5**
PCB-1242											<0.5		**<0.5**
PCB-1248											<0.5		**<0.5**
PCB-1254											<0.5		**<0.5**
PCB-1260											<0.5		**<0.5**
Toxaphene											<0.5		**<0.5**

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RP-1 Cucamonga Creek Downstream (R-002D) Remaining Priority Pollutants

Table 23a

RP-1 Cucamonga Creek Downstream (R-002D) Remaining Priority Pollutant Metals & Cyanide, µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Hg, Total Recoverable											<0.05		**<0.05**
Ag, Total Dissolved											<0.25		**<0.25**
As, Total Dissolved											<2		**<2**
Be, Total Dissolved											<0.5		**<0.5**
Cd, Total Dissolved											<0.25		**<0.25**
Cr, Total Dissolved											0.8		**0.8**
Cu, Total Dissolved											4.0		**4.0**
Ni, Total Dissolved											3		**3**
Pb, Total Dissolved											<0.5		**<0.5**
Sb, Total Dissolved											<1		**<1**
Se, Total Dissolved											<2		**<2**
Tl, Total Dissolved											<1		**<1**
Zn, Total Dissolved											33		**33**

Table 23b

RP-1 Cucamonga Creek Downstream (R-002D) Volatile Organics (EPA Methods 624, 601/602), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,1,1-Trichloroethane											<1		**<1**
1,1,2,2-Tetrachloroethane											<0.5		**<0.5**
1,1,2-Trichloroethane											<1		**<1**
1,1-Dichloroethane											<0.5		**<0.5**
1,1-Dichloroethene											<1		**<1**
1,2-Dichlorobenzene											<1		**<1**
1,2-Dichloroethane											<1		**<1**
1,2-Dichloropropane											<0.5		**<0.5**
1,3-Dichlorobenzene											<1		**<1**
1,4-Dichlorobenzene											<1		**<1**
2-Chloroethyl vinyl ether											<1		**<1**
Benzene											<1		**<1**
Bromodichloromethane											5		**5**
Bromoform											<1		**<1**
Bromomethane											<1		**<1**
Carbon tetrachloride											<1		**<1**
Chlorobenzene											<1		**<1**
Chloroethane											<1		**<1**
Chloroform											23		**23**
Chloromethane											<1		**<1**
cis-1,3-Dichloropropene											<1		**<1**
Dibromochloromethane											<1		**<1**
Ethylbenzene											<1		**<1**
Methylene chloride											<1		**<1**
Tetrachloroethene											<1		**<1**
Toluene											<1		**<1**
trans-1,2-Dichloroethene											<0.5		**<0.5**
trans-1,3-Dichloropropene											<1		**<1**
Trichloroethene											<1		**<1**
Trichlorofluoromethane											<2		**<2**
Vinyl chloride											<1		**<1**
Acrolein											<2		**<2**
Acrylonitrile											0.55		**0.55**

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RP-1 Cucamonga Creek Downstream (R-002D) Remaining Priority Pollutants

Table 23c

RP-1 Cucamonga Creek Downstream (R-002D) Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene											<1		**<1**
1,2-Dichlorobenzene											<1		**<1**
1,3-Dichlorobenzene											<1		**<1**
1,4-Dichlorobenzene											<1		**<1**
2,4,6-Trichlorophenol											<1		**<1**
2,4-Dichlorophenol											<2		**<2**
2,4-Dimethylphenol											<1		**<1**
2,4-Dinitrophenol											<3		**<3**
2,4-Dinitrotoluene											<1		**<1**
2,6-Dinitrotoluene											<2		**<2**
2-Chloronaphthalene											<1		**<1**
2-Chlorophenol											<1		**<1**
2-Methyl-4,6-dinitrophenol											<2		**<2**
2-Nitrophenol											<1		**<1**
3,3-Dichlorobenzidine											<5		**<5**
4-Bromophenyl phenyl ether											<1		**<1**
4-Chloro-3-methylphenol											<1		**<1**
4-Chlorophenyl phenyl ether											<1		**<1**
4-Nitrophenol											<3		**<3**
Acenaphthene											<1		**<1**
Acenaphthylene											<1		**<1**
Anthracene											<1		**<1**
Azobenzene											<1		**<1**
Benzidine											<5		**<5**
Benzo(a)anthracene											<5		**<5**
Benzo(a)pyrene											<1		**<1**
Benzo(b)fluoranthene											<1		**<1**
Benzo(g,h,i)perylene											<2		**<2**
Benzo(k)fluoranthene											<1		**<1**
Bis(2-chloroethoxy)methane											<2		**<2**
Bis(2-chloroethyl)ether											<1		**<1**
Bis(2-chloroisopropyl)ether											<1		**<1**
Bis(2-ethylhexyl)phthalate											<2		**<2**
Butyl benzyl phthalate											<1		**<1**
Chrysene											<1		**<1**
Dibenzo(a,h)anthracene											<1		**<1**
Diethyl phthalate											<2		**<2**
Dimethyl phthalate											<1		**<1**
Di-n-butyl phthalate											<1		**<1**
Di-n-octyl phthalate											<1		**<1**
Fluoranthene											<1		**<1**
Fluorene											<1		**<1**
Hexachlorobenzene											<1		**<1**
Hexachlorobutadiene											<1		**<1**
Hexachlorocyclopentadiene											<5		**<5**
Hexachloroethane											<1		**<1**
Indeno(1,2,3-cd)pyrene											<2		**<2**
Isophorone											<1		**<1**
Naphthalene											<1		**<1**
Nitrobenzene											<1		**<1**
N-Nitrosodimethylamine											<1		**<1**
N-Nitroso-di-n-propylamine											<1		**<1**
N-Nitrosodiphenylamine											<1		**<1**
Pentachlorophenol											<2		**<2**
Phenanthrene											<1		**<1**
Phenol											<1		**<1**
Pyrene											<1		**<1**
TCDD Scan											ND		**ND**

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RP-1 Cucamonga Creek Downstream (R-002D) Remaining Priority Pollutants

Table 23d

RP-1 Cucamonga Creek Downstream (R-002D) Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD											<0.006		**<0.006**
4,4-DDE											<0.006		**<0.006**
4,4-DDT											<0.008		**<0.008**
Aldrin											<0.004		**<0.004**
Alpha-BHC											<0.008		**<0.008**
Beta-BHC											<0.005		**<0.005**
Delta-BHC											<0.007		**<0.007**
Dieldrin											<0.006		**<0.006**
Endosulfan I											<0.01		**<0.01**
Endosulfan II											<0.007		**<0.007**
Endosulfan Sulfate											<0.009		**<0.009**
Endrin											<0.009		**<0.009**
Endrin aldehyde											<0.006		**<0.006**
Gamma-BHC											<0.01		**<0.01**
Heptachlor											<0.006		**<0.006**
Heptachlor epoxide											<0.007		**<0.007**
Chlordane											<0.1		**<0.1**
PCB-1016											<0.5		**<0.5**
PCB-1221											<0.5		**<0.5**
PCB-1232											<0.5		**<0.5**
PCB-1242											<0.5		**<0.5**
PCB-1248											<0.5		**<0.5**
PCB-1254											<0.5		**<0.5**
PCB-1260											<0.5		**<0.5**
Toxaphene											<0.5		**<0.5**

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RP-5 Chino Creek Upstream (R-003U) Remaining Priority Pollutants

