Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

AGENDA

MEETING OF THE BOARD OF DIRECTORS

WEDNESDAY, OCTOBER 16, 2019
10:00 A.M.
INLAND EMPIRE UTILITIES AGENCY*
AGENCY HEADQUARTERS
6075 KIMBALL AVENUE, BUILDING A
CHINO, CALIFORNIA 91708

CALL TO ORDER OF THE INLAND EMPIRE UTILITIES AGENCY BOARD OF DIRECTORS MEETING

FLAG SALUTE

PUBLIC COMMENT

Members of the public may address the Board on any item that is within the jurisdiction of the Board; however, no action may be taken on any item not appearing on the agenda unless the action is otherwise authorized by Subdivision (b) of Section 54954.2 of the Government Code. Those persons wishing to address the Board on any matter, whether or not it appears on the agenda, are requested to complete and submit to the Board Secretary a "Request to Speak" form which are available on the table in the Board Room. Comments will be limited to three minutes per speaker. Thank you.

ADDITIONS TO THE AGENDA

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

1. PUBLIC HEARING AND ADOPTION OF ORDINANCE NO. 108

Recommended that the Board:

1. Hold a Public Hearing to receive public comments prior to the adoption of Ordinance No. 108, establishing and setting forth the policies governing Agency authority dollar limits for procurement and procurement-related activities; and

2. After closing the Public Hearing, adopt Ordinance No. 108.

2. NEW EMPLOYEE INTRODUCTIONS

- Mr. Federico Sordo Mendo, Electrical & Instrumentation Technician II, hired July 29, 2019, Operations & Maintenance – North.

- Mr. Juan Zamorano, Electrical & Instrumentation Technician II, hired August 5, 2019, Operations & Maintenance – North.

- Ms. Sushmitha Reddy, Manager of Laboratories, hired October 7, 2019, Laboratory.

- Ms. Christiana Daisy, Executive Manager of Engineering/AGM, hired September 23, 2019, Engineering Division.

3. PROMOTIONS/RECOGNITIONS

Promotions:

- Ms. Carina McCarthy, Administrative Assistant I, promoted September 8, 2019, Operations & Maintenance – Organics Management.

- Mr. Scott Lening, Deputy Manager of Operations, promoted September 22, 2019 – Operations & Maintenance – North.

4. CONSENT ITEMS

NOTICE: All matters listed under the Consent Calendar are considered to be routine and non-controversial and will be acted upon by the Board by one motion in the form listed below. There will be no separate discussion on these items prior to the time the Board votes unless any Board members, staff or the public requests specific items be discussed and/or removed from the Consent Calendar for separate action.

A. MINUTES

The Board will be asked to approve the minutes from the September 18, 2019 Board meeting and the October 2, 2019 Board workshop/meeting.

B. REPORT ON GENERAL DISBURSEMENTS

Staff recommends that the Board approve the total disbursements for the month of August 2019, in the amount of $20,227,319.29.

C. ADOPTION OF RESOLUTION FOR THE USBR WATERSMART DROUGHT RESILIENCY GRANT ON BEHALF OF CDA

Staff recommends that the Board adopt Resolution No. 2019-10-1, authorizing the General Manager to enter into a financial assistance agreement with the USBR for the WaterSMART Drought Response Program: Drought Resiliency Project.

D. ADOPTION OF RESOLUTION FOR THE ROUND 1 INTEGRATED REGIONAL WATER MANAGEMENT IMPLEMENTATION GRANT FOR THE JOINT IEUA-JCSD RECYCLED WATER INTERTIE PROJECT

Staff recommends that the Board:

1. Adopt Resolution No. 2019-10-2, authorizing the General Manager to enter into a financial assistance agreement with the California Department of Water Resources for the IEUA-JCSD Recycled Water Intertie Project; and

2. Adopt the 2018 Update of the SAWPA OWOW 2.0 Plan, which was officially adopted by the SAWPA Commission on February 19, 2019.

E. NEW AGENCY-WIDE MEMBERSHIP - CALIFORNIA AFRICAN AMERICAN WATER EDUCATION FOUNDATION (CAAWEF)

Staff recommends that the Board adopt a support position on joining CAAWEF at $10,000 per year for a three-year period, for a total commitment of $30,000.

F. RP1-MECHANCIAL RESTORATION AND IMPROVEMENTS PROJECT PROGRAMING SERVICES ***(Eng/Ops/WR)***

Staff recommends that the Board:

1. Approve a task order with Technical Services, Inc., for the RP-1 Mechanical Restoration and Improvements, through the Master Services Contract, 4600002467, for the not-to-exceed amount of $221,715; and

2. Authorize the General Manager to execute the task order, subject to non-substantive changes.

G. RP-1 PRIMARY SLUDGE PIPING REPAIR CONSTRUCTION CONTRACT AWARD ***(Eng/Ops/WR)***

Staff recommends that the Board:

1. Award a construction contract for the RP-1 Primary Sludge Piping Repair, Project No, EN20060, to AToM Engineering Construction, Inc., in the amount of $107,398; and

2. Authorize the General Manager to execute the contract subject to non-substantive changes.

H. 930 WEST RECYCLED WATER PIPELINE EASEMENT ACQUISITION ***(Eng/Ops/WR)***

Staff recommends that the Board authorize the General Manager to approve payment of $182,655 to the San Bernardino County Flood Control District for the valuation of the recycled water pipeline easement.

I. **RP-4 INFLUENT SCREEN REPLACEMENT DESIGN-BUILD CONTRACT AWARD** *(Eng/Ops/WR)*

Staff recommends that the Board:

1. Award a design-build contract for the RP-4 Influent Screen Replacement, Project No. EN19010, to Stanek Constructors, Inc., in the amount of $1,898,000; and

2. Authorize the General Manager to execute the contract, subject to non-substantive changes.

5. **INFORMATION ITEMS**

A. **ENGINEERING AND CONSTRUCTION MANAGEMENT PROJECT UPDATES (POWERPOINT)** *(Eng/Ops/WR)*

B. **GRANTS DEPARTMENT SEMI-ANNUAL UPDATE (POWERPOINT)**

C. **STATE POLICY FOCUS ON DISADVANTAGE COMMUNITIES (ORAL)**

D. **MWD UPDATE (ORAL)**

E. **CBWM UPDATE (ORAL)**

F. **SAWPA UPDATE (ORAL)**

G. **CHINO BASIN PROGRAM UPDATE (ORAL)**

RECEIVE AND FILE INFORMATION ITEMS

H. **PLANNING & ENVIRONMENTAL RESOURCES ANNUAL REPORTS (WRITTEN)** *(Eng/Ops/WR)*

I. **FIRST QUARTER PLANNING & ENVIRONMENTAL RESOURCES UPDATE (POWERPOINT)** *(Eng/Ops/WR)*

J. **TREASURER'S REPORT OF FINANCIAL AFFAIRS (WRITTEN/ POWERPOINT)**

K. **PUBLIC OUTREACH AND COMMUNICATION (WRITTEN)**

L. **STATE LEGISLATIVE REPORT AND MATRIX FROM WEST COAST ADVISORS (WRITTEN)**

M. **FEDERAL LEGISLATIVE REPORT AND MATRIX FROM INNOVATIVE FEDERAL STRATEGIES (WRITTEN)**

N. **CALIFORNIA STRATEGIES, LLC MONTHLY ACTIVITY REPORT (WRITTEN)**

6. AGENCY REPRESENTATIVES' REPORTS

A. SAWPA REPORT (WRITTEN)

October 1, 2019 Regular Commission meeting. The October 15, 2019 meeting agenda was not available at time of printing.

B. MWD REPORT (WRITTEN)

October 8, 2019 Board meeting.

C. REGIONAL SEWERAGE PROGRAM POLICY COMMITTEE REPORT (WRITTEN)

The October 3, 2019 Regional Sewerage Program Policy Committee meeting was cancelled. The next meeting is scheduled for November 7, 2019.

D. CHINO BASIN WATERMASTER REPORT

September 26, 2019 CBWM Board meeting.

E. CHINO BASIN DESALTER AUTHORITY (WRITTEN)

September 26, 2019 CDA Special Board meeting. The October 3, 2019 Board meeting was cancelled.

7. GENERAL MANAGER'S REPORT (WRITTEN)

8. BOARD OF DIRECTORS' REQUESTED FUTURE AGENDA ITEMS

9. DIRECTORS' COMMENTS

A. CONFERENCE REPORTS

This is the time and place for the Members of the Board to report on prescheduled Committee/District Representative Assignment meetings, which were held since the last regular Board meeting, and/or any other items of interest.

10. CLOSED SESSION

A. PURSUANT TO GOVERNMENT CODE SECTION 54956.9(a) – CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION

1. Chino Basin Municipal Water District vs. City of Chino, Case No. RCV51010

2. Spicer vs. W.A. Rasic Construction, Case No. CIVDS 1711812

B. PURSUANT TO GOVERNMENT CODE SECTION 54956.9 – CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION

Two Cases

11. ADJOURN

*A Municipal Water District

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Board Secretary (909) 993-1736, 48 hours prior to the scheduled meeting so that the Agency can make reasonable arrangements.

Proofed by: JH

Declaration of Posting

I, April Woodruff, Board Secretary/Office Manager of the Inland Empire Utilities Agency*, A Municipal Water District, hereby certify that a copy of this agenda has been posted by 5:30 p.m. at the Agency's main office, 6075 Kimball Avenue, Building A, Chino, CA on Thursday, October 10, 2019.

April Woodruff

INFORMATION
ITEM

5H

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date: October 16, 2019

To: The Honorable Board of Directors **From:** Shivaji Deshmukh, General Manager

Committee: Engineering, Operations & Water Resources *10/09/19*

Executive Contact: Christiana Daisy, Executive Manager of Engineering/AGM

Subject: Planning & Environmental Resources Annual Reports (Water Use, Recycled Water, and Energy)

Executive Summary:

The Inland Empire Utilities Agency (IEUA) monitors and compiles water use data for the Annual Water Use Report. IEUA tracks overall water demands and sources of supply from each of its retail agencies. Total water consumption within IEUA's service area for FY 2018/19 was 188,817 AF, a 7% decrease from FY 2017/18.

IEUA's Recycled Water Annual Report provides annual delivery data by retail member agencies, by usage types, and by customers. Recycled water recharge was down 15% and direct use down 20%.

IEUA's energy consumption, renewable generation performance, and energy efficiency projects are reported in the Annual Energy Report. IEUA consumed 73,598 MWh of electricity, a decrease of 4% from FY 2017/18, of which 9% was generated by its renewable sources.

Staff's Recommendation:

This is an informational item for the Board of Directors to receive and file.

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

Account/Project Name:

N/A

Fiscal Impact (explain if not budgeted):

N/A

Full account coding (internal AP purposes only): - - - - - - Project No.:

Prior Board Action:

N/A

Environmental Determination:

Not Applicable

Business Goal:

The Planning & Environmental Resources Annual Reports (Water Use, Recycled Water, and Energy) are consistent with the Agency's Business Goals of Business Practices and Environmental Stewardship by providing an evaluation of Agency activities and being committed to the responsible use and protection of the environment through conservation and sustainable practices.

Attachments:

Attachment 1 - IEUA FY 2018/19 Annual Water Use Report
Attachment 2 - IEUA FY 2018/19 Annual Recycled Water Report
Attachment 3 - IEUA FY 2018/19 Annual Energy Report

2019

IEUA FY 2018-2019 Annual Water Use Report:

Retail Agency Water Use and Five Year History

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

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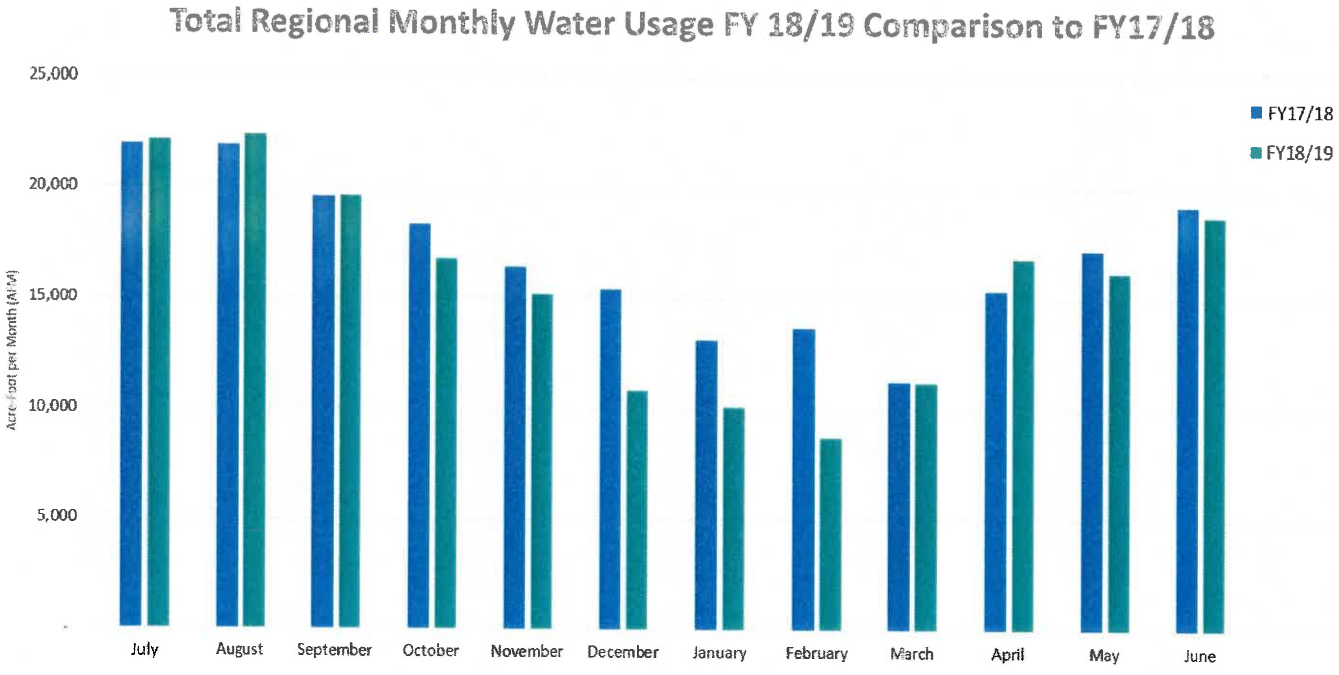
Preface

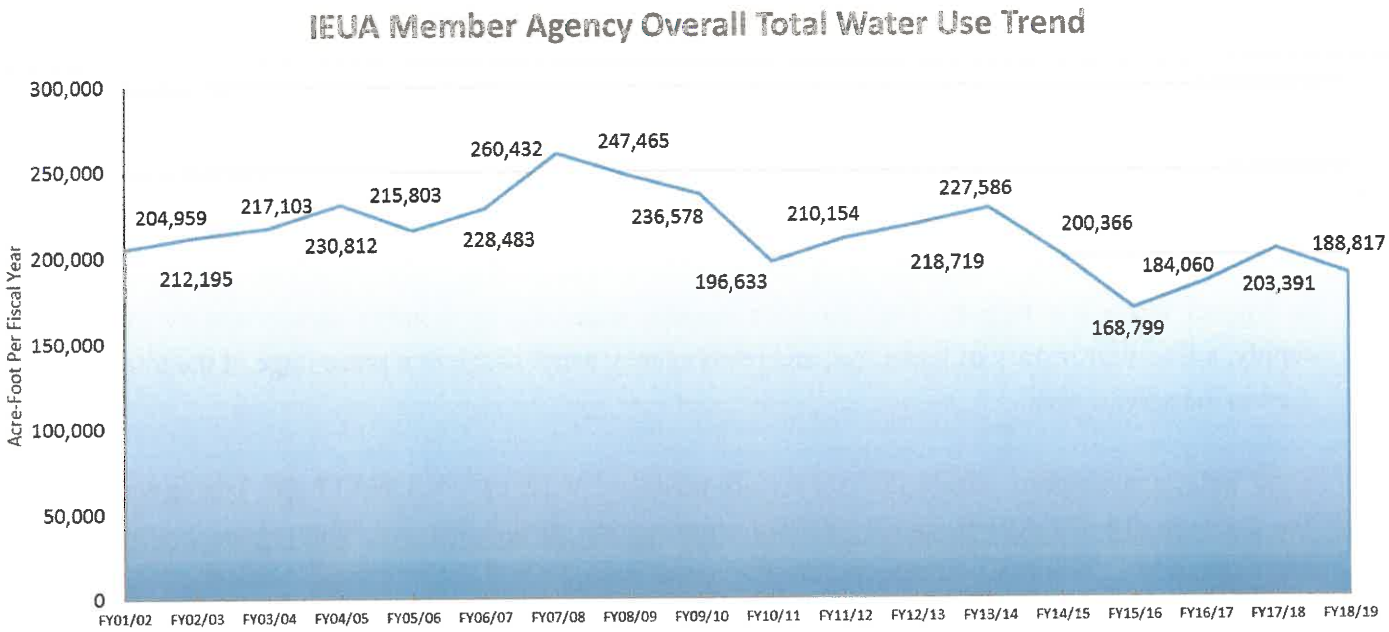
FY 2018-2019 Water Use Summary Report

Inland Empire Utilities Agency (IEUA) monitors and compiles water use data from each of its retail agencies to track overall water demands and sources of supply. Each year, this data is compiled into an Annual Water Use Report. Data includes monthly water use by member agency and by source of supply, a five-year history of water use, and retail agency water usage as a percentage of the total water used in the service area.

Total water consumption within IEUA's service area for FY 18/19 was 188,817 AF. This is roughly a 7% decrease (14,574 AF) from FY 2017/18 consumption of 203,391 AF. The region is now using approximately 17% less water than before the recent drought in FY 13/14 when consumption was at 227,586 AF. Usage is down across all water sources from FY17/18 to FY18/19 excluding purchases from other local water sources, such as San Antonio Water Company (SAWCo), West End Consolidated Water Company (WECWC), and Chino Basin Desalter Authority (CDA) water sources which saw minimal increases for the year.

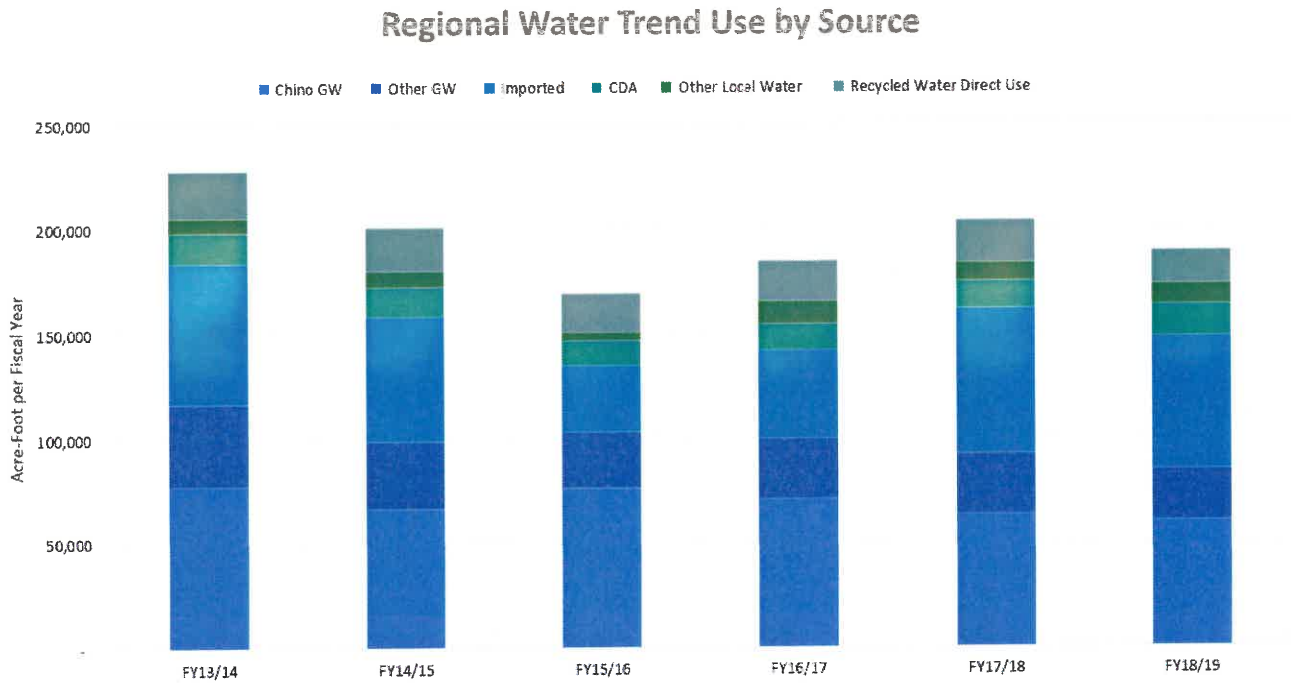
IEUA anticipates a slight increase in FY19/20 water usage due to the continually growing population in the region and the general climate change trend of projected temperature increases. However, long-term demands are not expected to exceed the peak year of FY 07/08 and current water usage is below the low demand forecast outlined in IEUA's 2015 Integrated Resources Plan (IRP). This analysis came from demand modeling conducted as part of the IRP and Urban Water Management Plan (UWMP) which found that new developments in the region tend to be more





Note: Total Water Use Data includes imported water, surface water, groundwater, recycled and desalter production. Excludes IEUA groundwater recharge

water efficient due to changes in the plumbing code, higher density developments with less landscaping, and compliance with the existing model landscape ordinance requirements set forth in AB1881. FY18/19 usage is roughly 10% below the 2020 predicted usage found in the low demand IRP forecast. A continual focus on water use efficiency and per capita reductions, as required in SB X7-7, has lead to slower water usage growth demand.



**Other Local Water includes purchases from local water companies such as SAWCo and WECWC*

In addition, the region is continuing to diversify and maximize local resource development including recycled water, expand water use efficiency programs, and increase groundwater storage as outline in the IRP. These efforts will continue to prepare the service area to cope with future dry years and increase regional resiliency in the face of climate change.

Below is a summary and update on the region's major water supply efforts and programs:

- *Water Use Efficiency (WUE)*: IEUA and its member agencies continue to offer water use efficiency programs outlined in the 2015-2020 Regional Water use Efficiency Business Plan. With outdoor irrigation accounting for 60% of total urban water demand, the recent focus has been to increase efficiency programs targeting outdoor irrigation. In July 2018, the Turf Removal program was reoffered with an increased rebate amount of $3 per square foot. The new Smart Landscape Irrigation Tune Up pilot was fully subscribed as of April 2019 and IEUA is looking to extend the program into FY19/20 due to its popularity.

- *Chino Basin Project (CBP):* IEUA received a conditional award of $206.9M from Prop 1 funds in July 2018. Leveraging this funding, the CBP plans to increase local water security, improve water quality, and lower subsidence through the installation of an advanced water treatment facility (AWT), additional pipelines and pipeline interconnects, and wellhead improvements. The AWT will be able to treat and store 15,000 AF per year in the Chino Basin. The CBP will also add 50,000AF per year in additional groundwater treatment capabilities to help reduce salinity. The new water from the AWT will be exchanged towards ecosystem benefits north of the Delta for 25 years. Brown & Caldwell have been selected as the technical and environmental consultant who will work on a preliminary design and project feasibility study. Upon approval, the preliminary design report will be completed by March 2020. The CBP is aligned with the Optimum Basin Management Program's (OBMP) goal to enhance water quality and management of the Chino basin.

- *RP-5 Upgrade:* The addition of a new membrane bio-reactor to the RP-5 facility in Chino will allow for greater treatment and recycled water recovery. The RP-5 expansion project is in the final design phase and will be ready to bid in 2020. The upgraded facility will increase total liquid treatment to 30 million gallons per day and biosolids treatment to 40 million gallons per day while providing an additional 7.5 million gallons of recycled water per day (8,400 AF per year).

- *Chino Desalter Expansion Phase III:* After receiving $7.2 million to support the expansion project, all three of the new wells are scheduled to be producing and feeding the Chino-II Desalter by FY 19/20. The new wells will increase production at Chino Desalter-II to a total of 40,000AF per year.

- *San Sevaine Basin Improvement:* This improvement project increased the amount of storm water and recycled water that can be used for ground water recharge at the San Sevaine Basin. The upgrade was completed in April 2019 and added approximately 600AF of storm water and 4,100AF of recycle water groundwater recharge capacity.

IEUA would like to thank its member agencies for their assistance in compiling the data contained in this report.

SECTION 1

Total Water Resources Data from FY 18/19

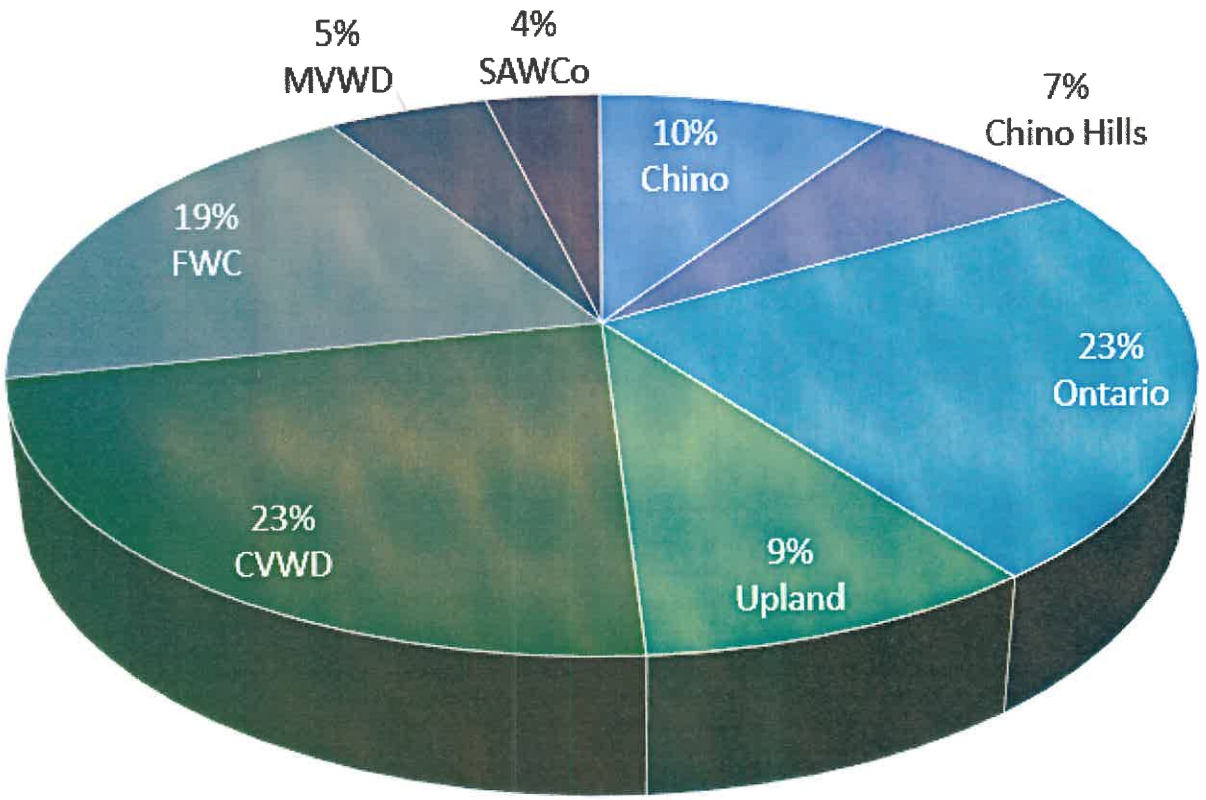
Total IEUA Service Area Water Use For FY 18/19

FY 18-19		Total IEUA Service Area Water Use by Retail Agency for FY 18-19 (AFY)								
		CHINO	CHINO HILLS	ONTARIO	UPLAND	CVWD	FWC	MVWD	SAWCo	TOTAL
Purchases from IEUA	Imported Water (MWD)	3,955	1,500	5,737	5,602	26,691	12,075	7,669	0	63,230
	Recycled (Direct Use)	4,759	1,548	7,512	709	996	143	289	0	15,956
Subtotal		**8,715**	**3,048**	**13,249**	**6,311**	**27,687**	**12,219**	**7,958**	**0**	**79,186**
Production	Chino Groundwater	4,220	1,609	24,079	2,381	9,624	9,961	8,167	376	60,417
	Other Groundwater	0	0	0	762	3,259	11,280	0	8,993	24,294
	Local Surface Water	0	0	0	0	2,871	2,503	0	5,701	11,075
Subtotal		**4,220**	**1,609**	**24,079**	**3,142**	**15,754**	**23,743**	**8,167**	**15,070**	**95,786**
Purchases from Other Agencies	CDA	5,018	4,270	5,722	0	0	0	0	0	15,010
	MVWD*	0	4,893	0	0	0	0	0	0	4,893
	SAWCo Water	0	0	403	6,376	0	0	0	0	6,778
	West End	0	0	0	1,596	0	0	0	0	1,596
	CVWD	0	0	0	0	0	0	0	0	0
Subtotal		**5,018**	**9,162**	**6,125**	**7,972**	**0**	**0**	**0**	**0**	**28,277**
Sales to Other Agencies*	Chino Hills**	0	0	0	0	0	0	-6,351	0	-6,351
	Ontario	0	0	0	0	0	0	0	-403	-403
	Upland	0	0	0	0	0	0	0	-7,225	-7,225
	MVWD	0	0	0	0	0	0	0	-454	-454
Subtotal		**0**	**0**	**0**	**0**	**0**	**0**	**-6,351**	**-8,081**	**-14,432**
	Total	**17,953**	**13,819**	**43,453**	**17,426**	**43,441**	**35,962**	**9,774**	**6,989**	**188,817**

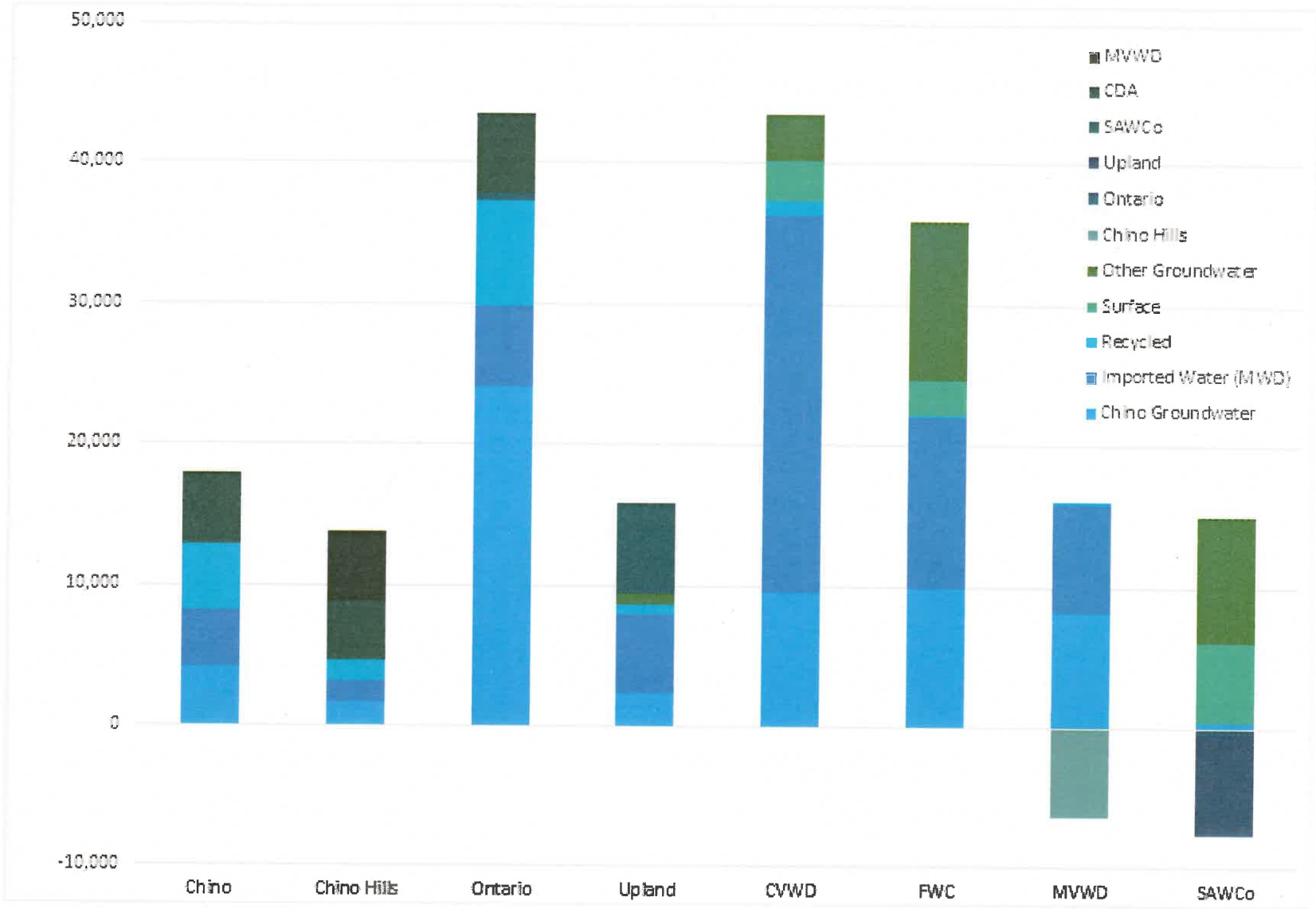
Note: All recycled water numbers in this report are based off IEUA operations data and are for direct use only.

Recycled water used for groundwater recharge may be found in the Recycled Water Report.

Total IEUA Service Area Water Use For FY 18/19



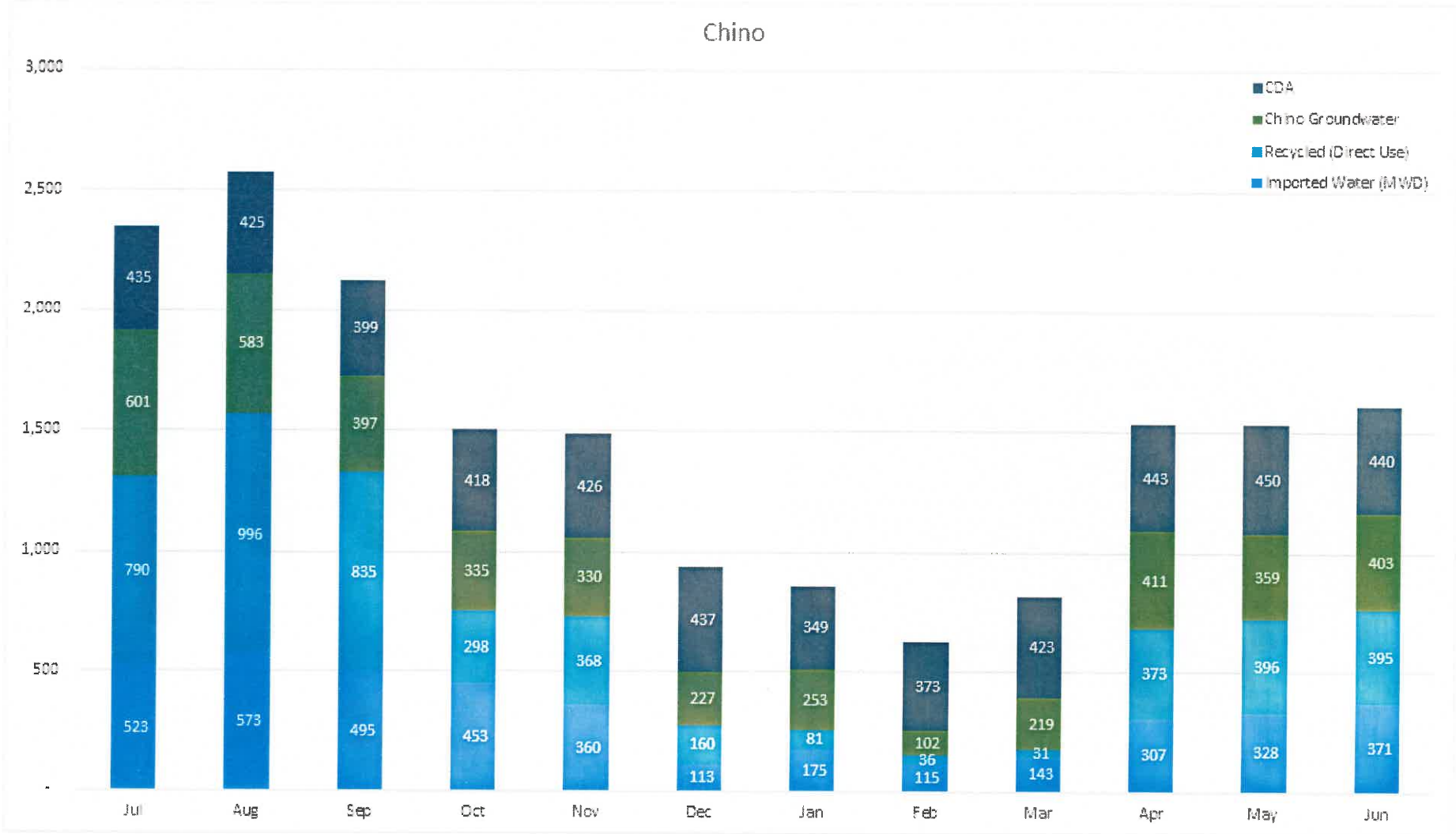
Total IEUA Service Area Water Use For FY 18/19



SECTION 2

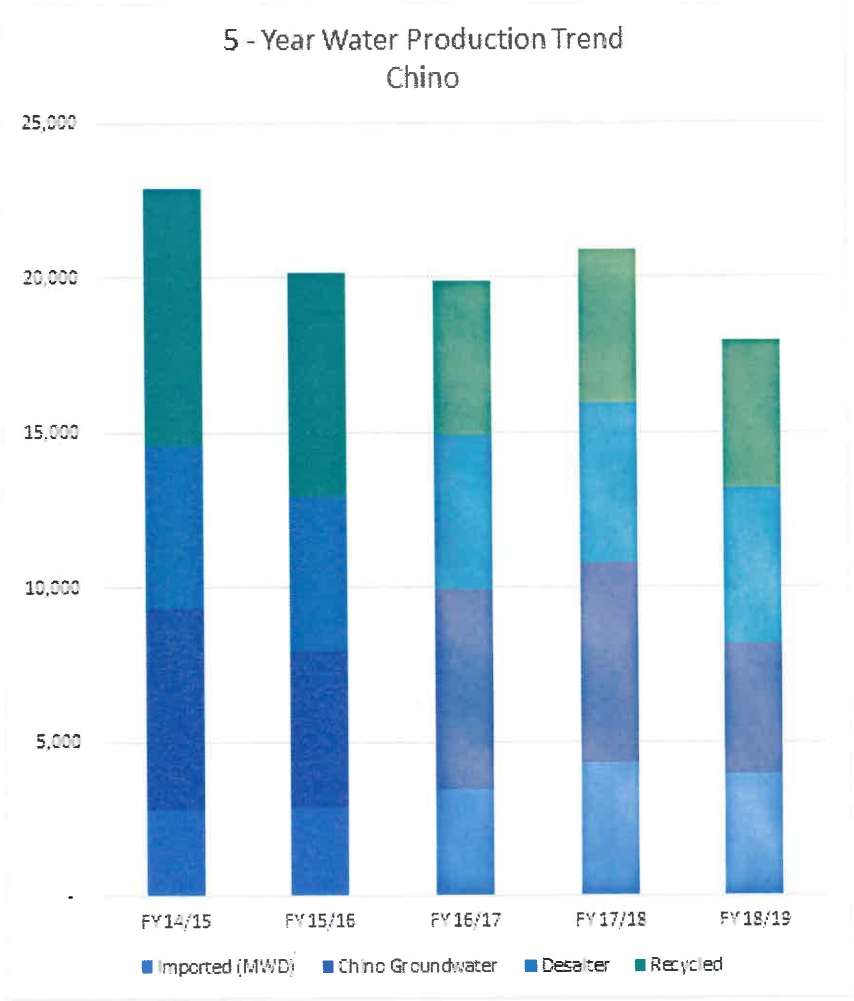
Retail Water Use Data from FY 18/19 by Agency

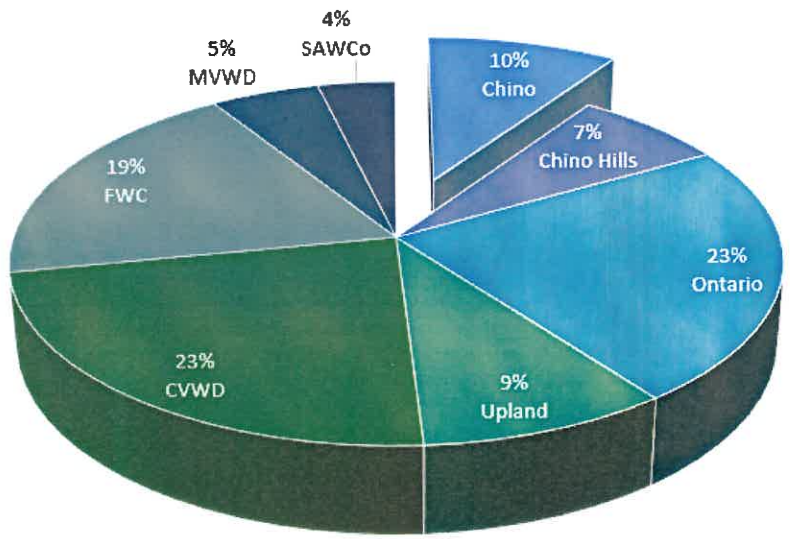
FY 18/19 Water Use Report City of Chino



FY 18/19 Water Use Report

City of Chino





In FY 2018/19, The City of Chino used 10% (17,953 AF) of 188,817 AF used in the IEUA service area.

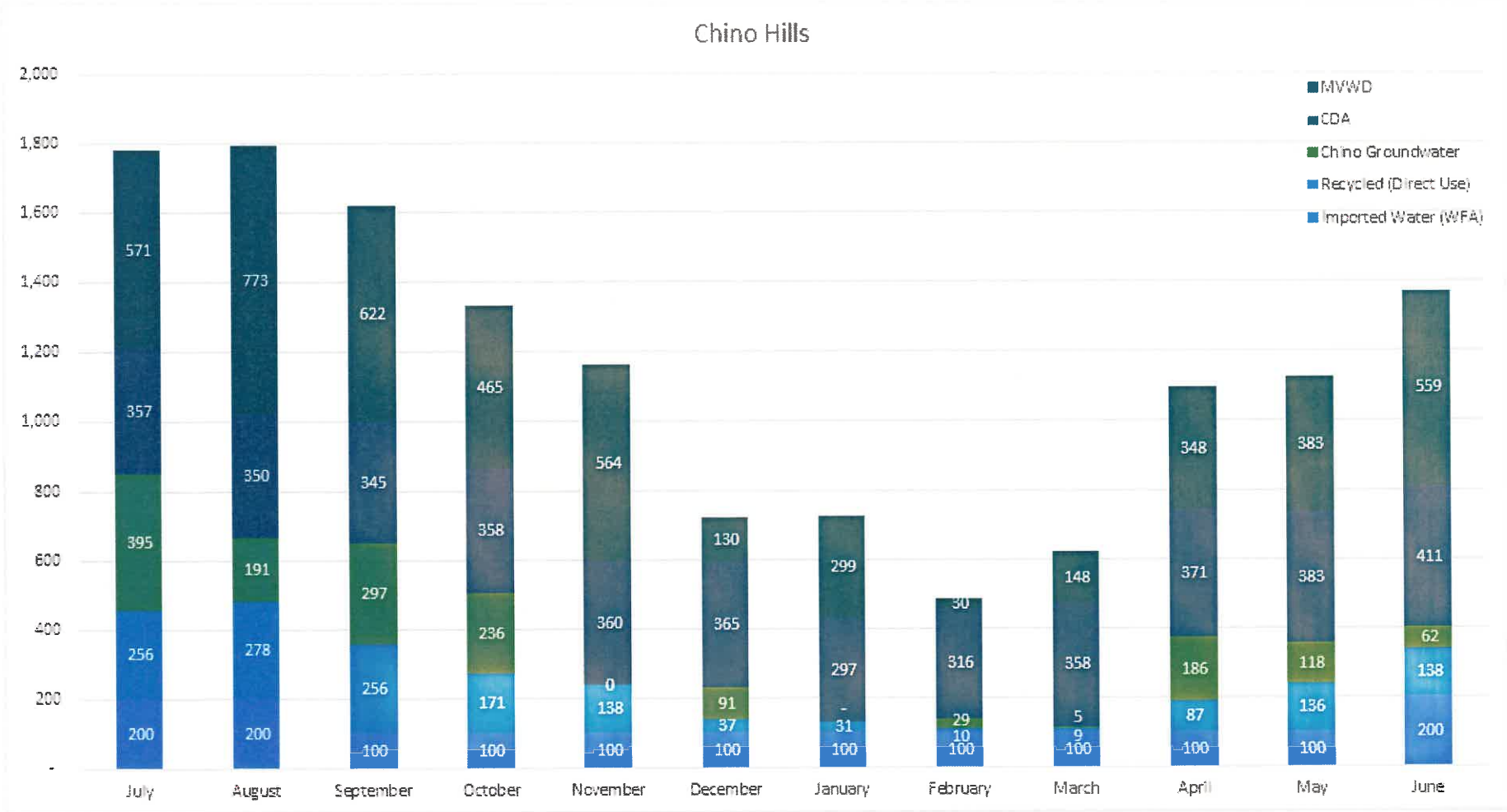
FY 18/19 Water Use Report

City of Chino

		Total IEUA Service Area Water Use By Agency for FY18-19 (AF)										City of Chino		
		July	August	September	October	November	December	January	February	March	April	May	June	Total
Purchases from IEUA	Imported Water (WFA)	523	573	495	453	360	113	175	115	143	307	328	371	3,955
	Recycle (Direct Use)	790	996	835	298	368	160	81	36	31	373	396	395	4,759
Subtotal		1,313	1,569	1,330	750	728	273	257	151	174	680	724	766	8,715
Production	Chino Groundwater	601	583	397	335	330	227	253	102	219	411	359	403	4,220
Subtotal		601	583	397	335	330	227	253	102	219	411	359	403	4,220
Agencies	CDA	435	425	399	418	426	437	349	373	423	443	450	440	5,018
Subtotal		435	425	399	418	426	437	349	373	423	443	450	440	5,018
Total		2,349	2,577	2,126	1,504	1,485	937	859	626	816	1,534	1,533	1,609	17,953

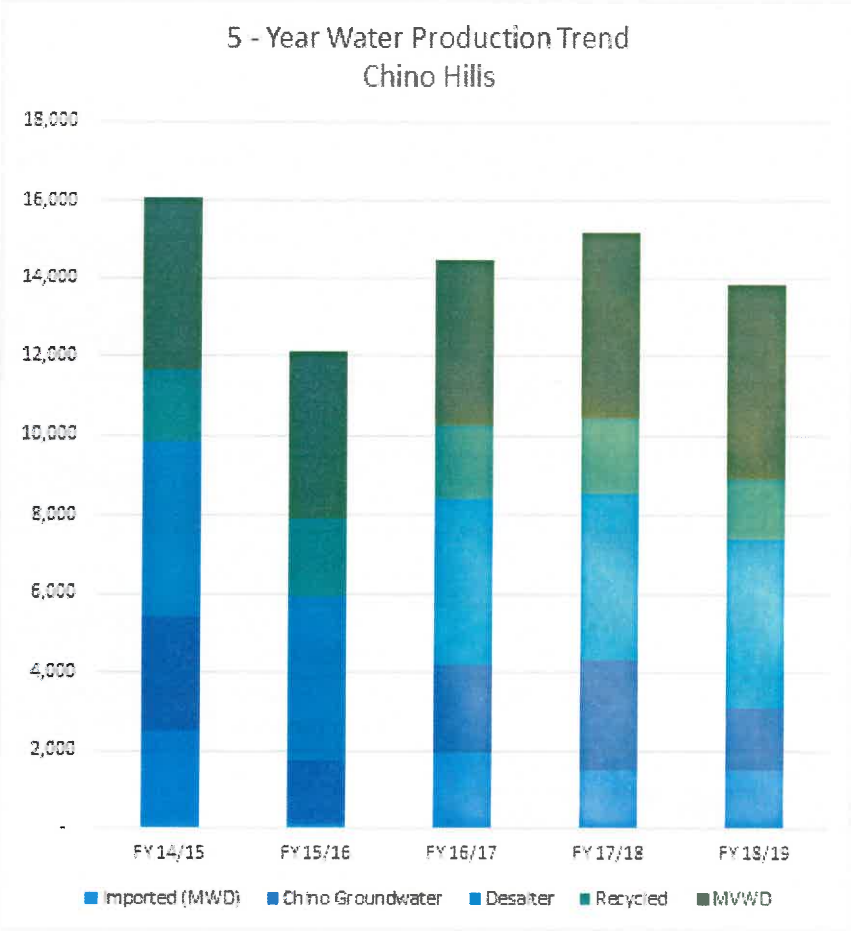
FY 18/19 Water Use Report

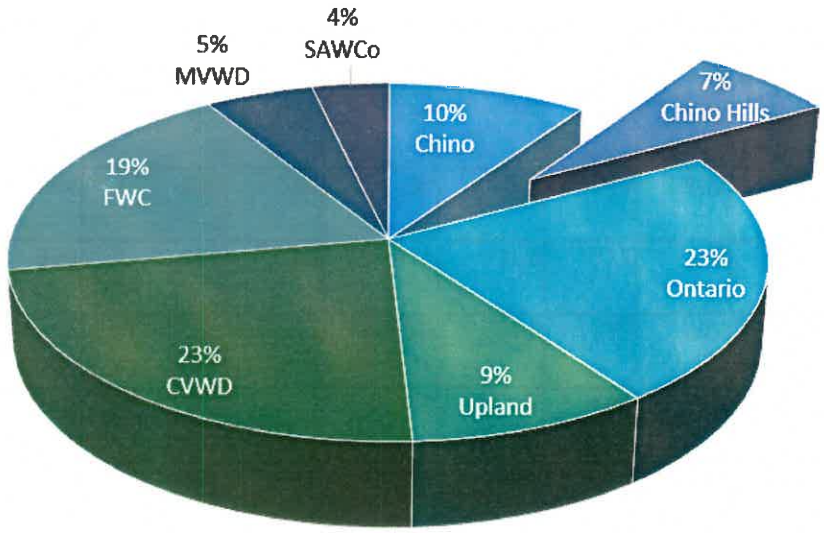
City of Chino Hills



FY 18/19 Water Use Report

City of Chino Hills





In FY 2018/19 The City of Chino Hills used 7% (13,819 AF) of 188,817 AF used in the IEUA service area.

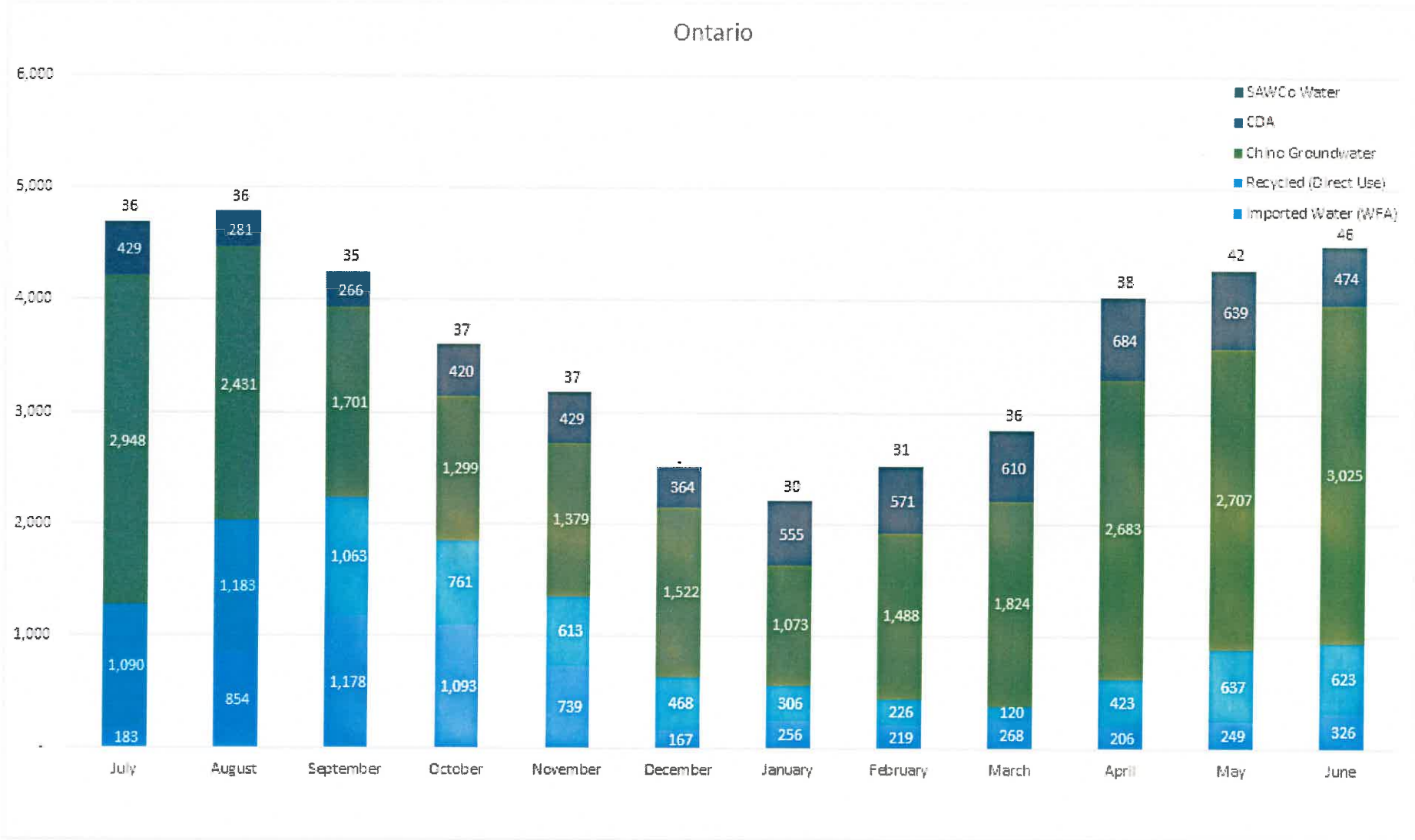
FY 18/19 Water Use Report

City of Chino Hills

		Total IEUA Service Area Water Use By Agency for FY18-19 (AF)										City of Chino Hills		
		July	August	September	October	November	December	January	February	March	April	May	June	Total
Purchases from IEUA	Imported Water (WFA)	200	200	100	100	100	100	100	100	100	100	100	200	1,500
	Recycle (Direct Use)	256	278	256	171	138	37	31	10	9	87	136	138	1,548
Subtotal		456	478	356	271	238	137	131	110	109	187	236	338	3,048
Production	Chino Groundwater	395	191	297	236	0	91	-	29	5	186	118	62	1,609
Subtotal		395	191	297	236	0	91	-	29	5	186	118	62	1,609
Purchase from other agencies	CDA	357	350	345	358	360	365	297	316	358	371	383	411	4,270
	MVWD	571	773	622	465	564	130	299	30	148	348	383	559	4,893
Subtotal		928	1,123	967	823	923	495	596	346	506	718	767	970	9,162
Total		1,779	1,792	1,619	1,330	1,161	722	727	485	620	1,092	1,121	1,370	13,819

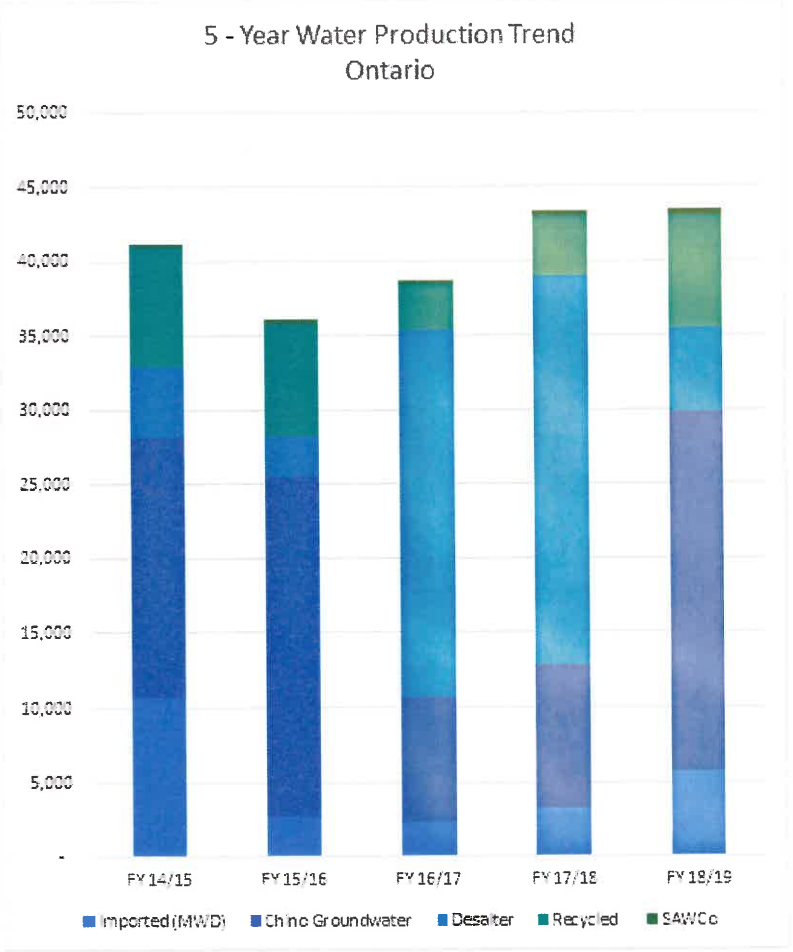
FY 18/19 Water Use Report

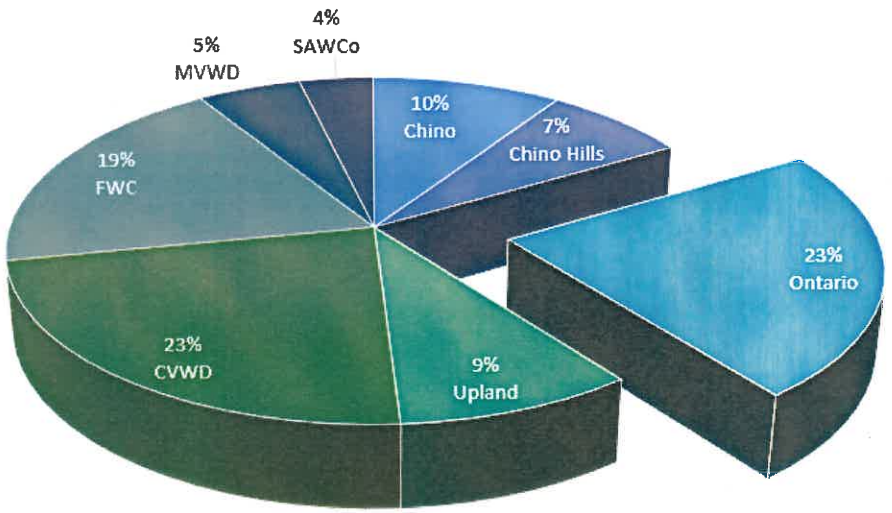
City of Ontario



FY 18/19 Water Use Report

City of Ontario





In FY 2018/19, The City of Ontario used 23% (43,453 AF) of 188,817 AF used in the IEUA service area.

