



**AGENDA  
MEETING OF THE  
INLAND EMPIRE UTILITIES AGENCY  
BOARD OF DIRECTORS**

**WEDNESDAY, NOVEMBER 16, 2016  
10:00 A.M.**

*Or immediately following the  
Joint CBRFA Commission and IEUA Board Meeting*

**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 five 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. NEW HIRE INTRODUCTIONS**

- Mr. Chad Bonnett, Electrical & Instrumentation Technician I, hired on 10/10/16 (Greg Barron)
- Mr. Javier Gallegos, Electrical & Instrumentation Technician I, hired on 10/10/16 (Jon Florio)

- Mr. Roberto Delgado, Deputy Manager of Maintenance, hired on 10/24/16 (Randy Lee)

## 2. 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 21, Board meeting, and October 5, 2016 Board Workshop.

### B. ADOPTION OF RESOLUTION NO. 2016-11-1, COMMENDING MAYOR DENNIS YATES FOR HIS 24 YEAR OF SERVICE WITH THE CITY OF CHINO

It is recommended that the Board adopt Resolution No. 2016-11-1, commending Mayor Dennis Yates for his 24 years of public service with the City of Chino, and best wishes on his retirement.

### C. SUPPORT OF THE CALIFORNIA WATERFIX PROJECT PROCESS

It is recommended that the Board adopt a support position for the process of developing the California WaterFix Project, noting that an official support position for the project is not recommended until costs are fully disclosed.

### D. PROPOSED 2017 FEDERAL AND STATE LEGISLATIVE PRIORITIES

It is recommended that the Board adopt the 2017 Federal and State Legislative Priorities.

### E. REPORT OF GENERAL DISBURSEMENTS FOR AUGUST

It is recommended that the Board approve the total disbursements for the month of August 2016, in the amount of \$10,282,194.52.

### F. REPORT ON GENERAL DISBURSEMENTS FOR SEPTEMBER

It is recommended that the Board approve the total disbursements for the month of September 2016, in the amount of \$13,658,483.29.

### G. ADOPTION OF RESOLUTION 2016-11-2, TO REMOVE THE PER MILLION GALLON SEWER SERVICE RATES

It is recommended that the Board adopt Rate Resolution No. 2016-11-2, to remove the per million gallon (MG) sewer service rate and maintain the equivalent dwelling unit (EDU) volumetric rate as adopted for Fiscal Years (FY) 2015/16 through 2019/20.

### H. DEBT MANAGEMENT POLICY UPDATE

It is recommended that the Board approve the updated Debt Management Policy governing all Agency's debt.

**I. IEUA AND SAN BERNARDINO COUNTY RECYCLED WATER LETTER AGREEMENT**

It is recommended that the Board:

1. Approve the proposed Letter Agreement between IEUA and County of San Bernardino regarding implementing recycled water requests; and
2. Authorize the General Manager to execute the Agreement.

**J. RP-4 IMPROVEMENTS BID REJECTION**

It is recommended that the Board reject the September 7, 2016, bids for the construction of the RP-4 Improvements, Project No. EN14018.

**K. CONTRACT AWARD TO AQUA BEN CORPORATION FOR HYDROFLOC 748E POLYMER**

It is recommended that the Board:

1. Approve Contract No. 4600002229 to Aqua Ben Corporation, establishing a one-year contract for supply of Hydrofloc 748E with options for four additional one-year extensions, for a potential total contract term of five years; and
2. Authorize the General Manager to execute the contract with the four potential contract extensions.

**L. CONTRACT AWARD TO CHEMTRADE FOR BULK ALUMINUM SULFATE**

It is recommended that the Board:

1. Approve Contract No. 4600002237 to Chemtrade Chemicals US LLC, establishing a two-year contract for the supply of bulk aluminum sulfate with options for three additional one-year extensions, for a potential total contract term of five years; and
2. Authorize the General Manager to execute the contract with the three potential contact extensions.

**M. CONTRACT AWARD FOR CCWRF CLIMBER SCREENS AND INFLUENT GATES REPAIR**

It is recommended that the Board:

1. Award Single Source Contract No. 4600002240 to Misco, Inc. for the Carbon Canyon Water Recycling Facility (CCWRF) climber screens and influent gates repair for a total amount not-to-exceed \$358,000; and
2. Authorize the General Manager to execute the contract.

**N. RATIFY CONTRACT FOR THE DECLEZ BASIN RESTORATION OF PHYSICAL STRUCTURES**

It is recommended that the Board ratify Contract No. 4600002233 with Jeremy Harris Construction, Inc. (previously authorized by the General Manager) for the Declez Basin Restoration of Physical Structures maintenance activities for a not-to-exceed amount of \$185,808.

**O. RP-4 PROJECT MANAGEMENT AND DESIGN SERVICES CONTRACT AWARD**

It is recommended that the Board:

1. Award a consultant contract to Carollo Engineers for the Project Management and Design Services for the RP-4 Primary Clarifier Rehabilitation Project No. EN17043 and RP-4 Process Rehabilitation Project No. EN17110 for a not-to-exceed total amount of \$1,288,858; and
2. Authorize the General Manager to execute the consultant contract.

**P. HEADQUARTERS AUDIOVISUAL DESIGN-BUILD CONTRACT AWARD**

It is recommended that the Board:

1. Approve the design-build contract award for the Headquarters Audiovisual Upgrades, Project No. EN16049, to New Millennium Construction Services in the amount of \$831,890; and
2. Authorize the General Manager to execute the design-build contract.

**3. ACTION ITEMS – (to be continued after closed session)**

**A. SARCCUP FY 2017 BUDGET**

It is recommended that the Board:

1. Adopt the PA 22 and PA 23 Committee Budgets for Fiscal Year Ending (FYE) 2017 for the SARCCUP; and
2. Authorize the General Manager to execute the requisite documents.

**B. RP-1 DEWATERING CENTRIFUGE EMERGENCY REPAIR**

It is recommended that the Board:

1. Ratify the emergency purchase of parts and services from Alfa Laval under Purchase Order No. 4500024955 for \$107,880 and Purchase Order No. 4500025219 for \$11,350; and
2. Approve the additional costs associated with centrifuge unit 2 repair and shipping for a total project not-to-exceed amount of \$160,000.



**4. INFORMATION ITEMS**

- A. LAFCO UPDATE – CASE NO. 3212 (WRITTEN)**
- B. ENGINEERING AND CONSTRUCTION MANAGEMENT PROJECT UPDATES (POWERPOINT)**
- C. SEPTIC TO SEWER FEASIBILITY STUDY UPDATE (POWERPOINT)**
- D. MWD AND DROUGHT UPDATE - STATE WATER PROJECT (POWERPOINT)**
- E. RP-5 BATTERY STORAGE PROJECT UPDATE (POWERPOINT)**

**RECEIVE AND FILE INFORMATION ITEMS**

- F. TREASURER'S REPORT OF FINANCIAL AFFAIRS FOR AUGUST (WRITTEN/ POWERPOINT)**
- G. TREASURER'S REPORT OF FINANCIAL AFFAIRS FOR SEPTEMBER (WRITTEN/ POWERPOINT)**
- H. PUBLIC OUTREACH AND COMMUNICATION (WRITTEN)**
- I. LEGISLATIVE REPORT FROM INNOVATIVE FEDERAL STRATEGIES (WRITTEN)**
- J. LEGISLATIVE REPORT FROM WEST COAST ADVISORS (WRITTEN)**
- K. LEGISLATIVE REPORT FROM AGRICULTURAL RESOURCES (WRITTEN)**
- L. CALIFORNIA STRATEGIES, LLC MONTHLY ACTIVITY REPORT (WRITTEN)**
- M. RP-1/RP-5 EXPANSION PRELIMINARY DESIGN REPORT (PDR) UPDATE (WRITTEN/POWERPOINT)**
- N. RECHARGE MASTER PLAN PRELIMINARY DESIGN REPORT UPDATE (WRITTEN/POWERPOINT)**
- O. FY 2015/16 IEUA ANNUAL WATER USE EFFICIENCY PROGRAMS REPORT (WRITTEN/POWERPOINT)**
- P. ANNUAL WATER USE REPORT (WRITTEN/POWERPOINT)**
- Q. FY 15/16 BUILDING ACTIVITY SUMMARY TEN-YEAR GROWTH SURVEY (POWERPOINT)**
- R. 1<sup>ST</sup> QUARTER PLANNING & ENVIRONMENTAL RESOURCES UPDATE (POWERPOINT)**

*Materials related to an item on this agenda submitted to the Agency, after distribution of the agenda packet, are available for public inspection at the Agency's office located at 6075 Kimball Avenue, Chino, California during normal business hours.*

5. **AGENCY REPRESENTATIVES' REPORTS**
  - A. **SAWPA REPORT**
  - B. **MWD REPORT (WRITTEN)**
  - C. **REGIONAL SEWERAGE PROGRAM POLICY COMMITTEE REPORT**
  - D. **CHINO BASIN WATERMASTER REPORT**
6. **GENERAL MANAGER'S REPORT (WRITTEN)**
7. **BOARD OF DIRECTORS' REQUESTED FUTURE AGENDA ITEMS**
8. **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.

9. **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. Martin vs. IEUA, Case No. CIVRS 1000767
    3. Mwembu vs. IEUA, Case No. CIVDS 1415762
  - B. **PURSUANT TO GOVERNMENT CODE SECTION 54956.8 – CONFERENCE WITH REAL PROPERTY NEGOTIATOR**

Supplemental Water Transfer/Purchase  
Negotiating Party: General Manager P. Joseph Grindstaff  
Under Negotiation: Price and Terms of Purchase
  - C. **PURSUANT TO GOVERNMENT CODE SECTION 54956.9 CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION**

One (1) Case
  - D. **PURSUANT TO GOVERNMENT CODE SECTION 54956.9(d)(4) CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION: INITIATION OF LITIGATION**

Two (2) Cases

**E. PURSUANT TO GOVERNMENT CODE SECTION 54957 – PERSONNEL MATTERS**

1. Various Positions – Compensation Study
2. Various Positions

**F. PURSUANT TO GOVERNMENT CODE SECTION 54957 – PERSONNEL MATTERS – PUBLIC EMPLOYEE PERFORMANCE EVALUATION**

Manager of Internal Audit  
Board Secretary/Office Manager

**3. ACTION ITEMS – (continued)**

**C. ADOPTION OF RESOLUTIONS TO AMEND THE MEMORANDA OF UNDERSTANDING AND SALARY MATRIXES/SCHEDULES FOR UNIT MODIFICATION**

It is recommended that the Board adopt Resolution Nos. 2016-11-4 and 2016-11-5 to amend the Supervisors' Unit, General Unit and the Professional Unit Memoranda of Understanding (MOUs) and salary matrix/schedule to reflect a unit modification

**10. 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: 

**Declaration of Posting**

I, April Woodruff, Board Secretary 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, November 10, 2016.

  
\_\_\_\_\_  
April Woodruff

**INFORMATION  
ITEM**

**4K**

# *Agricultural Resources*

635 Maryland Avenue, N.E.  
Washington, D.C. 20002-5811  
(202) 546-5115  
[dweiman@agriculturalresources.org](mailto:dweiman@agriculturalresources.org)

October 28, 2016

## Legislative Report

**TO:** Joe Grindstaff  
General Manager, Inland Empire Utility Agency

**FR:** David M. Weiman  
Agricultural Resources  
LEGISLATIVE REPRESENTATIVE, IEUA

**SU:** Legislative Report, October 2016

---

### State of Affairs

- \* New fiscal year now is underway.
- \* Congress adjourned for all of October.
- \* Congress to return on November 14, immediately after the election for the lame duck session.
- \* Short-term funding for entirety of Federal Departments/agencies in place until December 9.
- \* A clash between Congress and the Administration over overall Federal (and Department-specific) spending/funding levels is/are anticipated.
- \* Congress will have only a small window of time (two calendar weeks) to address annual funding (election outcome will almost assuredly influence what occurs).
- \* October 1 – key date. Beginning of new fiscal year (Federal Level) AND beginning of new “water” year in California.
- \* Concern about drought returning is ever-present.

### Legislative Activities

- \* Energy Bill. Staff discussions continue (albeit slowly). No public conference committee meetings. As they get closer to the election – the less being done.
- \* Drought bill (part of Energy Bill). Discussions between House Majority Leader

McCarthy and Senator Feinstein have continued behind closed doors. Reportedly, the current focus (and sticking point) relates to statutorily imposing CVP operational directives and mandates into law. Senator Feinstein and others have requested and now, are waiting for proposed “flexibility” language from the impacted Federal agencies. Many view this as a very bad idea (if operational changes are required in the future to address unforeseen circumstances, then they would require a legislative enactment). If not precedential for BuRec projects, it would certainly be highly unusual.

- \* **Energy Bill Options.** If the Energy bill gets gridlocked (likely over water issues), then look for the Senate to break out about 30-40 land protection provisions to attempt to move them separately. Same with various “energy” provisions.
- \* **WRDA.** Staff discussions continue (as for WaterSense and the water softener issues, see below) and unlike the Energy bill, talks are moving more quickly. As of today, it is not expected that the House and Senate will convene a formal conference, but instead, will continue to negotiate the bill at a staff level.
- \* **Tax Reform.** Considered a high priority 2017 issue. Speaker Ryan and Ways and Means Chair, Rep. Brady (R-TX) have indicated that this issue will be front and center early in 2017. Both presidential candidates have called for tax reform (albeit with different priorities). Among other things, the continued deductibility of municipal bonds is “in play.”

**WRDA – Water Sense and Water Softener Language.** During October, IEUA’s representatives participated in a series of meetings regarding:

- \* Proposed amendment language being drafted.
- \* Letters and explanations in support of the statutory language.
- \* Targeting of both the pending Energy and/or WRDA bills.
- \* Strategy development to advance the language.
- \* Special discussions with Senator Boxer (in California and in DC) – Boxer is the ranking Democrat on EPW (Environment and Public Works).
- \* Collaboration with WaterReuse, ACWA, NACWA, CASA, Los Angeles Sanitation District and a growing list of others).
- \* Targeting non-California Senators and Representatives for support of the pending language as Committee perceives this as a “California-only” issue.
- \* Educational outreach to all parties (including EPA).

Meetings, conference calls and reports occurred or were circulated on a near-daily basis. The objective, secure statutory language that removes ambiguity and avoids conflict in the future.

As a result of our internal conversations, it was recognized that, with regard to water softeners, that EPA was in conflict with EPA (different offices and different subagencies have not, in the past, collaborated with one another). On one hand, with regard to water supply issues, EPA has recommended increase water recycling as part of the “solutions” mix.. On the other, EPA

(through the WaterSense program) was facilitating the use of water softeners in salt sensitive areas, which may result in compromising the ability to recycle water in those areas. The language already in the Senate version of the EPW bill and the pending request for statutory clarification is designed to eliminate those internal EPA agency conflicts.

**The Election.** The election is fast coming to a close. The Presidency, control of the Senate and control of the House are uncertain. At the risk of understatement, this election is like no other in decades. The outcomes, at every level, will have profound impact on politics and policy. We – all of us – are in uncharted territory (politically).

Both national presidential campaigns have transition teams in place. NJ Governor, Chris Christie is heading up the effort for Trump. David Barnhart, former Solicitor of the Interior under President George W. Bush, is heading up the Interior Department transition team. For Clinton, former Senator and former Senator Ken Salazar is doing the same for Clinton.

A week after the election, Congress will convene for a Lame Duck session. Funding the Federal government is the primary legislative obligation. Other major bills – Energy, WRDA – are pending. Leadership elections will also occur beginning in mid-November.

# # # # #

**INFORMATION  
ITEM**

**4L**





CALIFORNIA STRATEGIES, LLC

Date: October 28, 2016  
To: Inland Empire Utilities Agency  
From: John Withers, Jim Brulte  
Re: October Activity Report

---

Listed below is the California Strategies, LLC monthly activity report. Please feel free to call us if you have any questions or would like to receive any more information on any of the items mentioned below.

- Met with Executive Management Team to review priority issues and to discuss activities for October that Executive Staff wanted accomplished
- Discussed Little Hoover Commission hearing results and follow up
- Reviewed Chino Basin Water Bank project concept and formation JPA
- Support and advised on IEUA/SBVMWD transfer transaction on an as needed basis.
- Reviewed Water Rates progress with member agencies and Regional Contract renewal.
- Continue to monitor statewide water issues including The Water Fix, water bond, and drought relief act activities. Made recommendation regarding the request for money from various state special funds.
- Monitor Santa Ana Regional Board agenda and issues of interest to IEUA including the Ontario Plume settlement
- Respond to requests for information from IEUA Directors.



**INFORMATION  
ITEM**


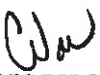
**4M**


Date: November 16, 2016

To: The Honorable Board of Directors

Through: Engineering, Operations, and Biosolids Management Committee (11/9/16)

From:  P. Joseph Grindstaff   
General Manager

Submitted by:  Chris Berch   
Executive Manager of Engineering/Assistant General Manager

Shaun Stone   
Manager of Engineering

Subject: RP-1/RP-5 Expansion Preliminary Design Report (PDR) Update

---

### **RECOMMENDATION**

This is an informational item for the Board of Directors.

### **BACKGROUND**

On October 5, 2016, Agency Staff conducted the RP-1 & RP-5 Expansion Preliminary Design Report Board Workshop No. 2. The workshop included the following topics for discussion:

1. RP-5 Liquids Treatment Site Plan
2. RP-5 Solids Treatment Site Plan
3. Organics Diversion
4. Beneficial Use of Digester Gas
5. Estimated Liquids & Solids Project Cost

During the Organics Diversion discussion of the workshop, several questions were raised by the Board that warranted additional clarification. Staff presented four alternatives for the treatment of organics (food waste) at RP-5. The Organics Diversion alternatives, Phase I project costs for each treatment alternative, and relative cost comparison to the Biosolids only alternative are summarized on the following page in Table 1.

Table 1. Summary of Organics Diversion Alternatives

Option	Description	Phase I Cost <sup>1</sup>	Δ Option 1
1	Biosolids only	\$152.4M	---
2	Co-Digestion at RP-5	\$199.4M	\$47.0M
3	Food Waste at RP-5 SHF	\$195.9M	\$43.5M
4	Hybrid Food Waste System	\$165.4M	\$13.0M

<sup>1</sup> Revised to include thermophilic digestion and methanol chemical injection.

The Hybrid Food Waste alternative includes the addition of a food waste receiving station at RP-5 Solids Handling Facility, one additional centrifuge, larger cake storage silos, and additional digester gas treatment. Table 2, below, shows the increase in capital cost of the Hybrid Food Waste alternative compared to the Biosolids only alternative.

Table 2. Phase I Capital Cost Comparison between Biosolids only and Hybrid Alternatives

Component	Biosolids only Cost	Hybrid System Cost	Incremental Cost Usable for Ultimate Biosolids	Incremental Cost for Food Waste
Receiving Station	---	\$3.3M	---	\$3.3M
Thickening	\$8.7M	\$8.7M	---	---
Digestion	\$48.2M	\$48.2M	---	---
Sludge Storage	\$7.4M	\$7.4M	---	---
Dewatering & Storage	\$44.1M	\$49.5M	\$4.5M	\$0.9M
Odor Control	\$1.9M	\$1.9M	---	---
Centrate Treatment	\$1.8M	\$1.8M	---	---
Gas Equipment	\$5.1M	\$6.4M	---	\$1.3M
<b>Construction Sub-total</b>	<b>\$117.2M</b>	<b>\$127.2M</b>	<b>\$4.5M</b>	<b>\$5.5M</b>
<b>Design &amp; Admin (30%)</b>	<b>\$35.2M</b>	<b>\$38.2M</b>	<b>\$1.4M</b>	<b>\$1.6M</b>
<b>Project Total</b>	<b>\$152.4M</b>	<b>\$165.4M</b>	<b>\$5.9M</b>	<b>\$7.1M</b>

The benefits of the Hybrid Food Waste alternative are described below:

- Reduces capital risk of constructing systems for food waste that may not be utilized if the food waste program is not fully developed and implemented. The dewatering equipment for the Hybrid Food Waste alternative is required or may be beneficially used for the ultimate RP-5 Solids Treatment Facility (Biosolids Only). Food waste systems that may not being utilized if the program is not fully developed and implemented include the food

waste receiving station, larger biosolids cake storage, and the additional gas treatment at an estimated project cost of \$7,100,000.

- Approximately \$6,000,000 of the \$7,100,000 will not be expended until the construction phase of the project (2019-2023). To continue with design of the Hybrid Food Waste alternative a commitment of approximately \$1,000,000 will be required at the completion of the preliminary design report.
- Any systems related to food waste will be designed and included as additive line items in the construction bid forms to allow off-ramps before capital dollars are expended.
- Provides capacity for the processing and treatment of approximately 50,000 gallons per day of food waste until 2030-2035 allowing IEUA and the member agencies to pilot food waste at RP-5 and develop a regional approach before spending additional capital.
- Obtaining food waste grants can reduce or eliminate any capital risk associated with the project.

Additionally, IEUA staff will continue discussions with the local cities to further develop the regional food waste program, as well as conduct a Food Waste Workshop on October 27, 2016. An update on these discussions and workshop will be provided to the Board of Directors at the time of presentation.

This PDR is consistent with the *Agency's Business Goal of Wastewater Management Capacity* objective that IEUA will maintain capacity within systems and facilities to meet essential service demands and to protect public health and environment.

### **PRIOR BOARD ACTION**

On January 20, 2016, the Board of Directors approved the consulting engineering services contract award for the RP-1/RP-5 Expansion PDR to Parsons Water & Infrastructure Inc. for the not-to-exceed amount of \$2,431,598.

### **IMPACT ON BUDGET**

The April 2016 approved TYCIP budgets for Project No. EN19001, RP-5 Liquids Treatment Expansion, and Project No. EN19006, RP-5 Solids Treatment Facility, are \$125,000,000 and \$136,000,000, respectively. With the recommendations provided during the first and second Board Workshops, the total project cost for the RP-5 Liquids Treatment Expansion, Project No. EN19001, is estimated to increase to \$160,000,000. In addition, the total project cost for the RP-5 Solids Treatment Facility, Project No. EN19006, is estimated to increase to \$165,000,000. The project cost will continue to be refined as the PDR progresses to completion.

There are no budget impacts to the current phase of the project.

PJG:CB:SS:jm

# RP-1 & RP-5 Expansion PDR Organics Diversion Update

November 16, 2016



# RP-5 Organics Diversion Alternatives

## Alternative 1 – No Food Waste

- Biosolids Treatment Only

## Alternative 2 – 50,000 gpd Food Waste

- Co-digestion at RP-5

## Alternative 3 – 100,000 gpd Food Waste

- RP-5 Solids Handling Facility at Ultimate Service Area Food Waste Projections

## Alternative 4 - ~50,000 gpd Food Waste

- Hybrid Food Waste System



# RP-5 Organics Diversion Alternatives Comparison

Alt. No.	Alternative Name	Food Waste Volume	Capital Cost	Δ Alt 1	Annual O&M <sup>1</sup> Cost	Est. Min. Tipping Fee <sup>6</sup>	Est. Tipping Fee with \$10M Grant
1	Biosolids Only	---	\$152.4M <sup>7</sup>	---	---	---	---
2	Co-Digestion at RP-5	50,000 gpd (209 wtpd)	\$199.4M	\$47.0M	---	11.1¢/gal <sup>2, 5</sup> (\$26.62/wt)	8.7¢/gal (\$20.88/wt)
3	Food Waste at RP-5 SHF	100,000 gpd (417 wtpd)	\$195.9M	\$43.5M	\$0.4M	6.9¢/gal (\$16.55/wt) Capital: 5.2¢/gal <sup>2, 5</sup> O&M: 1.7¢/gal <sup>4, 5</sup>	5.7¢/gal (\$13.68/wt)
4	Hybrid System	50,000 gpd (209 wtpd)	\$165.4M	\$13.0M	---	5.4¢/gal <sup>3, 5</sup> (\$12.96/wt)	1.2¢/gal (\$2.88/wt)

<sup>1</sup> Annual O&M and R&R costs related to organics processing with credit given for energy production offset.

<sup>2</sup> Payback period of 30 years on Capital Cost with 1.8% interest

<sup>3</sup> Payback period of 15 years on Capital Cost with 1.8% interest

<sup>4</sup> Annual O&M Cost projected with 3% annual escalation

<sup>5</sup> Assumes max food waste processing beginning in Year 1

<sup>6</sup> Tipping Fees are preliminary estimates and are for comparison purposes only

<sup>7</sup> Revised from Board Workshop No. 2 to include thermophilic digestion and methanol chemical injection system.



## Alternative 4: Hybrid System



# RP-5 Expansion: Recommended Project

Component	Phase I Biosolids System Size	Cost	Hybrid Food Waste System Size	Cost	Incremental Cost Utilizable for Ultimate Biosolids	Incremental Cost for Food Waste
Receiving Station	---	---	50,000 gpd @ SHF	\$3.3M	---	\$3.3M
Thickening	5 Thickeners	\$8.7M	5 Thickeners	\$8.7M	---	---
Digestion	2 Acid & 4 Thermo	\$48.2M	2 Acid & 4 Thermo	\$48.2M	---	---
Sludge Storage	1 Digester	\$7.4M	1 Digester	\$7.4M	---	---
Dewatering & Biosolids Storage	4 Centrifuges 2 Storage Silos	\$44.1M	5 Centrifuges <del>2 Storage Silos</del>	\$49.5M	\$4.5M	\$0.9M
Odor Control	Pipeline to Liquids	\$1.9M	Pipeline to Liquids	\$1.9M	---	---
Centrate Treatment	EQ & Methanol	\$1.8M	EQ & Methanol	\$1.8M	---	---
Gas Equipment	Gas Treatment & Waste Gas Flares	\$5.1M	Gas Treatment & Waste Gas Flares	\$6.4M	---	\$1.3M
<b>Estimated Construction Cost</b>		<b>\$117.2M</b>		<b>\$127.2M</b>	<b>\$4.5M</b>	<b>\$5.5M</b>
<b>Design &amp; Project Management (30%)</b>		<b>\$35.2M</b>		<b>\$38.2M</b>	<b>\$1.4M</b>	<b>\$1.6M</b>
<b>Estimated Project Cost</b>		<b>\$152.4M</b>		<b>\$165.4M</b>	<b>\$5.9M</b>	<b>\$7.1M</b>



# Benefits of Food Waste Hybrid System

- IEUA can accommodate 50,000 gpd of food waste until 2030-2035.
- Reduces initial capital cost.
- Dewatering equipment is required or will be beneficially used as part of the Biosolids Ultimate Expansion.
- Food Waste Systems will be included as additive line items on construction bid.
- \$7.1M of increased capital cost is attributable to food waste
  - ~\$1M Design & Admin (2017-2019)
  - ~\$6M Construction & Admin (2019-2023)
- Grants can be leveraged to reduce or eliminate capital cost.



*West Valley Material Recovery Facility  
Raw Food Waste Receiving Pile*

# Questions



Organics Diversion



Regional Discussions



**INFORMATION  
ITEM**

**4N**

Date: November 16, 2016

To: The Honorable Board of Directors

Through: Engineering, Operations, and Biosolids Management Committee (11/09/16)

From: *for* P. Joseph Grindstaff *WJ*  
General Manager

Submitted by: *for* Chris Berch *CB*  
Executive Manager of Engineering/Assistant General Manager

Shaun J. Stone *SJS*  
Manager of Engineering

Subject: Recharge Master Plan Preliminary Design Report Update

---

### **RECOMMENDATION**

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

### **BACKGROUND**

In 2013, Inland Empire Utilities Agency (IEUA) and Chino Basin Watermaster (Watermaster) approved the amendment to the 2010 Recharge Master Plan Update (RMPU), which proposed 11 yield enhancement projects for the Chino Basin Groundwater Recharge System. On June 17, 2015, the Board authorized a contract with Stantec Consulting Services, Inc. (Stantec) to develop a preliminary design report (PDR) on the investigation and evaluation on seven RMPU projects. Two of the projects, Lower Day Basin and San Sevaine Basins, were accelerated with a separate schedule and consultant, in order to qualify for available grant funding. At the same time, two other RMPU projects, Lower San Sevaine Basin and Sierra Basin, were removed from consideration because the owners of the site had other uses for the basins. This letter provides an overview on Stantec's final PDR and a schedule on when Watermaster's stakeholders are expected to decide on which of the seven remaining RMPU projects will proceed into design and ultimately to construction.

On September 15, 2016, Stantec presented a draft PDR at Watermaster's Recharge Investigations and Projects Committee Meeting (RIPCom) to seek initial comments from representatives of the Agricultural, Non-Agricultural, and Appropriative Pools. After receiving comments from RIPCom attendees and IEUA staff, a final draft of the PDR (Attachment 1 and 2) was presented as an information item at the Watermaster Pool Meetings on October 13, 2016. All comments have been discussed and incorporated into the final PDR.

In November 2016, Watermaster staff will seek the Pools' decision on which RMPU projects are approved for design and construction. This decision will follow further review from Watermaster's Advisory Committee before it is approved by Watermaster's Board in late November. IEUA staff will present Watermaster's decision to IEUA's Committee and Board members in the following month, December 2016, to seek a concurring approval.

The following are key highlights from the PDR:

- The PDR's proposed projects are consistent with the initial planning concepts but the projected scope and cost were refined to include a higher degree of project definition as determined from the preliminary design investigation and an escalated cost from the initial 2013 estimates.
- The total capital cost for all RMPU projects which include Lower Day and San Sevaine is \$48.4M where Watermaster's share is \$44.4M and IEUA's \$4.4M.
- The PDR's revised melded unit cost for Watermaster's stormwater share on all projects is \$567 per acre-feet.
- Watermaster's engineer, Wildermuth Environmental, Inc., updated their flow model on the expected stormwater yield of each project to reflect the PDR's findings.

The table below is a comparison of cost and yield between the 2013 RMPU and the 2016 Final PDR. Please note that Lower Day and San Sevaine are include in the table below but they are not a part of the Stantec's PDR; and Lower San Sevaine and Sierra Basin are also not a part of the PDR because they were removed for consideration after the 2013 RMPU was initially approved. For a point of reference, the 2017 MWP untreated tier one rate for water is \$666 per acre-feet.

Project	2013 RMPU				2016 RMPU PDR			
	Total Cost	SW Yield (AFY)	RW Yield (AFY)	SW Unit Cost (\$/AF)	Total Cost	SW Yield (AFY)	RW Yield (AFY)	SW Unit Cost (\$/AF)
CSI Storm Water Basin	\$440,000	81	-	\$388	\$993,310	100	-	\$683
Wineville/Jurupa/RP3 Basins & SW Force Main Improvement	\$21,314,000	3,166	2,905	\$500	\$16,447,527	2,921	2,905	\$405
Declez Basin	\$4,070,000	241	-	\$1,135	\$15,201,000	507	-	\$1,987
Victoria Basin	\$150,000	43	120	\$151	\$172,000	75	120	\$111
Turner Basin	\$890,000	66	-	\$914	\$1,143,000	23	-	\$3,269
Ely Basin	\$3,200,000	221	-	\$979	\$2,501,000	101	-	\$1,648
Montclair Basins	\$1,440,000	248	-	\$415	\$1,802,000	233	-	\$540
Lower Day Basin	\$2,480,000	789	-	\$242	\$3,688,000	956	-	\$288
San Sevaine Basins	\$3,550,000	642	1,911	\$217	\$6,460,000	669	1,911	\$384
Lower San Sevaine Basin	\$22,550,000	1,221	-	\$1,239	-	-	-	-
Sierra Basin	\$490,000	64	-	\$537	-	-	-	-
	<b>\$60,574,000</b>	<b>5,340</b>	<b>4,936</b>	<b>\$612</b>	<b>\$48,408,000</b>	<b>5,585</b>	<b>4,936</b>	<b>\$567</b>

There continues to be discussion among the Watermaster parties regarding which projects to move forward. As noted above, the final recommended projects will be presented in December.

Any actions taken for the recommended RMPU projects are consistent with IEUA's *Business Goal of Water Reliability* by maximizing the beneficial reuse of recycled water and sources of groundwater recharge through the enhancement of groundwater recharge facilities.

### **PRIOR BOARD ACTION**

On June 17, 2015, the Board of Directors approved the consulting engineering services contract award for the preliminary design efforts for the RMPU Stantec Consulting Services, Inc. for the not-to-exceed amount of \$768,950.

On July 16, 2014, the Board of Directors approved the Master Cost Sharing Agreement (Master Agreement) between IEUA and Chino Basin Watermaster.

On October 16, 2013, the Board of Directors approved the 2013 Amendment to the 2010 Chino Basin Recharge Master Plan Update.

### **IMPACT ON BUDGET**

Currently, IEUA's Project No. RW15003 is budgeted to fund the planning and design efforts (soft costs) as originally established from the 2013 RMPU planning document. If all of the suggested RMPU projects from the PDR are considered for approval, the current budget for the soft cost efforts will require an amendment to fund the increased cost. However, the costs for construction which are planned under three separate projects (EN18007, WR15020 & WR15019) already have sufficient funds as projected in the ten-year capital improvement projects.

Any changes in budget and scope will require an amendment to the existing cost sharing agreement between IEUA and Watermaster on the soft cost effort under the Master Agreement's Task Order No. 1.

IEUA's 50 percent cost share is only on two basin improvements, Victoria and RP-3 because both projects include a recycled water and stormwater benefit. The remaining basin improvements are 100 percent reimbursed by Watermaster having only storm water benefit.

IEUA staff has submitted several grant applications for all RMPU projects. All cost assumptions are based on no grant proceeds.