Table 24a

RP-5 Chino Creek Upstream (R-003U) Remaining Priority Pollutant Metals & Cyanide, µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Hg, Total Recoverable											<0.05		**<0.05**
Ag, Total Dissolved											<0.25		**<0.25**
As, Total Dissolved											<2		**<2**
Be, Total Dissolved											<0.5		**<0.5**
Cd, Total Dissolved											<0.25		**<0.25**
Cr, Total Dissolved											0.9		**0.9**
Cu, Total Dissolved											5.6		**5.6**
Ni, Total Dissolved											4		**4**
Pb, Total Dissolved											<0.5		**<0.5**
Sb, Total Dissolved											<1		**<1**
Se, Total Dissolved											3		**3**
Tl, Total Dissolved											<1		**<1**
Zn, Total Dissolved											6		**6**

Table 24b

RP-5 Chino Creek Upstream (R-003U) Volatile Organics (EPA Methods 624, 601/602), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,1,1-Trichloroethane											<1		**<1**
1,1,2,2-Tetrachloroethane											<0.5		**<0.5**
1,1,2-Trichloroethane											<1		**<1**
1,1-Dichloroethane											<0.5		**<0.5**
1,1-Dichloroethene											<1		**<1**
1,2-Dichlorobenzene											<1		**<1**
1,2-Dichloroethane											<1		**<1**
1,2-Dichloropropane											<0.5		**<0.5**
1,3-Dichlorobenzene											<1		**<1**
1,4-Dichlorobenzene											<1		**<1**
2-Chloroethyl vinyl ether											<1		**<1**
Benzene											<1		**<1**
Bromodichloromethane											<1		**<1**
Bromoform											<1		**<1**
Bromomethane											<1		**<1**
Carbon tetrachloride											<1		**<1**
Chlorobenzene											<1		**<1**
Chloroethane											<1		**<1**
Chloroform											<1		**<1**
Chloromethane											<1		**<1**
cis-1,3-Dichloropropene											<1		**<1**
Dibromochloromethane											<1		**<1**
Ethylbenzene											<1		**<1**
Methylene chloride											<1		**<1**
Tetrachloroethene											<1		**<1**
Toluene											<1		**<1**
trans-1,2-Dichloroethene											<0.5		**<0.5**
trans-1,3-Dichloropropene											<1		**<1**
Trichloroethene											<1		**<1**
Trichlorofluoromethane											<2		**<2**
Vinyl chloride											<1		**<1**
Acrolein											<2		**<2**
Acrylonitrile											<2		**<2**

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RP-5 Chino Creek Upstream (R-003U) Remaining Priority Pollutants

Table 24c

RP-5 Chino Creek Upstream (R-003U) Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene											<1		**<1**
1,2-Dichlorobenzene											<1		**<1**
1,3-Dichlorobenzene											<1		**<1**
1,4-Dichlorobenzene											<1		**<1**
2,4,6-Trichlorophenol											<1		**<1**
2,4-Dichlorophenol											<2		**<2**
2,4-Dimethylphenol											<1		**<1**
2,4-Dinitrophenol											<3		**<3**
2,4-Dinitrotoluene											<1		**<1**
2,6-Dinitrotoluene											<2		**<2**
2-Chloronaphthalene											<1		**<1**
2-Chlorophenol											<1		**<1**
2-Methyl-4,6-dinitrophenol											<2		**<2**
2-Nitrophenol											<1		**<1**
3,3-Dichlorobenzidine											<5		**<5**
4-Bromophenyl phenyl ether											<1		**<1**
4-Chloro-3-methylphenol											<1		**<1**
4-Chlorophenyl phenyl ether											<1		**<1**
4-Nitrophenol											<3		**<3**
Acenaphthene											<1		**<1**
Acenaphthylene											<1		**<1**
Anthracene											<1		**<1**
Azobenzene											<1		**<1**
Benzidine											<5		**<5**
Benzo(a)anthracene											<5		**<5**
Benzo(a)pyrene											<1		**<1**
Benzo(b)fluoranthene											<1		**<1**
Benzo(g,h,i)perylene											<2		**<2**
Benzo(k)fluoranthene											<1		**<1**
Bis(2-chloroethoxy)methane											<2		**<2**
Bis(2-chloroethyl)ether											<1		**<1**
Bis(2-chloroisopropyl)ether											<1		**<1**
Bis(2-ethylhexyl)phthalate											<2		**<2**
Butyl benzyl phthalate											<1		**<1**
Chrysene											<1		**<1**
Dibenzo(a,h)anthracene											<1		**<1**
Diethyl phthalate											<2		**<2**
Dimethyl phthalate											<1		**<1**
Di-n-butyl phthalate											<1		**<1**
Di-n-octyl phthalate											<1		**<1**
Fluoranthene											<1		**<1**
Fluorene											<1		**<1**
Hexachlorobenzene											<1		**<1**
Hexachlorobutadiene											<1		**<1**
Hexachlorocyclopentadiene											<5		**<5**
Hexachloroethane											<1		**<1**
Indeno(1,2,3-cd)pyrene											<2		**<2**
Isophorone											<1		**<1**
Naphthalene											<1		**<1**
Nitrobenzene											<1		**<1**
N-Nitrosodimethylamine											<1		**<1**
N-Nitroso-di-n-propylamine											<1		**<1**
N-Nitrosodiphenylamine											<1		**<1**
Pentachlorophenol											<2		**<2**
Phenanthrene											<1		**<1**
Phenol											<1		**<1**
Pyrene											<1		**<1**
TCDD Scan											ND		**ND**

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RP-5 Chino Creek Upstream (R-003U) Remaining Priority Pollutants

Table 24d

RP-5 Chino Creek Upstream (R-003U) Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD											<0.006		**<0.006**
4,4-DDE											<0.006		**<0.006**
4,4-DDT											<0.008		**<0.008**
Aldrin											<0.004		**<0.004**
Alpha-BHC											<0.008		**<0.008**
Beta-BHC											<0.005		**<0.005**
Delta-BHC											<0.007		**<0.007**
Dieldrin											<0.006		**<0.006**
Endosulfan I											<0.01		**<0.010**
Endosulfan II											<0.007		**<0.007**
Endosulfan Sulfate											<0.009		**<0.009**
Endrin											<0.009		**<0.009**
Endrin aldehyde											<0.006		**<0.006**
Gamma-BHC											<0.01		**<0.01**
Heptachlor											<0.006		**<0.006**
Heptachlor epoxide											<0.007		**<0.007**
Chlordane											<0.1		**<0.1**
PCB-1016											<0.5		**<0.5**
PCB-1221											<0.5		**<0.5**
PCB-1232											<0.5		**<0.5**
PCB-1242											<0.5		**<0.5**
PCB-1248											<0.5		**<0.5**
PCB-1254											<0.5		**<0.5**
PCB-1260											<0.5		**<0.5**
Toxaphene											<0.5		**<0.5**

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2019 NPDES Annual Report

RP-5 Chino Creek Downstream (R-003D) Remaining Priority Pollutants

Table 25a

RP-5 Chino Creek Downstream (R-003D) Remaining Priority Pollutant Metals & Cyanide, µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Hg, Total Recoverable											<0.05		**<0.05**
Ag, Total Dissolved											<0.25		**<0.25**
As, Total Dissolved											<2		**<2**
Be, Total Dissolved											<0.5		**<0.5**
Cd, Total Dissolved											<0.25		**<0.25**
Cr, Total Dissolved											0.7		**0.7**
Cu, Total Dissolved											6.2		**6.2**
Ni, Total Dissolved											4		**4**
Pb, Total Dissolved											<0.5		**<0.5**
Sb, Total Dissolved											<1		**<1**
Se, Total Dissolved											<2		**<2**
Tl, Total Dissolved											<1		**<1**
Zn, Total Dissolved											41		**41**