FY 18/19 Water Use Report

City of Ontario

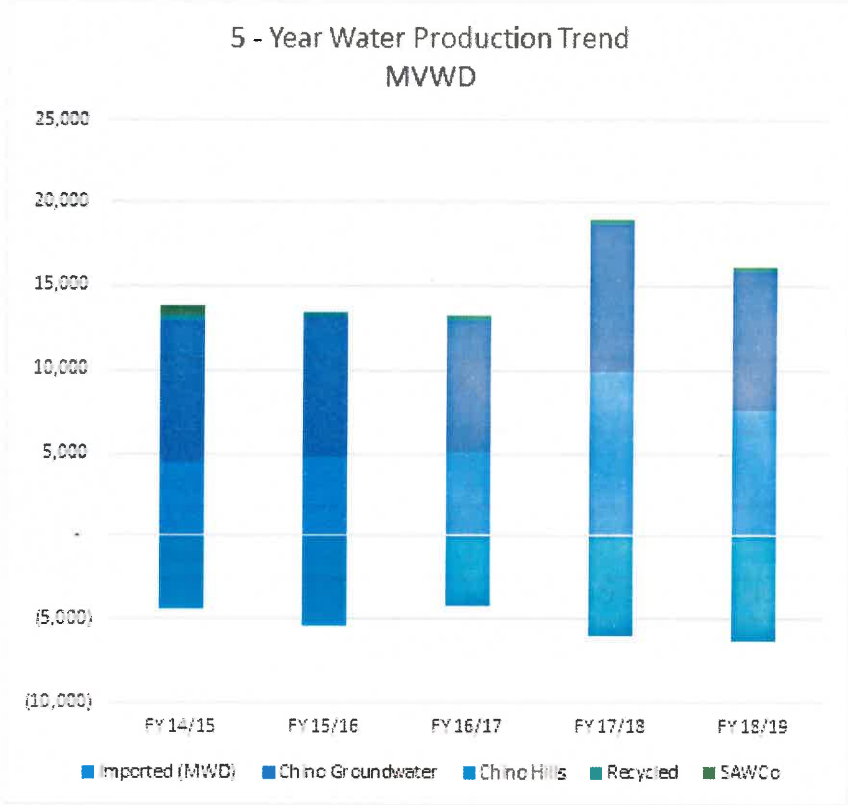
		Total IEUA Service Area Water Use By Agency for FY18-19 (AF)										City of Ontario		
		July	August	September	October	November	December	January	February	March	April	May	June	Total
Purchases from IEUA	Imported Water (WFA)	183	854	1178	1093	739	167	256	219	268	206	249	326	5,737
	Recycle (Direct Use)	1090	1183	1063	761	613	468	306	226	120	423	637	623	7,512
Subtotal		1,272	2,036	2,241	1,855	1,352	634	563	445	388	629	885	950	13,249
Production	Chino Groundwater	2948	2431	1701	1299	1379	1522	1073	1488	1824	2683	2707	3025	24,079
Subtotal		2,948	2,431	1,701	1,299	1,379	1,522	1,073	1,488	1,824	2,683	2,707	3,025	24,079
Purchase from other agencies	CDA	429	281	266	420	429	364	555	571	610	684	639	474	5,722
	SAWCo Water	36	36	35	37	37	0	30	31	36	38	42	46	403
Subtotal		465	317	300	457	466	364	586	601	646	722	681	520	6,125
Total		4,685	4,784	4,242	3,611	3,196	2,521	2,221	2,534	2,858	4,034	4,273	4,494	43,453

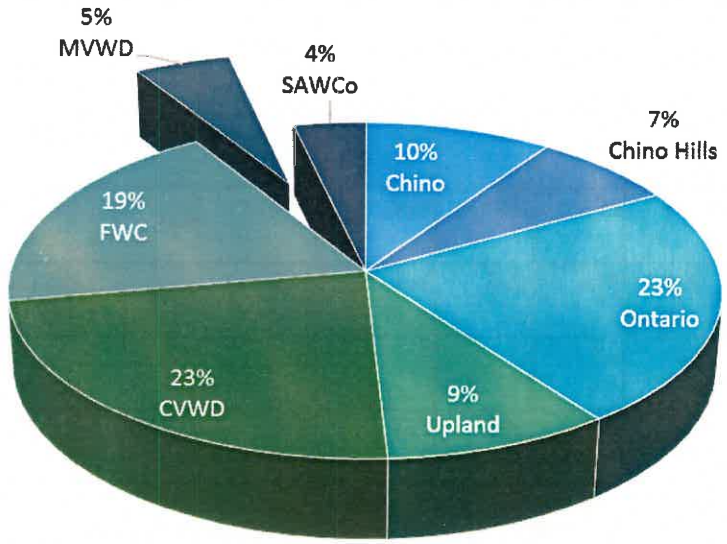
FY 18/19 Water Use Report

Monte Vista Water District

FY 18/19 Water Use Report

Monte Vista Water District





In FY 2018/19, Monte Vista Water District used 5% (9,774 AF) of 188,817 AF used in the IEUA service area.

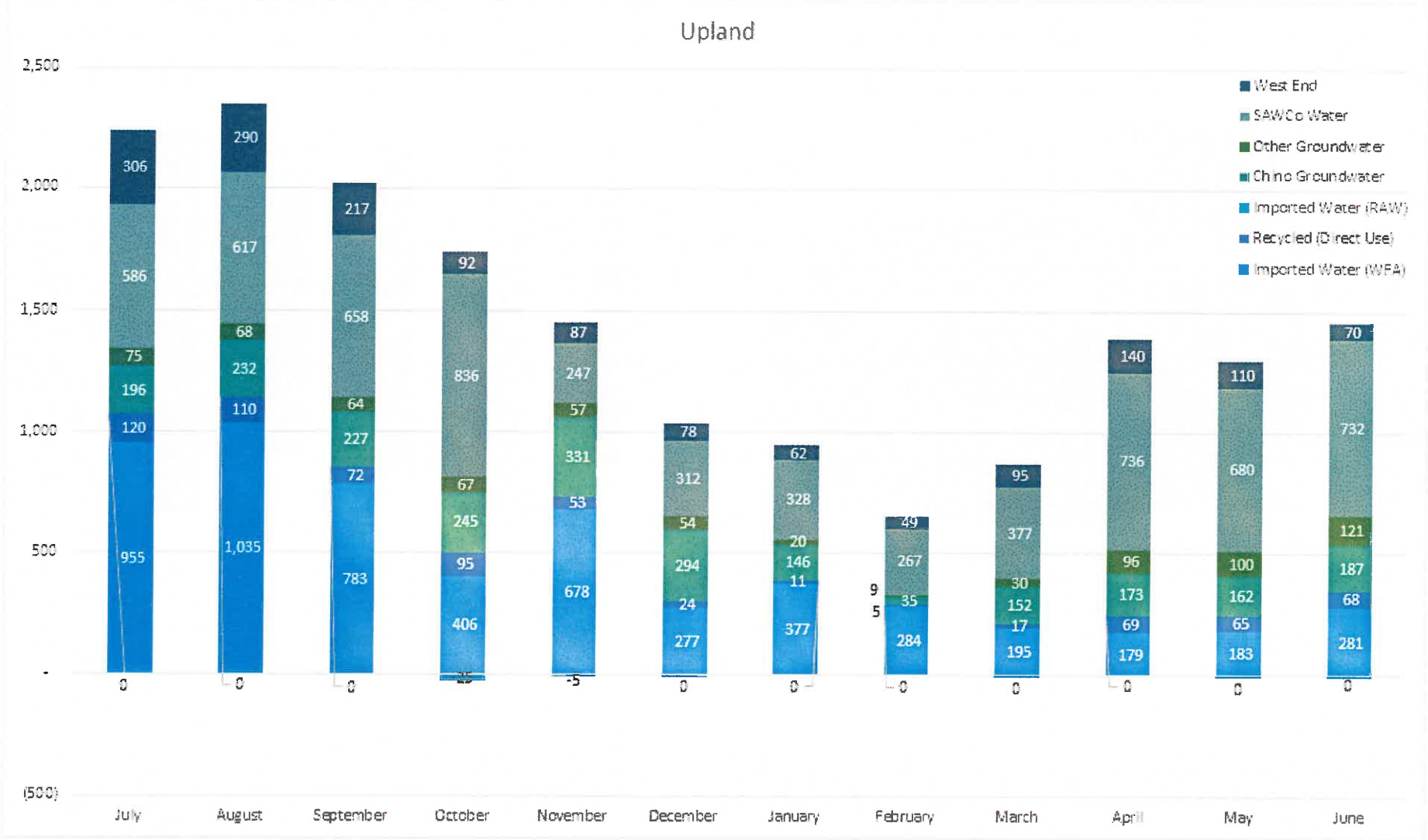
FY 18/19 Water Use Report

Monte Vista Water District

		Total IEUA Service Area Water Use By Agency for FY18-19 (AF)										MVWD		
		July	August	September	October	November	December	January	February	March	April	May	June	Total
Purchases from IEUA	Imported Water (WFA)	964	1,076	870	714	983	264	426	197	265	490	499	923	7,669
	Recycle (Direct Use)	50	44	37	32	23	11	3	2	3	29	26	28	289
Subtotal		1,014	1,120	907	746	1,006	275	429	199	268	519	525	950	7,958
Production	Chino Groundwater	990	873	934	840	481	576	420	431	420	757	641	806	8,167
Subtotal		990	873	934	840	481	576	420	431	420	757	641	806	8,167
Sales to other agencies	Chino Hills	-941	-934	-891	-674	-540	-221	-281	-59	-153	-534	-501	-621	-6,351
Subtotal		-941	-934	-891	-674	-540	-221	-281	-59	-153	-534	-501	-621	-6,351
Total		1,062	1,058	950	911	947	631	567	571	535	742	665	1,136	9,774

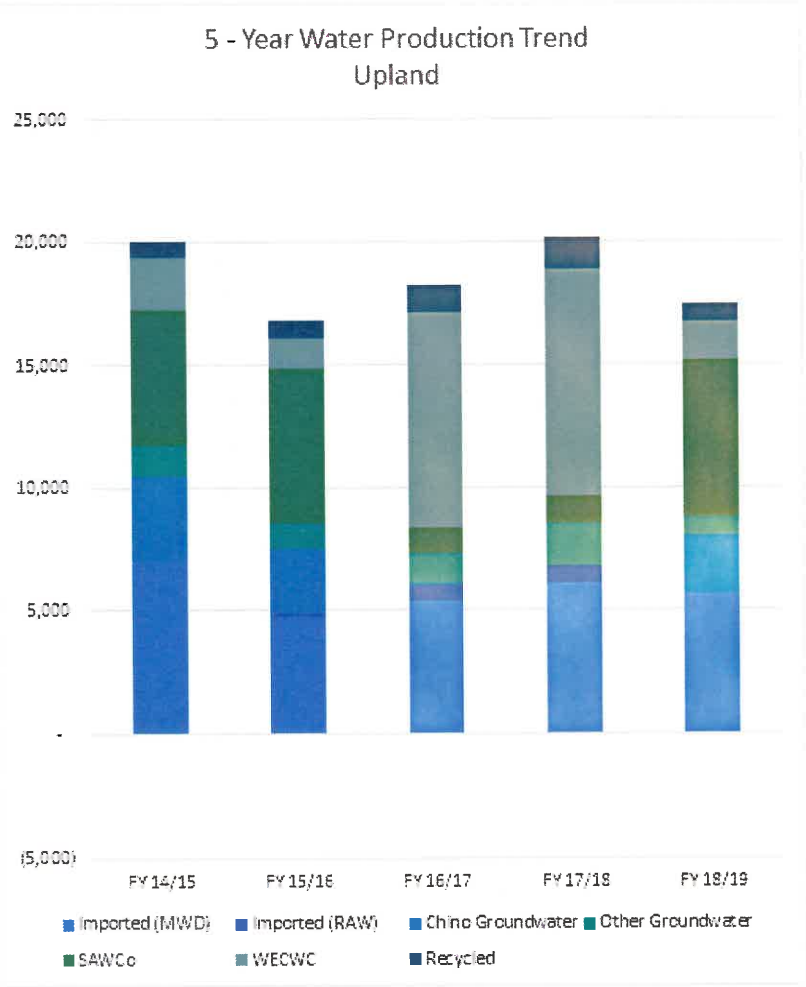
FY 18/19 Water Use Report

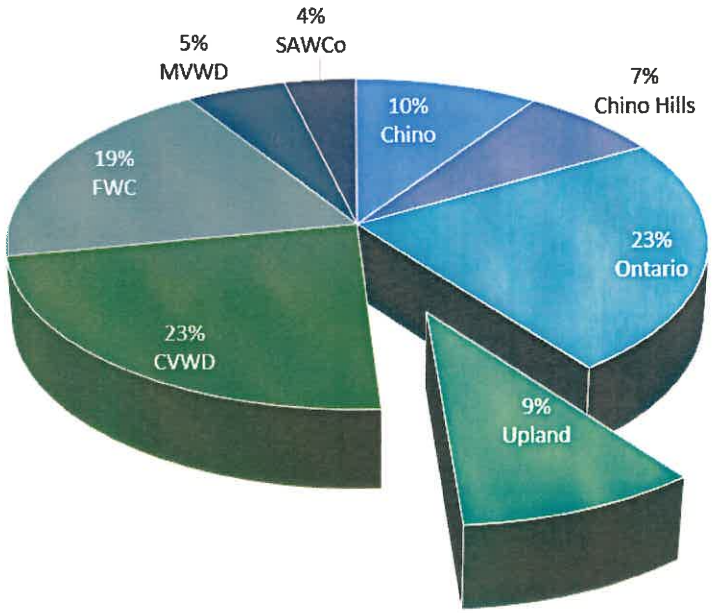
City of Upland



FY 18/19 Water Use Report

City of Upland





In FY 2018/19, The City of Upland used 9% (17,426 AF) of 188,817 AF used in the IEUA service area.

FY 18/19 Water Use Report

City of Upland

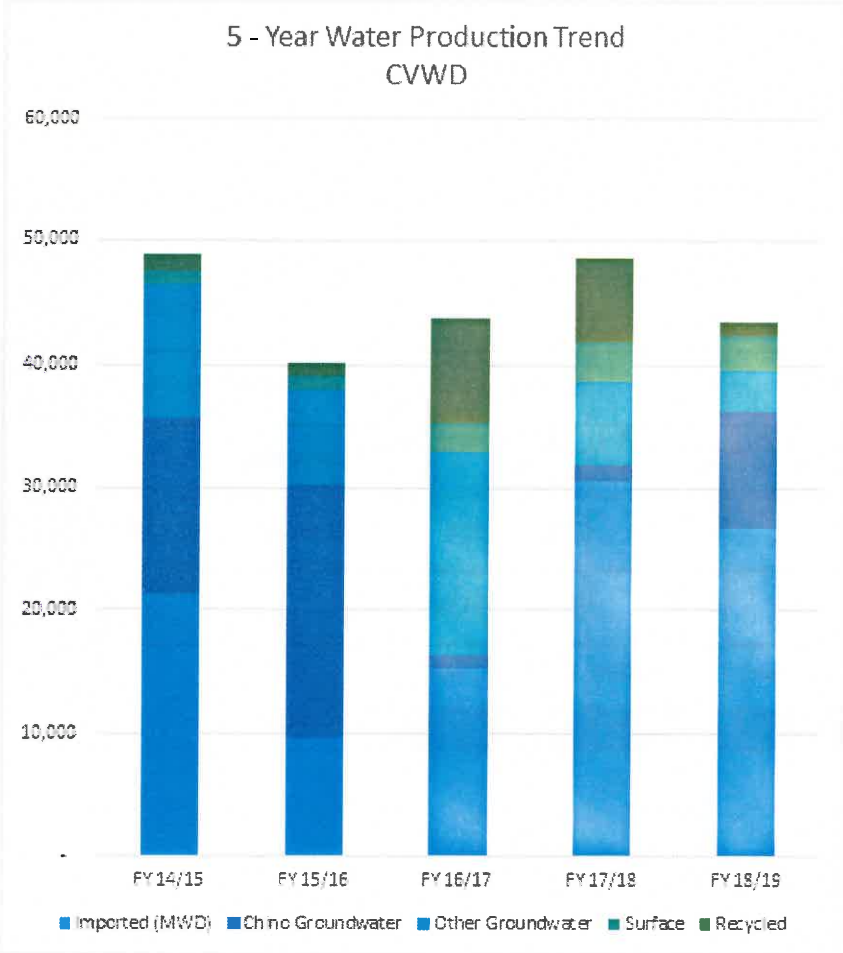
		Total IEUA Service Area Water Use By Agency for FY18-19 (AF)										City of Upland		
		July	August	Septem-ber	October	November	December	January	February	March	April	May	June	Total
Purchases from IEUA	Imported Water (WFA)	955	1035	783	406	678	277	377	284	195	179	183	281	5,633
	Recycle (Direct Use)	120	110	72	95	53	24	11	5	17	69	65	68	709
	Imported Water (RAW)	0.00	0.00	0.00	-24.53	-5.28	-0.16	0.00	0.00	-0.25	0.00	-0.41	-0.31	-31
Subtotal		1,075	1,145	855	476	725	301	389	289	212	248	248	349	6,311
Production	Chino Groundwater	196	232	227	245	331	294	146	35	152	173	162	187	2,381
	Other Groundwater	75	68	64	67	57	54	20	9	30	96	100	121	762
Subtotal		271	299	291	312	388	348	166	44	183	269	262	308	3,142
Purchase from other agencies	SAWCo Water	586	617	658	836	247	312	328	267	377	736	680	732	6,376
	West End	306	290	217	92	87	78	62	49	95	140	110	70	1,596
Subtotal		892	906	876	928	333	391	390	316	472	876	790	803	7,972
Total		2,237	2,351	2,021	1,716	1,447	1,040	945	649	867	1,392	1,300	1,460	17,426

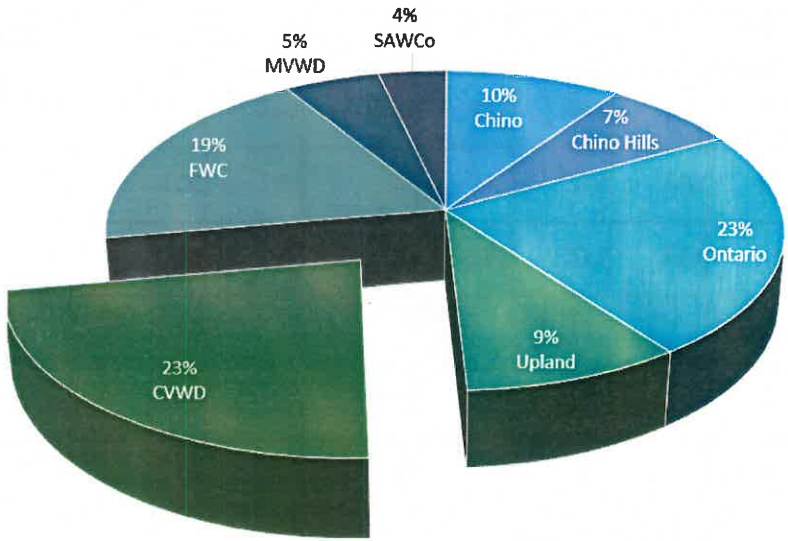
FY 18/19 Water Use Report

Cucamonga Valley Water District

FY 18/19 Water Use Report

Cucamonga Valley Water District





In FY 2018/19, Cucamonga Valley Water District used 23% (43,441) of 188,817 AF used in the IEUA service area.

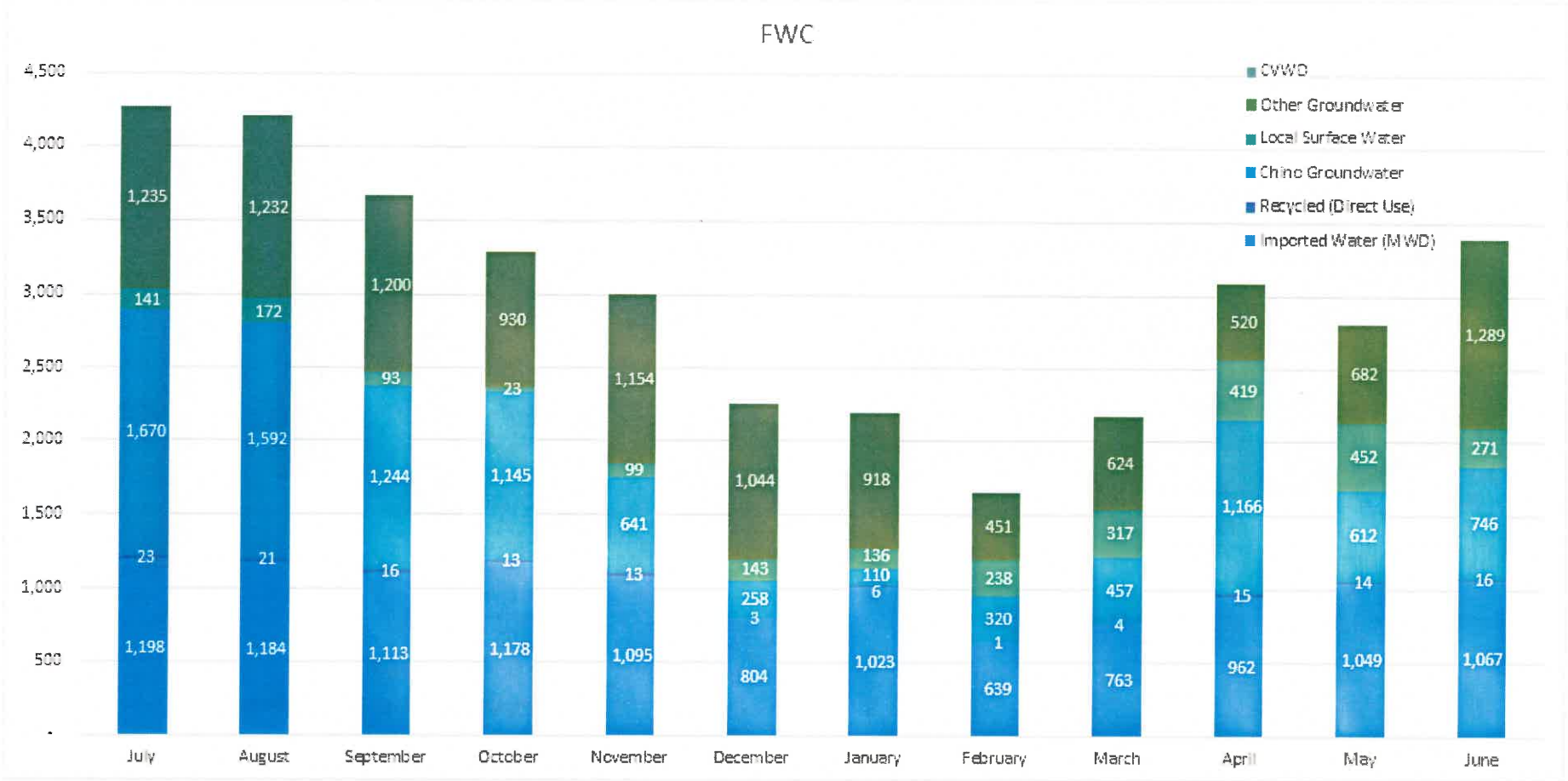
FY 18/19 Water Use Report

Cucamonga Valley Water District

		Total IEUA Service Area Water Use By Agency for FY18-19 (AF)										CVWD		
		July	August	September	October	November	December	January	February	March	April	May	June	Total
Purchases from IEUA	Imported Water (MWD)	3615	3636	3525	3266	2359	0	1483	0	667	2683	2027	3431	26,691
	Recycle (Direct Use)	171	142	104	122	74	32	28	9	30	113	70	99	996
Subtotal		3,786	3,778	3,629	3,388	2,433	32	1,512	9	696	2,796	2,097	3,530	27,687
Production	Chino Groundwater	1017	1023	732	434	957	2109	345	1369	956	131	524	26	9,624
	Local Surface Water	99	82	78	87	86	106	180	25	317	730	469	612	2,871
	Other Groundwater	514	415	276	267	275	312	238	213	175	161	258	156	3,259
Subtotal		1,630	1,520	1,086	788	1,319	2,526	762	1,607	1,447	1,022	1,252	794	15,754
Total		5,416	5,298	4,715	4,177	3,752	2,559	2,274	1,616	2,144	3,818	3,349	4,324	43,441

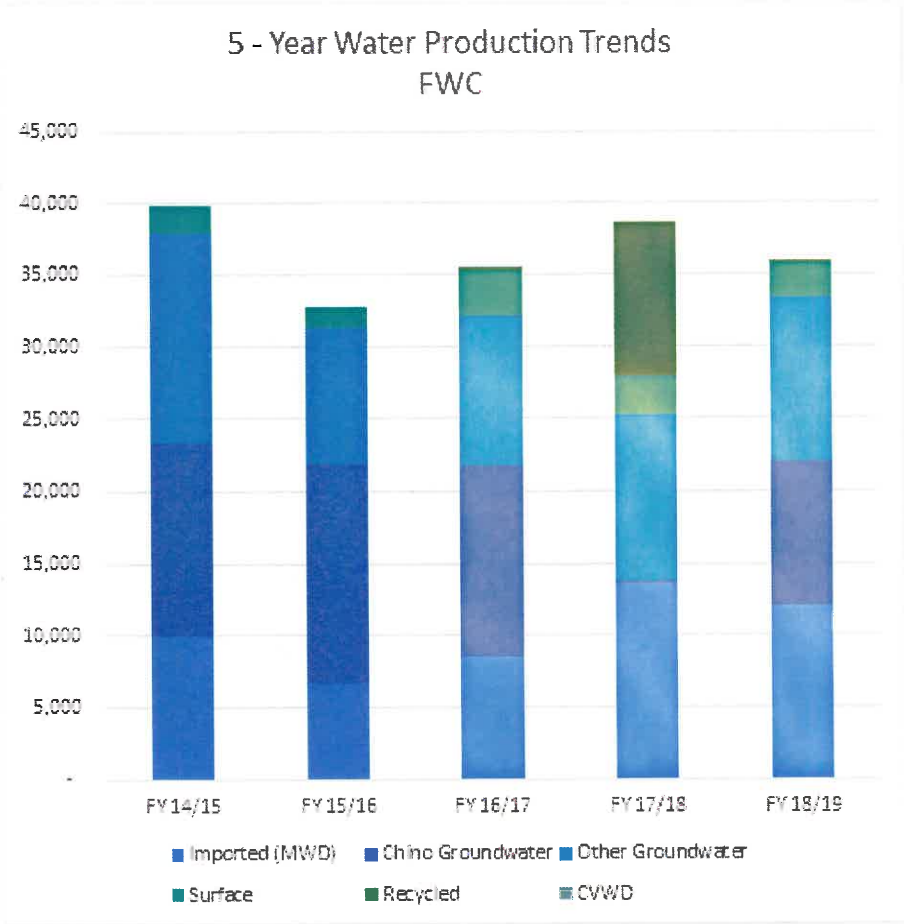
FY 18/19 Water Use Report

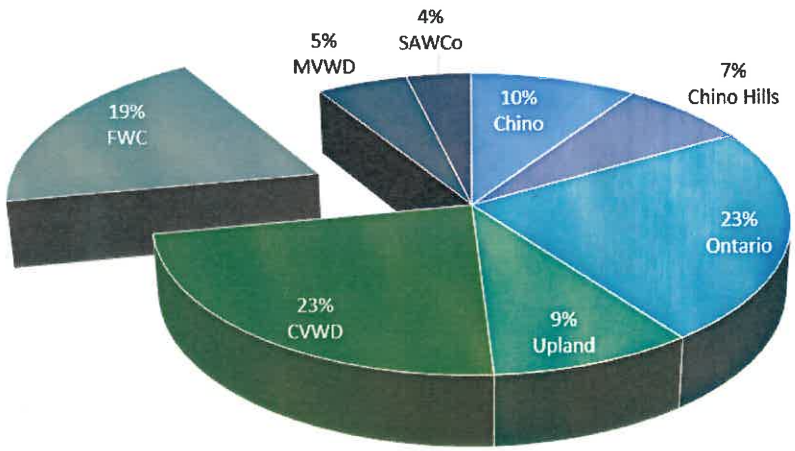
Fontana Water Company



FY 18/19 Water Use Report

Fontana Water Company





In FY 2018/19, Fontana Water Company used 19% (35,962 AF) of 188,817 AF used in the IEUA service area.

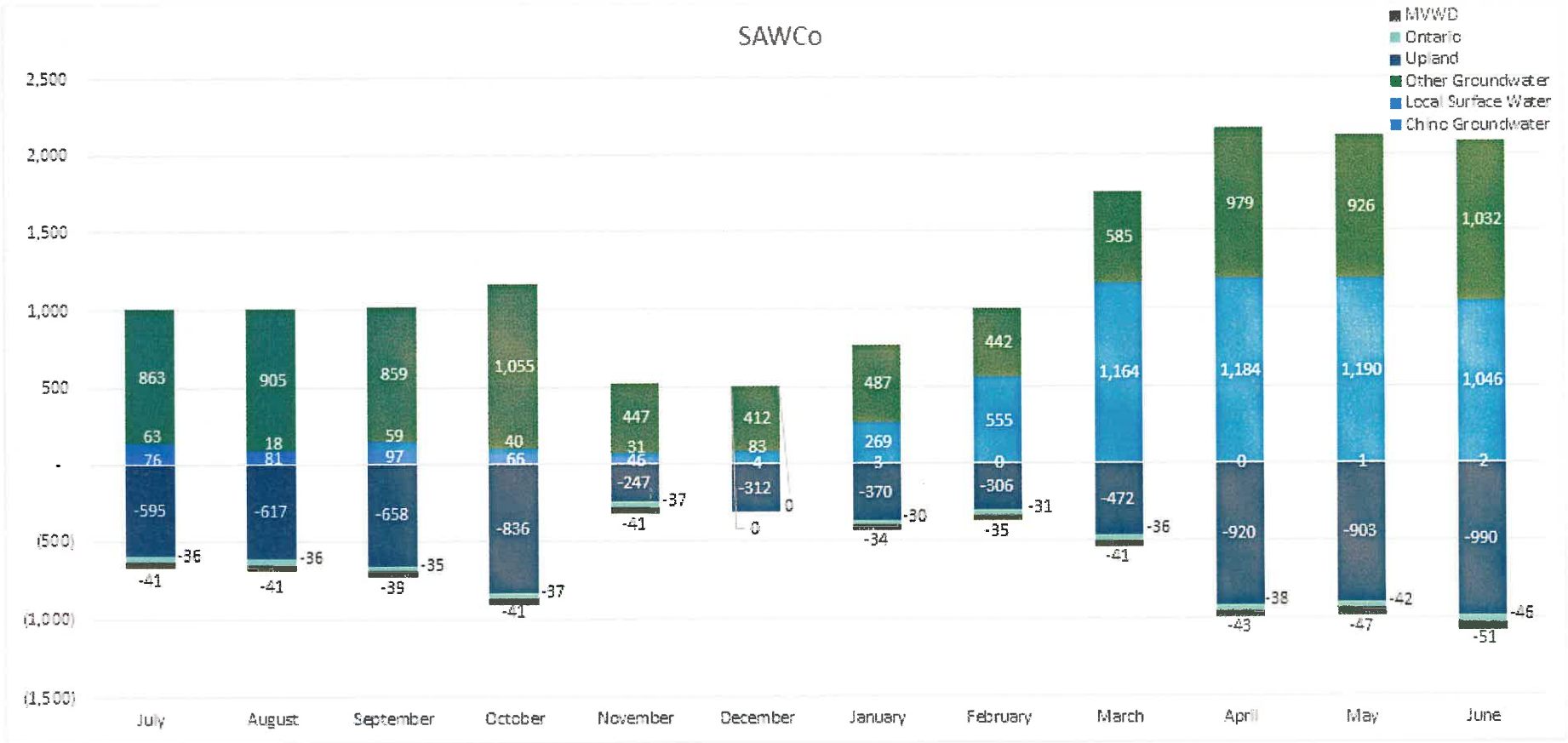
FY 18/19 Water Use Report

Fontana Water Company

		Total IEUA Service Area Water Use By Agency for FY18-19 (AF)										FWC		
		July	August	September	October	November	December	January	February	March	April	May	June	Total
Purchases from IEUA	Imported Water (MWD)	1198	1184	1113	1178	1095	804	1023	639	763	962	1049	1067	12,075
	Recycle (Direct Use)	23	21	16	13	13	3	6	1	4	15	14	16	143
Subtotal		1,221	1,205	1,129	1,191	1,108	806	1,029	640	767	977	1,063	1,083	12,219
Production	Chino Groundwater	1670	1592	1244	1145	641	258	110	320	457	1166	612	746	9,961
	Local Surface Water	141	172	93	23	99	143	136	238	317	419	452	271	2,503
	Other Groundwater	1235	1232	1200	930	1154	1044	918	451	624	520	682	1289	11,280
Subtotal		3,045	2,995	2,536	2,099	1,893	1,445	1,164	1,009	1,399	2,106	1,746	2,306	23,743
Purchase from other agencies	CVWD	0	0	0	0	0	0	0	0	0	0	0	0	-
Subtotal		-	-	-	-	-	-	-	-	-	-	-	-	-
Total		4,267	4,201	3,665	3,289	3,001	2,251	2,193	1,648	2,165	3,083	2,809	3,389	35,962

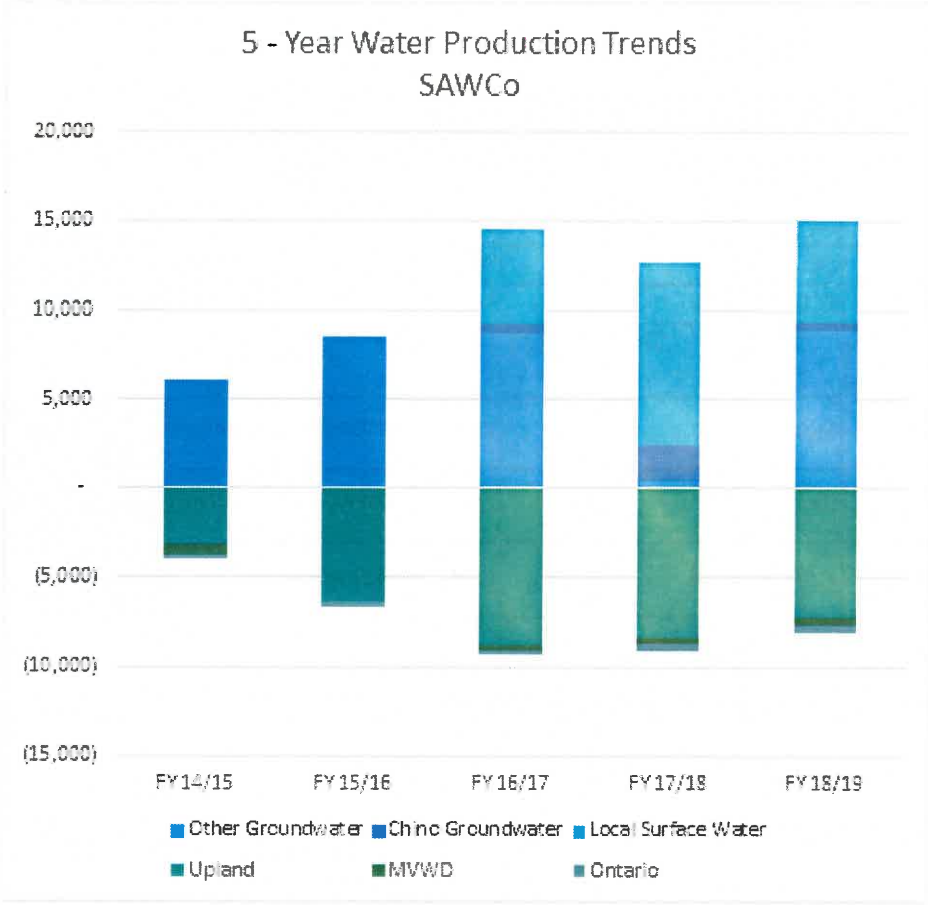
FY 18/19 Water Use Report

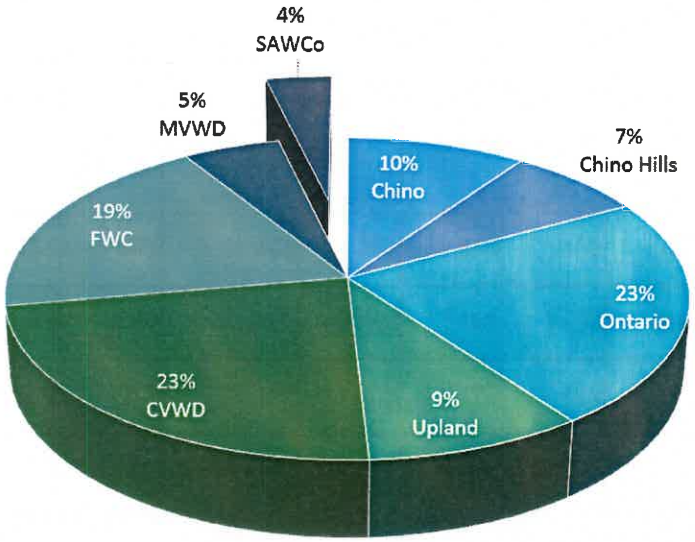
San Antonio Water Company



FY 18/19 Water Use Report

San Antonio Water Company





In FY 2018/19, San Antonio Water Company used 4% (6,989AF) of 188,817 AF used in the IEUA service area.

FY 18/19 Water Use Report

San Antonio Water Company

		Total IEUA Service Area Water Use By Agency for FY18-19 (AF)										SAWCo		
		July	August	September	October	Novem-ber	Decem-ber	January	February	March	April	May	June	Total
Production	Chino Groundwater	76.3	80.9	97.2	65.7	46.0	3.6	3.1	0.0	0.0	0.5	0.6	1.9	376
	Local Surface Water	63	18	59	40	31	83	269	555	1164	1184	1190	1046	5,701
	Other Groundwater	863	905	859	1055	447	412	487	442	585	979	926	1032	8,993
Subtotal		1,002	1,004	1,015	1,161	524	498	760	997	1,749	2,164	2,116	2,080	15,070
Sales to other agencies	Upland	-595	-617	-658	-836	-247	-312	-370	-306	-472	-920	-903	-990	-7225
	Ontario	-36	-36	-35	-37	-37	0	-30	-31	-36	-38	-42	-46	-403
	MVWD	-41	-41	-39	-41	-41	0	-34	-35	-41	-43	-47	-51	-454
Subtotal		-672	-694	-732	-914	-324	-312	-434	-372	-549	-1001	-992	-1086	-8081
Total		331	310	283	248	199	186	326	625	1,200	1,163	1,125	994	6,989

APPENDIX A

Five year Historical Data Summary

FY 17-18		Total IEUA Service Area Water Use by Retail Agency for FY 17-18 (AFY)								
		CHINO	CHINO HILLS	ONTARIO	UPLAND	CVWD	FWC	MVWD	SAWCo	TOTAL
Purchases from IEUA	Imported Water (MWD)	4,292	1,500	3,211	6,073	30,559	13,642	9,935	0	69,212
	Recycled (Direct Use)	6,480	1,858	9,654	706	1,263	176	318	0	20,455
Subtotal		**10,772**	**3,358**	**12,865**	**6,779**	**31,822**	**13,818**	**10,253**	**0**	**89,667**
Production	Chino Groundwater	5,149	2,839	26,109	1,764	6,819	11,392	8,755	428	63,255
	Other Groundwater	0	0	0	1,112	6,737	10,725	0	10,245	28,819
	Local Surface Water	0	0	0	0	3,195	2,735	0	2,020	7,950
Subtotal		**5,149**	**2,839**	**26,109**	**2,876**	**16,751**	**24,852**	**8,755**	**12,693**	**100,024**
Purchases from Other Agencies	CDA	4,999	4,211	4,032	0	0	0	0	0	13,242
	MVWD*	0	4,763	0	0	0	0	0	0	4,763
	SAWCo Water	0	0	341	9,197	0	0	0	0	9,538
	West End	0	0	0	1,298	0	0	0	0	1,298
	CVWD	0	0	0	0	0	0	0	0	0
Subtotal		**4,999**	**8,974**	**4,373**	**10,495**	**0**	**0**	**0**	**0**	**28,841**
Sales to Other Agencies*	Chino Hills**	0	0	0	0	0	0	-6,064	0	-6,064
	Ontario	0	0	0	0	0	0	0	-232	-232
	Upland	0	0	0	0	0	0	0	-8,401	-8,401
	MVWD	0	0	0	0	0	0	0	-444	-444
Subtotal		**0**	**0**	**0**	**0**	**0**	**0**	**-6,064**	**-9,077**	**-15,141**
Total		20,920	15,171	43,347	20,150	48,573	38,670	12,944	3,616	203,391

FY 16-17		Total IEUA Service Area Water Use by Retail Agency for FY 16-17 (AFY)								
		CHINO	CHINO HILLS	ONTARIO	UPLAND	CVWD	FWC	MVWD	SAWCo	TOTAL
Purchases from IEUA	Imported Water (MWD)	3,469	1,954	2,364	5,406	15,288	8,510	5,105	0	42,096
	Recycled (Direct Use)	6,447	1,838	8,352	652	1,056	52	306	0	18,703
Subtotal		**9,916**	**3,792**	**10,716**	**6,058**	**16,344**	**8,562**	**5,411**	**0**	**60,799**
Production	Chino Groundwater	4,972	2,245	24,672	1,260	16,549	13,251	7,786	537	71,272
	Other Groundwater	0	0	0	1,026	8,386	10,338	0	8,739	28,490
	Local Surface Water	0	0	0	0	2,448	3,230	0	5,282	10,960
Subtotal		**4,972**	**2,245**	**24,672**	**2,286**	**27,384**	**26,818**	**7,786**	**14,558**	**110,721**
Purchases from Other Agencies	CDA	5,008	4,206	3,077	0	0	0	0	0	12,292
	MVWD*	0	4,237	0	0	0	0	0	0	4,237
	SAWCo Water	0	0	171	8,791	0	0	0	0	8,961
	West End	0	0	0	1,068	0	0	0	0	1,068
	CVWD	0	0	0	0	0	39	0	0	39
Subtotal		**5,008**	**8,444**	**3,248**	**9,858**	**0**	**39**	**0**	**0**	**26,597**
Sales to Other Agencies*	Chino Hills**	0	0	0	0	0	0	-4,818	0	-4,818
	Ontario	0	0	0	0	0	0	0	-171	-171
	Upland	0	0	0	0	0	0	0	-8,791	-8,791
	MVWD	0	0	0	0	0	0	0	-278	-278
Subtotal		**0**	**0**	**0**	**0**	**0**	**0**	**-4,818**	**-9,240**	**-14,058**
	Total	19,896	14,481	38,636	18,203	43,728	35,419	8,379	5,318	184,060

FY 15-16		Total IEUA Service Area Water Use by Retail Agency for FY 15-16 (AFY)								
		CHINO	CHINO HILLS	ONTARIO	UPLAND	CVWD	FWC	MVWD	SAWCo	TOTAL
Purchases from IEUA	Imported Water (MWD)	2,843	110	2,755	4,890	9,712	6,613	4,799	0	31,722
	Recycled (Direct Use)	7,217	1,410	7,566	719	1,146	0	278	0	18,336
Subtotal		10,060	1,520	10,321	5,609	10,857	6,613	5,078	0	50,058
Production	Chino Groundwater	5,104	1,630	22,755	2,601	20,524	15,317	8,371	0	76,302
	Other Groundwater	0	0	0	1,054	7,783	9,253	0	8,517	26,607
	Local Surface Water	0	0	0	0	1,002	1,497	0	0	2,499
Subtotal		5,104	1,630	22,755	3,655	29,309	26,067	8,371	8,517	105,408
Purchases from Other Agencies	CDA	5,000	4,201	2,682	0	0	0	0	0	11,883
	MVWD	0	5,642	0	0	0	0	0	0	5,642
	SAWCo Water	0	0	338	6,297	0	0	0	0	6,635
	West End	0	0	0	1,246	0	0	0	0	1,246
Subtotal		5,000	9,843	3,020	7,543	0	0	0	0	25,406
Sales to Other Agencies*	Chino Hills	0	0	0	0	0	0	-5,437	0	-5,437
	Ontario	0	0	0	0	0	0	0	-338	-338
	Upland	0	0	0	0	0	0	0	-6,297	-6,297
Subtotal		0	0	0	0	0	0	-5,437	-6,635	-12,072
	Total	20,163	12,993	36,096	16,807	40,166	32,681	8,012	1,882	168,800

FY 14-15		Total IEUA Service Area Water Use by Retail Agency for FY 14-15 (AFY)								
		CHINO	CHINO HILLS	ONTARIO	UPLAND	CVWD	FWC	MVWD	SAWCo	TOTAL
Purchases from IEUA	Imported Water (MWD)	2,830	2,494	10,703	7,047	21,306	9,994	4,530	0	58,905
	Recycled (Direct Use)	8,324	1,827	8,018	636	1,400	0	308	0	20,513
Subtotal		**11,154**	**4,321**	**18,721**	**7,684**	**22,705**	**9,994**	**4,838**	**0**	**79,418**
Production	Chino Groundwater	6,497	2,904	17,426	3,416	14,490	13,344	8,407	0	66,485
	Other Groundwater	0	0	0	1,291	10,631	14,500	0	6,091	32,513
	Local Surface Water	0	0	0	0	1,076	1,969	0	0	3,044
Subtotal		**6,497**	**2,904**	**17,426**	**4,708**	**26,196**	**29,813**	**8,407**	**6,091**	**102,042**
Purchases from Other Agencies	CDA	5,232	4,426	4,827	0	0	0	0	0	14,485
	MVWD	0	4,436	0	0	0	0	0	0	4,436
	SAWCo Water	0	0	172	5,461	0	0	612	0	6,246
	West End	0	0	0	2,139	0	0	0	0	2,139
Subtotal		**5,232**	**8,862**	**5,000**	**7,601**	**0**	**0**	**612**	**0**	**27,306**
Sales to Other Agencies	Chino Hills	0	0	0	0	0	0	-4,439	0	-4,439
	MVWD	0	0	0	0	0	0	0	-612	-612
	Ontario	0	0	0	0	0	0	0	-172	-172
	Upland	0	0	0	0	0	0	0	-3,177	-3,177
Subtotal		**0**	**0**	**0**	**0**	**0**	**0**	**-4,439**	**-3,961**	**-8,400**
	Total	**22,884**	**16,087**	**41,147**	**19,992**	**48,902**	**39,807**	**9,419**	**2,129**	**200,366**

FY 13-14		Total IEUA Service Area Water Use by Retail Agency for FY 13-14 (AFY)								
		CHINO	CHINO HILLS	ONTARIO	UPLAND	CVWD	FWC	MVWD	SAWCo	TOTAL
Purchases from IEUA	Imported Water (MWD)	4,342	962	9,904	7,265	28,825	9,792	5,965	0	67,055
	Recycled (Direct Use)	8,916	2,002	8,428	869	1,652	0	339	0	22,205
Subtotal		**13,258**	**2,964**	**18,332**	**8,134**	**30,477**	**9,792**	**6,304**	**0**	**89,261**
Production	Chino Groundwater	6,725	2,138	21,723	2,822	16,122	15,378	12,522	0	77,430
	Other Groundwater	0	0	0	704	8,324	17,454	0	12,610	39,092
	Local Surface Water	0	0	0	0	1,254	2,405	0	0	3,658
Subtotal		**6,725**	**2,138**	**21,723**	**3,526**	**25,700**	**35,236**	**12,522**	**12,610**	**120,180**
Purchases from Other Agencies	CDA	5,198	4,396	5,141	0	0	0	0	0	14,735
	CVWD	0	0	0	0	0	757	0	0	757
	MVWD	0	8,427	0	0	0	0	0	0	8,427
	SAWCo Water	0	0	0	9,662	0	0	400	0	10,063
	West End	0	0	0	2,653	0	0	0	0	2,653
Subtotal		**5,198**	**12,824**	**5,141**	**12,316**	**0**	**757**	**400**	**0**	**36,636**
Sales to Other Agencies	Chino Hills	0	0	0	0	0	0	-8,428	0	-8,428
	MVWD	0	0	0	0	0	0	0	-400	-400
	Upland	0	0	0	0	0	0	0	-9,662	-9,662
Subtotal		**0**	**0**	**0**	**0**	**0**	**0**	**-8,428**	**-10,063**	**-18,490**
	Total	**25,181**	**17,926**	**45,196**	**23,975**	**56,177**	**45,785**	**10,798**	**2,547**	**227,586**

APPENDIX B

Definitions

Chino Basin Groundwater – Water pumped from the Chino Basin Aquifer and treated by retail water agencies for all potable uses within the IEUA service area.

Desalter Water – Water pumped from Chino Basin Desalter I owned and operated by the Chino Basin Desalter Authority (CDA). Groundwater, with high levels of dissolved solids, is treated and distributed to several retail agencies within the IEUA's service area for potable uses.

Imported Water (MWD) – Water from Northern California and supplied by the Metropolitan Water District of Southern California (MWD), and water transferred from other groundwater basins to retail water agencies operating within the IEUA service area. All Tier I and Tier II deliveries are included in this category.

Other Groundwater – Water produced from other local groundwater basins to retail water agencies operating within IEUA's service area.

Surface Water – Water collected by retail water agencies from mountain runoff and storm flows, which is collected and treated for potable use.

Recycled Water – Title 22 recycled water produced by the IEUA at its water recycling plants for distribution through separate pipelines to retail water agency customers for all non-potable uses.

WECWC– West End Consolidated Water Company supplies some water to the City of Upland.

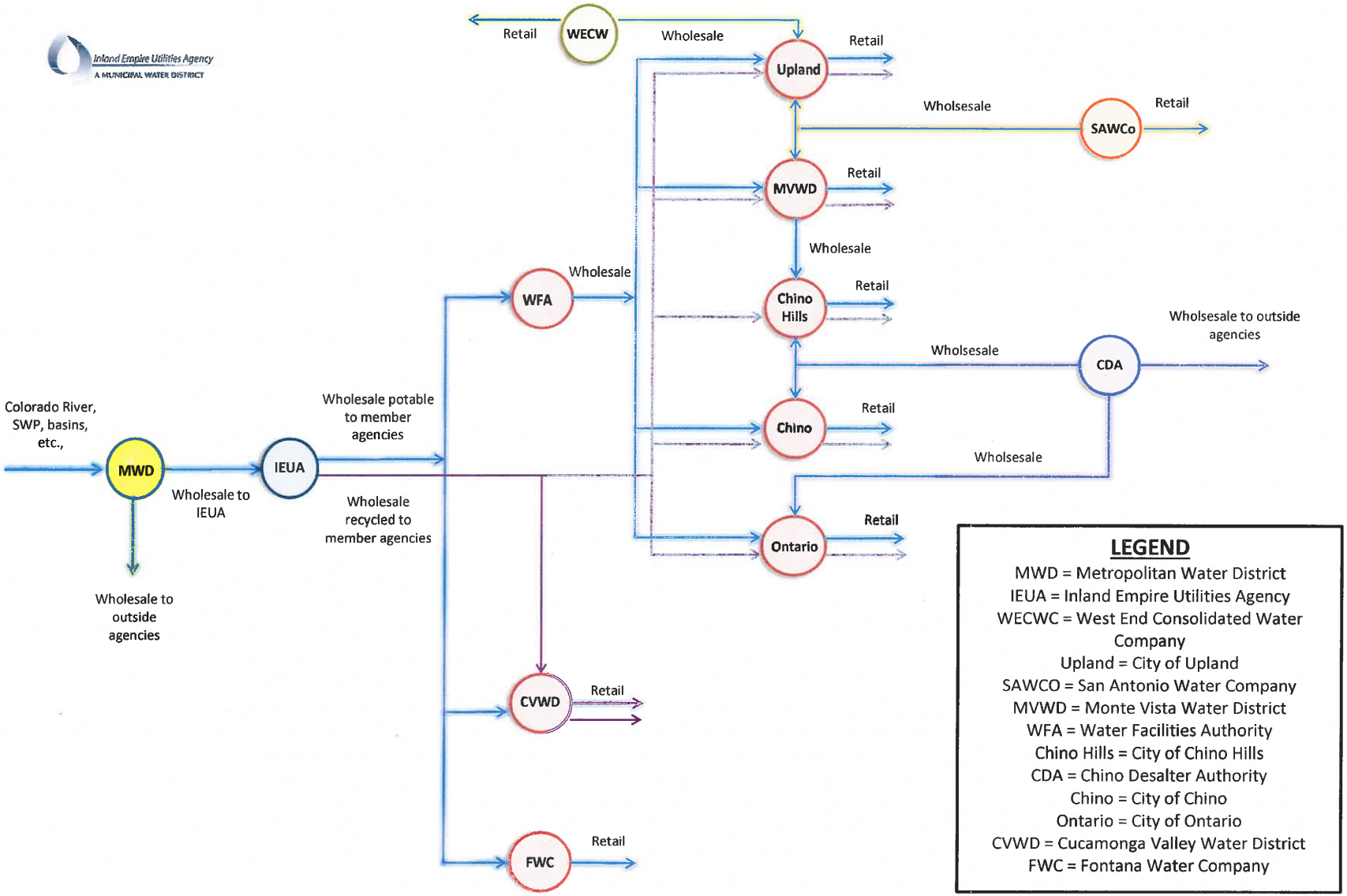
WVWD – West Valley Water District

Production – Amount of water Agencies produce from their groundwater, surface water, or other water supplies that they have rights or jurisdiction over.