Attachments:

Attachment 1: RMPU Yield Enhancement Projects Preliminary Design Report Volume 1 of 2  
[https://dl.dropbox.com/s/1yg6gj035ha90aw/16290%20Attachment%201%20-%20RMPU\\_Pre-design\\_Report%20Update%20Nov%202016.pdf?dl=0](https://dl.dropbox.com/s/1yg6gj035ha90aw/16290%20Attachment%201%20-%20RMPU_Pre-design_Report%20Update%20Nov%202016.pdf?dl=0)



Recharge Master Plan Preliminary Design Report Update

November 16, 2016

Page 4 of 4

Attachment 2: RMPU Yield Enhancement Projects Preliminary Design Report Volume 2 of 2  
[https://dl.dropbox.com/s/ugvtrqfq44d4zk6/16290%20Attachment%202%20-%20RMPU\\_Pre-design\\_Report%20Update%20Nov%202016.pdf?dl=0](https://dl.dropbox.com/s/ugvtrqfq44d4zk6/16290%20Attachment%202%20-%20RMPU_Pre-design_Report%20Update%20Nov%202016.pdf?dl=0)

PJG:CB:SS:ji

# Recharge Master Plan Update Preliminary Design Report Status Update

Project No. RW15003  
November 16, 2016



Shaun Stone, P.E.  
Manager of Engineering

Joel Ignacio, P.E.  
Senior Engineer



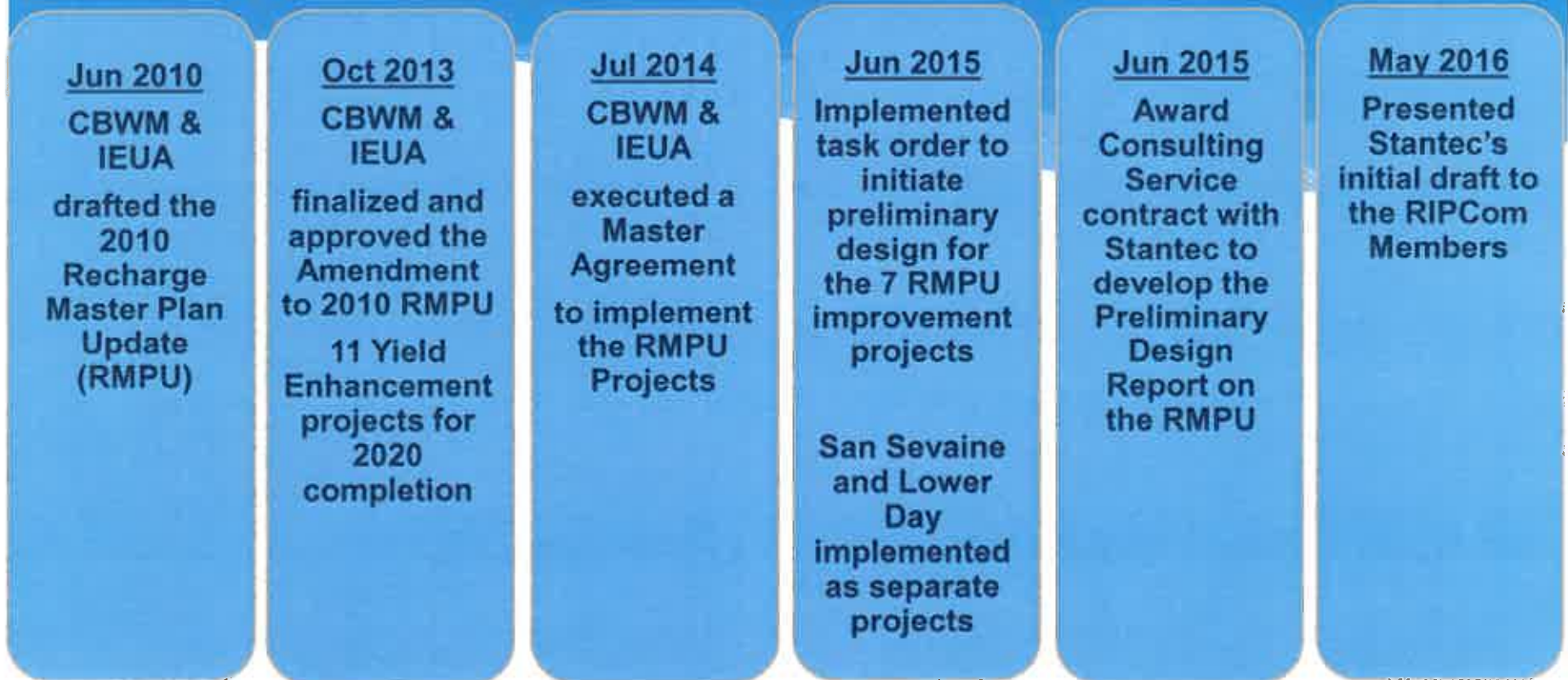
*Inland Empire Utilities Agency*

**A MUNICIPAL WATER DISTRICT**

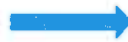


# Background

## RMPU Preliminary Design Report (PDR) Timeline



September 2016 – Presented Draft to attendees of the Recharge Investigation Project Committee (RIPCom)



October 2016 – Presented PDR findings to Watermaster members for review and comment



November 2016 - Seek final decision on the recommended RMPU projects for further design consideration



# Evaluated RMPU Projects

## Project Map



# Background

## Initial Capital/Unit Cost for the 2013 RMPU Projects Excludes Excavation/Hauling

Melded Unit Cost –  
\$612/AF

In 2013 RMPU Steering  
Committee indicated a  
preference for all  
recharge projects that  
combines to a \$612/AF or  
less

Project ID	Project	Storm Water Yield	Recycled Water Yield	Storm Water Recharge Unit Cost	Storm Water Capital Cost	Storm Water Total Annual Cost
<b>Recommended MZ3 Projects</b>						
18a	CSI Storm Water Basin	81	0	\$ 388	\$ 440,000	\$ 31,612
23a	Wineville/Jurupa/RP3 Basins & SW Force Main Improvements	3,166	2,905	\$ 500	\$ 19,552,000	\$ 1,582,914
25a	Sierra Basin	64	0	\$ 537	\$ 490,000	\$ 34,262
27	Declez Basin	241	0	\$ 1,135	\$ 4,070,000	\$ 273,720
<b>Total MZ3</b>		<b>3,552</b>	<b>2,905</b>	<b>\$ 541</b>	<b>\$ 24,552,000</b>	<b>\$ 1,922,508</b>
<b>Recommended MZ2 Projects</b>						
11	Victoria Basin	43	120	\$ 151	\$ 75,000	\$ 6,484
7	San Sevaine Basins	642	1,911	\$ 217	\$ 1,775,000	\$ 139,256
12	Lower Day Basin	789	0	\$ 242	\$ 2,480,000	\$ 190,482
14	Turner Basin	66	0	\$ 914	\$ 890,000	\$ 60,338
15a	Ely Basin	221	0	\$ 979	\$ 3,200,000	\$ 216,362
17a	Lower San Sevaine Basin	1,221	0	\$ 1,239	\$ 22,550,000	\$ 1,512,065
<b>Total MZ2</b>		<b>2,982</b>	<b>2,031</b>	<b>\$ 713</b>	<b>\$ 30,970,000</b>	<b>\$ 2,124,987</b>
<b>Recommended MZ1 Projects</b>						
2	Montclair Basins	248	0	\$ 415	\$ 1,440,000	\$ 102,876
<b>Total MZ1</b>		<b>248</b>	<b>0</b>	<b>\$ 415</b>	<b>\$ 1,440,000</b>	<b>\$ 102,876</b>
<b>Total Recommended Projects</b>		<b>6,782</b>	<b>4,936</b>	<b>\$ 612</b>	<b>\$ 56,962,000</b>	<b>\$ 4,150,371</b>

"Storm Water" in front of Recharge Unit Cost, Capital Cost, and Total Annual Cost are in regards to Watermaster's Share



# Proposed Yield Enhancement Projects

Updated Capital/Unit Cost on PDR's recommended projects  
Excludes Excavation/Hauling

Melded Unit Cost --  
\$567/AF

San Sevaine & Lower Day  
included but addressed  
as separate projects

Sierra Basin and Lower  
San Sevaine noted but  
costs are removed to  
reflect deletion

Updated Melded Unit  
Cost -- \$380/AF

With deferred projects

Project ID	Project	Storm Water Yield	Recycled Water Yield	Storm Water Recharge Unit Cost	Storm Water Capital Cost	Storm Water Total Annual Cost
<b>Recommended MZ3 Projects</b>						
18a	CSI Storm Water Basin	100	0	\$ 683	\$ 993,000	\$ 68,316
23a	Wineville/Jurupa/RP-3 Basins & SW Force Main Improvement	2,921	2,905	\$ 406	\$ 15,726,000	\$ 1,184,823
25a	Sierra Basin	0	0	\$ -	\$ -	\$ -
27	Declaz Basin	507	0	\$ 1,987	\$ 15,201,000	\$ 1,007,603
<b>Total MZ3</b>		<b>3,528</b>	<b>2,905</b>	<b>\$ 641</b>	<b>\$ 31,920,000</b>	<b>\$ 2,260,742</b>
<b>Recommended MZ2 Projects</b>						
11	Victoria Basin	75	120	\$ 111	\$ 86,000	\$ 8,358
7	San Sevaine Basins	669	4,100	\$ 384	\$ 3,230,000	\$ 257,189
12	Lower Day Basin	993	0	\$ 285	\$ 3,779,000	\$ 282,579
14	Turner Basin	23	0	\$ 3,269	\$ 1,143,000	\$ 75,188
15a	Ely Basin	101	0	\$ 1,648	\$ 2,501,000	\$ 166,446
17a	Lower San Sevaine Basin	0	0	\$ -	\$ -	\$ -
<b>Total MZ2</b>		<b>1,861</b>	<b>4,220</b>	<b>\$ 424</b>	<b>\$ 10,739,000</b>	<b>\$ 789,759</b>
<b>Recommended MZ1 Projects</b>						
2	Montclair Basins	233	0	\$ 540	\$ 1,802,000	\$ 125,844
<b>Total MZ1</b>		<b>233</b>	<b>0</b>	<b>\$ 540</b>	<b>\$ 1,802,000</b>	<b>\$ 125,844</b>
<b>Total Recommended Projects</b>		<b>5,622</b>	<b>7,125</b>	<b>\$ 565</b>	<b>\$ 44,461,000</b>	<b>\$ 3,176,345</b>

"Storm Water" in front of Recharge Unit Cost, Capital Cost, and Total Annual Cost are in regards to Watermaster's Share

# Proposed Yield Enhancement Projects

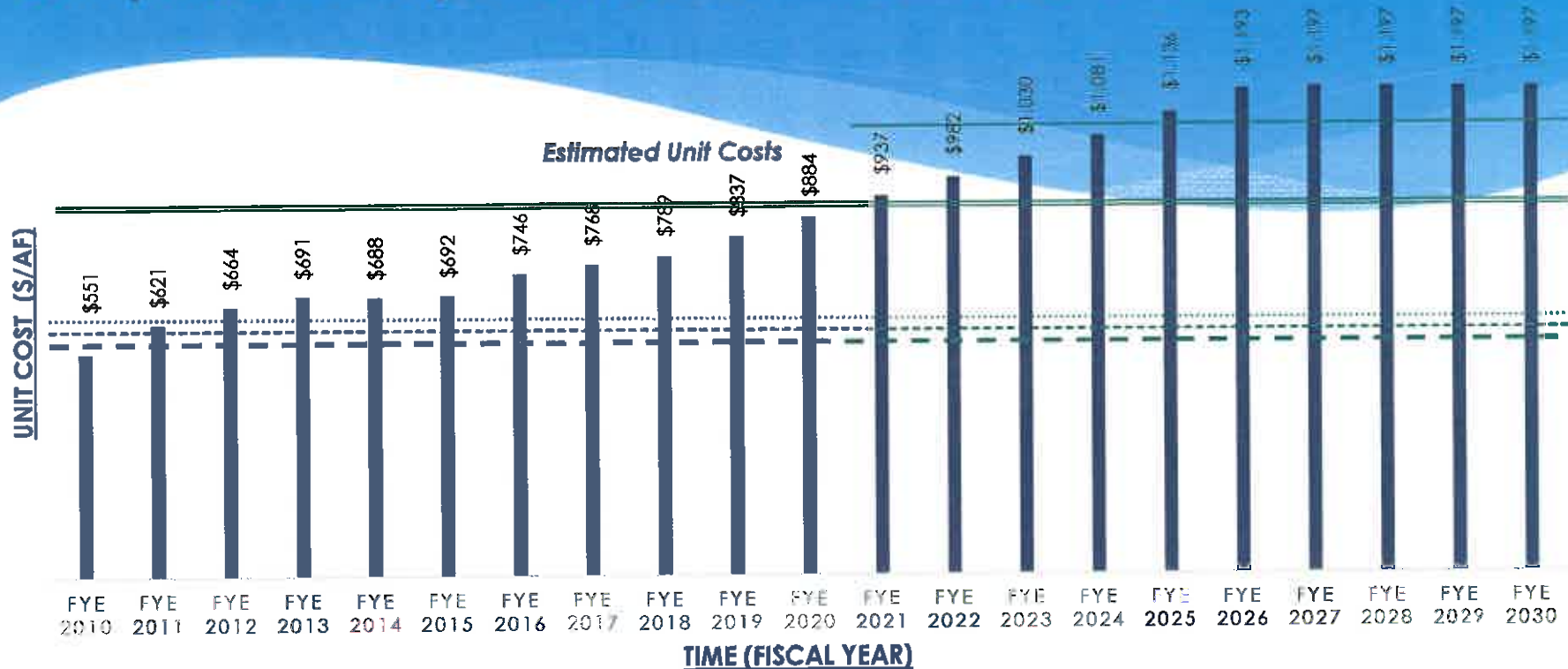
## Comparison of Costs 2013 RMPU/2016 Preliminary Design Report

RMPU PROJECT ID	PROJECT NAME	2013 RMPU TOTAL COST	RMPU 2016 PDR TOTAL ESTIMATED PROJECT COST	DIFFERENCE	
				\$	%
2	Montclair Basins	\$ 1,440,000	\$ 1,802,000	\$ 362,000	25%
11	Victoria Basin	\$ 150,000	\$ 172,000	\$ 22,000	15%
14	Turner Basins	\$ 890,000	\$ 1,143,000	\$ 253,000	28%
15a	Ely Basins	\$ 3,200,000	\$ 2,501,000	\$ (699,000)	-22%
18a	CSI Stormwater Basin	\$ 440,000	\$ 993,000	\$ 553,000	126%
23a	Wineville Basin, Jurupa Basin, RP-3 Basins, Pump Stations and Associated Piping	\$ 21,314,000	\$ 16,448,000	\$ (4,866,000)	-23%
27	Declez Basin	\$ 4,070,000	\$ 15,201,000	\$ 11,131,000	273%
7	San Sevaine Basin	\$ 3,550,000	\$ 6,460,000	\$ 2,910,000	82%
12	Lower Day Basin	\$ 2,480,000	\$ 3,688,000	\$ 1,208,000	49%
25a	Sierra Basin	\$ 490,000	\$ -	\$ (490,000)	-100%
17a	Lower San Sevaine Basin	\$ 22,550,000	\$ -	\$ (22,550,000)	-100%
		\$ 60,574,000	\$ 48,408,000	\$ (12,166,000)	-20%

- **San Sevaine approved as part of the Task Order No.8 Amendment No. 1**
- **Lower Day pending final approval**
- **Sierra/Lower San Sevaine removed for consideration at the start of the RMPU PDR. If comparison does not support these two projects, the total increases by 30% or \$10.1M**

# Closing

## Comparison of Project Unit Costs with Unit Cost of Water



**Notes:**

- \* Assuming 5,500 AFY for RMPU for all years
- \* IEUA RTS Share held constant at 3.5% prior to FYE 2015
- \* Ten year rolling average held constant prior to FYE 2015
- \* Assumes IEUA surcharge to 10/2016

----- \$612/AF Unit Cost 2013 RMPU (without Excavation/Hauling)

- - - - - \$567/AF Unit Cost 2016 PDR (without Excavation/Hauling)

..... \$637 AF Unit Cost 2016 PDR (with Excavation/Hauling)

————— \$1,114/AF Unit Cost of Import Water (10-Yr Average 2020 to 2030)

————— \$926/AF Unit Cost of Import Water (20-Yr Average 2020 to 2030)





**INFORMATION  
ITEM**

**40**

Date: November 16, 2016

To: The Honorable Board of Directors

Through: Public, Legislative Affairs, and Water Resources Committee (11/9/16)

From: *for* P. Joseph Grindstaff *PG*  
General Manager

Submitted by: Chris Berch *CB*  
Executive Manager of Engineering/Assistant General Manager

Sylvie Lee *SL*  
Manager of Planning and Environmental Compliance

Subject: FY 2015/16 IEUA Annual Water Use Efficiency Programs Report

---

### **RECOMMENDATION**

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

### **BACKGROUND**

Inland Empire Utilities Agency (IEUA) and its regional water use efficiency partners strive to increase regional sustainability through development of local water supplies and reduced dependence on more costly and increasingly less reliable imported water. Water use efficiency (WUE) is universally regarded as the most cost effective method to reduce water demands. The region has made substantial investments in WUE initiatives over the past 24 years and continues to strategically plan for present and future water supply challenges.

Each year, IEUA prepares a comprehensive WUE report that captures all activities that occurred during the prior fiscal year. This report tracks the progress that has been made toward goals and objectives outlined in IEUA's Regional WUE Business Plan. For each member agency a regional WUE summary perspective is included as well as service area specific data and activities that provide the foundation for regulatory compliance with State WUE statutes. The report serves as a benchmark for assessing and evaluating overall program performances for planning existing and future programs.

IEUA currently offers a suite of WUE programs to improve landscape management and reduce outdoor water use. Over the last fiscal year, approximately 65,942 water saving technologies/services were implemented throughout the service area.

The water savings achieved through these regional demand reduction activities is estimated to be 1,858 acre-feet (AF) per year, with an average lifetime savings of 21,470 AF, and adds to IEUA's cumulative lifetime water savings of 133,937 AF for all water conserving activities since 1992.

WUE and conservation are key fundamentals of the IEUA's short and long-term water resource management strategies. Over the last year, IEUA has taken proactive steps to boost conservation efforts through allocating IEUA's resources for the funding of data analytics, technology-based software, and support for development of sustainable water rate structures. In addition, IEUA currently participates in the Data Collaborative, a coalition of water utilities working together to pioneer new data infrastructure that supports water managers in meeting their reliability objectives.

Policies and practices are shaped largely by core strategies and programs designed to meet regulatory requirements of the following initiatives:

- State-mandated Drought Emergency Conservation Regulation (short-term)
- State-mandated Long-Term Conservation Regulations
- Surpassing SBX 7-7 - The Water Conservation Act of 2009 (reduction in per capita water use by 20% by 2020)
- Assembly Bill 1881 – The Model Water Efficient Landscape Ordinance
- State grant and loan eligibility requirements
- Future WUE legislation and regulations

Sustained reduction in water use, as mandated by state legislation, will be met through IEUA's member agency regional alliance and IEUA's continued commitment to implement innovative WUE programs that create market transformations. Many of these programs have been made possible through funding partnerships with local agencies, including the Metropolitan Water District of Southern California, the Department of Water Resources, the U.S. Bureau of Reclamation, and public/private partnerships.

### **PRIOR BOARD ACTION**

None.

### **IMPACT ON BUDGET**

None.

Attachment: FY 2015/16 IEUA Annual Water Use Efficiency Programs Report and Appendices can be viewed at the following link:  
<https://ieua.hostedftp.com/CdDc3Jwk1f3K9colpiK9e1i4I>

# Annual Water Use Efficiency Programs Report FY 2015-16



*Inland Empire Utilities Agency*  
A MUNICIPAL WATER DISTRICT

**Lisa Morgan-Perales**

IEUA Board of Directors Meeting  
November 2016

# FY 2015-2016 Annual WUE Programs Summary

- 65,942 WUE technologies/services implemented
- ~1,858 AF of annual water savings from WUE activities
- Projected lifetime water savings: 21,181 AF
- Total Conservation Program Funding (FY 2015-2016)
  - Outside sources: \$10,439,811
  - Agency funding: \$1,966,159
  - Imported Tier II (\$721) avoided cost: \$1,339,618
  - Water Use Efficiency Programmatic Cost Per AF: \$92



# FY 2015-2016 Regional Priorities

- Statewide Mandatory Reduction Targets
- 2015 Emergency Drought Regulations
- Governor's Executive Order
- Senate Bill X7-7 - The Water Conservation Act of 2009
- Assembly Bill 1420-Demand Management Measures
- Maintain state grant and loan eligibility (IEUA & members)
- Regional Water Use Efficiency Business Plan (2010-2015)
- Compliance with future WUE legislation and regulations



DATA IN



Parcel Data



Imagery



Water Meter Data

# FY 2015-2016 Water Use Efficiency Programs

IEUA Locally Implemented WUE Programs	Activity	Savings (AFY)
IEUA Residential Landscape Retrofit Program	501 sites (778 WBICs*; 9,135 HE* Nozzles)	293
Landscape Transformation Program (Turf Removal)	30 sites (26,750 sq. ft.)	4
Freesprinklernozzles.com Voucher Program	227 vouchers (16,874 HE nozzles – Res/CII)	87
Regional Landscape Evaluation and Audit Program	64 residential / 10 CII	58
Residential Pressure Regulation Pilot Program	20 sites (June 2016)	12
Rebates/Devices: Residential and CII*	45,671 rebates	1,404

\* WBICs: Weather-Based Irrigation Controllers, HE: High Efficiency, CII: Commercial, Industrial & Institutional

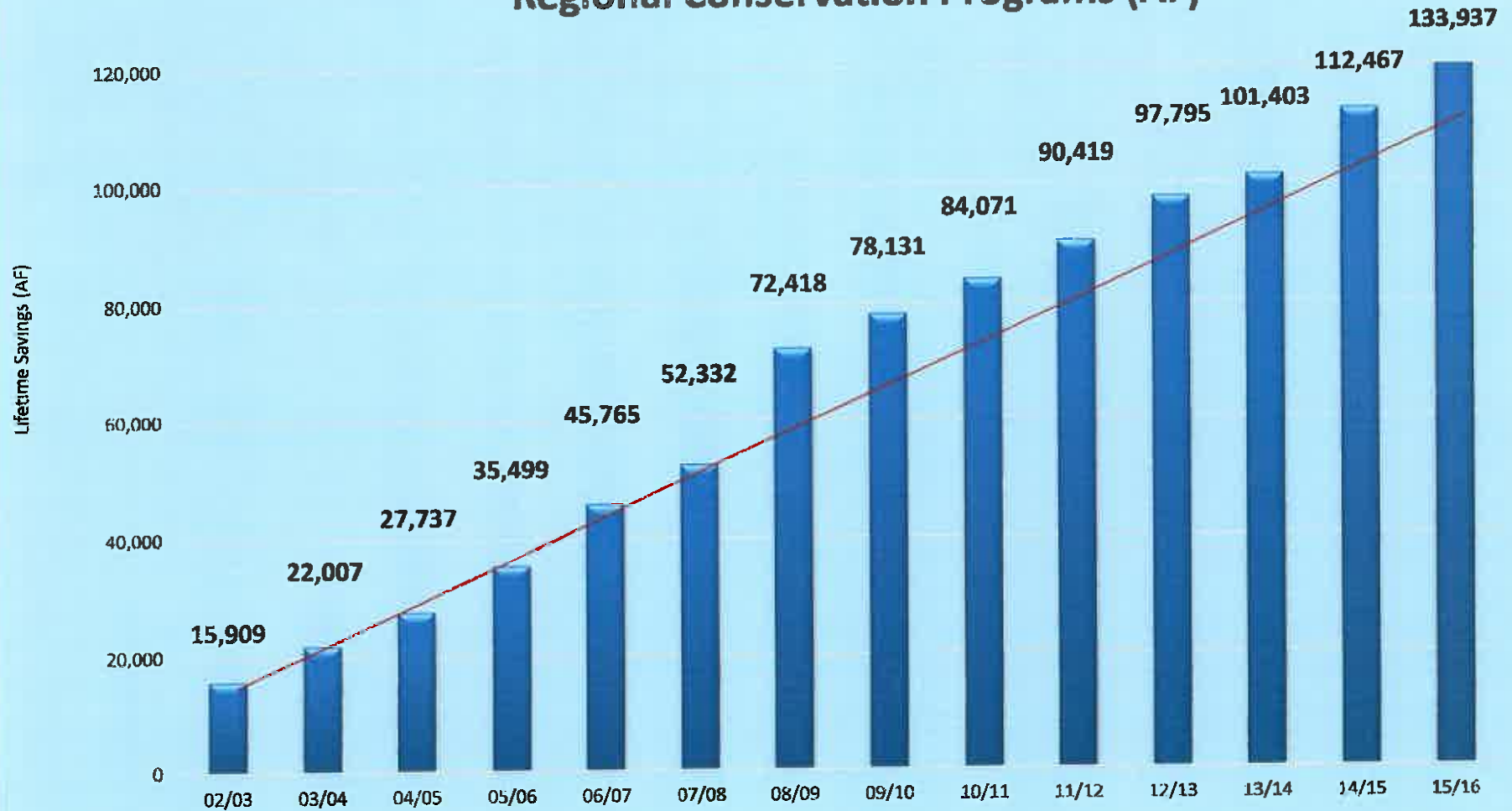
# FY 2015-2016 Education & Outreach

- IEUA Regional Landscape Training Workshops
  - 18 residential courses conducted throughout IEUA's service areas
- National Theatre for Children
  - 101 Theater Performances – 27,990 K-6 students, teachers & parents reached
- Shows That Teach
  - 16 Theater Performances – 9,067 K-6 students, teachers & parents reached
- Garden-In-Every School
  - 4 new Gardens Installed – 5,849 students, teachers, and parents reached (Chino, Chino Hills, Fontana)
  - 2 Mini –Grant Gardens Installed (Rancho Cucamonga)
- Water Saving Garden Friendly Program
  - Home Depot Events – Cities of Chino, Rancho Cucamonga, Fontana, and Upland



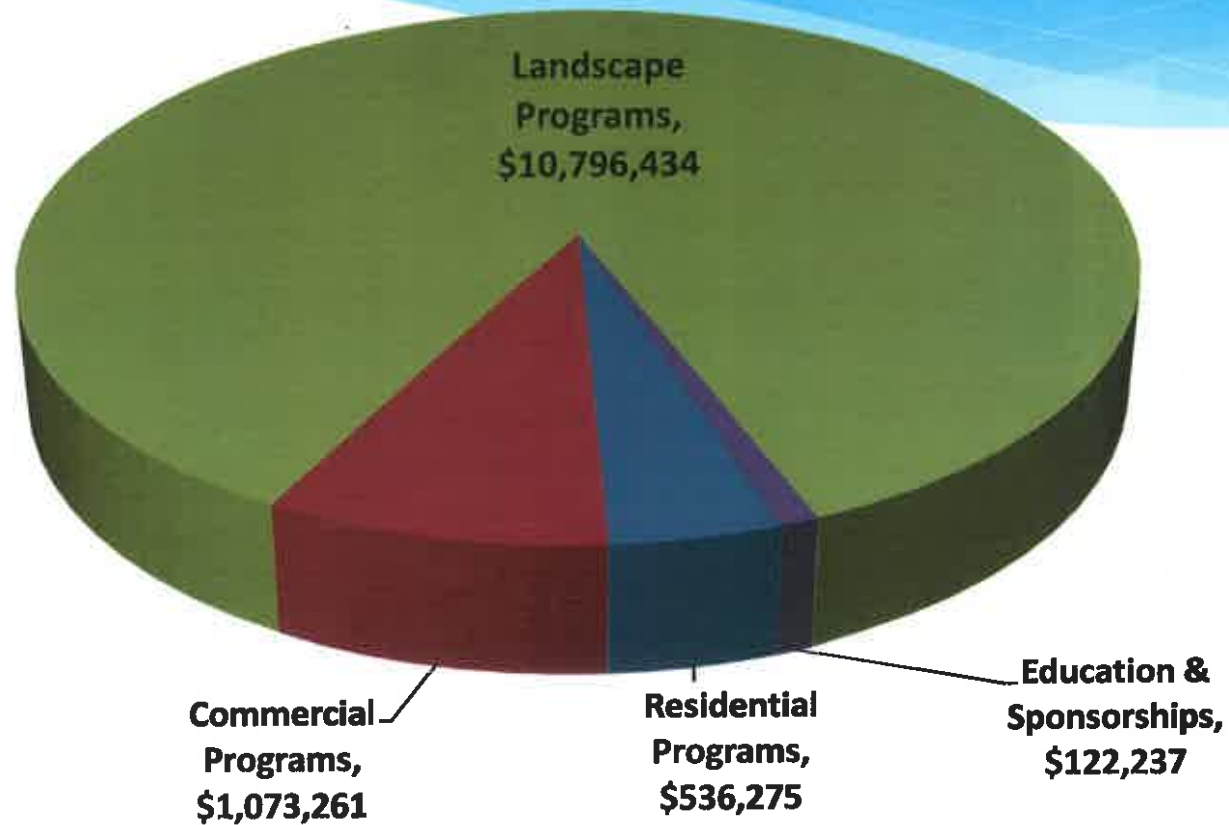


## IEUA Lifetime Water Savings From Regional Conservation Programs (AF)



# FY 2015-2016 WUE Programs

*For every \$1 invested, IEUA received \$5 in outside funding*



**INFORMATION  
ITEM**


**4P**


---


Date: November 16, 2016

To: The Honorable Board of Directors

Through: Public, Legislative Affairs, and Water Resources Committee (11/9/16)

From: *for* P. Joseph Grindstaff   
General Manager

Chris Berch   
Executive Manager of Engineering/Assistant General Manager

Submitted by: Sylvie Lee   
Manager of Planning & Environmental Resources

Subject: Annual Water Use Report

---

### **RECOMMENDATION**

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

### **BACKGROUND**

Each year the Inland Empire Utilities Agency (IEUA) compiles water use data from each of its retail agencies to track overall water demands and sources of supply in the 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 regional usage for FY15/16 was 168,799 AFY, which is a 25% decrease from FY13/14 usage, consistent with Governor Brown's mandatory use restrictions and is the lowest water use for the region since 1995. IEUA anticipates a continuing trend of declining usage in response to the continuing drought in California, long-term state efficiency goals, and more efficient development patterns as a result of changes in the plumbing code, higher density developments with less landscaping, and compliance with the existing model landscape ordinance requirements set forth in AB1881.

### **PRIOR BOARD ACTION**

None.

### **IMPACT ON BUDGET**

None.

# FY 15/16 Annual Water Use

## November 2016



*Inland Empire Utilities Agency*

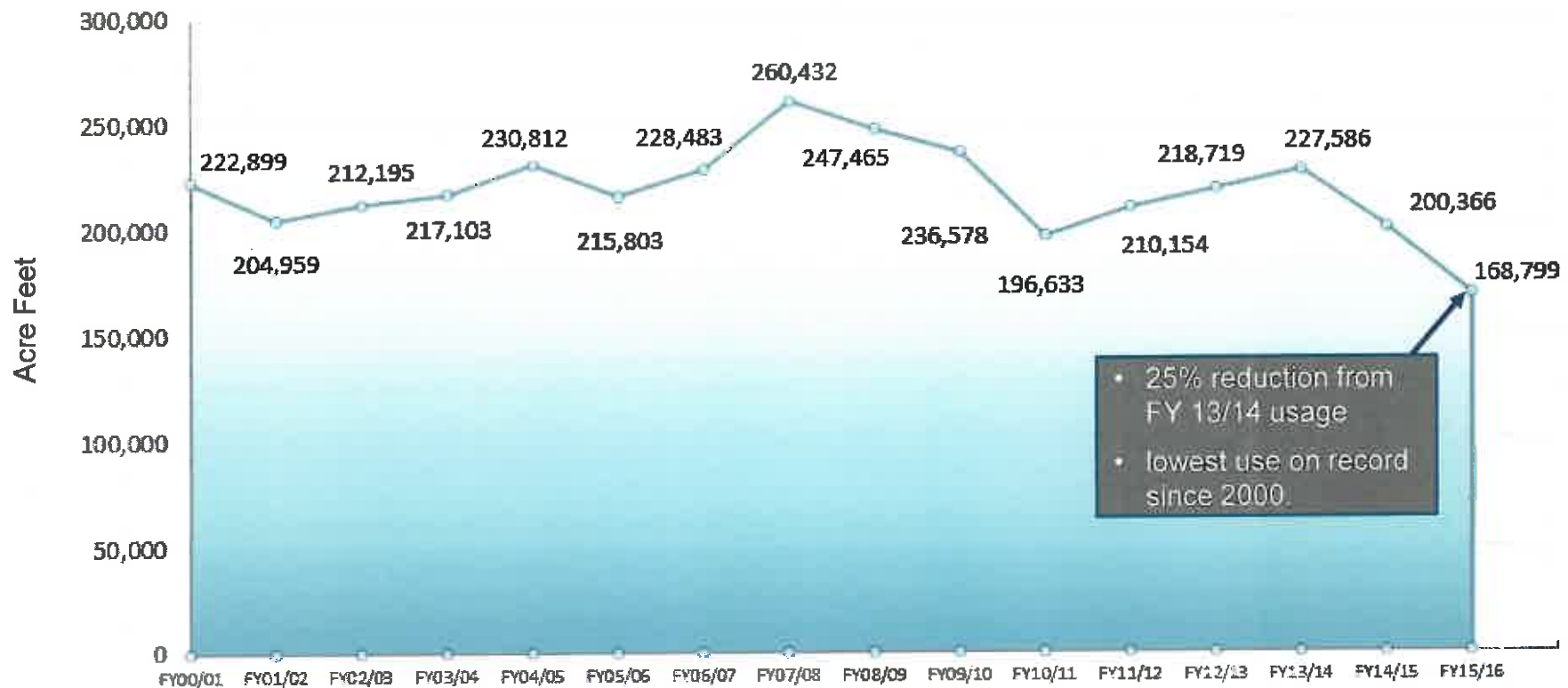
A MUNICIPAL WATER DISTRICT

**Elizabeth Hurst**

IEUA Board of Directors Meeting  
November 2016

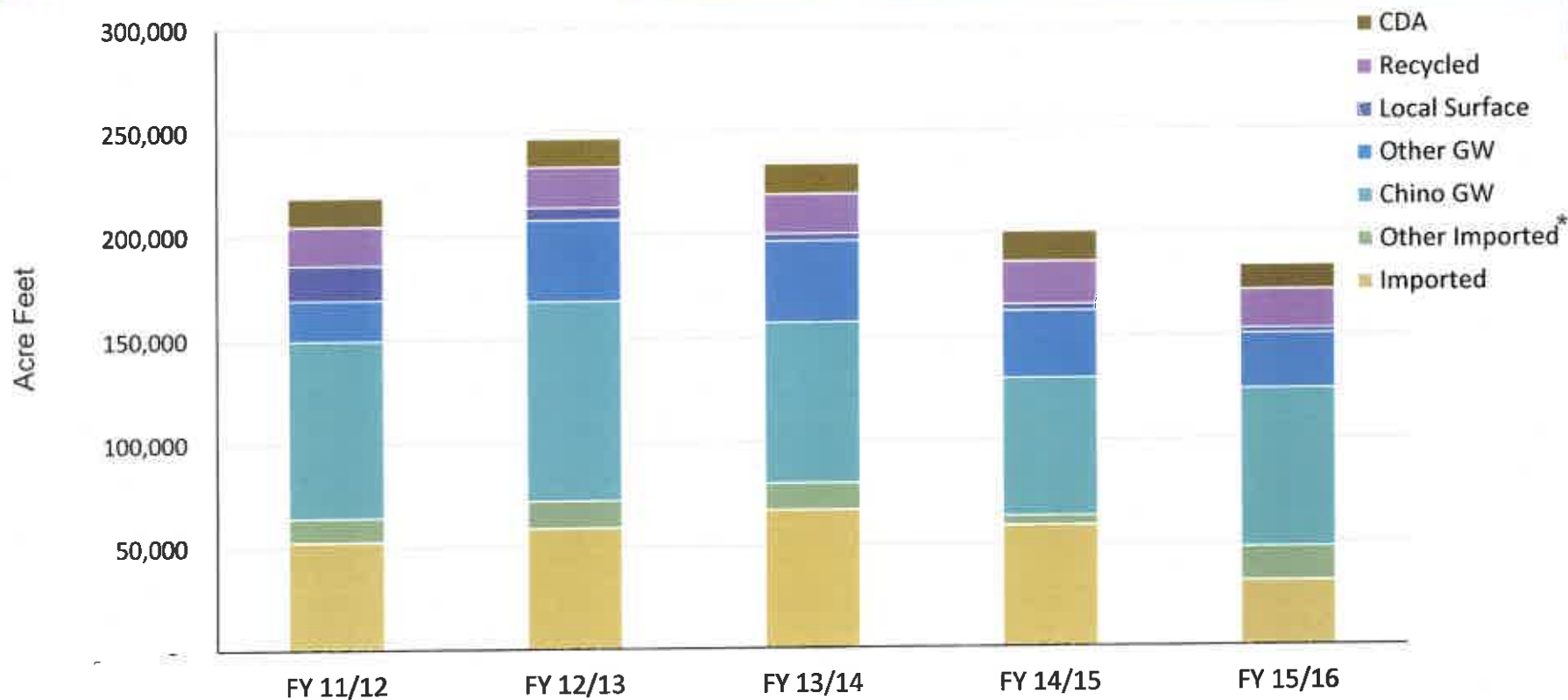


# Regional Water Use Trend



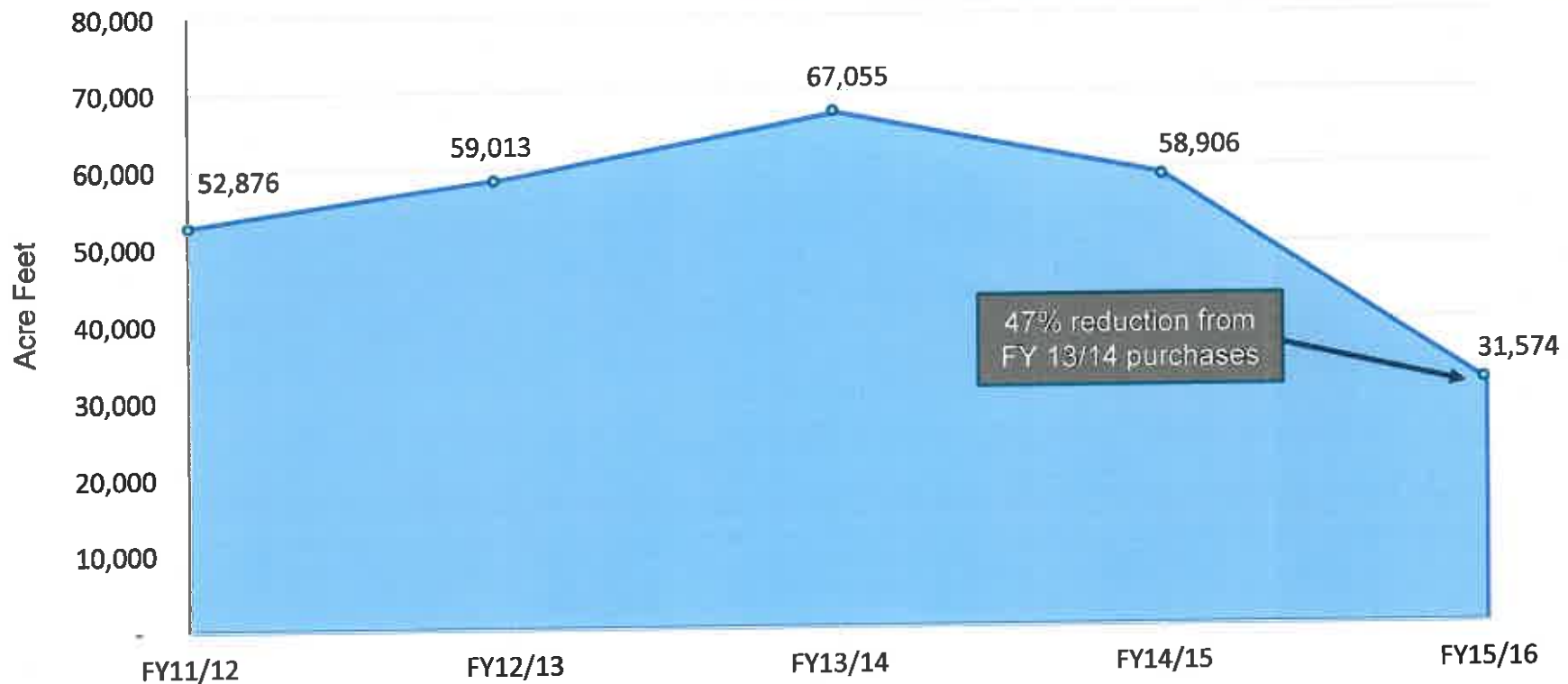
Note: Total Water Use Data includes imported water, surface water, groundwater, recycled and desalter production. Excludes IEUA groundwater recharge

# Regional Water Use Trend By Source

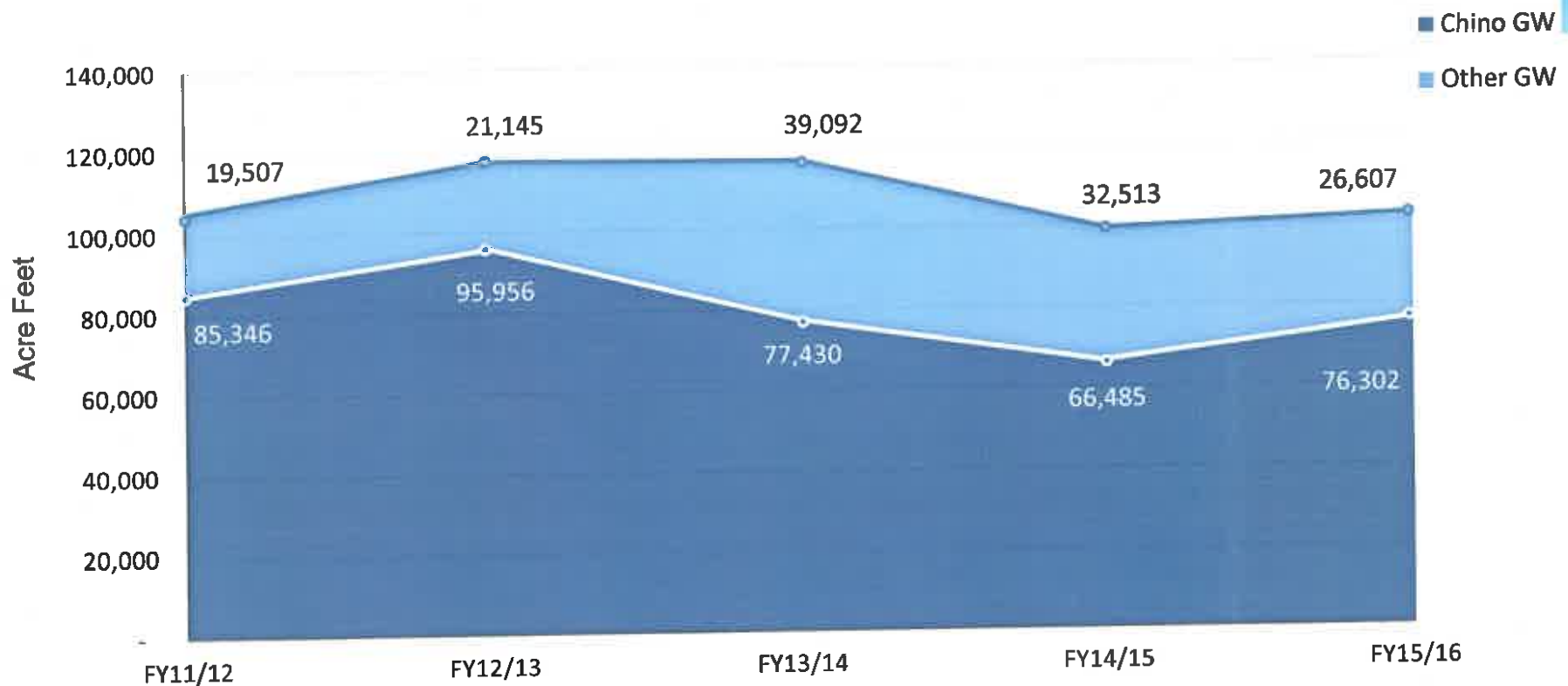


\*Water purchased from other companies (such as SAWCo or WECWC) that do not get their water from MWD.