Table 25b

RP-5 Chino Creek Downstream (R-003D) Volatile Organics (EPA Methods 624, 601/602), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,1,1-Trichloroethane											<1		**<1**
1,1,2,2-Tetrachloroethane											<0.5		**<0.5**
1,1,2-Trichloroethane											<1		**<1**
1,1-Dichloroethane											<0.5		**<0.5**
1,1-Dichloroethene											<1		**<1**
1,2-Dichlorobenzene											<1		**<1**
1,2-Dichloroethane											<1		**<1**
1,2-Dichloropropane											<0.5		**<0.5**
1,3-Dichlorobenzene											<1		**<1**
1,4-Dichlorobenzene											<1		**<1**
2-Chloroethyl vinyl ether											<1		**<1**
Benzene											<1		**<1**
Bromodichloromethane											9		**9**
Bromoform											<1		**<1**
Bromomethane											<1		**<1**
Carbon tetrachloride											<1		**<1**
Chlorobenzene											<1		**<1**
Chloroethane											<1		**<1**
Chloroform											28		**28**
Chloromethane											<1		**<1**
cis-1,3-Dichloropropene											<1		**<1**
Dibromochloromethane											<1		**<1**
Ethylbenzene											<1		**<1**
Methylene chloride											<1		**<1**
Tetrachloroethene											<1		**<1**
Toluene											<1		**<1**
trans-1,2-Dichloroethene											<0.5		**<0.5**
trans-1,3-Dichloropropene											<1		**<1**
Trichloroethene											<1		**<1**
Trichlorofluoromethane											<2		**<2**
Vinyl chloride											<1		**<1**
Acrolein											<2		**<2**
Acrylonitrile											0.26		**0.26**

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2019 NPDES Annual Report

RP-5 Chino Creek Downstream (R-003D) Remaining Priority Pollutants

Table 25c

RP-5 Chino Creek Downstream (R-003D) Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene											<1		**<1**
1,2-Dichlorobenzene											<1		**<1**
1,3-Dichlorobenzene											<1		**<1**
1,4-Dichlorobenzene											<1		**<1**
2,4,6-Trichlorophenol											<1		**<1**
2,4-Dichlorophenol											<2		**<2**
2,4-Dimethylphenol											<1		**<1**
2,4-Dinitrophenol											<3		**<3**
2,4-Dinitrotoluene											<1		**<1**
2,6-Dinitrotoluene											<2		**<2**
2-Chloronaphthalene											<1		**<1**
2-Chlorophenol											<1		**<1**
2-Methyl-4,6-dinitrophenol											<2		**<2**
2-Nitrophenol											<1		**<1**
3,3-Dichlorobenzidine											<5		**<5**
4-Bromophenyl phenyl ether											<1		**<1**
4-Chloro-3-methylphenol											<1		**<1**
4-Chlorophenyl phenyl ether											<1		**<1**
4-Nitrophenol											<3		**<3**
Acenaphthene											<1		**<1**
Acenaphthylene											<1		**<1**
Anthracene											<1		**<1**
Azobenzene											<1		**<1**
Benzidine											<5		**<5**
Benzo(a)anthracene											<5		**<5**
Benzo(a)pyrene											<1		**<1**
Benzo(b)fluoranthene											<1		**<1**
Benzo(g,h,i)perylene											<2		**<2**
Benzo(k)fluoranthene											<1		**<1**
Bis(2-chloroethoxy)methane											<2		**<2**
Bis(2-chloroethyl)ether											<1		**<1**
Bis(2-chloroisopropyl)ether											<1		**<1**
Bis(2-ethylhexyl)phthalate											<2		**<2**
Butyl benzyl phthalate											<1		**<1**
Chrysene											<1		**<1**
Dibenzo(a,h)anthracene											<1		**<1**
Diethyl phthalate											<2		**<2**
Dimethyl phthalate											<1		**<1**
Di-n-butyl phthalate											<1		**<1**
Di-n-octyl phthalate											<1		**<1**
Fluoranthene											<1		**<1**
Fluorene											<1		**<1**
Hexachlorobenzene											<1		**<1**
Hexachlorobutadiene											<1		**<1**
Hexachlorocyclopentadiene											<5		**<5**
Hexachloroethane											<1		**<1**
Indeno(1,2,3-cd)pyrene											<2		**<2**
Isophorone											<1		**<1**
Naphthalene											<1		**<1**
Nitrobenzene											<1		**<1**
N-Nitrosodimethylamine											<1		**<1**
N-Nitroso-di-n-propylamine											<1		**<1**
N-Nitrosodiphenylamine											<1		**<1**
Pentachlorophenol											<2		**<2**
Phenanthrene											<1		**<1**
Phenol											<1		**<1**
Pyrene											<1		**<1**
TCDD Scan											ND		**ND**

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RP-5 Chino Creek Downstream (R-003D) Remaining Priority Pollutants

Table 25d

RP-5 Chino Creek Downstream (R-003D) Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD											<0.006		**<0.006**
4,4-DDE											<0.006		**<0.006**
4,4-DDT											<0.008		**<0.008**
Aldrin											<0.004		**<0.004**
Alpha-BHC											<0.008		**<0.008**
Beta-BHC											<0.005		**<0.005**
Delta-BHC											<0.007		**<0.007**
Dieldrin											<0.006		**<0.006**
Endosulfan I											<0.01		**<0.010**
Endosulfan II											<0.007		**<0.007**
Endosulfan Sulfate											<0.009		**<0.009**
Endrin											<0.009		**<0.009**
Endrin aldehyde											<0.006		**<0.006**
Gamma-BHC											<0.01		**<0.01**
Heptachlor											<0.006		**<0.006**
Heptachlor epoxide											<0.007		**<0.007**
Chlordane											<0.1		**<0.1**
PCB-1016											<0.5		**<0.5**
PCB-1221											<0.5		**<0.5**
PCB-1232											<0.5		**<0.5**
PCB-1242											<0.5		**<0.5**
PCB-1248											<0.5		**<0.5**
PCB-1254											<0.5		**<0.5**
PCB-1260											<0.5		**<0.5**
Toxaphene											<0.5		**<0.5**

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2019 NPDES Annual Report

CCWRF Chino Creek Upstream (R-004U) Remaining Priority Pollutants

Table 26a

CCWRF Chino Creek Upstream (R-004U) Remaining Priority Pollutant Metals & Cyanide, µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Hg, Total Recoverable											<0.05		**<0.05**
Ag, Total Dissolved											<0.25		**<0.25**
As, Total Dissolved											2		**2**
Be, Total Dissolved											<0.5		**<0.5**
Cd, Total Dissolved											<0.25		**<0.25**
Cr, Total Dissolved											0.9		**0.9**
Cu, Total Dissolved											7.6		**7.6**
Ni, Total Dissolved											4		**4**
Pb, Total Dissolved											0.6		**0.6**
Sb, Total Dissolved											<1		**<1**
Se, Total Dissolved											3		**3**
Tl, Total Dissolved											<1		**<1**
Zn, Total Dissolved											7		**7**

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Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2019 NPDES Annual Report