Use – Amount of water used within a member agency's jurisdiction, as reported by them to IUEA.

APPENDIX C

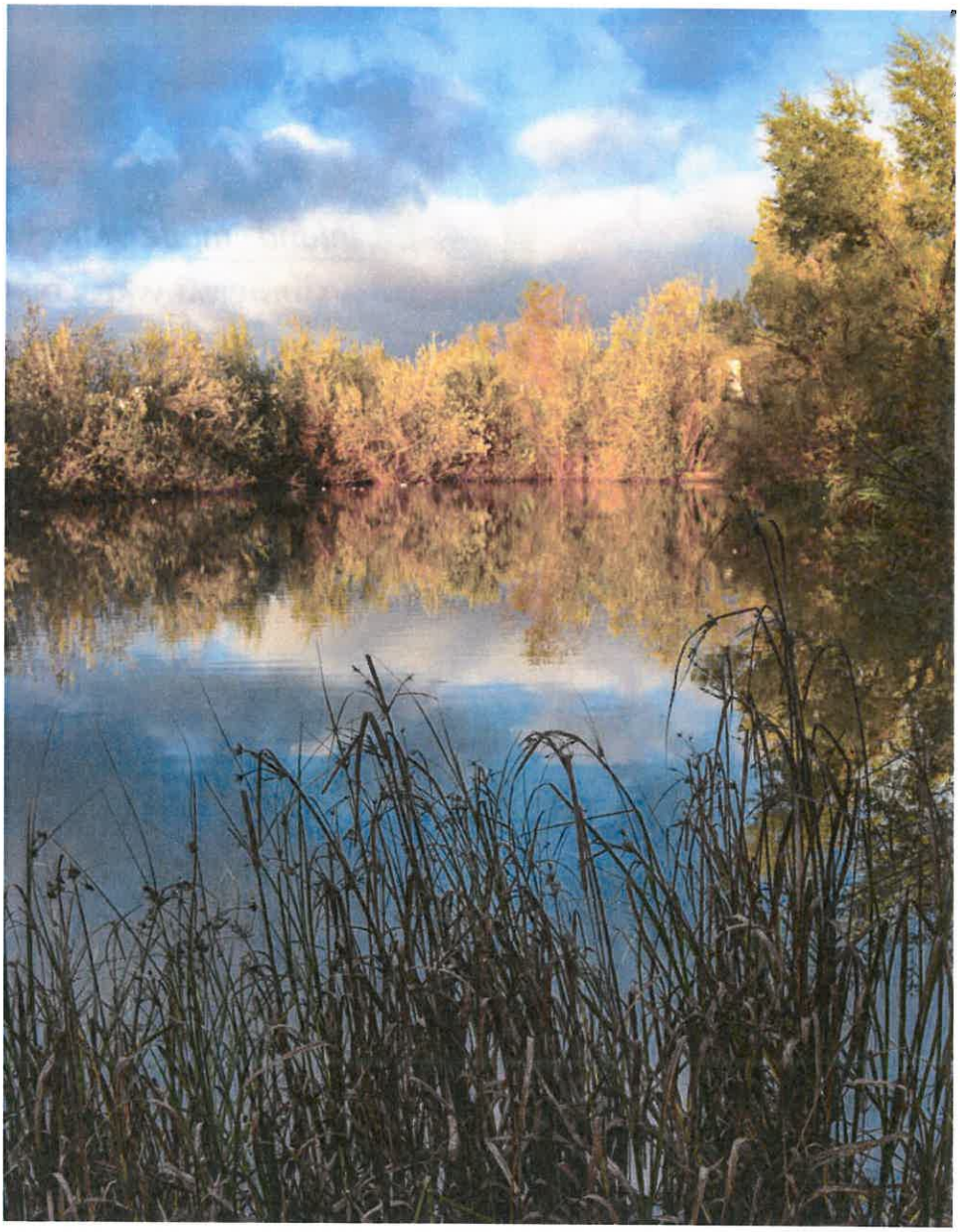
Member Agency Organizational Chart


Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT
Retail
WECW
Wholesale
Upland
Retail
Wholsesale
SAWCo
Retail
MVWD
Retail
Wholesale
WFA
Wholesale
Chino Hills
Retail
Wholesale to outside agencies
Wholesale
CDA
Colorado River, SWP, basins, etc.,
MWD
Wholesale to IEUA
IEUA
Wholesale potable to member agencies
Wholesale recycled to member agencies
Chino
Retail
Wholesale
Wholesale to outside agencies
Ontario
Retail
CVWD
Retail
FWC
Retail
LEGEND
MWD = Metropolitan Water District
IEUA = Inland Empire Utilities Agency
WECWC = West End Consolidated Water Company
Upland = City of Upland
SAWCO = San Antonio Water Company
MVWD = Monte Vista Water District
WFA = Water Facilities Authority
Chino Hills = City of Chino Hills
CDA = Chino Desalter Authority
Chino = City of Chino
Ontario = City of Ontario
CVWD = Cucamonga Valley Water District
FWC = Fontana Water Company

2019

IEUA FY 2018-2019 Recycled Water Annual Report

Water Smart
Thinking in Terms of Tomorrow



Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT


Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

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INTRODUCTION

The 2018/19 Recycled Water Annual Report for the Inland Empire Utilities Agency (IEUA) recycled water program provides annual delivery data by IEUA retail member agencies, by usage types, and by customers. The 2018/19 report is for IEUA's fiscal year, which runs from July 2018 to June 2019. The report summarizes the program history, describes recent construction, and gives an overview of the IEUA treatment plants. IEUA provides wastewater treatment for its seven member agencies: the Cities of Chino, Chino Hills, Fontana, Montclair, Ontario, and Upland and Cucamonga Valley Water District. Recycled water from the treatment process is generated and delivered to its retail water agencies for use in the IEUA service area.

IEUA owns and operates five wastewater recycling facilities that serve over 875,000 people. **Figure 1** shows the IEUA service area, its member agencies, and the locations of IEUA's treatment plants. Of the five plants, four produce tertiary-treated, Title 22-quality recycled water. Of the treatment plants, RP-2 does not have any liquid treatment processes, and as such does not produce any recycled water. The general layout and capacities of the water recycling plants are discussed in the last section of the report. **Appendices A** and **B** contain the recycled water effluent monitoring data and recycled water compliance data, respectively, for the 2018 calendar year for the four recycled water facilities.

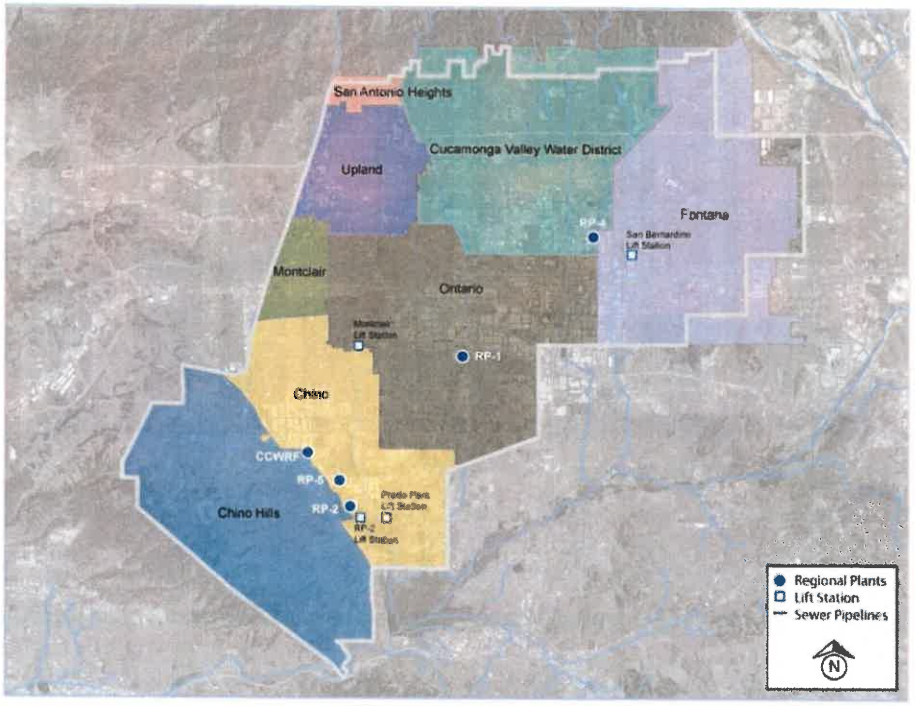

Figure 1 - IEUA Service Area

DEMANDS

During 2018/19, the average recycled water supply from IEUA's facilities was approximately 49.7 million gallons per day (MGD), or 55,666 acre-feet per year (AFY). Recycled water groundwater recharge usage was 11,542 AFY and recycled water direct usage was 16,803 AFY. Total recycled water demands during 2018/19 were 28,345 acre-feet (AF), a decrease by 18% from the previous fiscal year. Recycled water recharge was down 15% and direct use was down 20%. 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 51 percent of the available supply. During the peak demand summer months (July through September), the total recycled water demands were approximately 87 percent of the available supply.

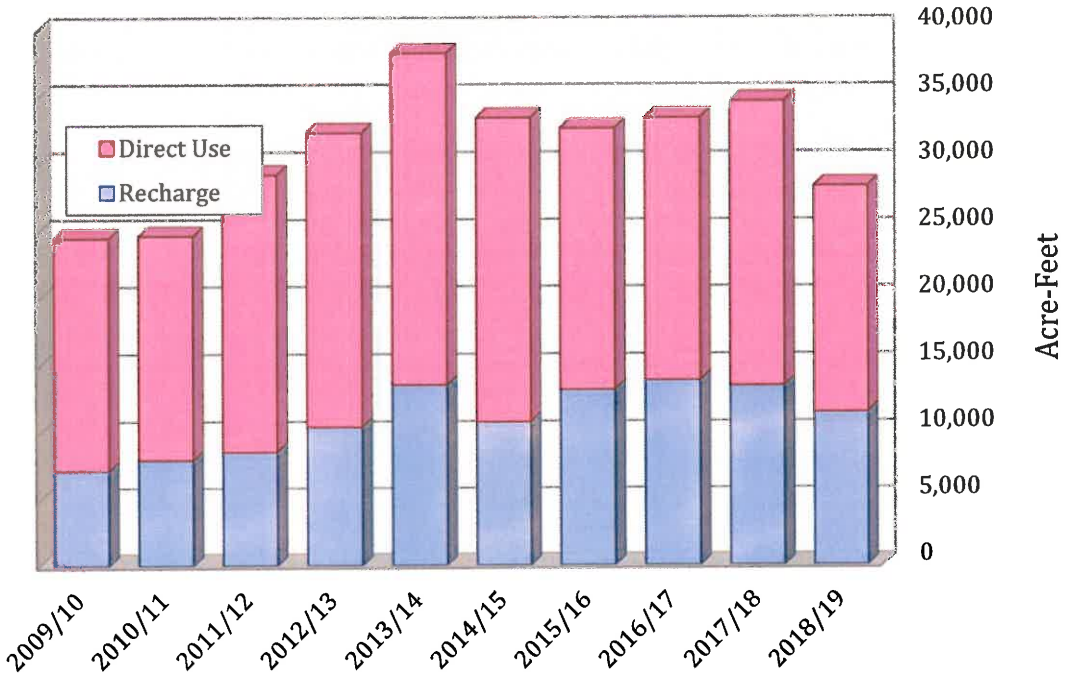

Figure 2 – Historical Recycled Water Direct Use and Groundwater Recharge

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 2018/19 recycled water demand by use type.

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

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

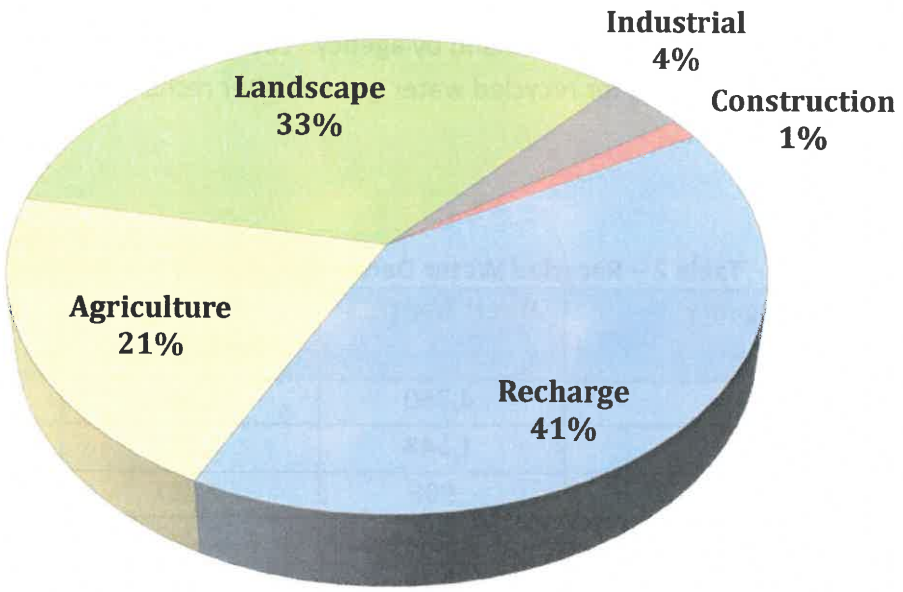

Figure 3 – Recycled Water Demand by Use Type for 2018/19

RETAIL DEMANDS

IEUA is the wholesale recycled water provider to its member agencies, which in turn are retail agencies that directly serve their customers. IEUA member agencies which served recycled water in 2018/19 include:

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

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

Table 2 shows the 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 IEUA's Regional Sewage Service Contract.

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

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

CUSTOMERS DEMANDS

Table 3 lists the top ten largest direct reuse customer sites for the fiscal year (excluding groundwater recharge sites). During 2018/19, ninety-nine (99) new connections were made to the recycled water system with a total new demand estimated at 596 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 2018/19

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

ECONOMIC AND ENVIRONMENTAL IMPACTS

The 28,345 AF of recycled water used during the fiscal year is the equivalent of the water supply for roughly 56,690 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 2018/19 was $480/AF for direct usage and $540/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 joined forces 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 basins (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 5,000 AF in 2004/05 to 38,251 AF in FY 2013/14. Over the past five fiscal years, recycled water demand has fallen slightly, which has been primarily driven by land use conversion from agriculture to urban.

TREATMENT PLANTS

IEUA owns and operates five regional water recycling facilities: RP-1, RP-2, RP-4, RP-5, and CCWRF. Of the treatment plants, RP-2 does not have any liquid treatment processes, and as such does not produce any recycled water. The combined treatment capacity of the remaining four plants is approximately 85 MGD. With the planned plant expansion of RP-5 over the coming years, an additional 15 MGD average capacity will be achieved, which will increase the combined treatment capacity to approximately 100 MGD.

APPENDIX A

RECYCLED WATER

EFFLUENT MONITORING DATA

FOR CALENDAR YEAR 2018

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-18	4.7	0.0	6.0	783	672	1003	6.9	6.7	7.3	<2	<2	2	0.5	<2	<2	<2	0.5	5.7	5.2	6.3	487	428	514	6.0	3.4	8.7	7.1	5.7	8.7	<0.1	<0.1	<0.1
Feb-18	5.9	3.8	7.0	839	682	912	7.0	6.7	7.1	<2	<2	<2	0.5	<2	<2	<2	0.5	5.4	4.5	6.0	513	504	526	5.1	2.9	6.7	5.9	4.5	6.6	<0.1	<0.1	<0.1
Mar-18	5.0	3.3	6.0	853	801	929	6.9	6.7	7.1	<2	<2	<2	0.5	<2	<2	<2	0.4	5.9	5.2	6.6	529	514	552	4.4	2.6	6.0	5.4	4.4	6.4	<0.1	<0.1	<0.1
Apr-18	6.0	5.9	6.1	839	682	912	7.1	6.6	7.2	<2	<2	2	0.4	<2	<2	<2	0.5	6.1	5.4	6.8	508	490	530	4.2	3.4	5.3	5.0	4.1	5.3	<0.1	<0.1	<0.1
May-18	3.0	0.0	6.0	894	849	951	7.0	6.6	7.1	<2	<2	2	0.4	<2	<2	<2	0.5	6.6	5.9	7.6	532	508	554	4.1	3.0	5.4	5.3	5.0	6.1	<0.1	<0.1	0.2
Jun-18	2.0	0.0	3.1	907	866	939	7.1	6.9	7.2	<2	<2	2	0.5	<2	<2	<2	0.5	6.4	5.6	9.5	538	508	566	4.1	2.7	6.0	5.1	4.3	6.5	<0.1	<0.1	<0.1
Jul-18	3.0	0.5	4.2	880	844	943	7.2	6.8	8.1	<2	<2	<2	0.4	<2	<2	<2	0.4	6.2	5.7	6.6	518	504	536	4.6	3.1	6.5	5.2	4.5	6.2	<0.1	<0.1	<0.1
Aug-18	3.9	3.0	6.0	865	825	896	7.1	6.9	7.2	<2	<2	<2	0.5	<2	<2	<2	0.5	5.9	5.6	6.3	510	504	524	4.4	3.1	5.3	5.4	5.0	5.9	<0.1	<0.1	<0.1
Sep-18	3.9	2.0	6.8	880	843	921	7.0	6.9	7.2	<2	<2	<2	0.5	<2	<2	<2	0.5	5.7	5.1	6.4	511	494	522	4.9	4.3	5.6	5.8	5.5	6.1	<0.1	<0.1	<0.1
Oct-18	3.2	0.9	5.1	935	884	1044	7.0	6.8	7.2	<2	<2	<2	0.6	<2	<2	<2	0.5	5.9	5.4	6.3	529	512	554	4.3	3.0	6.0	6.0	5.3	6.8	<0.1	<0.1	<0.1
Nov-18	2.8	1.8	4.1	928	889	966	7.1	6.9	7.3	<2	<2	<2	0.7	<2	<2	<2	0.5	5.9	5.5	6.5	536	526	550	5.2	4.8	5.6	6.0	5.6	6.3	<0.1	<0.1	0.1
Dec-18	0.9	0.0	3.5	900	873	923	7.1	6.9	7.3	<2	<2	<2	0.5	<2	<2	<2	0.5	5.8	5.2	6.4	519	506	532	4.6	3.5	5.5	5.5	4.3	6.5	<0.1	<0.1	<0.1
Avg	**3.7**	**1.8**	**5.3**	**875**	**809**	**945**	**7.0**	**6.8**	**7.3**	**<2**	**<2**	**<2**	**0.5**	**<2**	**<2**	**<2**	**0.5**	**6.0**	**5.4**	**6.8**	**519**	**500**	**538**	**4.7**	**3.3**	**6.0**	**5.6**	**4.9**	**6.5**	**<0.1**	**<0.1**	**<0.1**
Min	**0.9**	**0.0**	**3.1**	**783**	**672**	**896**	**6.9**	**6.6**	**7.1**	**<2**	**<2**	**<2**	**0.4**	**<2**	**<2**	**<2**	**0.4**	**5.4**	**4.5**	**6.0**	**487**	**428**	**514**	**4.1**	**2.6**	**5.3**	**5.0**	**4.1**	**5.3**	**<0.1**	**<0.1**	**<0.1**
Max	**6.0**	**5.9**	**7.0**	**935**	**889**	**1044**	**7.2**	**6.9**	**8.1**	**<2**	**<2**	**2**	**0.7**	**<2**	**<2**	**<2**	**0.5**	**6.6**	**5.9**	**9.5**	**538**	**526**	**566**	**6.0**	**4.8**	**8.7**	**7.1**	**5.7**	**8.7**	**<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-18	19.6	6.2	33.5	636	571	702	7.1	6.6	7.6	<2	<2	2	0.5	<2	<2	2	0.5	5.5	5.1	6.3	464	452	476	5.2	3.4	8.1	5.9	5.9	5.9	<0.1	<0.1	<0.1
Feb-18	8.7	0.6	24.3	722	671	834	6.8	6.7	7.0	<2	<2	<2	0.5	<2	<2	<2	0.5	5.3	4.8	6.0	493	480	508	4.9	3.1	6.9	6.5	6.5	6.5	<0.1	<0.1	<0.1
Mar-18	23.1	4.4	31.2	695	651	750	6.8	6.6	7.0	<2	<2	<2	0.5	<2	<2	<2	0.5	5.8	4.1	6.2	496	482	510	3.7	2.2	5.4	6.0	6.0	6.0	<0.1	<0.1	0.1
Apr-18	3.2	0.3	6.8	706	662	772	6.9	6.6	7.2	<2	<2	4	0.5	<2	<2	<2	0.5	5.9	5.2	6.8	497	476	520	4.4	3.3	6.1	5.8	5.8	5.8	<0.1	<0.1	<0.1
May-18	4.1	0.2	10.5	700	657	860	6.9	6.6	7.2	<2	<2	2	0.4	<2	<2	<2	0.5	6.4	5.2	8.0	501	492	512	4.1	2.6	5.5	6.2	6.2	6.2	<0.1	<0.1	0.1
Jun-18	2.7	0.1	10.1	694	628	863	6.9	6.7	7.2	<2	<2	<2	0.5	<2	<2	3	0.5	6.0	5.3	6.7	511	496	548	3.9	2.6	5.3	4.6	4.6	4.6	<0.1	<0.1	<0.1
Jul-18	0.8	0.1	2.6	662	631	718	6.8	6.5	7.0	<2	<2	2	0.5	<2	<2	<2	0.5	6.0	5.5	6.9	510	492	522	4.4	3.0	5.8	6.3	6.3	6.3	<0.1	<0.1	<0.1
Aug-18	1.8	0.1	5.2	683	635	833	6.9	6.6	7.1	<2	<2	<2	0.6	<2	<2	<2	0.5	5.6	5.2	6.0	499	484	518	4.0	3.1	5.1	4.7	4.7	4.7	<0.1	<0.1	<0.1
Sep-18	4.0	0.3	9.1	825	738	925	6.9	6.6	7.1	<2	<2	<2	0.5	<2	<2	<2	0.5	5.4	4.9	6.0	493	470	510	4.6	3.4	5.6	5.9	5.9	5.9	<0.1	<0.1	<0.1
Oct-18	14.9	6.2	28.1	826	713	905	6.8	6.6	6.9	<2	<2	<2	0.6	<2	<2	<2	0.5	5.6	5.0	6.2	502	490	516	4.1	2.9	5.3	6.9	6.9	6.9	<0.1	<0.1	<0.1
Nov-18	11.5	2.0	32.5	876	779	985	6.8	6.6	7.1	<2	<2	2	0.6	<2	<2	<2	0.5	5.8	5.2	7.8	501	480	520	6.0	6.0	6.0	6.8	6.8	6.8	<0.1	<0.1	0.1
Dec-18	21.1	6.8	37.7	728	655	806	6.9	6.7	7.0	<2	<2	<2	0.5	<2	<2	<2	0.5	5.6	5.1	6.3	477	448	498	4.1	4.1	4.1	4.9	4.9	4.9	<0.1	<0.1	<0.1
Avg	**9.6**	**2.3**	**19.3**	**729**	**666**	**829**	**6.9**	**6.6**	**7.1**	**<2**	**<2**	**<2**	**0.5**	**<2**	**<2**	**<2**	**0.5**	**5.7**	**5.1**	**6.6**	**495**	**479**	**513**	**4.4**	**3.3**	**5.8**	**5.9**	**5.9**	**5.9**	**<0.1**	**<0.1**	**<0.1**
Min	**0.8**	**0.1**	**2.6**	**636**	**571**	**702**	**6.8**	**6.5**	**6.9**	**<2**	**<2**	**<2**	**0.4**	**<2**	**<2**	**<2**	**0.5**	**5.3**	**4.1**	**6.0**	**464**	**448**	**476**	**3.7**	**2.2**	**4.1**	**4.6**	**4.6**	**4.6**	**<0.1**	**<0.1**	**<0.1**
Max	**23.1**	**6.8**	**37.7**	**876**	**779**	**985**	**7.1**	**6.7**	**7.6**	**<2**	**<2**	**4**	**0.6**	**<2**	**<2**	**3**	**0.5**	**6.4**	**5.5**	**8.0**	**511**	**496**	**548**	**6.0**	**6.0**	**8.1**	**6.9**	**6.9**	**6.9**	**<0.1**	**<0.1**	**0.1**

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-18	5.2	3.5	8.8	1058	994	1119	6.8	6.5	6.9	<2	<2	<2	0.5	<2	<2	2	0.5	5.0	4.4	5.6	499	452	550	5.3	3.0	6.5	5.8	5.8	5.8	<0.1	<0.1	0.1
Feb-18	3.4	1.4	4.5	1111	1068	1178	6.8	6.6	6.9	<2	<2	<2	0.6	<2	<2	<2	0.6	5.3	5.0	5.5	520	496	532	6.6	5.0	7.9	6.6	6.6	6.6	<0.1	<0.1	<0.1
Mar-18	4.6	2.8	6.4	933	835	1098	6.8	6.6	6.9	<2	<2	2	0.6	<2	<2	5	0.7	5.5	5.0	6.2	524	510	540	7.6	6.3	9.7	7.1	7.1	7.1	<0.1	<0.1	<0.1
Apr-18	2.9	1.7	4.4	941	907	1028	6.9	6.6	7.1	<2	<2	<2	0.5	<2	<2	2	0.6	5.2	4.6	6.0	536	518	550	7.5	6.5	8.8	7.2	7.2	7.2	<0.1	<0.1	<0.1
May-18	2.2	1.2	4.1	949	916	1002	6.9	6.6	7.1	<2	<2	<2	0.5	<2	<2	2	0.6	5.1	3.9	6.8	544	520	562	7.0	5.7	8.9	6.3	6.3	6.3	<0.1	<0.1	<0.1
Jun-18	1.9	0.0	4.6	993	942	1031	6.9	6.6	7.2	<2	<2	<2	0.4	<2	<2	<2	0.5	4.9	4.4	5.2	561	544	574	6.3	4.8	7.5	6.2	6.2	6.2	<0.1	<0.1	<0.1
Jul-18	0.0	0.0	0.0	994	950	1029	7.1	6.9	7.4	<2	<2	<2	0.5	<2	<2	<2	0.6	4.8	4.2	6.4				7.3	6.1	9.0	7.4	7.4	7.4			
Aug-18	0.0	0.0	0.0	984	959	1009	6.9	6.8	7.1	<2	<2	<2	0.8	<2	<2	<2	0.7	4.5	4.1	4.9				7.1	6.3	9.1	7.2	7.2	7.2			
Sep-18	2.3	0.0	4.7	992	957	1024	6.7	6.5	7.0	<2	<2	<2	0.6	<2	<2	<2	0.5	4.6	4.3	4.9	519	496	570	6.9	5.4	10.0	6.7	6.7	6.7	<0.1	<0.1	<0.1
Oct-18	5.0	2.7	7.6	990	961	1012	6.8	6.5	7.0	<2	<2	<2	0.7	<2	<2	<2	0.6	4.8	4.5	5.4	537	516	546	6.7	5.5	8.1	6.8	6.8	6.8	<0.1	<0.1	<0.1
Nov-18	4.1	2.5	6.0	969	915	1015	6.9	6.6	7.0	<2	<2	2	0.7	<2	<2	2	0.7	4.9	4.4	8.4	548	520	562	6.9	6.9	6.9	7.6	7.6	7.6	<0.1	<0.1	<0.1
Dec-18	6.0	3.5	9.0	887	830	928	6.8	6.7	7.0	<2	<2	2	0.6	<2	<2	<2	0.7	5.0	4.5	9.3	537	530	550	7.2	7.2	7.2	7.8	7.8	7.8	<0.1	<0.1	<0.1
Avg	**3.1**	**1.6**	**5.0**	**984**	**936**	**1039**	**6.8**	**6.6**	**7.1**	**<2**	**<2**	**<2**	**0.6**	**<2**	**<2**	**<2**	**0.6**	**5.0**	**4.4**	**6.2**	**532**	**510**	**554**	**6.9**	**5.7**	**8.3**	**6.9**	**6.9**	**6.9**	**<0.1**	**<0.1**	**<0.1**
Min	**0.0**	**0.0**	**0.0**	**887**	**830**	**928**	**6.7**	**6.5**	**6.9**	**<2**	**<2**	**<2**	**0.4**	**<2**	**<2**	**<2**	**0.5**	**4.5**	**3.9**	**4.9**	**499**	**452**	**532**	**5.3**	**3.0**	**6.5**	**5.8**	**5.8**	**5.8**	**<0.1**	**<0.1**	**<0.1**
Max	**6.0**	**3.5**	**9.0**	**1111**	**1068**	**1178**	**7.1**	**6.9**	**7.4**	**<2**	**<2**	**2**	**0.8**	**<2**	**<2**	**5**	**0.7**	**5.5**	**5.0**	**9.3**	**561**	**544**	**574**	**7.6**	**7.2**	**10.0**	**7.8**	**7.8**	**7.8**	**<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-18	3.2	1.0	8.1	841	750	898	6.8	6.6	7.1	<2	<2	<2	0.4	<2	<2	<2	0.4	6.5	5.8	7.4	490	456	522	5.0	3.8	6.3	5.4	5.4	5.4	<0.1	<0.1	<0.1
Feb-18	1.1	0.9	2.9	907	868	933	6.8	6.6	7.0	<2	<2	2	0.5	<2	<2	<2	0.5	7.3	6.9	7.8	534	518	548	5.2	3.7	6.0	5.9	5.9	5.9	<0.1	<0.1	<0.1
Mar-18	4.8	1.5	7.9	921	889	947	6.8	6.6	7.0	<2	<2	<2	0.4	<2	<2	<2	0.5	6.9	6.0	7.6	536	516	552	5.0	3.7	6.4	6.6	6.6	6.6	<0.1	<0.1	<0.1
Apr-18	2.0	0.9	8.0	946	910	990	6.9	6.6	7.1	<2	<2	<2	0.4	<2	<2	<2	0.6	6.0	5.0	6.5	556	522	648	4.9	3.5	6.1	4.7	4.7	4.7	<0.1	<0.1	<0.1
May-18	1.2	0.0	4.5	931	881	985	6.8	6.5	7.8	<2	<2	<2	0.5	<2	<2	2	0.6	5.6	4.8	6.2	548	532	572	5.2	4.1	6.6	5.9	5.9	5.9	<0.1	<0.1	<0.1
Jun-18	0.0	0.0	0.0	874	833	899	7.1	7.0	7.2	<2	<2	<2	0.5	<2	<2	<2	0.7	5.9	5.2	6.7				5.1	3.9	5.7	6.4	6.4	6.4			
Jul-18	0.0	0.0	0.0	893	869	912	7.1	7.0	7.2	<2	<2	<2	0.5	<2	<2	<2	0.7	6.0	5.1	6.8				4.8	3.8	5.9	6.7	6.7	6.7			
Aug-18	0.0	0.0	0.0	888	864	905	7.1	7.0	7.3	<2	<2	<2	0.6	<2	<2	<2	0.6	6.3	5.9	6.8				5.0	3.1	5.8	6.6	6.6	6.6			
Sep-18	0.0	0.0	0.0	860	834	887	7.1	7.0	7.3	<2	<2	<2	0.5	<2	<2	<2	0.6	5.7	5.1	6.4				5.1	3.9	5.8	6.7	6.7	6.7			
Oct-18	0.0	0.0	0.0	884	843	925	7.1	7.0	7.3	<2	<2	<2	1.0	<2	<2	<2	0.7	5.6	5.2	6.1				4.8	4.2	5.4	6.4	6.4	6.4			
Nov-18	2.1	0.0	8.0	975	926	1020	6.9	6.6	7.2	<2	<2	<2	0.7	<2	<2	4	0.7	5.5	5.0	6.3	557	548	570	4.8	4.8	4.8	5.6	5.6	5.6	<0.1	<0.1	<0.1
Dec-18	6.5	3.6	9.3	922	849	963	6.8	6.7	7.0	<2	<2	<2	0.6	<2	<2	<2	0.6	5.5	4.8	6.2	517	492	532	5.9	5.9	5.9	6.8	6.8	6.8	0.2	0.1	0.2
Avg	**1.7**	**0.7**	**4.1**	**904**	**860**	**938**	**7.0**	**6.8**	**7.2**	**<2**	**<2**	**<2**	**0.6**	**<2**	**<2**	**<2**	**0.6**	**6.1**	**5.4**	**6.7**	**534**	**512**	**563**	**5.0**	**4.0**	**5.9**	**6.1**	**6.1**	**6.1**	**<0.1**	**<0.1**	**<0.1**
Min	**0.0**	**0.0**	**0.0**	**841**	**750**	**887**	**6.8**	**6.5**	**7.0**	**<2**	**<2**	**<2**	**0.4**	**<2**	**<2**	**<2**	**0.4**	**5.5**	**4.8**	**6.1**	**490**	**456**	**522**	**4.8**	**3.1**	**4.8**	**4.7**	**4.7**	**4.7**	**<0.1**	**<0.1**	**<0.1**
Max	**6.5**	**3.6**	**9.3**	**975**	**926**	**1020**	**7.1**	**7.0**	**7.8**	**<2**	**<2**	**2**	**1.0**	**<2**	**<2**	**4**	**0.7**	**7.3**	**6.9**	**7.8**	**557**	**548**	**648**	**5.9**	**5.9**	**6.6**	**6.8**	**6.8**	**6.8**	**0.2**	**0.1**	**0.2**

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}
01/06/18	thru	01/12/18	100	1.0	1.0	70	1.4	1.2	92.4
01/20/18	thru	01/26/18	100	1.0	1.0	<60	>1.7	1.4	81.4
02/03/18	thru	02/09/18	100	1.0	1.0	100	1.0	1.4	100
02/05/18	thru	02/09/18	100	1.0	1.0	100	1.0	1.2	100
02/17/18*	thru	02/23/18	100	1.0	1.0	100	1.0	1.0	100
03/03/18	thru	03/09/18	100	1.0	1.0	70	1.4	1.0	85.3
03/17/18	thru	03/23/18	100	1.0	1.0	90	1.1	1.1	100
03/31/18	thru	04/06/18	100	1.0	1.0	70	1.4	1.4	100
04/14/18	thru	04/20/18	100	1.0	1.0	100	1.0	1.3	100
04/28/18	thru	05/04/18	100	1.0	1.0	100	1.0	1.0	100
06/09/18	thru	06/15/18	100	1.0	1.0	80	1.3	1.1	100
06/23/18	thru	06/29/18	100	1.0	1.0	100	1.0	1.0	100
07/07/18	thru	07/13/18	100	1.0	1.0	100	1.0	1.0	100
08/04/18	thru	08/10/18	100	1.0	1.0	60	1.7	1.3	95
08/18/18	thru	08/24/18	100	1.0	1.0	100	1.0	1.0	100
09/01/18	thru	09/07/18	100	1.0	1.0	90	1.1	1.1	100
09/15/18	thru	09/21/18	100	1.0	1.0	70	1.4	1.3	98
09/29/18	thru	10/05/18	100	1.0	1.0	90	1.1	1.1	100
10/13/18	thru	10/19/18	100	1.0	1.0	100	1.0	1.1	100
11/12/18*	thru	11/16/18	100	1.0	1.0	100	1.0	1.0	100
12/10/18*	thru	12/14/18	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}
12/30/17	thru	01/05/18	100	1.0	1.0	100	1.0	1.0	100
02/03/18	thru	02/09/18	100	1.0	1.0	100	1.0	1.0	100
03/24/18	thru	03/30/18	100	1.0	1.0	100	1.0	1.0	100
04/07/18	thru	04/13/18	100	1.0	1.0	100	1.0	1.0	100
05/12/18	thru	05/18/18	100	1.0	1.0	100	1.0	1.0	100
06/02/18	thru	06/08/18	100	1.0	1.0	100	1.0	1.0	100
06/30/18	thru	07/06/18	100	1.0	1.0	100	1.0	1.0	100
08/04/18	thru	08/10/18	100	1.0	1.0	100	1.0	1.0	100
09/01/18	thru	09/07/18	100	1.0	1.0	100	1.0	1.0	100
09/29/18	thru	10/05/18	100	1.0	1.0	100	1.0	1.0	100
11/12/18*	thru	11/16/18	100	1.0	1.0	100	1.0	1.0	100
12/10/18*	thru	12/14/18	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}
12/30/17	thru	01/05/18	100	1.0	1.0	100	1.0	1.0	100
02/17/18	thru	02/23/18	100	1.0	1.0	80	1.3	1.1	100
03/03/18	thru	03/09/18	100	1.0	1.0	100	1.0	1.1	100
03/17/18	thru	03/23/18	100	1.0	1.0	100	1.0	1.0	100
04/21/18	thru	04/27/18	100	1.0	1.0	100	1.0	1.0	100
05/05/18	thru	05/10/18	100	1.0	1.0	100	1.0	1.0	100
06/02/18	thru	06/08/18	100	1.0	1.0	100	1.0	1.0	100
					No Discharge During July 2018				
					No Discharge During August 2018				
09/08/18	thru	09/14/18	100	1.0	1.0	80	1.3	1.1	100
09/22/18	thru	09/28/18	100	1.0	1.0	80	1.3	1.3	97
10/06/18	thru	10/12/18	100	1.0	1.0	100	1.0	1.3	100
10/13/18	thru	10/19/18	100	1.0	1.0	100	1.0	1.1	100
11/12/18*	thru	11/16/18	100	1.0	1.0	100	1.0	1.0	100
12/10/18*	thru	12/14/18	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}
01/13/18	thru	01/19/18	100	1.0	1.0	90	1.1	1.1	100
01/27/18	thru	02/02/18	100	1.0	1.0	100	1.0	1.0	100
02/10/18	thru	02/16/18	100	1.0	1.0	100	1.0	1.0	100
03/10/18	thru	03/16/18	100	1.0	1.0	100	1.0	1.0	100
04/07/18	thru	04/13/18	100	1.0	1.0	100	1.0	1.0	100
05/12/18	thru	05/17/18	100	1.0	1.0	100	1.0	1.0	100
					No Discharge During June 2018				
					No Discharge During July 2018				
					No Discharge During August 2018				
					No Discharge During September 2018				
					No Discharge During October 2018				
					No Toxicity Test Results for November 2018**				
12/10/18*	thru	12/14/18	100	1.0	1.0	100	1.0	1.0	100

* MBC Laboratory

** Two toxicity tests will be run in January 2019.

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-18	0.6	0.8	0.5	0.7	23.7	24.4	19.8	22.2	<1	1.0	<1	<1	<1	1.0	<1	<1	3	165	849	3	173	818
Feb-18	0.5	0.6	0.4	0.6	23.5	24.2	22.3	23.0	<1	1.0	<1	1.0	<1	1.0	<1	1.0	3	167	565	3	165	630
Mar-18	0.5	0.6	0.4	1.0	23.5	24.6	22.7	23.9	<1	1.0	<1	<1	<1	1.0	<1	<1	3	166	884	3	152	775
Apr-18	0.6	1.0	0.5	1.0	25.1	25.9	24.3	25.0	<1	1.0	<1	1	<1	1.0	<1	1.0	3	171	796	3	149	733
May-18	0.7	0.9	0.6	0.9	25.7	26.5	25.4	25.9	<1	2.0	<1	<1	<1	2.0	<1	<1	4	132	758	4	136	664
Jun-18	0.9	1.0	0.7	1.0	27.5	28.3	27.1	28.5	<1	<1	<1	<1	<1	<1	<1	<1	4	142	747	4	146	542
Jul-18	0.8	1.1	0.7	1.1	29.7	30.7	29.7	30.2	<1	1.0	<1	<1	<1	1.0	<1	<1	4	143	623	4	165	771
Aug-18	0.7	1.0	0.6	0.8	30.4	30.9	30.1	30.4	<1	1.0	<1	<1	<1	1.0	<1	<1	3	146	587	3	145	533
Sep-18	0.6	0.7	0.5	0.7	29.3	30.0	29.1	30.0	<1	1.0	<1	<1	<1	1.0	<1	<1	4	141	656	4	138	586
Oct-18	0.5	0.6	0.5	0.6	27.7	28.9	24.8	27.6	<8	204.6	<1	1.0	<8	204.6	<1	1.0	3	144	673	3	143	593
Nov-18	0.6	0.8	0.5	0.7	25.5	27.3	26.1	27.3	<10	261.3	<1	<1.0	<10	261.3	<1	<1.0	3	151	701	3	154	705
Dec-18	0.6	0.8	0.6	0.8	23.5	24.3	23.6	24.2	<1	15.6	<1	1.0	<1	15.6	<1	1.0	4	147	681	4	155	818
Avg	**0.6**	**0.8**	**0.5**	**0.8**	**26.2**	**27.2**	**25.4**	**26.5**	**<2**	**41**	**<1**	**<1**	**<2**	**41**	**<1**	**<1**	**3**	**151**	**718**	**3**	**152**	**681**
Min	**0.5**	**0.6**	**0.4**	**0.6**	**23.5**	**24.2**	**19.8**	**22.2**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**3**	**132**	**565**	**3**	**136**	**533**
Max	**0.9**	**1.1**	**0.7**	**1.1**	**30.4**	**30.9**	**30.1**	**30.4**	**<10**	**261**	**<1**	**1**	**<10**	**261**	**<1**	**1**	**4**	**171**	**884**	**4**	**173**	**818**

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-18	0.7	1.0	0.7	1.0	23.2	23.9	22.0	23.6	<1	1.0	<1	<1	<1	2.0	<1	<1	3	152	478	2	135	480
Feb-18	0.7	1.1	0.7	0.9	22.4	23.2	22.0	23.3	<1	2.0	<1	<1	<1	2.0	<1	<1	4	149	496	2	120	484
Mar-18	0.8	1.0	0.7	0.8	24.5	26.7	22.6	23.8	<1	1.0	<1	<1	<1	2.0	<1	<1	3	159	474	2	118	516
Apr-18	0.8	1.0	0.5	0.7	25.7	26.9	22.7	24.2	<1	1.0	<1	<1	<1	2.0	<1	<1	4	153	476	2	131	508
May-18	0.7	0.9	0.5	0.8	24.4	25.7	25.5	27.2	<1	1.0	<1	<1	<1	1.0	<1	<1	4	154	508	1	160	532
Jun-18	0.6	0.8	0.6	0.7	25.8	26.0			<1	<1	<1	<1	<1	<1	<1	<1	4	160	561	1	151	497
Jul-18	0.7	0.9	0.5	0.6					<1	1.0	<1	<1	<1	1.0	<1	<1	3	189	515	2	127	610
Aug-18	0.8	0.9	0.6	0.8					<1	<1	<1	<1	<1	13.5	<1	<1	3	199	497	2	116	492
Sep-18	0.7	1.0	0.5	0.8	29.1	31.4			<1	1.0	<1	<1	<1	1.0	<1	<1	3	135	526	2	116	519
Oct-18	0.8	1.0	0.5	0.6	26.8	27.9			<1	2.0	<1	<1	<1	1.0	<1	<1	3	140	475	2	148	679
Nov-18	0.5	0.7	0.5	0.8	24.2	24.9	24.7	26.0	<1	1.0	<1	<1	<1	1.0	<1	<1	4	131	492	2	120	609
Dec-18	0.6	0.8	0.5	0.8	20.0	23.5	23.8	24.3	<1	1.0	<1	<1	<1	1.0	<1	<1	4	128	478	3	114	526
Avg	**0.7**	**0.9**	**0.6**	**0.8**	**24.6**	**26.0**	**23.3**	**24.6**	**<1**	**1**	**<1**	**<1**	**<1**	**2**	**<1**	**<1**	**3**	**154**	**496**	**2**	**130**	**538**
Min	**0.5**	**0.7**	**0.5**	**0.6**	**20.0**	**23.2**	**22.0**	**23.3**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**<1**	**3**	**128**	**474**	**1**	**114**	**480**
Max	**0.8**	**1.1**	**0.7**	**1.0**	**29.1**	**31.4**	**25.5**	**27.2**	**<1**	**2**	**<1**	**<1**	**<1**	**14**	**<1**	**<1**	**4**	**199**	**561**	**3**	**160**	**679**

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-18	0.0	0.0	0.0	0.0	13.0	12.6	11.9	13.3	9.5	9.6	488	3.3	187	<2	10.6	9.8	20.9	22.7	8.0	8.7	145	<2
Feb-18	0.0	0.0	0.0	0.0	12.2	12.0	11.7	12.9	9.3	11.4	310	0.5			10.8	10.4	18.1	19.0	8.6	10.5		
Mar-18	0.0	0.0	0.0	0.0	13.9	12.5	12.0	16.5	9.2	10.0	336	1.5			12.2	9.5	20.4	21.6	7.7	8.9		
Apr-18	0.0	0.0	0.0	0.0	12.4	10.8	16.6	19.4	9.2	10.3	262	<0.2	110	3	12.8	10.9	19.9	22.9	8.8	9.2	143	6
May-18	0.0	0.0	0.0	0.0	11.1	10.1	17.8	20.1	9.1	9.5	466	5.7			12.5	10.8	19.3	21.3	8.5	9.2		
Jun-18	0.0	0.0	0.0	0.0	10.9	10.5	21.0	21.8	9.2	9.6	1210	1.3			9.9	8.6	22.1	23.1	8.4	9.0		
Jul-18	0.0	0.0	0.0	0.0	10.6	9.5	22.9	25.1	9.2	9.7	402		193	9	11.4	6.1	24.1	25.6	8.5	9.3	175	3
Aug-18	0.0	0.0	0.0	0.0	9.2	8.6	21.9	23.3	9.0	9.3	408	1.2			9.5	7.5	23.6	24.8	8.3	9.9		
Sep-18	0.0	0.0	0.0	0.0	9.5	9.3	20.0	22.2	9.3	9.7	378	<0.2			9.6	8.6	23.1	25.0	8.1	8.9		
Oct-18	0.0	0.0	0.0	0.0	9.1	8.8	18.8	21.5	9.2	9.4	318	0.6	133	11	8.0	7.2	23.7	26.0	7.7	8.0	135	10
Nov-18	0.0	0.0	0.0	0.0	9.8	9.1	14.9	17.5	9.0	10.9	708	<0.2			9.0	8.4	19.8	22.5	7.4	8.9		
Dec-18	0.0	0.0	0.0	0.0	10.5	9.4	11.7	13.6	9.2	11.1	306	1.0			10.2	8.5	20.6	23.5	7.6	8.6		
Avg	**0.0**	**0.0**	**0.0**	**0.0**	**11.0**	**10.3**	**16.8**	**18.9**	**9.2**	**10.0**	**466**	**1.4**	**156**	**6**	**10.5**	**8.9**	**21.3**	**23.2**	**8.1**	**9.1**	**150**	**5**
Min	**0.0**	**0.0**	**0.0**	**0.0**	**9.1**	**8.6**	**11.7**	**12.9**	**9.0**	**9.3**	**262**	**<0.2**	**110**	**<2**	**8.0**	**6.1**	**18.1**	**19.0**	**7.4**	**8.0**	**135**	**<2**
Max	**0.0**	**0.0**	**0.0**	**0.0**	**13.9**	**12.6**	**22.9**	**25.1**	**9.5**	**11.4**	**1,210**	**5.7**	**193**	**11**	**12.8**	**10.9**	**24.1**	**26.0**	**8.8**	**10.5**	**175**	**10**

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-18	0.0	0.0	0.0	0.0	10.6	9.2	23.0	24.4	7.0	7.6	456	5.5	135	<2	7.6	6.5	19.3	20.0	7.1	7.4	233	6	15.1	11.8	19.4	23.3	8.2	9.4	690	1.8	381	<2
Feb-18	0.0	0.0	0.0	0.0	13.7	11.0	22.1	24.6	7.7	8.8	550	6.5			7.7	7.0	19.2	20.5	7.5	7.6			13.1	11.1	21.0	25.7	8.8	10.5	748	1.0		
Mar-18	0.0	0.0	0.0	0.0	12.0	9.2	23.2	24.8	7.5	7.9	558	3.4			7.6	7.0	21.5	24.1	7.6	7.8			12.3	7.6	23.0	26.3	7.7	10.8	778	0.2		
Apr-18	0.0	0.0	0.0	0.0	12.5	7.5	23.4	26.3	7.2	9.8	566	6.1	157	9	6.5	6.1	20.8	22.0	7.5	7.8	262	6	10.9	9.8	20.9	28.8	7.5	9.2	828	<0.2	443	8
May-18	0.0	0.0	0.0	0.0	12.0	8.5	25.2	25.9	7.5	8.6	552	6.1			7.4	6.7	21.9	23.4	7.5	8.6			10.4	9.9	28.3	32.7	8.9	10.2	310	5.6		
Jun-18	0.0	0.0													8.3	7.1	26.0	26.4	7.7	8.0												
Jul-18																																
Aug-18																																
Sep-18	0.0	0.0													6.9	6.7	23.5	23.9	7.6	7.6												
Oct-18	0.0	0.0										1.6	134	11	6.3	5.8	24.8	25.8	5.6	7.6	274	15								1.6	336	6
Nov-18	0.0	0.0	0.0	0.0	11.5	8.1	22.4	24.8	8.0	8.5	718	2.3		4	7.3	6.8	21.1	22.0	5.6	6.4	250		16.2	14.4	16.7	20.3	9.1	9.8	340	2.2		7
Dec-18	0.0	0.0	0.0	0.0	9.1	7.4	23.8	25.0	6.7	8.5	556	5.5			7.5	7.1	20.3	20.7	5.2	7.0			16.0	11.9	17.0	23.1	7.3	10.2	730	1.9		
Avg	**0.0**	**0.0**	**0.0**	**0.0**	**11.6**	**8.7**	**23.3**	**25.1**	**7.4**	**8.5**	**565**	**4.6**	**142**	**7**	**7.3**	**6.7**	**21.8**	**22.9**	**6.9**	**7.6**	**255**	**9**	**13.4**	**10.9**	**20.9**	**25.7**	**8.2**	**10.0**	**632**	**1.8**	**387**	**6**
Min	**0.0**	**0.0**	**0.0**	**0.0**	**9.1**	**7.4**	**22.1**	**24.4**	**6.7**	**7.6**	**456**	**1.6**	**134**	**<2**	**6.3**	**5.8**	**19.2**	**20.0**	**5.2**	**6.4**	**233**	**6**	**10.4**	**7.6**	**16.7**	**20.3**	**7.3**	**9.2**	**310**	**<0.2**	**336**	**<2**
Max	**0.0**	**0.0**	**0.0**	**0.0**	**13.7**	**11.0**	**25.2**	**26.3**	**8.0**	**9.8**	**718**	**6.5**	**157**	**11**	**8.3**	**7.1**	**26.0**	**26.4**	**7.7**	**8.6**	**274**	**15**	**16.2**	**14.4**	**28.3**	**32.7**	**9.1**	**10.8**	**828**	**5.6**	**443**	**8**

* 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-18	4.9	6.9	0.6	849	<1	1.0	<1	<1	<2	<2	453	8.5	6.8	0.4	606	<1	1.0	<1	<1	<2	<2	422
Feb-18	13.0	7.0	0.5	565	<1	1.0	<1	1.0	<2	<2	473	9.2	6.8	0.4	848	<1	1.0	<1	<1	<2	<2	447
Mar-18	2.7	6.9	0.5	884	<1	1.0	<1	<1	<2	<2	482	4.5	6.8	0.5	737	<1	1.0	<1	<1	<2	<2	471
Apr-18	18.0	7.1	0.6	796	<1	1.0	<1	1	<2	<2	469	9.0	6.8	0.7	868	<1	1.0	<1	<1	<2	<2	444
May-18	18.1	7.0	0.7	758	<1	2.0	<1	<1	<2	<2	478	9.1	6.8	0.6	946	<7	155.3	<1	<1	<2	<2	476
Jun-18	20.8	7.1	0.9	747	<1	<1	<1	<1	<2	<2	476	9.2	6.8	0.5	1067	<1	<1	<1	<1	<2	<2	464
Jul-18	23.1	7.2	0.8	623	<1	1.0	<1	<1	<2	<2	469	8.7	6.9	0.4	693	<1	<1	<1	<1	<2	<2	464
Aug-18	22.6	7.1	0.7	587	<1	1.0	<1	<1	<2	<2	467	9.1	6.9	0.5	873	<1	<1	<1	<1	<2	<2	445
Sep-18	19.2	7.0	0.6	656	<1	1.0	<1	<1	<2	<2	461	8.9	6.8	0.5	926	<1	<1	<1	<1	<2	<2	419
Oct-18	9.5	7.0	0.5	673	<8	204.6	<1	1.0	<2	<2	477	7.5	6.8	0.5	885	<1	<1	<1	<1	<2	<2	457
Nov-18	12.4	7.1	0.6	701	<10	261.3	<1	<1.0	<2	<2	482	7.2	6.8	0.6	910	<1	3	<1	<1	<2	<2	457
Dec-18	3.3	7.1	0.6	681	<1	15.6	<1	1.0	<2	<2	459	7.3	6.8	0.6	982	<1	9.7	<1	<1	<2	<2	448
Avg	**14.0**	**7.0**	**0.6**	**715**	**<2**	**41**	**<1**	**<1**	**<2**	**<2**	**470**	**8.2**	**6.8**	**0.5**	**856**	**<2**	**15**	**<1**	**<1**	**<2**	**<2**	**451**
Min	**2.7**	**6.9**	**0.5**	**565**	**<1**	**<1**	**<1**	**<1**	**<2**	**<2**	**453**	**4.5**	**6.8**	**0.4**	**606**	**<1**	**<1**	**<1**	**<1**	**<2**	**<2**	**419**
Max	**23.1**	**7.2**	**0.9**	**884**	**<10**	**261**	**<1**	**1**	**<2**	**<2**	**482**	**9.2**	**6.9**	**0.7**	**1067**	**<7**	**155**	**<1**	**<1**	**<2**	**<2**	**476**

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-18	0.4	6.8	0.7	478	<1	1	<1	<1	<2	<2	482	3.4	6.8	0.7	480	<1	2	<1	<1	<2	<2	469
Feb-18	0.2	6.8	0.7	496	<1	2	<1	<1	<2	<2	512	5.6	6.8	0.7	484	<1	2	<1	<1	<2	<2	523
Mar-18	0.4	6.8	0.8	474	<1	1	<1	<1	<2	<2	519	1.9	6.8	0.7	516	<1	2	<1	<1	<2	<2	518
Apr-18	0.7	6.9	0.8	476	<1	1	<1	<1	<2	<2	521	4.7	6.9	0.5	508	<1	2	<1	<1	<2	<2	520
May-18	3.7	6.9	0.7	508	<1	1	<1	<1	<2	<2	526	6.0	6.8	0.5	532	<1	1	<1	<1	<2	<2	510
Jun-18	4.3	6.9	0.6	561	<1	<1	<1	<1	<2	<2	530	6.4	7.1	0.6	497	<1	<1	<1	<1	<2	<2	501
Jul-18	4.8	7.1	0.7	515	<1	1	<1	<1	<2	<2	531	7.0	7.1	0.5	610	<1	1	<1	<1	<2	<2	510
Aug-18	3.9	6.9	0.8	497	<1	<1	<1	<1	<2	<2	509	8.0	7.1	0.6	492	<1	14	<1	<1	<2	<2	512
Sep-18	3.5	6.7	0.7	526	<1	1	<1	<1	<2	<2	497	6.9	7.1	0.5	519	<1	1	<1	<1	<2	<2	474
Oct-18	2.5	6.8	0.8	475	<1	2	<1	<1	<2	<2	511	6.2	7.1	0.5	679	<1	1	<1	<1	<2	<2	504
Nov-18	3.7	6.9	0.5	492	<1	1	<1	<1	<2	<2	530	5.1	6.9	0.5	609	<1	1	<1	<1	<2	<2	517
Dec-18	3.5	6.8	0.6	478	<1	1	<1	<1	<2	<2	503	1.4	6.8	0.5	526	<1	1	<1	<1	<2	<2	502
Avg	**2.6**	**6.8**	**0.7**	**495**	**<1**	**1**	**<1**	**<1**	**<2**	**<2**	**514**	**5.2**	**7.0**	**0.6**	**539**	**<1**	**2**	**<1**	**<1**	**<2**	**<2**	**505**
Min	**0.2**	**6.7**	**0.5**	**474**	**<1**	**<1**	**<1**	**<1**	**<2**	**<2**	**482**	**1.4**	**6.8**	**0.5**	**480**	**<1**	**<1**	**<1**	**<1**	**<2**	**<2**	**469**
Max	**4.8**	**7.1**	**0.8**	**561**	**<1**	**2**	**<1**	**<1**	**<2**	**<2**	**531**	**8.0**	**7.1**	**0.7**	**679**	**<1**	**14**	**<1**	**<1**	**<2**	**<2**	**523**