# Regional MWD Imported Water Use Trend

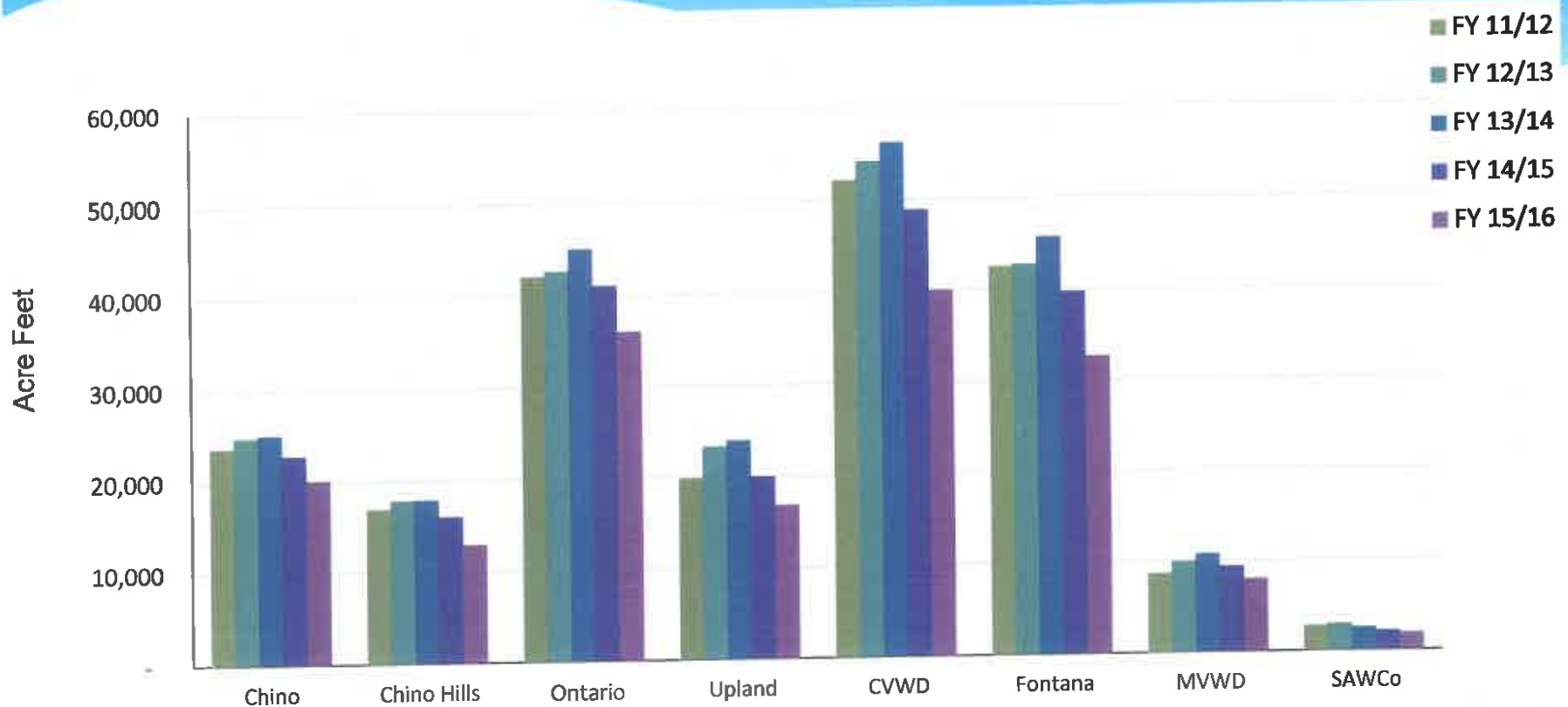


# Regional Chino Basin Groundwater Use Trend



\*Note: Other GW includes Cucamonga Basin and 6 Basin as reported from Member Agencies

# Regional 5-Year Historical Water Use



\*MVWD wholesale deliveries included in Chino Hills data  
 \*\*historically, SAWCo wholesale deliveries included in Upland data



2016

# IEUA FY 2015-2016 Annual Water Use Report:

## Retail Agency Water Use and Five Year History



*Inland Empire Utilities Agency*  
A MUNICIPAL WATER DISTRICT



# Table of Contents

<b>Preface.....</b>	<b>1</b>
<b>Section 1: Total IEUA Service Area Water Use for FY 2015/16.....</b>	<b>5</b>
<b>Section 2: Monthly Water Use for FY 2015/16 and 5 Year Water Use.....</b>	<b>9</b>
<b>Summary by Retail Agency</b>	
<b>City of Chino.....</b>	<b>10</b>
<b>City of Chino Hills.....</b>	<b>13</b>
<b>City of Ontario.....</b>	<b>16</b>
<b>Monte Vista Water District .....</b>	<b>19</b>
<b>City of Upland.....</b>	<b>22</b>
<b>Cucamonga Valley WaterDistrict.....</b>	<b>25</b>
<b>Fontana Water Company.....</b>	<b>28</b>
<b>San Antonio Water Company.....</b>	<b>31</b>
<b>Section 3: Appendices.....</b>	<b>34</b>
<b>Appendix A – 5-Year Historical Data</b>	
<b>Appendix B – Definitions</b>	
<b>Appendix C – Member Agency Organizational Chart</b>	
<b>Appendix D – PowerPoint Presentations for Governor’s Executive Order</b>	

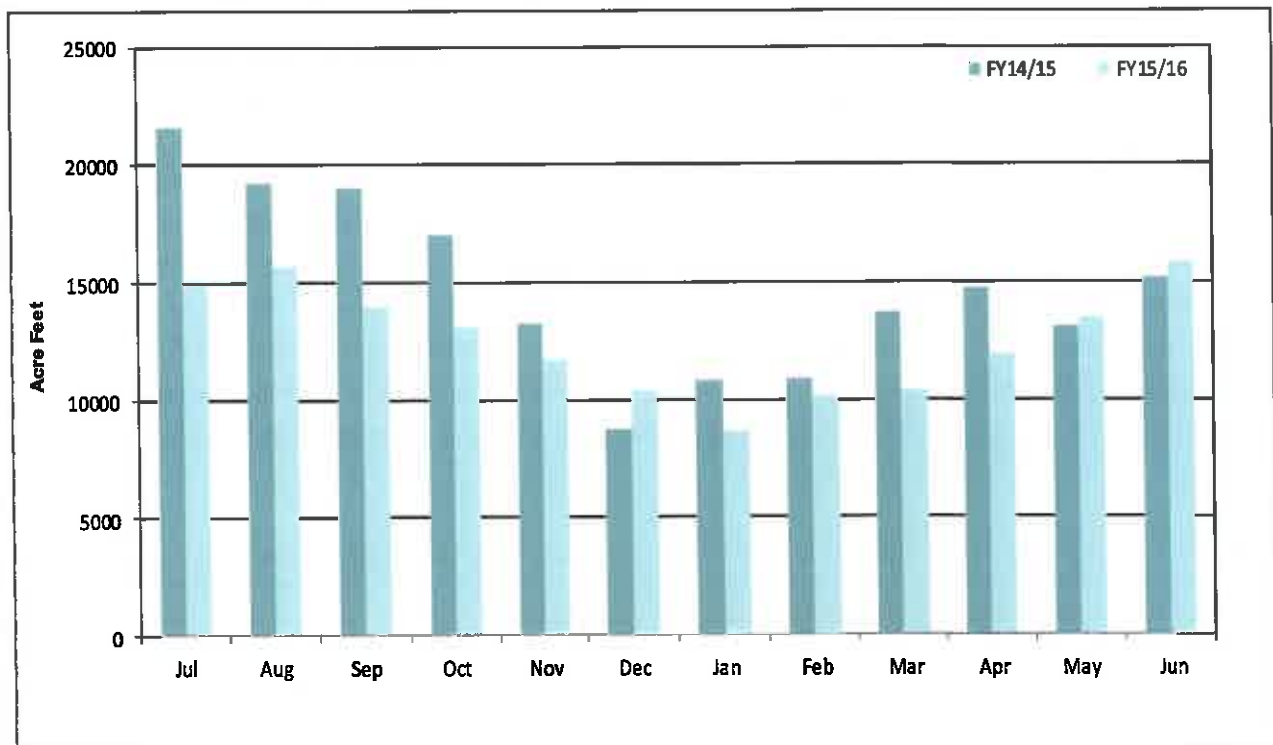
## Preface

### FY 2015-16 Water Use Summary Report

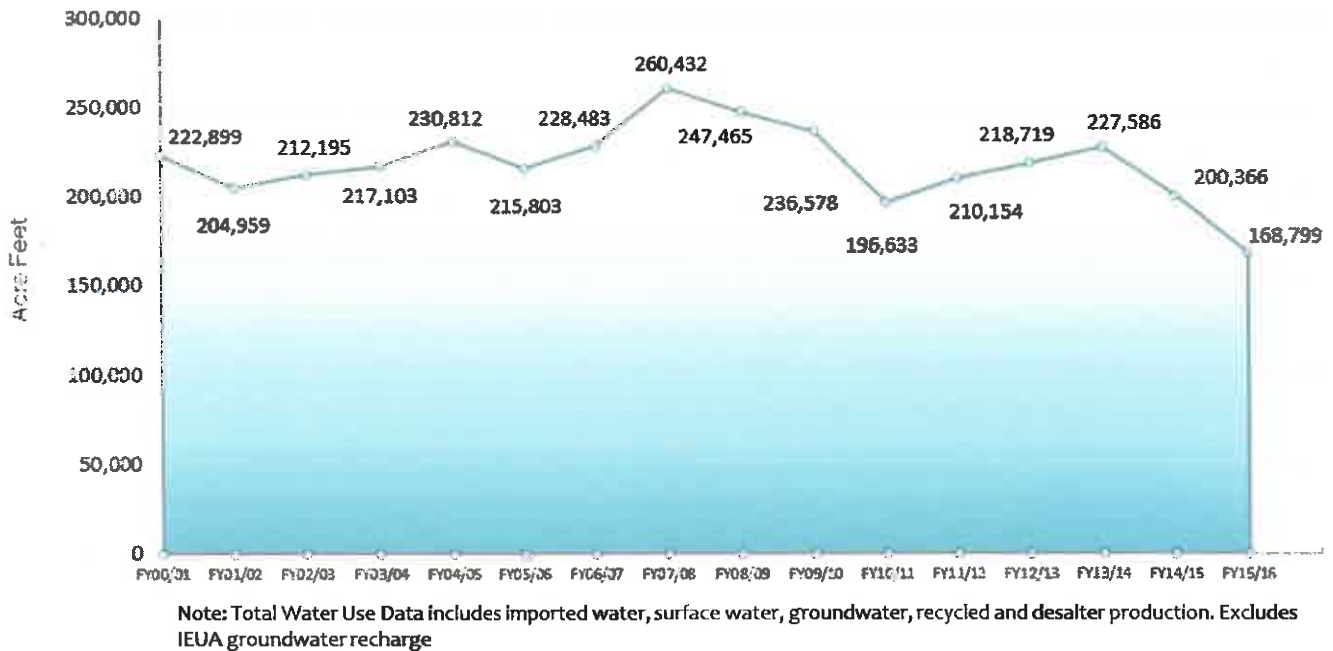
Inland Empire Utilities Agency (IEUA) monitors and compiles water use data from each of its retail agencies to track overall water demands and sources of supply. Each year, this data is compiled into an Annual Water Use Report. Data includes monthly water use (by member agency and by source of supply),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

Although Southern California remains in a state of “exceptional drought”, conditions improved enough in the northern half of the state for Governor Brown to end mandatory water restrictions in May 2016, and return authority to local agencies. Three hundred and forty-three water agencies (or 84% of the largest 411 agencies in the state) gave themselves a conservation target of zero for the rest of the year. Also in May, Governor Brown released an executive order that calls for long-term improvements to local drought preparation across the state and directs the State Water Resources Control Board to develop emergency water restrictions should the drought continue. The list includes permanent monthly water use reporting, new urban water use targets, reducing system leaks, eliminating wasteful practices, strengthening urban drought contingency plans, and improving agricultural water management plans. IEUA is monitoring State meetings on implementation of the executive order, and has developed a brief PowerPoint for the State Water Board and Department of Water Resources discussions which walk through implications and options (See Appendix D).

Regional Monthly Total Water Usage FY 15/16 Comparison to FY14/15



## IEUA Member Agency Overall Total Water Use Trend



The regional water use for FY 15/16 was 168,799 AFY, the lowest water use for the region since 1995.

Overall water consumption within the IEUA’s service area decreased 15.8% (31,566 AF) from FY 2014/15. Chino Desalter Authority (CDA) production decreased by 2,603 AF and direct use recycled water decreased by 2,177 AF.

IEUA anticipates a trend of declining usage as a response to the drought in California. Although development is anticipated to continue and growth may rebound at the end of the drought, long-term demands are not expected to greatly increase. This analysis came from demand modeling conducted as part of IEUA’s 2015 Integrated Resources Plan (IRP) which found that new developments in the region tend to be more 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.

In addition, aggressive efforts are being made to diversify and maximize local resource development, expand water use efficiency programs, and assist interested member agencies with the development of budget based rate structures. These efforts have better prepared 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:

- IEUA and its member agencies have finalized the 2015 IRP. The plan is available on the IEUA website. The IRP outlines an overall strategy for developing water supplies and meeting projected demands within the IEUA service area in a cost-effective manner. The plan developed an updated demand model based on new regional development trends of high density, efficient indoor devic-

es, and low water use outdoor plants per state legislation. Conceptual projects from the IRP will be incorporated into the IEUA Regional Programmatic Environmental Impact Report to ensure that projects are grant eligible. Project details and an implementation schedule will be developed as part of the IRP Phase II, which will begin in fall 2016.

- In June, IEUA's Board of Directors adopted the 2015 Urban Water Management Plan.
- The 2015 Water Use Efficiency Business report will be presented to the IEUA Board in October.
- IEUA completed the 2015 Recycled Water Program Strategy, which will further implement the Recycled Water Business Plan to expand its connected demand and maximize recycled water deliveries for both direct use and groundwater recharge. In FY 2015/16 member agency direct recycled water use was 18,335 AF.
- IEUA launched a Pilot Home Pressure Regulation Program in June which will reach out to 500 residential sites and correct high pressure problems by either making adjustments or installing a new regulator.
- IEUA is working with the Agricultural Pool to identify appropriate farm sites for water efficiency upgrades. This will help maintain a sustainable Chino Basin groundwater supply.
- IEUA and its member agencies are working towards completing the Phase III expansion of the Chino Desalters, which will increase capacity from 24,600 AFY to 40,000 AFY. In FY 2015/16, IEUA agency's share of the production was 11,883 AF.
- IEUA and its member agencies continue to implement the water use efficiency programs outlined in the long term Regional Water Use Efficiency Business Plan completed in September 2010. This document serves as the blueprint for the Agency's existing regional programs while providing the guidance for developing new cost-effective initiatives. The plan is also being updated as part of the IRP process. Future conservation targets are anticipated to be much more aggressive as a result of the IRP. In FY 2015/16, the regional water use efficiency programs increased savings by approximately 80% from FY14/15 reaching a record high of approximately 1,858 AF, and an estimated lifetime savings of 21,470 AF.

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



## **SECTION 1**

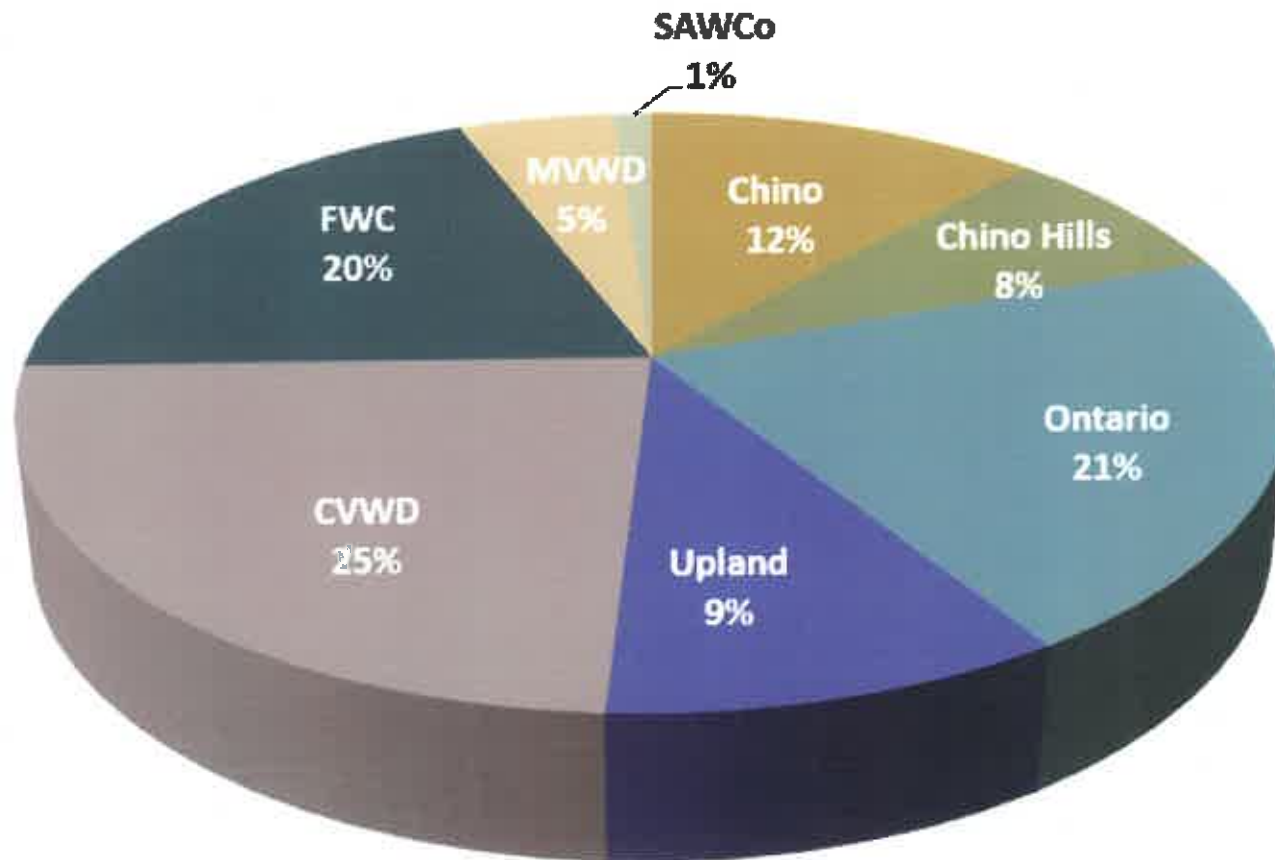
### **Total Water Resources Data from FY 15/16**

## Total IEUA Service Area Water Use For FY 15/16

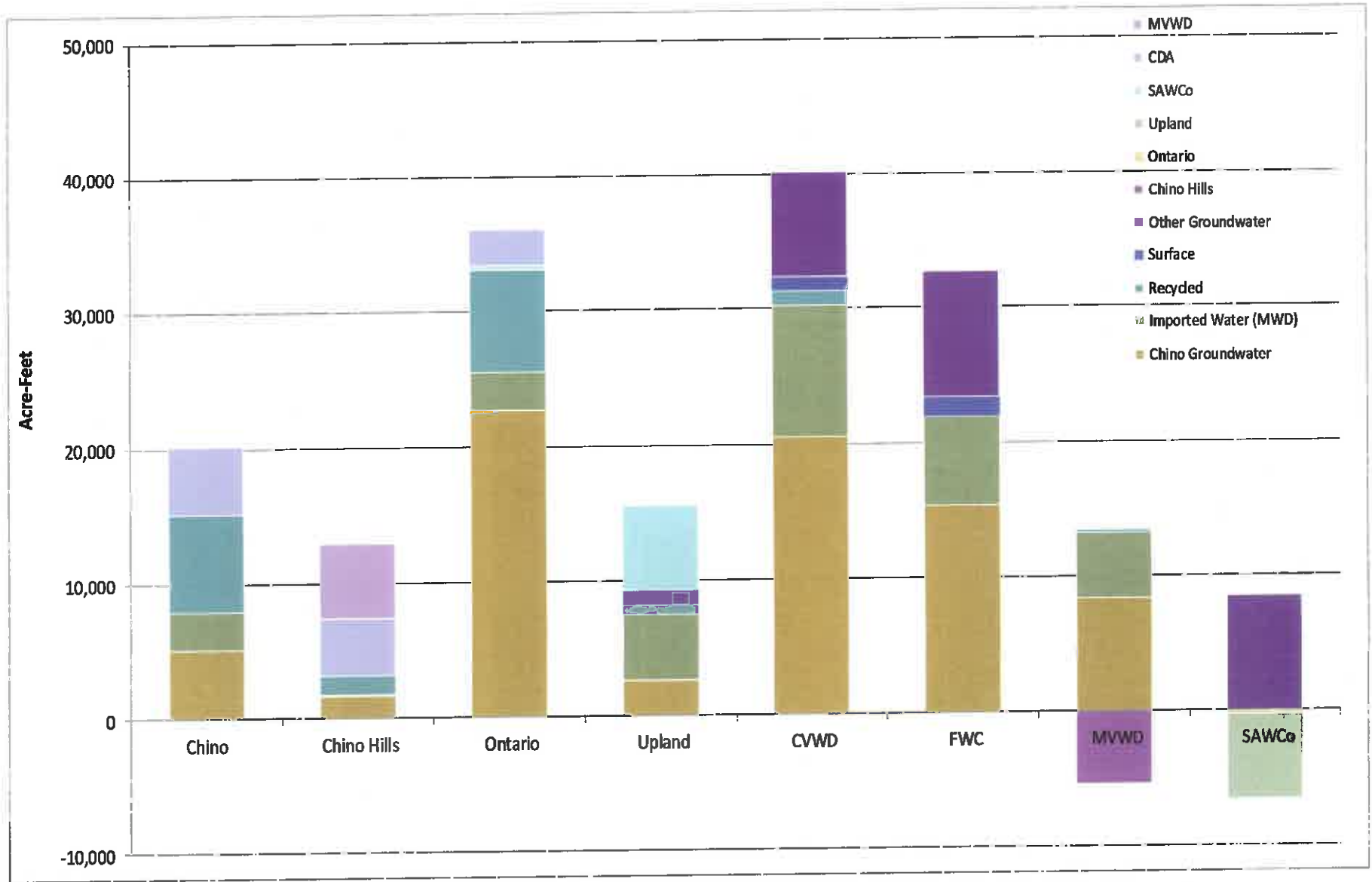
		Total IEUA Service Area Water Use by Retail Agency for FY 15-16 (AFY)								
		CHINO	CHINO HILLS	ONTARIO	UPLAND	CVWD	FWC	MVWD	SAWCo	TOTAL
Purchases from IEUA	Imported Water (MWD)	2,843	110	2,755	4,890	9,712	6,613	4,799	0	31,722
	Recycled (Direct Use)	7,217	1,410	7,566	719	1,146	0	278	0	18,336
<b>Subtotal</b>		<b>10,060</b>	<b>1,520</b>	<b>10,321</b>	<b>5,609</b>	<b>10,857</b>	<b>6,613</b>	<b>5,078</b>	<b>0</b>	<b>50,058</b>
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
<b>Subtotal</b>		<b>5,104</b>	<b>1,630</b>	<b>22,755</b>	<b>3,655</b>	<b>29,309</b>	<b>26,067</b>	<b>8,371</b>	<b>8,517</b>	<b>105,408</b>
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
<b>Subtotal</b>		<b>5,000</b>	<b>9,843</b>	<b>3,020</b>	<b>7,543</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25,406</b>
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
	<b>Subtotal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-5,437</b>	<b>-6,635</b>	<b>-12,072</b>
<b>Total</b>		<b>20,163</b>	<b>12,993</b>	<b>36,096</b>	<b>16,807</b>	<b>40,166</b>	<b>32,681</b>	<b>8,012</b>	<b>1,882</b>	<b>168,799</b>

Note: an additional 541 AF of RW was used for IEUA purposes, an additional 13,222 AF of RW was used for recharge, and additional 536 AF of RW was sold to San Bernardino County. All RW numbers in this report based off IEUA operations data.

## Total IEUA Service Area Water Use For FY 15/16



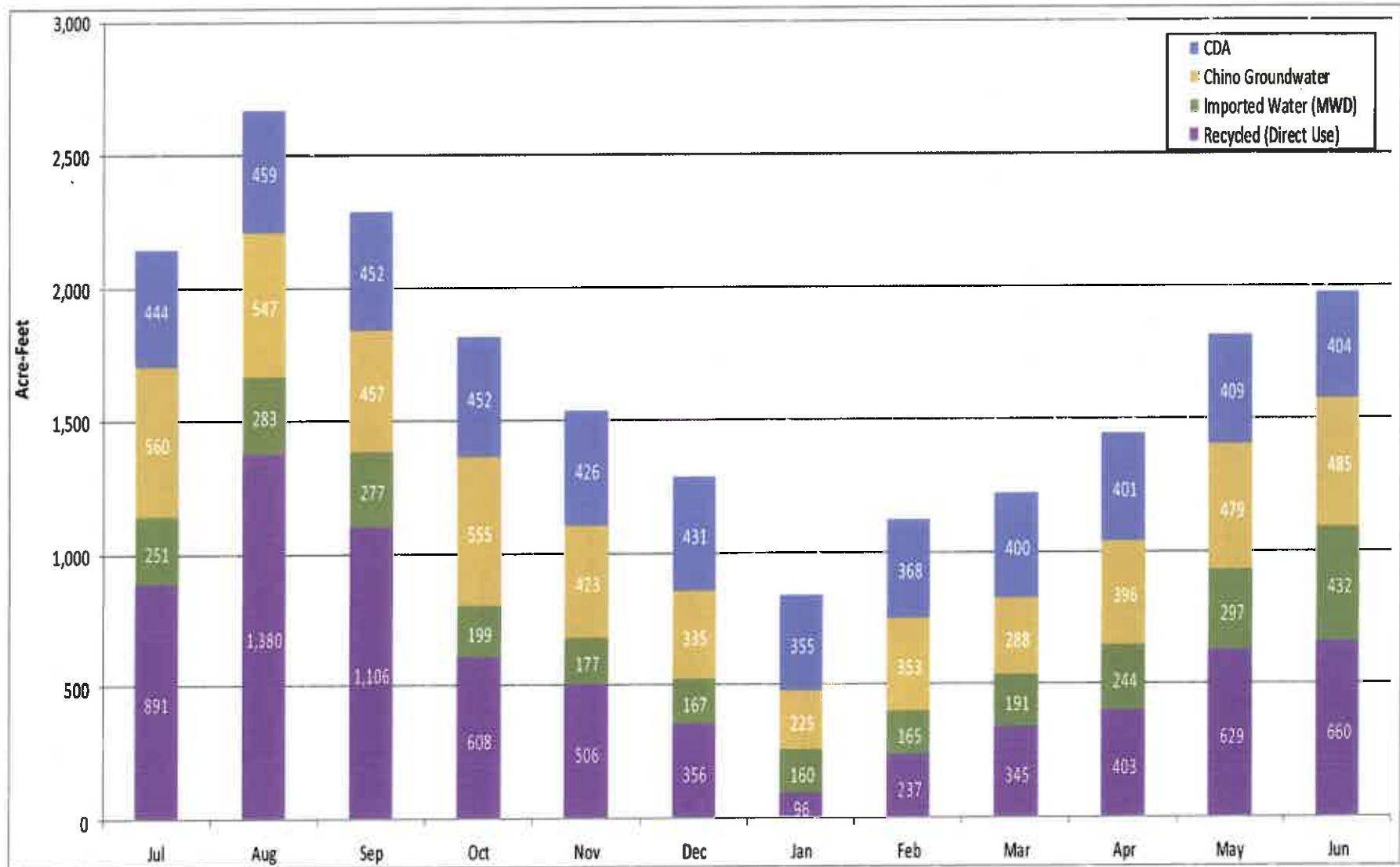
## Total IEUA Service Area Water Use For FY 15/16



## **SECTION 2**

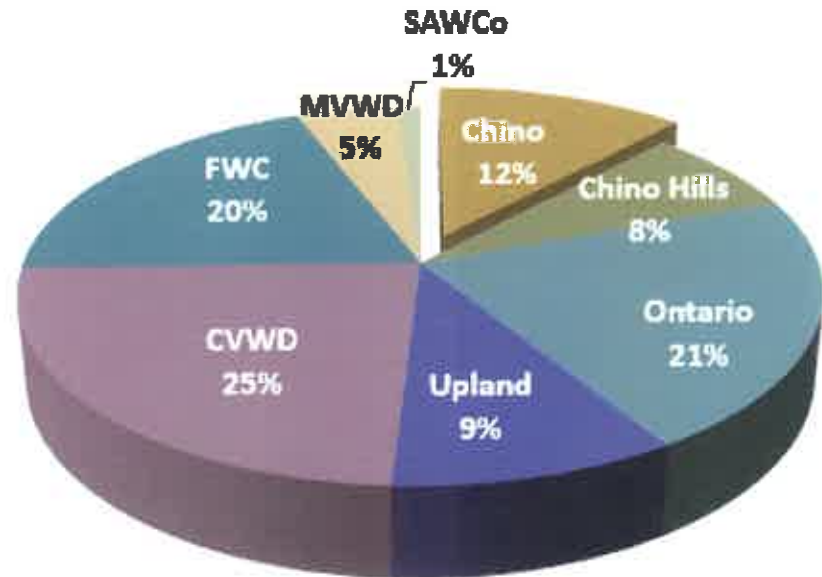
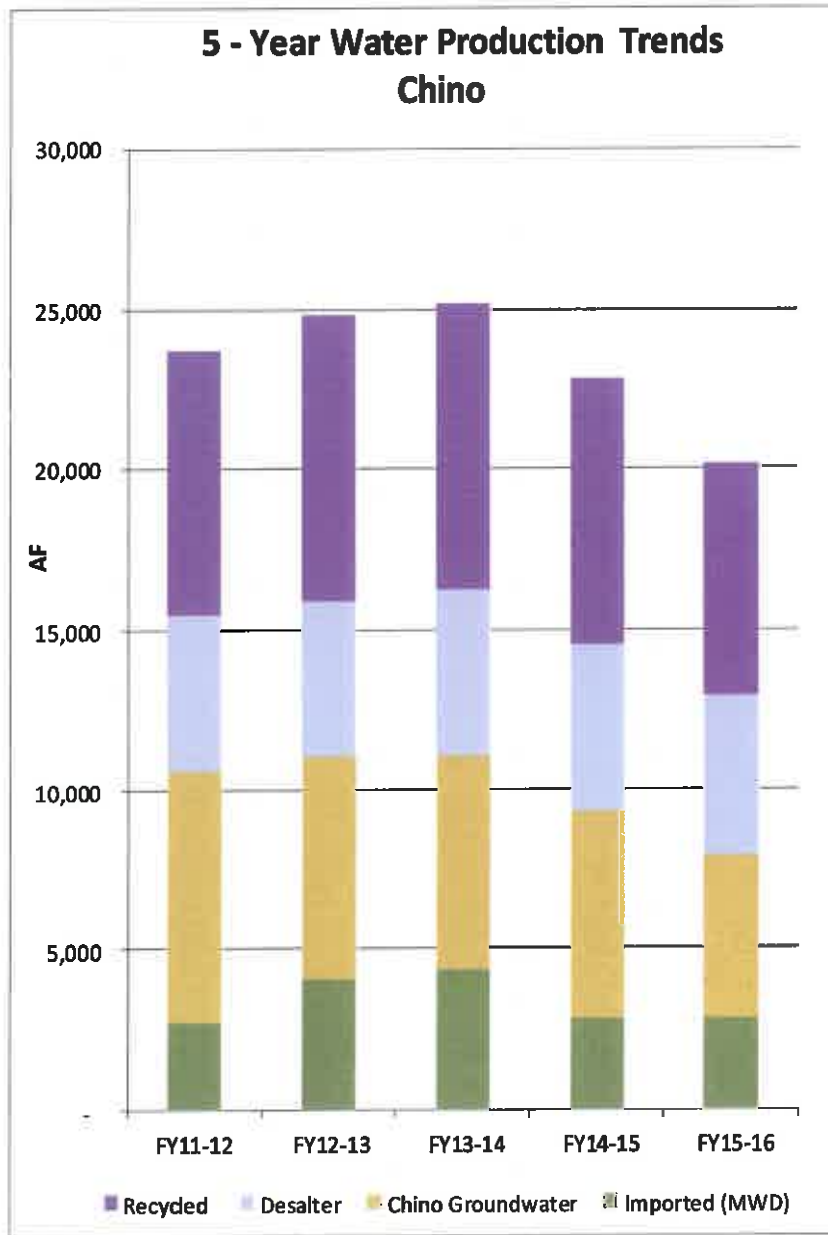
### **Retail Water Use Data from FY 15/16 by Agency**