CCWRF Chino Creek Upstream (R-004U) Remaining Priority Pollutants

Table 26b

CCWRF Chino Creek Upstream (R-004U) Volatile Organics (EPA Methods 624, 601/602), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,1,1-Trichloroethane											<1		**<1**
1,1,2,2-Tetrachloroethane											<0.5		**<0.5**
1,1,2-Trichloroethane											<1		**<1**
1,1-Dichloroethane											<0.5		**<0.5**
1,1-Dichloroethene											<1		**<1**
1,2-Dichlorobenzene											<1		**<1**
1,2-Dichloroethane											<1		**<1**
1,2-Dichloropropane											<0.5		**<0.5**
1,3-Dichlorobenzene											<1		**<1**
1,4-Dichlorobenzene											<1		**<1**
2-Chloroethyl vinyl ether											<1		**<1**
Benzene											<1		**<1**
Bromodichloromethane											<1		**<1**
Bromoform											<1		**<1**
Bromomethane											<1		**<1**
Carbon tetrachloride											<1		**<1**
Chlorobenzene											<1		**<1**
Chloroethane											<1		**<1**
Chloroform											<1		**<1**
Chloromethane											<1		**<1**
cis-1,3-Dichloropropene											<1		**<1**
Dibromochloromethane											<1		**<1**
Ethylbenzene											<1		**<1**
Methylene chloride											<1		**<1**
Tetrachloroethene											<1		**<1**
Toluene											<1		**<1**
trans-1,2-Dichloroethene											<0.5		**<0.5**
trans-1,3-Dichloropropene											<1		**<1**
Trichloroethene											<1		**<1**
Trichlorofluoromethane											<2		**<2**
Vinyl chloride											<1		**<1**
Acrolein											<2		**<2**
Acrylonitrile											<2		**<2**

INLAND EMPIRE UTILITIES AGENCY

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CCWRF Chino Creek Upstream (R-004U) Remaining Priority Pollutants

Table 26c

CCWRF Chino Creek Upstream (R-004U) Base/Neutral and Acid Extractibles (EPA Method 625), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
1,2,4-Trichlorobenzene											<1		**<1**
1,2-Dichlorobenzene											<1		**<1**
1,3-Dichlorobenzene											<1		**<1**
1,4-Dichlorobenzene											<1		**<1**
2,4,6-Trichlorophenol											<1		**<1**
2,4-Dichlorophenol											<2		**<2**
2,4-Dimethylphenol											<1		**<1**
2,4-Dinitrophenol											<3		**<3**
2,4-Dinitrotoluene											<1		**<1**
2,6-Dinitrotoluene											<2		**<2**
2-Chloronaphthalene											<1		**<1**
2-Chlorophenol											<1		**<1**
2-Methyl-4,6-dinitrophenol											<2		**<2**
2-Nitrophenol											<1		**<1**
3,3-Dichlorobenzidine											<5		**<5**
4-Bromophenyl phenyl ether											<1		**<1**
4-Chloro-3-methylphenol											<1		**<1**
4-Chlorophenyl phenyl ether											<1		**<1**
4-Nitrophenol											<3		**<3**
Acenaphthene											<1		**<1**
Acenaphthylene											<1		**<1**
Anthracene											<1		**<1**
Azobenzene											<1		**<1**
Benzidine											<5		**<5**
Benzo(a)anthracene											<5		**<5**
Benzo(a)pyrene											<1		**<1**
Benzo(b)fluoranthene											<1		**<1**
Benzo(g,h,i)perylene											<2		**<2**
Benzo(k)fluoranthene											<1		**<1**
Bis(2-chloroethoxy)methane											<2		**<2**
Bis(2-chloroethyl)ether											<1		**<1**
Bis(2-chloroisopropyl)ether											<1		**<1**
Bis(2-ethylhexyl)phthalate											<2		**<2**
Butyl benzyl phthalate											<1		**<1**
Chrysene											<1		**<1**
Dibenzo(a,h)anthracene											<1		**<1**
Diethyl phthalate											<2		**<2**
Dimethyl phthalate											<1		**<1**
Di-n-butyl phthalate											<1		**<1**
Di-n-octyl phthalate											<1		**<1**
Fluoranthene											<1		**<1**
Fluorene											<1		**<1**
Hexachlorobenzene											<1		**<1**
Hexachlorobutadiene											<1		**<1**
Hexachlorocyclopentadiene											<5		**<5**
Hexachloroethane											<1		**<1**
Indeno(1,2,3-cd)pyrene											<2		**<2**
Isophorone											<1		**<1**
Naphthalene											<1		**<1**
Nitrobenzene											<1		**<1**
N-Nitrosodimethylamine											<1		**<1**
N-Nitroso-di-n-propylamine											<1		**<1**
N-Nitrosodiphenylamine											<1		**<1**
Pentachlorophenol											<2		**<2**
Phenanthrene											<1		**<1**
Phenol											<1		**<1**
Pyrene											<1		**<1**
TCDD Scan											ND		**ND**

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2019 NPDES Annual Report

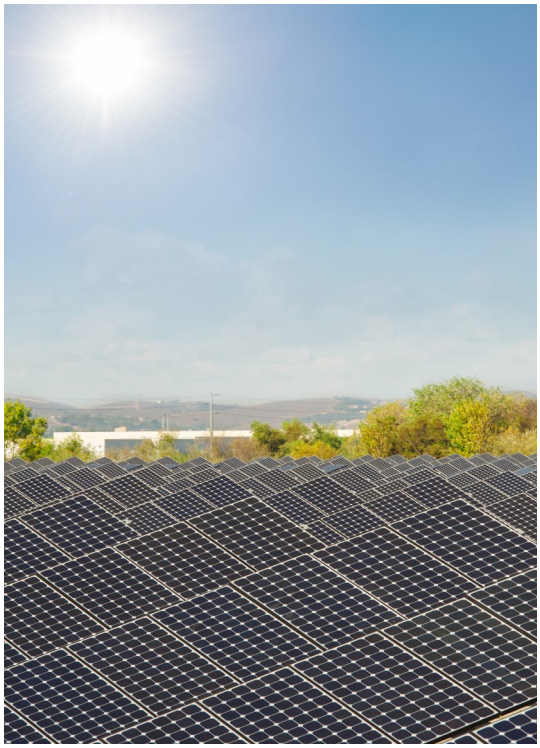
CCWRF Chino Creek Upstream (R-004U) Remaining Priority Pollutants

Table 26d

CCWRF Chino Creek Upstream (R-004U) Pesticides (EPA Method 608), µg/L

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD											<0.006		**<0.006**
4,4-DDE											<0.006		**<0.006**
4,4-DDT											<0.008		**<0.008**
Aldrin											<0.004		**<0.004**
Alpha-BHC											<0.008		**<0.008**
Beta-BHC											<0.005		**<0.005**
Delta-BHC											<0.007		**<0.007**
Dieldrin											<0.006		**<0.006**
Endosulfan I											<0.01		**<0.01**
Endosulfan II											<0.007		**<0.007**
Endosulfan Sulfate											<0.009		**<0.009**
Endrin											<0.009		**<0.009**
Endrin aldehyde											<0.006		**<0.006**
Gamma-BHC											<0.01		**<0.01**
Heptachlor											<0.006		**<0.006**
Heptachlor epoxide											<0.007		**<0.007**
Chlordane											<0.1		**<0.1**
PCB-1016											<0.5		**<0.5**
PCB-1221											<0.5		**<0.5**
PCB-1232											<0.5		**<0.5**
PCB-1242											<0.5		**<0.5**
PCB-1248											<0.5		**<0.5**
PCB-1254											<0.5		**<0.5**
PCB-1260											<0.5		**<0.5**
Toxaphene											<0.5		**<0.5**


Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT



IEUA FY 2019-2020 Annual Energy Report







Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

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IEUA is committed to optimizing facility energy use and effectively managing renewable resources to contain future energy costs and provide for future rate stabilization.