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-18	141	133	0.2	42	0	97	0.2	8	88	43	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	23	4	13	
Feb-18	140	136	0.2	43	0	104	0.2	9	97	46	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	27			
Mar-18	138	139	0.3	39	0	115	0.2	10	100	50	<0.25	0.8	6	<0.5	<0.05	<2	<0.25	33			
Apr-18	148	142	0.2	43	0	108	0.1	10	94	49	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	34	2	12	
May-18	147	146	0.3	43	0	114	0.2	10	97	50	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	35			
Jun-18	145	150	0.3	44	0	118	0.2	9	95	52	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	38			
Jul-18	142	144	0.2	43	0	113	0.2	9	88	47	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	37	3	15	0.0
Aug-18	153	150	0.3	46	0	111	0.2	9	98	45	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	37			
Sep-18	139	127	0.3	39	0	118	0.2	10	95	48	<0.25	0.6	4	<0.5	<0.025	<2	<0.25	32			
Oct-18	134	132	0.3	36	0	118	0.2	11	102	50	<0.25	0.5	4	<0.5	<0.025	<2	<0.25	35	9	31	
Nov-18	140			38				11			<0.5		<2	<0.5				34			
Dec-18	150	150		42	0	121	0.2	11		44	<0.5		<2	<0.5				28			
Avg	**143**	**141**	**0.2**	**41**	**0**	**112**	**0.2**	**10**	**95**	**48**	**<0.29**	**<0.5**	**4**	**<0.5**	**<0.05**	**<2**	**<0.25**	**33**	**4**	**18**	**0.0**
Min	**134**	**127**	**0.2**	**36**	**0**	**97**	**0.1**	**8**	**88**	**43**	**<0.25**	**<0.5**	**<2**	**<0.5**	**<0.03**	**<2**	**<0.25**	**23**	**2**	**12**	**0.0**
Max	**153**	**150**	**0.3**	**46**	**0**	**121**	**0.2**	**11**	**102**	**52**	**<0.50**	**0.8**	**6**	**<0.5**	**<0.05**	**<2**	**<0.25**	**38**	**9**	**31**	**0.0**

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-18	139	133	0.2	42	0	99	0.2	9	91	57	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	23	3	13	
Feb-18	144	129	0.2	43	0	108	0.2	9	102	64	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	27			
Mar-18	140	131	0.3	40	0	117	0.2	10	110	71	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	31			
Apr-18	149	132	0.2	43	0	111	0.2	10	100	67	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	36	2	11	
May-18	148	134	0.3	42	0	119	0.2	10	110	66	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	35			
Jun-18	146	145	0.3	44	0	119	0.2	9	100	69	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	34			
Jul-18	142	131	0.2	43	0	112	0.2	8	97	79	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	35	<2	16	0.047
Aug-18	153	145	0.3	46	0	112	0.2	9	103	67	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	35			
Sep-18	138	120	0.3	39	0	122	0.2	10	102	70	<0.25	0.6	4	<0.5	<0.025	<2	<0.25	31			
Oct-18	131	122	0.3	36	0	124	0.2	10	110	72	<0.25	<0.5	4	<0.5	<0.025	<2	<0.25	35	5	22	
Nov-18	140			39		135		11			<0.5		<2	<0.5				34			
Dec-18	140	142		39	0	108	0.2	10		63	<0.5		<2	<0.5				26			
Avg	**142**	**133**	**0.2**	**41**	**0**	**115**	**0.2**	**10**	**103**	**68**	**<0.29**	**<0.5**	**4**	**<0.5**	**<0.05**	**<2**	**<0.25**	**32**	**3**	**15**	**0.047**
Min	**131**	**120**	**0.2**	**36**	**0**	**99**	**0.2**	**8**	**91**	**57**	**<0.25**	**<0.5**	**<2**	**<0.5**	**<0.03**	**<2**	**<0.25**	**23**	**2**	**11**	**0.047**
Max	**153**	**145**	**0.3**	**46**	**0**	**135**	**0.2**	**11**	**110**	**79**	**<0.50**	**0.6**	**6**	**<0.5**	**<0.05**	**<2**	**<0.25**	**36**	**5**	**22**	**0.047**

*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-18	152	108	0.2	44	0	128	0.1	10	93	63	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	53	<1	12	0.0
Feb-18	177	115	0.2	51	0	145	0.1	12	103	59	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	41	2	17	0.0
Mar-18	164	110	0.2	46	0	145	<0.1	12	101	59	<0.25	<0.5	7	<0.5	<0.05	<2	<0.25	45	2	17	0.0
Apr-18	169	108	0.3	49	0	141	0.1	11	101	59	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	48	1	9	0.0
May-18	188	114	0.3	54	0	152	0.1	13	102	63	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	44	4	26	0.0
Jun-18	170	111	0.3	50	0	150	0.1	11	102	75	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	38	3	17	0.0
Jul-18	172	127	0.2	50	0	153	0.1	11	89	38	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	36			0.0
Aug-18	186	117	0.3	53	0	153	0.1	13	96	40	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	39			0.0
Sep-18	181	114	0.3	52	0	149	<0.1	12	100	62	<0.25	<0.5	6	<0.5	<0.025	<2	<0.25	36	3	16	0.0
Oct-18	183	126	0.3	52	0	153	0.1	13	107	63	<0.25	<0.5	6	<0.5	<0.025	<2	<0.25	47	3	13	0.0
Nov-18	192			54				14			<0.5		3	<0.5				42	5	20	0.0
Dec-18	180	118		53	0	158	0.1	13		57	<0.5		3	<0.5				50			0.0
Avg	**176**	**115**	**0.3**	**51**	**0**	**148**	**0.1**	**12**	**100**	**58**	**<0.29**	**<0.5**	**5**	**<0.5**	**<0.05**	**<2**	**<0.25**	**43**	**3**	**16**	**0.0**
Min	**152**	**108**	**0.2**	**44**	**0**	**128**	**0.1**	**10**	**89**	**38**	**<0.25**	**<0.5**	**3**	**<0.5**	**<0.03**	**<2**	**<0.25**	**36**	**<1**	**9**	**0.0**
Max	**192**	**127**	**0.3**	**54**	**0**	**158**	**0.1**	**14**	**107**	**75**	**<0.50**	**<0.5**	**7**	**<0.5**	**<0.05**	**<2**	**<0.25**	**53**	**5**	**26**	**0.0**

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-18	140	117	0.2	41	0	124	0.1	9	108	70	<0.25	<0.5	7	<0.5	<0.05	<2	<0.25	45	4	17	0.0
Feb-18	139	101	0.3	37	0	149	0.1	11	120	76	<0.25	<0.5	7	<0.5	<0.05	<2	<0.25	49	5	27	
Mar-18	143	102	0.3	38	0	154	<0.1	12	121	76	<0.25	<0.5	7	<0.5	<0.05	<2	<0.25	58	6	28	
Apr-18	153	114	0.3	42	0	148	0.1	11	113	70	<0.25	<0.5	7	<0.5	<0.05	<2	<0.25	51	6	21	0.0
May-18	155	110	0.2	45	0	142	0.1	11	107	86	<0.25	<0.5	7	<0.5	<0.05	<2	<0.25	59	4	20	
Jun-18	145	117	0.3	41	0	144	0.1	11	106	62	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	53			
Jul-18	133	106	0.3	36	0	149	0.1	10	100	60	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	45			No Discharge
Aug-18	145	117	0.3	39	0	131	0.2	13	110	55	<0.25	<0.5	5	<0.5	<0.025	<2	<0.25	44			
Sep-18	145	117	0.3	39	0	131	0.2	13	110	55	<0.25	<0.5	5	<0.5	<0.025	<2	<0.25	44			
Oct-18	145	117	0.3	39	0	131	0.2	13	110	55	<0.25	<0.5	5	<0.5	<0.025	<2	<0.25	44			
Nov-18						168					<0.5	<1	5	<0.5	<0.2	<5	<0.5	57	8	28	
Dec-18	140	106		38	0	163	0.1	11		74	<0.5		4	<0.5				60			0.0
Avg	**144**	**111**	**0.3**	**40**	**0**	**144**	**0.1**	**11**	**110**	**67**	**<0.29**	**<0.5**	**6**	**<0.5**	**<0.06**	**<2**	**<0.27**	**51**	**6**	**23**	**0.0**
Min	**133**	**101**	**0.2**	**36**	**0**	**124**	**0.1**	**9**	**100**	**55**	**<0.25**	**<0.5**	**4**	**<0.5**	**<0.03**	**<2**	**<0.25**	**44**	**4**	**17**	**0.0**
Max	**155**	**117**	**0.3**	**45**	**0**	**168**	**0.2**	**13**	**121**	**86**	**<0.50**	**<1.0**	**7**	**<0.5**	**<0.20**	**<5**	**<0.50**	**60**	**8**	**28**	**0.0**

*Free Cyanide is analyzed using ASTM-D7237 for analysis of free cyanide in accordance with R8-2015-0036

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-18	117	<1	<2	12	<1	3
Feb-18	124	<1	<2	14	<1	3
Mar-18	91	<1	<2	12	<1	3
Apr-18	59	<1	<2	13	<1	3
May-18	<25	<1	<2	16	<1	3
Jun-18	118	<1	<2	18	<1	4
Jul-18	99	<1	<2	14	<1	4
Aug-18	28	<1	<2	20	<1	3
Sep-18	68	<1	<2	12	<1	4
Oct-18	99	<1	<2	12	<1	4
Nov-18						
Dec-18						
Avg	**83**	**<1**	**<2**	**14**	**<1**	**3**
Min	**<25**	**<1**	**<2**	**12**	**<1**	**3**
Max	**124**	**<1**	**<2**	**20**	**<1**	**4**

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

Al, TR µg/L	Sb, TR µg/L	As, TR µg/L	Ba, TR µg/L	Co, TR µg/L	Ni, TR µg/L
116	<1	<2	12	<1	3
136	<1	<2	14	<1	3
101	<1	<2	12	<1	3
93	<1	<2	13	<1	3
29	<1	<2	16	<1	3
111	<1	<2	17	<1	3
96	<1	<2	14	<1	4
34	<1	<2	19	<1	3
73	<1	<2	12	<1	4
74	<1	<2	12	<1	4
86	**<1**	**<2**	**14**	**<1**	**3**
29	**<1**	**<2**	**12**	**<1**	**3**
136	**<1**	**<2**	**19**	**<1**	**4**

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-18	<25	<1	<2	17	<1	3
Feb-18	<25	<1	<2	21	<1	3
Mar-18	<25	<1	<2	17	<1	3
Apr-18	<25	<1	<2	26	<1	3
May-18	37	<1	<2	25	<1	3
Jun-18	<25	<1	<2	30	<1	3
Jul-18	<25	<1	<2	23	<1	3
Aug-18	<25	<1	<2	22	<1	3
Sep-18	<25	<1	<2	24	<1	3
Oct-18	<25	<1	<2	24	<1	3
Nov-18						
Dec-18						
Avg	**<26**	**<1**	**<2**	**23**	**<1**	**3**
Min	**<25**	**<1**	**<2**	**17**	**<1**	**3**
Max	**37**	**<1**	**<2**	**30**	**<1**	**3**

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

Al, TR µg/L	Sb, TR µg/L	As, TR µg/L	Ba, TR µg/L	Co, TR µg/L	Ni, TR µg/L
90	<1	<2	11	<1	3
115	<1	<2	9	<1	3
99	<1	<2	9	<1	3
153	<1	<2	10	<1	3
97	<1	<2	12	<1	3
72	<1	<2	10	<1	3
59	<1	<2	8	<1	3
92	<1	<2	9	<1	3
58	<1	<2	7	<1	3
43	<1	<2	7	<1	3
	<1	1			<5
88	**<1**	**<2**	**9**	**<1**	**3**
43	**<1**	**1**	**7**	**<1**	**3**
153	**<1**	**<2**	**12**	**<1**	**3**

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-18	4.7	19.6	5.2	3.2	6.0	240	5.2	840	5.3	230	5.0	130	5.3	1,440	8	5,338	6.0
Feb-18	5.9	8.7	3.4	1.1	5.1	250	4.9	360	6.6	190	5.2	50	5.3	850	8	5,338	5.9
Mar-18	5.0	23.1	4.6	4.8	4.4	180	3.7	710	7.6	290	5.0	200	4.4	1,380	8	5,338	5.8
Apr-18	6.0	3.2	2.9	2.0	4.2	210	4.4	120	7.5	180	4.9	80	5.0	590	8	5,338	5.8
May-18	3.0	4.1	2.2	1.2	4.1	100	4.1	140	7.0	130	5.2	50	4.8	420	8	5,338	5.7
Jun-18	2.0	2.7	1.9	0.0	4.1	70	3.9	90	6.3	100	NA	0	4.7	260	8	5,338	5.6
Jul-18	3.0	0.8	0.0	0.0	4.6	110	4.4	30	NA	0	NA	0	4.6	140	8	5,338	5.4
Aug-18	3.9	1.8	0.0	0.0	4.4	140	4.0	60	NA	0	NA	0	4.3	200	8	5,338	5.3
Sep-18	3.9	4.0	2.3	0.0	4.9	160	4.6	150	6.9	130	NA	0	5.2	440	8	5,338	5.3
Oct-18	3.2	14.9	5.0	0.0	4.3	120	4.1	510	6.7	280	NA	0	4.7	910	8	5,338	5.1
Nov-18	2.8	11.5	4.1	2.1	5.2	120	6.0	570	6.9	240	4.8	80	5.9	1,010	8	5,338	5.1
Dec-18	0.9	21.1	6.0	6.5	4.6	40	4.1	710	7.2	360	5.9	320	5.0	1,430	8	5,338	4.9
12-Mo Avg	**3.7**	**9.6**	**3.1**	**1.7**	**4.7**	**150**	**4.4**	**360**	**6.8**	**180**	**5.1**	**80**	**4.9**	**760**	**8**	**5,338**	**5.5**
Min	**0.9**	**0.8**	**0.0**	**0.0**	**4.1**	**40**	**3.7**	**30**	**5.3**	**0**	**4.8**	**0**	**4.3**	**140**	**8**	**5,338**	**4.9**
Max	**6.0**	**23.1**	**6.0**	**6.5**	**6.0**	**250**	**6.0**	**840**	**7.6**	**360**	**5.9**	**320**	**5.9**	**1,440**	**8**	**5,338**	**6.0**

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-18	4.7	4.9	19.6	8.5	5.2	0.4	3.2	3.4	487	453	464	422	499	482	490	469	464	180,180	550	366,960	456
Feb-18	5.9	13.0	8.7	9.2	3.4	0.2	1.1	5.6	513	473	493	447	520	512	534	523	488	186,770	550	366,960	456
Mar-18	5.0	2.7	23.1	4.5	4.6	0.4	4.8	2.1	529	482	496	471	524	519	536	518	504	176,930	550	366,960	459
Apr-18	6.0	18.0	3.2	9.0	2.9	0.7	2.0	5.2	508	469	497	444	536	521	556	520	485	181,430	550	366,960	460
May-18	3.0	18.1	4.1	9.1	2.2	3.7	1.2	6.0	532	478	501	476	544	526	548	510	495	190,410	550	366,960	463
Jun-18	2.0	20.8	2.7	9.2	1.9	4.3	0.0	6.4	538	476	511	464	561	530	NA	501	490	193,300	550	366,960	465
Jul-18	3.0	23.1	0.8	8.7	0.0	4.8	0.0	7.0	518	469	510	464	NA	531	NA	510	484	191,360	550	366,960	468
Aug-18	3.9	22.6	1.8	9.1	0.0	3.9	0.0	8.0	510	467	499	445	NA	509	NA	512	478	196,780	550	366,960	471
Sep-18	3.9	19.2	4.0	8.9	2.3	3.5	0.0	6.9	511	461	493	419	519	497	NA	474	467	190,030	550	366,960	473
Oct-18	3.2	9.5	14.9	7.5	5.0	2.5	0.0	6.2	529	477	502	457	537	511	NA	504	496	202,660	550	366,960	479
Nov-18	2.8	12.4	11.5	7.2	4.1	3.7	2.1	5.1	536	482	501	479	548	530	557	517	505	206,290	550	366,960	483
Dec-18	0.9	3.3	21.1	7.3	6.0	3.5	6.5	1.4	519	459	477	448	537	503	517	502	487	202,880	550	366,960	487
Avg	**3.7**	**14.0**	**9.6**	**8.2**	**3.1**	**2.6**	**1.7**	**5.3**	**519**	**470**	**495**	**453**	**532**	**514**	**534**	**505**	**487**	**191,590**	**550**	**366,960**	**469**
Min	**0.9**	**2.7**	**0.8**	**4.5**	**0.0**	**0.2**	**0.0**	**1.4**	**487**	**453**	**464**	**419**	**499**	**482**	**490**	**469**	**464**	**176,930**	**550**	**366,960**	**456**
Max	**6.0**	**23.1**	**23.1**	**9.2**	**6.0**	**4.8**	**6.5**	**8.0**	**538**	**482**	**511**	**479**	**561**	**531**	**557**	**523**	**505**	**206,290**	**550**	**366,960**	**487**

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 2018

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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			<0.01			<0.01			**0.01**
Copper (Cu)	0.16			0.03			0.04			0.07			**0.16**
Lead (Pb)	<0.02			<0.02			<0.02			<0.02			**<0.02**
Mercury (Hg)	0.0020				<0.0005		<0.0005			<0.0005			**0.0020**
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	0.59			0.11			0.13			0.17			**0.59**
CN, Aquatic Free	6			3			4						**6**

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			<5			<5			**<5**
Bromoform	<5			<5			<5			<5			**<5**
Bromomethane							<5						**<5**
Carbon tetrachloride							<2.5						**<2.5**
Chlorobenzene							<5						**<5**
Chloroethane							<5						**<5**
Chloroform	16			<5			<5			14			**16**
Chloromethane							<5						**<5**
cis-1,3-Dichloropropene							<2.5						**<2.5**
Dibromochloromethane	<5			<5			<5			<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*							0.015						0.015

*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)	0.16			0.04			0.05			0.08			**0.16**
Lead (Pb)	<0.02			<0.02			<0.02			<0.02			**<0.02**
Mercury (Hg)	0.0006				<0.0005		<0.0005			<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	0.56			0.13			0.15			0.20			**0.56**
CN, Aquatic Free	9			<2			7						**9**

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			<5			<5			**<5**
Bromoform	<5			<5			<5			<5			**<5**
Bromomethane							<5						**<5**
Carbon tetrachloride							<2.5						**<2.5**
Chlorobenzene							<5						**<5**
Chloroethane							<5						**<5**
Chloroform	14			<5			<5			12			**14**
Chloromethane							<5						**<5**
cis-1,3-Dichloropropene							<2.5						**<2.5**
Dibromochloromethane	<5			<5			<5			<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*	0.417	0.000	0.018	0.021	0.065	0.020	0.101	0.085	0.063	0.303	0.029	0.000	**0.417**

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

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
Arsenic (As)	<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
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	0.7	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	0.5			0.8
Copper (Cu)	3.6	4.3	5.5	3.9	4.4	4.7	4.1	3.8	4.0	4.1	<0.5		5.5
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)	2.6	3.0	3.2	3.0	3.4	3.5	3.7	3.3	3.6	3.7			3.7
Selenium (Se)	<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
Thallium (Tl)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			<1
Zinc (Zn)	23	27	33	34	35	38	37	37	32	35	34		38
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
Benzene							<1						<1
Bromodichloromethane	13			12			15			31			31
Bromoform	<1			<1			<1			<1			<1
Bromomethane							<1						<1
Carbon tetrachloride							<0.5						<0.5
Chlorobenzene							<1						<1
Chloroethane							<1						<1
Chloroform	48			51			53			72			72
Chloromethane							<1						<1
cis-1,3-Dichloropropene							<0.5						<0.5
Dibromochloromethane	4			2			3			9			9
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								<0.25					<0.25

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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
1,2-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			<2			<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

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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							<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 (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			<1.0
Arsenic (As)	<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
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	0.6	<0.5			0.6
Copper (Cu)	4.3	4.3	5.6	4.2	4.6	4.2	4.3	4.1	4.2	4.2	<0.5		5.6
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)	2.7	2.6	3.0	3.2	3.5	3.3	3.8	3.4	3.7	3.6			3.8
Selenium (Se)	<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
Thallium (Tl)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			<1
Zinc (Zn)	23	27	31	36	35	34	35	35	31	35	34		36
CN, Free	<2			3			2			3			3

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	13			11			16			22			22
Bromoform	<1			<1			<1			<1			<1
Bromomethane							<1						<1
Carbon tetrachloride							<0.5						<0.5
Chlorobenzene							<1						<1
Chloroethane							<1						<1
Chloroform	66			45			64			57			66
Chloromethane							<1						<1
cis-1,3-Dichloropropene							<0.5						<0.5
Dibromochloromethane	3			2			2			5			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			<2
Acrylonitrile								0.57		0.31			0.57

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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
1,2-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			<2			<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

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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*							0.047						0.047

*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			<1.0
Arsenic (As)	<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
Cadmium (Cd)	<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
Copper (Cu)	5.9	5.8	7.1	6.1	6.3	5.9			5.5	6.1	3.0		7.1
Lead (Pb)	<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
Nickel (Ni)	2.5	2.6	3.0	2.6	3.1	3.1			3.2	3.1			3.2
Selenium (Se)	<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
Thallium (Tl)	<1	<1	<1	<1	<1	<1			<1	<1			<1
Zinc (Zn)	53	41	45	48	44	38			36	47	42		53
CN, Free	<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	12	17	17	9	26	17			16	13	20		26
Bromoform	<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	62	74	55	30	83	59			46	34	54		83
Chloromethane									<1				<1
cis-1,3-Dichloropropene									<0.5				<0.5
Dibromochloromethane	<1	2	2	1	4	3			3	3	5		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									<0.25				<0.25

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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			<2					<2	<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

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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	0.000	0.000	**0.000**

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

ND: No Discharge

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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		<1.0
Arsenic (As)	<2	<2	<2	<2	<2						1		<2
Beryllium (Be)	<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
Chromium (Cr)	<0.5	<0.5	<0.5	<0.5	<0.5						<0.5		<0.5
Copper (Cu)	6.7	7.0	7.4	6.7	6.8						4.5		7.4
Lead (Pb)	<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
Nickel (Ni)	2.7	2.9	3.2	2.9	3.1						<1		3.2
Selenium (Se)	<2	<2	<2	<2	<2						<2		<2
Silver (Ag)	<0.25	<0.25	<0.25	<0.25	<0.25						<0.25		<0.25
Thallium (Tl)	<1	<1	<1	<1	<1						<1		<1
Zinc (Zn)	45	49	58	51	59						57		59
CN, Free	<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	17	27	28	21	20						28		28
Bromoform	<1	<1	<1	<1	<1						<1		<1
Bromomethane											<1		<1
Carbon tetrachloride											<0.5		<0.5
Chlorobenzene											<1		<1
Chloroethane											<1		<1
Chloroform	74	70	66	46	48						56		74
Chloromethane											<1		<1
cis-1,3-Dichloropropene											<0.5		<0.5
Dibromochloromethane	4	5	6	6	4						8		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											<0.25		<0.25

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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
1,2-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							<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											1		1
Phenanthrene											<1		<1
Phenol											<1		<1
Pyrene											<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**
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												0.045	**0.045**
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**

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

PCDD/PCDF Congeners*	0.000			0.000								0.042	**0.042**

*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								1.33					**1.33**
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								11.5					**11.5**
Ni, Total Dissolved								2					**2**
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								10					**10**

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								1.1					1.1
Cu, Total Dissolved								7.3					7.3
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								27					27

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								2					2
Bromoform								<1					<1
Bromomethane								<1					<1
Carbon tetrachloride								<1					<1
Chlorobenzene								<1					<1
Chloroethane								<1					<1
Chloroform								10					10
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								0.47					0.47

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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											<0.5		**<0.5**
Cu, Total Dissolved											4.4		**4.4**
Ni, Total Dissolved											<1		**<1**
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											58		**58**

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											15		**15**
Bromoform											<1		**<1**
Bromomethane											<1		**<1**
Carbon tetrachloride											<1		**<1**
Chlorobenzene											<1		**<1**
Chloroethane											<1		**<1**
Chloroform											44		**44**
Chloromethane											<1		**<1**
cis-1,3-Dichloropropene											<1		**<1**
Dibromochloromethane											5		**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											<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												0.046	**0.046**
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 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											1		**1**
Be, Total Dissolved											<0.5		**<0.5**
Cd, Total Dissolved											<0.25		**<0.25**
Cr, Total Dissolved											<0.5		**<0.5**
Cu, Total Dissolved											3.4		**3.4**
Ni, Total Dissolved											<1		**<1**
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											34		**34**

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											5		**5**
Bromoform											<1		**<1**
Bromomethane											<1		**<1**
Carbon tetrachloride											<1		**<1**
Chlorobenzene											<1		**<1**
Chloroethane											<1		**<1**
Chloroform											20		**20**
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 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

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2018 NPDES Annual Report

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												0.022	**0.022**
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, 2018 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											1		**1**
Be, Total Dissolved											<0.5		**<0.5**
Cd, Total Dissolved											<0.25		**<0.25**
Cr, Total Dissolved											<0.5		**<0.5**
Cu, Total Dissolved											6.1		**6.1**
Ni, Total Dissolved											<1		**<1**
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											26		**26**

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2018 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

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2018 NPDES Annual Report

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, 2018 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**

IEUA FY 2018-2019 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 achieve peak power independence and contain future energy costs.

Introduction

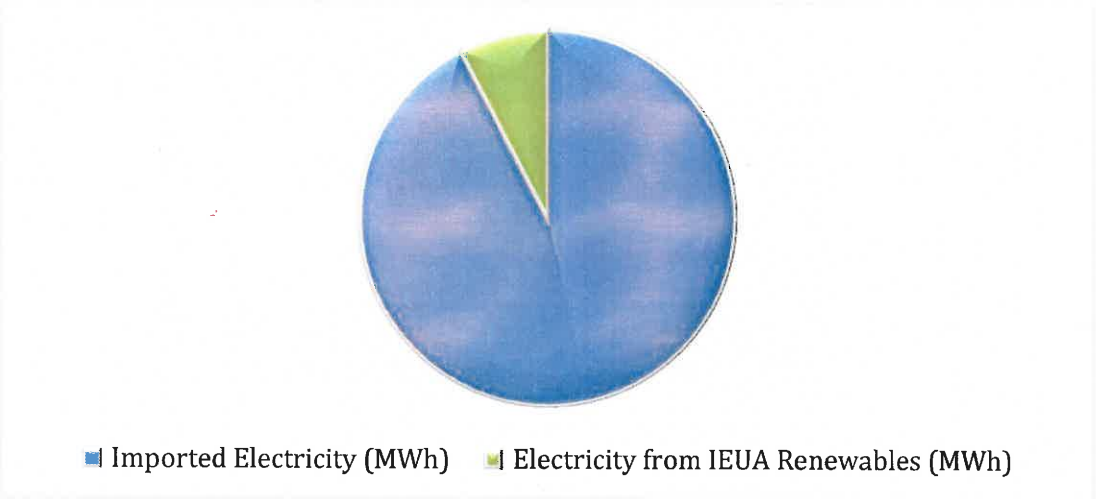
The 2018/19 Energy Report tracks IEUA's energy consumption, renewable generation performance and savings, and energy efficiency projects for the fiscal year. The report includes a brief description of upcoming projects and initiatives that will be implemented over the next few years.

Summary

In 2018/19, IEUA:

- Consumed 73,598 MWh of electricity (Figure 1).
- Generated 9% of the electricity consumed from renewable energy (Figure 1) resulting in $58,000 in savings for the fiscal year. Savings to date since 2008 is approximately $1,080,000.
- Spent $8.3 million for utilities, that includes imported electricity, renewable energy and natural gas.
- Completed the following energy efficiency projects:
    - 1.5 MW Battery Storage Installation (RP-4)
    - 1.5 MW Solar Installation (IERCF)
    - Process Optimization (RP-1)

Figure 1: IEUA Electricity Source for 2018/19



Did you know?

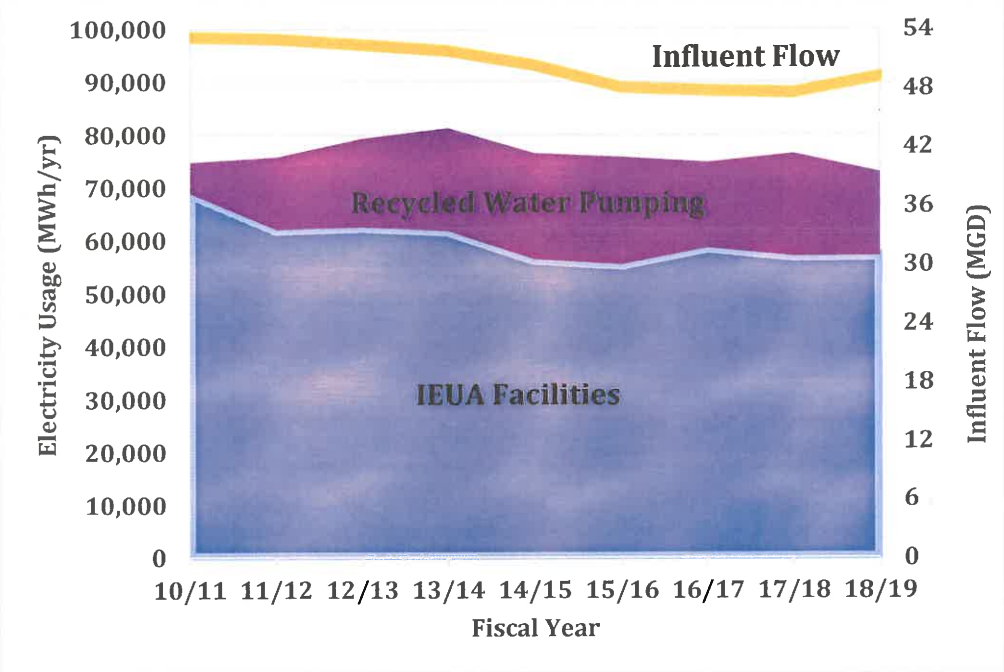
** In 2017 a typical U.S. household used 11,764 kWh (U.S. Energy Information Administration).*

** The renewable energy generated by IEUA would be able to provide electricity to at least 544 homes.*

Flow and Energy Consumption

- In 2018/19, the annual average influent flow to the regional water recycling plants was 49.1 MGD which was an increase of 3.4% as compared to the previous fiscal year of 47.5 MGD (Figure 2). The increase is likely due to population growth, and inflow and infiltration of stormwater and groundwater into the sanitary sewer system during the heavy rainy season.
- In 2018/19, IEUA facilities which include the regional water recycling plants, composting facility, and recycled water pumping used approximately 73,598 MWh of electricity (Figure 2). The electricity consumption for 2018/19 decreased by 3.8% as compared to the previous fiscal year of 76,527 MWh. This was due to the decreased recycled water pumping because of the heavy rain during the wintertime. In parallel, the increase in influent flows resulted in a 0.5% increase of electricity use at the regional water recycling plants.

Figure 2: IEUA Electricity Use and Regional Influent Flows



Power Demand

- During the fiscal year, agency-wide demand ranged from 7,600 kW during the winter months to 10,400 kW during the summer months (Figure 4 and 5). The large seasonal variation in the power demand is attributed to the recycled water demand and the related recycle water pumping.

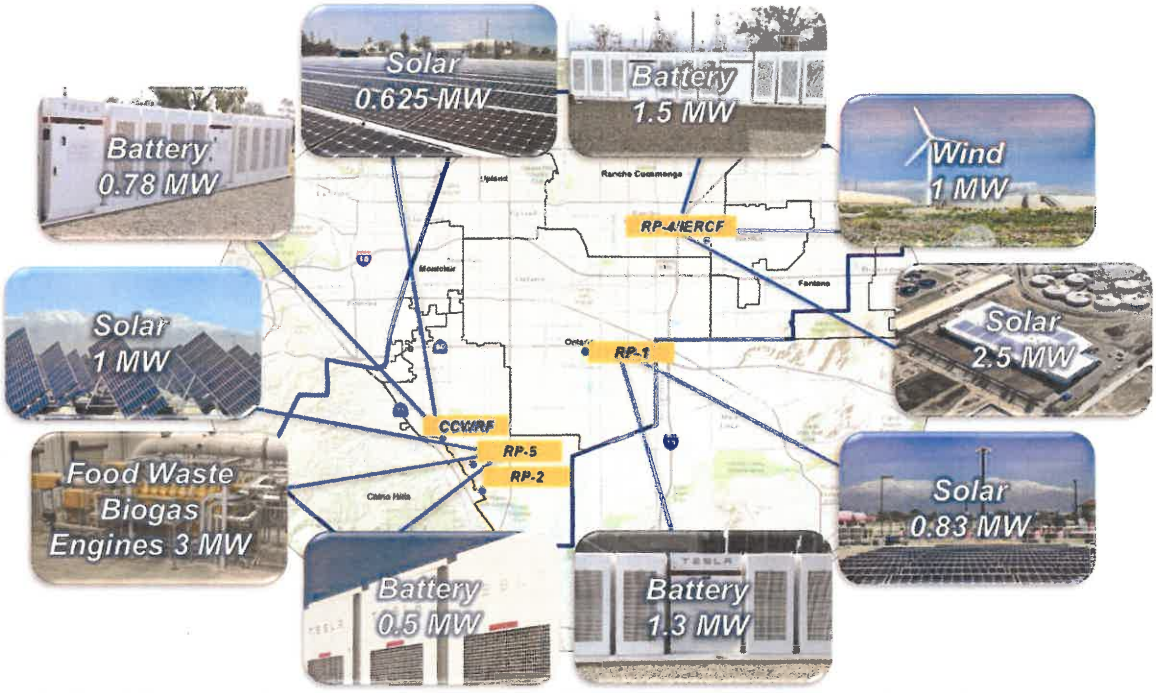
Expenditure

- The cost of electricity remains the highest non-labor operations and maintenance (O&M) expenditure for IEUA. In 2018/19, the annual cost for electricity was $8.3 million which was a decrease of 5% as compared to the previous fiscal year of $8.7 million due to the decrease in energy consumption. IEUA diversified energy procurement approach, that includes on-site generation Power Purchase Agreements (PPA), 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). If fully operational, onsite generation would provide approximately 86% of the electricity needed to satisfy agency-wide demand during peak hours (Figure 4); current output is approximately 33% of the summer peak demand with the Renewable Energy Efficiency Project (REEP) Engines offline (Figure 5). It should be noted that 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 move closer to the goal of peak power independence by 2030, 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. This would allow IEUA to be able to operate completely off the grid during peak energy usage periods.

Figure 3: IEUA's Diverse Renewable Portfolio



- IEUA's renewable portfolio generated 9% of the electricity used in 2018/19. Of the electricity consumed by IEUA;
  - 8.5% was produced by the solar across IEUA facilities; and
  - 0.3% was produced by the wind turbine at RP-4.
- In 2018/19, 6,402 MWh of electricity was generated on site, 1.7% less than 2017/18. Although an increase in generation was expected because of the installation of the 1.5 MW of additional solar at Inland Empire Regional Composting Facility (IERCF) in December 2018, the decrease was caused by several onsite energy sources being offline.
- Despite PPA average rates were typically higher than the average grid price in 2018/19, renewable energy projects provided overall $58,000 in savings, as a result of lower standby charges compared to the facility demand charge rate.
- Generated solar electricity varies throughout the year due to the different number of sunlight hours, solar generation is usually higher in March and lower in December (Figure 5). In addition, CCWRF solar was inoperable during the second half of the fiscal year. SunPower is currently in the process of repairing the existing solar facility which is expected to go online October 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.

Typically, the wind turbine produces more in the winter time, but this fiscal year, more generation was experienced in the fall (Figure 5).

- The REEP engine has been offline since August 2017 due to Inland BioEnergy, LLC (IBE) permitting issues with the Santa Ana Watershed Project Authority (SAWPA). IBE, the lessee and operator of the RP-5 Solids Handling Facility (SHF), ceased operation and terminated their existing agreement with IEUA. Previously, IBE received food waste, produced biogas, and generated electricity to be used at RP-5.
- 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 battery storage spread across four facilities have been in operation since July 2017 with commercial operation began November 2018.

Figure 4: Connected Renewables' Capacities vs. Agency-Wide Power Demand

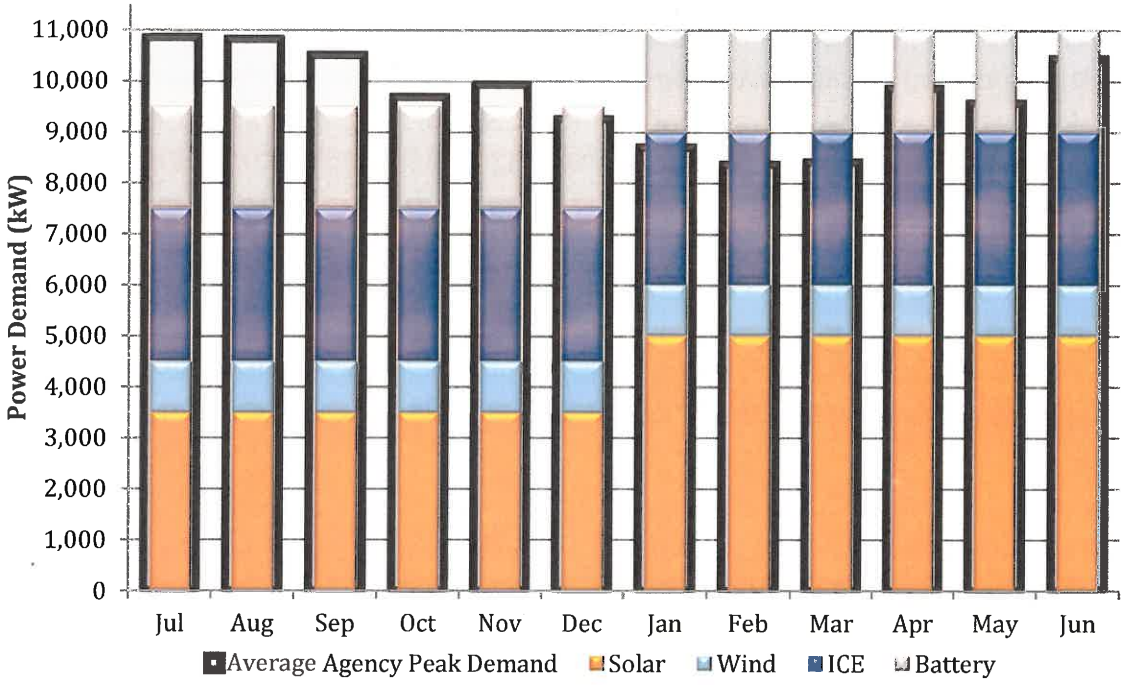
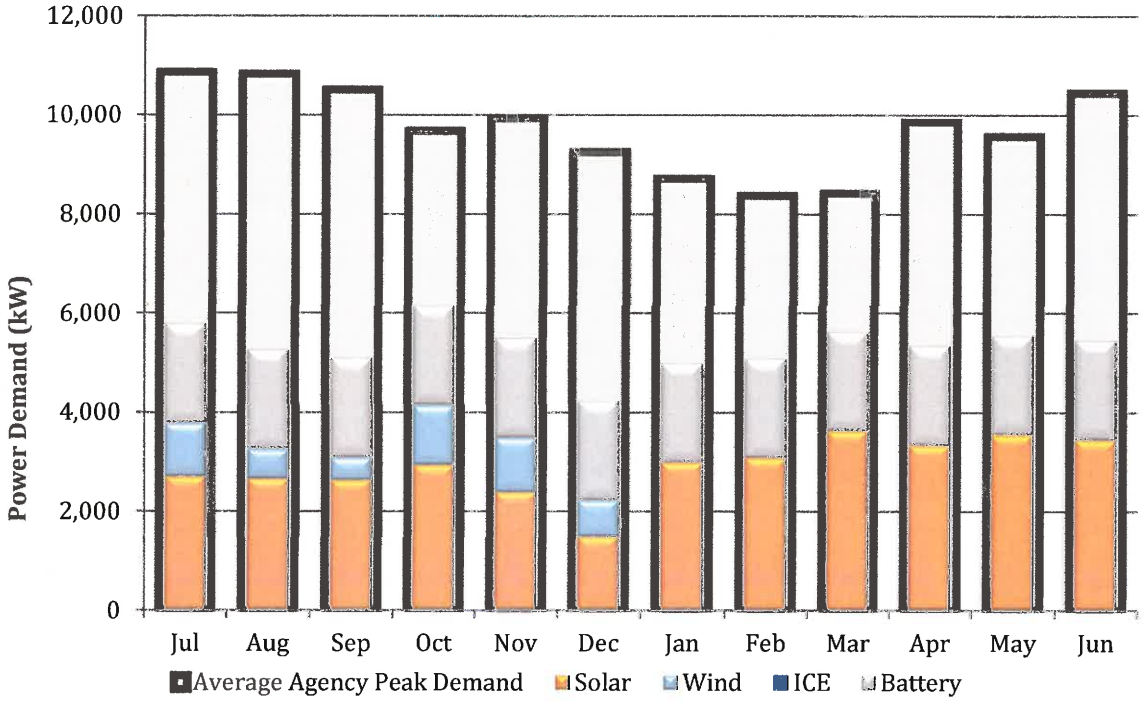
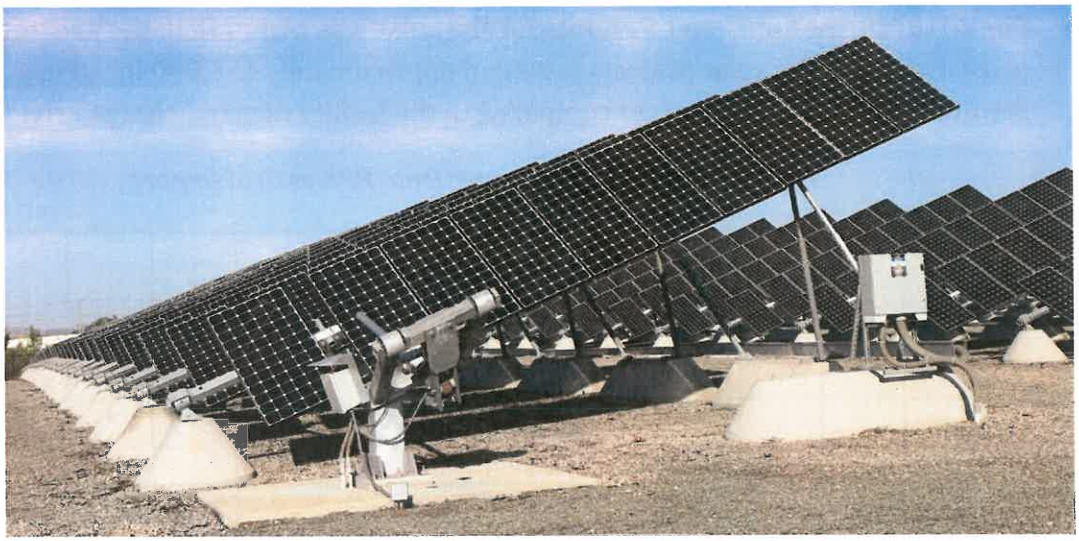


Figure 5: Actual Renewables' Output



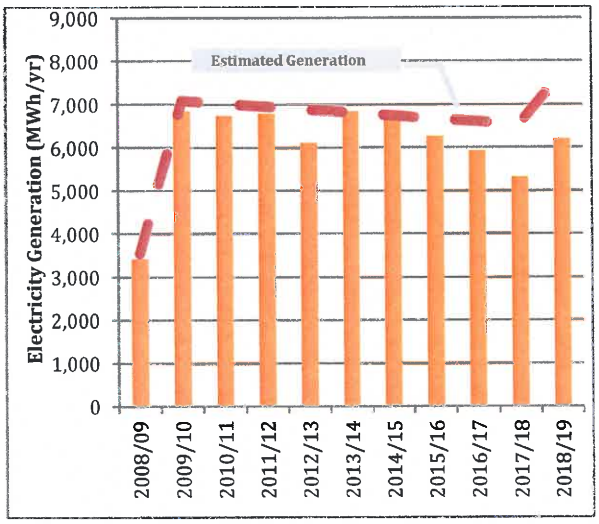
Solar



Solar Performance

- Solar across IEUA facilities generated 6,207 MWh of renewable energy, 16.6% more than 2017/18. The increased output was due to the 1.5 MW addition of solar at IERCF, which was put online in the end of December 2019. 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 with AMS.

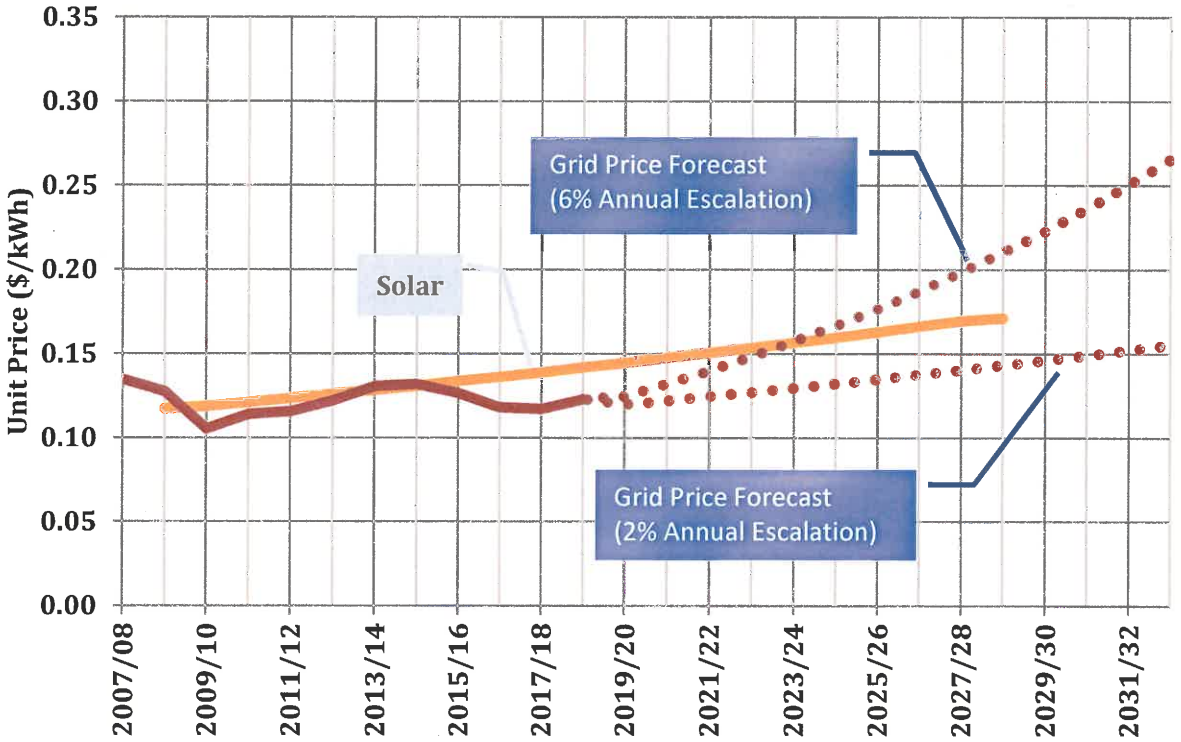
Figure 6: Solar Electricity Generation



Solar Cost

- For 2018/19, the SunPower PPA rate for the solar was higher than the average grid price. However, the solar projects provided approximately $54,000 in savings, as a result of lower standby charges compared to the facility demand charge rate.

Figure 7: Cost of Solar Power from PPA vs Grid Import

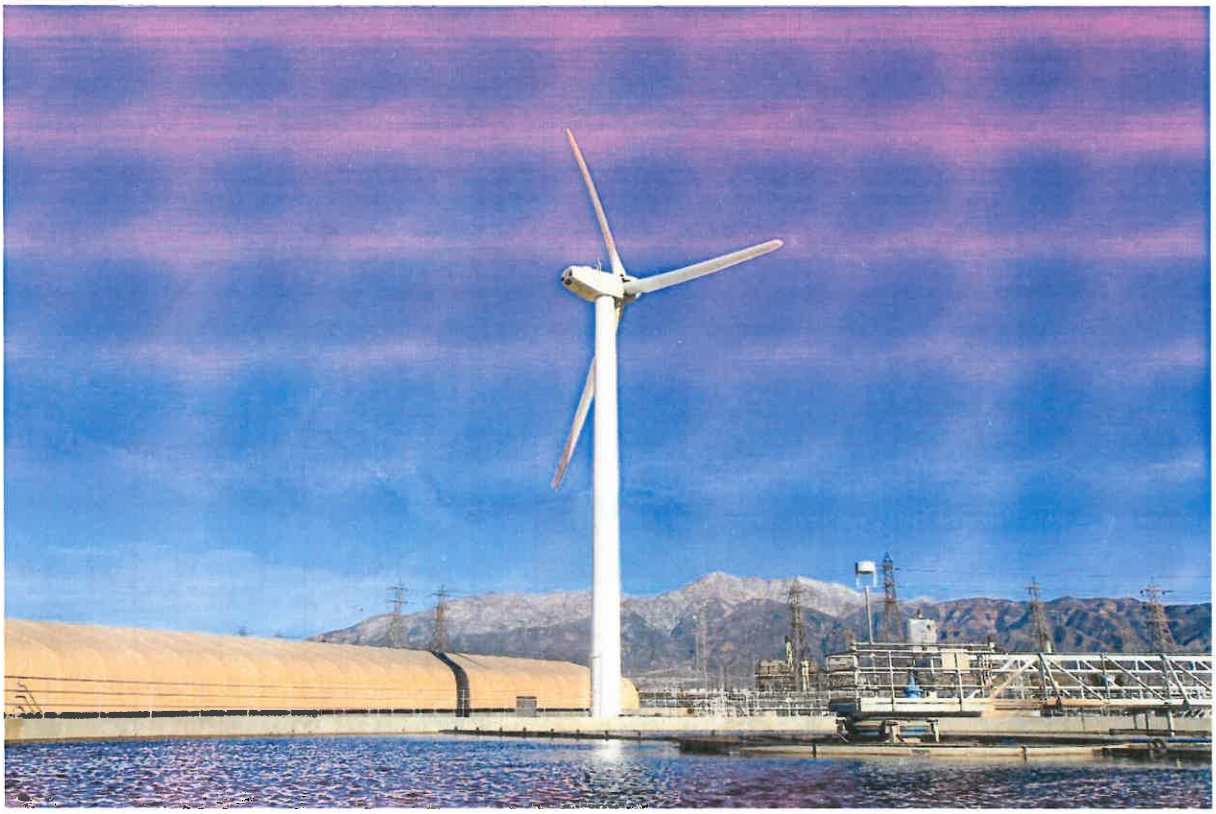


- Solar generated $293,000 from 2008/09 to 2018/19.

Table 1: Savings from Solar Power PPA

Savings FY 08/09 – FY 18/19	$293,000
Range of Savings PPA Term (FY 08/09 – FY 28/29)	$661,000 (2% Esc) $2,741,000 (6% Esc)

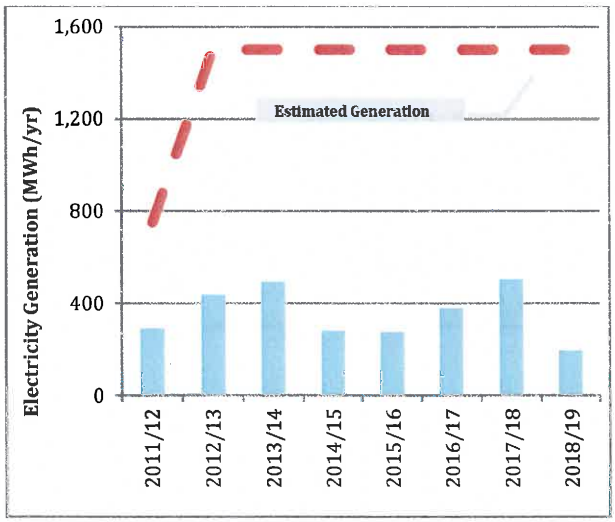
Wind



Wind Performance

- In FY 2018/19 the wind turbine at RP-4 generated 195 MWh of renewable energy, 61% lower than 2017/18 due to the system being offline since December 2018.

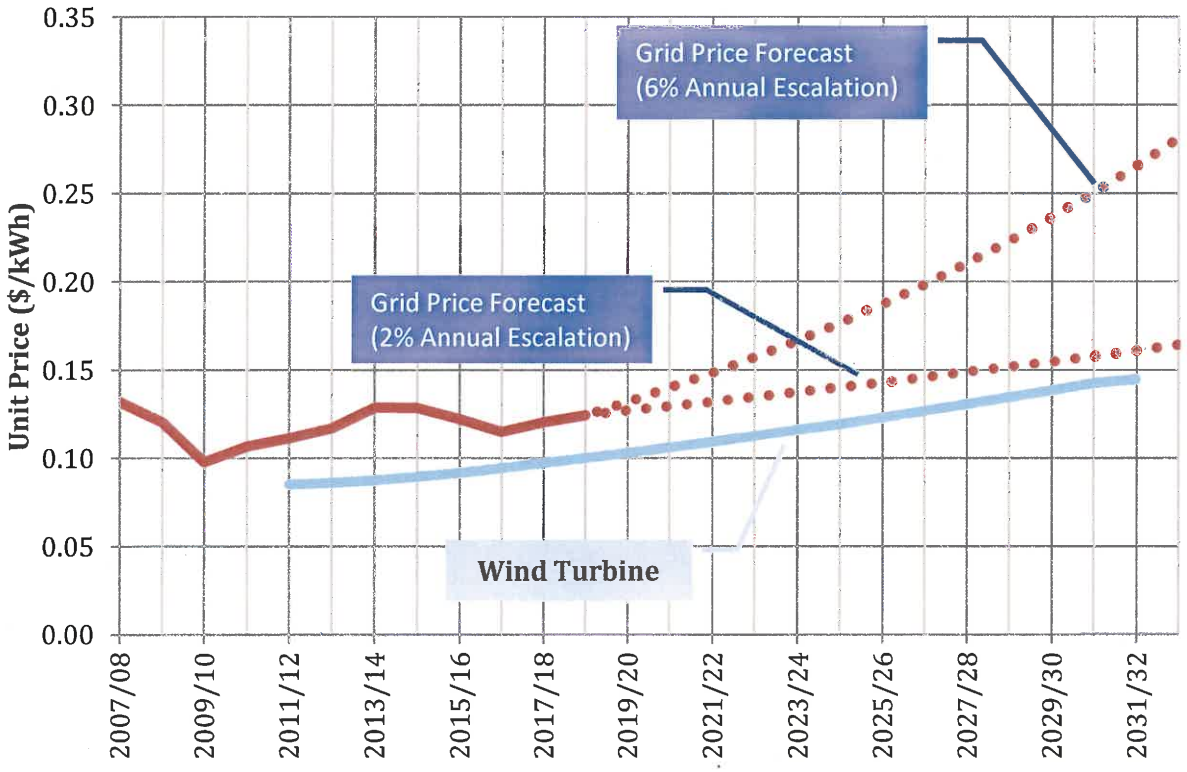
Figure 8: Wind Electricity Generation



Wind Cost

- For 2018/19, the PPA rate for the wind turbine was 20% lower than the average grid price.

Figure 9: Cost of Wind Power vs Grid Import

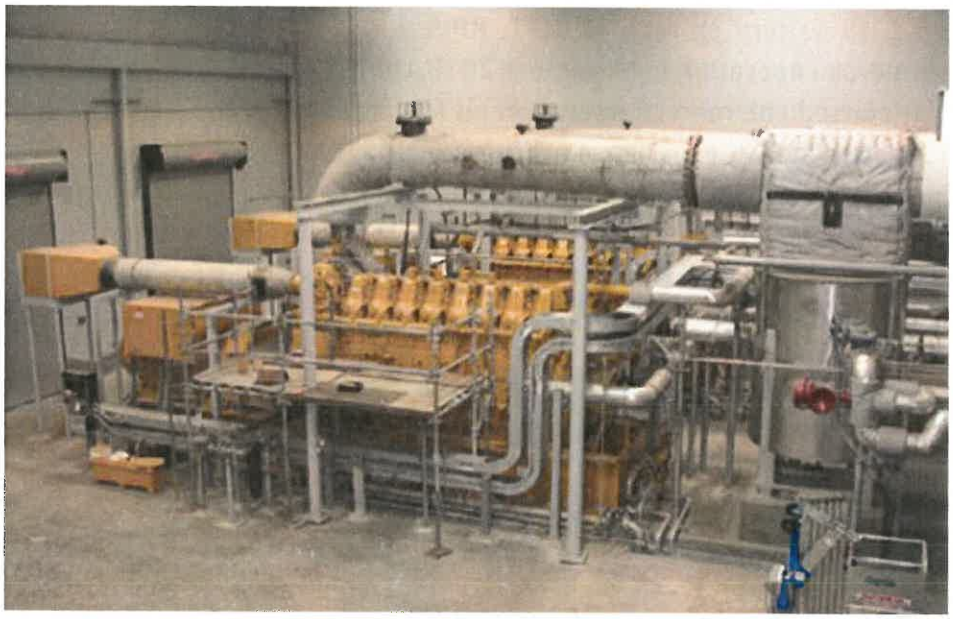


- Wind generated $78,000 in savings from 2011/12 to 2018/19.