## City of Chino FY 2015/16 Monthly Water Usage





## City of Chino FY 2015/16 Water Use Report

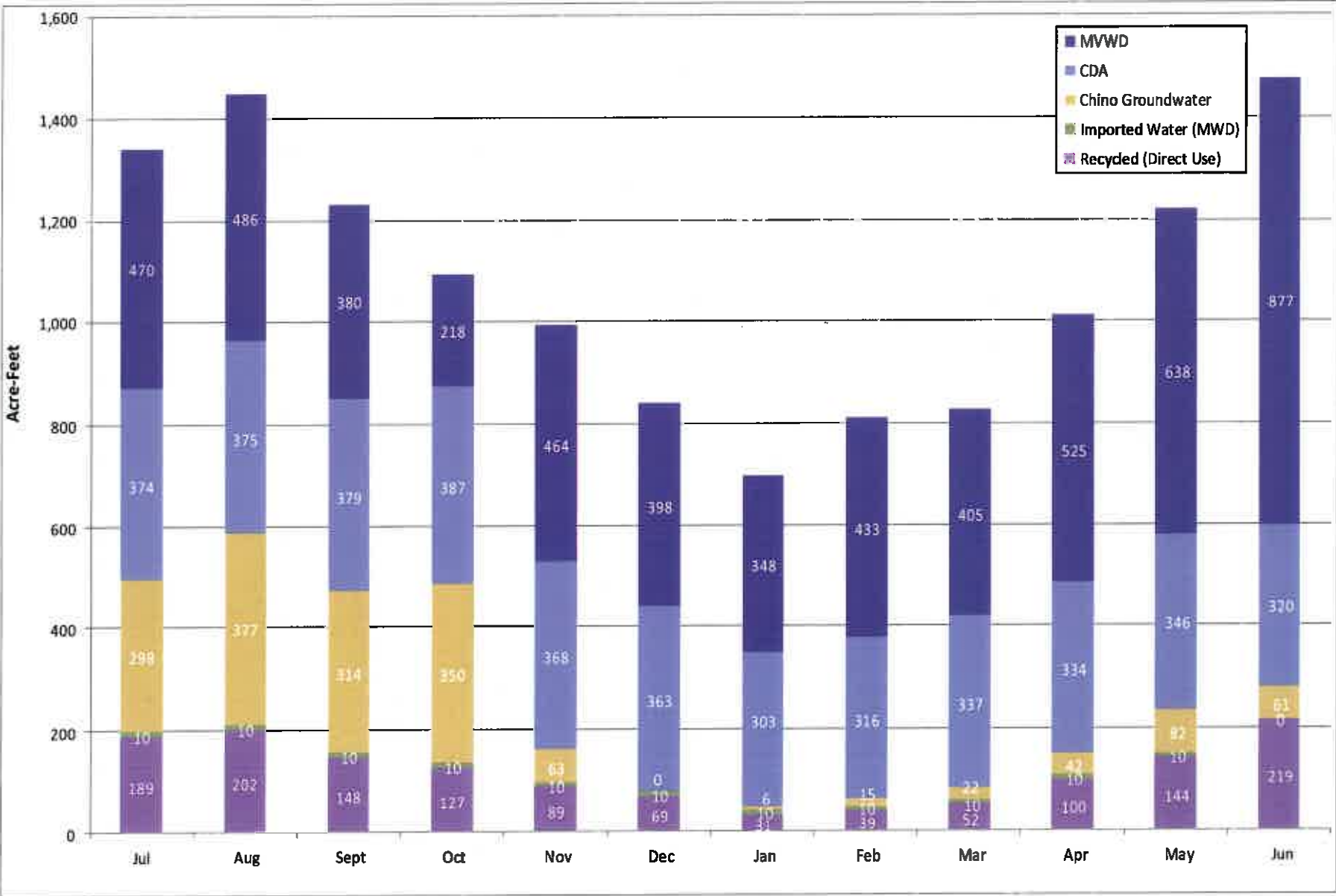


**In FY 2015/16, The City of Chino used 12% (20,163 AF) of 168,799 AF used in the IEUA service area.**

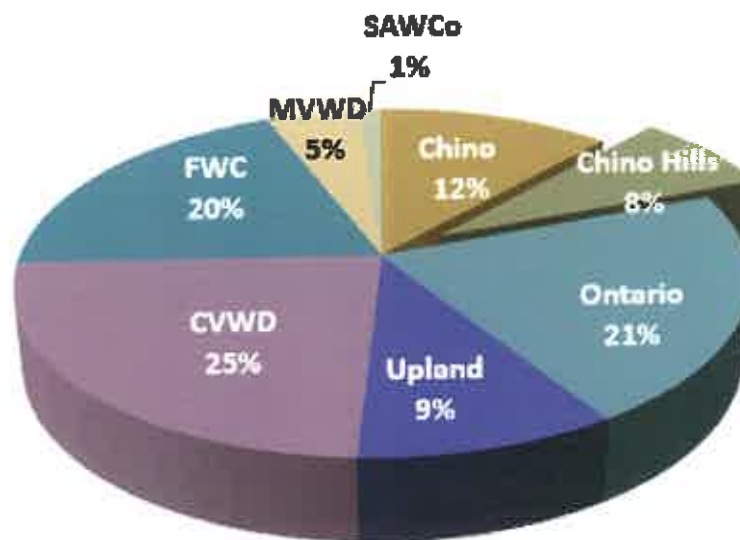
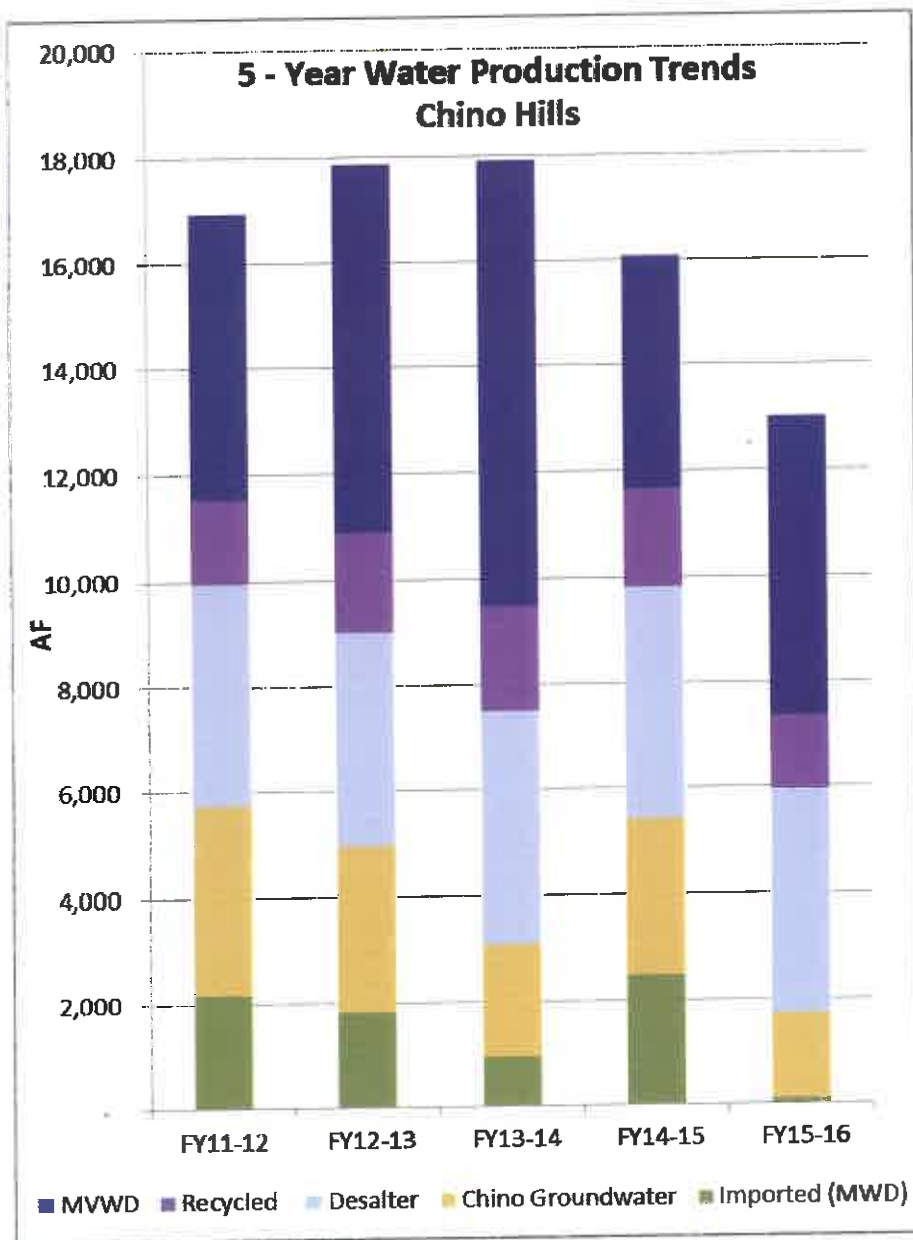
## City of Chino FY 2015/16 Monthly Water Usage

		Table 1. Total IEUA Service Area Water Use by Agency for FY15-16 (AF) Chino												
		July	August	September	October	November	December	January	February	March	April	May	June	Total
<b>Purchases from IEUA</b>	<b>Recycled (Direct use)</b>	891	1,380	1,106	608	506	356	98	237	345	403	629	660	7,217
	<b>Imported Water (MWD)</b>	251	283	277	199	177	167	160	165	191	244	297	432	2,843
	Subtotal	1,142	1,663	1,383	807	684	523	256	402	536	647	926	1,092	10,060
<b>Production</b>	<b>Chino Groundwater</b>	560	547	457	555	423	335	225	353	288	396	479	485	5,104
	Subtotal	560	547	457	555	423	335	225	353	288	396	479	485	5,104
<b>agencies</b>	<b>CDA</b>	444	459	452	452	426	431	355	368	400	401	409	404	5,000
	Subtotal	444	459	452	452	426	431	355	368	400	401	409	404	5,000
<b>Total</b>		<b>2,146</b>	<b>2,669</b>	<b>2,293</b>	<b>1,814</b>	<b>1,532</b>	<b>1,290</b>	<b>836</b>	<b>1,123</b>	<b>1,224</b>	<b>1,443</b>	<b>1,813</b>	<b>1,980</b>	<b>20,163</b>

# City of Chino Hills FY 2015/16 Monthly Water Usage



## City of Chino Hills FY 2015/16 Water Use Report



**In FY 2015/16, The City of Chino Hills used 8% (12,993 AF) of 168,799 AF used in the IEUA service area.**

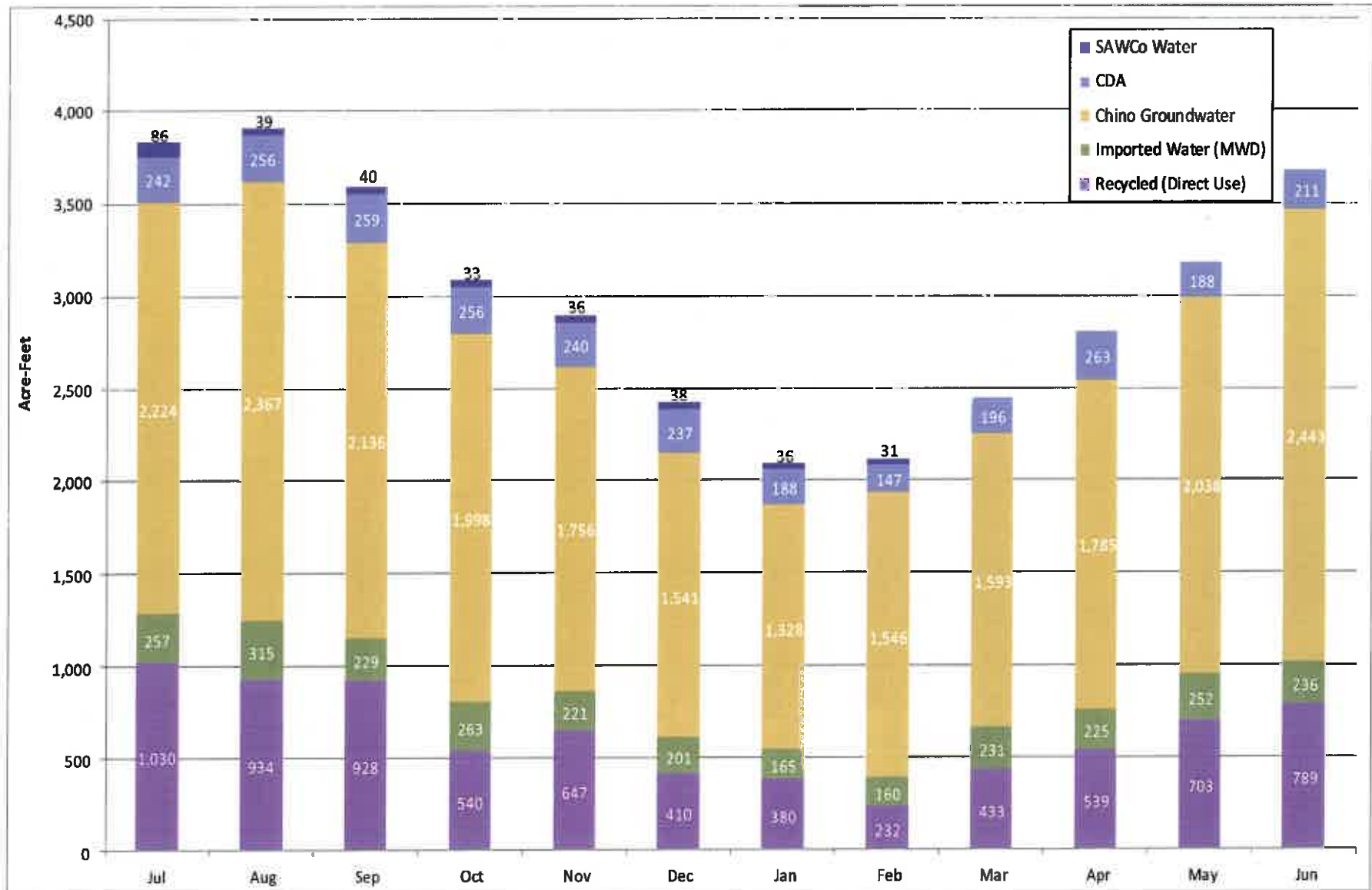
# City of Chino Hills

## FY 2015/16 Monthly Water Usage

**Table 1. Total IEUA Service Area Water Use by Agency for FY15-16 (AF) - Chino Hills**

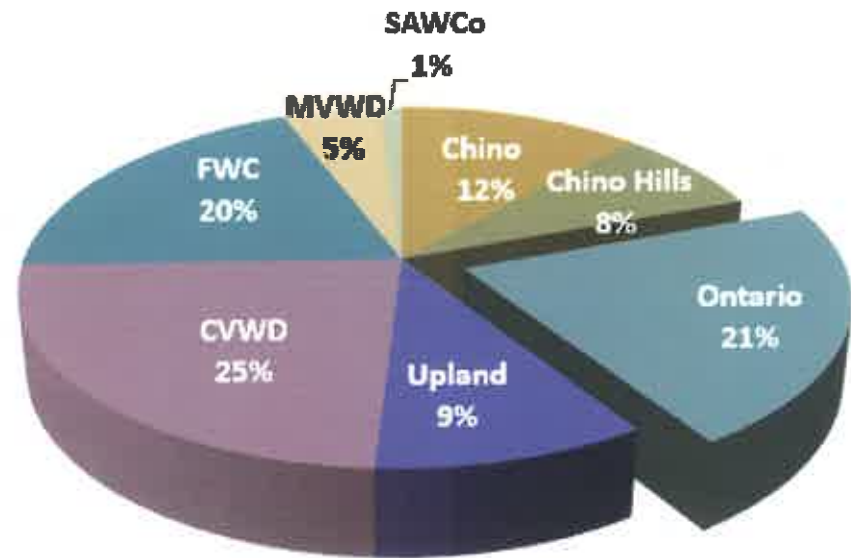
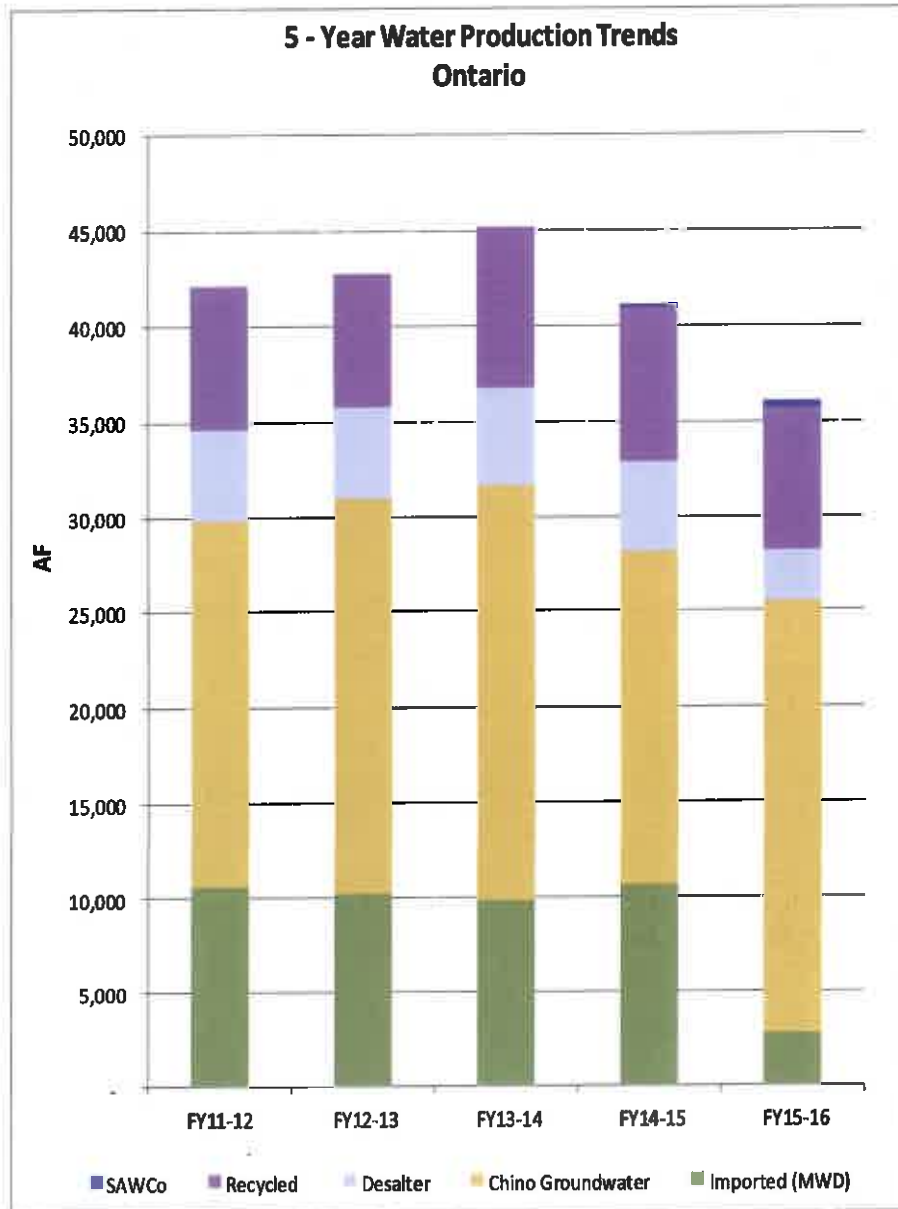
		July	August	September	October	November	December	January	February	March	April	May	June	Total
Purchases from IEUA	Recycled (Direct use)	189	202	148	127	89	69	31	39	52	100	144	219	1,410
	Imported Water (MWD)	10	10	10	10	10	10	10	10	10	10	10	0	110
Subtotal		199	212	158	137	99	79	41	49	62	110	154	219	1,520
Production	Chino Groundwater	298	377	314	350	63	0	6	15	22	42	82	61	1,630
	Subtotal	298	377	314	350	63	0	6	15	22	42	82	61	1,630
Purchase from other agencies	CDA	374	375	379	387	368	363	303	316	337	334	346	320	4,201
	MWD	470	486	380	218	464	398	348	433	405	525	638	877	5,642
Subtotal		844	860	759	605	832	761	652	749	742	859	984	1,197	9,843
<b>Total</b>		<b>1,341</b>	<b>1,449</b>	<b>1,231</b>	<b>1,093</b>	<b>984</b>	<b>840</b>	<b>699</b>	<b>812</b>	<b>826</b>	<b>1,011</b>	<b>1,220</b>	<b>1,477</b>	<b>12,993</b>

## City of Ontario FY 2015/16 Monthly Water Usage





# City of Ontario FY 2015/16 Water Use Report

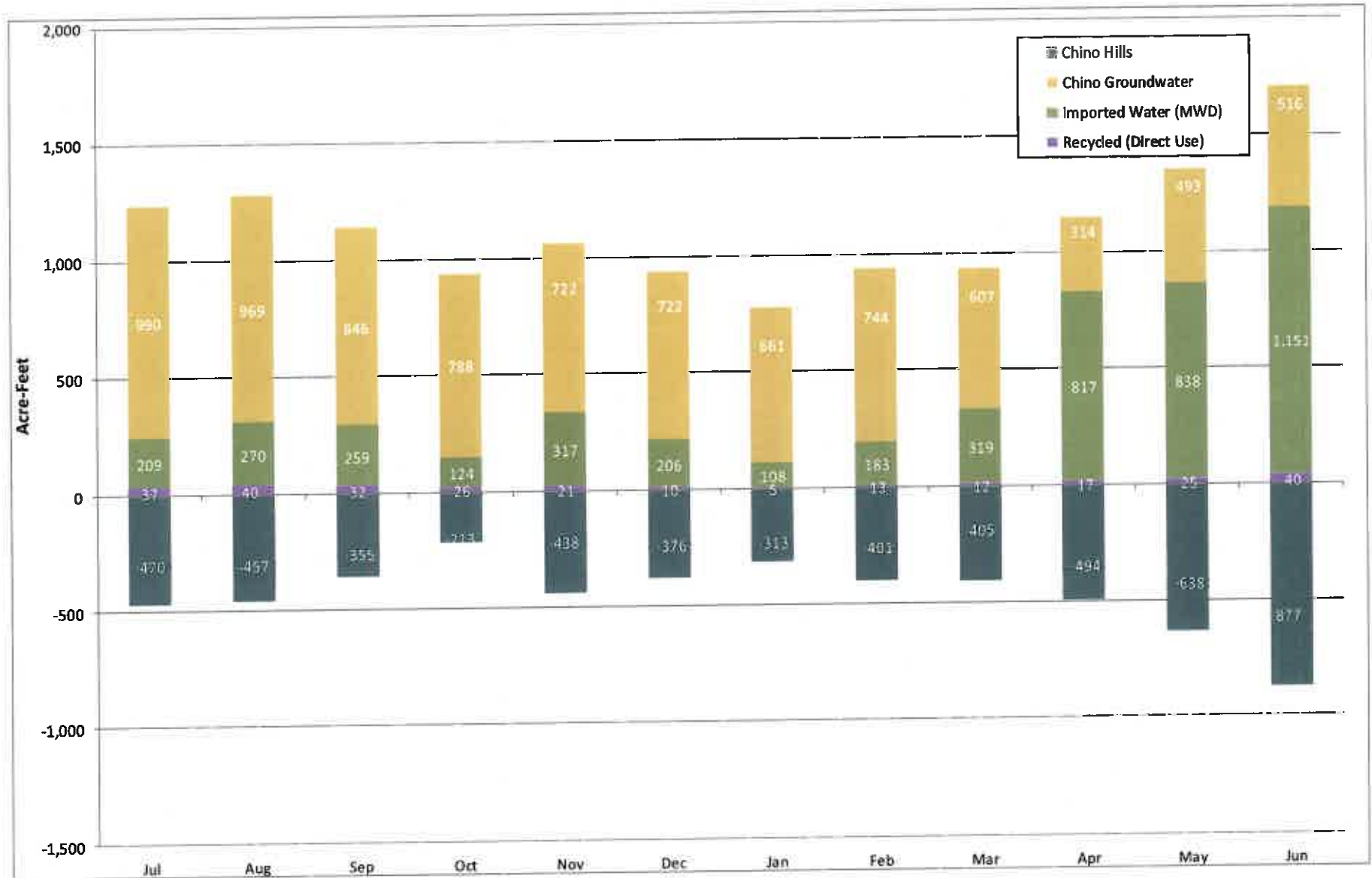


**In FY 2015/16, The City of Ontario used 21% (36,096 AF) of  
168,799 AF used in the IEUA service area.**

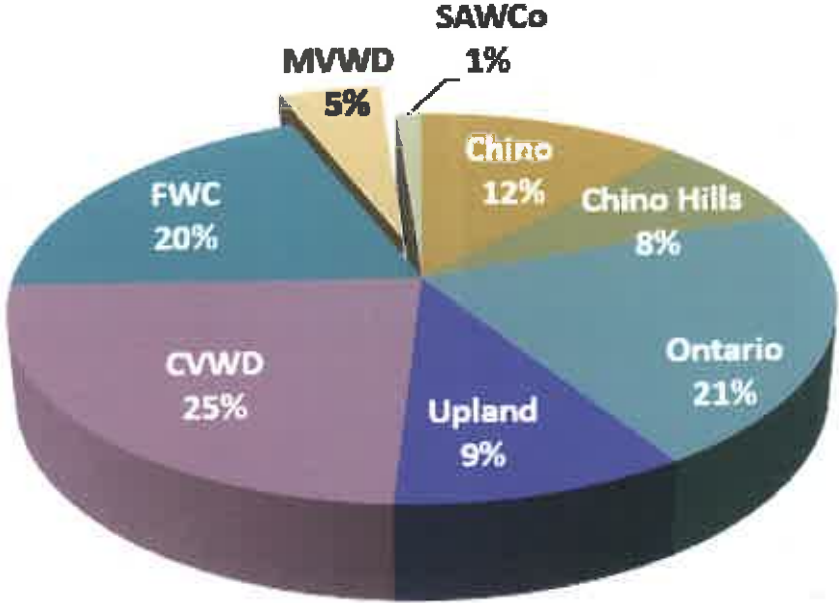
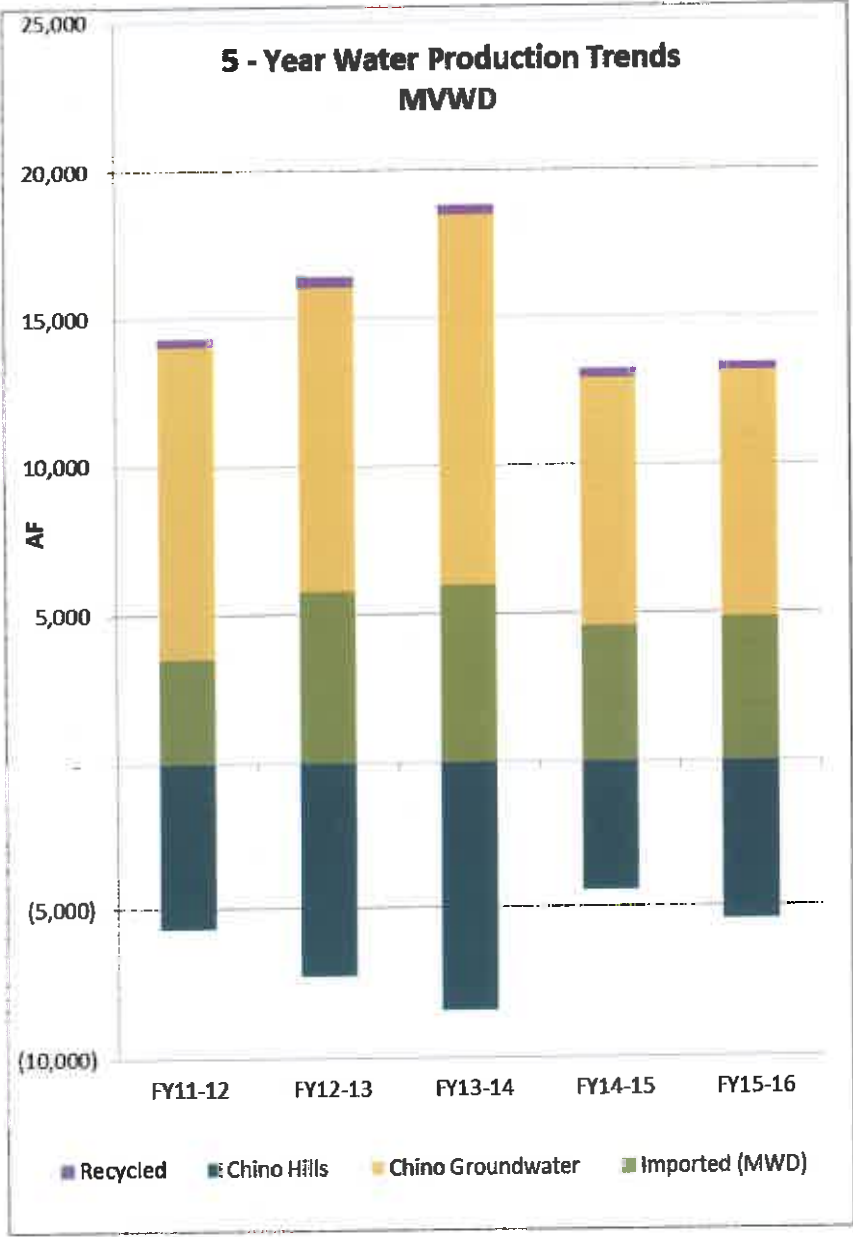
## City of Ontario FY 2015/16 Monthly Water Usage

		Table 1: IEUA Service Area Water Use by Agency for FY15-16 (AF) - Ontario												
		July	August	September	October	November	December	January	February	March	April	May	June	Total
Purchases from IEUA	Recycled (Direct use)	1,030	934	928	540	647	410	380	232	433	539	703	789	7,566
	Imported Water (MWD)	257	315	229	263	221	201	165	160	231	225	252	236	2,755
Subtotal		1,287	1,250	1,157	803	867	611	546	392	664	764	955	1,025	10,321
Production	Chino Groundwater	2,224	2,367	2,136	1,998	1,756	1,541	1,328	1,546	1,583	1,785	2,038	2,443	22,755
	Subtotal	2,224	2,367	2,136	1,998	1,756	1,541	1,328	1,546	1,583	1,785	2,038	2,443	22,755
Purchase from other agencies	CDA	242	256	258	256	240	237	188	147	198	263	188	211	2,882
	SAWCo Water	86	39	40	33	36	38	36	31	0	0	0	0	338
Subtotal		328	295	299	289	276	275	224	178	198	263	188	211	3,021
<b>Total</b>		<b>3,839</b>	<b>3,911</b>	<b>3,592</b>	<b>3,090</b>	<b>2,899</b>	<b>2,427</b>	<b>2,098</b>	<b>2,116</b>	<b>2,453</b>	<b>2,812</b>	<b>3,181</b>	<b>3,678</b>	<b>36,097</b>

## Monte Vista Water District FY 2015/16 Monthly Water Usage



# Monte Vista Water District FY 2015/16 Water Use Report

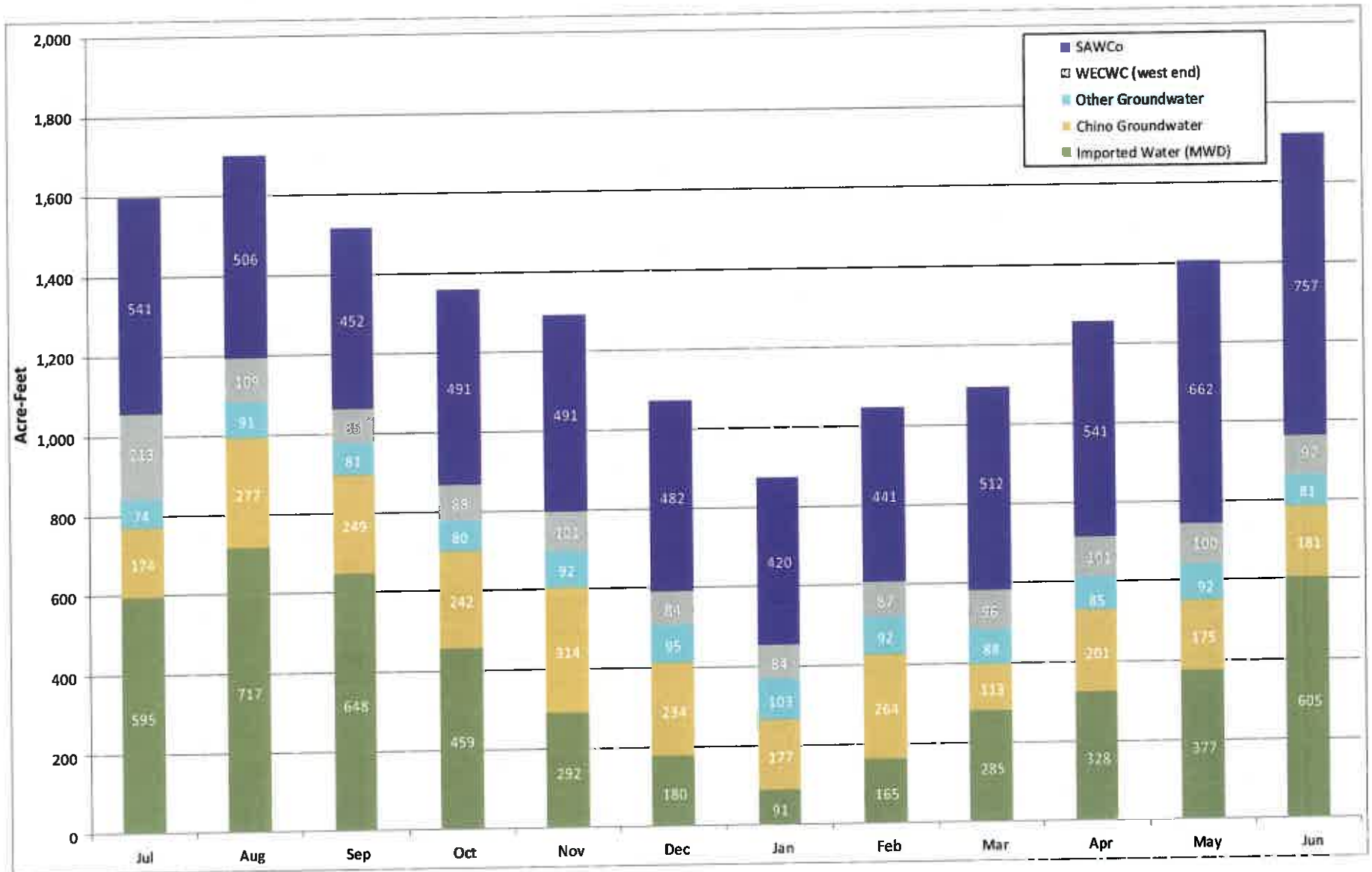


**In FY 2015/16, Monte Vista Water District used 5% (8,012 AF) of 168,799 AF used in the IEUA service area.**

## Monte Vista Water District FY 2015/16 Monthly Water Usage

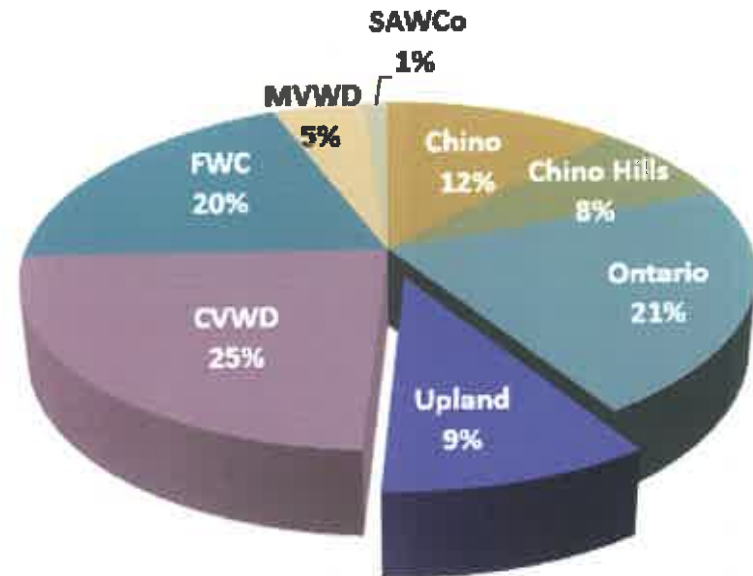
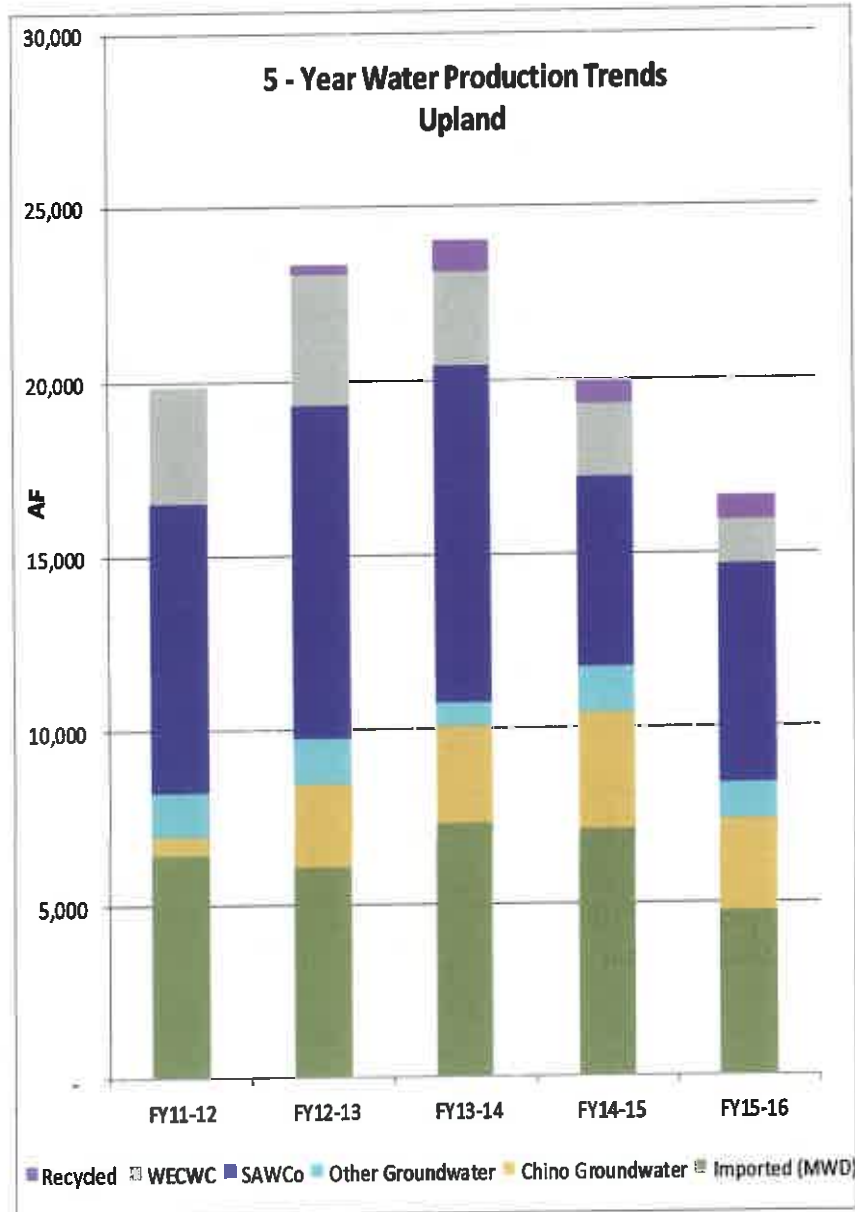
Table 1. IEUA Service Area Water Use by Agency for FY 15-16 (AF) - MVWD														
		July	August	September	October	November	December	January	February	March	April	May	June	Total
Purchases from IEUA	Recycled (Direct use)	37	40	32	26	21	10	5	13	12	17	25	40	278
	Imported Water (MWD)	209	270	259	124	317	206	108	183	319	817	838	1,151	4,799
	Subtotal	246	310	291	150	338	216	113	198	331	834	862	1,191	5,078
Production	Chino Groundwater	990	969	846	788	722	722	661	744	607	314	493	516	8,371
	Subtotal	990	969	846	788	722	722	661	744	607	314	493	516	8,371
Sales to other agencies	Chino Hills	-470	-457	-355	-213	-438	-376	-313	-401	-405	-494	-638	-877	-5,437
	Subtotal	-470	-457	-355	-213	-438	-376	-313	-401	-405	-494	-638	-877	-5,437
	<b>Total</b>	<b>766</b>	<b>822</b>	<b>781</b>	<b>725</b>	<b>622</b>	<b>563</b>	<b>462</b>	<b>539</b>	<b>533</b>	<b>654</b>	<b>717</b>	<b>829</b>	<b>8,012</b>