Introduction

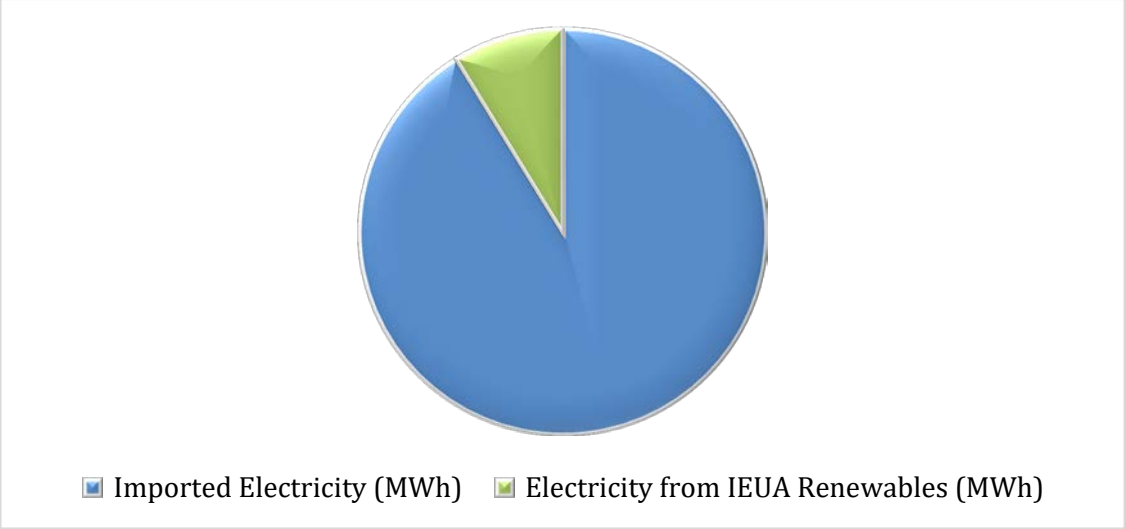
The 2019/20 Energy Report tracks IEUA's energy consumption and portfolio, renewable generation performance and savings, and energy efficiency projects for the fiscal year. The report includes a brief description of upcoming projects and initiatives that will be implemented over the next few years.

Summary

In 2019/20, IEUA:

- Consumed 75,703 MWh of electricity (Figure 1).
- Generated 10% of the electricity consumed from renewable energy (Figure 1). Savings to date since 2008 is approximately $1,040,000.
- Spent $7.6 million for utilities, that includes imported electricity, renewable energy and natural gas, and energy management services.
- Completed an energy efficiency project at RP-1.
- Commissioned 70 kW of solar on the RP-5 Lab rooftop.

Figure 1: IEUA Electricity Source for 2019/20



Did you know?

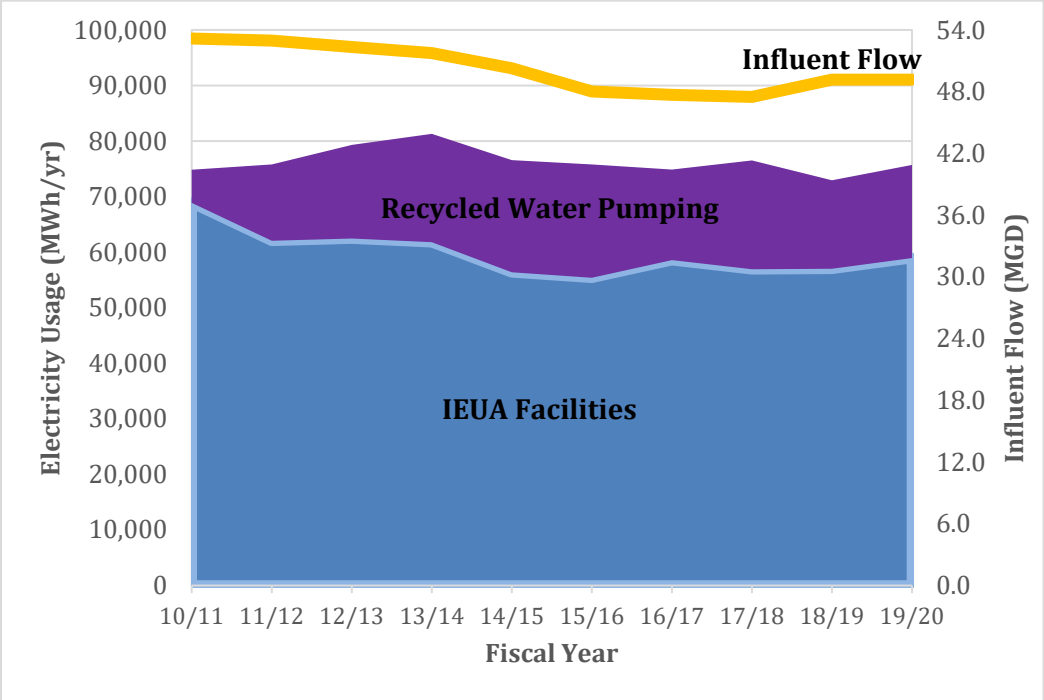
** In 2018 a typical U.S. household used 12,146 kWh (U.S. Energy Information Administration).*
** The renewable energy generated by IEUA would be able to provide electricity to at least 648 homes.*

Flow and Energy Consumption

- In 2019/20, the annual average influent flow to the regional water recycling plants was 49.2 MGD which was a slight increase of 0.1% as compared to the previous fiscal year of 49.1 MGD (Figure 2).

- In 2019/20, IEUA facilities which include the regional water recycling plants, composting facility, and recycled water pumping used approximately 75,703 MWh of electricity (Figure 2). The electricity consumption for 2019/20 increased by 2.9% as compared to the previous fiscal year of 73,598 MWh. This was due to the increased recycled water pumping and groundwater recharge activity

Figure 2: IEUA Electricity Use and Regional Influent Flows



Utility Change in Time-of-Use (TOU)

- Southern California Edison (SCE) changed their peak time of use from 12 p.m.-6 p.m. to 4 p.m.-9 p.m. starting on March 2019. This change is due to the significant impact of solar installations across their service area and statewide. During the late afternoon to nighttime, there is typically a surge in imported demand after the solar is no longer producing power. Although, wastewater treatment is an around the clock process, there are some processes in Agency facilities that are offline during the new peak time such as the composting facility and dewatering, which results in reduced on-peak demand. Additionally, SCE decreased facility demand rates.

Expenditure

- The cost of electricity remains the highest non-labor operations and maintenance (O&M) expenditure for IEUA. In 2019/20, the annual cost for energy related utilities and energy management was $7.6 million which had a decrease of 5% as compared to the previous fiscal year of $8.0 million due to the increase in renewable generation and energy demand management from the battery storage systems.

IEUA has a diversified energy procurement approach, that includes on-site generation Power Purchase Agreements (PPA), energy demand management, electricity purchase from Southern California Edison, and direct access contract with Shell Energy North America, continues to provide rate stabilization and cost effectiveness.

Renewable Energy Production and Storage

- IEUA's diverse renewable portfolio consists of 5.0 MW solar, 1.0 MW of wind, 3.0 MW of engines, and 4.0 MW battery (Figure 3). The battery storage optimizes energy management by charging from the grid during off-peak periods and discharging during on-peak periods, therefore it is not considered as onsite generation. In order to increase onsite renewable generation, IEUA plans to complete the installation of the necessary emissions control required by South Coast Air Quality Management District to have the REEP engines operating as part of the RP-5 Expansion project.

Figure 3: IEUA's Diverse Renewable Portfolio



- In 2019/20, 7,867 MWh of electricity was generated onsite, 23% more than 2018/19. The increase is due to the operation of the 1.5 MW of additional solar at Inland Empire Regional Composting Facility (IERCF) for a full year.