Table 2: Savings from Wind Power

Savings FY 11/12 – FY 17/18	$78,000
Range of Savings PPA Term (FY 11/12 – FY 31/32)	$181,000 (2% Esc) $434,000 (6% Esc)

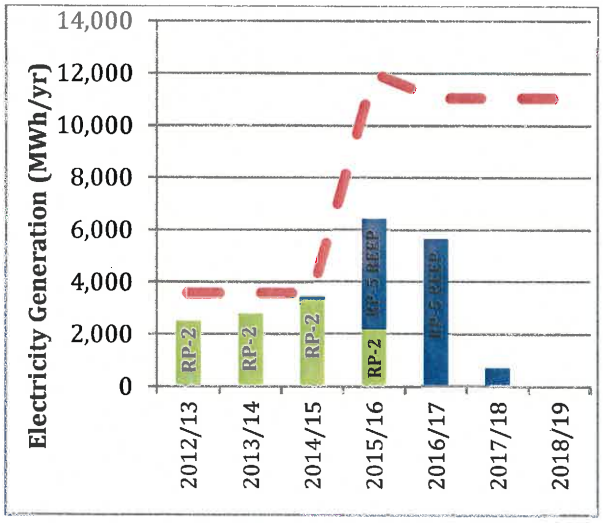
Engine



Engine Performance

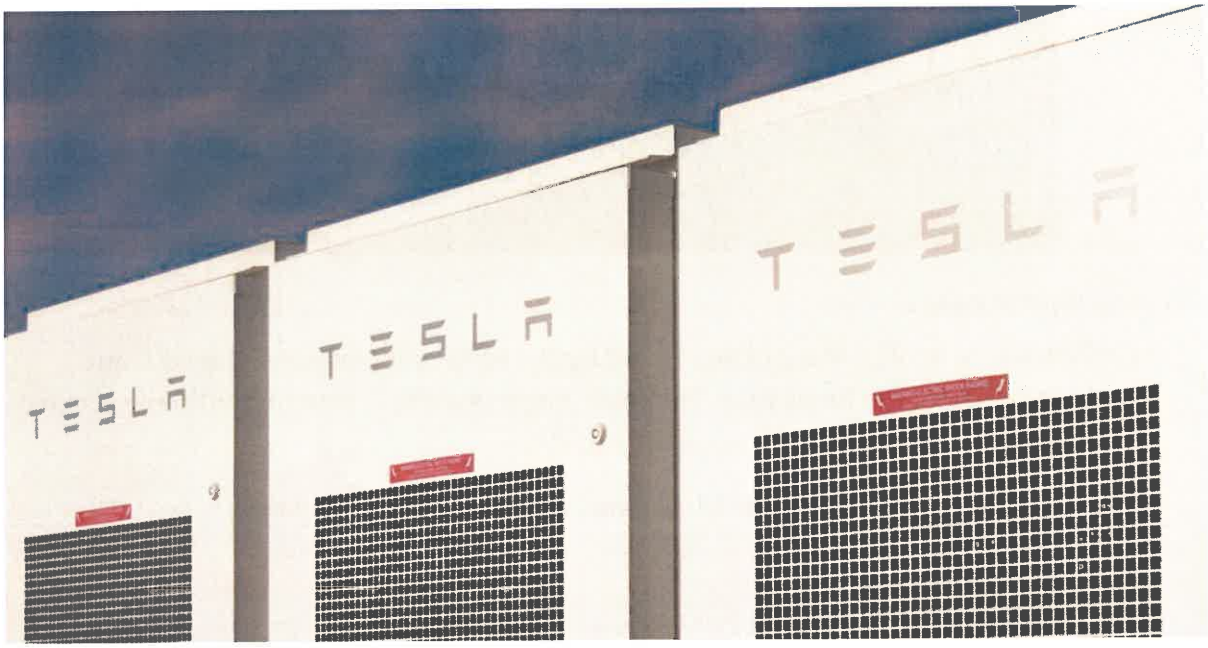
- Renewable energy was not generated by the REEP engines since they did not operate the entire fiscal year. The REEP engines at RP-5 were put offline in August 2017 due to permitting issues with SAWPA.

Figure 10: Engine(s) Electricity Generation



Battery Storage + Solar

- The AMS battery storage at RP-1, RP-5 and CCWRF (2.5 MW combined) started commercial operation in November 2018, the 1.5 MW battery storage and 1.5 MW of solar started commercial operation on March 2019. In the first month of operation, the system at IERCF and RP-4 achieved over $16,000 in energy cost savings and was able to incur a 1,500-kilowatt peak reduction from the electric utility; however, since the EMS contract has a set annual minimum guaranteed savings for the Agency, a comprehensive evaluation of the energy storage performance will be available at the end of the first year of operation.



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 throughout its facilities and operations. In FY 18/19, the following process optimization project was completed:

Process Optimization

- This project replaced the grit blowers at RP-1 with energy efficient blowers.
- Completed: June 2019
- Expected annual savings: 288,266 kWh and $30,552
- Avoided power usage: 18 kW

RP-4 Battery Storage and IERCF Rooftop Solar

- AMS installed 1.5 MW of battery storage at RP-4 and 1.5 MW of solar at IERCF. The new solar is integrated with the battery and the onsite renewable sources. Through an EMS contract, the battery and solar system will improve energy load management and provide cost savings by shifting electricity use from the grid during peak periods.
- Completed: December 2018

The new 1.5 MW solar panels at IERCF installed by AMS.

Upcoming Projects

Process Optimization

- This project will install automated ammonia controls at RP-1. The project was completed August 2019.

Pumping Project

- This project will replace 4 recycled water pumps at RP-1. The project is expected to be completed in August 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 is evaluating opportunities to beneficially use the biogas generated at RP-1 in addition to on-site use for digesters heating.

UCR Energy Demand Management

- IEUA will continue to work with University of California, Riverside (UCR) to demonstrate and deploy energy management, data acquisition, and supervisory control strategies to improve efficiency and reduce both peak loads and electricity costs at CCWRF.

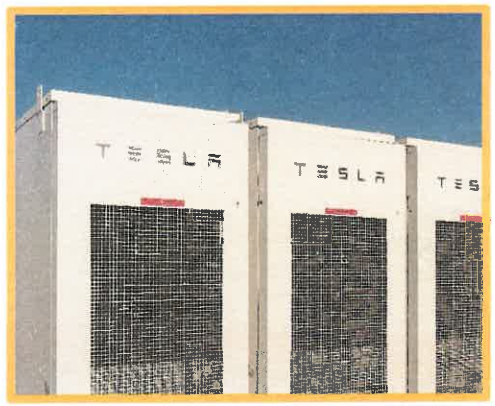
In-Conduit Hydroelectric Power Generation

- IEUA has issued a Request For Information (RFI) for recommendations for feasible and cost-effective in-conduit hydropower technology projects. The proposal received is being evaluated.

INFORMATION
ITEM

5I

1st Quarter Planning & Environmental Resources Update

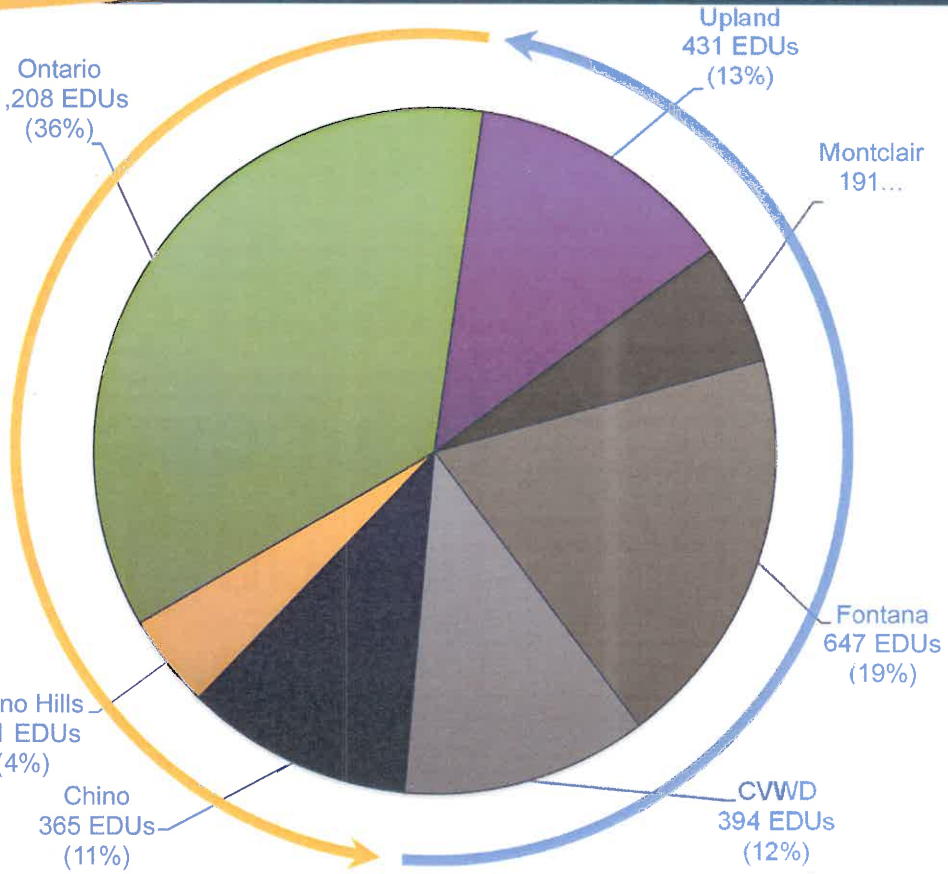


Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Pietro Cambiaso
October 2019

FY18/19 Building Activity

3,387 EDUs Resulted in $22.4M Funding



South Service Area
1,724 EDUs
(51%)

North Service Area
1,663 EDUs
(49%)

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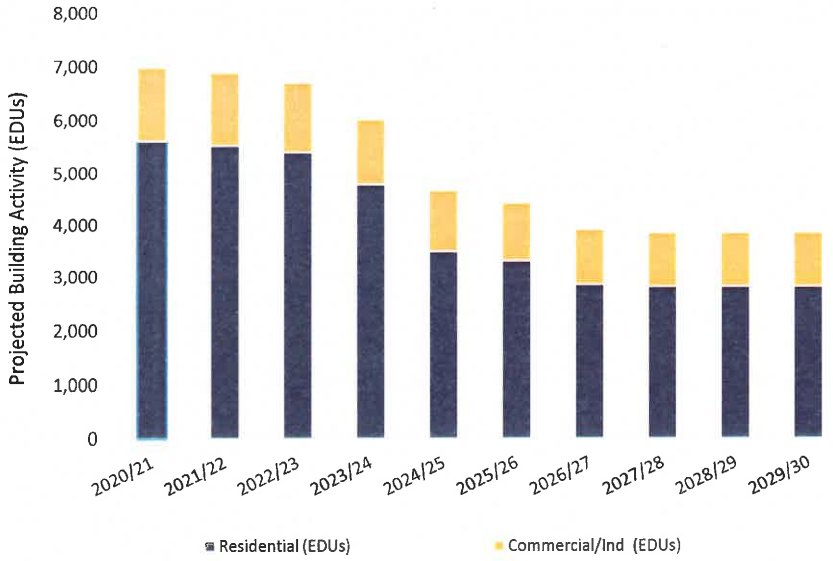
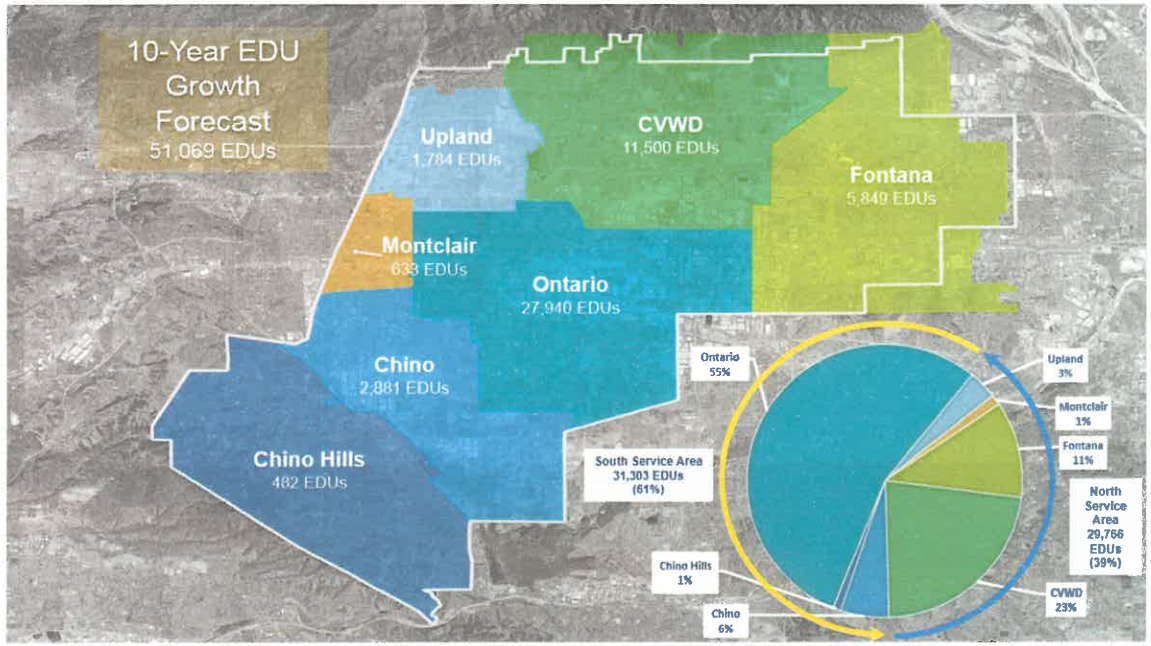
EDU = Equivalent Dwelling Unit
Partial EDU rounded to the nearest whole number

Regional Contracting Agencies EDU Projections



2019 Ten Year Growth Forecast: 52,795 EDU

2020 Ten Year Growth Forecast: 51,069 EDU



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Regional Water Use Trend

Note: Total Water Use Data includes imported water, surface water, groundwater, recycled and desalter production. Excludes IEUA groundwater recharge

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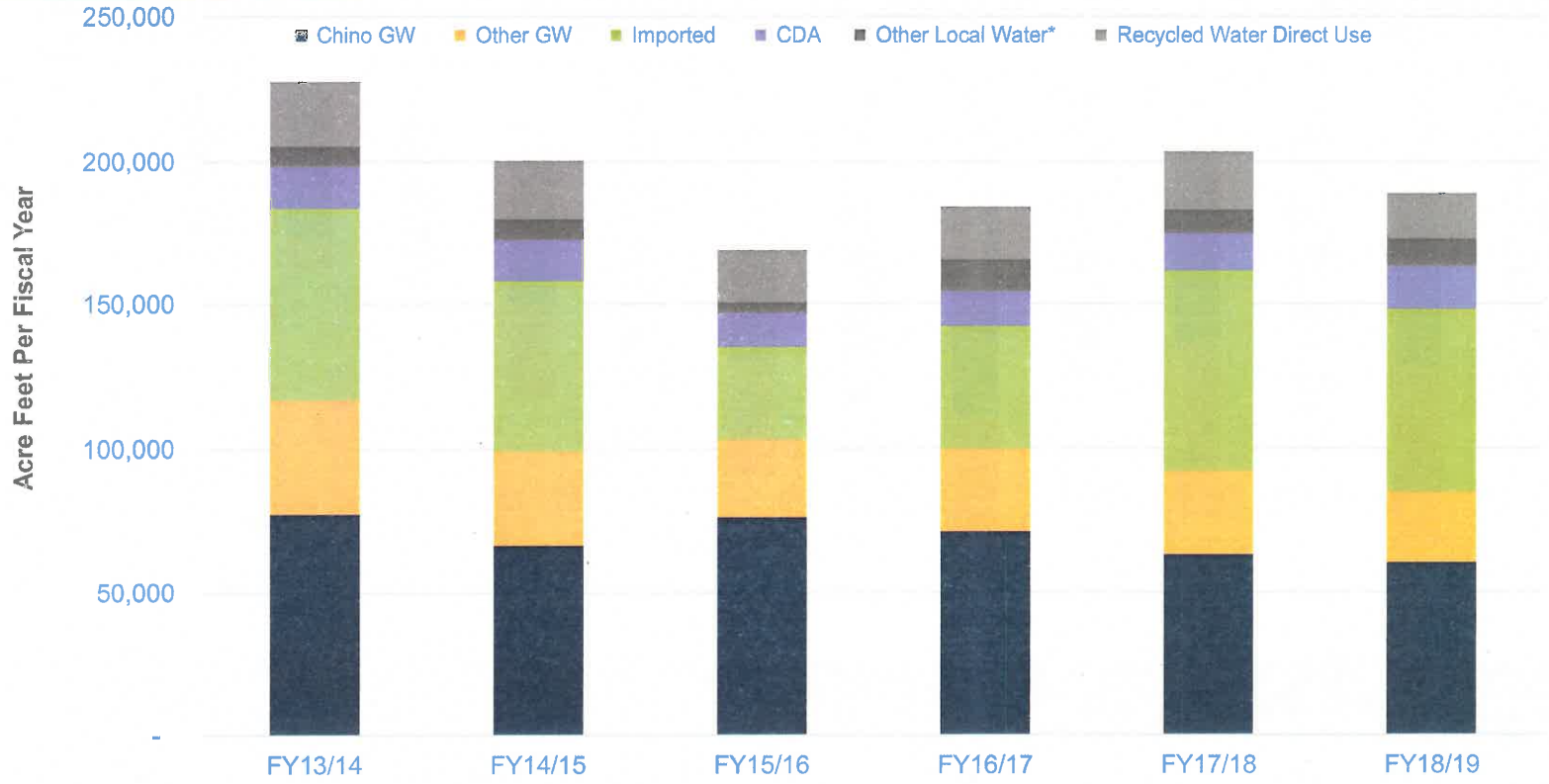
Regional Water Use Trend By Source



* Water purchased from other local water companies (such as SAWCo or WECWC) and surface flows

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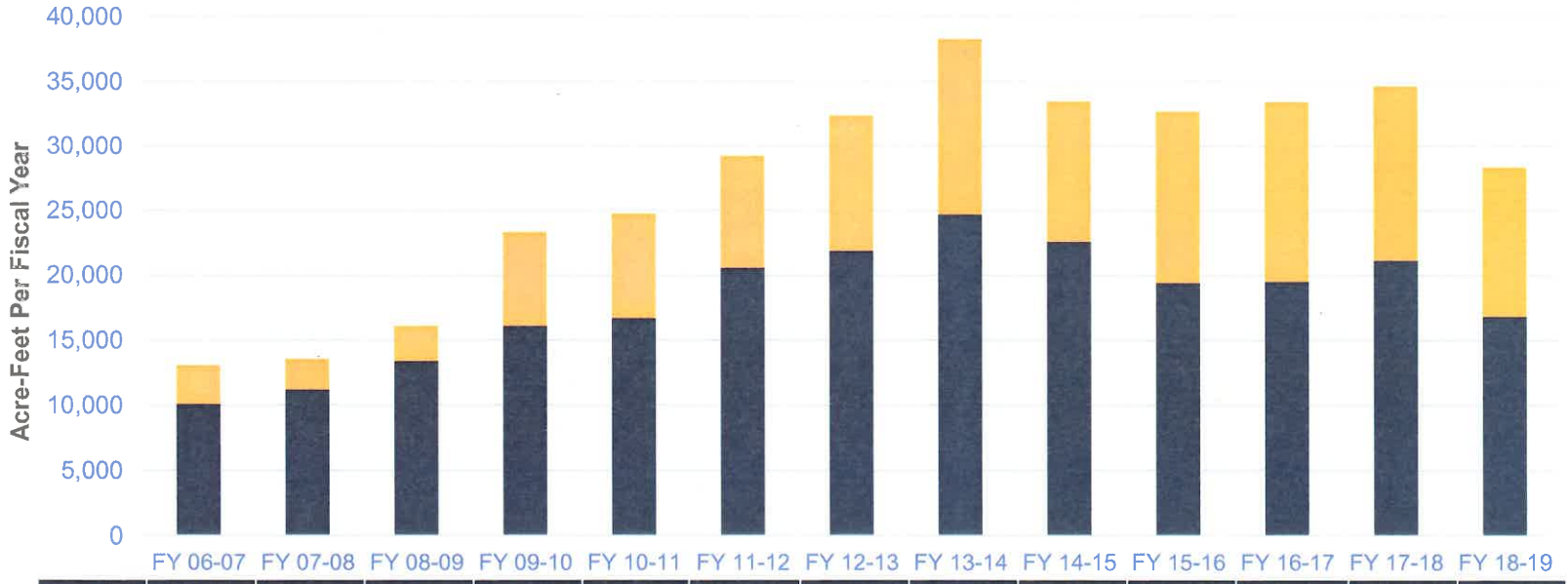
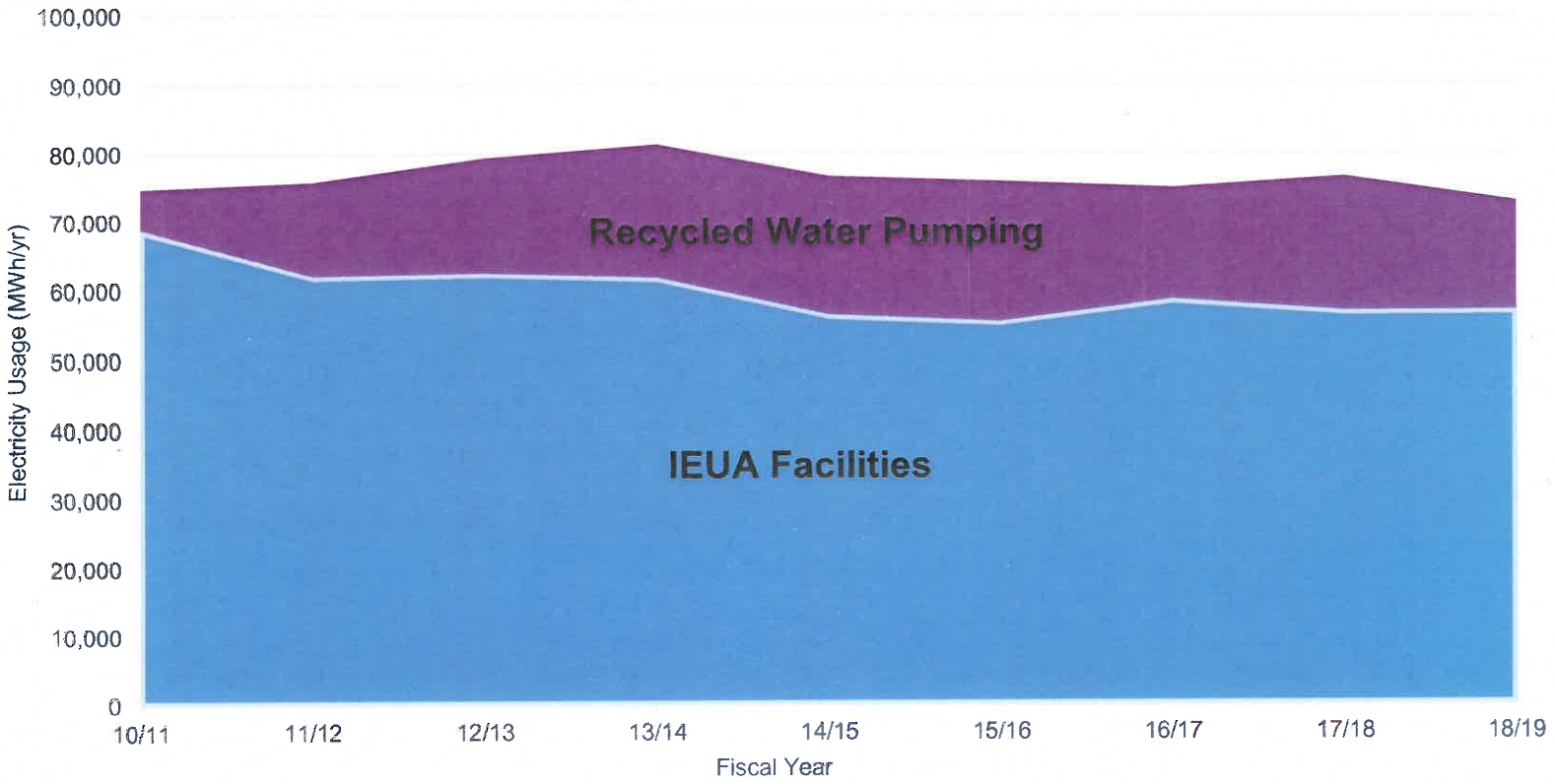
Recycled Water Deliveries



	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
Direct	10,048	11,153	13,361	16,057	16,656	20,556	21,840	24,659	22,850	19,397	19,477	21,132	16,803
GWR	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
Total	13,029	13,493	16,045	23,265	24,684	29,190	32,319	38,252	33,690	32,619	33,411	34,642	28,345

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Electricity Usage



Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

INFORMATION
ITEM

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Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date: October 16, 2019

To: The Honorable Board of Directors **From:** Shivaji Deshmukh, General Manager

Committee:

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

Subject: Treasurer's Report of Financial Affairs

Executive Summary:

The Treasurer's Report of Financial Affairs for the month ended August 31, 2019 is submitted in a format consistent with the State requirement.

For the month of August 2019, total cash, investments, and restricted deposits of $252,680,085 reflects a decrease of $7,071,174 compared to the total of $259,751,259 reported for July 2019. The decrease was primarily due to debt service payments for State Revolving Fund loans and the 2010A revenue bond. The average days cash on hand for the month ended August 31, 2019 decreased from 261 days to 249 days.

The unrestricted Agency investment portfolio yield in August 2019 was 2.477 percent, an increase of 0.026 percent compared to the July 2019 yield of 2.452 percent. The slight increase in yield is mainly attributed to the allocation of funds from the Citizens Business Bank Sweep account to accounts earning higher yields.

Staff's Recommendation:

The Treasurer's Report of Financial Affairs for the month ended August 31, 2019 is an information item for the Board of Director's review.

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

Account/Project Name:

Fiscal Impact (explain if not budgeted):

Interest earned on the Agency's investment portfolio increases the Agency's overall reserves.

Full account coding (internal AP purposes only): - - - - - - Project No.:

Prior Board Action:

On September 18, 2019, the Board of Directors approved the Treasurer's Report of Financial Affairs for the month ended July 31, 2019.

Environmental Determination:

Not Applicable

Business Goal:

The Financial Affairs report is consistent with the Agency's Business Goal of Fiscal Responsibility in providing financial reporting that accounts for cash and investment activities to fund operating requirements and to optimize investment earnings.

Attachments:

Attachment 1 - Background
Attachment 2 - PowerPoint
Attachment 3 - Treasurer's Report of Financial Affairs

Background

Subject: Treasurer's Report of Financial Affairs

The Treasurer's Report of Financial Affairs for the month ended August 31, 2019 is submitted in a format consistent with State requirements. The monthly report denotes investment transactions that have been executed in accordance with the criteria stated in the Agency's Investment Policy (Resolution No. 2019-3-1).

Agency total cash, investments, and restricted deposits for the month of August 2019 was $252.7 million, a decrease of $7.1 million from the $259.8 million reported for the month ended July 31, 2019. The decrease was primarily due to debt service payments for State Revolving Fund loans and the 2010A revenue bond.

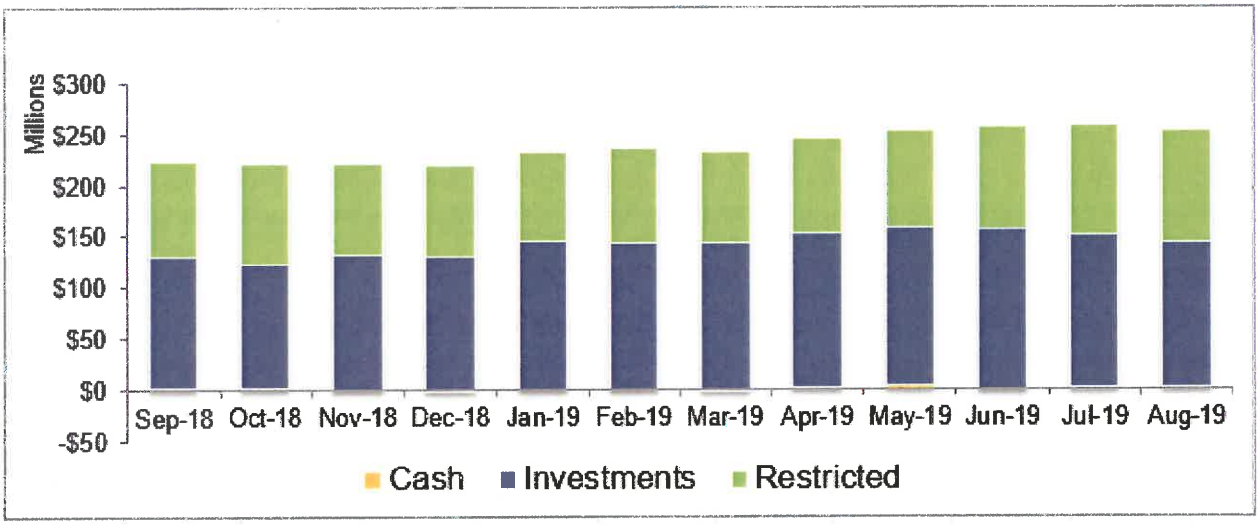
Table 1 represents the unrestricted Agency investment portfolio, by authorized investment and duration, with total portfolio amount of $142.7 million. The Agency portfolio excludes cash and restricted deposits in the amount of $110.0 million held by member agencies and with fiscal agents.

Table 1: Agency Portfolio

Authorized Investments	Allowable Threshold ($ million or %)	Investment Value as of August 31, 2019 ($ million)				Average Yield %	Portfolio% (Unrestricted)
		Under 1 Year	1-3 Years	Over 3 Years	Total		
LAIF*- Unrestricted	$65	$24.8	$0	$0	$24.8	2.34%	17.4%
CAMP** – Unrestricted	n/a	19.3			19.3	2.28	13.5
Citizens Business Bank – Sweep	40%	7.2			7.2	1.10	5.0
Sub-Total Agency Managed		**$51.3**	**$0**	**$0**	**$51.3**	**2.144%**	**35.9%**
Brokered Certificates of Deposit	30%	$2.8	$1.1	$0	$3.9	3.12%	2.7%
Medium Term Notes	30%	0.7	7.8	6.6	15.1	3.03	10.6
Municipal Bonds	10%	1.0			1.0	1.75	0.7
US Treasury Notes	n/a	2.2	24.5	22.0	48.7	2.55	34.2
US Gov't Securities	n/a	3.5	11.7	7.5	22.7	2.64	15.9
Sub-Total PFM Managed		**$10.2**	**$44.2**	**$37.0**	**$91.4**	**2.66%**	**64.1%**
Total		**$61.5**	**$44.2**	**$37.0**	**$142.7**	**2.477%**	**100.0%**

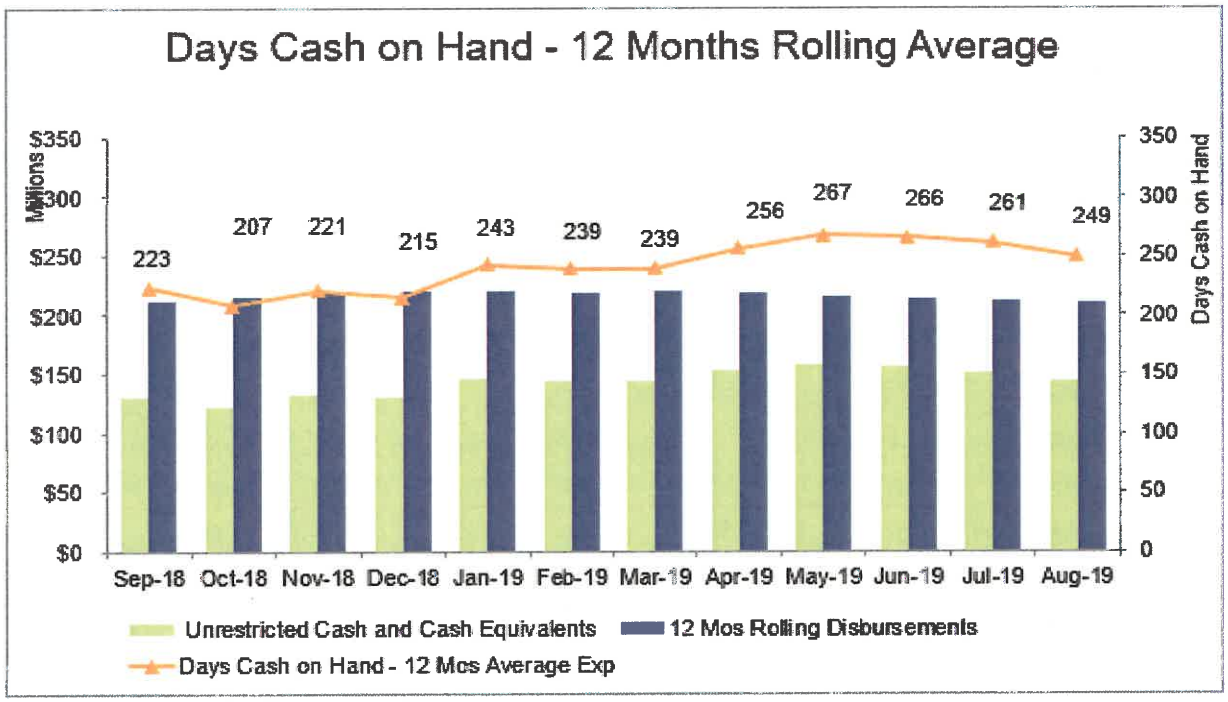
*LAIF – Local Agency Investment Fund
**CAMP – California Asset Management Program
+/- due to rounding

Figure 1: Cash, Investments, and Restricted Deposits



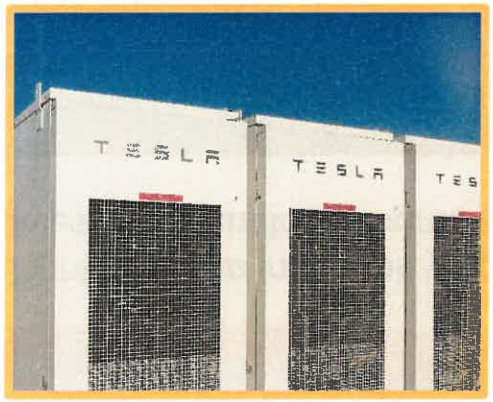
Average days cash on hand is calculated using the monthly ending balance of unrestricted cash and cash equivalents divided by disbursements associated with operating expenses, debt service, and capital expenditures as recorded in the Agency's cash flow. The average days cash on hand for the month ended August 31, 2019 decreased from 261 days to 249 days as shown in Figure 2.

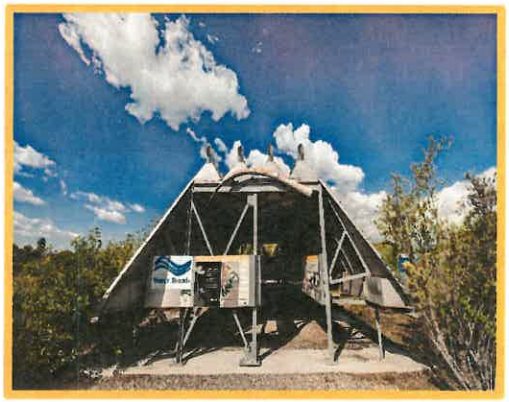
Figure 2: Days Cash on Hand – 12 Month Rolling Average



Monthly cash and investment summaries are available on the Agency's website at:
https://www.ieua.org/fy-2019-20-cash-and-investment-summary/

Treasurer's Report of Financial Affairs for Month Ended August 31, 2019





Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Javier Chagoyen-Lazaro
October 2019

Agency Liquidity

- Slight increase in overall yield mainly attributed to the allocation of funds from the Citizens Business Bank Sweep account to accounts earning higher yields.

Description	August ($ million)	July ($ million)	Increase/ (Decrease) ($ million)
Investment Portfolio	$142.7	$149.9	($7.2)
Cash and Restricted Deposits	$109.9	$109.8	$0.1
Total Investments, Cash, and Restricted Deposits	**$252.7**	**$259.8**	**($7.1)**
Investment Portfolio Yield	2.477%	2.452%	0.026%
Weighted Average Duration (Years)	1.02	0.97	0.05
Average Cash on Hand (Days)	249	261	(12)

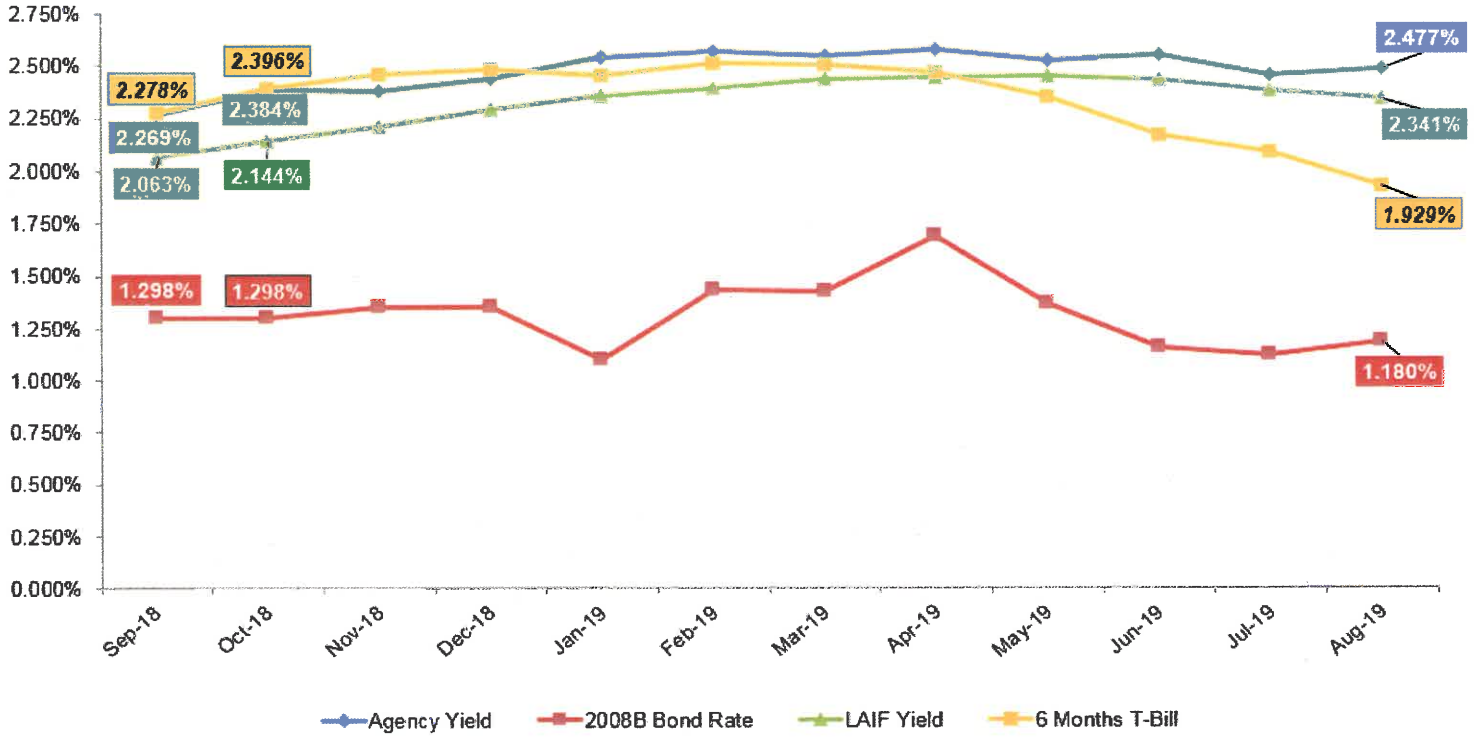
Monthly cash and investment summaries available at https://www.ieua.org/fy-2019-20-cash-and-investment-summary/

Agency Investment Position

Authorized Investments	Allowable Threshold ($ million or %)	Under 1 Year	1 – 3 Years	Over 3 Years	Total	Average Yield %	Portfolio % (Unrestricted)
Local Agency Investment Fund	$65	$24.8	$0	$0	$24.8	2.34%	17.4%
California Asset Management Program	n/a	19.3			19.3	2.28	13.5
Citizens Business Bank – Sweep	40%	7.2			7.2	1.10	5.0
Sub-Total Agency Managed		**$51.3**	**$0**	**$0**	**$51.3**	**2.14%**	**35.9%**
Brokered Certificates of Deposit (CD)	30%	$2.8	$1.1	$0	$3.9	3.12%	2.7%
Medium Term Notes	30%	0.7	7.8	6.6	15.1	3.03	10.6
Municipal Bonds	10%	1.0			1.0	1.75	0.7
US Treasury Notes	n/a	2.2	24.5	22.0	48.7	2.55	34.2
US Government Securities	n/a	3.5	11.7	7.5	22.7	2.64	15.9
Sub-Total PFM Managed		**$10.2**	**$44.1**	**$37.1**	**$91.4**	**2.66%**	**64.1%**
Total		**$61.5**	**$44.1**	**$37.1**	**$142.7**	**2.477%**	**100.0%**

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Portfolio Yield Comparison



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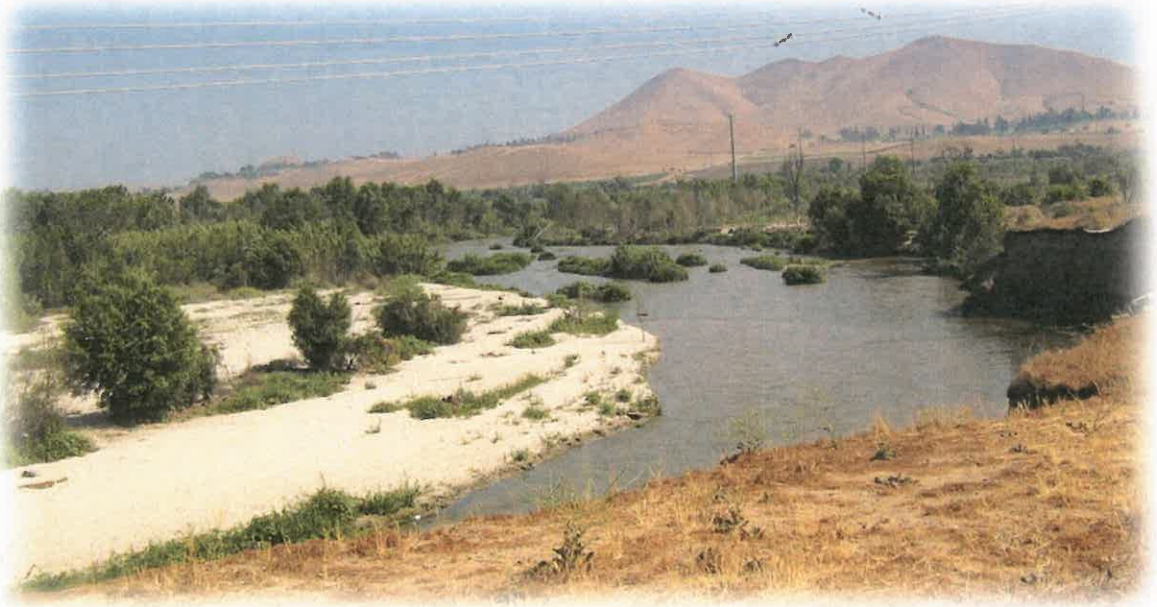
Questions



The Treasurer's Report of Financial Affairs is consistent with the Agency's business goal of fiscal responsibility.

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

TREASURER'S REPORT OF FINANCIAL AFFAIRS

For the Month Ended August 31, 2019

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

All investment transactions have been executed in accordance with the criteria stated in the Agency's Investment Policy (Resolution No. 2019-3-1) adopted by the Inland Empire Utilities Agency's Board of Directors during its regular meeting held on May 15, 2019.

The funds anticipated to be available during the next six-month period are expected to be sufficient to meet all foreseen expenditures during the period.

* A Municipal Water District

INLAND EMPIRE UTILITIES AGENCY
Cash and Investment Summary
Month Ended
August 31, 2019

	August	July	Variance
Cash, Bank Deposits, and Bank Investment Accounts	$1,118,852	$1,419,028	($300,176)
Investments			
Agency Managed			
Citizens Business Bank (CBB) Repurchase (Sweep)	$7,194,598	$14,582,030	($7,387,432)
Local Agency Investment Fund (LAIF)	24,798,099	21,665,351	3,132,748
California Asset Management Program (CAMP)	19,330,199	22,287,331	(2,957,132)
Total Agency Managed Investments	51,322,896	58,534,712	(7,211,816)
PFM Managed			
Certificates of Deposit	$3,864,791	$3,864,769	$22
Municipal Bonds	1,000,000	999,894	106
Commercial Paper	0	1,019,320	(1,019,320)
Medium Term Notes	15,071,579	15,073,944	(2,365)
U.S. Treasury Notes	48,733,523	47,694,343	1,039,180
U.S. Government Sponsored Entities	22,710,993	22,708,549	2,444
Total PFM Managed Investments	91,380,886	91,360,819	20,067
Total Investments	$142,703,782	$149,895,531	($7,191,749)
Total Cash and Investments Available to the Agency	$143,822,634	$151,314,559	($7,491,925)
Restricted Deposits			
CAMP Water Connection Reserve	$16,396,188	$15,960,387	$435,801
LAIF Self Insurance Reserve	6,312,073	6,444,821	(132,748)
Debt Service Accounts	2,614,277	2,610,311	3,966
Capital Capacity Reimbursement Account (CCRA) Deposits Held by Member Agencies**	65,994,860	65,994,860	0
California Employers' Retirement Benefit Trust Account - CERBT (Other Post Employment Benefits - OPEB)	17,490,252	17,301,467	188,785
Escrow Deposits	49,801	124,854	(75,053)
Total Restricted Deposits	$108,857,451	$108,436,700	$420,751
Total Cash, Investments, and Restricted Deposits	**$252,680,085**	**$259,751,259**	**($7,071,174)**

***Total reported as of June 2019*

INLAND EMPIRE UTILITIES AGENCY
Cash and Investment Summary
Month Ended
August 31, 2019

Cash, Bank Deposits, and Bank Investment Accounts

CBB Demand Account (Negative balance offset by CBB Sweep Balance)	$144,609
CBB Payroll Account	-
CBB Workers' Compensation Account	28,580
Subtotal Demand Deposits	$173,189
Other Cash and Bank Accounts	
Petty Cash	$2,250
Subtotal Other Cash	$2,250
US Bank Pre-Investment Money Market Account	$943,413
Total Cash and Bank Accounts	**$1,118,852**

Unrestricted Investments

CBB Repurchase (Sweep) Investments	
Federal Home Loan Bank	$4,765,084
Fannie Mae	2,429,514
Subtotal CBB Repurchase (Sweep)	$7,194,598
Local Agency Investment Fund (LAIF)	
LAIF Fund	$24,798,099
Subtotal Local Agency Investment Fund	$24,798,099
California Asset Management Program (CAMP)	
Short Term	$19,330,199
Subtotal CAMP	$19,330,199
Subtotal Agency Managed Investment Accounts	**$51,322,896**

INLAND EMPIRE UTILITIES AGENCY
Cash and Investment Summary
Month Ended
August 31, 2019

Unrestricted Investments Continued

Brokered Certificates of Deposit	
Brokered Certificates of Deposit	$3,864,791
Subtotal Brokered Certificates of Deposit	$3,864,791
Municipal Bonds	
University of California Taxable Revenue Bonds	$1,000,000
Subtotal State and Municipal Bonds	$1,000,000
Medium Term Notes	
UPS of America Inc	$748,433
Hershey Company	334,866
American Honda Finance	780,614
Boeing Co	755,376
Toyota Motor	1,186,137
Bank of NY Mellon	2,767,059
American Express	790,425
Walt Disney Company	804,247
Paccar Financial Corp	929,548
Visa Inc	804,193
Bank of America	778,114
Oracle Corporation	1,397,349
Amazon Inc	926,853
Burlington North Santa Fe Corp	793,233
Pfizer Inc	1,275,133
Subtotal Medium Term Notes	$15,071,579

INLAND EMPIRE UTILITIES AGENCY
Cash and Investment Summary
Month Ended
August 31, 2019

Unrestricted Investments Continued

U.S. Treasury Notes	
Treasury Note	$48,733,523
Subtotal U.S. Treasury Notes	$48,733,523
U.S. Government Sponsored Entities	
Fannie Mae Bank	$8,256,563
Freddie Mac Bank	7,996,430
Federal Home Loan Bank	6,458,000
Subtotal U.S. Government Sponsored Entities	$22,710,993
Subtotal PFM Managed Investment Accounts	**$91,380,886**
Total Investments	**$142,703,782**

Restricted Deposits

Investment Pool Accounts	
CAMP -Water Connection Reserves	$16,396,188
LAIF - Self Insurance Fund Reserves	6,312,073
Subtotal Investment Pool Accounts	$22,708,261
Debt Service	
2008B Debt Service Accounts	$2,613,764
2017A Debt Service Accounts	513
Subtotal Debt Service	$2,614,277

INLAND EMPIRE UTILITIES AGENCY
Cash and Investment Summary
Month Ended
August 31, 2019

Restricted Deposits Continued

CCRA Deposits Held by Member Agencies	
City of Chino	$10,665,100
Cucamonga Valley Water District	11,280,117
City of Fontana	9,363,869
City of Montclair	3,081,312
City of Ontario	20,904,691
City of Chino Hills	6,275,501
City of Upland	4,424,270
Subtotal CCRA Deposits Held by Member Agencies**	$65,994,860

***Total reported as of June 2019*

CalPERS	
CERBT Account (OPEB)	$17,490,252
Subtotal CalPERS Accounts	$17,490,252

Escrow Deposits	
Stanek Construction	$49,801
Subtotal Escrow Deposits	$49,801

Total Restricted Deposits	$108,857,451
Total Cash, Investments, and Restricted Deposits as of August 31, 2019	**$252,680,085**

Total Cash, Investments, and Restricted Deposits as of 08/31/19	$252,680,085
Less: Total Cash, Investments, and Restricted Deposits as of 07/31/19	259,751,259
Total Monthly Increase (Decrease)	($7,071,174)

INLAND EMPIRE UTILITIES AGENCY
Cash and Investment Summary
Month Ended
August 31, 2019

	Settlement Date	Security Length	Credit Rating @ Purchase		CHANGES IN Credit Rating		Par	Cost Basis	Term	August	%	% Yield to	Maturity	Market
			S&P	Moody's	S&P	Moody's	Amount	Amount	(Days)	Value	Coupon	Maturity	Date	Value
Cash, Bank Deposits, and Bank Investment Accounts														
Citizens Business Bank (CBB)														
Demand Account							$144,609	$144,609	N/A	$144,609		N/A	N/A	$144,609
Payroll Checking							0	0	N/A	0		N/A	N/A	0
Workers' Compensation Account							28,580	28,580	N/A	28,580		N/A	N/A	28,580
Subtotal CBB Accounts							$173,189	$173,189		$173,189				$173,189
US Bank (USB)														
Custodial Money Market *(Investment Mgmt.)*							$855,752	$855,752	N/A	$855,752		1.62%	N/A	$855,752
Custodial Money Market *(Debt Service)*							87,661	87,661	N/A	87,661		1.62%	N/A	87,661
Subtotal USB Account							$943,413	$943,413		$943,413		1.62%		$943,413
Petty Cash							$2,250	$2,250	N/A	$2,250		N/A	N/A	$2,250
Total Cash, Bank Deposits and Bank Investment Accounts							**$1,118,852**	**$1,118,852**		**$1,118,852**				**$1,118,852**
Investments														
CBB Daily Repurchase (Sweep) Accounts														
Fannie Mae							$2,429,514	$2,429,514	N/A	$2,429,514		1.10%	N/A	$2,429,514
Federal Home Loan Bank							4,765,084	4,765,084	N/A	4,765,084		1.10%	N/A	4,765,084
Subtotal CBB Repurchase Accounts							$7,194,598	$7,194,598		$7,194,598		1.10%		$7,194,598
LAIF Accounts														
Non-Restricted Funds							$24,798,099	$24,798,099	N/A	$24,798,099		2.341%	N/A	$24,798,099
Subtotal LAIF Accounts							$24,798,099	$24,798,099		$24,798,099		2.341%		$24,798,099
CAMP Accounts														
Non-Restricted Funds							$19,330,199	$19,330,199	N/A	$19,330,199		2.28%	N/A	$19,330,199
Subtotal CAMP Accounts							$19,330,199	$19,330,199		$19,330,199		2.28%		$19,330,199
Subtotal Agency Managed Investment Accounts							**$51,322,896**	**$51,322,896**		**$51,322,896**		**2.14%**		**$51,322,896**
Brokered Certificates of Deposit (CDs)														
Bank of Nova Scotia Houston	06/07/18	718	A-1	P-1			$1,410,000	$1,409,464	729	$1,409,791	3.08%	3.10%	06/05/20	$1,424,173
Bank of Montreal Chicago	08/03/18	720	A-1	P-1			1,400,000	1,400,000	731	1,400,000	3.19%	3.23%	08/03/20	1,413,934
Sychrony Bank	10/02/15	1800	N/R	N/R			240,000	240,000	1827	240,000	2.25%	2.25%	10/02/20	241,290
Royal Bank of Canada NY	06/08/18	1079	AA-	Aa2			815,000	815,000	1095	815,000	3.24%	3.24%	06/07/21	835,753
Subtotal Brokered CDs							$3,865,000	$3,864,464		$3,864,791		3.12%		$3,915,150

INLAND EMPIRE UTILITIES AGENCY
Cash and Investment Summary
Month Ended
August 31, 2019