## City of Upland FY 2015/16 Monthly Water Usage





## City of Upland FY 2015/16 Water Use Report



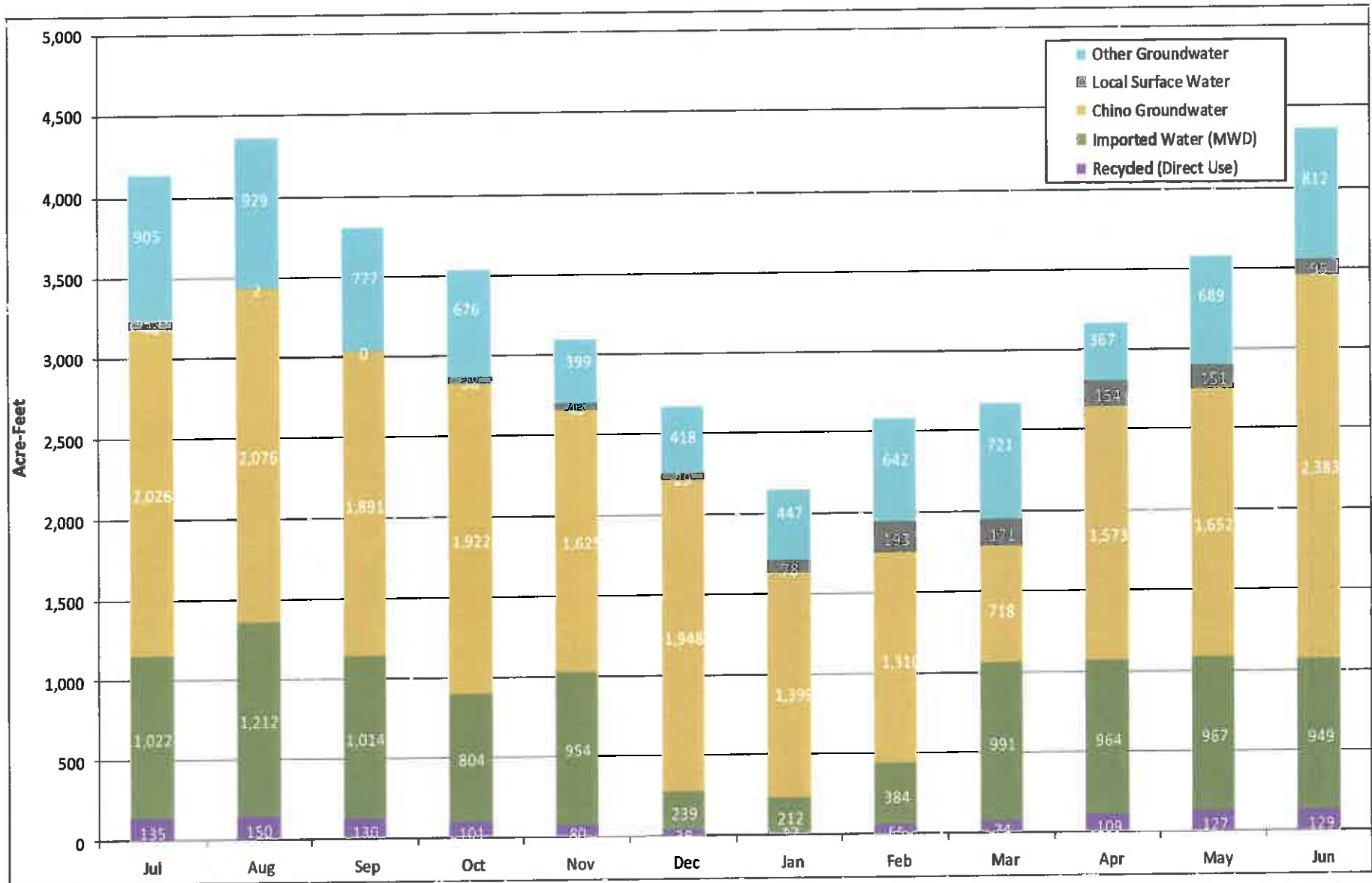
**In FY 2015/16, The City of Upland used 9% (16,806 AF) of 168,799 AF used in the IEUA service area.**

## City of Upland FY 2015/16 Monthly Water Usage

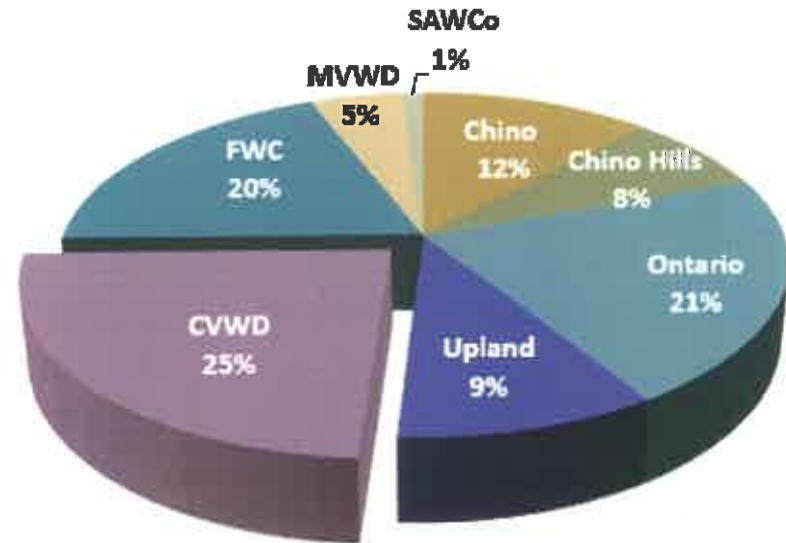
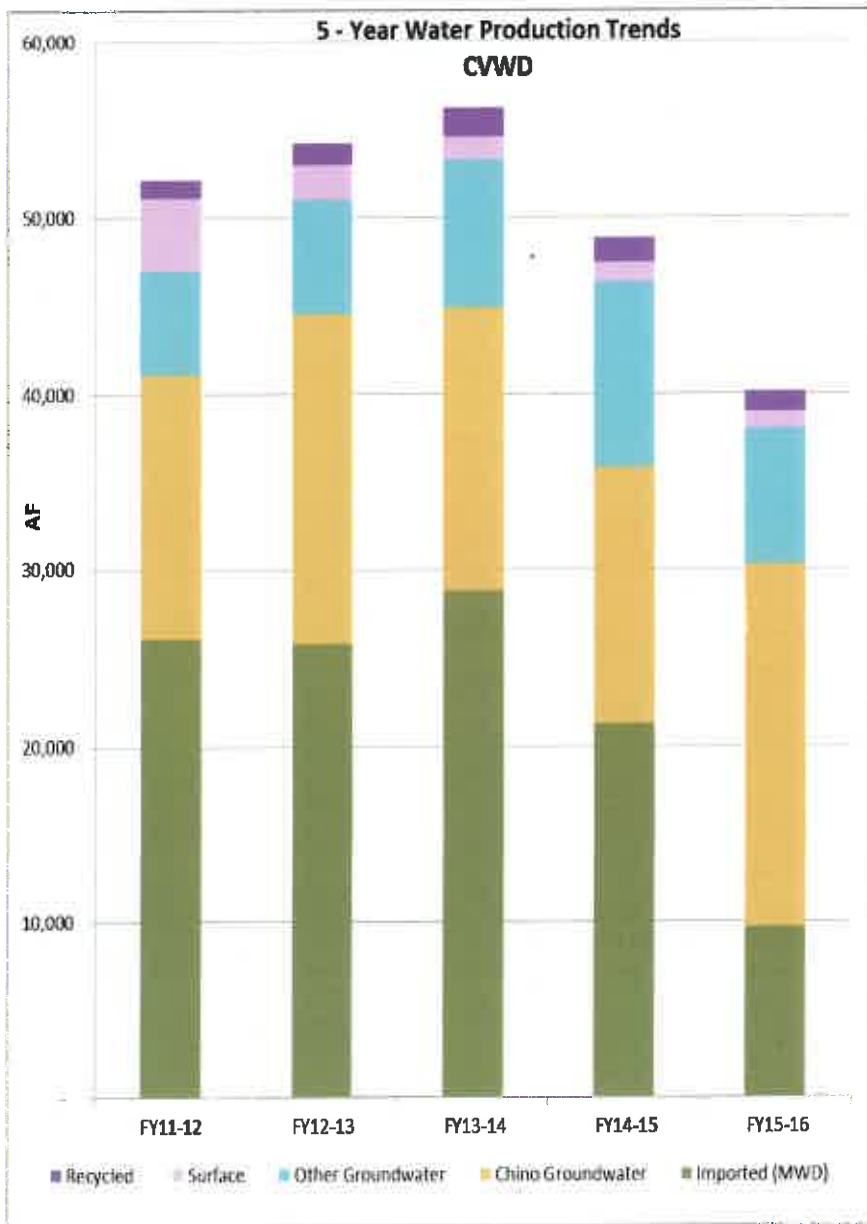
		Table 1. IEUA Service Area Water Use by Agency for FY 15-16 (AF) - Upland												
		July	August	September	October	November	December	January	February	March	April	May	June	Total
Purchases from IEUA	Recycled (Direct use)	92	97	82	82	58	37	15	37	34	57	59	69	719
	Imported Water (MWD)	595	717	648	459	292	180	91	165	285	328	377	805	4,742
	Imported Water* (RAW)	0	0	0	0	0	0	23	64	24	7	23	8	148
Subtotal		687	814	730	540	350	217	129	266	344	391	459	881	5,609
Production	Chino Groundwater	174	277	249	242	314	234	177	264	113	201	175	181	2,601
	Other Groundwater	74	91	81	80	92	95	103	92	88	85	92	81	1,054
Subtotal		248	368	330	322	406	329	280	356	201	286	267	262	3,655
Purchase from other agencies	SAWCo Water	541	508	452	491	491	482	420	441	512	541	862	757	6,297
	West End	213	109	85	88	101	84	84	87	96	101	100	97	1,246
Subtotal		753	615	537	579	592	566	505	528	609	642	763	854	7,543
<b>Total</b>		<b>1,689</b>	<b>1,796</b>	<b>1,597</b>	<b>1,442</b>	<b>1,348</b>	<b>1,112</b>	<b>914</b>	<b>1,150</b>	<b>1,153</b>	<b>1,319</b>	<b>1,488</b>	<b>1,798</b>	<b>16,807</b>

\*purchased from WFA

## Cucamonga Valley Water District FY 2015/16 Monthly Water Usage



## Cucamonga Valley Water District FY 2015/16 Water Report



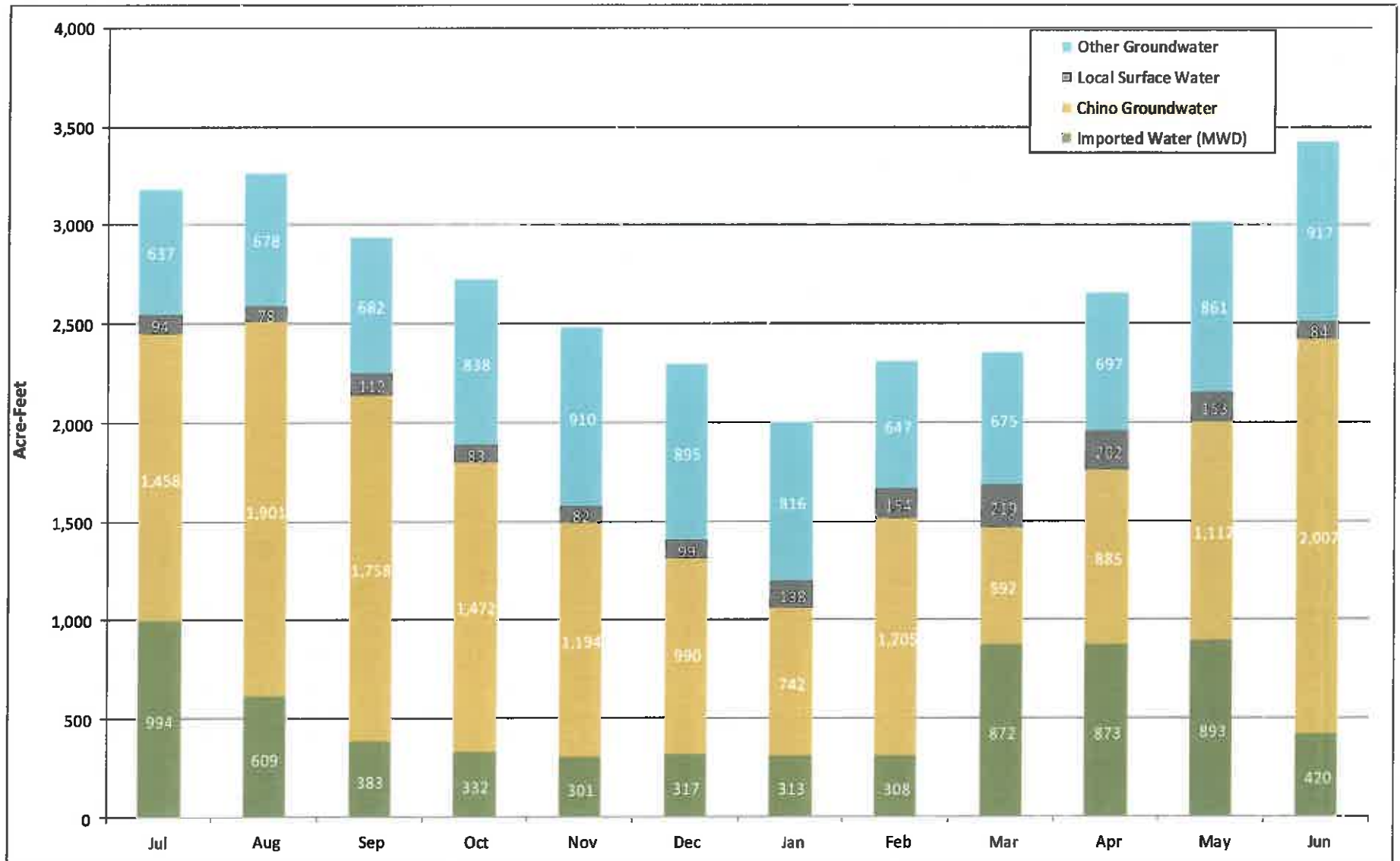
**In FY 2015/16, Cucamonga Valley Water District used 25% (40,166 AF) of 168,799 AF used in the IEUA service area.**

# Cucamonga Valley Water District FY 2015/16 Monthly Water Usage

**Table 1. IEUA Service Area Water Use by Agency for FY 15-16 (AF) - CVWD**

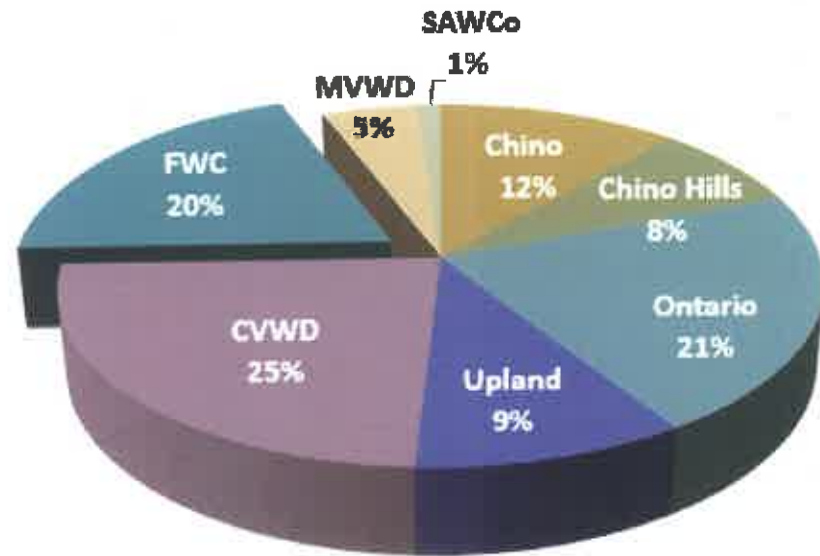
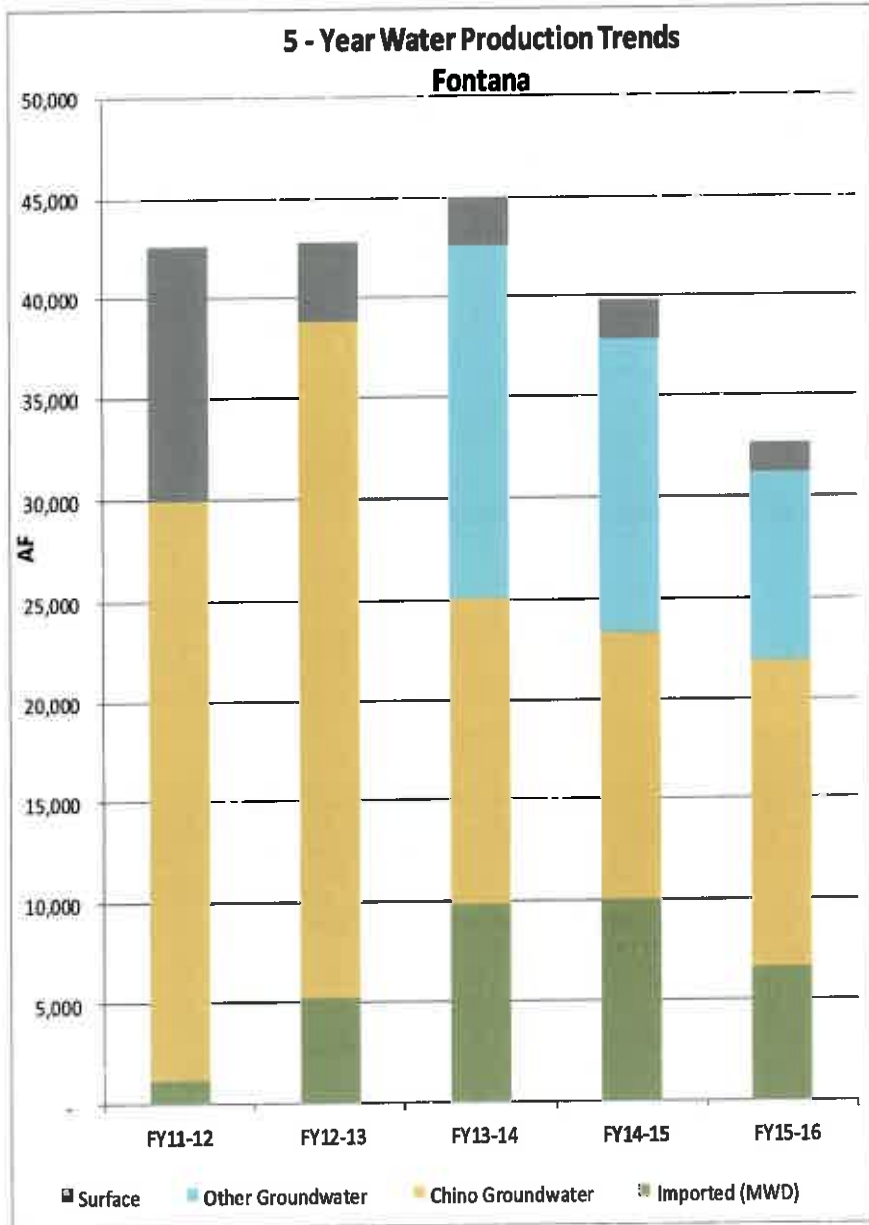
		July	August	September	October	November	December	January	February	March	April	May	June	Total
<b>Purchases from IEUA</b>	Recycled (Direct use)	135	150	130	101	80	38	17	55	74	109	127	129	1,146
	Imported Water (MWD)	1,022	1,212	1,014	804	954	239	212	384	991	964	967	949	9,712
Subtotal		1,157	1,362	1,144	905	1,034	277	229	439	1,065	1,073	1,095	1,078	10,857
<b>Production</b>	Chino Groundwater	2,026	2,076	1,891	1,822	1,625	1,948	1,399	1,310	718	1,573	1,652	2,383	20,524
	Local Surface Water	48	2	0	38	43	29	78	193	171	154	151	95	1,001
	Other Groundwater	905	929	777	676	399	418	447	642	721	367	689	812	7,783
Subtotal		2,979	3,007	2,668	2,636	2,067	2,395	1,924	2,145	1,610	2,094	2,493	3,290	29,309
<b>Total</b>		<b>4,136</b>	<b>4,369</b>	<b>3,812</b>	<b>3,541</b>	<b>3,100</b>	<b>2,672</b>	<b>2,153</b>	<b>2,584</b>	<b>2,675</b>	<b>3,167</b>	<b>3,588</b>	<b>4,368</b>	<b>40,166</b>

## Fontana Water Company FY 2015/16 Monthly Water Usage





## Fontana Water Company FY 2015/16 Water Use Report

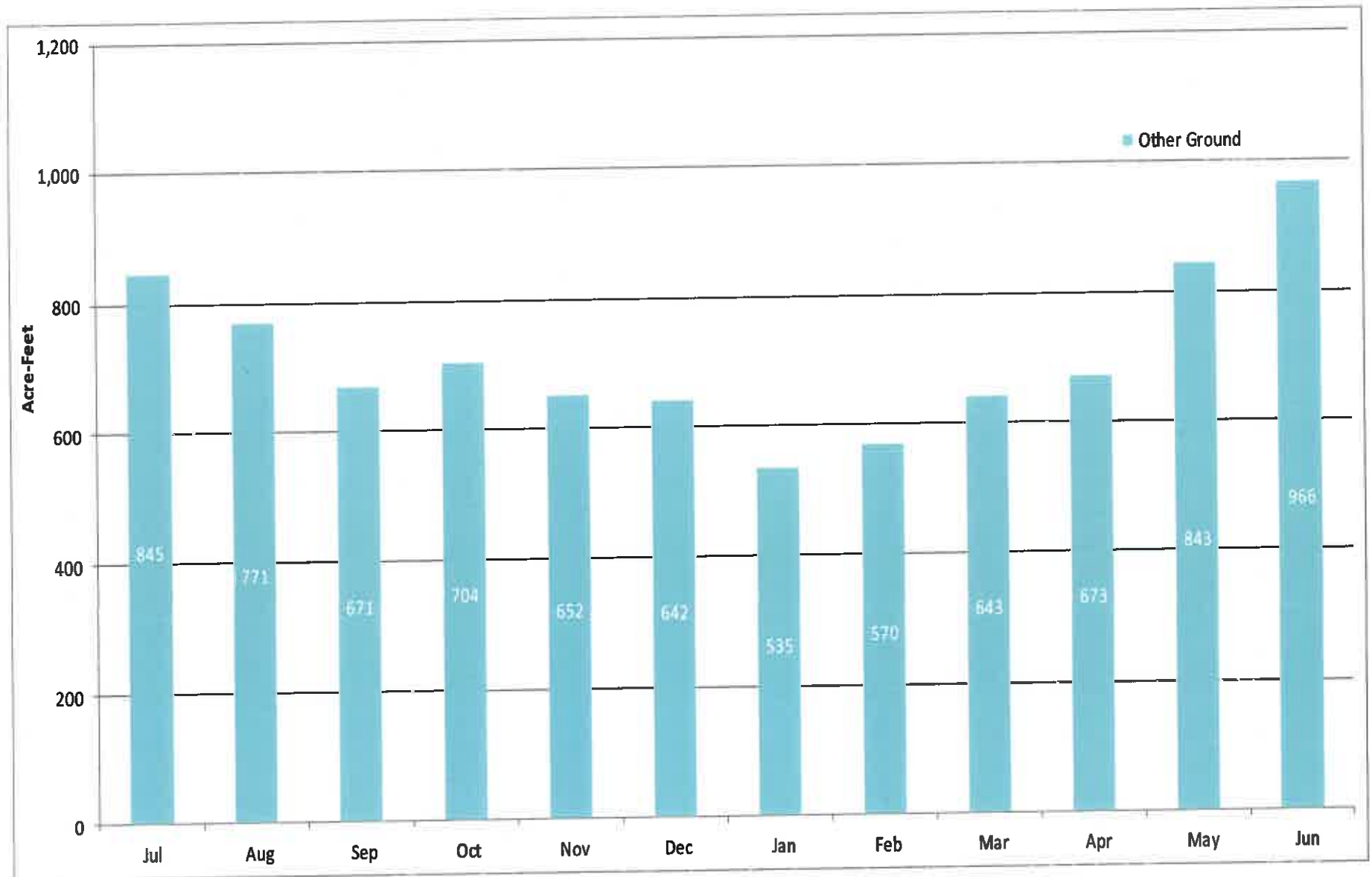


**In FY 2015/16, The Fontana Water Company used 20% (32,680 AF) of 168,799 AF used in the IEUA service area.**

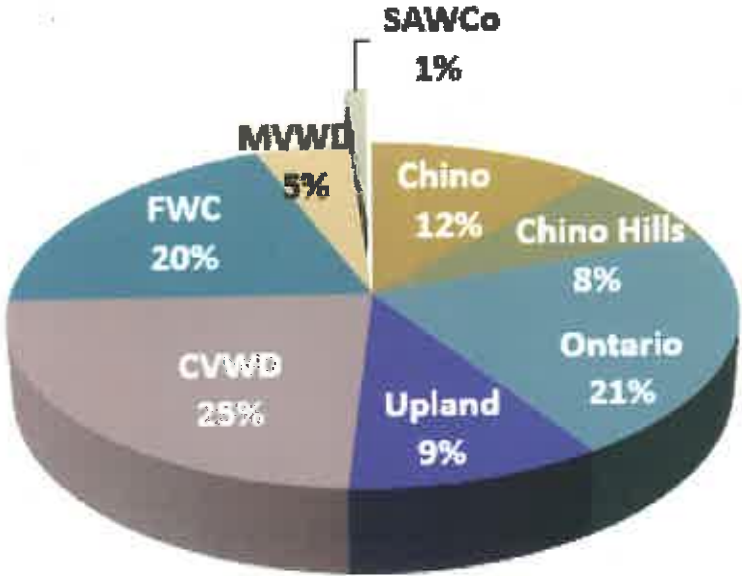
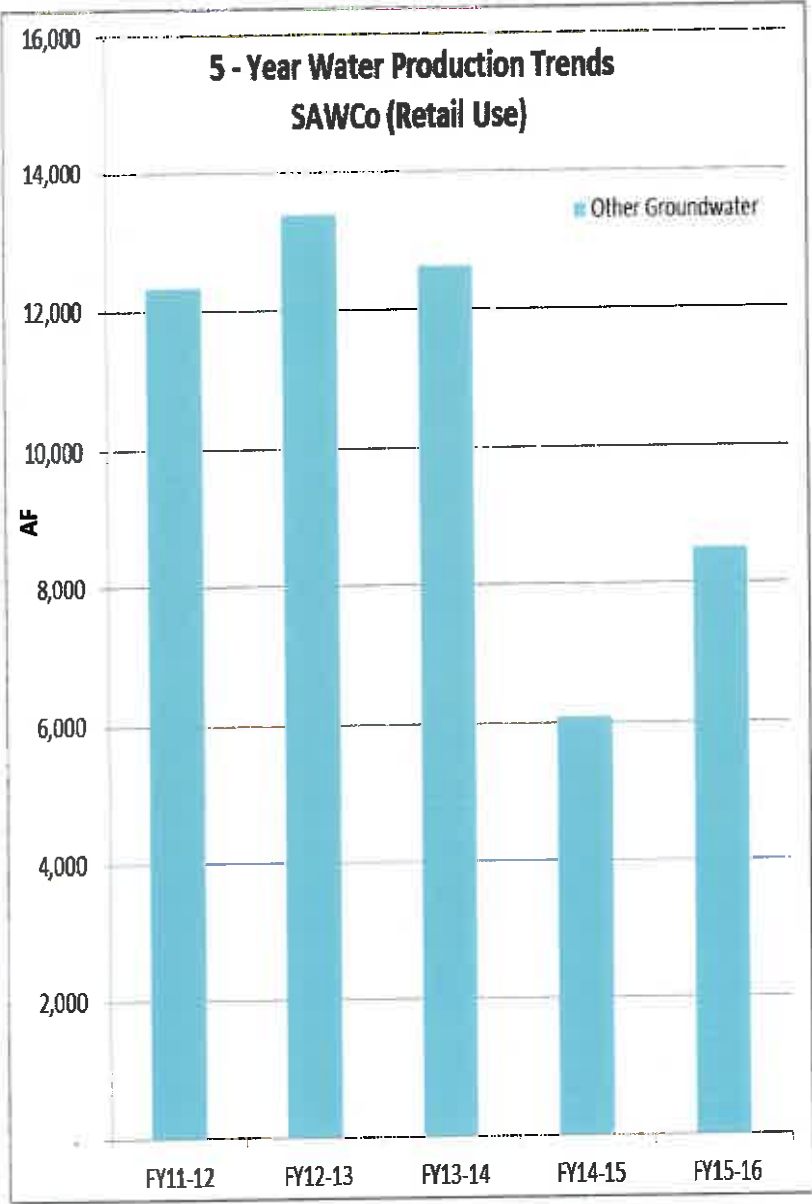
## Fontana Water Company FY 2015/16 Monthly Water Usage

Table 1. IEUA Service Area Water Use by Agency for FY15-16 (AF) - FWC														
		July	August	September	October	November	December	January	February	March	April	May	June	Total
Purchases from IEUA	Imported Water (MWD)	994	609	383	332	301	317	313	308	872	873	893	420	6,613
	Subtotal	994	609	383	332	301	317	313	308	872	873	893	420	6,613
Production	Chino Groundwater	1,458	1,901	1,758	1,472	1,194	990	742	1,205	592	885	1,112	2,007	15,317
	Local Surface Water	94	78	112	83	82	99	138	154	219	202	153	84	1,497
	Other Groundwater	637	678	682	838	910	895	816	847	675	697	861	917	9,253
Subtotal		2,189	2,657	2,552	2,394	2,186	1,984	1,696	2,005	1,486	1,784	2,127	3,007	28,087
Total		3,183	3,266	2,935	2,726	2,487	2,301	2,010	2,313	2,358	2,657	3,020	3,427	32,681

## San Antonio Water Company FY 2015/16 Monthly Water Usage



# San Antonio Water Company FY 2015/16 Water Use Report



**In FY 2015/16, The San Antonio Water Company used 1% (1,881 AF) of 168,799 AF used in the IEUA service area.**

## San Antonio Water Company FY 2015/16 Monthly Water Usage

		Table 1. IEUA Service Area Water Use by Agency for FY15-16 (AF) - SAWCO												
		July	August	September	October	November	December	January	February	March	April	May	June	Total
Production	Other Groundwater	845	771	671	704	652	642	535	570	643	673	843	966	8,517
	Subtotal	845	771	671	704	652	642	535	570	643	673	843	966	8,517
Sales to Other Agencies	Ontario	-86	-39	-40	-33	-36	-38	-36	-31	0	0	0	0	-338
	Upland	-541	-506	-452	-491	-491	-482	-420	-441	-512	-541	-662	-757	-6,297
	Subtotal	-627	-545	-492	-524	-527	-520	-457	-472	-512	-541	-662	-757	-6,635
	<b>Total</b>	<b>218</b>	<b>226</b>	<b>180</b>	<b>181</b>	<b>126</b>	<b>123</b>	<b>78</b>	<b>98</b>	<b>131</b>	<b>132</b>	<b>180</b>	<b>209</b>	<b>1,882</b>

**APPENDIX A**  
**Five year Historical Data Summary**



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
<b>Subtotal</b>		<b>10,060</b>	<b>1,520</b>	<b>10,321</b>	<b>5,609</b>	<b>10,857</b>	<b>6,613</b>	<b>5,078</b>	<b>0</b>	<b>50,058</b>
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
<b>Subtotal</b>		<b>5,104</b>	<b>1,630</b>	<b>22,755</b>	<b>3,655</b>	<b>29,309</b>	<b>26,067</b>	<b>8,371</b>	<b>8,517</b>	<b>105,408</b>
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
<b>Subtotal</b>		<b>5,000</b>	<b>9,843</b>	<b>3,020</b>	<b>7,543</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>25,406</b>
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
<b>Subtotal</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-5,437</b>	<b>-6,635</b>	<b>-12,072</b>
<b>Total</b>		<b>20,163</b>	<b>12,993</b>	<b>36,096</b>	<b>16,807</b>	<b>40,166</b>	<b>32,681</b>	<b>8,012</b>	<b>1,882</b>	<b>168,799</b>

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

FY 12-13		Total IEUA Service Area Water Use by Retail Agency for FY 12-13 (AFY)								
		CHINO	CHINO HILLS	ONTARIO	UPLAND	CVWD	FWC	MVWD	SAWCo	TOTAL
Purchases from IEUA	Imported Water (MWD)	4,085	1,822	10,244	6,067	25,845	5,215	5,737	0	59,013
	Recycled (Direct Use)	8,957	1,890	6,894	264	1,231	0	327	0	19,562
Subtotal		13,042	3,711	17,138	6,331	27,075	5,215	6,063	0	78,575
Production	Chino Groundwater	7,022	3,134	20,801	2,358	18,740	33,576	10,325	0	95,956
	Other Groundwater	0	0	0	1,349	6,420	0	0	13,376	21,145
	Local Surface Water	0	0	0	0	1,921	4,059	0	0	5,980
Subtotal		7,022	3,134	20,801	3,707	27,081	37,635	10,325	13,376	123,081
Purchases from Other Agencies	CDA	4,805	4,075	4,792	0	0	0	0	0	13,671
	MVWD	0	6,949	0	0	0	0	0	0	6,949
	SAWCo Water	0	0	0	9,594	0	0	841	0	10,435
	West End	0	0	0	3,692	0	0	0	0	3,692
Subtotal		4,805	11,024	4,792	13,286	0	0	841	0	34,747
Sales to Other Agencies	Chino Hills	0	0	0	0	0	0	-7,249	0	-7,249
	MVWD	0	0	0	0	0	0	0	-841	-841
	Upland	0	0	0	0	0	0	0	-9,594	-9,594
Subtotal		0	0	0	0	0	0	-7,249	-10,435	-17,684
Total		24,868	17,869	42,731	23,324	54,157	42,850	9,980	2,941	218,719

FY 11-12		Total IEUA Service Area Water Use by Retail Agency for FY 11-12 (AFY)								
		CHINO	CHINO HILLS	ONTARIO	UPLAND	CVWD	FWC	MVWD	SAWCo	TOTAL
Purchases from IEUA	Imported Water (MWD)	2,743	2,173	10,661	6,446	26,144	1,202	3,506	0	52,876
	Recycled (Direct Use)	8,274	1,567	7,493	0	1,019	0	288	0	18,641
Subtotal		11,018	3,740	18,154	6,446	27,163	1,202	3,793	0	71,517
Production	Chino Groundwater	7,856	3,566	19,164	526	14,949	28,748	10,538	0	85,346
	Other Groundwater	0	0	0	1,246	5,933	0	0	12,328	19,507
	Local Surface Water	0	0	0	0	4,070	12,674	0	0	16,744
Subtotal		7,856	3,566	19,164	1,772	24,952	41,421	10,538	12,328	121,597
Purchases from Other Agencies	CDA	4,887	4,236	4,838	0	0	0	0	0	13,961
	MVWD	0	5,416	0	0	0	0	0	0	5,416
	SAWCo Water	0	0	0	8,309	0	0	1,277	0	9,586
	West End	0	0	0	3,324	0	0	0	0	3,324
Subtotal		4,887	9,652	4,838	11,633	0	0	1,277	0	32,287
Sales to Other Agencies	Chino Hills	0	0	0	0	0	0	-5,661	0	-5,661
	MVWD	0	0	0	0	0	0	0	-1,277	-1,277
	Upland	0	0	0	0	0	0	0	-8,309	-8,309
Subtotal		0	0	0	0	0	0	-5,661	-9,586	-15,247
Total		23,761	16,959	42,156	19,851	52,115	42,624	9,947	2,742	210,154

# **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.

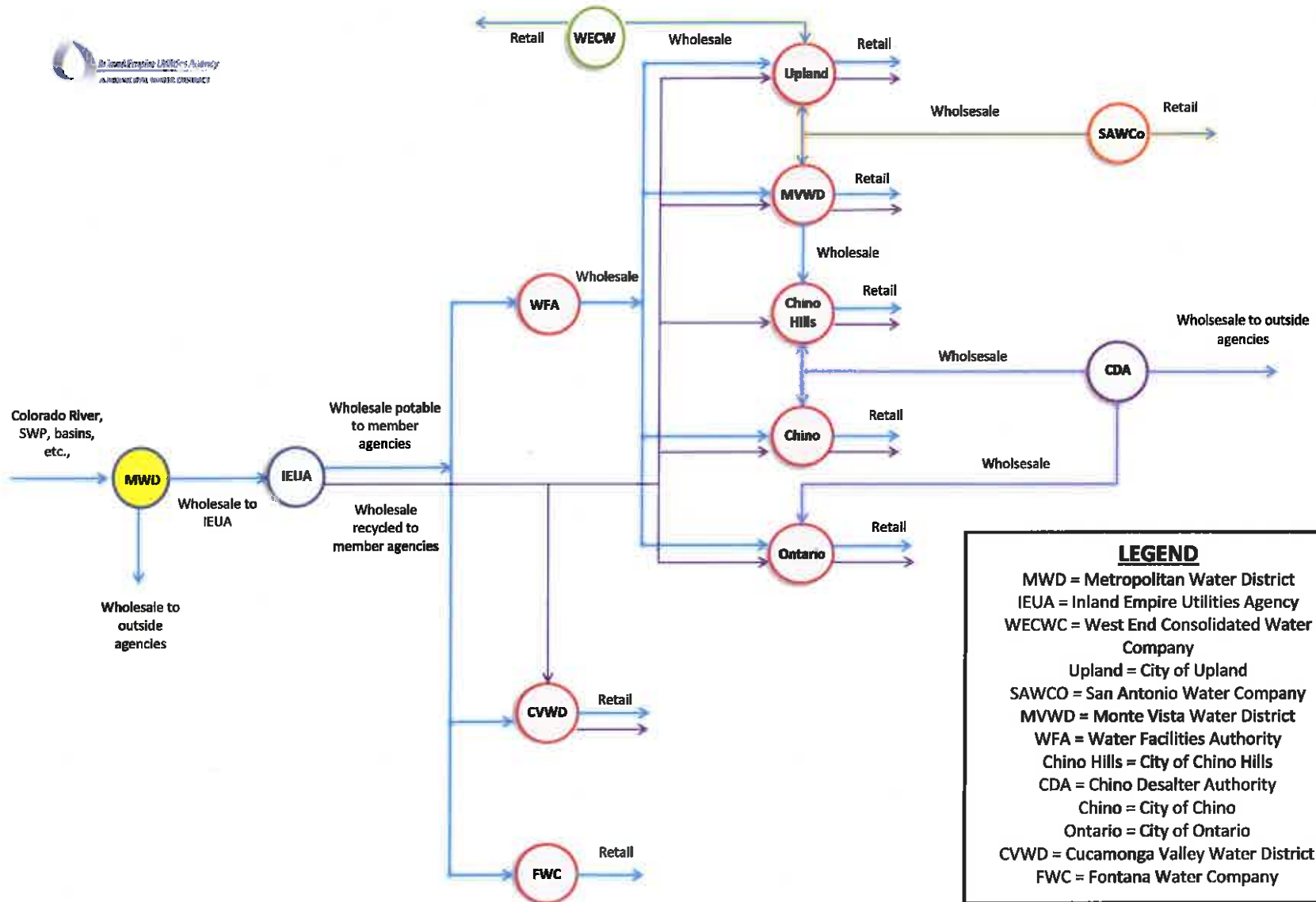
**WECWC**– West End Consolidated Water Company supplies some water to the City of Upland.