- IEUA's renewable portfolio generated 10% of the electricity used in 2019/20. Of the electricity consumed by IEUA;
    - 7,556 MWh was produced by the solar across IEUA facilities; and
    - 311 MWh was produced by the wind turbine at RP-4.
- Although PPA average rates have been typically higher than the average grid price in previous years, renewable energy projects provided savings, as a result of lower standby charges compared to the facility demand charge rate. Due to the decrease in facility demand rates from the new SCE tariffs, PPA renewable energy projects received overall no savings in 2019/20. IEUA paid an estimated $26,000 more on renewable energy than the grid.
- Generated solar electricity varies throughout the year due to the different number of sunlight hours, solar generation is usually higher in the summer and lower in the winter. In addition, CCWRF solar was inoperable beginning the second half of the previous fiscal year but was repaired and has been fully operational since November 2019.
- As a requirement by Southern California Edison (SCE), during the installation of the new solar at IERCF, the wind turbine had to be put offline in December 2018 until the proper protections were put in place to prevent impact to the transmission line. The wind turbine was put back online December 2019.
- The REEP engine has been offline since August 2017, they are expected to restart operation subsequent to the completion of the RP-5 Biosolids Facility project and the installation of the emission control equipment, which is anticipated in 2025.
- In 2015, IEUA partnered with Advanced Microgrid Solutions (AMS) through an energy management services (EMS) agreement to install 4 MW of battery storage and 1.5 MW of solar to optimize energy management and achieve cost savings through strategic procurement. The RP-1, RP-5, and CCWRF battery storage systems started commercial operation in November 2018. While the RP-4 and IERCF battery storage and solar system began commercial operation in March 2019. All facilities have completed their first year of operation. As of April 2020, the battery systems are now being operated and maintained by Enel X.

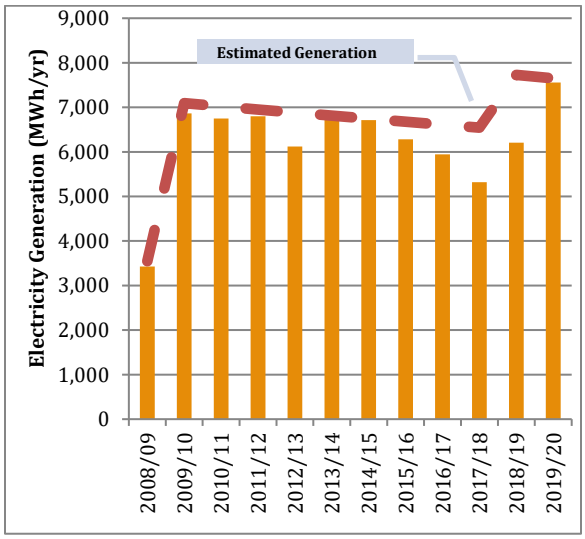
Solar



Solar Performance

- Solar across IEUA facilities generated 7,556 MWh of renewable energy, 21.7% more than 2018/19. The increased output was due to the 1.5 MW addition of solar at IERCF operating for a full year and the CCWRF solar going back online during the fiscal year. The disturbance in solar output, starting in FY2015/16 is caused by multiple solar inverters going offline. It should be noted that the existing 3.5 MW of solar is through a PPA with SunPower and the new solar is through an EMS contract.

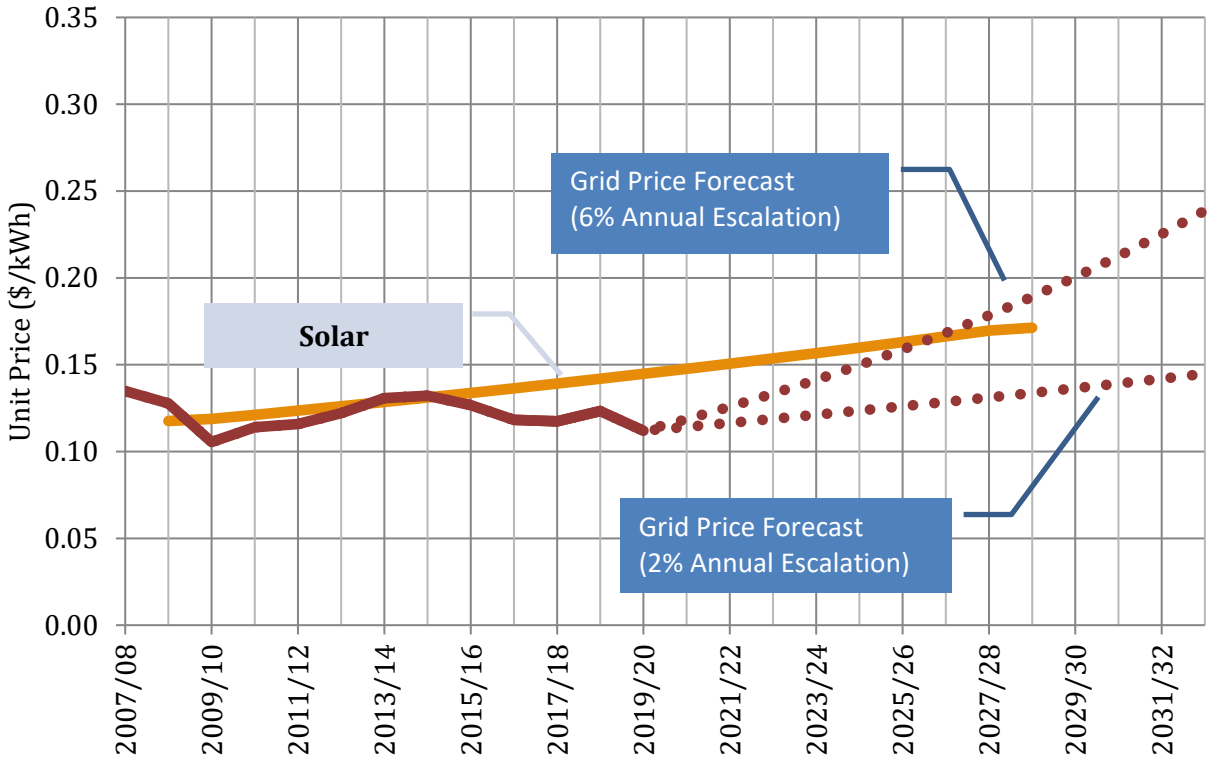
Figure 4: Solar Electricity Generation



Solar Cost

- For 2019/20, the SunPower PPA rate for the solar was higher than the average grid price. The solar projects provided no savings, as a result of lower facility demand charge rates compared to the standby charge rates. IEUA paid an estimated $32,000 more than the grid.
- The current SunPower PPA will expire in 2029. Staff will negotiate with the provider to extend the contract or purchase the solar, whichever is most cost-effective for the Agency.

Figure 5: Cost of Solar Power from PPA vs Grid Import



- Solar generated an overall savings of $342,327 from 2008/09 to 2019/20.

Table 1: Savings from Solar Power PPA

Savings FY 08/09 – FY 19/20	$250,000
Range of Savings PPA Term (FY 08/09 – FY 28/29)	-$475,000 (2% Esc) $1,069,000 (6% Esc)

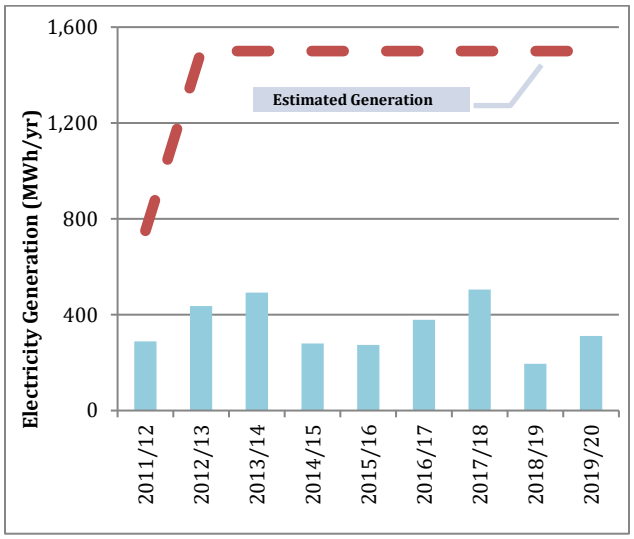
Wind



Wind Performance

- In FY 2019/20 the wind turbine at RP-4 generated 311 MWh of renewable energy, 59% higher than 2018/19 due to the system being offline more than half of the previous fiscal year.