	Settlement Date	Security Length	Credit Rating @ Purchase		CHANGES IN Credit Rating		Par	Cost Basis	Term	August	%	% Yield to	Maturity	Market
			S&P	Moody's	S&P	Moody's	Amount	Amount	(Days)	Value	Coupon	Maturity	Date	Value
Investments (continued)														
US Treasury Note														
US Treasury Note	04/18/18	807	AA+	Aaa			$2,195,000	$2,149,128	819	$2,176,940	1.500%	2.46%	07/15/20	$2,188,913
US Treasury Note	04/18/18	1003	AA+	Aaa			2,225,000	2,201,012	1019	2,212,652	2.125%	2.53%	01/31/21	2,239,253
US Treasury Note	01/24/19	741	AA+	Aaa			1,900,000	1,886,938	753	1,890,721	2.250%	2.59%	02/15/21	1,916,551
US Treasury Note	03/15/19	825	AA+	Aaa			2,781,000	2,761,120	838	2,765,114	2.125%	2.45%	06/30/21	2,809,135
US Treasury Note	04/17/18	1184	AA+	Aaa			2,615,000	2,588,543	1201	2,599,377	2.250%	2.57%	07/31/21	2,649,424
US Treasury Note	07/17/18	1184	AA+	Aaa			580,000	567,426	1202	571,613	2.000%	2.69%	10/31/21	586,004
US Treasury Note	04/17/18	1303	AA+	Aaa			2,555,000	2,480,346	1323	2,507,909	1.750%	2.60%	11/30/21	2,569,372
US Treasury Note	04/25/18	1416	AA+	Aaa			2,500,000	2,418,750	1436	2,445,741	1.875%	2.75%	03/31/22	2,525,978
US Treasury Note	08/03/18	1318	AA+	Aaa			3,070,000	2,969,266	1336	2,997,958	1.875%	2.82%	03/31/22	3,101,900
US Treasury Note	09/06/18	1285	AA+	Aaa			3,790,000	3,678,225	1302	3,708,098	1.875%	2.75%	03/31/22	3,829,382
US Treasury Note	04/17/18	1453	AA+	Aaa			1,605,000	1,558,480	1474	1,573,768	1.875%	2.64%	04/30/22	1,622,241
US Treasury Note	07/05/18	1435	AA+	Aaa			1,300,000	1,252,570	1456	1,265,831	1.750%	2.72%	06/30/22	1,311,375
US Treasury Note	06/06/18	1554	AA+	Aaa			2,065,000	1,980,706	1577	2,003,893	1.750%	2.76%	09/30/22	2,084,601
US Treasury Note	05/04/18	1617	AA+	Aaa			1,600,000	1,546,625	1641	1,561,716	2.000%	2.80%	10/31/22	1,627,875
US Treasury Note	10/04/18	1557	AA+	Aaa			1,040,000	990,356	1580	1,000,314	1.750%	2.93%	01/31/23	1,051,050
US Treasury Note	04/17/18	1751	AA+	Aaa			305,000	288,535	1778	292,962	1.500%	2.69%	02/28/23	305,763
US Treasury Note	07/05/18	1673	AA+	Aaa			1,275,000	1,206,269	1699	1,222,568	1.500%	2.74%	02/28/23	1,278,188
US Treasury Note	02/12/19	1489	AA+	Aaa			1,235,000	1,189,508	1508	1,195,320	1.500%	2.44%	03/31/23	1,238,619
US Treasury Note	01/24/19	1596	AA+	Aaa			2,000,000	1,899,453	1618	1,912,531	1.38%	2.58%	06/30/23	1,996,094
US Treasury Note	02/12/19	1609	AA+	Aaa			1,260,000	1,196,951	1630	1,204,411	1.25%	2.44%	07/31/23	1,251,436
US Treasury Note	05/03/19	1587	AA+	Aaa			650,000	667,088	1611	665,869	2.88%	2.25%	09/30/23	687,248
US Treasury Note	03/08/19	1687	AA+	Aaa			3,450,000	3,484,904	1713	3,481,544	2.75%	2.52%	11/15/23	3,635,976
US Treasury Note	01/09/19	1761	AA+	Aaa			2,525,000	2,479,826	1786	2,485,498	2.13%	2.52%	11/30/23	2,597,988
US Treasury Note	01/31/19	1770	AA+	Aaa			120,000	120,356	1795	120,317	2.63%	2.56%	12/31/23	126,042
US Treasury Note	06/04/19	1766	AA+	Aaa			2,345,000	2,355,534	1792	2,355,046	2.00%	1.90%	04/30/24	2,406,373
US Treasury Note	07/03/19	1797	AA+	Aaa			1,485,000	1,500,314	1824	1,499,834	2.00%	1.78%	06/30/24	1,525,315
US Treasury Note	08/09/19	1792	AA+	Aaa			1,000,000	1,016,172	1818	1,015,977	2.13%	1.78%	07/31/24	1,033,516
Subtotal US Treasuries							$49,471,000	$48,434,401		$48,733,523		2.55%		$50,195,611
U.S. Government Sponsored Entities														
Federal Home Loan Bank	04/25/18	646	AA+	Aaa			$1,000,000	$993,050	657	$998,255	2.13%	2.52%	02/11/20	$1,001,156
Federal Home Loan Bank	04/18/18	702	AA+	Aaa			2,500,000	2,495,600	712	2,498,674	2.38%	2.47%	03/30/20	2,507,295
Freddie Mac Bond	04/17/18	1019	AA+	Aaa			2,500,000	2,485,350	1,036	2,492,343	2.38%	2.59%	02/16/21	2,527,850
Freddie Mac Bond	04/25/18	1011	AA+	Aaa			2,550,000	2,527,994	1,028	2,538,393	2.38%	2.70%	02/16/21	2,578,407
Fannie Mae Bond	04/17/18	1076	AA+	Aaa			2,510,000	2,502,671	1,092	2,505,969	2.50%	2.60%	04/13/21	2,547,479
Federal Home Loan Bank	01/24/19	978	AA+	Aaa			1,865,000	1,882,717	992	1,878,926	3.00%	2.63%	10/12/21	1,921,153
Fannie Mae Bond	01/11/19	1080	AA+	Aaa			795,000	794,428	1,096	794,546	2.63%	2.65%	01/11/22	815,190
Freddie Mac Bond	08/26/19	1080	AA+	Aaa			1,520,000	1,520,000	1,096	1,520,000	2.05%	2.05%	08/26/22	1,520,117
Fannie Mae Bond	04/17/18	1608	AA+	Aaa			1,655,000	1,603,678	1,632	1,618,797	2.00%	2.74%	10/05/22	1,681,298
Freddie Mac Bond	07/05/18	1784	AA+	Aaa			1,450,000	1,444,461	1,810	1,445,694	2.75%	2.83%	06/19/23	1,517,057
Fannie Mae Bond	12/06/18	1716	AA+	Aaa			855,000	853,273	1,741	853,542	2.88%	2.92%	09/12/23	902,303
Fannie Mae Bond	11/05/18	1747	AA+	Aaa			1,820,000	1,803,274	1,772	1,805,969	2.88%	3.08%	09/12/23	1,920,692
Federal Home Loan Bank	01/31/19	1748	AA+	Aaa			870,000	895,642	1,772	892,749	3.38%	2.72%	12/08/23	938,312
Fannie Mae Bond	02/08/19	1797	AA+	Aaa			680,000	677,470	1,823	677,740	2.50%	2.58%	02/05/24	711,470
Federal Home Loan Bank	02/15/19	1798	AA+	Aaa			190,000	189,327	1,824	189,397	2.50%	2.58%	02/13/24	198,700
Subtotal U.S. Gov't Sponsored Entities							22,760,000	22,668,936		$22,710,993		2.64%		$23,288,479

INLAND EMPIRE UTILITIES AGENCY
Cash and Investment Summary
Month Ended
August 31, 2019

	Settlement Date	Security Length	Credit Rating @ Purchase		CHANGES IN Credit Rating		Par	Cost Basis	Term	August	%	% Yield to	Maturity	Market
			S&P	Moody's	S&P	Moody's	Amount	Amount	(Days)	Value	Coupon	Maturity	Date	Value
Investments (continued)														
Municipal Bonds														
University of California Taxable Revenue Bonds	02/09/17		AA	N/R			$1,000,000	$996,800	934	$1,000,000	1.625%	1.75%	09/01/19	$1,000,000
Subtotal State and Local Municipal Bonds							$1,000,000	$996,800		$1,000,000		1.75%		$1,000,000
Investments (continued)														
Medium Term Notes														
UPS of America Inc	04/18/18	703	A	A2			$725,000	$802,046	714	$748,433	8.38%	2.75%	04/01/20	$750,394
Toyota Motor	01/08/19	720	AA-	Aa3			200,000	199,880	731	199,918	3.05%	3.08%	01/08/21	203,203
Hershey Company	05/10/18	1085	A	A1			335,000	334,769	1101	334,866	3.10%	3.12%	05/15/21	341,411
American Honda Finance	04/18/18	1164	A	A2			800,000	767,016	1181	780,614	1.65%	3.00%	07/12/21	796,189
Boeing Co	04/18/18	1197	A	A2			680,000	805,678	1215	755,376	8.75%	2.88%	08/15/21	764,776
Toyota Motor	04/27/18	1334	AA-	Aa3			1,000,000	978,790	1355	986,218	2.60%	3.21%	01/11/22	1,016,147
Bank of NY Mellon	04/18/18	1369	A	A1			1,400,000	1,371,048	1391	1,381,102	2.60%	3.18%	02/07/22	1,422,949
American Express	04/18/18	1395	A-	A2			800,000	785,488	1415	790,425	2.70%	3.20%	03/03/22	815,929
Walt Disney Company	04/18/18	1396	A	A2			815,000	798,692	1416	804,247	2.45%	3.00%	03/04/22	829,954
Paccar Financial Corp	05/10/19	1080	A+	A1			930,000	929,498	1483	929,548	2.65%	2.67%	05/10/22	948,660
Visa Inc	04/18/18	1587	AA-	Aa3			825,000	795,407	1611	804,193	2.15%	3.03%	09/15/22	836,779
Bank of America	04/18/18	1623	A-	A2			800,000	769,264	1647	778,114	2.50%	3.43%	10/21/22	807,718
Oracle Corp	04/19/18	1736	A+	A1			1,420,000	1,389,001	1763	1,397,349	2.63%	3.11%	02/15/23	1,450,832
Amazon Inc	04/15/19	1387	AA-	A3			935,000	925,996	1774	926,853	2.40%	2.66%	02/22/23	951,924
Burlington North Santa Fe Corp	04/18/18	1767	A+	A3			800,000	790,800	1792	793,233	3.00%	3.26%	03/15/23	827,581
Bank of NY Mellon	01/24/19	1534	A	A1			1,375,000	1,387,595	1555	1,385,957	3.50%	3.27%	04/28/23	1,449,430
Pfizer Inc	04/04/19	1781	AA-	A1			1,260,000	1,276,392	1807	1,275,133	2.95%	2.67%	03/15/24	1,313,178
Subtotal Medium Term Notes							$15,100,000	$15,107,360		$15,071,579		3.03%		$15,527,054
Subtotal PFM Managed Investment Accounts							**$92,196,000**	**$91,071,961**		**$91,380,886**		**2.66%**		**$93,926,294**
Total Investments							**$143,518,896**	**$142,394,857**		**$142,703,782**				**$145,249,190**
(Source of Investment Amortized Cost: PFM)														
Restricted Deposits														
Investment Pool Accounts														
CAMP - Water Connection Reserves							$16,396,188	$16,396,188	N/A	$16,396,188		2.28%	N/A	$16,396,188
LAIF - Self Insurance Reserves							6,312,073	6,312,073	N/A	6,312,073		2.34%	N/A	6,312,073
Total Investment Pool Accounts							$22,708,261	$22,708,261		$22,708,261		2.30%		$22,708,261
Debt Service and Arbitrage Accounts														
2008B Debt Service Accounts							$2,613,764	$2,613,764	N/A	$2,613,764		1.55%		$2,613,764
2017A Debt Service Accounts							513	513	N/A	513		0.20%		513
Total Debt Service Accounts							$2,614,277	$2,614,277		$2,614,277		1.55%		$2,614,277

INLAND EMPIRE UTILITIES AGENCY
Cash and Investment Summary
Month Ended
August 31, 2019

	Settlement Date	Security Length	Credit Rating @ Purchase		CHANGES IN Credit Rating		Par	Cost Basis	Term	August	%	% Yield to	Maturity	Market
			S&P	Moody's	S&P	Moody's	Amount	Amount	(Days)	Value	Coupon	Maturity	Date	Value
Restricted Deposits (continued)														
CCRA Deposits Held by Member Agencies														
City of Chino							$10,665,100	$10,665,100	N/A	$10,665,100		N/A	N/A	$10,665,100
City of Chino Hills							6,275,501	6,275,501	N/A	6,275,501		N/A	N/A	6,275,501
Cucamonga Valley Water District							11,280,117	11,280,117	N/A	11,280,117		N/A	N/A	11,280,117
City of Fontana							9,363,869	9,363,869	N/A	9,363,869		N/A	N/A	9,363,869
City of Montclair							3,081,312	3,081,312	N/A	3,081,312		N/A	N/A	3,081,312
City of Ontario							20,904,691	20,904,691	N/A	20,904,691		N/A	N/A	20,904,691
City of Upland							4,424,270	4,424,270	N/A	4,424,270		N/A	N/A	4,424,270
*Subtotal CCRA Deposits Held by Member Agencies***							$65,994,860	$65,994,860		$65,994,860				$65,994,860
***Total reported as of June 2019*														
CalPERS Deposits														
CERBT Account (OPEB)							$15,000,000	$15,000,000	N/A	$17,490,252		N/A	N/A	$17,490,252
Subtotal CalPERS Deposits							$15,000,000	$15,000,000		$17,490,252				$17,490,252
CERBT Strategy 2 Performance as of July 31, 2019 based on 1 Year Net Return was 6.32%.														
Escrow Deposits														
Stanek Contractors Escrow							$49,801	$49,801	N/A	$49,801		N/A	N/A	$49,801
Subtotal Escrow Deposits							$49,801	$49,801		$49,801				$49,801
Total Restricted Deposits							**$106,367,199**	**$106,367,199**		**$108,857,451**				**$108,857,451**
Total Cash, Investments, and Restricted Deposits as of August 31, 2019							**$251,004,947**	**$249,880,908**		**$252,680,086**				**$255,225,493**

INLAND EMPIRE UTILITIES AGENCY
Cash and Investment Summary
Month Ended
August 31, 2019

August Purchases

No.	Date	Transaction	Investment Security	Type	Par Amount Purchased	Investment Yield to Maturity
1	08/09/19	Purchase	US Treasury Bill	Treasury Bond	$1,000,000	1.78%
2	08/26/19	Purchase	Freddie Mac	Bond	1,520,000	2.05%
					$ 2,520,000	

August Investment Maturities, Calls & Sales

No.	Date	Transaction	Investment Security	Type	Par Amount Matured/Sold	Investment Yield to Maturity
1	08/09/19	Maturity	JP Morgan Security	Commercial Paper	$1,020,000	3.07%
2	08/23/19	Called	Federal Home Loan Bank	Bond	1,520,000	2.66%
			Total Maturities, Calls & Sales		***$ 2,540,000***	

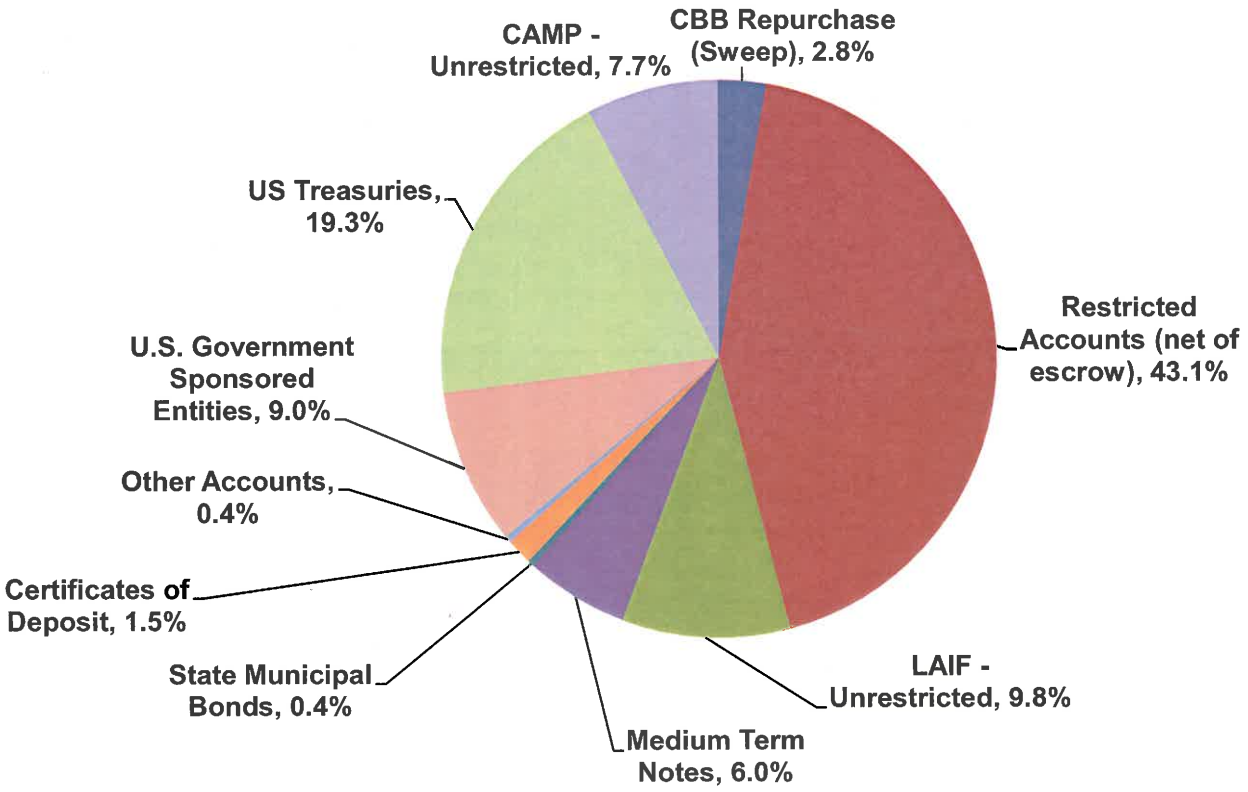
Inland Empire Utilities Agency

Treasurer's Report of Financial Affairs

Month Ended August 31, 2019

Agency Investment Portfolio (Net of Escrow Accounts)

$252,630,285



INLAND EMPIRE UTILITIES AGENCY

Cash and Investment Summary

Month Ended
August 31, 2019

Directed Investment Category	Amount Invested	Yield
CBB Repurchase (Sweep)	$7,194,598	1.100%
LAIF - Unrestricted	24,798,099	2.341%
CAMP - Unrestricted	19,330,199	2.280%
Brokered Certificates of Deposit	3,864,791	3.124%
Medium Term Notes	15,071,579	3.032%
Municipal Bonds	1,000,000	1.753%
US Treasury Notes	48,733,523	2.545%
U.S. Government Sponsored Entities	22,710,993	2.639%
Total Investment Portfolio	***$142,703,782***	
Investment Portfolio Rate of Return		***2.477%***

Restricted/Transitory/Other Accounts	Amount Invested	Yield
CCRA Deposits Held by Member Agencies	$65,994,860	N/A
CalPERS OPEB (CERBT) Account	17,490,252	N/A
CAMP Restricted Water Connection Reserve	16,396,188	2.280%
LAIF Restricted Insurance Reserve	6,312,073	2.341%
US Bank - 2008B Debt Service Accounts	2,613,764	1.550%
US Bank - 2010A Debt Service Accounts	0	0.000%
US Bank - 2017A Debt Service Accounts	513	0.200%
US Bank - Pre-Investment Money Market Account	943,413	1.620%
Citizens Business Bank - Demand Account	144,609	N/A
Citizens Business Bank - Workers' Compensation Account	28,580	N/A
Other Accounts*	2,250	N/A
Escrow Account	49,801	N/A
Total Restricted/Transitory/Other Accounts	***$109,976,303***	
Average Yield of Other Accounts		***2.198%***
Total Agency Directed Deposits	**$252,680,086**	

**Petty Cash*

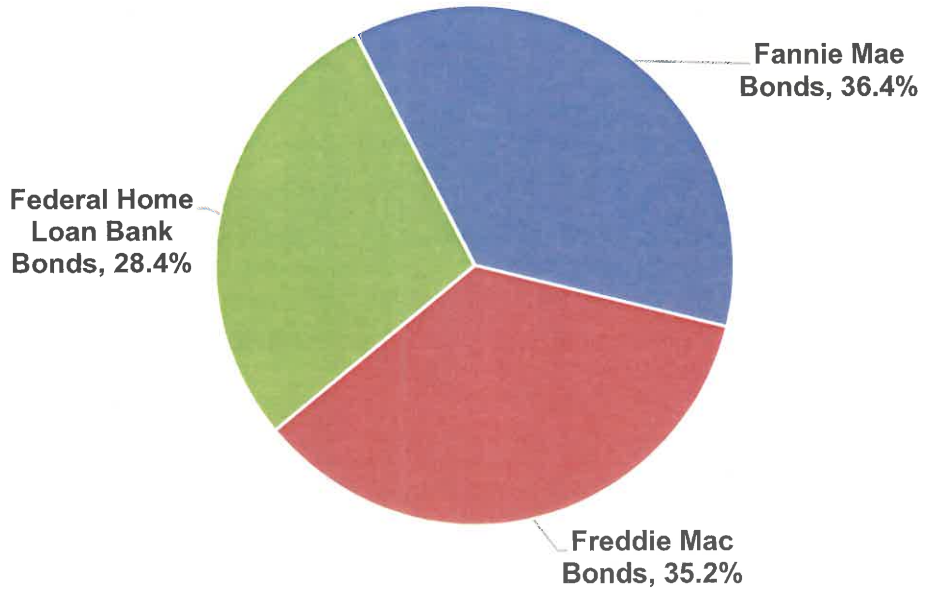
Inland Empire Utilities Agency

Treasurer's Report of Financial Affairs

Month Ended August 31, 2019

U.S. Government Sponsored Entities Portfolio

$22,710,993



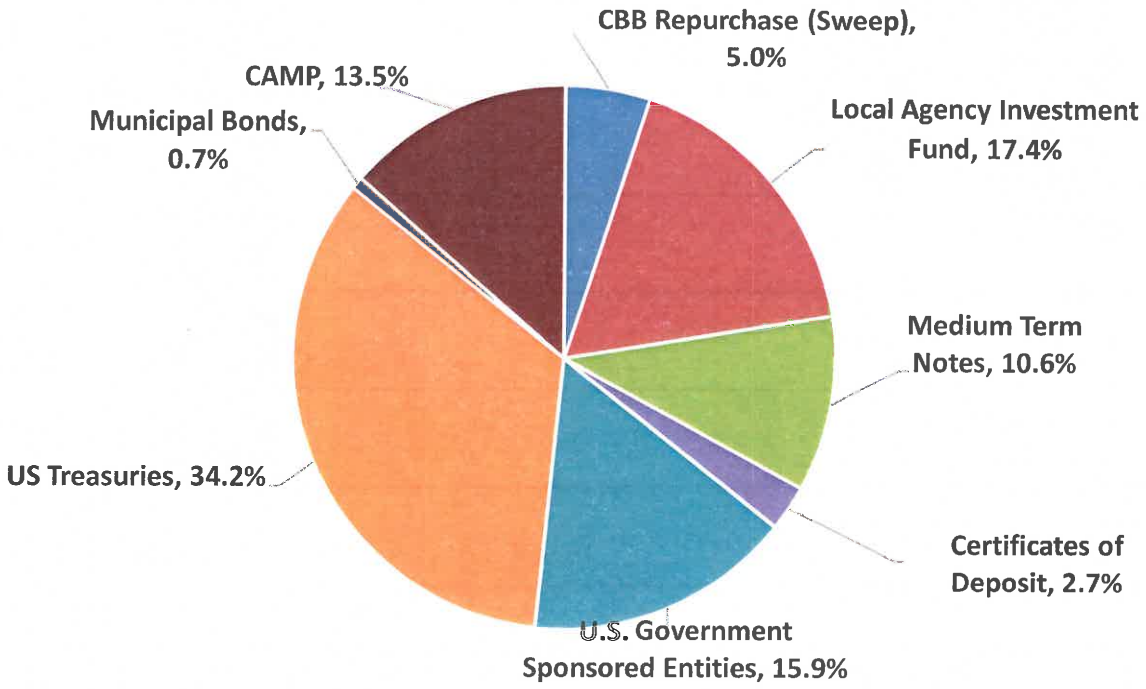
Inland Empire Utilities Agency

Treasurer's Report of Financial Affairs

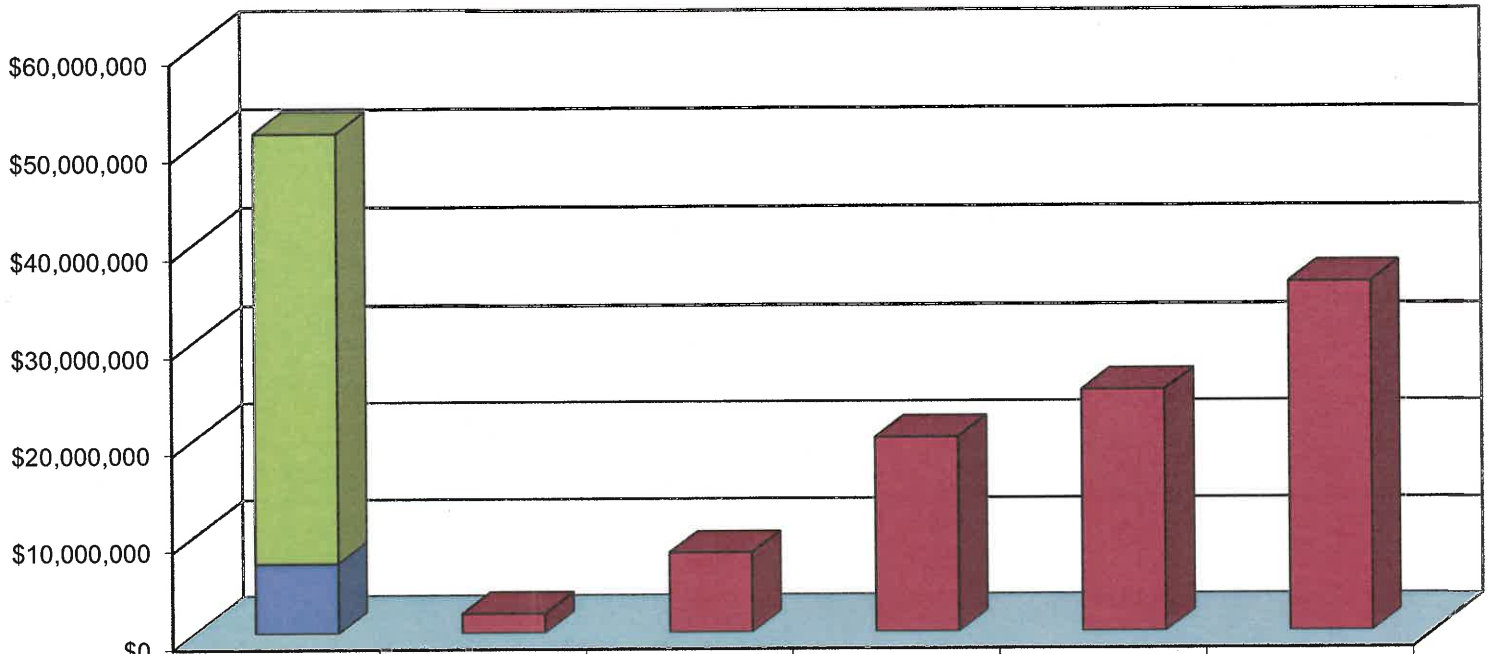
Month Ended August 31, 2019

Unrestricted Agency Investment Portfolio

$142,703,782

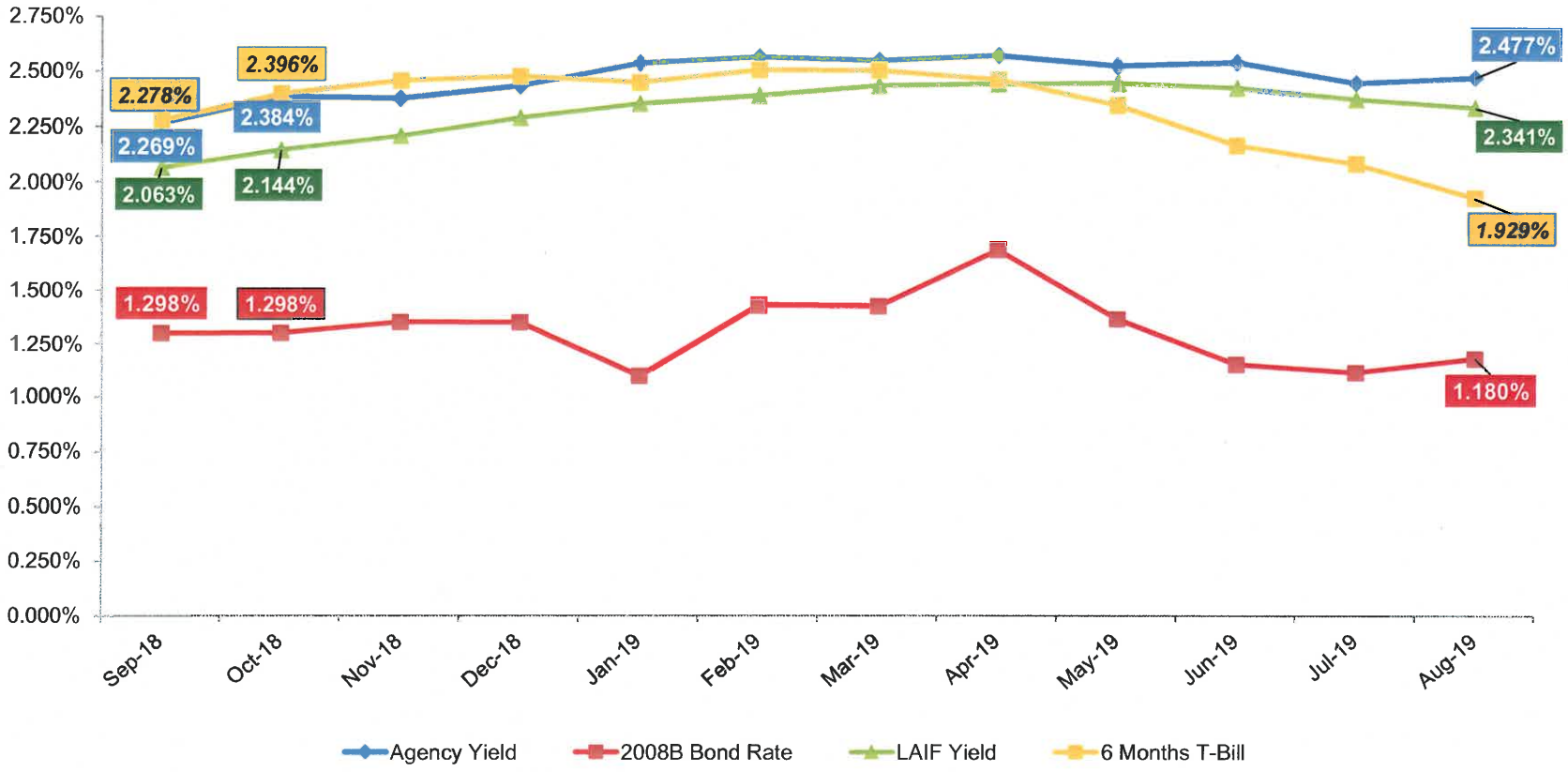


Inland Empire Utilities Agency
Treasurer's Report of Financial Affairs
Month Ended August 31, 2019
Agency Investment Portfolio Maturity Distribution (Unrestricted)
$142,703,782



	0-30 Days	31-180 Days	181-365 Days	366-730 Days	2 to 3 Years	Over 3 Yrs
LAIF+CAMP	$44,128,298					
CBB Repurchase (Sweep)	$7,194,598					
GSE+CD+MTN+MUNI		$1,998,255	$8,233,838	$20,130,343	$24,960,124	$36,058,327
Percent	36.06%	1.40%	5.77%	14.11%	17.49%	25.17%

Inland Empire Utilities Agency
Treasurer's Report of Financial Affairs
Month Ended August 31, 2019
Agency Investment Portfolio Yield Comparison



INFORMATION
ITEM

5K

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date: October 16, 2019

To: The Honorable Board of Directors **From:** Shivaji Deshmukh, General Manager

Committee:

Executive Contact: Kathy Besser, Executive Manager of Ext. Aff. & Policy Dev./AGM

Subject: Public Outreach and Communication

Executive Summary:

- National Energy Awareness Month
- October 2, Community Leaders Water Briefing, 12:30 p.m. – 2:00 p.m., HQA (on lot behind building)
- October 5-13, Water Professionals Appreciation Week
- October 12, Landscape and Water Conservation Fair, 10:00 a.m. – 2:00 p.m., Waterwise Community Center: 4594 San Bernardino Street, Montclair
- October 15, California Special Districts Association Legislative Staffer Tour (Includes lunch, tour of new laboratory and activity), 11:00 a.m. – 1:00 p.m., HQB Event Room
- October 23, Imagine a Day Without Water
- October 26, National Prescription Drug Take Back Day
- October 30, IEUA Hosted Blood Drive, 8:00 a.m. – 1:00 p.m., HQB Event Room

The month of October is recognized as National Energy Awareness Month. IEUA staff is promoting the Agency's renewable energy initiatives through social media channels.

Staff's Recommendation:

This is an informational item for the Board of Directors to receive and file.

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

Account/Project Name:

Fiscal Impact (explain if not budgeted):

Full account coding (internal AP purposes only): - - - - - - Project No.:

Prior Board Action:

N/A

Environmental Determination:

Statutory Exemption

N/A

Business Goal:

IEUA is committed to providing a reliable and cost-effective water supply and promoting sustainable water use throughout the region.

IEUA is committed to enhancing and promoting environmental sustainability and the preservation of the region's heritage.

Attachments:

Attachment 1 - Background

Background

Subject: Public Outreach and Communication

October

- National Energy Awareness Month
- October 2, Community Leaders Water Briefing, 12:30 p.m. – 2:00 p.m., HQA (on lot behind building)
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November

- November 9, IEUA Volunteer Packing Party w/ Community Action Partnership of San Bernardino County, 9:00 a.m. – 11:00 a.m., HQB Event Room (Not an Agency sponsored event)

December

- December 18, IEUA Holiday Luncheon, 11:30 a.m. – 3:00 p.m., Los Serranos Country Club: 15656 Yorba Avenue, Chino Hills

<u>Media and Outreach</u>

- IEUA staff promoted National Preparedness Month in September through safety tips and resources published on the Agency's social media channels.
- On September 19, IEUA in partnership with IERCA, held a dedication at Regional Water Recycling Plant No. 4 for the award-winning Battery and Solar Project. The program was emceed by General Manager Shivaji Deshmukh and the speakers consisted of Director Michael Camacho (IEUA Board member and IERCA Director), Harvey Braswell (Vice President of Asset Management, Advanced Microgrid Solutions) and Vice Chair Jon Blickenstaff (IERCA Vice Chair) who served as keynote. Legislative representatives were in attendance to present recognition certificates to both IEUA and IERCA for innovation and leading the way in renewable energy initiatives.
- IEUA hosted a Leadership Breakfast on September 24. California Department of Water Resources Deputy Director Kris Tjernell spoke on California's water resilience portfolio and initiatives. Over 70 people attended.
- The month of October is recognized as National Energy Awareness Month. IEUA staff is promoting the Agency's renewable energy initiatives through social media channels.

- October 5-13 is recognized as Water Professionals Appreciation Week. IEUA staff will be coordinating various recognition activities throughout the work week including giveaways, donut deliveries and more. IEUA staff members will be featured on IEUA's social media channels.
- A *Kick the Habit* ad ran in the *Champion's LA County Fair* section on September 14.
- A *Kick the Habit* ad will run in the *IE Magazine* September issue.
- A *Kick the Habit* ad will run in the *IE Magazine* October issue.
- The *Kick the Habit* digital banner ad continues to run in the *Fontana Herald News.*
- September: 13 posts were published to the IEUA Facebook page, 14 posts were published to IEUA's Instagram and 13 tweets were sent on the @IEUAwater Twitter handle.
    - The top three Facebook posts, based on reach and engagement, in the month of September were:
        - 9/10: IEUA Vice President Jasmin Hall Elected to CASA Officer Position
        - 9/19: IEUA Battery and Solar Project Dedication
        - 9/23: IEUA Welcomes Christiana Daisy
    - The top three tweets, based on reach and engagement, in the month of September were:
        - 9/12: CASA Award Press Release
        - 9/21: IEUA Participates in State of the City for Chino Hills
        - 9/10: Water Discovery Program Sign Ups
    - The top three Instagram posts, based on reach and engagement, in the month of September were:
        - 9/10: Water Discovery Program Sign Ups
        - 9/19: IEUA Battery and Solar Project Dedication
        - 9/21: IEUA Participates in State of the City for Chino Hills

For the month of September, there were 6,407 searches for a park in IEUA's service area on Yelp, where Chino Creek Wetlands and Education Park was viewed 524 times on a mobile device.

Education and Outreach Updates

- The Water Discovery Program field trips have begun. The Water Discovery and Busing Mini Grant through the California Department of Parks and Recreation will be ending December 2019. Starting January 2020, only schools within IEUA's service area will be eligible for busing grants to participate in the Water Discovery Program. Staff is working on a sponsorship request form for schools outside of IEUA's service area who would like to participate in the Water Discovery Program. The sponsorship request will be forwarded to the school's respective water agency to determine whether busing can be provided.
- Staff has reviewed the Garden in Every School® applications. Three schools have been selected for site evaluations. Site evaluations took place in early September. All schools are now planning the site clearing process. The three selected schools are: Randall Pepper Elementary (Fontana), Loving Savior (Chino Hills) and St. Joseph (Upland).

INFORMATION
ITEM

5L

West Coast Advisors
Strategic Public Affairs

September 26, 2019

To: Inland Empire Utilties Agency

From: Michael Boccadoro
Beth Olhasso
Maddie Munson

RE: September Report

Overview:

Water supply conditions continue to be well above normal for this time of the year. While most major reservoir levels are declining, they remain at or above historical averages for this time of year.

The Endangered Species Act is grabbing a lot of headlines lately. The Trump Administration released new regulations implementing the law that have generated opposition from environmentalists while garnering support from some water user and agricultural groups.

At the California Fish and Game Commission, water users continue to work towards to adoption of a much-needed Delta Fisheries Management policy and amendment of the outdated Striped Bass policy. While Commission bureaucracy is slow moving, progress is being made with staff and the vocally opposed angling community. The new Biological Opinions are scheduled to be released October 11.

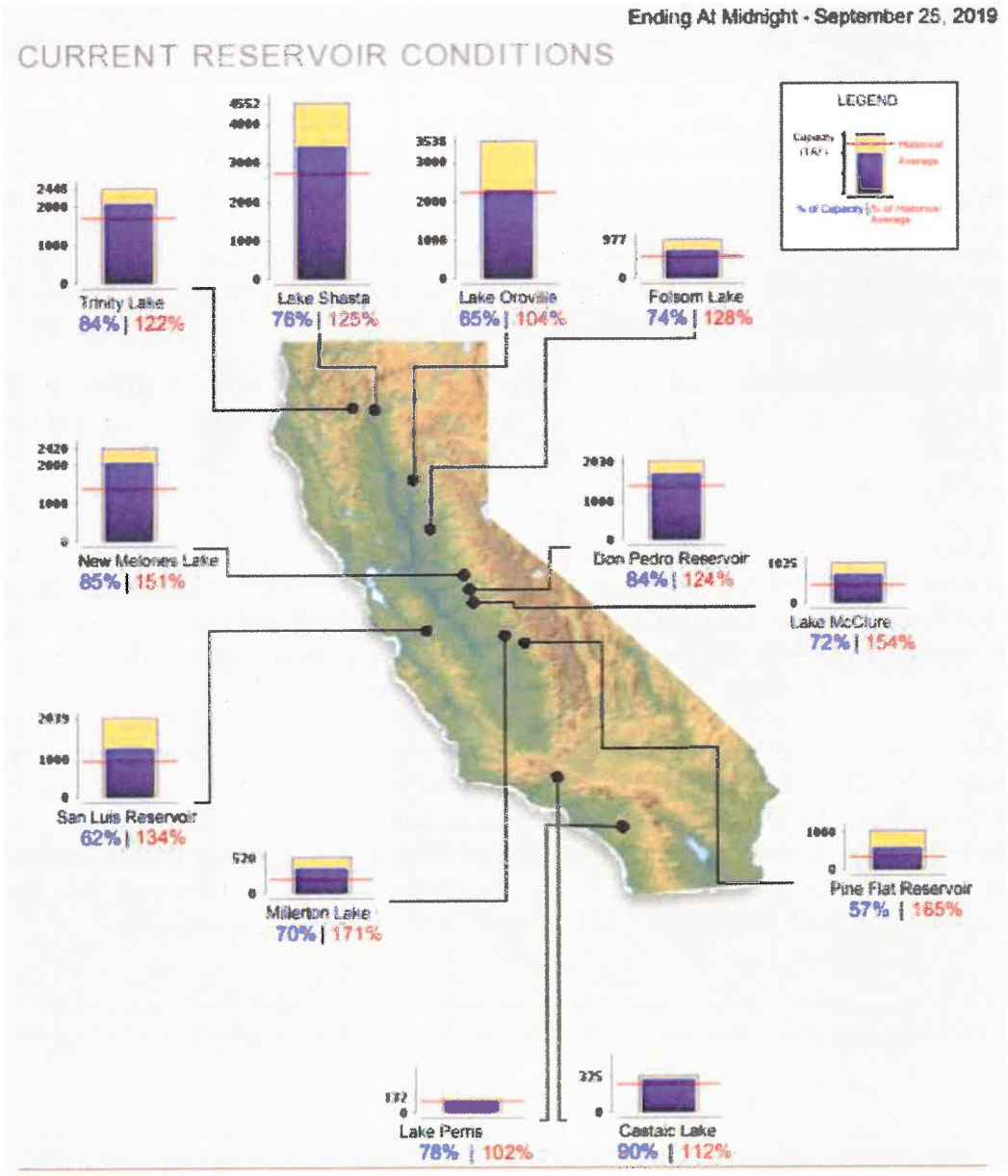
A subcommittee of the Senate Utilities, Energy and Communications committee recently held an informational hearing grilling the CPUC and the IOUs on the increasingly wide-spread use of Public Safety Power Shutoffs. Several legislative proposals addressing PSPS and various other aspects of the response to recent catastrophic wildfires became two-year bills at the end of session. Among these proposals are efforts by PG&E to fund their mounting liability.

Finally, the Legislative Session is officially over for the year, with the Legislature sending the Governor over 720 bills in the final days of the session. Included in the stack of bills on the Governor's desk is SB 1 (Atkins). The pro Tem chose to not take amendments offered by the administration that would have likely removed the concerns of the opposition coalition regarding the Endangered Species Act and the Voluntary Agreements. While the bill passed both houses, the Governor indicated that he will veto the bill because of the impacts it would have on the Voluntary Agreements.

Inland Empire Utilities Agency
Status Report – September 2019

Water Supply Conditions

Summer is typically the highest water use months of the year, so it is not surprising to see the levels of many of the major reservoirs decline slightly. However, all major reserviors continue to sit at or above average levels for this time of the year.



Trump Administration Announces Revised Endangered Species Act Regulations
The Trump Administration has released controversial changes to the Endangered Species Act implementing regulations after signaling impending revisions last year. The administration has characterized the changes as improvements that will help to expedite the rehabilitation of endangered and threatened species, but environmentalists groups have passionately disagreed. In summary, the new regulations make the following changes:

- Species will be added to the threatened or endangered list "based solely on the best available scientific and commercial information."
- Wildlife is deemed threatened when it's at risk of becoming endangered in the "foreseeable future," taking into consideration only future factors that are deemed "likely," not just possible.
- Requiring separate protections and plans for threatened species, rather than applying the same protections as species listed as endangered.
- Greater consideration of economic impacts.
- When designating critical habitat, officials would have to consider protecting areas already occupied by the species before considering unoccupied habitat.

Specifically, opponents criticize the new regulations for favoring economic considerations and giving less weight on climate change modeling.

The administration's plan will go into effect 30 days after being published in the federal register, barring a legal challenge to prevent it. However, California Attorney General Xavier Becerra and at 19 other Attorneys General recently filed a lawsuit challenging the regulations arguing that they violate the intent of the Act and were unlawfully promulgated.

California Fish and Game Commission Considers Changes to Delta Fisheries Management Policy
As previously reported, the California Fish and Game Commission has been working to update a Delta Fisheries policy and amend the existing, decades old striped bass policy. The two internal policies will guide the Commission in their promulgation of regulations related to this issue.

At the August Commission meeting in Sacramento, the full Commission heard a presentation on the policy from both Commission and Department of Fish and Wildlife staff. Staff shared with the Commissioners that both proponents and opponents of the proposals have been working collaboratively on the policy, and while the groups had not come to a consensus just yet, forward progress is still being made.

The Commission took public comment that consisted of several members of the angling community who expressed opposition to the policy due to the fear that the modest changes would result in collapse of the striped bass fishery. Representatives from the California Farm Bureau Federation and the Coalition for a Sustainable Delta testified in support of the continued stakeholder process being conducted by staff.

Commission President, Eric Sklar instructed the Department to give an update regarding ongoing scientific studies related to predation in the Delta at the next hearing where the issue is heard. The Commissioners moved to postpone acting on the items until the December meeting to allow for continued collaboration by staff and stakeholders.

Senate Holds Hearing on Utility Power Shutoffs
The Gas, Electric and Transportation Subcommittee of the Senate Energy, Utilities and Communications Committee held an informational hearing on the increasingly widespread use of Public Safety Power Shutoffs (PSPS) by utilities. The hearing, chaired by vocal PG&E critic Senator Jerry Hill (D-San Mateo), was an opportunity for committee members to delve into the mounting concerns expressed by many of their constituents and local public agencies.

The members held little back from CPUC and utility representatives, expressing concern about the effects of PSPS on vulnerable populations, traffic systems, businesses, emergency responders, communications infrastructure, and overall safety. Members also noted, and CPUC staff confirmed, that there can still be far-reaching impacts even when a utility notices a potential shutoff but does not follow through.

Senator Scott Wiener (D-San Francisco) worried that utilities will be incentivized to shutoff power more often in order to avoid potential wildfire liability. CPUC Safety and Enforcement Decision deputy executive director Elizaveta Malashenko responded by stating that the CPUC doesn't have enough information to create stricter guidelines for PSPS but is continuing to work with utility executives as events arise. Wiener also raised concerns about safety effects for refineries, an industry he rarely aligns with, along with overall cost impacts to businesses and ratepayers that should result in some kind of consequence for the utilities.

While the hearing was purely informational, it is clear that legislators continue to have strong concerns and will continue to press both the CPUC and utilities for improvements to the current procedures.

Legislative Update
The first year of the 2019-2020 legislative session officially came to a close in the pre-dawn hours of September 14. Ultimately, the Legislature sent the Governor around 720 bills at the end of session. Governor Newsom has until October 13 to act. There were only a small handful of bills left at the end of session concerning water policy, with most of the big issues such as elimination of ocean discharge and safe and affordable drinking water dispensed with earlier in the session.

AB 1180 (Friedman): AB 1180 will require the SWRCB to update the state's non-potable recycled water regulations by 2023. These regulations have not been revised since 2000. An update to these regulations, incorporating the knowledge and lessons learned from nearly two decades of non-potable water recycling, will help the state to achieve its ambitious goals for recycled water use. The bill also promotes recycled water use for dual plumbed buildings and for commercial, industrial and institutional (CII) uses by requiring the Water Board, through its update of Title 17 backflow regulations, to include the use of a change over device, such as a swivel ell. This bill is sponsored by WateReuse. The measure passed off the Senate floor on consent and easily passed off the Assembly floor where it needed a concurrence vote. It is now awaiting action by the Governor.

SB 1 (Atkins)
As previously reported, SB 1 by pro Tem Atkins, is an attempt to backstop any environmental regulations the Trump administration tries to roll back. The State Water Contractors, AWCA and other water agencies have raised serious concerns about key provisions of the bill. A coalition of business (California Chamber of Commerce) and water interests has formed to try to secure amendments to address those concerns.

The main concern is that the language would handcuff the CA Department of Fish and Wildlife (DFW) from being able to apply new science, new adaptive management practices or consider current hydrologic conditions, by locking in the current biological opinions, and incidental take permits in

place as of January 19, 2017. It would also allow the state to add federally listed endangered species to the California Endangered Species Act, bypassing the normal public process.

Locking these permits in place would also essentially end any discussion of voluntary agreements (VAs). The VA process began after the State Water Resources Control Board issued a draft plan for 40 percent unimpaired flows on the San Joaquin River (a second phase would consider unimpaired flows on the Sacramento River). Massive backlash led to the start of talks to create VAs. VA talks have been fruitful and are close to completion. The VAs will rely on a series of measures to sustainably manage flows, restore habitat and protect native species. If the 2017 rules are locked into place, the VAs could fall apart, causing irreparable harm to the effort.

The proponents of the bill, lead by the Defenders of Wildlife, are believed to be seeking these changes because they are unhappy with the VAs and because they would like to get two species, orca whales and steelhead trout, listed under the CA Endangered Species Act.

Because this bill is authored by the pro Tem, and clearly a top priority for her as it is the first bill introduced in the year, opponents know that defeating the bill was unlikely. The oppose unless amended coalition, including MWD, ACWA and the State Water Contractors, offered a set of amendments that would take care of their opposition without compromising the pro Tem's goal of protecting California from of federal rollback on environmental regulations. The Newsom administration got involved because of the implications for the VAs and attempted to bring parties together to come up with a solution.

The Administration weighed in with amendments that, while never made public, were rumored to take care of the concerns of the opposition coalition. The pro Tem chose not to take the amendments offered by the opposition coalition or the administration. The bill ultimately passed out of both houses. IEUA's communication with its representatives was important, and while the bill did pass, several members from the Inland Empire chose to abstain from voting on the bill.

The day after the bill passed, the Governor announced that he would veto the bill. He has yet to take action.

Water Bonds

Within the final few weeks of the session, two additional water bonds were introduced in the legislature. As reported previously, an initiative was submitted for a $7.8 billion bond for the November ballot, and SB 45 (Allen) has been in print since January. Recently, Speaker Rendon indicated that he was open to entertaining a water bond and two were subsequently introduced in the Assembly. Eduardo Garcia (D-Coachella), chair of the Assembly Water, Parks and Wildlife Committee, introduced AB 352, the $3.9 billion Wildlife Prevention, Safe Drinking Water, Drought Preparation, and Flood Protection Bond Act of 2020. Assemblymember Kevin Mullin (D-San Francisco) introduced AB 1298 the Climate Resiliency, Fire Risk Reduction, Recycling, Groundwater and Drinking Water Supply, Clean Beaches, and Jobs Infrastructure Bond Act of 2020 without funding amounts included.

No action was taken on these measures at the end of session, and leadership has started a working group process to work out details of a bond. Expectations are that a single bond will be shaped and passed by June 2020 and appear before voters on the November 2020 Presidential Election.

IEUA BILL POSITIONS—September 26, 2019

Bill Number	Author/Sponsor	Title and/or Summary	Summary	IEUA Position
AB 292	*Quirk* *WateReuse*	*Recycled water: raw water and groundwater augmentation*	*This bill would eliminate the definition of "direct potable reuse" and instead would substitute the term "groundwater augmentation" for "indirect potable reuse for groundwater recharge" in these definitions. The bill would revise the definition of "treated drinking water augmentation."*	*SUPPORT* *2-year bill*
AB 405	*Rubio*	*Sales and use taxes: exemption: water treatment*	*Would exempt from Sales and Use Tax the gross receipts from the sale in this state of, and the storage, use, or other consumption in this state of, chemicals used to treat water, recycled water, or wastewater regardless of whether those chemicals or other agents become a component part thereof and regardless of whether the treatment takes place before or after the delivery to consumers.*	*SUPPORT* *Held in Approps*
AB 533	*Holden* *MWD*	*Income taxes: exclusion: water conservation or efficiency programs: water runoff management improvement programs*	*This bill, for taxable years beginning on or after January 1, 2019, and before January 1, 2024, would provide an exclusion from gross income for any amount received as a rebate, voucher, or other financial incentive issued by a water service provider for any water conservation or efficiency program or water runoff management improvement program, as provided.*	*SUPPORT* *Held in Approps*
AB 557	*Wood*	*Atmospheric Rivers: Research, Mitigation, and Climate Forecasting Program*	*Would appropriate $9,250,000 from the General Fund to the Department of Water Resources in the 2019–20 fiscal year to operate the Atmospheric Rivers: Research, Mitigation, and Climate Forecasting Program.*	*SUPPORT* *Held in Approps*
AB 654	*Rubio*	*Public records: utility customers: disclosure of personal information*	*Would authorize a local agency to disclose the name, utility usage data, and home address of utility customers to an officer or employee of another governmental agency when the disclosure is not necessary for the performance of the other governmental agency's official duties but is to be used for scientific, educational, or research purposes, and the requesting agency receiving the disclosed material agrees to maintain it as confidential in accordance with specified criteria.*	*SUPPORT* *2- year bill*

AB 756	*Christina Garcia*	*Public water systems: perfluoroalkyl substances and polyfluoroalkyl substances.*	*Would authorize the State Water Resources Control Board to order a public water system to monitor for perfluoroalkyl substances and polyfluoroalkyl substances. The bill would require a community water system or a nontransient noncommunity water system, upon a detection of these substances, to report that detection, as specified. The bill would require a community water system or a nontransient noncommunity water system where a detected level of these substances exceeds the response level to take a water source where the detected levels exceed the response level out of use or provide a prescribed public notification.*	*OPPOSE* *Signed by Governor*
AB 841	*Ting*	*Drinking water: contaminants: perfluoroalkyl and polyfluoroalkyl substances*	*Would require the Office of Environmental Health Hazard Assessment to adopt and complete a work plan within prescribed timeframes to assess which substances in the class of perfluoroalkyl and polyfluoroalkyl substances should be identified as a potential risk to human health, as provided. The bill would require the office, as part of those assessments, to determine which of the substances are appropriate candidates for notification levels to be adopted by the state board. The bill would require the Office of Environmental Health Hazard Assessment, by January 1, 2022, to provide to the Legislature an update on the assessment.*	*SUPPORT* *2- Year Bill*
AB 1180	Friedman WateReuse	Recycled Water	The California Safe Drinking Water Act requires the State Water Resources Control Board to administer provisions relating to the regulation of drinking water to protect public health. Current law requires, on or before January 1, 2020, the state board to adopt standards for backflow protection and cross-connection control through the adoption of a policy handbook, as specified. This bill would require that handbook to include provisions for the use of a swivel or changeover device to supply potable water to a dual-plumbed system during an interruption in recycled water service.	SUPPORT Governor's Desk

AB 1194	*Frazier*	*Sacramento-San Joaquin Delta: Delta Stewardship Council*	*Would increase the membership of the Delta Stewardship Council to 13 members, including 11 voting members and 2 nonvoting members*	*OPPOSE* *2-year bill*
AB 1204	*Rubio* *ACWA*	*Public water systems: primary drinking water standards: implementation date.*	*Would require the adoption or amendment of a primary drinking water standard for a contaminant in drinking water not regulated by a federal primary drinking water standard or that is more stringent than a federal primary drinking water standard to take effect 3 years after the date on which the state board adopts or amends the primary drinking water standard. The bill would authorize the state board to delay the effective date of the primary drinking water standard adoption or amendment by no more than 2 additional years as necessary for capital improvements to comply with a maximum contaminant level or treatment technique.*	*SUPPORT* *2-year bill*
AB 1588	*Gloria*	*Drinking water and wastewater operator certification programs*	*Current law requires the State Water Resources Control Board to issue a water treatment operator certificate and water distribution operator certificate by reciprocity to any person holding a valid, unexpired, comparable certification issued by another state, the United States, prescribed territories or tribal governments, or a unit of any of these. Current law requires the board to classify types of wastewater treatment plants for the purpose of determining the levels of competence necessary to operate them. This bill would require the board to evaluate opportunities to issue a water treatment operator certificate or water distribution operator certificate by reciprocity, or a wastewater certificate by examination waiver, to persons who performed duties comparable to those duties while serving in the United States military, as specified.*	*SUPPORT* *Held in Senate Appropriations*

AB 1672	*Bloom* *CASA*	*Product labeling: flushable products*	*Current law regulates the labeling requirements on various consumer products. This bill would express the intent of the Legislature to enact legislation to prohibit the sale or advertisement of any nonwoven disposable product labeled as "flushable" or "sewer and septic safe" if that product fails to meet specified performance standards.*	*SUPPORT* *2-Year Bill*
ACA 1	*Aguiar-Curry*	*Local government financing: affordable housing and public infrastructure: voter approval*	*The California Constitution prohibits the ad valorem tax rate on real property from exceeding 1% of the full cash value of the property, subject to certain exceptions. This measure would create an additional exception to the 1% limit that would authorize a city, county, city and county, or special district to levy an ad valorem tax to service bonded indebtedness incurred to fund the construction, reconstruction, rehabilitation, or replacement of public infrastructure, affordable housing, or permanent supportive housing, or the acquisition or lease of real property for those purposes, if the proposition proposing that tax is approved by 55% of the voters of the city, county, or city and county, as applicable, and the proposition includes specified accountability requirements.*	*SUPPORT* *Assembly Floor- first vote failed, can be acted upon Jan 2020*
SB 1	Atkins Defenders of Wildlife	California Environmental, Public Health, and Workers Defense Act of 2019	Current state law regulates the discharge of air pollutants into the atmosphere. The Porter-Cologne Water Quality Control Act regulates the discharge of pollutants into the waters of the state. The California Safe Drinking Water Act establishes standards for drinking water and regulates drinking water systems. The California Endangered Species Act requires the Fish and Game Commission to establish a list of endangered species and a list of threatened species, and generally prohibits the taking of those species. This bill would require specified agencies to take prescribed actions regarding certain federal requirements and standards pertaining to air, water, and protected species, as specified.	OPOSE UNLESS AMENDED Governor's Desk
SB 200	*Monning*	*Safe and Affordable Drinking Water Fund*	*Would establish the Safe and Affordable Drinking Water Fund in the State Treasury to help water systems provide an adequate and affordable supply of safe drinking water in both the near and the long term. The bill would authorize the board to provide for the deposit into the fund*	*SUPPORT*

			of federal contributions, voluntary contributions, gifts, grants, and bequests and would provide that moneys in the fund are available, upon appropriation by the Legislature, to the board to fund grants, loans, contracts, or services to assist eligible recipients.	*Chaptered*
SB 204	*Dodd* *Delta Interests*	*State Water Project: Contracts*	*Would require the Department of Water Resources to provide at least 10 days' notice to the Joint Legislative Budget Committee and relevant policy and fiscal committees of the Legislature before holding public sessions to negotiate any potential amendment of a long-term water supply contract that is of project-wide significance with substantially similar terms intended to be offered to all contractors, or that would permanently transfer a contractual water amount between contractors.*	*WATCH* *2- year bill*
SB 307	*Roth* *National Parks Conservation Association*	*Water conveyance: use of facility with unused capacity*	*This bill would prohibit a transferor of water from using a water conveyance facility that has unused capacity to transfer water from a groundwater basin underlying desert lands, as defined, that is in the vicinity of specified federal lands or state lands to outside of the groundwater basin unless the State Lands Commission, in consultation with the Department of Fish and Wildlife, finds that the transfer of the water will not adversely affect the natural or cultural resources of those federal and state lands.*	*OPPOSE* *Signed by Governor*
SB 332	*Hertzberg* *NRDC*	*Ocean Discharge*	*Would declare, except in compliance with the bill's provisions, that the discharge of treated wastewater from ocean outfalls is a waste and unreasonable use of water. The bill would require each wastewater treatment facility that discharges through an ocean outfall and affiliated water suppliers to reduce the facility's annual flow as compared to the average annual wastewater discharge baseline volume, as prescribed, by at least 50% on or before January 1, 2030, and by at least 95% on or before January 1, 2040. The bill would subject the owner or operator of a wastewater treatment facility, as well as the affiliated water suppliers, to a civil penalty of $2,000 per acre-foot of water above the required reduction in overall volume discharge for the failure to meet these deadlines.*	*OPPOSE UNLESS AMENDED* *Held in Approps*

SB 414	*Caballero* *Eastern MWD/ CMUA*	*Small System Water Authority Act of 2019*	*Would create the Small System Water Authority Act of 2019 and state legislative findings and declarations relating to authorizing the creation of small system water authorities that will have powers to absorb, improve, and competently operate noncompliant public water systems. The bill, no later than March 1, 2020, would require the state board to provide written notice to cure to all public agencies, private water companies, or mutual water companies that operate a public water system that has either less than 3,000 service connections or that serves less than 10,000 people, and are not in compliance, for the period from July 1, 2018, through December 31, 2019, with one or more state or federal primary drinking water standard maximum contaminant levels, as specified.*	*SUPPORT* *2- year bill*
SB 667	*Hueso*		*Would require the Department of Resources Recycling and Recovery to develop, on or before January 1, 2021, and would authorize the department to amend, a 5-year needs assessment to support innovation and technological and infrastructure development, in order to meet specified organic waste reduction and recycling targets, as provided. The bill would require, on or before June 1, 2021, the department, in coordination with the Treasurer and the California Pollution Control Financing Authority, to develop financial incentive mechanisms, including, among other mechanisms, loans and incentive payments, to fund and accelerate public and private capital towards organic waste diversion and recycling infrastructure.*	*SUPPORT IF AMENDED* *2-year bill*
SB 669	*Caballero* *ACWA/CMUA*	*Safe Drinking Water Trust*	*Would establish the Safe Drinking Water Fund in the State Treasury and would provide that moneys in the fund are continuously appropriated to the State Water Resources Control Board. The bill would require the state board to administer the fund to assist community water systems in disadvantaged communities that are chronically noncompliant relative to the federal and state drinking water standards and do not have the financial capacity to pay for operation and maintenance costs to comply with those standards, as specified.*	*Held in Approps*

AJR 8	*Quirk*	*Invasive species: federal Nutria Eradication and Control Act of 2003*	*Would urge the United States Congress to specifically add California to the Nutria Eradication and Control Act of 2003 and to authorize an appropriation of $4,000,000 to help the state implement a nutria eradication program.*	*SUPPORT* *Chaptered*

INFORMATION
ITEM

5M

INNOVATIVE FEDERAL STRATEGIES, LLC
Comprehensive Government Relations

MEMORANDUM

To: **IEUA Community and Legislative Affairs Committee**

From: **Letitia White, Jean Denton, Drew Tatum, Shavenor Winters**

Date: **September 27, 2019**

Re: **September Monthly Legislative Update**

CR Passes House, Senate as Senate Works on Individual Bills
The Senate faced a short timetable late this month with only one-week to clear a House-passed continuing resolution to fund the government past September 30.