**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 IEUA.

**APPENDIX C**  
**Member Agency Organizational Chart**



**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

## **APPENDIX D**

### **Powerpoint Presentations for Governor's Executive Order**

# Technical and Procedural Aspects of Implementing the EO Efficiency Standards

## 1. Residential Overview

Indoor Implementation Protocol

Outdoor Implementation Protocol

## 2. CII and Water Loss Overview

Technical Issues

# Data for Residential Efficiency Formula

- **Collect necessary data:**
  - **Agency by Agency Single Family Residential landscape area (Aggregated)**
    - Shape files for each agency
    - Statewide aerial imagery
    - Averaged/weighted ET per service area
    - Aggregated residential / irrigation efficiency target by agency



# Water Efficiency Formula

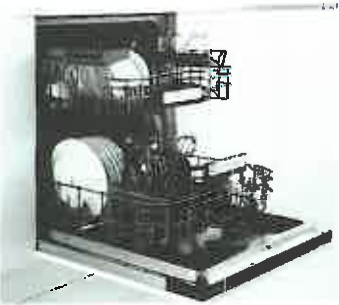
(# of Residents) (gpcd)

+

(ET) (Landscape Area) (ET Factor)

indoor

outdoor



$$\underbrace{(\# \text{ of Residents}) (\text{gpcd})}_{\text{indoor}} + \underbrace{(\text{ET}) (\text{Landscape Area}) (\text{Plant Factor})}_{\text{outdoor}}$$

# Indoor Variables

- 1) Population or people per household

# 1. Population or People per Household

## *DWR Population Tool*

- Many utilities used this tool to complete their 2015 UWMP

### Urban Water Management Tools

The UWMP Tool allows urban water suppliers to electronically submit their Urban Water Management Plans (UWMPs) to DWR.

 [Launch UWMP Tool](#)

**Timeline:** Completed as part of UWMP

**Cost:** Completed as part of UWMP

**Accuracy:** moderate (depends on nature of growth)

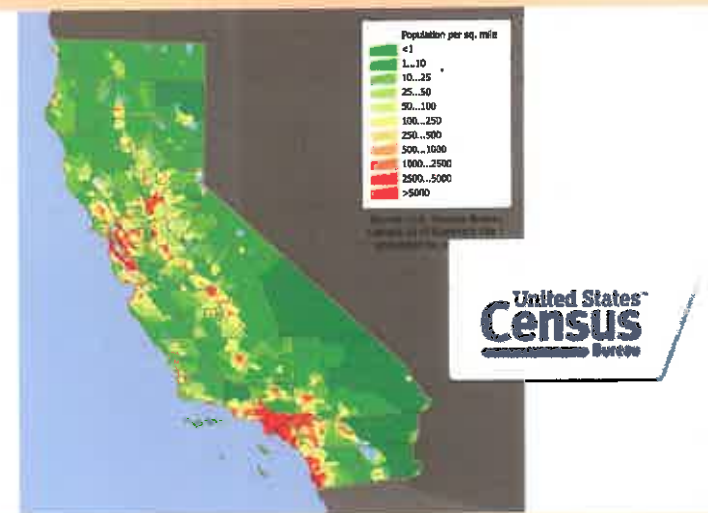
**Issues:** Growth in a service area

**Solutions:** Flexibility to update, utilizing a variance process for all agencies to DWR

# 1. Population or People per Household

## *Census + Meter Data*

- Agency provides population data and/or DWR utilizes Census data.
- Verifying large households can also be done by checking meter reads for actual use



**Timeline:** Completed as part of UWMP

**Cost:** Completed as part of UWMP

**Accuracy:** moderate (depends on alignment of census block and utility boundaries)

**Issues:** Home by home occupancy is not necessary. Aggregated population within the district is sufficient for calculating an agency efficiency target.

**Solutions:** Use best available population data either inside the agency, from local sources or Census data. Utilize a “variance” or adjustment process for consistent updates for growth to calculate accurate agency target levels.

(# of Residents) (gpcd)

+

(ET) (Landscape Area) (Plant Factor)

indoor

outdoor

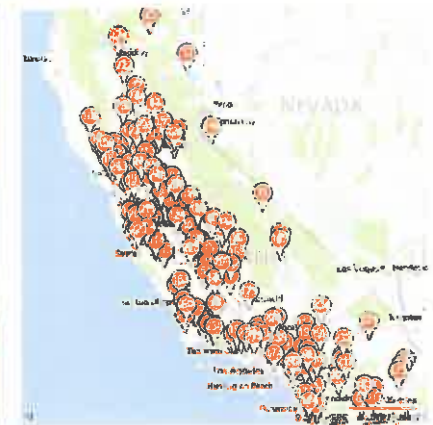
## Outdoor Variables

- 1) ET
- 2) Landscape Area
- 3) Commercial, Industrial, Institutional

# Outdoor

## 1. ET—CIMIS

- Free on CIMIS website
- Coverage challenges in certain urban areas
- How to address multiple micro-climate service areas will be key



**Timeline:** Currently available

**Cost:** free

**Accuracy:** Low (>85%)

Varies per station location and microclimates

**Issues:** Proximity of the station to the agency service area; where customers and water use is within the service area; reliability of weather station reporting data; developing “average” ET for agencies with multiple micro-climates

**Solutions:** Specific to agencies, including using an agreed-to CIMIS station, using Spatial CIMIS, installing an ET station within the service area, utilizing a private sector vendor to produce local, averaged/weighted ET for the service area.



# Outdoor

## 1. ET—Spatial CIMIS

- The ability to collect estimated ET for a time-period on a zip code basis
- A product of DWR



**Timeline:** Currently available  
(challenges with web interface)

**Cost:** free

**Accuracy:** Low (>85%)

Varies per station location and microclimates

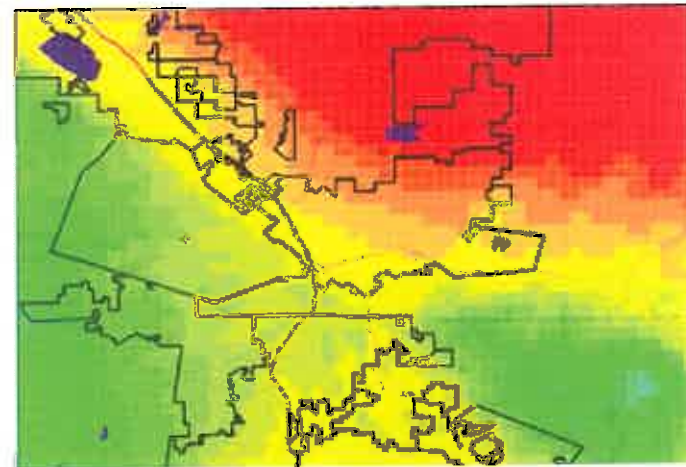
**Issues:** Availability of Spatial CIMIS for a given zip code. Ability to “average” ET in a large service area or in a service area with different microclimates across zip codes.

**Solutions:** Agencies work directly with DWR. Agencies work with private vendors to develop an appropriate ET for reporting.

# Outdoor

## *1. ET—Private Vendors*

- HydroPoint Data Systems
- Omni Earth/Weather Analytics
- Western Weather Network
- Others



Timeline: 6-9 months

Cost: \$2-3M

Accuracy: Medium (85-95%)

**Issues:** Ability to accurately calculate a single ET value for each reporting period. Opportunity for individual vendors to use private sector ET data for a varied service area.

**Solutions:** Work with vendors to test the efficacy of this approach as a solution.

# Outdoor

## *2. Land Cover Measurement---Challenges across methods*

- Age of development
  - Wide variation in data quality and accessibility across county assessors
- Edge case land uses
  - Horse paddocks, Urban farming, etc.
- Drought impact on vegetation color
  - Normally irrigated areas may have gone brown during drought
- Proposed solutions
  - Start with initial conservative measurements as a starting point
  - Use variance process and iteratively refine data

# Outdoor

## 2. Land Cover Measurement—NAIP Imagery Analysis

- National Agriculture Inventory Program (NAIP)
- Free imagery
- Updated every 2 years
- Available via the California Data Collaborative (Claremont Graduate University)



Timeline: 6 months

Cost: \$1M

Accuracy: Moderate (85-95%)

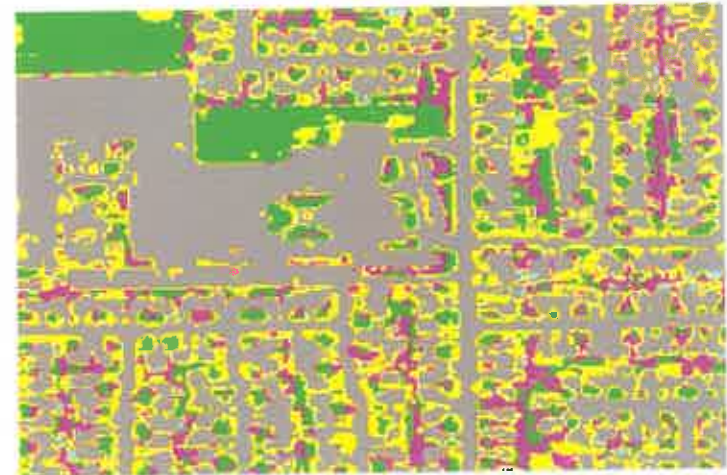
Issues: Lower resolution imagery with moderate to high accuracy depending upon the service area characteristics; free imagery every 2 years for updating land cover. Recognition of shadow and/or irrigable areas, particularly in wild-land interface areas.

Solutions: Sample ground truthing or hand GIS measurement.

# Outdoor

## 2. Land Cover Measurement— Fully Automated Imagery

- Computerized calculation w/ learning over time (from new imagery)
- Example Vendors  
Omni Earth Inc.  
SRI



Timeline: 6 months

Cost: \$2-3 M

Accuracy: Moderate (85-95%)

Issues: Recognition of shadow and/or irrigable areas, particularly in wild-land interface areas; common to any aerial imagery source.

Solutions: Sample ground truthing or hand GIS measurement



# Outdoor

## 2. Land Cover Measurement—Automated + Manual Analysis

- Computerized calculation combined with hand and visual sample verification
- Example Vendor: Eagle Aerial Inc.



Timeline: 12 months

Cost: \$3-5M

Accuracy: High (>95%)

Issues: While this method is highly accurate, the timing of aerial imagery flights, shadow areas, tree canopy and parcel data alignment (common to any methods) are consistent issues with aerial imagery.

Solutions:



# Outdoor

## *2. Land Cover Measurement—Hand Measure*

- Physical measurements on site for each parcel involved



**Timeline:** 24+ months

**Cost:** \$5+ M

**Accuracy:** Medium (85-95%)

**Issues:** Labor intensive; Parcel boundaries may not align with on the ground property

**Solutions:** use only for edge cases. Allow agency provided data to update imagery under a variance program.

# Outdoor

## 3. Commercial, Industrial, Institutional- Aggregated

- Use selected land cover measurement technique to total CII regardless of parcel/ water supply source



**Timeline:** Comparable to land cover measurement method used

**Cost:** Bundled in landscape measurement approach

**Accuracy:** Comparable to land cover measurement method used

**Issues:** Disentangling recycled water from potable water landscape area is challenging on an aggregate basis.

**Solutions:** Diving to the meter level, using a formula to estimate landscape area for recycled water CII versus potable water CII. Customer driven landscape sf method.

# Outdoor

## *3. Commercial, Industrial, Institutional- by meter*

- Input metered data by agency into CaDC to breakout indoor versus outdoor and recycled water versus potable.



Timeline: 5 years

Cost: \$2-3 M

Accuracy: Dependent on method-  
potentially over 95%

Issues: Most accurate method to breakdown CII usage to achieve specific policy goals by water source. Some agencies do not breakout indoor versus outdoor CII.

Solutions: Develop process to transition all CII to indoor versus outdoor metering with state assistance.

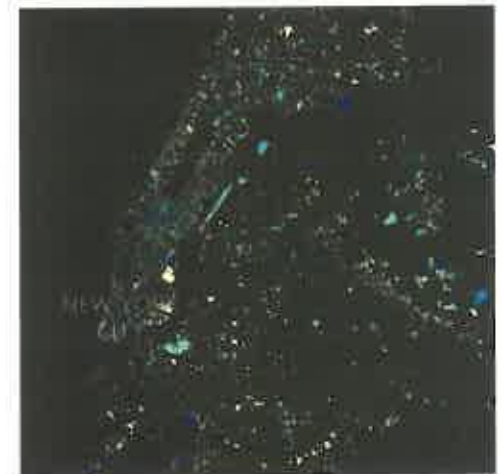
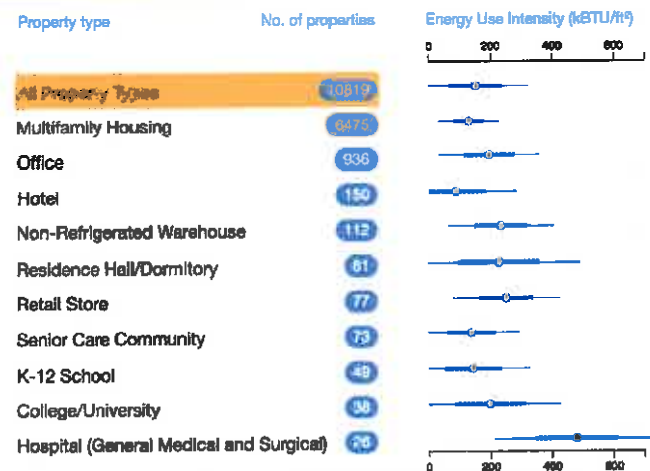
# Other Efficiency Standards Issues

- 1) Commercial, Industrial, Institutional
- 2) Water Loss

# Other Efficiency Standards Issues

## 1. Benchmarking commercial, industrial, and institutional

- Examples for improvement in energy star score and water / energy efficiency benchmarking in NYC



Timeline: TBD

Cost: Proprietary datasets to scale algorithms statewide

Accuracy: High

Issues: Warehouse, offices and restaurants have very different water use requires and thus there is a need to categorize CII customers at a finer grain. Opportunity to learn from energy benchmarking

Solutions: partnership with NYU CUSP to benchmark water efficiency for more granular customer categories.

# Other Efficiency Standards Issues

## 2. *Water loss*

- Opportunity for analytics to support utility managers in achieving leak loss detection



Timeline: TBD

Cost: TBD

Accuracy: depends on approach

Issues: large variation in metering and data management practices across California 411 major urban retailers and other water systems.

Solutions: one example of the value of integrating meter level water use and flow data across districts.



## Conclusion and key takeaways

- Governor's EO data requirements are **achievable**
- Data requirements are best fulfilled through an **phased approach**
- **Variance process** for agency data is integral for buy-in and building accuracy
- Integrated public/private expertise and **partnership** option available through CaDC



# Executive Order Water Efficiency

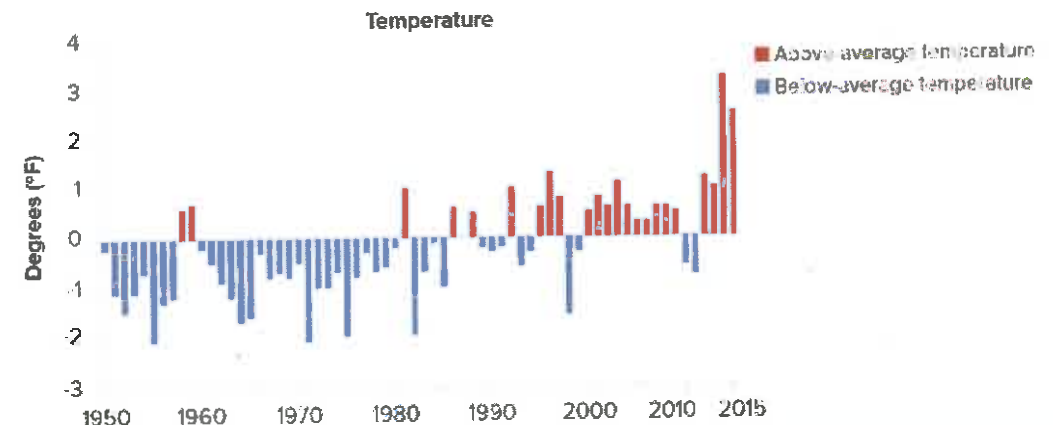
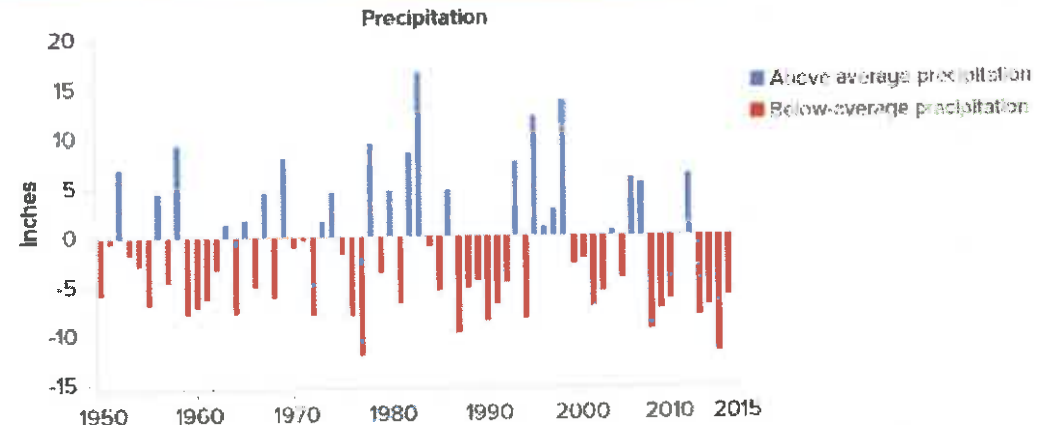
Efficiency Formula Detail

# Outline

- Executive Order Context
- Existing Legislation Related to the Executive Order
- Breakdown of the Efficiency Formula and Framework

# Drivers for Water Efficiency

- Precipitation is decreasing while temperatures are increasing across the State
- Drought conditions may become the “new normal”
- Future water supplies are uncertain
- Population growth
- Environmental health



Source: Public Policy Institute of California

# Existing Legislation Links to the Executive Order

- **State Constitution Article 10, Section 2**  
“...the waste and unreasonable use of water be prohibited”
- **AB 1881 – Model Water Efficient Landscape Ordinance (MWELO, 2006)**  
Established efficient landscape allocation formula
- **SBX7-7 – 20% Reduction by 2020 (2009)**  
Established indoor and outdoor efficiency targets
- **Executive Order B-37-16: Making Conservation a Way of Life (May, 2016)**  
“These new water use targets shall build upon the existing state law requirements that the state achieve a 20% reduction in urban water usage by 2020.”
- **California Water Action Plan, 2016**  
“Conservation must become a way of life”



# Executive Order Requirements

- Meet **efficiency** standards
- **Equitable** across the state
- **Customized** to each agency



“

These water use targets shall be customized to the unique conditions of each water agency, shall generate more statewide water conservation than existing requirements, and shall strengthen standards for:

- a. Indoor residential per capita water use  
SBX7-7d: (# of residents) (55 gpcd)
- b. Outdoor irrigation, in a manner that incorporates landscape area, local climate and new satellite imagery data; MWELD: (ET)(Landscape area) (ETAF)
- c. Commercial, Industrial, and Institutional water use, and
- d. Water Loss through leaks

”

# Key Definitions

(# of Residents) (55 gpcd) + (ET) (Landscape Area) (.80)

## Senate Bill No. 7

### CHAPTER 4

[Approved by Governor November 10, 2009. Filed with  
Secretary of State November 10, 2009.]

“ Per capita water use is a valid measure of a water provider’s efforts to reduce urban water use within its service area. However, per capita water use is less useful for measuring relative water use efficiency between different water providers. Differences in weather, historical patterns of urban and suburban development, and density of housing in a particular location need to be considered when assessing per capita water use as a measure of efficiency.

10608.4. It is the intent of the Legislature, by the enactment of this part, to do all of the following:

- (a) Require all water suppliers to increase the efficiency of use of this essential resource.”

#### What is **efficiency**?

Definition: *to eliminate waste/ optimize use*

#### What is **conservation**?

Definition: *to use less*

# Executive Order Formula

**(# of Residents) (55 gpcd) + (ET) (Landscape Area) (.80)**

## EXECUTIVE ORDER 8-37-16

### MAKING WATER CONSERVATION A CALIFORNIA WAY OF LIFE

#### USE WATER MORE WISELY

- The Department of Water Resources (Department) shall work with the Water Board to develop new water use targets as part of a permanent framework for urban water agencies. These new **water use targets shall build upon the existing state law** requirements that the state achieve a 20% reduction in urban water usage by 2020. (Senate Bill No. 7 (7th Extraordinary Session, 2009-2010).) These water use targets shall be customized to the unique conditions of each water agency, shall generate more statewide water conservation than existing requirements, and shall be based on strengthened standards for:
  - Indoor residential per capita water use; (55 gpcd; SBX7-7)
  - Outdoor irrigation, in a manner that incorporates landscape area, local climate, and new satellite imagery data; (AB 1881/MWELO)
  - Commercial, industrial, and institutional water use; and (SBX7-7)
  - Water lost through leaks.

#### Application of the Formula:

- Applied to every agency statewide
- Every agency has an customized target
- Agency characteristics and past performance are recognized
- Target changes with weather and growth



# Applying an Efficiency Formula

**(# of Residents) (55 gpcd) + (ET) (Landscape Area) (.80)**

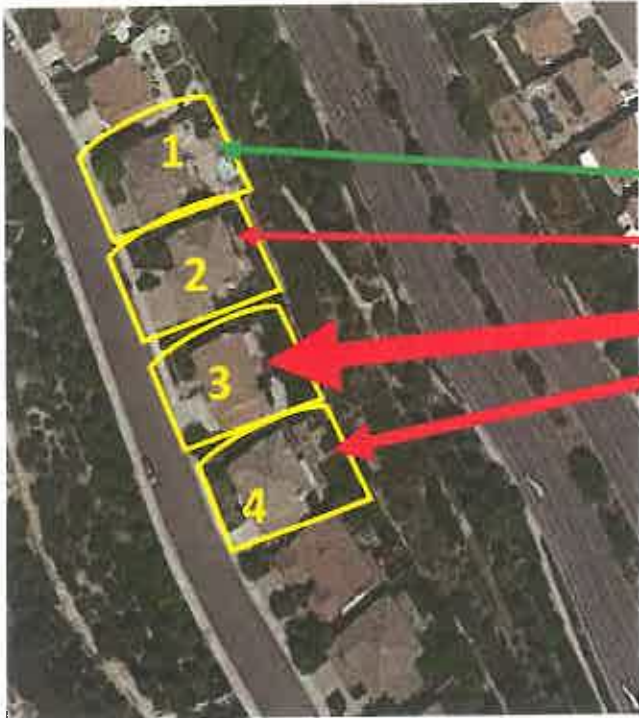
**Efficiency Target (one month) = (4) (55gpcd) + (7" ET) (3,000 sf) (.80) = 14 ccf (10,472 gal.)**



- 4 homes
- Same lot size
- Same number of residents per household
- Same weather (ET)

# Measuring Efficiency

(# of Residents) (55 gpcd) + (ET) (Landscape Area) (.80)



Use   % Target   Gallons saved ↓ / wasted ↑

- 12 CCF (85%↓) (1,496 gallons ↓)
- 25 CCF (78%↑) (8,228 gallons ↑)
- 39 CCF (178%↑) (18,700 gallons ↑)
- 26 CCF (85%↑) (8,976 gallons ↑)

# Customized Targets for Statewide Efficiency

## EXECUTIVE ORDER 8-37-16

### MAKING WATER CONSERVATION A CALIFORNIA WAY OF LIFE

- The Department of Water Resources (Department) shall work with the Water Board to develop new water use targets as part of a permanent framework for urban water agencies. These new water use targets shall build upon the existing state law requirements that the state achieve a 20% reduction in urban water usage by 2020. (Senate Bill No. 7 (7th Extraordinary Session, 2009-2010).) **These water use targets shall be customized to the unique conditions of each water agency**, shall generate more statewide water conservation than existing requirements, and shall be based on strengthened standards for:
  - Indoor residential per capita water use;
  - Outdoor irrigation, in a manner that incorporates landscape area, local climate, and new satellite imagery data;

#### What is “customized”?

Customer level data across agency service areas:

- Land cover



- Weather (aka ET)



- Population



# Indoor Efficiency Formula Variables

**(# of Residents) (55 gpcd) + (ET) (Landscape Area) (.80)**

## Where:

Indoor Efficiency Target (SBX7-7):

✓ **# of Residents:** number of residents

✓ **55 gpcd:** Current indoor efficiency factor

## The Indoor Efficiency Standard is:

- Relative to agencies across the state
- Impartial to family size
- Comes from existing legislation (SBX7-7)
- Reflects customer reality (# of residents and a mix of plumbing new/old plumbing fixtures)

# Outdoor Efficiency Formula Variables

$$(\# \text{ of Residents}) (55 \text{ gpcd}) + (\text{ET}) (\text{Landscape Area}) (.80)$$

## Outdoor Efficiency Target (MWELO):

- **ET:** reflects the actual ET averaged across the individual agency service area (DWR, MWELO, Ex. Order)
- **Landscape Area:** includes landscape area for the specific agency (SBX7-7, MWELO, Ex. Order)
- **ETAF (Evapotranspiration Adjustment Factor):** Set by the State to reflect a reasonable water allowance for a landscape (SBX7-7, MWELO, Ex. Order)

## Current & New MWELO

Category	MWELO	ET
Special Landscapes	1.00	100%
Existing Residential	.80	80%
Existing Commercial	.70	60%
New Residential	.55	40%
New Commercial	.45	20%

## Plant Water Needs:

Turf (cool season) 

Street Trees 

Fruit Trees 

Mediterranean plants 

Calif. Native plants 



# Is Efficiency a Brown Lawn?

No.

✓ The turf pictured operates at 80% of local ET as per agency allocations.



Crop coefficients ( $K_c$ ) for cool-season and warm-season turfgrasses in California<sup>1</sup>.

Month	Cool-Season <sup>2</sup>	Warm-Season <sup>3</sup>
January	0.61	0.61
February	0.64	0.54
March	0.75	0.76
April	1.04	0.72
May	0.95	0.79
June	0.68	0.68
July	0.94	0.71
August	0.86	0.71
September	0.74	0.52
October	0.75	0.54
November	0.68	0.56
December	0.60	0.55
<b>Annual Average</b>	<b>0.80</b>	<b>0.60</b>

Source: UC Cooperative Extension

# Is Efficiency One Size Fits All?

**No.**

The Executive Order states, “**water use targets shall be customized to the unique conditions of each water agency...**”

<b>(# of Residents)</b>	<b>(55 gpcd)</b>	<b>+</b>	<b>(ET)</b>	<b>(Landscape Area)</b>	<b>(ETAF)</b>
Unique to agency	Indoor target		Local Weather	Unique to agency	Outdoor target

✓ All agencies are different and are recognized in the efficiency formula framework.



# Is there Local Discretion to Achieve Efficiency?

Yes.

- ✓ The framework for efficiency establishes a **performance standard for reporting water use**
- ✓ Each agency has **complete discretion** of how to achieve the efficiency target
- ✓ **There is no stipulation** within the Executive Order to require agencies to adopt rate structures or any other specific method to meet efficiency targets

# Flexibility of the Executive Order Framework

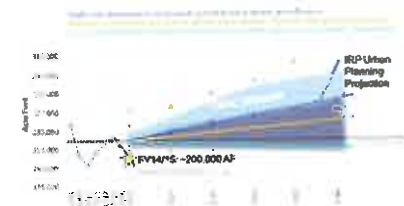
- Population changes or growth can be recognized in the framework  
(# of Residents) (55 gpcd) + (ET) (Landscape Area) (.80)



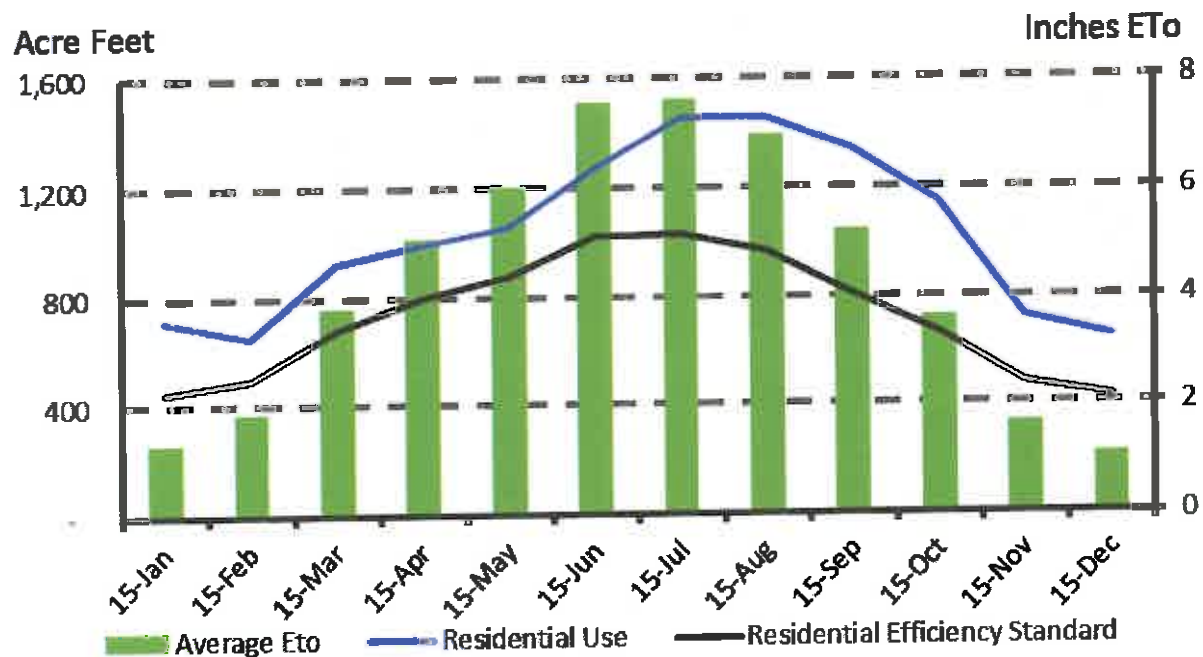
- Weather changes can be accommodated in the framework  
(# of Residents) (55 gpcd) + (ET) (Landscape Area) (.80)



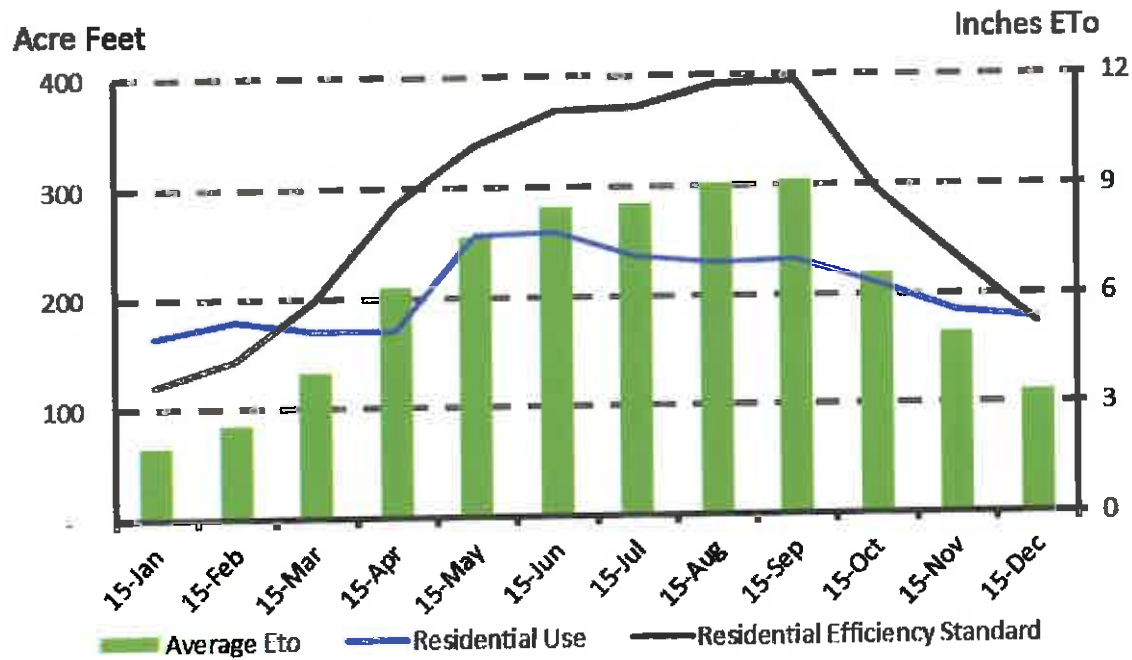
- Changes in landscape area, such as growth, can be adjusted as growth occurs  
(# of Residents) (55 gpcd) + (ET) (Landscape Area) (.80)



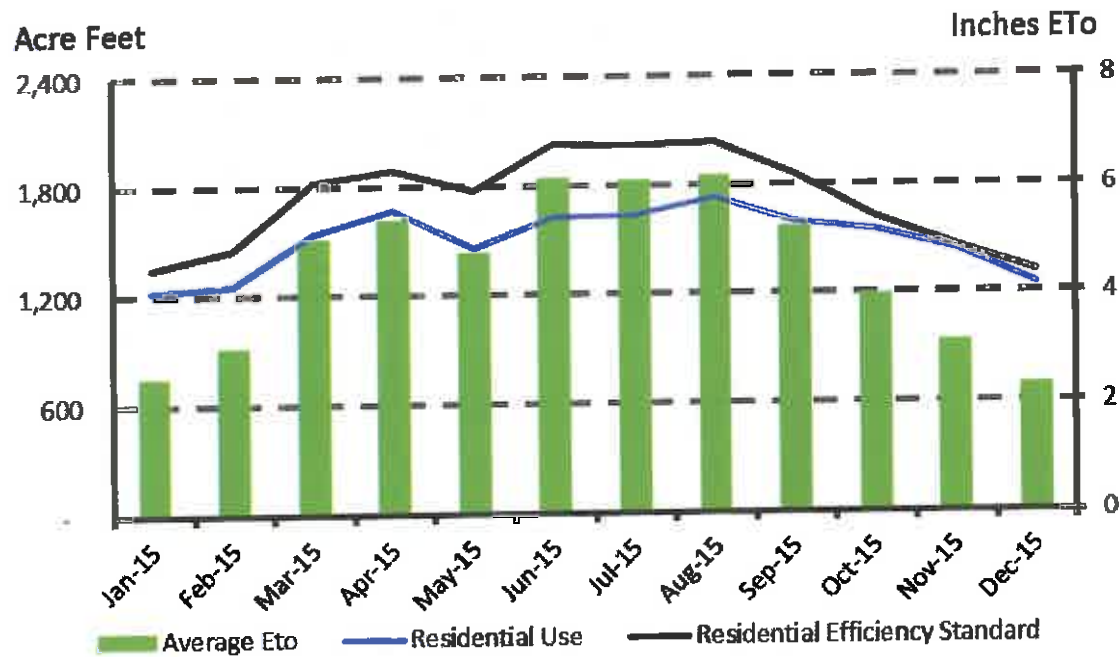
# Anytown California #1 – *example community in Sacramento hydrologic region*



# Anytown California #2— *sample community in Colorado River Hydrologic Region*



# Anytown California #3— *sample community in South Coast hydrologic region*





# Summary of Efficiency Formula Breakdown

Measuring efficiency provides a framework that can reduce water waste by:

- Establishing a **standardized** efficiency formula for agencies statewide
- Providing a formula that **customizes** efficiency targets with agency characteristics
- Calculating an efficiency target from the **aggregated** land cover (landscape area), population and weather data for an agency
- Offering **flexibility** for changes in weather, legislation, growth, etc.
- Utilizing existing efficiency standards in legislation for **equitable application** across the state