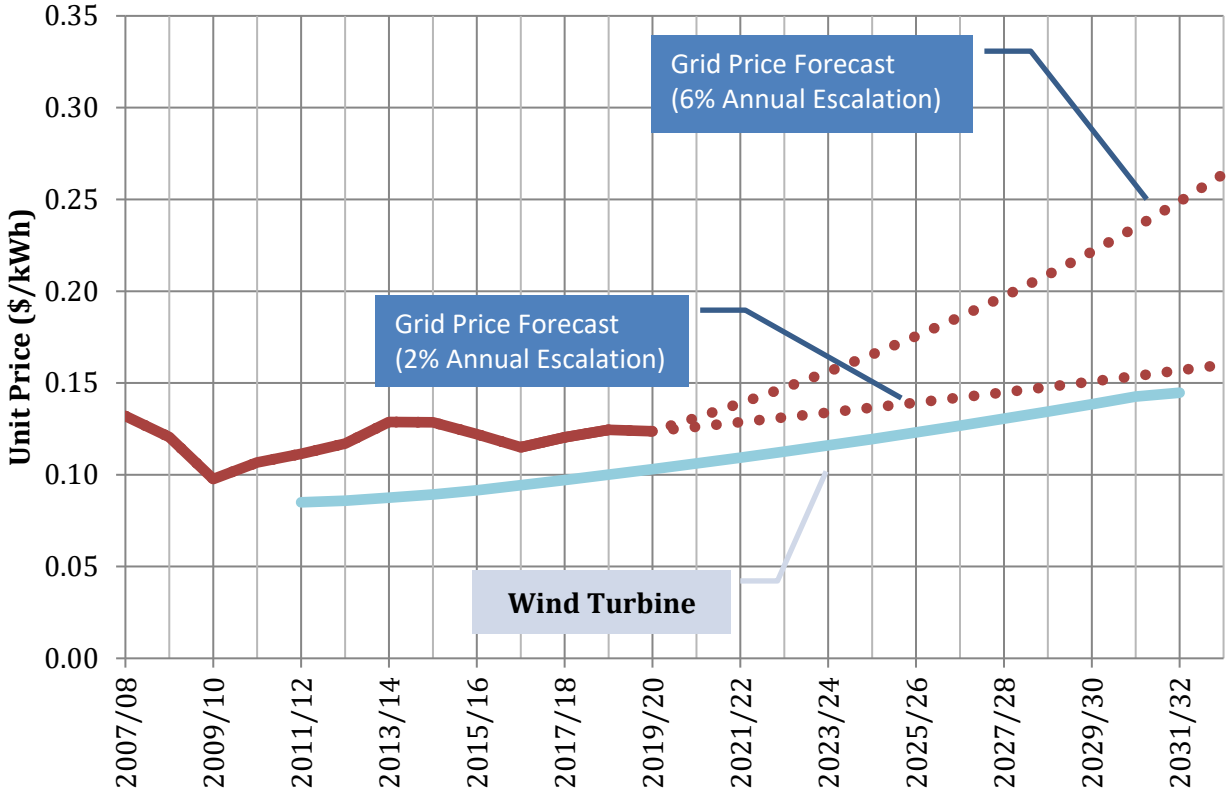
Figure 6: Wind Electricity Generation



Wind Cost

- For 2019/20, the PPA rate for the wind turbine was 20% lower than the average grid price. The wind turbine provided approximately $6,000 in savings.

Figure 7: Cost of Wind Power vs Grid Import



- Wind generated $84,000 in savings from 2011/12 to 2019/20.

Table 2: Savings from Wind Power

Savings FY 11/12 – FY 19/20	$84,000
Range of Savings PPA Term (FY 11/12 – FY 31/32)	$152,000 (2% Esc) $338,000 (6% Esc)

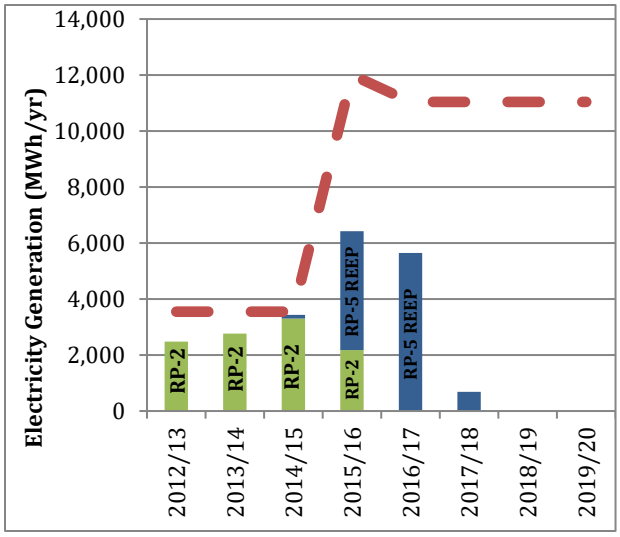
Engine



Engine Performance

- Renewable energy was not generated by the REEP engines since they did not operate the entire fiscal year. The REEP engines at RP-5 were put offline in August 2017. The engines are expected to go back online in 2025 after the completion of the RP-5 Biosolids Facility project, and the installation of the SCAQMD required emission controls.

Figure 8: Engine(s) Electricity Generation



Battery Storage + Solar



Battery Storage + Solar Performance

- The AMS battery storage at RP-1, RP-5 and CCWRF (2.5 MW combined) started commercial operation in November 2018, and the 1.5 MW battery storage at RP-4 and 1.5 MW of solar at IERCF started commercial operation on March 2019. In the first year of commercial operation, RP-1, RP-5, and CCWRF experienced a combined average demand reduction of 333 kW with a total bill savings of $124,000. While the system at IERCF and RP-4 achieved an average demand reduction of 334 kW and solar generation of 2,255 MWh with a total bill savings of $297,000 in the first term year. Since the minimum guaranteed savings per the contract was not met, the battery system owners reconciled the remainder of the expected savings to the Agency.

Energy Efficiency Projects

- IEUA continues to work with Southern California Edison (SCE) and Southern California Regional Energy Network (SoCalREN) to conduct comprehensive energy audits and to implement projects to reduce electricity consumption and demand throughout its facilities and operations. In FY 19/20, the following process optimization project was completed:
  - Automated ammonia controls installation at the RP-1 aeration basins.
    - Completed: August 2019
    - Expected annual savings: 326,00 kWh and $41,000
    - Incentive: $32,000
      Avoided power usage: 37 kW
- Since the start of the partnership in 2015, the Agency's implementation of energy efficiency projects has accumulated:
    - Expected annual savings: 4,308,000 kWh and $499,000
    - Incentive: $405,000
    - Avoided power usage: 227 kW

RP-5 Lab Rooftop Solar

- As part of the RP-5 Lab Project, 70 kw of solar was installed on the rooftop of the Lab building. The solar was commissioned in November 2019.

Upcoming Projects

Pumping Project

- This project will replace 4 recycled water pumps at RP-1. The project is expected to be completed in September 2020.

Greenhouse Gas Emissions Annual Reporting

- IEUA will continue to voluntarily report its greenhouse gas emissions to The Climate Registry.

Beneficial Use of Biogas

- IEUA evaluated opportunities to beneficially use the biogas generated at RP-1 in addition to onsite use for digesters heating. From the study, the following alternatives were explored:
    - Internal Combustion Engines
    - Microturbines
    - Fuel Cell through a PPA
    - Pipeline Injection
    - Compressed Natural Gas (CNG) Station

- It was concluded that the Internal Combustion Engine would be the most cost-effective.