The Senate passed the measure (H.R. 4378—Continuing Appropriations Act, 2020, and Health Extenders Act of 2019), by a vote of 82 to 15. Before sending the bill to the Senate, the House passed the continuing resolution (CR) by a vote of 301-123.

The measure, now on its way to be signed by the President, will fund the government through November 21. President Donald Trump has indicated he intends to sign the stopgap spending bills.

The CR funds the government largely at FY19 spending levels and includes a Democratic demand that the Department of Agriculture report to Congress about the effects of the trade war on farmers in exchange for providing funding to allow payments to farmers impacted by the trade war along with a package of health-related extenders. It also includes directions to prevent the White House Office of Management and Budget (OMB) from attempting to block funds through rescissions. Additionally, it boosts funding for the Census Bureau and the Secret Service.

While the House has passed 10 of its 12 bills out of the chamber, the Senate has not yet passed any of its bills. However, the Senate Committee on Appropriations has succeeded in advancing a total of 10 of its 12 bills out of committee, leaving only the Labor-HHS and Military Construction-VA Appropriations bills to be considered by the committee.

Senate Appropriations Chairman Richard Shelby (R-AL) has mentioned that a full-year stopgap is a possibility, noting that Treasury Secretary Steven Mnuchin offered to accept that outcome during budget negotiations earlier this summer. Chairman Shelby has said no one in Congress seems to want a full-year continuing resolution, but it remains an option.

Chairman Shelby met with President Trump at the White House on Friday, September 27 to discuss a path forward on the appropriations process. After the meeting, Shelby indicated that he planned to spend the recess during the first two weeks of October negotiating a slate of 302(b)

allocations with the House so that a final package or packages of bills could be negotiated in the coming weeks.

One bill that advanced during the month was the Energy and Water Appropriations bill. Included in the legislation was $134 million for the WIIN Section 4007 water storage program. Other Bureau-wide programs would receive the following funding under the Senate bill:

Program	Budget Request	House Committee Recommendation	Senate Committee Recommendation
WaterSMART Grants	$10 million	$60 million	$60 million
Water Conservation Field Services Program	$1.570 million	$4.149 million	$4.179 million
Cooperative Watershed Management	$250 thousand	$2.250 million	$5.25 million
Basin Studies	$2 million	$5.2 million	$5.2 million
Drought Response and Comprehensive Drought Plans	$2.901 million	$9 million	$4 million
Title XVI Water Reclamation & Reuse Program	$3 million	$63.617 million	$65.017 million

The Senate Appropriations Committee has also passed the EPA-Interior bill which includes fiscal 2020 EPA-Interior funding and the Senate bill would increase EPA funding by $161 million to $9.01 billion. That is below the EPA budget of a near-record $9.5 billion that the Democratic-controlled House passed in its version on June 25 (H.R. 3055).

Of note, the spending bill provides no funding for Trump administration efforts to relocate the Bureau of Land Management's headquarters to Grand Junction, Colorado and move some Washington staff to other BLM offices. It also doesn't provide for the president's plan to reorganize the Interior Department. The House-passed EPA-Interior spending bill also zeroed out such funding.

The Senate Appropriations Committee also passed the Transportation, Housing and Urban Development bill. The $74.3 billion spending measure provides appropriations for the U.S. Department of Transportation, U.S. Department of Housing and Urban Development, and related agencies. The bill is $3.2 billion above FY2019 enacted levels. The subcommittee recommendation targets funding toward improving our nation's transportation and housing infrastructure, continuing to improve our air traffic control system and aircraft certification processes, and maintaining rental assistance and community development programs.

The measure included:

- $1 billion for Better Utilizing Investments to Leverage Development (BUILD) grants.
- $13.0 billion for the Federal Transit Administration (FTA).
- $3.3 billion for the Community Development Block Grant formula program;

- $25 million for pilot program to help individuals in recovery from a substance abuse disorder become stably housed;
- $1.3 billion for the HOME program; and
- $2.8 billion for homeless assistance programs and the bill also includes several provisions to improve HUD's delivery of housing and services to particularly vulnerable populations, including veterans, youth, and survivors of domestic violence.

After Policy Changes, House Chairman to Investigate EPA Water Office

Earlier this month, officials from the EPA and the U.S. Army Corps of Engineers repealed an Obama administration rule which updated the 1972 Clean Water Act definition of "waters of the United States", which had expanded protection to wetlands and streams that are disconnected from navigable rivers. The 2015 rule reviewed more than 1,200 studies on small streams and wetlands and found that they're critical to the health of downstream rivers.

The original definition of "waters of the United States" mainly covered large rivers, their tributaries, and adjacent wetlands. The Clean Water Act requires industrial and municipal polluters discharging to these rivers to obtain permits from the EPA and the 2015 update expanded those regulations to include smaller streams and wetlands. The repeal will soon be followed by a rule change, and the replacement text would basically revert to the '70s-level protections.

Officials have stated that the change would remove a current "regulatory patchwork"—the 2015 update only applies to 22 states, Washington D.C. and U.S. territories because other states have challenged the rule in court. In a press release, EPA Administrator Andrew Wheeler said redefining "waters of the United States" would "provide greater regulatory certainty for farmers, landowners, home builders, and developers nationwide."

In response to this move and a few rules changes the Administration has considered pursuing the Chairman of the House Transportation and Infrastructure Committee said he is outraged by the EPA's efforts to roll back environmental protections on water, and he plans to ratchet up congressional oversight on the administration.

Representative Peter DeFazio (D-OR), Chairman of the House Transportation and Infrastructure Committee, said he will conduct more investigations and refer more items to the agency's Inspector General moving forward.

A focus of DeFazio's ire was David Ross, assistant administrator of the Environmental Protection Agency's Office of Water. At a September hearing in one of his subcommittees, DeFazio peppered Ross with questions about the agency's recent decision to repeal the Obama-era policy that defined which bodies of water qualify for federal protections.

"I will use every tool available to me" on this issue, DeFazio said in a brief interview outside of the hearing. "I remember when rivers were burning. I remember when the rivers were full of sewage. I feel very passionately about this."

PFAS Legislative Timelines Not Feasible, EPA Says

Legislation that would require the EPA to designate all PFAS as hazardous substances within one year isn't feasible, Environmental Protection Agency Administrator Andrew Wheeler said September 26.

Wheeler referred to H.R. 535, introduced by Rep. Debbie Dingell (D-MI) in January. The provision to designate all PFAS as hazardous is now included in the House's National Defense Authorization Act (H.R. 2500).

The CERCLA, or Comprehensive Environmental Response, Compensation, and Liability Act, provision has been backed twice by the House and is supported by 53 Senators, said Michal Freedhoff, minority oversight director for the Senate Committee on Environment and Public Works.

That one-year requirement would bypass the agency's existing rules for determining what is hazardous, Wheeler said. It also would designate thousands of chemicals, "for which we do not yet have adequate scientific data," as hazardous, and it would lump into that classification newer PFAS chemicals that previous administrations reviewed and found to not pose an unreasonable risk, Wheeler added.

"We do not have the data necessary to evaluate the cleanups that would be required by this bill," which would put a label ahead of the science and be nearly impossible to implement, said Wheeler. The EPA estimates there are 602 PFAS in commerce, and another 1,200 have been in commerce historically. The Organization for Economic Cooperation and Development estimates there are about 4,700 PFAS.

"You cannot use the same cleanup technology for all compounds," Wheeler said. Different PFAS require different filters and other cleanup methods, he said. He is concerned that the science to understand what technologies could work for different compounds won't be available within the year timeline prescribed in the legislation.

States Challenge Trump Administration on ESA Policy

Eighteen state attorneys general and the city of New York filed a lawsuit on September 25 challenging the Trump administration's rollback of Endangered Species Act protections.

The weakening of protections is arbitrary, capricious, unauthorized, and unlawful under several federal acts, according to the lawsuit, filed in the U.S. District Court for the Northern District of California. California Attorney General Xavier Becerra and attorneys general from Massachusetts and Maryland led the state coalition.

"As we face the unprecedented threat of a climate emergency, now is the time to strengthen our planet's diversity, not to destroy it," Becerra said in a news release. "The only thing we want to

see extinct are the beastly policies of the Trump Administration putting our ecosystems in critical danger."

The suit challenges a decision by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service to finalize three rules related to requirements of the Endangered Species Act that the attorneys general say will put protected species at risk of extinction.

The suit names the two agencies, as well as Interior Secretary David Bernhardt and Commerce Secretary Wilbur Ross. Commerce declined comment and an Interior spokesman said the agency was unwavering in its stance.

"These are long overdue and necessary regulatory changes that will recover more imperiled species facing extinction than previously accomplished over the span of this law," Interior spokesman Nick Goodwin wrote in an email. "We will see them in court, and we will be steadfast in our implementation of this important act to improve conservation efforts across the country."

The announced revisions nix the U.S. Fish and Wildlife Service's long-standing "blanket rule," which automatically gives threatened species the same protections as higher-priority endangered species, such as a ban on killing or harming them. They also allow the Fish and Wildlife Service and the National Marine Fisheries Service to include economic costs in their listing decisions.

The suit says the revised rules put species at risk, including by excluding public input on environmental impacts, and expanding exemptions for designating critical habitats.

House, Senate Pass Legislation on Clean, Drinking Water Fund Transfers

The House and Senate this month have passed legislation that would permit states to transfer certain funds from the clean water revolving fund allocated to their state to their drinking water revolving fund.

The legislation would provide the transfer authority for a period of one year beginning on the date of enactment. States will be required to consult with the Administrator of the Environmental Protection Agency and make a determination that available funds in the clean water revolving fund of the State are necessary to address a threat to public health as a result of heightened exposure to lead in drinking water.

Transfers will be limited to no more than 5 percent of the cumulative clean water revolving funds provided in the form of federal grant dollars. Funds transferred must be used to provide additional subsidy to eligible recipients in the form of forgiveness of principal, negative interest loans, or grants (or any combination of these).

House Holds Hearing on Proposed Reorganization of the Bureau of Land Management

The House Committee on Natural Resources held a hearing this month to discuss the Proposed Reorganization and Relocation of the Bureau of Land Management (BLM) headquarters to Grand Junction, Colorado.

In mid-July, it was announced that BLM will move its headquarters and 27 top staffers to Grand Junction. Of the 550 positions the department studied, 61 will stay in the Washington area, including jobs related to budget, legislative affairs and regulatory issues.

During the hearing, arguments opposed to the BLM reorganization consisted of personnel concerns with members stating that the move will push top level career experts to leave their roles rather than uproot their families, and a lack of consultation with local tribes. Democrats on the committee expressed concern that the Administration is trying to "undermine public lands heritage" according to Chairman Grijalva.

The personnel issue was a large concern by many of the members who stated that Grand Junction is not as accessible as a larger urban area and would cause a lack of coordination with BLM staff. In an effort to incentivize BLM staff, the agency is offering a 25% lump-sum pay incentive for its Washington-based staff to relocate to the West according to an email sent to staff by agency leadership.

Arguments in favor of the reorganization highlighted that the move would bring BLM closer to the land that the organization is responsible for and would lead to an improvement of accountability and efficiency. "I have a new client, and my client is the American people," Acting Bureau of Land Management Director William Pendley said, adding later that "I love America's public lands" and "wholesale" transfer or disposal of public lands is off the table.

The hearing was solely for oversight purposes; there is no current legislation to stop the BLM move to Grand Junction. Yet some Democrats have vowed to do so through the appropriations process, but it's not yet clear whether they will have the votes or time to accomplish that.

Government Accountability Office Releases Findings on Dept. of Interior Fee Usage

Earlier this month, the nonpartisan Government Accountability Office (GAO) concluded that the Trump administration illegally used national park fees to keep parks open during the 35-day government shutdown in December and January.

The GAO said the Interior Department violated federal appropriations law by using entrance fees paid by visitors to national parks, which are supposed to go toward their maintenance and enhancement.

During the partial government shutdown that impacted most of the Interior Department between December 22, 2018, and January 25, 2019, the National Park Service (NPS) was directed to keep national parks accessible, keeping minimal staff on site. That raised concerns for NPS employees over public safety and resource protection.

During the shutdown, parks like Joshua Tree and Yosemite in California that remained open with limited staff faced sanitation and health issues like overflowing toilets and trash cans.

The GAO investigation stemmed from a request from Senator Tom Udall (D-NM) and Chairwoman Betty McCollum (D-MN) of the House Interior Appropriations Subcommittee, who both had raised concerns that keeping the national parks partially open was aimed at "limiting the public relations fallout" of the shutdown.

The Federal Land Recreation Enhancement Act (FLREA) requires fees collected at national parks to be used for their maintenance and improvement.

The GAO determined the Interior Department needed to report its violation to Congress and outline steps to prevent it from repeating similar violations.

Centrist House Democrats Call for Bipartisan Climate Approach

A coalition of centrist House Democrats are seeking for greater bipartisanship in the climate debate, as Republicans question whether the majority's proposals will achieve reasonable results and left-leaning groups criticize the approach as too weak.

The New Democrat Coalition unveiled a statement of principles on Wednesday, September 18 along with a list of 12 bills—seven of them bipartisan—that they believe will offer concrete solutions to climate change.

The bills offered in the principles document include: the Climate Action Now Act; Climate Security Intelligence Act; Nuclear Energy Leadership Act; Clean Industrial Technology Act; Advanced Research Projects Agency Reauthorization Act; USE IT Act; Clean Energy Standard Act; Super Pollutants Act; National Ocean and Coastal Security Improvements Act; and RECLAIM Act of 2019.

The policy recommendations set a goal of reaching net-zero greenhouse gas emissions by 2050 at the latest, a target that is in line with House Democratic leaders on the Energy and Commerce Committee.

It stops short of the broader vision of the Green New Deal, a House resolution introduced by Rep. Alexandria Ocasio-Cortez (D-NY) that calls for the rapid transformation of the economy away from fossil fuels over the next decade.

"Rather than create a list of aspirational goals that we don't feel are clearly defined and don't have legislation behind them, we decided to roll up our sleeves and come up with an initial platform of legislation and build on that," Rep. Elaine Luria (D-VA), co-chair of the coalition's climate change task force, said.

Disagreements Between California, Administration Grow on Air, Water, Homelessness

The Trump administration announced on Thursday, September 19 that it is rescinding California's authority to regulate greenhouse gas emissions from automobiles. The move comes in the form of a waiver that underpins California's power to set vehicle greenhouse gas standard separately from the federal standard.

The EPA said it won't wait for a review by its science advisers before forging ahead with the effort according to Environmental Protection Agency Administrator Andrew Wheeler told skeptical lawmakers last week at a House Science, Space, and Technology Committee hearing.

The Trump administration has a steep hill to climb before it can revoke a waiver that allows California to set separate rules that govern auto emissions. President Trump and his administration have made rolling back Obama-era regulatory issues a signature of his presidency.

The Department of Transportation and the Environmental Protection Agency announced that they were doing away with the 2013 carveout, which was one of President Barack Obama's signature measures to contain climate change.

But legal experts say that California, which formally filed suit alongside 23 other states, has a strong case that the administration's move is unlawful. And, they say, there is virtually no way in which the legal fight is over before the 2020 presidential election, meaning voters will also get a say in the matter.

The legal battle raises novel questions about the Clean Air Act, a landmark piece of legislation signed into law in 1963, that will be tested for the first time in this case. The case is expected to go all the way to the Supreme Court.

"California will continue its advance toward a cleaner future. We're prepared to defend the standards that make that promise a reality," California Attorney General Xavier Becerra said in a statement before the administration made the official announcement.

A separate issue that is likely to be litigated is whether California's emissions standards are fuel-economy standards. The Energy Policy and Conservation Act allows the federal government to preempt state laws that regulate fuel economy in order to ensure standard rules across the country.

In addition to setting auto emissions standards, the Environmental Protection Agency also took issue with California air and water standards in two letters sent to state officials during the week of September 23.

The first notified California that it has failed to file complete plans for fighting conventional air pollution and may lose highway funding as punishment. "If California doesn't work with the U.S. EPA to develop complete, approved plans for implementing federal air quality standards -- and withdraw unapproved plans now pending with the agency -- it could be hit with highway funding sanctions and other consequences, EPA Administrator Andrew Wheeler wrote. "We

certainly want to avoid these statutory triggers," he wrote, "but our foremost concern must be ensuring clean air for all Americans."

The second was sent on September 27 to Governor Gavin Newsom outlining concerns that California's implementation of federal environmental laws is failing to meet its obligations under delegated federal programs, especially as they relate to homelessness.

EPA alleges that California is allowing pollution tied to state's homelessness crisis to foul nearby waterways. Wheeler demanded California outline its plans for tackling the problem and accused California of failing to meet its obligations to protect the environment by inadequately treating wastewater and allowing sewage from homeless people to seep into waterways.

The EPA's letter, which falls short of a formal enforcement action, gives Newsom 30 days to respond.

Separate from the EPA letter on water quality issues, Housing and Urban Development Secretary Ben Carson rebuffed California Governor Gavin Newsom's request for more federal money to combat a homelessness crisis, instead demanding the state revise its housing regulations and crack down on undocumented immigration.

Newsom and mayors of the state's largest cities wrote President Donald Trump as he prepared to visit the state in September to request more federal rent vouchers and other aid. Trump has directed his government to explore ways to combat the homelessness crisis, particularly in Los Angeles; one possibility Carson's agency has considered is relocating people from the streets to vacant federal properties, according to administration officials.

Carson said in his letter nearly 500,000 California households already receive some type of federal housing assistance, and subsidies per tenant are 38% higher than the national average. He said that Los Angeles alone -- where many freeway overpasses and public parks have become encampments -- is home to 19% of the nation's entire homeless population. "Federal taxpayers are clearly doing their part to help solve the crisis," Carson wrote. "California cannot spend its way out of this problem using federal funds."

Instead, Carson said the state must allow police officers to refer homeless people to social services workers. It must increase its psychiatric hospital services, possibly through additional federal funding. And it must end so-called "sanctuary city" policies that he said encourage undocumented immigrants to travel to the state and seek government services.

Congress Votes to Overturn Wall Emergency, President to Veto

Congress for the second time this year rebuked President Donald Trump for raiding military spending accounts to fund his border wall. The House, in a 236-174 vote Friday, September 27, sent the president a resolution to cancel the national emergency declaration that Trump used to divert $3.6 billion in military construction funds toward the wall this year. The Senate approved the same measure, S.J. Res. 54, on a 54 to 41 vote earlier the same week.

The president vetoed a similar measure earlier this year and has indicated he will do the same when this resolution reaches his desk. The earlier measure passed the House in February on a 245-182 vote—like Friday's tally, well short of the two-thirds majority needed to override a presidential veto.

"The president chose his wall over our national security and the needs of our servicemembers and their families," said Appropriations Chairwoman Nita Lowey (D-NY). "Congressional Democrats have repeatedly made clear – including in our appropriations bills – that we will not give this president a blank check by backfilling these projects."

Trump took the extraordinary approach of redirecting taxpayer money after Congress approved only one-quarter of the $5.7 billion he sought for the wall in the wake of a 35-day government shutdown early this year. Another standoff over one of Trump's central campaign promises could derail the next round of talks to avoid another shutdown when short-term funding ends.

The decision to stage a second rebuke came after the Pentagon released the list of projects affected by Trump's move and revealed that Republican-held as well as Democratic-held districts would be affected.

Pressure for Gun Control Debate Increases in Senate

A group of top business leaders this month urged the Senate to take action on gun control. "Doing nothing about America's gun violence crisis is simply unacceptable and it is time to stand with the American public on gun safety," the CEOs from 145 companies including Twitter, Uber and Bloomberg LP wrote in the letter.

The executives are calling for the Senate to expand background checks on gun sales and strengthen so-called red-flag laws.

"The Senate must follow the House's lead by passing bipartisan legislation that would update the background checks law, helping to keep guns out of the hands of people who shouldn't have them, in an effort to save lives," they wrote. "Background checks on all gun sales are a common-sense solution with overwhelming public support and are a critical step toward stemming the gun violence epidemic in this country."

Pressure has grown on Congress to pass gun control legislation after three deadly mass shootings in August, with business executives becoming more vocal on the issue. The letter signals the most concerted effort by major companies to enter into a debate that was once considered off limits.

The president has been careful not to tip his hand for weeks about potential policy responses, but Senators say he's open to expanding background checks — a potential momentum shift for gun legislation that has stalled on Capitol Hill for years.

However, Senate conservatives are warning President Trump, and their own leaders, to tread carefully in the gun control debate to expand background checks for firearms sales. The House

passed a background check law earlier this year, but it has not been considered in the Republican-controlled Senate.

Bill Number (linked to the legislation on Congress.gov)	**Sponsor/ Cosponsor**	**Title and/or Summary**	**Summary/Status**	**Latest Action**
n/a		Status of the 12 annual appropriations bills in the House	The House has passed 10 of its 12 annual appropriations bills in three pieces of legislation. The first 9 passed in 2 separate minibus packages and the final bill went on its own. The two remaining bills have advanced through the House Appropriations Committee and await action by the full House.	H.R.2740, First minibus (passed 226 - 203): Defense; Energy and Water: Labor-HHS; and State-Foreign Operations. H.R.3055, Second minibus (passed 227 - 194): Agriculture; Commerce-Justice-Science; Military Construction - VA; Interior-Environment; and Transportation-HUD. H.R.3351, Stand alone legislation (passed 224-196): Financial Services. Not yet completed: Homeland Security; and
n/a		Status of the 12 annual appropriations bills in the Senate	The Senate has not yet introduced or passed any of its twelve annual appropriations bills.	In total the Senate Appropriations Committee has advanced six of its twelve bills: Agriculture, Defense, Energy and Water, Financial Services, Interior and Environment, Transportation and Housing. On September 18 the Senate attempted to begin consider of the first House minibus consisting of following appropriations bills: Defense; Energy and Water: Labor-HHS; and State-Foreign Operations. The attempt failed to gain enough votes for cloture and Senate consideration.
H.R. 4378	Rep. Nita Lowey (D- NY)	Continuing Resolution	The legislation includes several temporary extensions that run the length of the Continuing Resolution (CR), including the National Flood Insurance Program, the Export-Import Bank, the E-verify program, and other immigration authorities. The legislation also includes anomalies related to the Census Bureau, Secret Service, reimbursement for farmers under the Commodity Credit Corporation, among others.	The House introduced a Continuing Resolution (CR) with limited anomalies to extend federal government funding through November 21 and avoid a government shutdown. The House passed the measure by a vote of 301 to 123 on September 19. The Senate is expected to consider the legislation ahead of the October two week district work period.

H.R. 1695	Rep. Betty McCollum (D-MN)	Community Services Block Grant Reauthorization Act of 2019	The legislation would amend the Community Services Block Grant Act to reauthorize and modernize the Act.	The measure was introduced in the House on March 12, 2019 to the House Committee on Education and Labor. The legislation has bipartisan co-sponsorship.
S. 2356	Sen. Mike Braun (R-IN)	Define WOTUS Act of 2019	The measure would create a new WOTUS definition the void the previous Obama era definition that is currently tied up in litigation.	The legislation was introduced on the July 31 and referred to the Committee on Environment and Public Works.
H.R. 1764	Rep. John Garamendi (D-CA)	The bill to amend the Federal Water Pollution Act	The legislation would amend the Federal Water Pollution Control Act with respect to permitting terms, and for other purposes.	Introduced on March 15 and then referred to the Subcommittee on Water Resources and Environment. This legislation has bipartisan co-sponsorship..
S. 1790	Sen. Jim Inhofe (R-OK)	National Defense Authorization Act, 2020 Note: Included a rider on PFAS	The National Defense Authorization Act, 2020 is the annual authorization for Defense programs. This year, the legislation included legislation aimed at addressing the risks and challenges associated with per- and polyfluoroalkyl substances (PFAS). This provision will ensure that the EPA sets a national drinking water standard for PFAS and PFOS. It will also require industrial manufactures and users to notify the public when PFAS chemicals are released into the environment. The EPA will also have to issue guidance on how to dispose of and destroy PFAS. The legislation also provides authorization for funding for monitoring and sampling, and requires better interagency coordination on PFAS chemicals.	Passed the Senate on Thursday, June 27, 2019, though an amendment vote was held the following day. Both chambers have proceeded to conference on their respective measures, with the House and Senate naming conferees to reconciled differences.
H.R.1497	Rep. Peter DeFazio (D-OR)	Water Quality Protection and Job Creation Act of 2019	Reauthorizes sections of the Federal Water Pollution Control Act that provide grants to States and interstate agencies, including: State Management Assistance: Section 106(a); Watershed Pilot Projects: Section 122(c); Alternative Water Source Projects Pilot Program: Section 220(d); Sewer Overflow and Stormwater Reuse Municipal Grants: Section 221(f)1); and State Water Pollution Control Revolving Funds.	Introduced on March 6 and referred to the Subcommittee on Water Resources and Environment of the House Transportation Committee.
H.R. 1508 / S. 146	Rep. Blumenauer (D-OR) / Sen. John Hoeven (R-ND)	Move America Act of 2019	The measure would amend the Internal Revenue Code of 1986 to provide for Move America bonds and Move America credits.	The House bill was introduced on March 5 and then referred to the House Committee on Ways and Means. Note: All tax issues are likely to be addressed as part of a larger tax package. The Ways and Means Committee is considering forming a tax extenders package, which would be the most likely venue for this legislation. The Senate bill was introduced in the Senate on January 16th and referred to the Senate Committee on Finance.

H.R. 1744	Rep. Mark Takano (D-CA)	S.T.O.R.A.G.E. Act (Storage Technology for Operational Readiness And Generating Energy Act) Energy Storage Systems by Electric Utilities	The bill would provide for the consideration of energy storage systems by electric utilities as part of a supply side resource process, and for other purposes.	The bill was introduced on March 13 and the referred to the Committee on Energy and Commerce, and in addition to the Subcommittee on Energy of the Committee on Science, Space, and Technology.
S.1689	Sen. Cory Booker (D-NJ)	A bill to permit States to transfer certain funds from the clean water revolving fund of a State to the drinking water revolving fund of the State in certain circumstances, and for other purposes.	Allows States to transfer certain funds from the clean water revolving fund of a State to the drinking water revolving fund of the State in certain circumstances, and for other purposes. The authority is valid for one year and must be requested by states in consultation with the EPA administrator to transfer no more than 5% of the clean water funds to drinking water funds after a determination that available funds in the clean water revolving fund of the State are necessary to address a threat to public health as a result of heightened exposure to lead in drinking water.	Passed the House and Senate. Legislation has been sent to the President, where it is expected to be signed.
H.R.1162	Rep. Grace Napolitano (D-CA)	Water Recycling Investment and Improvement Act	This legislation would create a competitive grant program for the funding of water recycling and reuse projects by raising the authorization cap for the Title XVI program from $50 million to $500 million. The legislation would also raise the authorization cap from $20 million to $30 million for the Reclamation Wastewater and Groundwater Study and Facilities Act.	Introduced in the House on February 13. The House Natural Resources Subcommittee on Water, Oceans, and Wildlife held a hearing on the legislation on June 13.
H.R.579	Rep. Scott Tipton (R-CO)	Water Rights Protection Act of 2019	This bill would prohibit the conditioning of any permit, lease, or other use agreement on the transfer of any water right to the United States by the Secretaries of the Interior and Agriculture, and for other purposes.	Introduced in the House on January 15th. Referred to the Conservation and Forestry Subcommittee of the Agriculture Committee on 2/7 and to the Water, Oceans, and Wildlife Subcommittee of the House Natural Resources Committee on 2/4. A similar amendment was submitted to the House Rules Committee for consideration in the Interior-Environment Appropriations bill, but was not made in order by the Committee for floor consideration.
H. R. 855	Rep. Scott Peters (D-CA)	STRONG (Strengthening the Resiliency of our Nation on the Ground Act) Act	The bill would work to minimize the economic and social costs resulting from losses of life, property, well-being, business activity, and economic growth associated with extreme weather events by ensuring that the United States is more resilient to the impacts of extreme weather events in the short- and long-term, and for other purpose	Introduced in the House and referred to the Subcommittee on Economic Development, Public Buildings, and Emergency Management of the House Transportation Committee on February 7th.
S. 361/H.R. 807	Sen. Cory Gardner (R-CO) / Rep. Ken Buck (R-CO)	Water and Agriculture Tax Reform Act of 2019	The measure would work to amend the Internal Revenue Code of 1986 to facilitate water leasing and water transfers to promote conservation and efficiency.	Introduced and referred to the Committee on Finance (Senate) and Ways and Means Committee (House).
H.R. 420	Rep. Earl Blumenauer (D-OR)	Regulate Marijuana Like Alcohol Act	The bill would decriminalize marijuana and sets up legal framework to regulate marijuana.	Introduced in the House on January 9th and referred to the Committees on Energy and Commerce, Ways and Means, Natural Resources, and Agriculture.

S.420 /H.R. 1120	Sen. Ron Wyden (D-OR) / Rep. Earl Blumenauer (D-OR)	Marijuana Revenue and Regulation Act	A bill to amend the Internal Revenue Code of 1986 to provide for the taxation and regulation of marijuana products, and for other purposes.	The bill was introduced in the Senate on February 7th and was referred to the Finance Committee. Introduced in the House on February 8th and was referred to the Committees on Judiciary, Agriculture, and Natural Resources.
H.R.34	Rep. Eddie Bernice Johnson (D-TX)	Energy and Water Research Integration Act of 2019	The legislation would ensure consideration of water intensity in the Department of Energy's energy research, development, and demonstration programs to help guarantee efficient, reliable, and sustainable delivery of energy and clean water resources.	The bill was introduced in the House on January 3rd. It was marked up and ordered to be reported by the House Science and Technology Committee on May 1, 2019 and was passed by the House on July 23, 2019 by voice vote. On July 24, the bill was referred to the Senate Committee on Energy and Natural Resources.
H.R. 2313	Rep. Jared Huffman (D-CA)	Water Conservation Rebate Tax Parity Act	The measure would amend the Internal Revenue Code of 1986 to expand the exclusion for certain conservation subsidies to include subsidies for water conservation or efficiency measures and storm water management measures.	The bill was introduced in the House on April 12 and then referred to the Committee on Ways and Means. Note: All tax issues are likely to be addressed as part of a larger tax package. The Ways and Means Committee is considering forming a tax extenders package, which would be the most likely venue for this legislation.
H.R.1747	Rep. Rob Whittman (R-VA)	National Fish Habitat Conservation Through Partnerships Act	The measure aims to achieve measurable habitat conservation results through strategic actions of Fish Habitat Partnerships that lead to better fish habitat conditions and increased fishing opportunities, establish a consensus set of national conservation strategies as a framework to guide future actions and investment by Fish Habitat Partnerships, broaden the community of support for fish habitat conservation, fill gaps in the National Fish Habitat Assessment and the associated database of the National Fish Habitat Assessment, and communicate to the public and conservation partners.	A hearing has been held in the House Natural Resources Committee on the legislation.
S.1419	Sen. James Lankford (R-OK)	Early Participation in Regulations Act	The legislation would direct agencies to issue advanced notices for rules costing more than $100 million annually. The bill would require agencies must outline the problem the rule intends to solve and listen to the public's input on the subject.	On May 13, the bill was introduced into the Senate. It was then referred to the Committee on Homeland Security and Governmental Affairs. Hearings on the bill were held in both the Committee on Homeland Security and the Committee on Small Business. On July 19 the Committee on Homeland Security and Governmental Affairs ordered the measure to be reported favorably with an amendment in the nature of a substitute. On September 10, the bill was placed on the Senate Legislative Calendar under General Orders. The legislation has bipartisan co-sponsorship.

H.R. 3794	Rep. Paul A. Gosar (R-AZ)	Public Land Renewable Energy Development Act of 2019	The bill would work to promote the development of renewable energy on public lands	The measure was introduced in the House on July 17, 2019 and was then referred to both the Committee on Natural Resources and the Committee on Agriculture. A hearing on the bill was held on July 25 by the Subcommittee on Energy and Mineral Resources. On August 9th, the bill was referred to the Subcommittee on Conservation and Energy of the House Agriculture Committee. The measure was later referred to the Subcommittee on Energy and Mineral Resources, where a hearing was held on the legislation. The legislation has bipartisan co-sponsorship.
S. 1344	Sen. Cory Booker (D-NJ) and Tim Scott (R-SC)	Reinstate Opportunity Zone Data Mandates	The bill would require the Secretary of the Treasury to collect data and issue a report on the opportunity zone tax incentives enacted by the 2017 tax reform legislation. The reporting requirements were part of the original legislation as introduced, but they were not incorporated in H.R.1 (the tax package) when it was advanced in the House and Senate.	The legislation was introduced in the Senate on May 7, 2019 and referred to the Finance Committee. The legislation has bipartisan co-sponsorship.
Enacted Legislation				
H.J.Res.31	Rep. Lucille Roybal-Allard (D-CA)	Consolidated Appropriations Act, 2019 (Conference Reports for the Agriculture, Commerce-Justice-Science, Financial Services-General Government, Interior-Environment, State-Foreign Operations, and Transportation-HUD Appropriations bills).	The House and Senate came to an agreement on a Conference Report for the 7 remaining FY19 appropriations bills after holding an official conference on the FY19 Homeland Security Appropriations bill. The Homeland Security section contained approximately $1.3 billion for border fending in the Rio Grande Valley of Texas and slight reduction in funding for ICE detention beds. The other 6 appropriations bills contained conference reports similar to those that had been previously been released.	The bill was introduced on January 22nd and was passed by both the Senate and the House before being signed into law on February 15th. This bill's enactment finalized full year funding for all federal agencies for fiscal year 2019 through September 30, 2019.
S.47	Sen. Lisa Murkowski (R-AK)	Natural Resources Management Act (renamed the John D. Dingell, Jr. Conservation, Management, and Recreation Act) Included the following provisions: California Desert Protection and Recreation Act of 2019 Bureau of Reclamation Transparency Act Santa Ana River Wash Plan Land Exchange Act	This bill sets forth provisions regarding various programs, projects, activities, and studies for the management and conservation of natural resources on federal lands. Specifically, the bill addresses: Land conveyances, exchanges, acquisitions, withdrawals, and transfers; the Santa Ana River Wash Plan Land Exchange Act; national parks, monuments, memorials, wilderness areas, other conservation and recreation areas; and federal reclamation projects. For California, the legislation included the Santa Ana River Wash Plan Land Exchange Act and the California Desert Protection and Recreation Act of 2019, which was a compromise between individual bills introduced by Senator Dianne Feinstein and Congressman Paul Cook in previous Congresses.	Introduced in the Senate on January 8th. The legislation passed the Senate by a vote 92 - 8 on February 12th. The measure was then taken up by the House and passed by a vote of 363-62. The bill was signed into law by President Trump on March 12, 2019.

H.R. 2157	Rep. Nita Lowey (D- NY)	Supplemental Appropriations Act, 2019	This bill provides $19.1 billion in FY2019 supplemental appropriations to several federal departments and agencies for expenses related to the consequences of recent wildfires, hurricanes, volcanos, earthquakes, typhoons, and other natural disasters. The funding provided by this bill is designated as emergency spending, which is exempt from discretionary spending limits and other budget enforcement rules.	The Senate rejected the underlying legislation by failing to invoke cloture on the legislation as well as a substitute amendment due to disagreements over Puerto Rico and, after several attempts, later passed an alternative supplemental measure totaling $19.1 billion. The House passed the $19.1 billion disaster relief package by a vote of 354-58 on June 3. The measure was signed into law on June 6.
H.R. 3877	Rep. John Yarmuth (D-KY)	Bipartisan Budget Act of 2019	The measure would amend the Balanced Budget and Emergency Deficit Control Act of 1985, to establish a congressional budget for fiscal years 2020 and 2021 and to temporarily suspend the debt limit for two years- through July 31, 2021. Once the debt ceiling suspension lifts in 2021, the measure would not prohibit the Treasury Department from utilizing extraordinary measures. The 2-year proposal calls for increasing the discretionary spending caps for fiscal years 2020 and 2021 above the levels set in the Budget Control Act of 2011. The compromise would increase fiscal 2020 spending limits on non-defense programs by $24.5 billion over current levels, to $621.5 billion. Defense spending caps for fiscal 2020 would be increased by $19.5 billion over current levels, to $666.5 billion. Another $71.5 billion would be included in the OCO fund, an increase of $2.5 billion over the current OCO level.	The legislation was introduced in the House on July 23, 2019 and then referred to the Committee on the Budget, and in addition to the Committees on Rules, and Ways and Means. The measure was then considered and passed the House with a vote of 284 to 149. The Senate followed suit and passed the measure on August 1, 2019 with a vote of 67 to 28. The President signed the measure into law on August 2, 2019.

INFORMATION
ITEM

5N

CALIFORNIA STRATEGIES, LLC

Date: September 27, 2019

To: Inland Empire Utilities Agency

From: John Withers, Jim Brulte

Re: September 2019 Activity Report

1. This month Jim Brulte and John Withers participated in the monthly senior staff meeting which was attended by senior Executive Management Team members on September 9.
2. Chino Basin Program
    - Reviewed the activities to date regarding the regional contract including the Workshop which addressed predesign efforts, roles, and cost benefits.
    - Evaluated the various stakeholder projects and in September will consider alternatives.
    - Discussed governance issues and the current system of representation.
    - California Strategies drafted and edited an Op Ed piece in support of the CBP.
3. Biennial Budget
    - Discussed recycled water interties.
4. Rate Study (Carollo)
    - Next workshop is 9/16. Discussion of recycled water rates.
    - Goal is to be done by October with adoption by February.
5. Member Questions and Answers
    - Answered questions from IEUA Board members and the GM since the meeting.

4343 VON KARMAN AVENUE, THIRD FLOOR · NEWPORT BEACH, CA 92660
TELEPHONE (949) 252-8990 · FACSIMILE (949) 252-8911
WWW.CALSTRAT.COM

AGENCY REPRESENTATIVES' REPORTS

6A

SAWPA
SANTA ANA WATERSHED PROJECT AUTHORITY
11615 Sterling Avenue, Riverside, California 92503 • (951) 354-4220

REGULAR COMMISSION MEETING
TUESDAY, OCTOBER 1, 2019 – 9:30 A.M.

AGENDA

1. **CALL TO ORDER/PLEDGE OF ALLEGIANCE (Ronald W. Sullivan, Chair)**

2. **ROLL CALL**

3. **PUBLIC COMMENTS**

   Members of the public may address the Commission on items within the jurisdiction of the Commission; however, no action may be taken on an item not appearing on the agenda unless the action is otherwise authorized by Government Code §54954.2(b).

4. **CONSENT CALENDAR**

   All matters listed on the Consent Calendar are considered routine and non-controversial and will be acted upon by the Commission by one motion as listed below.

   A. **APPROVAL OF MEETING MINUTES: SEPTEMBER 17, 2019**
   Recommendation: Approve as posted.

5. **NEW BUSINESS**

   A. **DISADVANTAGED COMMUNITY INVOLVEMENT (DCI) PROGRAM STATUS – EDUCATION & ENGAGEMENT PROGRAMS (CM#2019.101)**
   Presenter: Rick Whetsel
   Recommendation: Receive and file.

   B. **2020 MEDICAL INSURANCE CAP (CM#2019.102)**
   Presenter: Rich Haller
   Recommendation: Direct staff to adjust the medical insurance cap from $1,745.45 to $1,781.93, which reflects the ACWA/JPIA 2020 Kaiser Family Plan rate.

C. **OWOW PROPOSITION 1 ROUND 1 INTEGRATED REGIONAL WATER MANAGEMENT PROJECT GRANT APPLICATION AND RELATED AGREEMENTS (CM#2019.103)**
Presenter: Ian Achimore
Recommendation: Adopt Resolution 2019.7 authorizing the General Manager, or designee, to do the following: (1) Submit a Proposition 1 Round 1 Integrated Regional Water Management Implementation Grant application to the Department of Water Resources; and, (2) Enter into a Grant Agreement with the Department of Water Resources and agreements with the Round 1 project proponents.

D. **PROPOSITION 84 ROUND 2 IMPLEMENTATION GRANT AGREEMENT AMENDMENT (CM#2019.104)**
Presenter: Marie Jauregui
Recommendation: (1) Receive and file a Proposition 84 Project status update; and, (2) Direct staff to execute an amendment to the Grant Agreement between SAWPA and the Department of Water Resources.

6. INFORMATIONAL REPORTS
Recommendation: Receive for information.

A. **SAWPA GENERAL MANAGERS MEETING NOTES**
- September 17, 2019

B. **CHAIR'S COMMENTS/REPORT**

C. **COMMISSIONERS' COMMENTS**

D. **COMMISSIONERS' REQUEST FOR FUTURE AGENDA ITEMS**

7. CLOSED SESSION

A. **PUBLIC EMPLOYEE ANNUAL PERFORMANCE EVALUATION – PURSUANT TO GOVERNMENT CODE SECTION 54957**
Title: General Manager

8. ADJOURNMENT

Americans with Disabilities Act: If you require any special disability related accommodations to participate in this meeting, call (951) 354-4230 or email kberry@sawpa.org. 48-hour notification prior to the meeting will enable staff to make reasonable arrangements to ensure accessibility for this meeting. Requests should specify the nature of the disability and the type of accommodation requested.

Materials related to an item on this agenda submitted to the Commission after distribution of the agenda packet are available for public inspection during normal business hours at the SAWPA office, 11615 Sterling Avenue, Riverside, and available at www.sawpa.org, subject to staff's ability to post documents prior to the meeting.

Declaration of Posting
I, Kelly Berry, Clerk of the Board of the Santa Ana Watershed Project Authority declare that on Wednesday, September 25, 2019, a copy of this agenda has been uploaded to the SAWPA website at www.sawpa.org and posted at the SAWPA office, 11615 Sterling Avenue, Riverside, California.

/s/

Kelly Berry, CMC

2019 SAWPA Commission Meetings|Events|Important Dates

First and Third Tuesday of the Month

(NOTE: Unless otherwise noticed, all Commission Workshops/Meetings begin at **9:30 a.m.**, and are held at SAWPA.)

March 3/5/19 Commission Workshop 3/19/19 Regular Commission Meeting 3/29/19 OWOW Conference 2019, Cal State Fullerton	**April** 4/2/19 Commission Workshop 4/16/19 Regular Commission Meeting
May 5/7/19 ~~Commission Workshop~~ [cancelled] 5/7 – 5/10/19 ACWA Spring Conference, Monterey 5/21/19 Regular Commission Meeting	**June** 6/4/19 Commission Workshop 6/18/19 Regular Commission Meeting
July 7/2/19 Commission Workshop 7/16/19 Regular Commission Meeting	**August** 8/6/19 Commission Workshop 8/20/19 Regular Commission Meeting
September 9/3/19 Commission Workshop 9/17/19 Regular Commission Meeting	**October** 10/1/19 Commission Workshop 10/15/19 Regular Commission Meeting
November 11/5/19 Commission Workshop 11/19/19 Regular Commission Meeting	**December** 12/3/19 Commission Workshop 12/17/19 Regular Commission Meeting 12/3 – 12/6/19 ACWA Fall Conference, San Diego

2020 SAWPA Commission Meetings/Events

First and Third Tuesday of the Month

(NOTE: Unless otherwise noticed, all Commission Workshops/Meetings begin at **9:30 a.m.** and are held at SAWPA.)

January 1/7/20 Commission Workshop 1/21/20 Regular Commission Meeting	**February** 2/4/20 Commission Workshop 2/18/20 Regular Commission Meeting
March 3/3/20 Commission Workshop 3/17/20 Regular Commission Meeting	**April** 4/7/20 Commission Workshop 4/21/20 Regular Commission Meeting
May 5/5/20 Commission Workshop 5/5 – 5/8/20 ACWA Spring Conference, Monterey 5/19/20 Regular Commission Meeting	**June** 6/2/20 Commission Workshop 6/16/20 Regular Commission Meeting
July 7/7/20 Commission Workshop 7/21/20 Regular Commission Meeting	**August** 8/4/20 Commission Workshop 8/18/20 Regular Commission Meeting
September 9/1/20 Commission Workshop 9/15/20 Regular Commission Meeting	**October** 10/6/20 Commission Workshop 10/20/20 Regular Commission Meeting
November 11/3/20 Commission Workshop 11/17/20 Regular Commission Meeting	**December** 12/1/20 Commission Workshop 12/1 – 12/4/20 ACWA Fall Conference, Indian Wells 12/15/20 Regular Commission Meeting

AGENCY REPRESENTATIVES' REPORTS

6B

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

MWD MEETING AGENDA

REVISION NO. 2

Regular Board Meeting
October 8, 2019
12:00 p.m. – Boardroom

Tuesday, October 8, 2019 Meeting Schedule		
9:30 AM	L&C	Rm. 2-145
10:30 AM	C&LR	Rm. 2-456
12:00 PM	Board Mtg	Boardroom

MWD Headquarters Building • 700 N. Alameda Street • Los Angeles, CA 90012

1. **Call to Order**

   (a) Invocation: Zary Lahouti, Administrative Assistant I, Engineering Services Group

   (b) Pledge of Allegiance: Director Larry Dick

2. **Roll Call**

3. **Determination of a Quorum**

4. Opportunity for members of the public to address the Board on matters within the Board's jurisdiction. (As required by Government Code Section 54954.3(a))

5. **OTHER MATTERS**

   A. Approval of the Minutes of the Meeting for September 10, 2019; and corrected Minutes of the Meeting for February 12, 2019 (Copies have been mailed to each Director) Any additions, corrections, or omissions

   B. Report on Directors' events attended at Metropolitan expense for month of September 2019

   C. Approve committee assignments

   D. Chairwoman's Monthly Activity Report

   E. Adopt motion to adjourn the November Board Meeting to November 5, 2019, due to Holiday (Committees to meet on November 4 and 5, 2019)

Date of Notice: October 3, 2019

F. Presentation of 5-year Service Pin to Director Larry McKenney

G. Induction of new Director Vartan Gharpetian from the City of Glendale
   (a) Receive credentials
   (b) Report on credentials by General Counsel
   (c) File credentials
   (d) Administer Oath of Office
   (e) File Oath

H. Induction of new Director Tracy Quinn from the City of Los Angeles
   (a) Receive credentials
   (b) Report on credentials by General Counsel
   (c) File credentials
   (d) Administer Oath of Office
   (e) File Oath

6. DEPARTMENT HEADS' REPORTS

A. General Manager's summary of activities for the month of September 2019

B. General Counsel's summary of activities for the month of September 2019

C. General Auditor's summary of activities for the month of September 2019

D. Ethics Officer's summary of activities for the month of September 2019

7. CONSENT CALENDAR ITEMS — ACTION

7-1 Award $594,480 contract to Kaveh Engineering & Construction, Inc. for rehabilitation of Service Connection A-06 on the East Orange Feeder No. 2; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (E&O)

7-2 Review and consider Lead Agency's adopted Mitigated Negative Declaration and take related CEQA actions, and adopt resolution for the 52nd Fringe Area Annexation concurrently to Western Municipal Water District and Metropolitan. (F&I)

END OF CONSENT CALENDAR

8. OTHER BOARD ITEMS — ACTION

Withdrawn **~~8-1~~** ~~Authorize on-call agreements with Arcadis U.S., Inc., HDR Inc., and Tetra Tech, Inc., in amounts not-to-exceed $1 million per year each, for a maximum of five years, for engineering services to support board-authorized Capital Investment Plan projects; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (E&O)~~

8-2 Authorize an increase of $700,000 to an agreement with IBI Group, for a new not-to-exceed total of $2,445,000 for design services for Headquarters Building improvements; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (E&O)

Revised **8-3** Authorize co-funding of dues payments to the Alliance for Water Efficiency and its California chapter, the California Water Efficiency Partnership, on behalf of water agencies within Metropolitan's service area, subject to a $325,000 annual cap; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (WP&S)

8-4 Authorize the General Manager to co-sponsor legislation to create a program at the State Water Resources Control Board to identify and evaluate drinking water quality constituents of emerging concern; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (C&L)

8-5 Authorize the General Manager to seek legislation to amend the Surface Mining and Reclamation Act to provide Metropolitan with lead agency status for its activities; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (C&L)

8-6 Review and consider the City of Camarillo's approved Final Supplemental EIR and authorize the General Manager to enter into a Local Resources Program Agreement with Calleguas Municipal Water District and the City of Camarillo for the North Pleasant Valley Desalter Project. (WP&S)

9. BOARD INFORMATION ITEMS

9-1 Update on Conservation Program

9-2 Compliance with Fund Requirements and Bond Indenture Provisions. (F&I)

9-3 Information on Stormwater for Recharge Pilot Program. (WP&S)

10. FOLLOW-UP ITEMS

11. FUTURE AGENDA ITEMS

12. ADJOURNMENT

NOTE: Each agenda item with a committee designation will be considered and a recommendation may be made by one or more committees prior to consideration and final action by the full Board of Directors. The committee designation appears in parentheses at the end of the description of the agenda item e.g., (E&O, F&I). Committee agendas may be obtained from the Board Executive Secretary.

Writings relating to open session agenda items distributed to Directors less than 72 hours prior to a regular meeting are available for public inspection at Metropolitan's Headquarters Building and on Metropolitan's Web site http://www.mwdh2o.com.

Requests for a disability related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting should be made to the Board Executive Secretary in advance of the meeting to ensure availability of the requested service or accommodation.

AGENCY REPRESENTATIVES' REPORTS

6C

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

NOTICE OF CANCELLATION OF THE

THURSDAY, OCTOBER 3, 2019, 4:00 P.M. REGULAR MEETING OF THE REGIONAL SEWERAGE POLICY COMMITTEE

HAS BEEN CANCELLED DUE TO A LACK OF BUSINESS TRANSACTIONS

THE NEXT REGULAR MEETING IS SCHEDULED FOR THURSDAY, NOVEMBER 7, 2019 AT 6075 KIMBALL AVENUE CHINO, CA 91708

DECLARATION OF POSTING

I, Laura Mantilla, Executive Assistant of the Inland Empire Utilities Agency, A Municipal Water District, hereby certify that a copy of this agenda has been posted to the IEUA Website at www.ieua.org and posted in the foyer at the Agency's main office at 6075 Kimball Avenue, Building A, Chino, CA, on Thursday, September 26, 2019.

Laura Mantilla

AGENCY REPRESENTATIVES' REPORTS

6D

CHINO BASIN WATERMASTER
WATERMASTER BOARD MEETING
11:00 a.m. – September 26, 2019
Mr. Jeff Pierson – Chair
Mr. Darron Poulsen – Vice-Chair
At The Offices Of
Chino Basin Watermaster
9641 San Bernardino Road
Rancho Cucamonga, CA 91730

AGENDA

CALL TO ORDER

PLEDGE OF ALLEGIANCE

PUBLIC COMMENTS

AGENDA - ADDITIONS/REORDER

I. CONSENT CALENDAR

Note: All matters listed under the Consent Calendar are considered to be routine and non-controversial and will be acted upon by one motion in the form listed below. There will be no separate discussion on these items prior to voting unless any members, staff, or the public requests specific items be discussed and/or removed from the Consent Calendar for separate action.

A. MINUTES

Approve as presented:

1. Minutes of the Watermaster Board Meeting held July 25, 2019

B. FINANCIAL REPORTS

Receive and file as presented:

1. Cash Disbursements for the month of June 2019
2. Watermaster VISA Check Detail for the month of June 2019
3. Combining Schedule for the Period July 1, 2018 through June 30, 2019
4. Treasurer's Report of Financial Affairs for the Period June 1, 2019 through June 30, 2019
5. Budget vs. Actual Report for the Period July 1, 2018 through June 30, 2019
6. Cash Disbursements for the month of July 2019
7. Watermaster VISA Check Detail for the month of July 2019
8. Combining Schedule for the Period July 1, 2019 through July 31, 2019
9. Treasurer's Report of Financial Affairs for the Period July 1, 2019 through July 31, 2019
10. Budget vs. Actual Report for the Period July 1, 2019 through July 31, 2019

C. OBMP SEMI-ANNUAL STATUS REPORTS 2019-1

Adopt the Semi-Annual OBMP Status Report 2019-1, along with filing a copy with the Court, subject to any necessary non-substantive changes.