**INFORMATION  
ITEM**

**4Q**



# FY15/16 Building Activity Summary Ten-Year Growth Survey



*Inland Empire Utilities Agency*

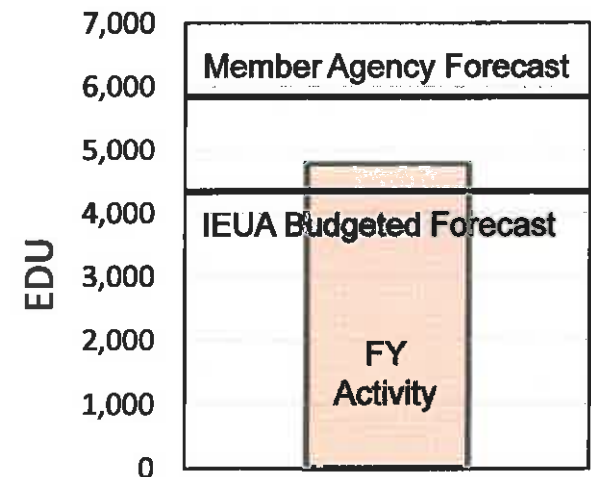
A MUNICIPAL WATER DISTRICT

**Pietro Cambiaso**

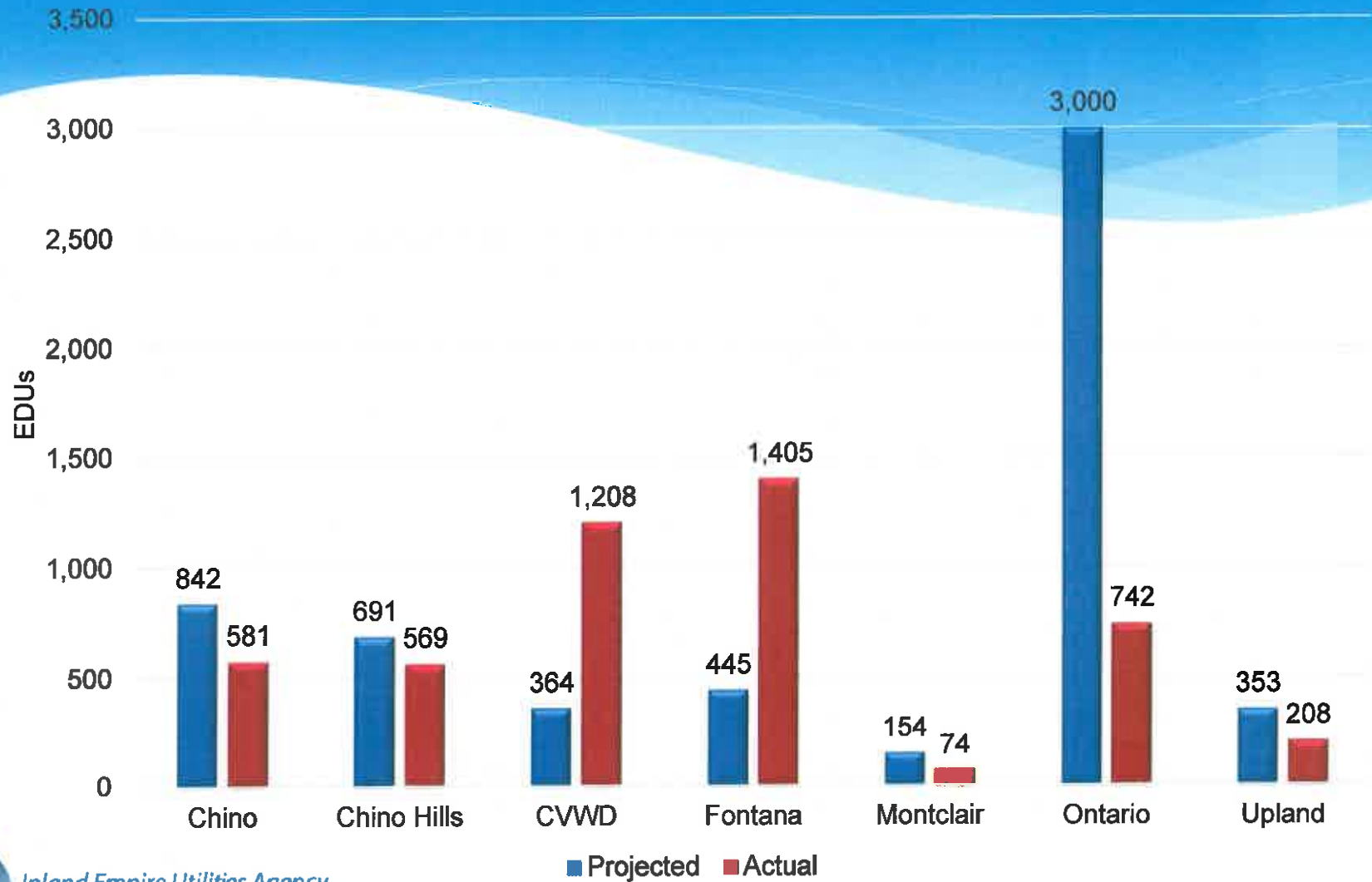
IEUA Board of Directors Meeting  
November 2016

# Summary: FY15/16 Building Activity

- IEUA Member Agency Forecast = 5,849 EDUs
- IEUA Budgeted Forecast = 4,330 EDUs
- Fiscal Year Building Activity = 4,787 EDUs
- EDU = Equivalent Dwelling Unit or Single Family

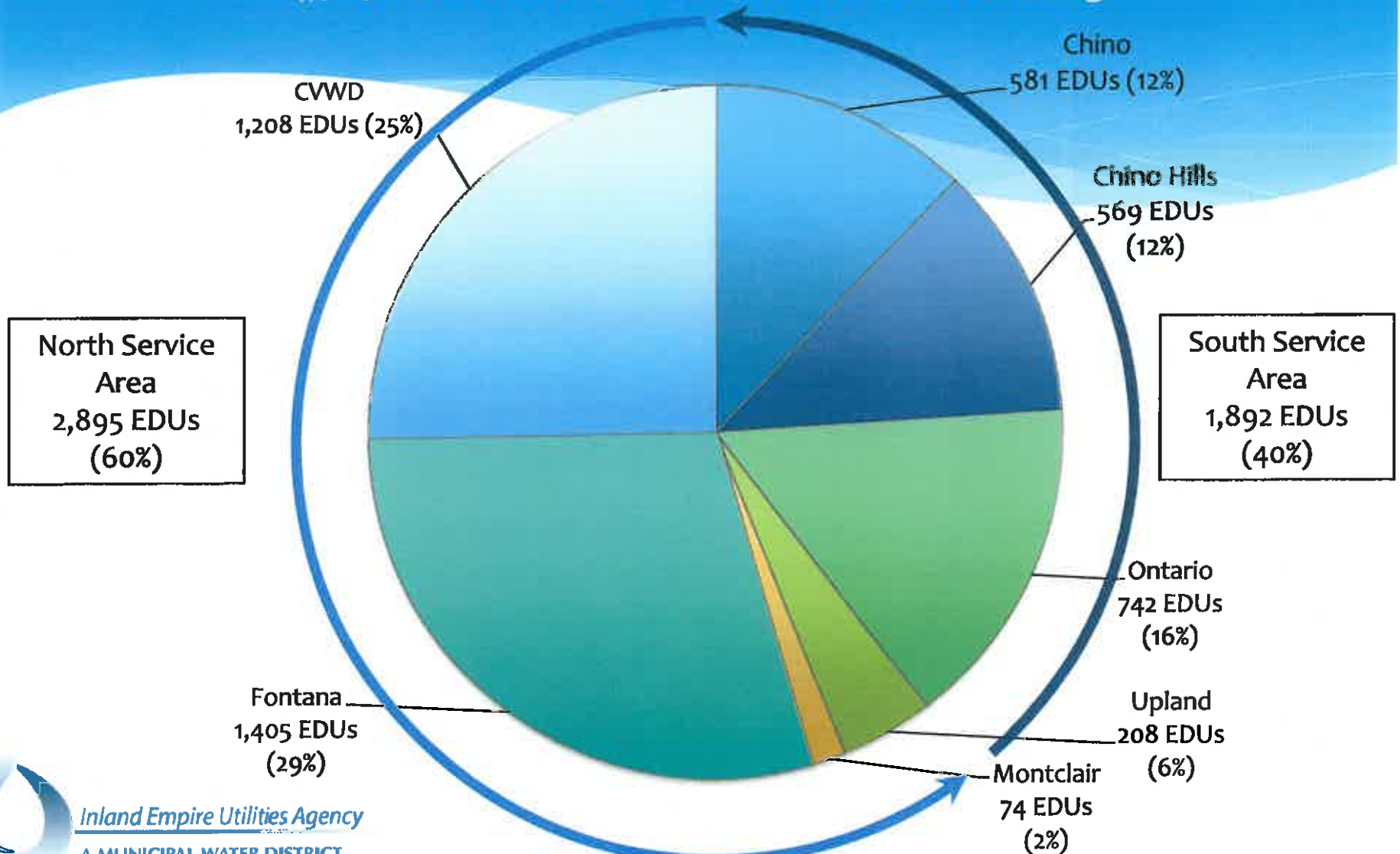


# FY15/16 Distribution of Growth



# FY15/16 Building Activity

4,787 EDUs Resulted in \$21.8M in CCRA Funding

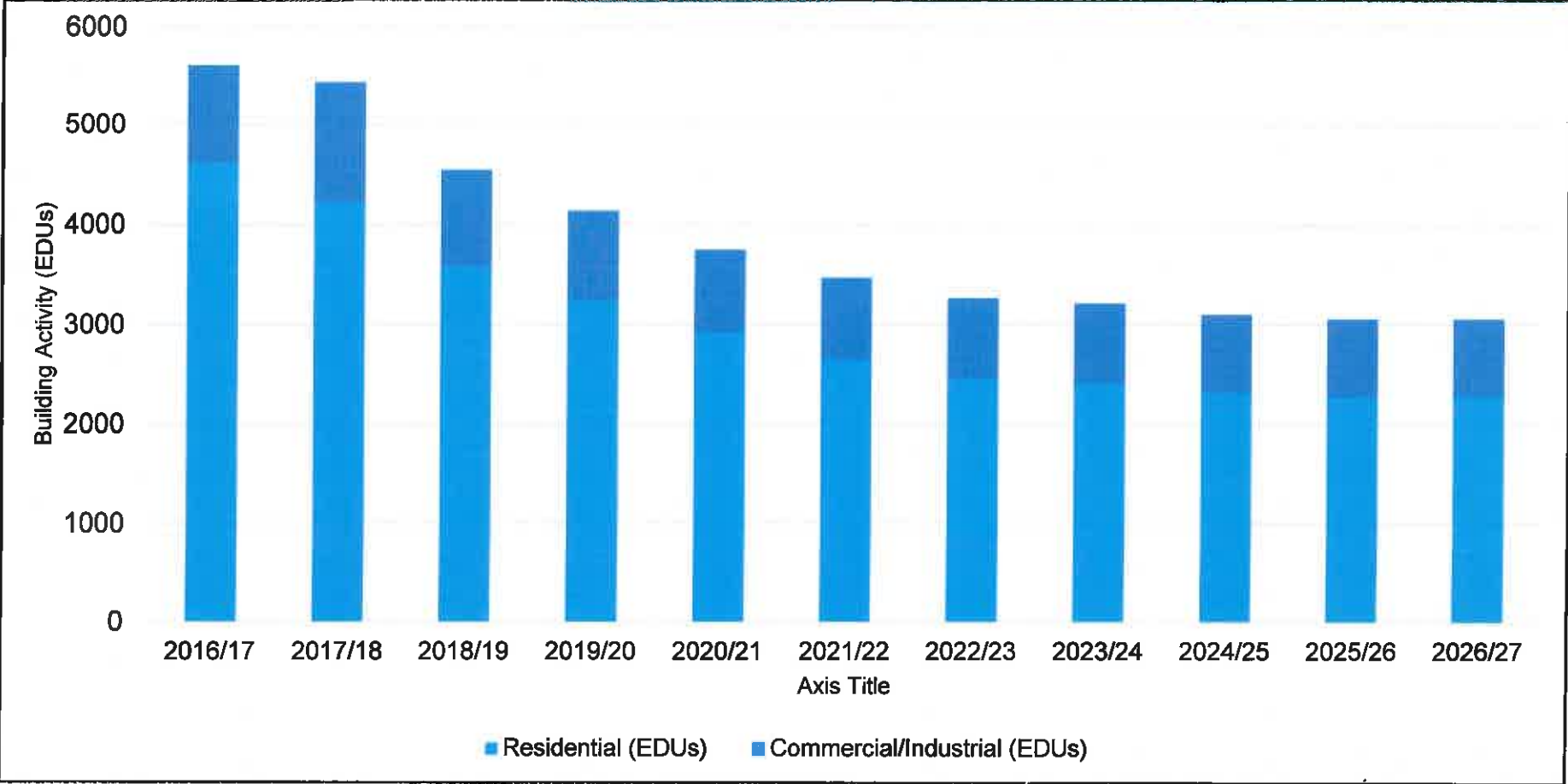




# FY16/17 EDU Projection

Contracting Agency	Residential (EDUs)	Commercial Industrial (EDUs)	Total (EDUs)
Chino	550	60	610
Chino Hills	1,166	70	1,236
CVWD	250	114	364
Fontana	770	156	926
Montclair	165	24	189
Ontario	1,500	550	2,050
Upland	226	11	237
<b>Projected Totals</b>	<b>4,627</b>	<b>985</b>	<b>5,612</b>

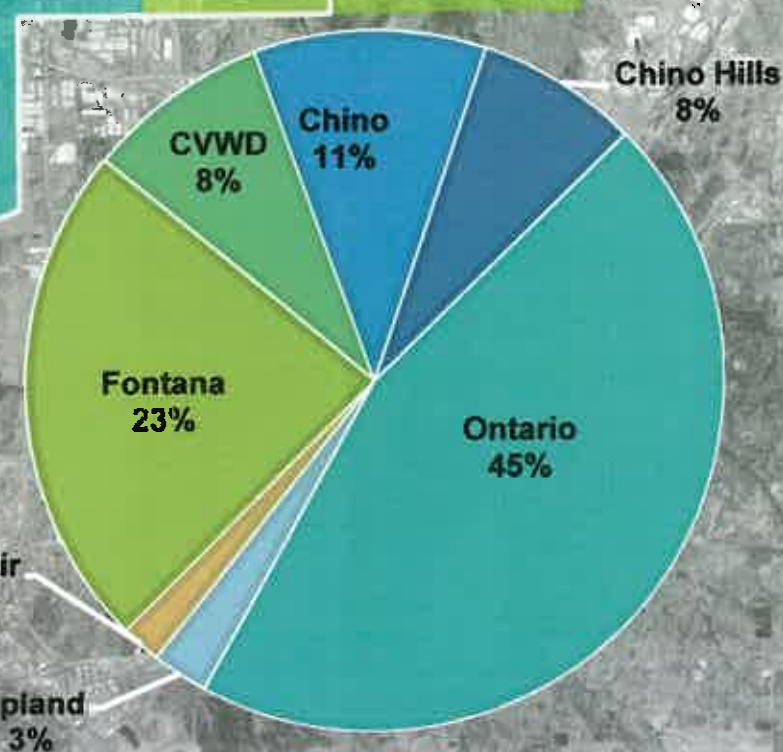
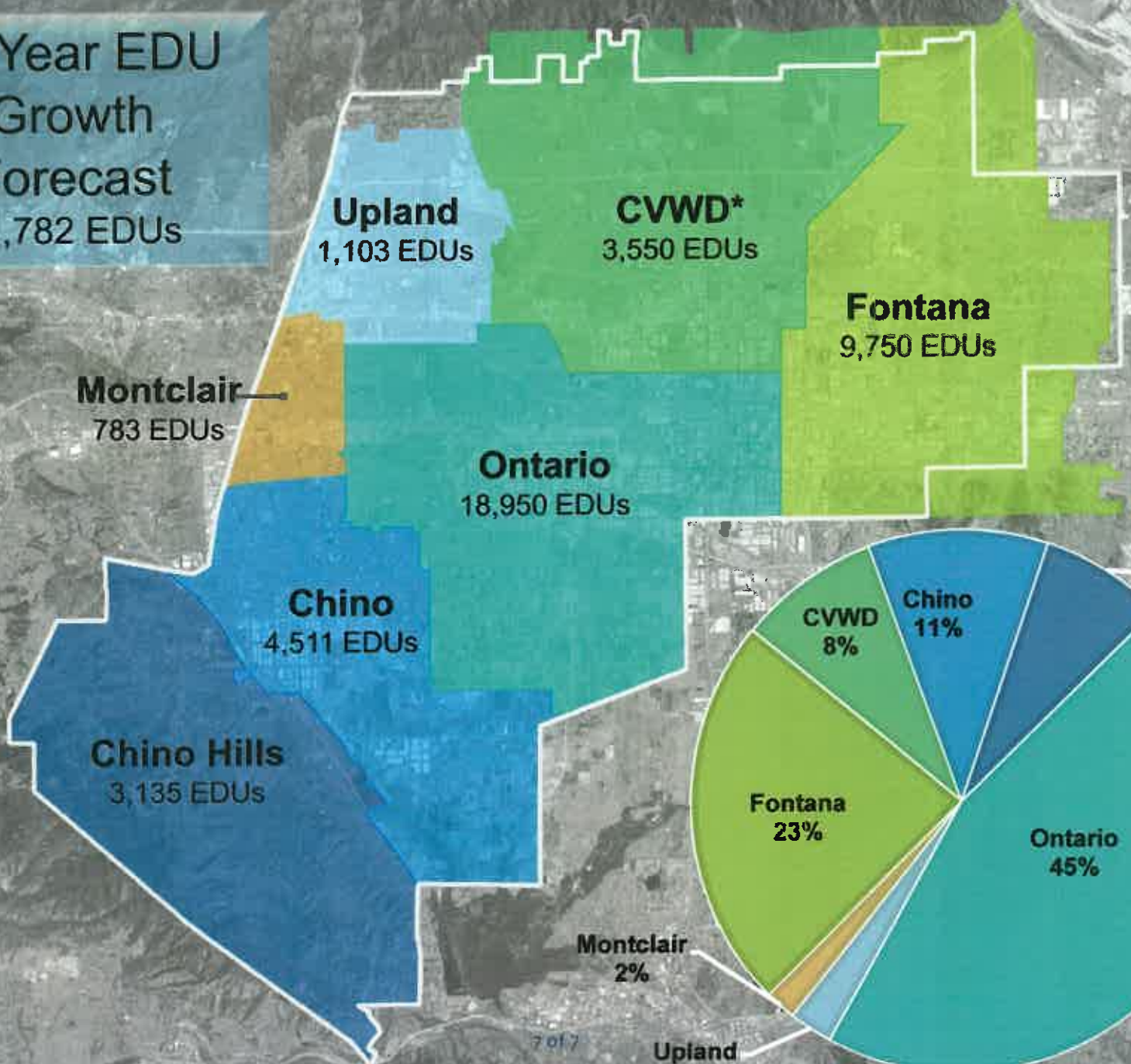
# EDU Growth Forecast





# 10-Year EDU Growth Forecast

41,782 EDUs



**INFORMATION  
ITEM**

**4R**

# 1st Quarter Planning & Environmental Resources Update



*Inland Empire Utilities Agency*

A MUNICIPAL WATER DISTRICT

Sylvie Lee

IEUA Board of Directors Meeting  
November 2016



# Regulatory Compliance Update

- **Regional Water Quality Control Board**

- All Facilities – 100% compliance
- Category 2 SSO at Francis & Milliken (Regional)

- **Air Quality Management District**

- RP-5 SHF – H<sub>2</sub>S exceedance on 8/12, venting incident on 8/28, engine #2 excess NO<sub>x</sub> emission on 9/4
- Annual Title V inspections – IERCF on 7/5, RP-1 & RP-5 on 8/31

- **Division of Drinking Water**

- CDA1 and GWR – 100% compliance



# Septic to Sewer Feasibility Study

## ■ Progress to Date

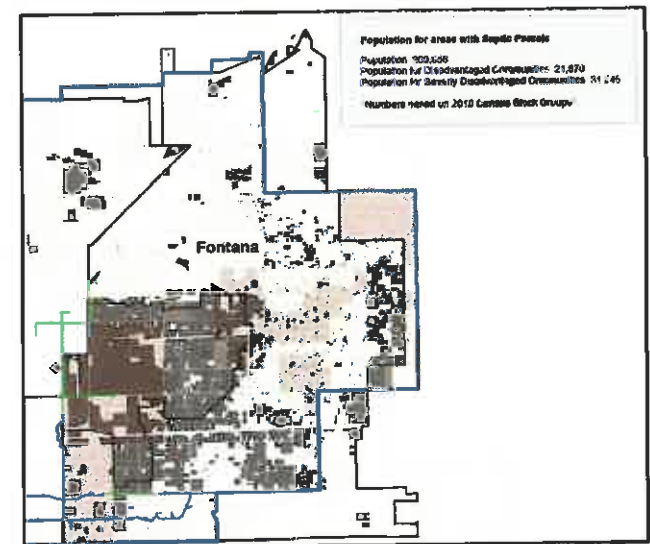
- Septic Parcel Confirmation Screening
  - Additional data screening with Member Agencies of questionable Septic Parcels

## ■ Next Steps

- Defining and Prioritizing Sewer Service Regions
- Grant Application data

## ■ Project Schedule

- Completion of Feasibility Study - April 2017



IEUA Board of Directors Meeting  
November 2016

# Pretreatment & Source Control

## ■ Regional System

- Local Limits Dioxin Evaluation
- Enforcement Actions - 35 NOVs
- Permits Processed - 11

## ■ North Brine Line

- Capacity Units Allocation – 15,214 Units
- Enforcement Actions - 12 NOVs
- Permits Processed - 14

## ■ South Brine Line

- SAWPA Ordinance No. 8 & Capacity Pool
- Enforcement Action – 1 NOV
- Permits Processed - 5





# Planning

- **Integrated Resources Plan**
  - Programmatic EIR underway
  - Phase 2 kickoff: September 2016
- **Annual Water Production Report**
  - FY15/16 regional usage decreased by 25% from Fy13/14
  - Regional MWD purchases decreased by 47% from FY13/14
- **Prado Basin Adaptive Management Plan**
  - USBR to perform vegetation survey by Dec 2016
- **Santa Ana River Habitat Conservation Plan (Jan 2017)**
  - Biological impact assessments underway

# Water Resources Activities

- **Chino Basin Drought Contingency Plan Update**
  - USBR Grant Funded (\$200,000)
  - Staff reviewing local ordinances and other regional plans
- **California Urban Water Conservation Council**
  - Board voted to implement significant changes to organization (Sept. 14, 2016)
  - New focus - assisting utility members achieve conservation and efficiency goals
  - Members will choose a new name to reflect the significant changes
- **California Data Collaborative**
  - Stanford Data Summit occurred on September 9, 2016
  - Rate modeling tool and turf rebate effectiveness evaluation complete
- **Water Rates**
  - New rates and fees effective October 1, 2016



# Agriculture Conservation

- **Weather Station will be installed for California Institute for Men (CIM)**
  - Received approval from State/DWR
  - Used to calculate evapotranspiration (ET) for service area water budgets
- **Ag Pool assistance with promoting on-site farm upgrades**
  - Program to assist installation of soil moisture sensors
  - Demonstration project to show potential water savings

**AGENCY  
REPRESENTATIVES'  
REPORTS**

**5A**



# S A W P A

SANTA ANA WATERSHED PROJECT AUTHORITY  
11015 Sterling Avenue, Riverside, California 92503 • (951) 354-4220

## REGULAR COMMISSION MEETING TUESDAY, NOVEMBER 15, 2016 – 9:30 A.M.

### AGENDA

1. CALL TO ORDER/PLEDGE OF ALLEGIANCE (Thomas P. Evans, 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: NOVEMBER 1, 2016

**Recommendation:** Approve as posted.

B. TREASURER'S REPORT – OCTOBER 2016

**Recommendation:** Approve as posted.

C. REACH V REHABILITATION AND IMPROVEMENT PROJECT – PHASE I  
(CM#2016.96)

**Recommendation:** Find that the unfinished condition of the Reach V Rehabilitation and Improvement Project (the Project) after the termination for cause of the Project contractor continues to be an emergency that requires immediate action per the Commission's prior action on August 2, 2016.

D. USE OF BUILDING RESERVE FUNDS TO INSTALL ONE AIR CONDITIONING UNIT  
(CM#2016.100)

**Recommendation:** Retroactively authorize the use of \$7,953 from the Building Reserve Fund to replace one air conditioning unit (Split Case serving computer server room).

5. NEW BUSINESS

A. FY 2015-16 REPORT ON AUDIT (CM#2016.99)

**Presenter:** Karen Williams

**Recommendation:** Review the Comprehensive Annual Financial Report (CAFR) for the Fiscal Year Ended June 30, 2016, which includes the Report on Audit prepared by White Nelson Diehl Evans LLP:

1. Accept the CAFR, including the Report on Audit as prepared by White Nelson Diehl Evans;
2. Direct staff to file the Report with the respective government agencies as required by law; and,
3. Direct staff to submit the CAFR, with any necessary changes, for the Certificate of Achievement for Excellence in Financial Reporting Award.

- B. BRINE LINE SERVICE CONTRACTS – LINE CLEANING AND INSPECTION (CM#2016.103)**  
**Presenter:** Carlos Quintero  
**Recommendation:** Approve year two of the existing Task Order INN-240-02 with Innerline Engineering, Inc. in the amount of \$50,000 for pipeline cleaning and inspection.
- C. SAWPA STRATEGIC ASSESSMENT – OWOW BUSINESS LINE (CM#2016.101)**  
**Presenter:** Mark Norton  
**Recommendation:** Provide feedback, then receive and file.
- D. PROP 84 STATUS REPORT AND BUDGET UPDATE – ALL ROUNDS**  
**Presenters:** Rich Haller | Nicole D. Weideman  
**Recommendation:** Receive and file.

**6. INFORMATIONAL REPORTS**

**Recommendation:** Receive and file the following oral/written reports/updates.

- A. CASH TRANSACTIONS REPORT – SEPTEMBER 2016**  
**Presenter:** Karen Williams
- B. INTER-FUND BORROWING – SEPTEMBER 2016 (CM#2016.97)**  
**Presenter:** Karen Williams
- C. PERFORMANCE INDICATORS/FINANCIAL REPORTING – SEPTEMBER 2016 (CM#2016.98)**  
**Presenter:** Karen Williams
- D. FIRST QUARTER FYE 2017 EXPENSE REPORTS**
- Staff
  - General Manager
- Presenter:** Karen Williams
- E. BUDGET SCHEDULE – FISCAL YEAR 2017-18, 2018-19**  
**Presenter:** Karen Williams
- F. GENERAL MANAGER’S REPORT**
- G. SAWPA GENERAL MANAGERS MEETING NOTES**
- October 31, 2016
- H. CHAIR’S COMMENTS/REPORT**
- I. COMMISSIONERS’ COMMENTS**
- J. COMMISSIONERS’ REQUEST FOR FUTURE AGENDA ITEMS**



**7. SPECIAL COMMENDATION – OUTGOING COMMISSIONER ED KILLGORE**

**8. CLOSED SESSION**

**A. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION PURSUANT TO GOVERNMENT CODE SECTION 54956.9(d)(1)**

Name of Case: Spiniello Companies v. Charles King Company, Inc., Santa Ana Watershed Project Authority, The Ohio Casualty Insurance Company (Superior Court of Los Angeles BC616589)

**9. ADJOURNMENT**

**PLEASE NOTE:**

Americans with Disabilities Act: Meeting rooms are wheelchair accessible. If you require any special disability related accommodations to participate in this meeting, please contact (951) 354-4220 or [kberry@sawpa.org](mailto: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](http://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 Thursday, November 10, 2016, a copy of this agenda has been uploaded to the SAWPA website at [www.sawpa.org](http://www.sawpa.org) and posted in SAWPA's office at 11615 Sterling Avenue, Riverside, California.

/S/

\_\_\_\_\_  
Kelly Berry, CMC

**2016 - SAWPA Commission Meetings/Events**

First and Third Tuesday of the Month

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

<b>November</b>	<b>December</b>
11/1/16 Commission Workshop	12/6/16 Commission Workshop
11/15/16 Regular Commission Meeting	12/20/16 Regular Commission Meeting
11/29 – 12/2/16 ACWA Fall Conference, Anaheim	

**2017 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.)

<b>January</b> 1/3/17 Commission Workshop 1/17/17 Regular Commission Meeting	<b>February</b> 2/7/17 Commission Workshop 2/21/17 Regular Commission Meeting
<b>March</b> 3/7/17 Commission Workshop 3/21/17 Regular Commission Meeting	<b>April</b> 4/4/17 Commission Workshop 4/18/17 Regular Commission Meeting
<b>May</b> 5/2/17 Commission Workshop 5/9 – 5/12/17 ACWA Spring Conference, Monterey 5/16/17 Regular Commission Meeting	<b>June</b> 6/6/17 Commission Workshop 6/20/17 Regular Commission Meeting
<b>July</b> 7/4/17 No Meeting (Independence Day) 7/18/17 Regular Commission Meeting	<b>August</b> 8/1/17 Commission Workshop 8/15/17 Regular Commission Meeting
<b>September</b> 9/5/17 Commission Workshop 9/19/17 Regular Commission Meeting	<b>October</b> 10/3/17 Commission Workshop 10/17/17 Regular Commission Meeting
<b>November</b> 11/7/17 Commission Workshop 11/21/17 Regular Commission Meeting 11/28 – 12/1/17 ACWA Fall Conference, Anaheim	<b>December</b> 12/5/17 Commission Workshop 12/19/17 Regular Commission Meeting

**AGENCY  
REPRESENTATIVES'  
REPORTS**

**5B**



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

MWD MEETING  
AGENDA

**Board Meeting - Revised Agenda**

**November 8, 2016**

**12:00 p.m. -- Board Room**

---

**MWD Headquarters Building**

**700 N. Alameda Street**

**Los Angeles, CA 90012**

---

**1. Call to Order**

(a) Invocation

(b) Pledge of Allegiance: Director Elsa Saxod

**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 Gov. Code § 54954.3(a))**

**5. OTHER MATTERS**

A. Approval of the Minutes of the Meeting for October 11, 2016. (A copy has been mailed to each Director)  
Any additions, corrections, or omissions

Draft Minutes

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

C. Approve committee assignments

D. Chairman's Monthly Activity Report

E. Nomination and Election for Board Secretary for two-year term effective January 1, 2017

**6. DEPARTMENT HEADS' REPORTS**

A. General Manager's summary of Metropolitan's activities for the month of October

6A Report

B. General Counsel's summary of Legal Department activities for the month of October

6B Report

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

6C Report

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

6D Report

**7. CONSENT CALENDAR ITEMS — ACTION**

Adopt CEQA determination and authorize entering into a Local Resources Program agreement with Los Angeles Department of Water and Power for the North Hollywood Area Water Recycling Project. (WP&S)

7-2 Board Letter and Attachments

7-2, 7-3, 7-4 & 7-5 Presentation

- 7-3 Adopt CEQA determination and authorize entering into a Local Resources Program agreement with Los Angeles Department of Water and Power for the Sepulveda Basin Sports Complex Water Recycling Project. (WP&S)

7-3 Board Letter and Attachments

- 7-4 Adopt CEQA determination and authorize entering into a Local Resources Program agreement with Eastern Municipal Water District for Perris II Brackish Groundwater Desalter. (WP&S)

7-4 Board Letter and Attachments

- 7-5 Adopt CEQA determination and authorize entering into a Local Resources Program agreement with the City of Torrance and the Water Replenishment District of Southern California for the Groundwater Reliability Improvement Program Recycled Water Project. (WP&S)

7-5 Board Letter and Attachments

- 7-6 Adopt CEQA determination and authorize entering into a Water Savings Incentive Plan Agreement with Tri-Star Dyeing and Finishing Inc. (WP&S)

7-6 Board Letter

7-6 Presentation

- 7-7 Adopt CEQA determination and approve Agreement for Temporary Emergency Delivery of a Portion of the Mexican Treaty Waters of the Colorado River to the International Boundary in the vicinity of Tijuana, Baja California, Mexico, and for Operation of Facilities in the United States. (WP&S)

7-7 Board Letter and Attachments

7-7 Presentation

(END OF CONSENT CALENDAR)

**8. OTHER BOARD ITEMS — ACTION**

- 8-1 Adopt CEQA determination and adopt resolution designating authorized agents to accept federal and state funding for declared disasters and to sign official correspondence for disaster assistance. (E&O)

8-1 Board Letter and Attachment

8-1 Presentation

- 8-2 Adopt CEQA determination and appropriate \$13.8 million; and award \$9,595,000 contract to McMillen LLC (dba McMillen Jacobs Associates) for seismic upgrades to the 6.9 kV switch houses at the Colorado River Aqueduct pumping plants (Approp. 15438). (E&O)

8-2 Board Letter and Attachments

8-2 Presentation

- 8-3 Adopt CEQA determination and appropriate \$7.8 million; and award \$4.58 million contract to Spiniello Companies for Stage 2 lining repairs on the Orange County Feeder (Approp. 15377). (E&O)

8-3 Board Letter and Attachments

8-3 Presentation

- 8-4 Adopt CEQA determination and appropriate \$8.1 million; and award \$4,426,000 contract to Woodcliff Corporation for seismic upgrades to the Administration Building at the Robert B. Diemer Water Treatment Plant (Approp. 15436). (E&O)

8-4 Board Letter and Attachments

8-4 Presentation

- 8-5 Adopt CEQA determination and authorize an amendment to the agreement with the Southern California Public Power Authority for the sale of renewable power from four hydroelectric power plants. (E&O)

8-5 Board Letter

8-5 Presentation

- 8-6 Adopt CEQA determination and authorize an amendment to an existing office lease in Sacramento between SFI 1121L Street, LLC and Metropolitan to expand the space by 768 rentable square feet and extend the term for ten years. (RP&AM)

[Conference with real property negotiators; Commercial office space located at 1121 L Street, Sacramento, California; agency negotiators: Metropolitan and SFI 1121 L Street, LLC; under negotiation: price and terms; to be heard in closed session pursuant to Gov. Code Section 54956.8]

- 8-7 Adopt CEQA determination and appropriate \$2.16 million; award \$1.571 million procurement contract to OPT Tech Corp. for EMC Corp. data storage equipment; and authorize a storage system upgrade for Metropolitan's datacenter (Approp. 15487). (OP&T)

8-7 Board Letter and Attachment

8-7 Presentation

- 8-8 Adopt CEQA determination and approve Metropolitan Water District of Southern California's Salary Schedule Pursuant to CalPERS Regulations. (OP&T)

8-8 Board Letter and Attachment

8-8 Presentation

- 8-9 Adopt CEQA determination, appropriate \$1.54 million and authorize implementation of Information Technology Cyber Security Upgrades (Approp. 15378). (OP&T) [Any discussions of threats to public services or facilities to be heard in closed session pursuant to Gov. Code Section 54957(a). Consultation with Metropolitan's security operations manager]

- 8-10 Report on San Diego County Water Authority v. Metropolitan Water District of Southern California, et al., San Francisco County Superior Court Case Nos. CPF-10-510830, CPF-12-512466, CPF-14-514004 and CPF-16-515282; and the appeal of the 2010 and 2012 actions, Court of Appeal for the First Appellate District Case Nos. A146901 and A148266; and in connection with these matters adopt the CEQA determination and authorize an increase in maximum amount payable under contracts for legal services with Manatt, Phelps & Phillips, LLP in the amount of \$300,000 for a total amount not to exceed \$400,000. (L&C)

[Conference with legal counsel - existing litigation; to be heard in closed session pursuant to Gov. Code Section 54956.9(d) (1)] (ADDED)

## 9. BOARD INFORMATION ITEMS

- 9-1 Overview of proposed Lower Colorado River Basin Drought Contingency Plan. (WP&S)

9-1 Board Letter and Attachment

9-1 Presentation

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

9-2 Board Letter

## 10. FUTURE AGENDA ITEMS

## 11. ADJOURNMENT

REVISED: Date of Notice: November 2, 2016

NOTE: At the discretion of the committee, all items appearing on this agenda, whether or not expressly listed for action, may be deliberated and may be subject to action by the committee.

This committee reviews items and makes a recommendation for final action to the full Board of Directors. Final action will be taken by the Board of Directors. Agendas for the meeting of the Board of Directors may be obtained from the Board Executive Secretary. This committee will not take any final action that is binding on the Board, even when a quorum of the Board is present.

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**

**5C**



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

### **AGENDA**

**Thursday, November 3, 2016**

**4:30 p.m.**

#### **Location**

Inland Empire Utilities Agency  
6075 Kimball Avenue  
Chino, CA 91710

---

**Call to Order and Roll Call**

**Pledge of Allegiance**

**Public Comment**

**Additions to the Agenda**

- 1. Technical Committee Report (*Oral*)**
- 2. Action Item**
  - A. Approval of the September 1, 2016 Meeting Minutes
- 3. Informational Items**
  - A. Ten-Year Growth Forecast and Building Activity Report
  - B. RP-1/RP-5 Pre-Design Report Update
  - C. Regional Contract Update/Renewal
  - D. IEUA Business Goals Update
  - E. Sewer and Recycled Water Service to Unincorporated County Area
- 4. Receive and File**
  - A. Building Activity Update
  - B. Recycled Water Distribution – Operations Summary
  - C. Annual Water Use Report
  - D. Fiscal Year 2015/16 Budget Variance
- 5. Other Business**
  - A. IEUA General Manager's Update
  - B. Committee Member Requested Agenda Items for Next Meeting
  - C. Committee Member Comments
  - D. Next Meeting – December 1, 2016

**6. Adjournment**

**DECLARATION OF POSTING**

---

I, Laura Mantilla, Executive Assistant of the Inland Empire Utilities Agency, A Municipal Water District, hereby certify that a copy of this agenda has been posted by 5:30 p.m. in the foyer at the Agency's main office, 6075 Kimball Avenue, Building A, Chino, CA on Monday, October 31, 2016.