Other Energy Related Activities

New Direct Access Contract

- IEUA issued a Request for Proposal (RFP) for an electric energy service provider. Two proposals were received, and Shell Energy North America was awarded the contract. On average, direct access account rates are about $0.02/kWh lower than bundled account rates.

In-Conduit Hydroelectric Power Generation

- IEUA has issued a Request For Information (RFI) for recommendations for feasible and cost-effective in-conduit hydropower technology projects. The responses received included expected electricity generation, installation impact to current recycled water operation, and interconnection agreement challenges with SCE. Staff will evaluate again this technology at a later time.

University of California Office of President (UCOP) Biomethane Purchase Partnership

- UCOP is looking to purchase Renewable Natural Gas (RNG) via pipeline injection. After IEUA's discussions with UCOP and similarity in scenarios presented in the Beneficial Use of Biogas study, it was concluded that this option was not cost-effective for the Agency.

SCE Overgeneration Pilot Study

- IEUA participated in a pilot study executed by SCE to explore the possibilities of using water pumping to ease the grid during times when energy production is higher than demand. The study found that water agencies in the SCE service area are open to support grid reliability and participate in over-generation events with the implementation of changes in the Demand Response program.

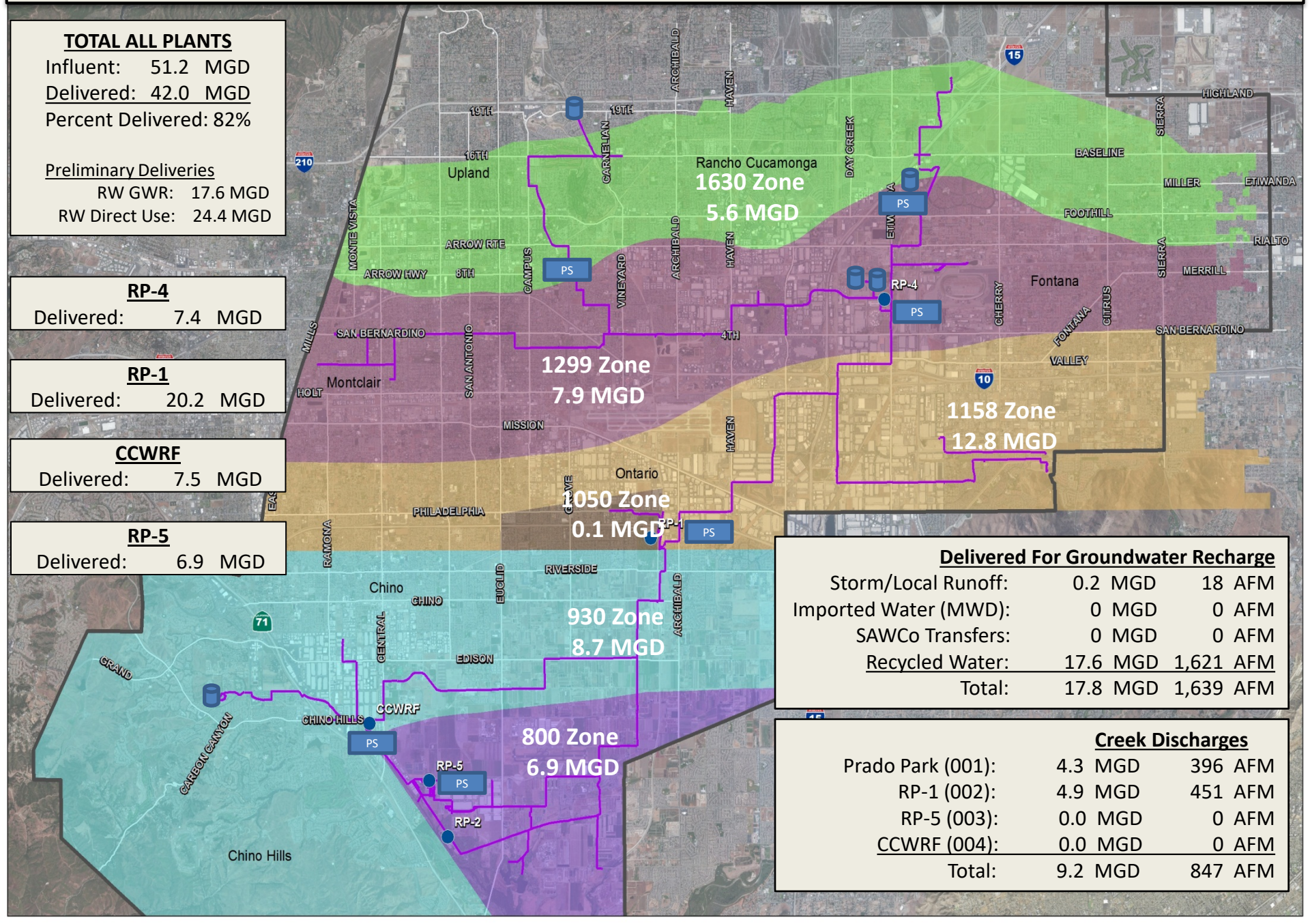
Air Source Heat Pumps for Preheating of Emergency Backup Generators

- IEUA is currently evaluation electricity and cost savings associated with heat pump technology for preheating standby generators.

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IEUA RECYCLED WATER DISTRIBUTION – SEPTEMBER 2020



TOTAL ALL PLANTS

Influent:	51.2 MGD
Delivered:	42.0 MGD
Percent Delivered:	82%

Preliminary Deliveries

RW GWR:	17.6 MGD
RW Direct Use:	24.4 MGD

RP-4

Delivered: 7.4 MGD

RP-1

Delivered: 20.2 MGD

CCWRF

Delivered: 7.5 MGD

RP-5

Delivered: 6.9 MGD

Delivered For Groundwater Recharge

Storm/Local Runoff:	0.2 MGD	18 AFM
Imported Water (MWD):	0 MGD	0 AFM
SAWCo Transfers:	0 MGD	0 AFM
Recycled Water:	17.6 MGD	1,621 AFM
Total:	17.8 MGD	1,639 AFM

Creek Discharges

Prado Park (001):	4.3 MGD	396 AFM
RP-1 (002):	4.9 MGD	451 AFM
RP-5 (003):	0.0 MGD	0 AFM
CCWRF (004):	0.0 MGD	0 AFM
Total:	9.2 MGD	847 AFM

Recycled Water Recharge Actuals - September 2020 (Acre-Feet)

Basin	9/1-9/5	9/6-9/12	9/13-9/19	9/20-9/26	9/27-9/30	Month Actual	FY To Date Actual	Deliveries are draft until reported as final.	
Ely	0.0	0.0	0.0	0.0	0.8	0.8	262		
Banana	0.0	0.0	0.0	0.0	0.0	0.0	0		
Hickory	21.2	10.6	25.7	12.2	15.3	85.0	218		
Turner 1 & 2	0.0	0.0	0.0	0.0	0.0	0.0	0		
Turner 3 & 4	0.0	0.0	0.0	0.0	0.0	0.0			
8th Street	17.0	20.3	11.3	54.8	37.2	140.6	453		
Brooks	17.5	27.6	39.4	26.6	20.1	131.2	414		
RP3	145.1	180.2	190.0	228.8	138.9	883.0	1686		
Declez	0.0	0.0	0.0	0.0	0.0	0.0	329		
Victoria	23.0	27.4	44.2	56.0	32.8	183.4	556		
San Sevaine	41.9	53.4	54.1	51.5	8.9	209.8	488		
Total	265.7	319.5	364.7	429.9	254.0	1,633.8	4,406	3,252	AF previous FY to day actual