D. FISCAL YEAR 2018/19 BUDGET TRANSFER (FORM T-19-06-01)

Approve Fiscal Year 2018/19 Budget Transfer (Form T-19-06-01) as presented.

II. BUSINESS ITEMS

A. REVISED 2014/15 THROUGH 2018/19 ASSESSMENT PACKAGES

Approve the Revised 2014/15 through 2018/19 Assessment Packages along with the assessment of Desalter Replenishment Obligation.

B. RESOLUTION TO LEVY REPLENISHMENT AND ADMINISTRATIVE ASSESSMENTS FOR REVISED 2014/15 THROUGH 2018/19 ASSESSMENT PACKAGES

Adopt Resolution 2019-05 as presented.

III. REPORTS/UPDATES

A. LEGAL COUNSEL REPORT

1. Rules and Regulations 2019 Update
2. December 13, 2019 Hearing

B. ENGINEER REPORT

1. GLMC Activities
2. Safe Yield Recalculation
3. PFAS Monitoring

C. CFO REPORT

1. September 2019 Assessment Invoicing and Payments

D. GM REPORT

1. Water Activity Reports
2. Status report: OBMP Update
3. Status report: Storage Management Plan
4. Ely 3 Basin
5. Other

IV. INFORMATION

1. Cash Disbursements for August 2019

V. BOARD MEMBER COMMENTS

VI. OTHER BUSINESS

VII. CONFIDENTIAL SESSION - POSSIBLE ACTION

Pursuant to Article 2.6 of the Watermaster Rules & Regulations, a Confidential Session may be held during the Watermaster Board meeting for the purpose of discussion and possible action.

VIII. FUTURE MEETINGS AT WATERMASTER

09/26/19	Thu	9:00 a.m.	Ground-Level Monitoring Committee
09/26/19	Thu	11:00 a.m.	Watermaster Board
10/10/19	Thu	9:00 a.m.	Appropriative Pool
10/10/19	Thu	11:00 a.m.	Non-Agricultural Pool
10/10/19	Thu	1:30 p.m.	Agricultural Pool
10/17/19	Thu	8:00 a.m.	Appropriative Pool Strategic Planning (Confidential Session Only)
10/17/19	Thu	9:00 a.m.	Advisory Committee
10/17/19	Thu	9:30 a.m.	OBMP Update – Listening Session 7
10/24/19	Thu	9:00 a.m.	Recharge Investigations and Projects Committee (RIPCom)
10/24/19	Thu	11:00 a.m.	Watermaster Board
10/29/19	Tue	1:00 p.m.	2019/20 Assessment Package Workshop

ADJOURNMENT

AGENCY REPRESENTATIVES' REPORTS

6E

SPECIAL BOARD MEETING OF THE BOARD OF DIRECTORS
CHINO BASIN DESALTER AUTHORITY

September 26, 2019
2:00 p.m.

Council Chambers, of the City of Ontario
303 E. "B" Street, Ontario, CA

All documents available for public review are on file with the Authority's secretary located at 2151 S. Haven Avenue, Suite 202, Ontario, CA 91761.

NOTICE AND AGENDA

CALL TO ORDER

FLAG SALUTE

PUBLIC COMMENT

Members of the public may address the Board at this time on any non-agenda matter. Please complete a Comment Card and give it to the Secretary. Comments are limited to three (3) minutes per individual. State your name and address for the record before making your presentation. This request is optional, but very helpful for the follow-up process.

Under the provisions of the Brown Act, the CDA Board is prohibited from taking action on oral requests. However, Board Members may respond briefly or refer the communication to staff. The CDA Board may also request the Secretary to calendar an item related to your communication at a future CDA Board meeting.

CONSENT CALENDAR ITEMS

Consent Calendar items are expected to be routine and non-controversial to be acted upon by the Board at one time without discussion. If any Board member, staff member, or interested person requests that an item be removed from the Consent Calendar, it will be moved to the first item on the Action Items.

1. **MINUTES OF SEPTEMBER 5, 2019 SPECIAL BOARD MEETING**

2. **TREASURER'S FINANCIAL AFFAIRS REPORT FOR QUARTER ENDED JUNE 2019**
   Report by: Jose Garcia, CDA Principal Accountant

3. **TREASURER'S REPORT ON GENERAL DISBURSEMENTS FOR THE QUARTER ENDED JUNE 2019**
   Report by: Jose Garcia, CDA Principal Accountant

4. **INVESTMENT REPORT**
   Report by: Jose Garcia, CDA Principal Accountant

5. **AUDITOR'S ENGAGEMENT LETTER**
   Report by: Michael Chung, CDA CFO/Treasurer

ACTION ITEMS

Prior to action of the CDA Board, any member of the audience will have the opportunity to address the CDA Board on any item listed on the agenda, including those on any consent calendar. Please submit a comment card to the secretary with the agenda item number noted.

6. **PROFESSIONAL SERVICES AGREEMENT FOR THE CHINO I SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM PROGRAMMING SUPPORT SERVICES**
Report by: Tom O'Neill, CDA General Manager/CEO

Staff Recommendation:

1. Approve a Professional Services Agreement with Cannon Corporation, in the not-to-exceed amount of $150,000 for Chino I Supervisory Control and Data Acquisition system programming support services for FY 2019/20; and
2. Authorize the General Manager/CEO to finalize and execute the agreement and approve up to $150,000 in authorized expenditures and extend the contract for up to four additional one-year periods consistent with the CDA Board approved budget.

7. **PURCHASE OF REVERSE OSMOSIS (RO) MEMBRANES ELEMENTS**

Report by: Tom O'Neill, CDA General Manager/CEO

Staff Recommendation:

1. Approve a purchase order with Dupont Water Solutions for the supply of 294 RO membrane elements in the amount of $124,950.

8. **CONTRACT WITH EVOQUA WATER TECHNOLOGIES FOR SUPPLY OF AMBERLITE PWA15 AND AMBERLITE HPR4800 CI RESINS**
Report by: Tom O'Neill, CDA General Manager/CEO

Staff Recommendation:

1. Approve a contract with Evoqua Water Technologies for the supply and delivery of Amberlite PWA15 and Amberlite HPR4800 CI Resins.
2. Authorize the General Manager/CEO to finalize and execute the initial contract and amendment for (1) one-year period; and
3. Authorize the General Manager/CEO to authorize expenditures up to the approved annual budgeted amounts.

9. **CONSTRUCTION CONTRACT AWARD FOR THE SOUTH ARCHIBALD PLUME RAW WATER PIPELINE PROJECT PHASE I (SPECIFICATION NO. CDA SAP19-017)**
Report by: Cindy Miller, South Archibald Plume Project Manager

Staff Recommendation:

1. Approve a construction contract award to Gwinco Construction & Engineering, Inc. for construction of the Raw Water Pipeline Project Phase I (Spec No. CDA SAP19-017) in the not-to-exceed amount of $1,447,265.
2. Authorize the General Manager/CEO to execute the contract and approve authorized expenditures up to a not-to-exceed total of $1,591,992.

10. **PHASE 3 EXPANSION: AGREEMENT WITH CAROLLO ENGINEERS FOR CONCENTRATE REDUCTION FACILITY MODIFICATIONS ENGINEERING SERVICES DURING CONSTRUCTION, INSPECTION SERVICES, AND FIELD ENGINEERING SERVICES**

Report by: Cindy Miller, South Archibald Plume Project Manager

Staff Recommendation:

1. Approve a Professional Services Agreement with Carollo Engineers for engineering and inspection services in the not-to-exceed amount of $93,880; and
2. Authorize the General Manager/CEO to finalize and execute the amendment and approve authorized expenditures up to a not-to-exceed total of $103,268.

11. **COUNTY OF SAN BERNARDINO AGREEMENT REGARDING JOINT FACILITY DEVELOPMENT**

Report by: Tom O'Neill, CDA General Manager/CEO

Staff Recommendation:

1. Approve the agreement with the County of San Bernardino; and
2. Authorize the General Manager/CEO to execute the agreement, subject to non-substantial revisions.

INFORMATION ITEMS

Information items are non-action items presented to the Board for their information.

12. **QUARTERLY SOUTH ARCHIBALD PLUME REPORT**
Report By: Cindy Miller, South Archibald Plume Program Manager

13. **QUARTERLY OPERATIONS REPORT**
Report By: Todd Minten, CDA Operations Manager

STAFF COMMENTS

Deputy CDA General Counsel, Allison Burns

CDA CFO/Treasurer, Michael Chung

CDA General Manager/CEO, Tom O'Neill

CLOSED SESSION

The Authority may adjourn to a Closed Session to consider litigation matters, personnel matters, or other matters as provided for in the Ralph M. Brown Act (Section 54950 et seq., of the Government Code).

14. **CONFERENCE WITH REAL PROPERTY NEGOTIATORS**
Property: APN 0218-231-13, 15, City of Ontario
CDA Negotiators: Tom O'Neill, Allison Burns
Negotiating parties: SC Ontario Development Company
Under negotiation: Price and terms of payment

15. **CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION: CONSIDERATION OF INITIATION OF LITIGATION PURSUANT TO GOVERNMENT CODE SECTION 54956.9(D)(4)**

(TWO POTENTIAL CASES)

16. **CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION: SIGNIFICANT EXPOSURE TO LITIGATION PURSUANT TO GOVERNMENT CODE SECTION 54956.9(D)(2)**

(ONE POTENTIAL CASES)

DIRECTOR COMMENTS

ADJOURN

Any person with a disability who requires accommodations in order to participate in this meeting or for package materials in an alternative format should telephone Executive Assistant Casey Costa at (909) 218-3730, at least 48 hours prior to the meeting in order to make a request for a disability-related modification or accommodation. Copies of records provided to Board Members which relate to any agenda item to be discussed in open session may be obtained from Chino Basin Desalter Authority at 2151 S. Haven Avenue, Suite 202, Ontario, CA 91761.

Declaration of Posting

I, Casey Costa, Executive Assistant to the Chino Basin Desalter Authority, hereby certify that a copy of this agenda has been posted by 2:00 p.m. at the Chino Basin Desalter Authority's main office, 2151 S. Haven Ave., Ontario, CA on Monday, September 23, 2019.

Casey Costa, Executive Assistant

NOTICE OF CANCELLATION OF REGULAR MEETING OF THE BOARD OF DIRECTORS OF THE CHINO BASIN DESALTER AUTHORITY

NOTICE IS HEREBY GIVEN that the Regular Meeting of the Board of Directors for the Chino Basin Desalter Authority scheduled for October 3, 2019 has been cancelled.

I, Casey Costa, Executive Assistant to the Chino Basin Desalter Authority, hereby certify that a copy of this Notice has been posted by 2:00 p.m. at the Chino Basin Desalter Authority, 2151 S. Haven Avenue, Suite 202, Ontario, CA 91761, CA on Monday, September 30, 2019.

Casey Costa
Executive Assistant

GENERAL MANAGER'S REPORT

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Date: October 16, 2019

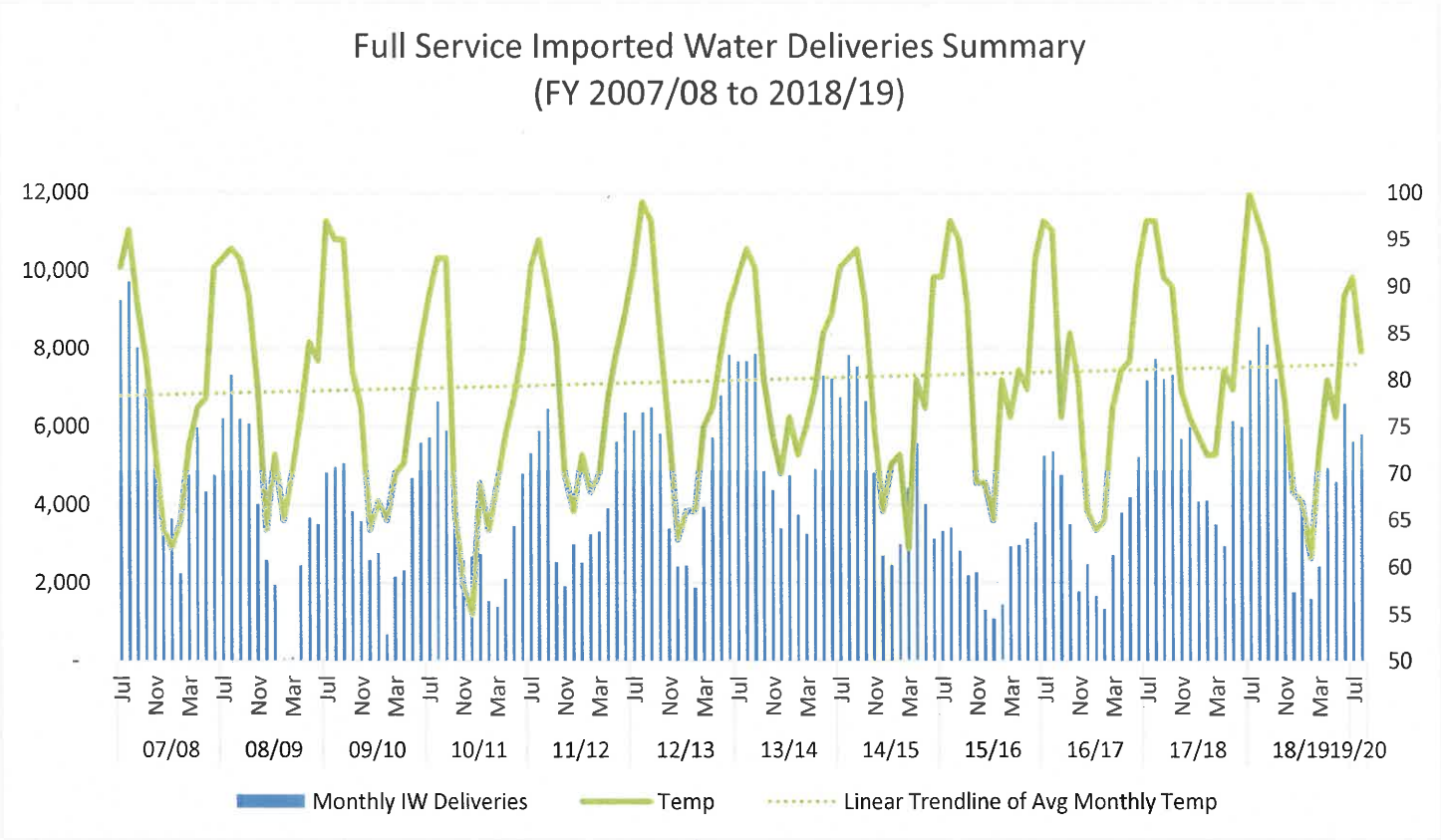
To: The Honorable Board of Directors

From: Shivaji Deshmukh, General Manager

Subject: General Manager's Report Regarding Agency Activities

PLANNING & ENVIRONMENTAL RESOURCES

A. Imported Water



B. Reclamation System

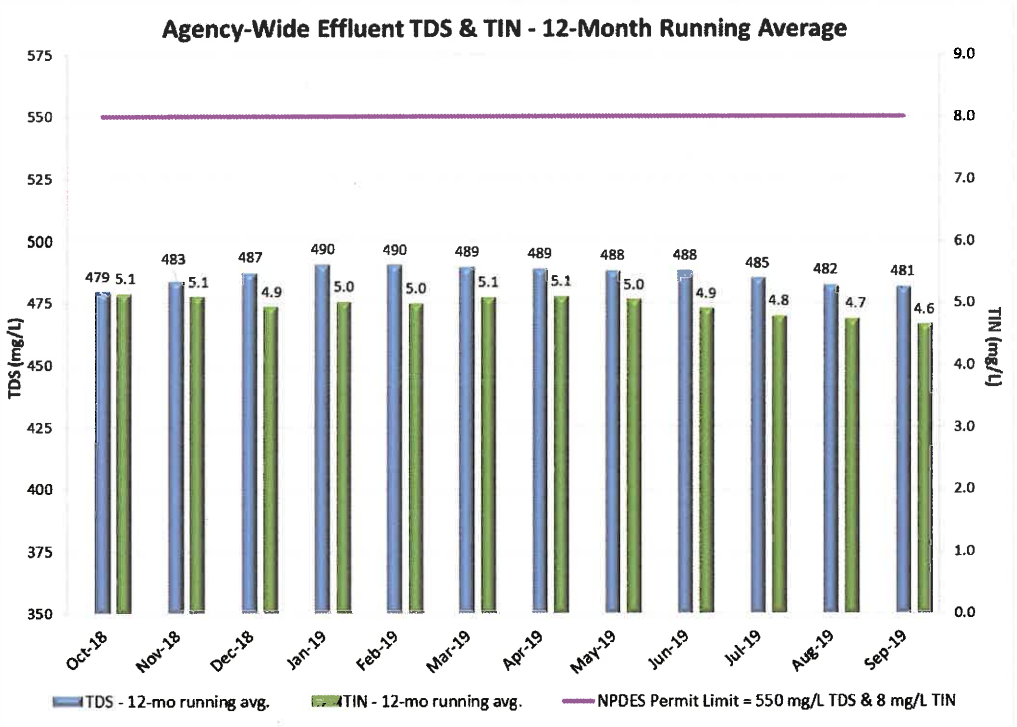
Regional Plants 1, 4, 5 and Carbon Canyon Water Recycling Facility met all the NPDES requirements and effluent/recycled water limitations, with the exception of one total coliform exceedance, during the month of September 2019.

1. The Agency-wide average sewer influent flow for the month of September 2019 was 50.0 million gallons per day (mgd) (preliminary value), which is a 0.7 mgd increase from the August 2019 total influent flow.

IEUA Regional Influent Flows

INFLUENT FLOW	RP-1	RP-4	RP-5	CCWRF	ALL FACILITIES
Daily Average (mgd)	23.8	9.7	8.3	8.1	50.0
Monthly Total (million gal.)	715	292	249	242	1,499

2. The discharge permit effluent limit for total dissolved solids (TDS) is 550 mg/L. The 12-month running average TDS value for September 2019 was 481 mg/L (preliminary value).
3. The discharge permit effluent limit for total inorganic nitrogen (TIN) is 8 mg/L. The 12-month running average TIN value for September 2019 was 4.6 mg/L (preliminary value).



On September 22, 2019, an RP-1 Effluent (M-001B) grab sample collected and tested for total coliform had a confirmed result of 261.3 MPN/100mL. This result exceeded the effluent limitation that states that " No total coliform bacteria sample shall exceed an MPN of 240 total coliform bacteria per 100 ml."

Air Quality

There were no reportable incidents relating to air quality compliance during the month of September 2019. IEUA is awaiting notices from the SCAQMD Legal Department for the RP-1 violations received in December 2017.

INLAND EMPIRE REGIONAL COMPOSTING FACILITY

A. Operational Comments

Facility throughput for September averaged approximately 85% of permitted capacity at an average of 400 tons per day of biosolids and 101 tons per day of amendments (based on the 30-day month-to-date). Biosolids volumes are on target for the fiscal year. The facility is operating well with no violations, environmental compliance issues, or lost-time incidents.

B. Facility Biosolids Throughput

SOURCE	WET TONS MONTH	WET TONS YEAR TO DATE
Los Angeles County Sanitation District	5,692.73	17,785.16
Inland Empire Utilities Agency	5,615.84	17,336.76
Orange County Sanitation District	710.52	2,330.06
TOTAL	**12,019.09**	**37,451.98**

C. Compost Sales

Sales volumes were decreased from last year. Inventory is currently at 8,900 cubic yards. Inventory is projected to be depleted over the next three months from pending orders. Sales are projected to exceed production through the winter to meet the demands of the agriculture markets.

D. Monthly Sales Summary

CUBIC YARD	$/CUBIC YARD	TOTAL REVENUE
11,554.41	**$1.62**	**$18,735.36**

Fiscal Year-To-Date Sales Summary

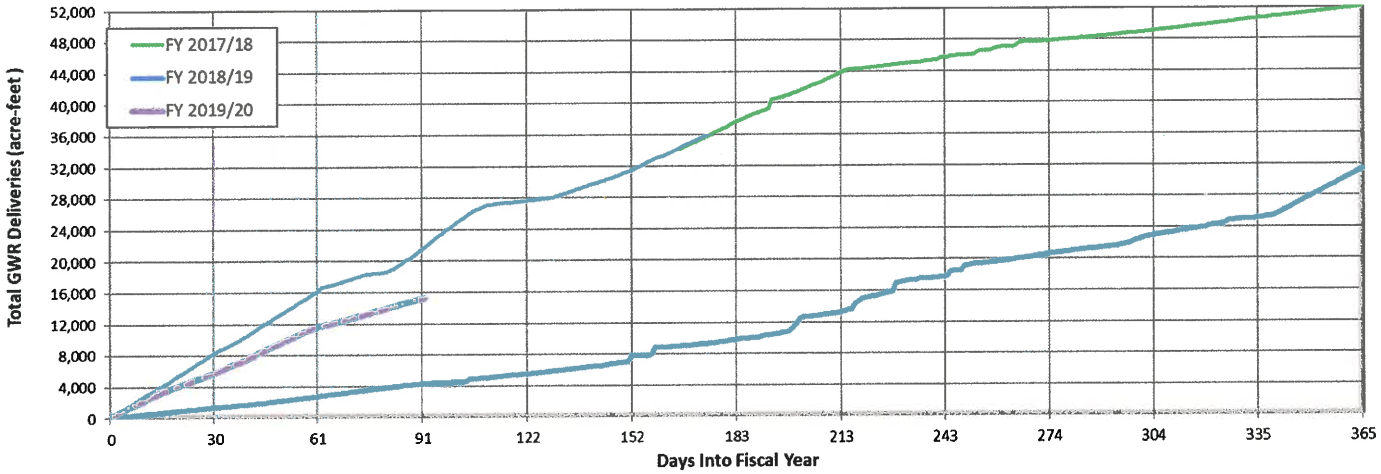
MONTH	TOTAL YARDS 2019/2020	TOTAL YARDS 2018/2019	TOTAL REVENUE 2019/2020	TOTAL REVENUE 2018/2019
July	15,197.96	14,910.11	$26,993.99	$24,972.01
August	18,235.92	15,194.50	$47,097.00	$28,866.84
September	11,554.41	17,728.97	$18,735.36	$24,979.50
TOTAL	**44,988.29**	47,833.58	**$92,826.35**	$78,818.35
AVERAGE	**14,996.10**	15,944.53	**$30,942.12**	$26,272.78

RECYCLED WATER

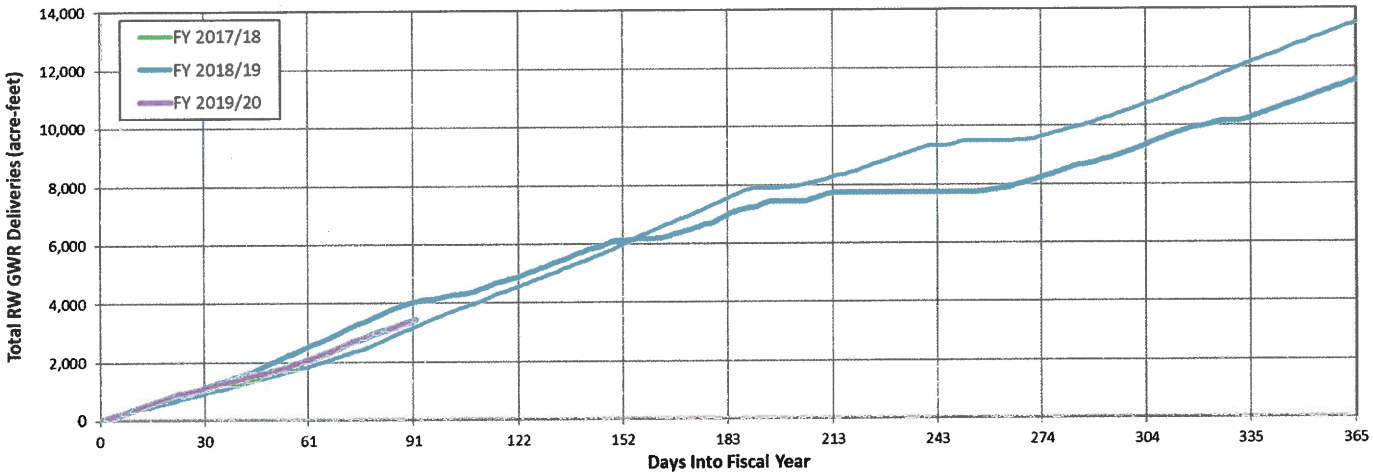
A. Groundwater Recharge – September 2019

During September 2019, recycled water recharge totaled 1,303 acre-feet. Dry weather flow recharge was approximately 37 acre-feet. Recharge of imported water from MWD totaled 2,184 acre-feet. For supplemental water deliveries (imported and recycled), Chino Basin Watermaster will remove 4.2% for evaporation losses during the month of September. Considering evaporation, total recharge for the month was approximately 3,378 acre-feet.

Total Groundwater Recharge – through September 2019

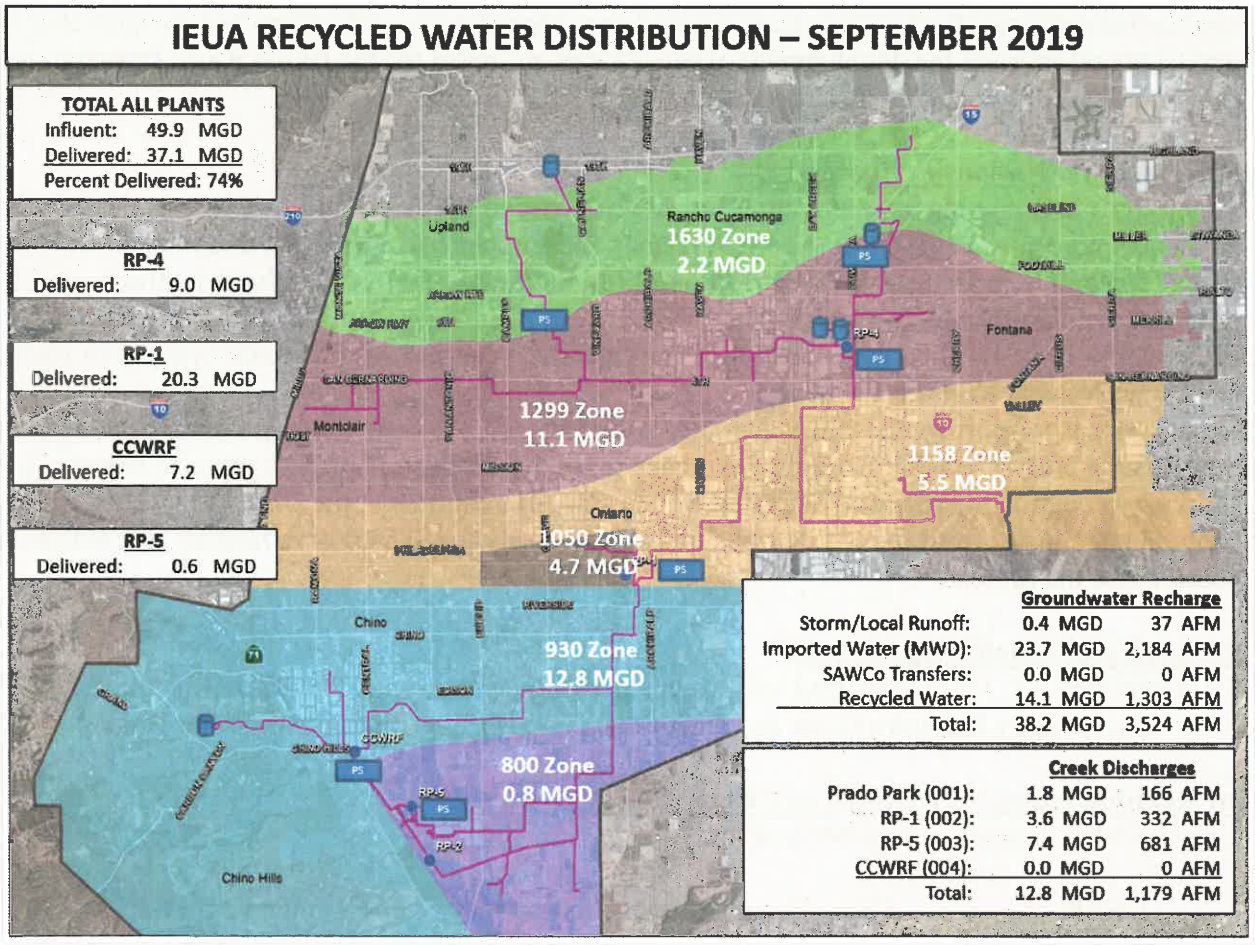


Recycled Water Delivered to Groundwater Recharge – through September 2019



B. Recycled Water Distribution – September 2019

During September 2019, 74% (37.1 MGD) of IEUA recycled water supply (49.9 MGD) was delivered into the distribution system for direct use customers (23.0 MGD) and groundwater recharge (14.1 MGD). Plant discharge to creeks feeding the Santa Ana River averaged 12.8 MGD.



GRANTS UPDATE

A. Grant/Loan Applications Submitted:

1. IEUA submitted a grant application for the US Bureau of Reclamation's (USBR) WaterSMART: Water Reclamation and Reuse Research grant opportunity under the Title XVI Program for FY 2019. The application requested $300,000 in grant funding to support the research efforts being undertaken by Brown and Caldwell through the development of the pre-design report for the Chino Basin Program. Awards for the program are expected to be announced in early 2020.

B. Grant/Loan Applications in Process:

1. Grants staff is preparing an application for the Proposition 68 Trails and Greenways Program to expand the education center in the Chino Creek Wetlands and Educational Park, as well as install restrooms in the park. The application requests a total of $1.5 million for the development of the new structures. The project proposal will be due to the California Natural Resources Agency on October 11. Proposals that are successful will be notified near the end of the calendar year and will host site visits with staff from the California Natural Resources Agency.
2. Grants staff is supporting the Chino Desalter Authority (CDA) with the preparation of an application for the USBR's WaterSMART: Drought Resiliency grant opportunity. The CDA plans to enhance local water supply by constructing granular activated carbon (GAC) treatment at the Chino I Desalter facility to treat contaminated water from four of its wells. IEUA will apply for $750,000 in funding, the maximum award possible for the project.

C. Grant/Loan Agreement Negotiation:

1. On September 23, IEUA finalized and executed an agreement with the USBR for the $400,000 Water Marketing Strategy Planning Grant agreement that supports the Chino Basin Water Bank project.

D. Grant Reimbursements Processed and Reporting Activities:

1. Grant reimbursements were processed for:

    - USBR – Update of Chino Basin Drought Contingency Plan - Invoice #2 for **$55,247.77**
    - SWRCB – Central Area Wineville Recycled Water Project – Invoice #12 for **$4,276.00**
    - SAWPA/DWR - High Visibility Turf Removal and Retrofit – Invoice #2 for **$331,435.97**

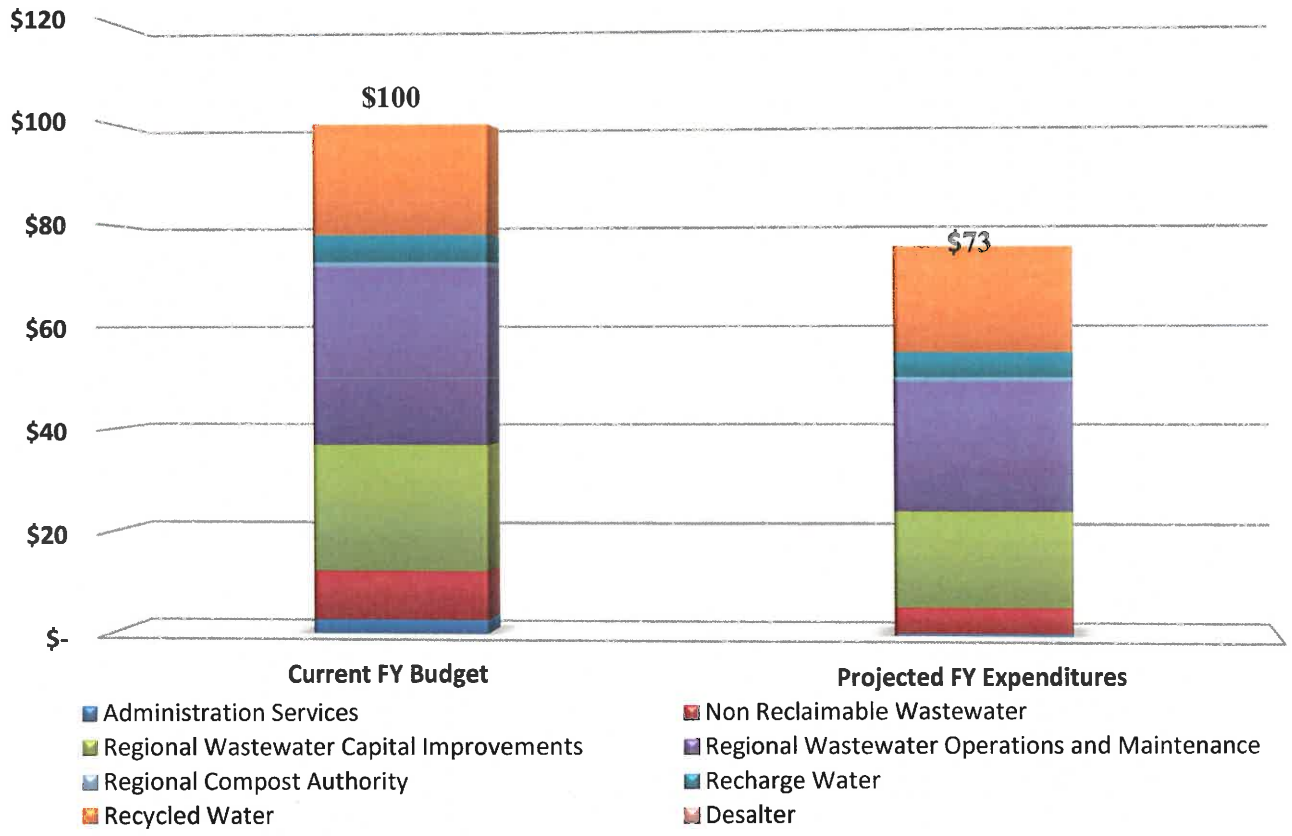
E. Other Department Activities:

1. None.

ENGINEERING AND CONSTRUCTION MANAGEMENT DEPARTMENT

Engineering and Construction Management's current FY 2019/20 budget is $99,747,685. As of September 30th, staff has projected to spend $75,327,026 (~75%).

Engineering and Construction Management FY19/20 Budget Status Update



The accompanying attachments have detailed information for IEUA's capital improvement program.

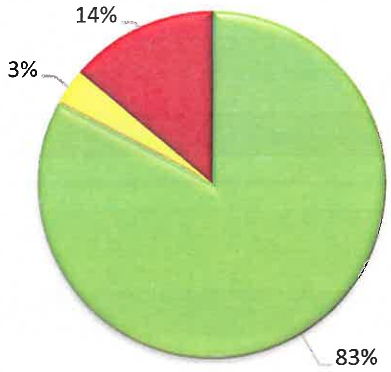
- Attachment A: Bid and Award Look Ahead Schedule
- Attachment B: Active Capital Improvement Project Status
- Attachment C: Emergency Projects

Attachment A
Bid and Award Look Ahead Schedule

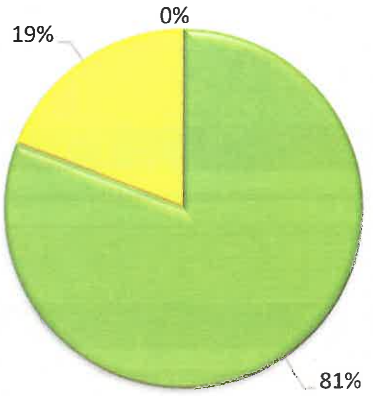
Bid and Award Look Ahead Schedule			
	Project Name	Projected Bid Opening Date	Projected Bid Award Date
	Oct-19		
1	EN19010.00 RP-4 Influent Screen Replacement	17-Sep-19	25-Oct-19
2	EN20060.00 RP-1 Plant 2 Sludge Piping Repair	13-Sep-19	25-Oct-19
	Nov-19		
3	EN21004.00/EN22004.00 1158 East and West Reservoir Re-coating/painting and Upgrades	3-Oct-19	20-Nov-19
4	RW15004.00 Lower Day Basin Improvements	27-Sep-19	20-Nov-19
	Dec-19		
5	EN20014.00/EN20015.00 Collection System/NRWS Manhole Upgrades - 19/20	25-Oct-19	18-Dec-19
6	EN19027.00 NRW Pipeline Relining Along Cucamonga Creek	6-Nov-19	18-Dec-19
	Jan-20		
7	EN19025.00 Regional Force Main Improvements	26-Nov-19	15-Jan-20
8	EN17043.00 RP4 Primary Clarifier Rehab	3-Dec-19	15-Jan-20
9	EN17110.00 RP-4 Process Improvements	3-Dec-19	15-Jan-20
10	RW15003.03 Montclair Basin Improvements	25-Oct-19	15-Jan-20
	Feb-20		
11	EN18006.00 RP-1 Flare Improvements	8-Jan-20	19-Feb-20
12	EN22002.00 NRW East End Flowmeter Replacement	8-Jan-20	19-Feb-20
	Mar-20		
13	EN19001.00/EN19006.00 RP-5 Expansion to 30 mgd	5-Feb-20	18-Mar-20
14	RW15003.06 Wineville/Jurupa/Force Main Improvements	29-Jan-20	18-Mar-20
	Apr-20		
15	EN19043.00 RP-1 Centrifuge Foul Air Line	4-Mar-20	15-Apr-20
	May-20		
16	EN20055.00 CCWRF Tertiary Panel Rebuild	8-Apr-20	20-May-20
17	FM20002.00 Agency Wide Roofing	26-Feb-20	20-May-20
18	EN20058.00 RP-1 TP-1 Waste Wash Water Basin Pumps Replacement	8-Apr-20	20-May-20
19	EN20037.00 Agency Wide Chemical Containment Coating Rehabilitation	16-Mar-20	20-May-20
20	EN20008.00 HQ Parking Lot FY19/20	27-Mar-20	20-May-20
	Jul-20		
21	EN17110.03 RP-4 Aeration Basin Wall Repair	26-May-20	15-Jul-20
22	PA20003.00 Agency Wide Paving	20-May-20	15-Jul-20
	Aug-20		
23	EN20040.00 HQ Driveway Improvements	8-Jul-20	19-Aug-20
	Sep-20		
24	EN20041.00 RP-1 TP-1 Bleach Mixing Repairs	6-Jul-20	16-Sep-20
25	EN20056.00 RSS Haven Avenue Repairs	5-Aug-20	16-Sep-20

Attachment B
Active Capital Improvement Project Status

Construction Schedule Performance



Design Schedule Performance



Agency-Wide

No.	Project ID	Project Title	Total Expenditures thru 9/30/2019 ($)	Total Project Budget ($)	Project Schedule Performance	Status	Schedule Recovery Plan
1	FM20001	HQ Interior Replacements	7,951	320,000	On-Time	Project Evaluation	
2	EN19024	Collection System Asset Management (Assessment Only)	51,542	1,250,000	On-Time	Project Evaluation	
3	EN19030	WC Asset Management (Assessment Only)	37,026	250,000	Recovery in Progress	Project Evaluation	GHD consulting engineers prepared a strategy to IEUA to implement an asset management strategy. Once the overall asset management strategy has been approved this project will be re-baselined.
4	PA20003	Agency Wide Paving	328	640,000	On-Time	Project Evaluation	
5	EN20037	Agency Wide Chemical Containment Coating Rehabilitation	3,389	350,000	On-Time	Consultant Contract Award	
6	EN20054	Agency Wide Chemical Containment Coating Evaluation	4,695	50,000	On-Time	Consultant Contract Award	
7	EN19023	Asset Management Planning Document	176,326	750,000	On-Time	Pre-Design	
8	EN20038	Agency Wide Pavement Management Study	9,128	300,000	On-Time	Pre-Design	
9	FM20002	Agency Wide Roofing	10,849	1,481,064	On-Time	Design	
10	EN20034.02	RP-5 IPS Guide Rail (Budget is in EN20034)	218	-	On-Time	Bid and Award	
11	EN17080	System Cathodic Protection Improvements	933,724	3,540,851	On-Time	Construction	
12	EN20035.01	RP-4 CCB Instrumentation Relocation (Budget is in EN20035)	1,475	-	On-Time	Construction	
13	EN20036.01	Carpenter Avenue 30-inch RW Line Restoration (Budget is in EN20036)	285	-	On-Time	Construction	

Agency-Wide (Cont.)

No.	Project ID	Project Title	Total Expenditures thru 9/30/2019 ($)	Total Project Budget ($)	Project Schedule Performance	Status	Schedule Recovery Plan
14	EN19032.01	Agency-Wide Railing and Threshold Improvements (Budget is in EN19032)	258,080	-	On-Time	Project Acceptance	
15	EN17020.05	Agency-Wide Recycled Water System Repairs and Improvements (Budget is in EN17020)	83,651	-	On-Time	Project Acceptance	
16	EN13016	SCADA Enterprise System	-	13,936,132	N/A	N/A	
17	EN17020	WC On-Call Operations and Maintenance Support	-	230,500	N/A	N/A	
18	EN19032	RO Safety Operations and Maintenance Projects	-	370,000	N/A	N/A	
19	EN20034	RO On-Call/Small Projects FY 19/20	-	500,000	N/A	N/A	
20	EN20035	RO Safety Operations and Maintenance Projects FY1920	-	500,000	N/A	N/A	
21	EN20036	WC On-Call/Small Projects FY 19/20	-	150,000	N/A	N/A	
		Totals	1,578,666	24,618,547			

Carbon Canyon

No.	Project ID	Project Title	Total Expenditures thru 9/30/2019 ($)	Total Project Budget ($)	Project Schedule Performance	Status	Schedule Recovery Plan
22	EN20055	CCWRF Tertiary Panel Rebuild	1,596	170,000	On-Time	Project Evaluation	
23	EN18036.01	CCWRF RW Pump Station Control Bldg. HVAC Modifications (Budget is in EN18036)	8,626	-	On-Time	Project Acceptance	
24	EN19032.02	CCWRF Electrical Wiring Repair (Budget is in EN19032)	22,326	-	On-Time	Project Acceptance	
25	EN18036	CCWRF Asset Management and Improvements - Package III	-	2,420,000	N/A	N/A	
		Totals	32,548	2,590,000			

Chino Desalter Authority (CDA)

No.	Project ID	Project Title	Total Expenditures thru 9/30/2019 ($)	Total Project Budget ($)	Project Schedule Performance	Status	Schedule Recovery Plan
26	EN16021	TCE Plume Cleanup	12,943,083	21,290,000	On-Time	Design	
		Totals	12,943,083	21,290,000			

Collections

No.	Project ID	Project Title	Total Expenditures thru 9/30/2019 ($)	Total Project Budget ($)	Project Schedule Performance	Status	Schedule Recovery Plan
27	EN19028	NRW Manhole and Pipeline Condition Assessment	37,340	915,000	On-Time	Project Evaluation	
28	EN20056	RSS Haven Avenue Repair & Replacement	6,595	6,000,000	On-Time	Consultant Contract Award	
29	EN20014	NRWS Manhole Upgrades - 19/20	19,397	200,000	On-Time	Design	
30	EN20015	Collection System Upgrades 19/20	2,822	500,000	On-Time	Design	
31	EN19025	Regional Force Main Improvements	199,709	4,173,000	On-Time	Design	
32	EN22002	NRW East End Flowmeter Replacement	353,059	1,986,985	On-Time	Design	
33	EN23002	Philadelphia Lift Station Force Main Improvements	435,503	18,848,000	On-Time	Design	
34	EN19027	NRW Pipeline Relining Along Cucamonga Creek	83,317	2,395,000	Recovery in Progress	Design	The permit coordination with San Bernardino Flood Control District (SBFCD) is required and has delayed the advertisement of the design package. The project will be re-baselined after construction contract award.
35	EN19041	San Bernardino Lift Station Facility Improvements	8,622	500,000	Recovery in Progress	Construction	The contract has been awarded and the schedule will be re-baselined pending the approval of the contractor schedule which may recover lost time.
		Totals	1,146,364	35,517,985			

Groundwater Recharge

No.	Project ID	Project Title	Total Expenditures thru 9/30/2019 ($)	Total Project Budget ($)	Project Schedule Performance	Status	Schedule Recovery Plan
36	RW15003.03	Montclair Basin Improvements (Budget is in RW15003)	230,430	-	Recovery in Progress	Design	Additional permitting requirements were required from the Army Corps of Engineers (ACOE) Staff is working with the ACOE to expedite this added effort and mitigate further delays in starting construction. Project will be re-baselined when contract is awarded, and contractor's schedule is received.
37	RW15003.06	Wineville/Jurupa/Force Main Improvements (Budget is in RW15003)	1,163,457	-	Recovery in Progress	Design	An easement was required to place the new pipeline within the Flood Control District's easement which is in process. The project will be re-baselined when the contract is awarded, and the contractor's schedule is received.
38	RW15004	Lower Day Basin Improvements	556,021	4,008,000	On-Time	Bid and award	
39	RW15003.05	RP-3 Basin Improvements (Budget is in RW15003)	392,284	-	On-Time	Construction	
40	RW19002	CBWM Pomona Extensometer Construction	1,185,060	1,463,581	Behind Schedule	Construction	Recovery is not possible. Staff is working with Watermaster and their contractor to resolve change orders and mitigate future delays.
41	RW15003	Recharge Master Plan Update	-	16,417,000	N/A	N/A	
		Totals	3,527,251	21,888,581			

Headquarters

No.	Project ID	Project Title	Total Expenditures thru 9/30/2019 ($)	Total Project Budget ($)	Project Schedule Performance	Status	Schedule Recovery Plan
42	EN20040	HQ Driveway Improvements	9,732	400,000	On-Time	Consultant Contract Award	
43	EN20008	HQ Parking Lot FY19/20	5,491	450,000	On-Time	Pre-Design	
44	EN19038	HR Exit Door	34,397	75,000	On-Time	Project Acceptance	
		Totals	49,620	925,000			

IERCF

No.	Project ID	Project Title	Total Expenditures thru 9/30/2019 ($)	Total Project Budget ($)	Project Schedule Performance	Status	Schedule Recovery Plan
45	RA15001.01	IERCF Duct Work Phase II (Budget is in RA15001)	33,125	-	On-Time	Construction	
46	RA17007.01	IERCF Design Build Wash Pad Cover (Budget is in RA17007)	40,460	-	Behind Schedule	Construction	The project did not originally include time for City of Rancho Cucamonga Planning Review Process, recovery not possible. When City of Rancho Cucamonga completes review project will be re-baselined.
47	RA19002	IERCF Trommel Screen Improvements	1,378,137	1,600,000	Behind Schedule	Construction	The project is waiting on completion of one punch list item. Recovery is not possible. The infeed conveyor continues to fail. Multiple attempts have been made to repair; however, none have successful. IEUA staff are still working with contractor to resolve.
48	RA17007	IERCF Building Improvements	-	550,000	N/A	N/A	
49	RA15001	IERCF Baghouse and Dust Collection System Enhancements	-	1,700,000	N/A	N/A	
		Totals	1,451,721	3,850,000			

Regional Water Recycling Plant No. 1 (RP-1)

No.	Project ID	Project Title	Total Expenditures thru 9/30/2019 ($)	Total Project Budget ($)	Project Schedule Performance	Status	Schedule Recovery Plan
50	EN20058	RP-1 TP-1 Waste Wash Water Basin Pumps Replacement	2,219	650,000	On-Time	Consultant Contract Award	
51	EN19043	RP-1 Centrifuge Foul Air Line	663	45,000	Recovery in Progress	Consultant Contract Award	Pre-Design took longer than expected, recovery is not possible. Project will be re-baselined after construction contract award.
52	EN20041	RP-1 TP-1 Bleach Mixing Repairs	5,488	680,000	On-Time	Consultant Contract Award	
53	EN20043	RP-1 Pipe Gallery Staircase Evaluation	4,694	50,000	On-Time	Consultant Contract Award	

Regional Water Recycling Plant No. 1 (RP-1) (Cont.)

No.	Project ID	Project Title	Total Expenditures thru 9/30/2019 ($)	Total Project Budget ($)	Project Schedule Performance	Status	Schedule Recovery Plan
54	EN13016.05	SCADA Enterprise System - (Regional Water Recycling Plant No. 1) (Budget is in EN13016)	528,181	-	On-Time	Pre-Design	
55	EN17044	RP-1 12 kV Switchgear and Generator Control Upgrades	1,283,463	5,870,248	On-Time	Design	
56	EN18006	RP-1 Flare Improvements	708,390	5,682,000	Recovery in Progress	Design	At 85 percent design the project was put on hold to complete preselection of flare equipment manufacture. The project will be re-baselined after construction contract is awarded.
57	EN24001	RP-1 Liquid Treatment Capacity Recovery	4,210,342	182,050,000	On-Time	Design	
58	EN20042	RP-1 Headworks Sump Pump Redundancy	1,870	150,000	On-Time	Design	
59	EN24002	RP-1 Solids Treatment Expansion	1,241,148	48,050,000	On-Time	Design	
60	EN20034.01	RP-1 Gravity Thickener Gearbox Installation (Budget is in EN20034)	688	-	On-Time	Bid and Award	
61	EN20060	RP-1 Plant 2 Sludge Piping Repair	237	125,000	Recovery in Progress	Bid and award	The schedule will be re-baselined pending the approval of the contractor schedule.
62	EN17082	Mechanical Restoration and Upgrades	812,698	10,646,000	On-Time	Construction	
63	EN14042	1158 RWPS Upgrades	2,326,768	7,900,000	On-Time	Construction	
64	EN15012.01	RP-1 Plant No. 2 Effluent Conveyance Improvements (Budget is in EN15012)	265,151	-	On-Time	Construction	
65	EN17042	Digester 6 and 7 Roof Repairs	3,221,106	7,056,000	On-Time	Construction	
66	EN17045	RP-1 Filter Valve Replacement	552,341	890,000	On-Time	Construction	
67	EN14019	RP-1 Headworks Primary and Secondary Upgrades	9,503,720	9,750,000	On-Time	Project Acceptance	
68	EN19034	RP-1 Operations Building Paving Project	219,620	220,000	On-Time	Project Acceptance	
69	EN19040	RP-1 Aeration Basin Catwalk Safety Railing	118,095	155,000	On-Time	Project Acceptance	
70	EN18042	RP-1 Civil Restoration and Upgrades	771,352	966,000	On-Time	Project Acceptance	
71	EN15012	RP-1 Primary Effluent Conveyance Improvements		8,724,000	N/A	N/A	
		Totals	25,778,233	289,659,248			

Regional Water Recycling Plant No. 2 (RP-2)

No.	Project ID	Project Title	Total Expenditures thru 9/30/2019 ($)	Total Project Budget ($)	Project Schedule Performance	Status	Schedule Recovery Plan
		Totals	-	-			

Regional Water Recycling Plant No. 4 (RP-4)

No.	Project ID	Project Title	Total Expenditures thru 9/30/2019 ($)	Total Project Budget ($)	Project Schedule Performance	Status	Schedule Recovery Plan
72	EN19010	RP-4 Influent Screen Replacement	59,714	3,040,000	On-Time	Consultant Contract Award	
73	EN17043	RP4 Primary Clarifier Rehab	525,696	7,681,542	On-Time	Design	
74	EN17110	RP-4 Process Improvements	6,250,524	15,800,432	On-Time	Design	
75	EN13016.03	SCADA Enterprise System - (Regional Water Recycling Plant No. 4) (Budget is in EN13016)	3,789,792	-	On-Time	Construction	
76	EN19029	RP-4 Outfall Pipeline	340,839	945,000	Behind Schedule	Construction	A combination of delays in obtaining multiple city permits and problems with the contractor's insurance have delayed the project. Project schedule recovery is not possible.
		Totals	10,966,565	27,466,974			

Regional Water Recycling Plant No. 5 (RP-5)

No.	Project ID	Project Title	Total Expenditures thru 9/30/2019 ($)	Total Project Budget ($)	Project Schedule Performance	Status	Schedule Recovery Plan
77	EN19001	RP-5 Expansion to 30 mgd	10,738,315	175,000,000	On-Time	Design	
78	EN19006	RP-5 Biosolids Facility	10,709,568	165,400,000	On-Time	Design	
79	EN14043	RP-5 RW Pipeline Bottleneck	2,465,486	3,137,169	On-Time	Construction	
80	EN13016.04	SCADA Enterprise System - (Regional Water Recycling Plant No. 5) (Budget is in EN13016)	4,501,455	-	On-Time	Project Acceptance	
		Totals	28,414,824	343,537,169			

Recycled Water

	Project ID	Project Title	Total Expenditures thru 9/30/2019 ($)	Total Project Budget ($)	Project Schedule Performance	Status	Schedule Recovery Plan
81	EN15002	1158 Reservoir Site Cleanup	55,724	1,215,000	Recovery in Progress	Project Evaluation	The project scope is not yet defined. Staff is waiting for approval from Department of Toxic Substances Control (DTSC) on Southern California Edison facility investigation report. Once that is received, the schedule will be rebaselined.
83	EN17041	Orchard Recycled Water Turnout Improvements	130,200	477,000	Recovery in Progress	Design	The Army Corps of Engineers (USACE) reviewed the plans and required the connection be redesigned which has been submitted for their review. The project schedule will be re-baselined once the project is awarded and the contractor's schedule is received.
82	EN22004	1158 East Reservoir Re-coating/painting and Upgrades	803	2,200,000	On-Time	Bid and award	
84	EN21004	1158 West Reservoir Re-coating/painting and Upgrades	14,506	1,201,000	On-Time	Bid and award	
85	EN17049	Baseline RWPL Extension	2,138,233	6,921,000	On-Time	Construction	
86	WR15021	Napa Lateral	2,779,590	6,947,717	On-Time	Construction	
87	EN20061	Recycle Water Area 11 Blow Off Repairs	13,016	20,000	On-Time	Project Acceptance	
		Totals	5,132,071	18,981,717			
		Overall Totals	91,020,947	790,325,221			

Attachment C

FY 19/20 Emergency Projects

	Project ID	Contractor	Task Order Description (Details of Circumstance and Cause of the Emergency)	Location	TO #	Original Not-to-Exceed /Estimate	Actual Cost thru 9/30/2019	Date of Award	Status
Agency Wide									
1	EN20062.00	W.A. Rasic Construction	Chino Creek Park Potable Water Line Leak Repair	Chino Creek Park	TO-0018	10,000	0	10/1/2019	Active
CCWRF									
2	EN20017.01	W.A. Rasic Construction	CCWRF 3" Recycled Water Line Break	CCWRF	TO-0019	22,500	0	10/1/2019	Active
				Totals		32,500	0		

October 2019 Emergency

Contractor	Task Order Description	Details of the Circumstances/Cause of Emergency	Scope of Repair	Location	Date of Call Out	Not-to-Exceed /Estimate
W.A. Rasic Construction	TO-0019	A 3" recycled water pipeline broke and sprayed through the asphalt pavement. The break caused the asphalt to be undermined, the area flooded, and rocks and dirt were sprayed around the vicinity	) The Contractor mobilized onsite and excavated the broken asphalt. Upon investigation, it was discovered that the 3" PVC recycled water pipeline was filled with rocks causing a pressure build up which eventually broke the pipe. The 3" PVC pipeline was an old irrigation line that was not used. The Contractor was directed to cut and cap the pipeline. The Contractor backfilled the excavation and repaved the surrounding area. All dirt and rocks were cleaned up.	CCWRF	10/1/2019	22,500
W.A. Rasic Construction	TO-0018	A potable water line leak was discovered by facilities at the Chino Creek Wetlands Park. The leak was causing ponding in the area and mud formation. The water line was temporary shutdown which eliminated water flow to the educational trailer and public water fountain	The Contractor hand-dug the area to expose the leak. The damaged 2-inch PVC line was replaced with a new PVC line. Contractor waited 24 hours and then tested the line and backfilled the area.	Chino Creek Park	10/1/2019	10,000
						32,500