---

Laura Mantilla

**AGENCY  
REPRESENTATIVES'  
REPORTS**

**5D**

**CHINO BASIN WATERMASTER  
WATERMASTER BOARD MEETING**

11:00 a.m. – October 27, 2016

**WITH**

*Mr. Steve Elie – Chair*

*Mr. James Curatalo – 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**

1. Approve Minutes of the Watermaster Board Meeting held September 22, 2016

**B. FINANCIAL REPORTS**

1. Cash Disbursements for the month of August 2016
2. Watermaster VISA Check Detail for the month of August 2016
3. Combining Schedule for the Period July 1, 2016 through August 31, 2016
4. Treasurer's Report of Financial Affairs for the Period August 1, 2016 through August 31, 2016
5. Budget vs. Actual Report for the Period July 1, 2016 through August 31, 2016

**C. EXHIBIT "G" PHYSICAL SOLUTION TRANSFER RATE SUBSTITUTION**

Approve the proposed Fiscal Year 2016-17 substitute Physical Solution Transfer rate, and approve Watermaster legal counsel's filing of motion for Court approval of the same.

**II. BUSINESS ITEMS**

**A. 2015 GROUND-LEVEL MONITORING COMMITTEE ANNUAL REPORT**

Adopt the 2015 Annual Report of the Ground-Level Monitoring Committee, along with filing a copy with the Court.

**III. REPORTS/UPDATES**

**A. LEGAL COUNSEL REPORT**

1. September 23, 2016 Hearing and Subsequent Ruling

**B. ENGINEER REPORT**

1. RMPU Projects Support
2. Recomputation of Ambient Water Quality
3. Water Rights Compliance
4. Model Update and Required Demonstrations
5. 2016-17 Meeting/Reporting Schedules for Prado Basin Habitat Sustainability Program and Ground-Level Monitoring Committees

**C. CFO REPORT**

1. Use of SB 222 Fund

**D. GM REPORT**

1. FY 2016/17 Assessment Package
2. Storage Management
3. FY 2015/16 Replenishment Water Order
4. FY 2016/17 First Interim Organization Performance Report
5. SGMA Update
6. Holiday Meeting Schedule
7. Other

**IV. INFORMATION**

1. Cash Disbursements for September 2016
2. RMPU Status Report
3. Ground-Level Monitoring Status Report
4. South Archibald and Chino Airport Plumes Status Report

**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 committee meeting for the purpose of discussion and possible action.

1. September 19, 2016 Tentative Rulings

**VIII. FUTURE MEETINGS AT WATERMASTER**

10/27/16	Thu	9:00 a.m.	Ground-Level Monitoring Committee Meeting
10/27/16	Thu	11:00 a.m.	Watermaster Board Meeting
11/02/16	Wed	10:00 a.m.	FY 16/17 Assessment Package Workshop
11/02/16	Wed	2:30 p.m.	Prado Basin Habitat Sustainability Program Committee Meeting (at IEUA)
11/10/16	Thu	9:00 a.m.	Appropriative Pool Meeting
11/10/16	Thu	11:00 a.m.	Non-Agricultural Pool Meeting
11/10/16	Thu	1:30 p.m.	Agricultural Pool Meeting
11/17/16	Thu	8:00 a.m.	Appropriative Pool Strategic Planning (Confidential Session Only)
11/17/16	Thu	9:00 a.m.	Advisory Committee Meeting
11/17/16	Thu	9:30 a.m.	Recharge Investigations and Projects Committee (RIPCom)
11/17/16	Thu	11:00 a.m.	Watermaster Board*

\*Accelerated by a week due to the Thanksgiving Holiday.

**ADJOURNMENT**



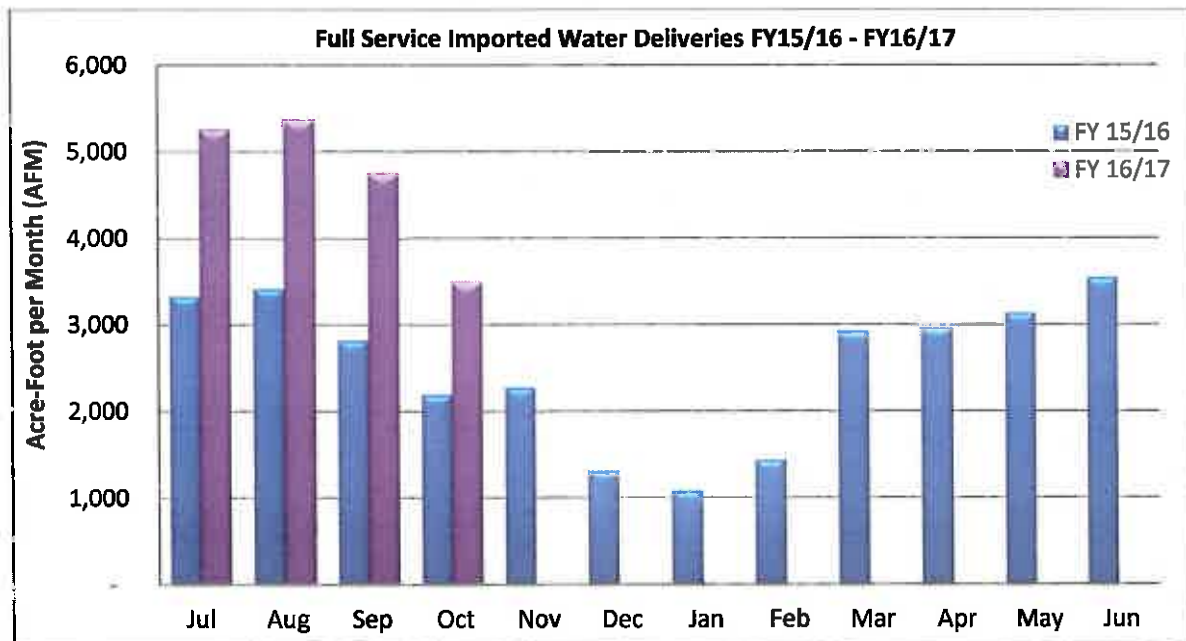
**GENERAL  
MANAGER'S  
REPORT**



Date: November 16, 2016  
To: The Honorable Board of Directors  
From: P. Joseph Grindstaff, General Manager  
Subject: General Manager's Report Regarding Agency Activities

**PLANNING & ENVIRONMENTAL RESOURCES**

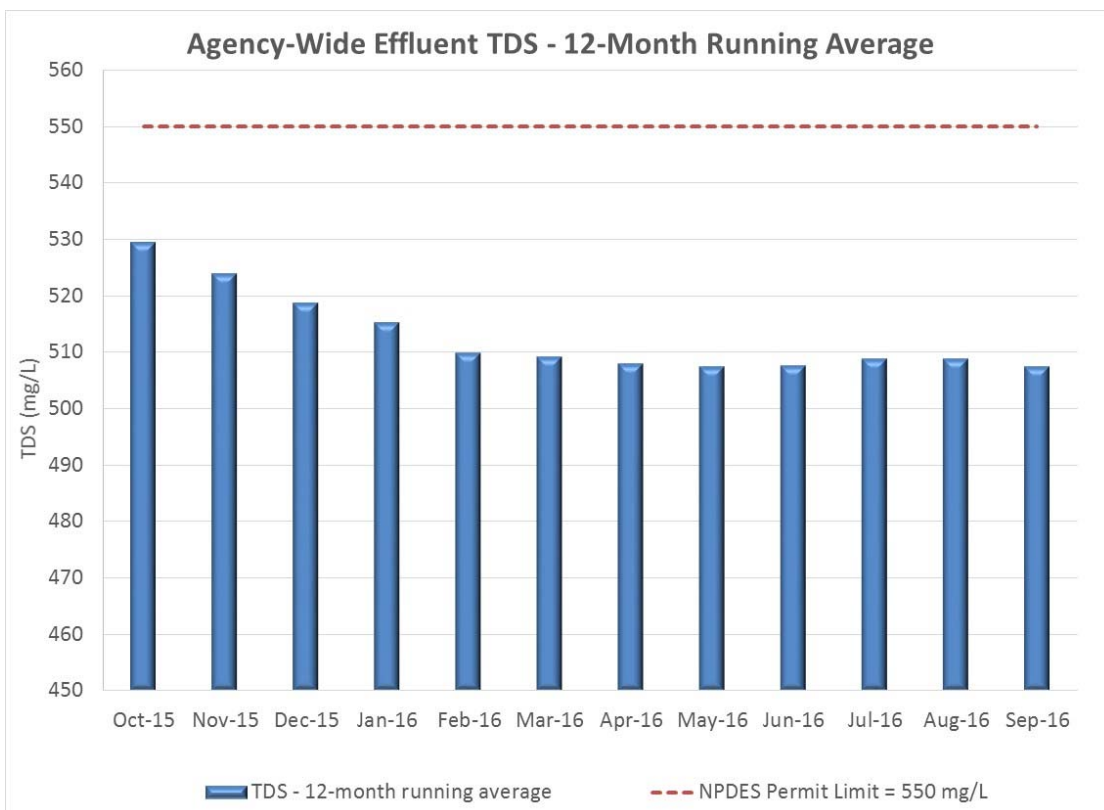
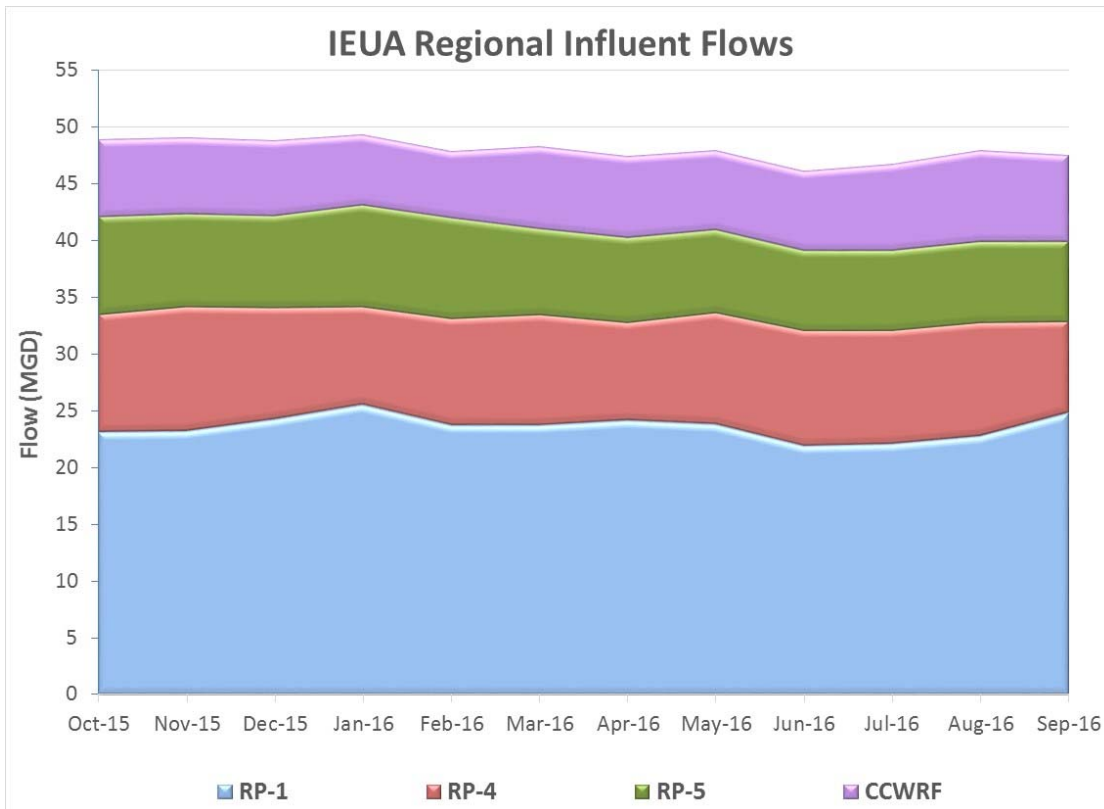
For FY16/17, the full service imported water deliveries for the month of October were at its highest compared to FY15/16.



The Agency-wide average influent flow for the month of September 2016 was approximately 47.5 million gallons per day (mgd), which is a 0.4 mgd increase from the August 2016 total influent flow.

The discharge permit effluent limit for total inorganic nitrogen (TIN) is 8 mg/L. The 12-month running average TIN value for September 2016 was 6.0 mg/L.

The discharge permit effluent limit for total dissolved solids (TDS) is 550 mg/L. The 12-month running average TDS value for September 2016 was 507 mg/L.



Engine #2 at RP-5 resulted in excess NOx emissions on October 23rd.

**IERCF UPDATE**

**Operational Comments** – Facility throughput for October averaged approximately 99% of permitted capacity at an average of 393 tons per day of biosolids and 167 tons per day of amendments (based on a 31-day month). The facility is operating well with no violations or lost time incidents.

**Facility Biosolids Throughput**

POTW	WET TONS MONTH	WET TONS YEAR TO DATE
LACSD	6,397.93	69,608.38
IEUA	4,727.39	51,019.74
OCSD	1,042.71	2,723.60
<b>TOTAL</b>	<b>12,168.03</b>	<b>123,351.72</b>

**Compost Sales** –Sales in October were greater than last year due to an early start of the AG season and an expansion of the sales area. Riverside County issued permits to IERCA authorizing the land application of compost to farms in the county significantly expanding sales options in the area. IERCA is the first biosolids compost producer to receive the formal authorization. Strong sales are expected to continue through November. Compost inventory in the storage facility is 17,950.00 cubic yards of finished material.

**Monthly Sales Summary**

PRODUCT	CUBIC YARD	AVERAGE PRICE PER CUBIC YARD	TOTAL REVENUE
Premium	17,632.24	\$1.67	\$29,415.77
Base	15,486.46	\$0.06	\$986.67
<b>TOTAL</b>	<b>33,118.70</b>	<b>\$0.92</b>	<b>\$30,402.44</b>

**Year-To-Date Sales Summary**

MONTH	TOTAL YARDS 2016/2017	TOTAL YARDS 2015/2016	TOTAL REVENUE 2016/2017	TOTAL REVENUE 2015/2016
July	14,898.82	21,389.25	\$27,554.05	\$34,657.16
August	13,973.73	16,919.04	\$32,185.36	\$30,461.07
September	28,277.42	16,750.02	\$25,161.07	\$24,655.71
October	33,118.70	27,394.30	\$30,402.44	\$33,401.74
<b>TOTAL</b>	<b>90,268.67</b>	<b>82,452.61</b>	<b>\$115,302.92</b>	<b>\$123,175.68</b>
<b>AVERAGE</b>	<b>22,567.17</b>	<b>20,613.15</b>	<b>\$28,825.73</b>	<b>\$30,793.92</b>

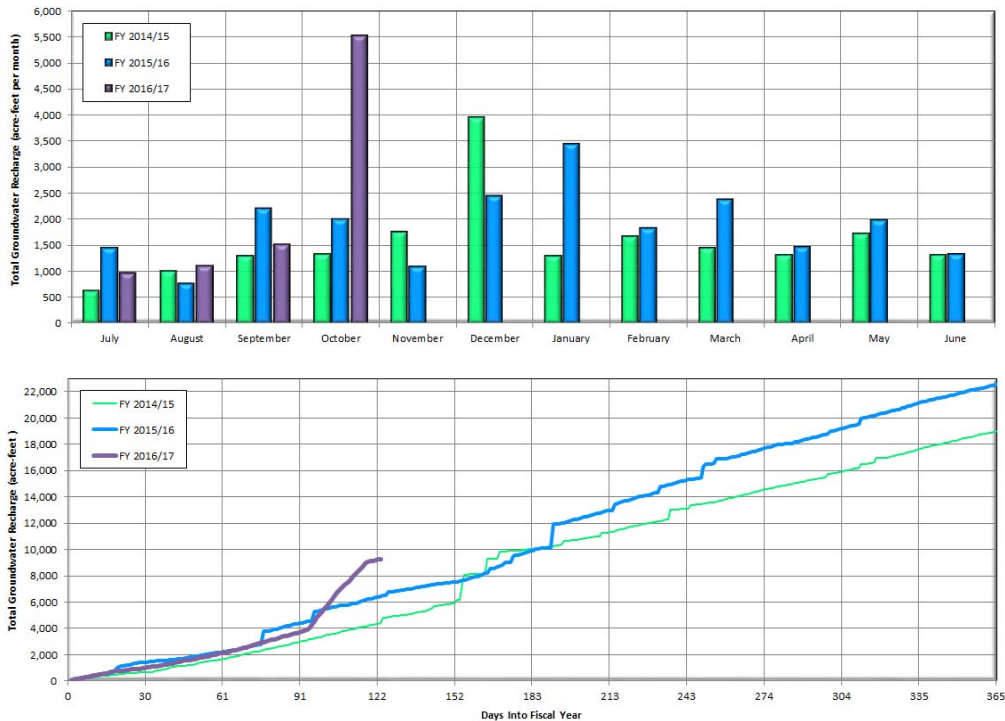
**Groundwater Recharge – September 2016**

During September 2016, recycled water recharge totaled 1,447 acre-feet. There was no imported water delivered. The capture of dry weather creek flows totaled 87 acre-feet. There were no rain events during this period. Monthly summaries of recharge by recharge site for the Chino Basin Groundwater Recharge Operations can be found at <http://www.ieua.org/category/reports/groundwater-recharge-reports>.

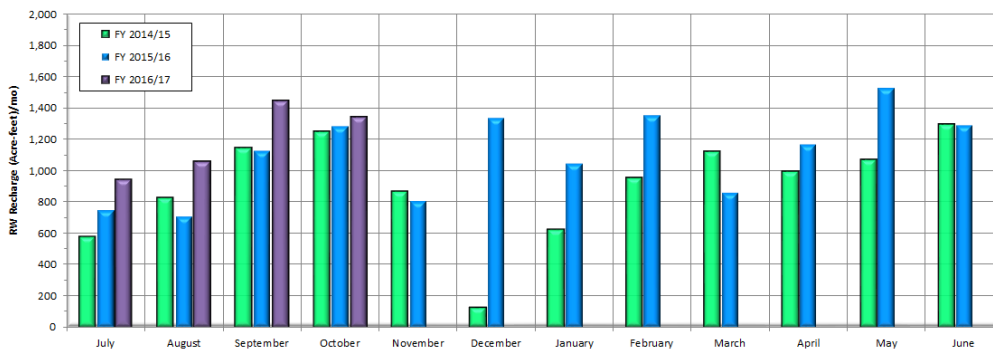
**Groundwater Recharge – October 2016 (Preliminary)**

During October 2016, recycled water recharge totaled 1,342 acre-feet. The CBWM order of 4,156 acre-feet of imported water was completed. The capture of dry weather creek flows totaled 20 acre-feet. There was one rain event during this period that totaled 180 acre-feet of captured storm water. Monthly summaries of recharge by recharge site for the Chino Basin Groundwater Recharge Operations can be found at <http://www.ieua.org/category/reports/groundwater-recharge-reports>.

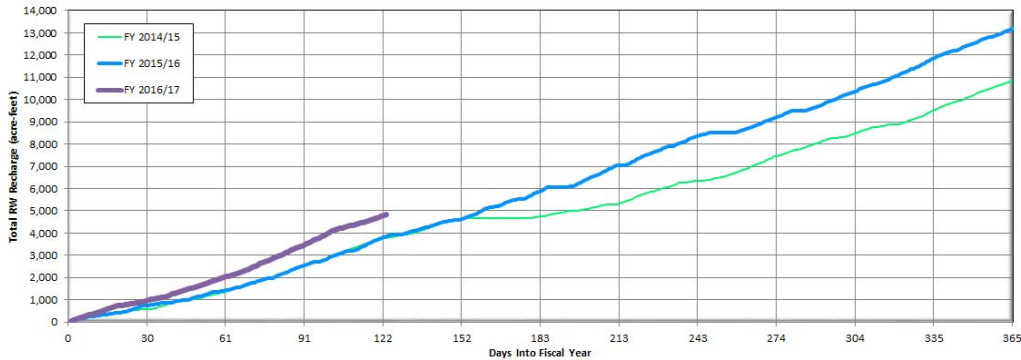
**Total Groundwater Recharge – October 2016**



**Recycled Water Delivered to Groundwater Recharge – October 2016**



**Recycled Water Delivered to Groundwater Recharge – October 2016 (continued)**

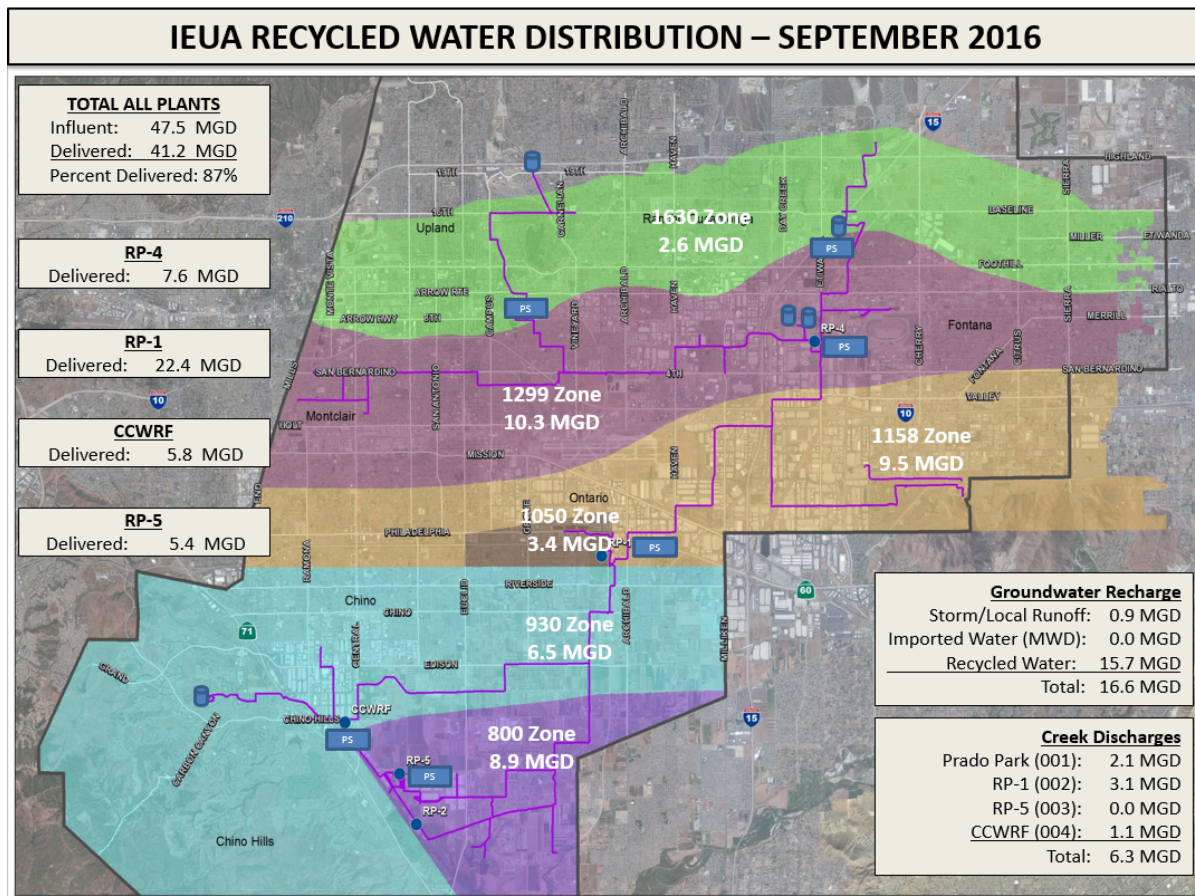


**RW Distribution – September 2016**

During September 2016, 87% (41.2 MGD) of IEUA recycled water supply (47.5 MGD) was delivered into the distribution system for both direct use customers (25.5 MGD) and groundwater recharge (15.7 MGD). Plant discharge to creeks feeding the Santa Ana River averaged 6.3 MGD.

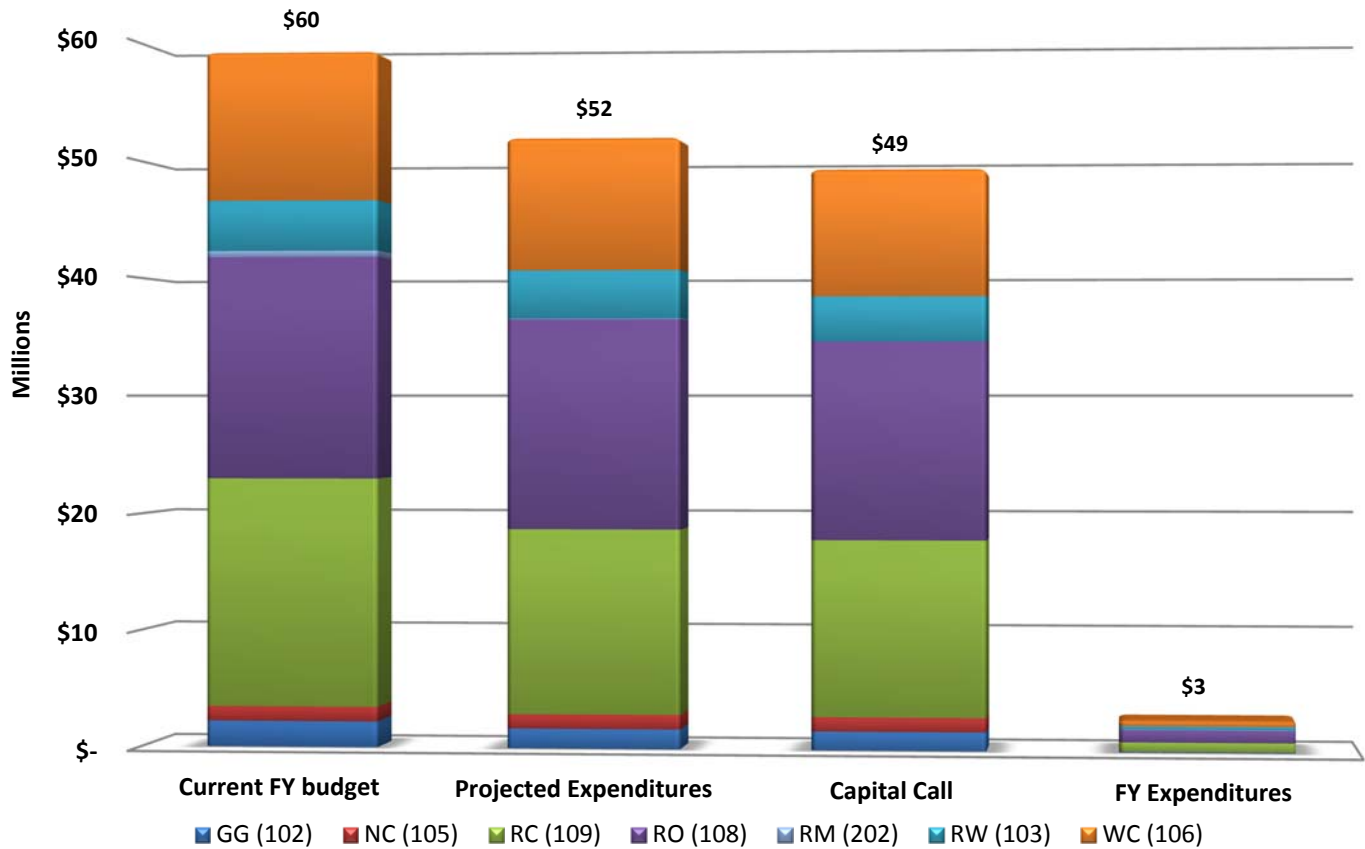
**RW Distribution – October 2016 (Preliminary)**

During October 2016, 68% (32.6 MGD) of IEUA recycled water supply (47.9 MGD) was delivered into the distribution system for both direct use customers (18.5 MGD) and groundwater recharge (14.1 MGD). Plant discharge to creeks feeding the Santa Ana River averaged 15.3 MGD.





**Engineering and Construction Management FY 16/17 Budget Status Update**



Project Budget Variance > \$500,000						
Project	Description	(A) FY 16/17 Forecast \$	(B) FY 16/17 Budget \$	(B-A) Variance (FY Budget - FY Forecast) \$	Reason for Variance	
1	EN11031	RP-5 Flow Equalization and Effluent Monitoring	841,151	1,465,000	623,849	The project scope was reduced in consideration of the RP-5 expansion project, which will address or modify some of the project components. As a result of the scope reduction, project expenditures are expected to be less than anticipated.
2	EN13016	SCADA Enterprise System	811,618	1,504,652	693,034	Initiation of Phase II of the SCADA Enterprise project was delayed when the delivery method was re-evaluated for the remaining facilities to take advantage of potential grant funds and accelerate the overall project timeline. As a result of the delay, the FY16/17 spending will be lower than anticipated.
3	EN14019	RP-1 Headworks Gate Replacement	912,724	1,500,000	587,276	The design consultant has struggled to meet the project schedule due to project complexity. Staff is scheduling meetings with key staff with the goal of developing a solid set of plans to meet the project objective. As a result, the FY project expenditures are expected to be less than anticipated.
4	EN15002	1158 Reservoir Site Cleanup	102,005	650,000	547,995	The scope of work has not been clearly defined due to a lack of available information. Further investigation is required to formulate the scope of work. A consulting services contract will be solicited to prepare a pre design report to define the scope of work.
5	EN15055	1630 W. Recycled Water Pump Station - Surge Tank Installation	502,378	1,340,000	837,622	The contractor's contract amount is considerably lower than the engineer's estimate. Additionally, the project has a very low change order percentage.
6	EN19006	RP-5 SHF - RO	1,245,000	3,125,000	1,880,000	The schedule for the RP-1 and RP-5 Expansion PDR has been extended from January 2017 to March 2017 which leads into the design for the RP-5 Liquid Treatment Expansion, EN19001, and the RP-5 Solids Treatment Facility, EN19006. The award of the design contract for the RP-5 Liquids Expansion and RP-5 Solids Treatment Facility has been scheduled for April 2017.
			4,414,876	9,584,652	5,169,776	



General Manager's Report Regarding Agency Activities

November 16, 2016

Page 7 of 16

<b>Bid and Award Look Ahead Schedule</b>			
	<b>Project Name</b>	<b>Projected Bid Opening Date</b>	<b>Projected Bid Award Date</b>
<b>Nov-16</b>			
1	EN16049.00 Conference Rooms Audio Visual Upgrades	10/13/2016	11/16/2016
<b>Dec-16</b>			
2	EN11031.00 RP-5 Flow Equalization and Effluent Monitoring	11/17/2016	12/21/2016
<b>Jan-17</b>			
3	EN16047.00 HQ Parking Lot FY15/16	12/15/2016	1/18/2017
4	WR15021.00 Napa Lateral	12/15/2016	1/18/2017
<b>Mar-17</b>			
5	EN17015.00 Collection System Upgrades 16/17	2/15/2017	3/15/2017
6	EN17047.00 RP-1 Dewatering Silo/Conveyor Safety Improvement Repairs	2/15/2017	3/15/2017
7	EN17048.00 RP-1 Dewatering Vertical Conveyor Repairs	2/15/2017	3/15/2017
8	EN17051.00 CCWRF Valve Replacement	2/15/2017	3/15/2017
9	EN13001.00 San Sevaine Basin Improvements	2/15/2017	3/15/2017
10	EN13016.04 SCADA Enterprise System - (Regional Water Recycling Plant No. 5)	2/15/2017	3/15/2017
11	EN13016.03 SCADA Enterprise System - (Regional Water Recycling Plant No. 4 )	2/15/2017	3/15/2017
12	EN17052.00 RP-1 and RP-4 Safety Improvements	2/15/2017	3/15/2017
13	EN14018.00 RP-4 Collection System Improvements	2/15/2017	3/15/2017
<b>May-17</b>			
14	CP16003.00 Headquarters Roofing Replacement	4/15/2017	5/17/2017
<b>Jun-17</b>			
15	EN16034.00 RW Pressure Sustaining Valve Installation FY 15/16	5/15/2017	6/21/2017
16	RP-4 Building Improvements	5/15/2017	6/21/2017
17	EN14019.00 RP-1 Headworks Primary and Secondary Upgrades	5/15/2017	6/21/2017
<b>Jul-17</b>			
18	EN15013.00 RP-1 TWAS and Primary Effluent Piping Replacement 2014	6/15/2017	7/19/2017
19	EN17046.00 1630 East Pump Station Upgrades	6/15/2017	7/19/2017
<b>Aug-17</b>			
20	EN14043.00 RP-5 RW Pipeline Bottleneck	7/15/2017	8/16/2017
21	EN17044.00 RP-1 Power Reliability Generator Control Upgrades	7/15/2017	8/16/2017
<b>Sep-17</b>			
22	EN17039.00 8th St. Basin RW Turnout Discharge Retrofit	8/15/2017	9/20/2017
23	EN11039.00 TP-1 Disinfection Pump Improvements	8/15/2017	9/20/2017
24	EN15002.00 1158 Reservoir Site Cleanup	8/15/2017	9/20/2017
<b>Oct-17</b>			
25	RW15004.00 Lower Day Basin RMPU Improvements	9/15/2017	10/18/2017
26	EN13048.98 RP-1 Power System Upgrades	9/15/2017	10/18/2017
<b>Dec-17</b>			
27	EN17043.00 RP4 Primary Clarifier Rehab	11/15/2017	12/20/2017

Fiscal Year 15/16 Capital Improvement Program

Agency-Wide

Agency-Wide														
No.	Project ID	Project Title	Budget					Contract						
			(a) Prior FY Expenditures thru 6/30/16 (\$)	(b) FY Budget 2016/17 (\$)	(c) FY 2016/17 Expenditures 7/1/16- 9/30/2016 (\$)	(d) Total Expenditures to Date thru 9/30/16 (A + C) (\$)	(e) Total Project Budget (\$)	(f) Phase	(g) Original Contract (\$)	(h) CO's/ Amendments (\$)	(i) CO's/ Amendments (H/G) (%)	(j) Contract Completion Date	(k) Projected/ Contract Completion Date (NOC)	(l) Float (J-K)
1	EN13016	SCADA Enterprise System (EN13016.02 RP-1)	5,058,331	1,504,652	141,618	5,199,948	13,900,000	Evaluation	1,926,650	71,271	3.70%	6/30/2020	7/8/2020	-8
2	EN17052	RP-1 and RP-4 Safety Improvements	-	760,000	57,398	57,398	760,000	Design	57,430	-	0.00%	6/30/2017	8/23/2017	-54
3	EN16070	Agency-Wide Pumps Efficiencies Improvements	-	635,000	13,141	13,141	1,275,000	Construction	142,060	-	0.00%	4/30/2017	5/1/2017	-1
4	EN16013	Agency-Wide Lighting Improvements	186,129	213,945	112,209	298,339	400,000	Construction	293,000	(12,027)	-4.10%	6/2/2017	11/30/2016	184
5	EN17034	Agency-Wide Lighting Improvements	-	1,385,000	1,193	1,193	1,400,000	Construction	1,107,320	-	0.00%	6/2/2017	3/13/2017	81
6	EN17053	Agencywide Recycled Water Pumps Overhaul Services	-	625,000	5,458	5,458	625,000	Construction	466,319	-	0.00%	4/28/2017	4/20/2017	8
7	EN15032	Agency-Wide HVAC Improvements- Pckg No. 3	742,334	26,750	2,228	744,562	1,155,000	Warranty	431,216	22,909	5.31%	5/10/2016	5/10/2016	0
8	EN17004	Agency-Wide Energy Efficiency Study	91,500	5,540	2,632	94,132	1,600,000	Warranty	17,780	-	0.00%	5/31/2016	6/28/2016	-28
9	EN13056	Agency-Wide HVAC Improvements- Pckg No. 2, (EN13056.01 RP-4 MCC)	885,445	192,968	97,645	983,090	1,131,500	Warranty	188,000	18,258	9.71%	9/24/2016	10/19/2016	-25
10	EN16018	RC Emergency O&M Projects FY 15/16	17,685	60,000	24,309	41,994	500,000	N/A	Various Emergency Projects					
11	EN16019	RO Emergency O&M Projects FY 15/16	344,200	85,000	78,405	422,604	600,000	N/A	Various Emergency Projects					
12	EN16017	WC Emergency O&M Projects FY 15/16	397,778	30,000	352	398,130	500,000	N/A	Various Emergency Projects					
13	EN17018	RC Emergency O&M Projects FY 16/17	-	600,000	1,881	1,881	600,000	N/A	Various Emergency Projects					
14	EN17019	RO Emergency O&M Projects FY 16/17	-	600,000	2,058	2,058	600,000	N/A	Various Emergency Projects					
15	EN17017	WC Emergency O&M Projects FY 16/17	-	500,000	8,762	8,762	500,000	N/A	Various Emergency Projects					
16	EN17016	NRWS Emergency O&M Projects FY 16/17	-	200,000	2,400	2,400	200,000	N/A	Various Emergency Projects					
17	EN17021	RC On-Call Operations and Maintenance Support	-	250,000	-	-	250,000	N/A	Various Maintenance Projects					
18	EN17022	RO On-Call Operations and Maintenance Support	-	250,000	-	-	250,000	N/A	Various Maintenance Projects					
19	EN17020	WC On-Call Operations and Maintenance Support	-	250,000	52	52	250,000	N/A	Various Maintenance Projects					
20	EN17027	RC Safety Operations and Maintenance Support	-	250,000	-	-	250,000	N/A	Various Safety Projects					
21	EN17026	RO Safety Operations and Maintenance Support	-	250,000	-	-	250,000	N/A	Various Safety Projects					
22	EN17025	WC Safety Projects Operations and Maintenance Support	-	250,000	-	-	250,000	N/A	Various Safety Projects					
23	CW17003	RC OE Projects FY 16/17	-	50,000	2,840	2,840	50,000	N/A	Various Permit Projects					
24	CW17101	NRWS OE Projects FY 16/17	-	10,000	2,188	2,188	10,000	N/A	Various Permit Projects					
25	CW17005	WC OE Projects FY 16/17	-	50,000	1,292	1,292	50,000	N/A	Various Permit Projects					
Totals			7,723,402	9,033,854	558,061	8,281,463	27,356,500		4,629,775	100,411				

Carbon Canyon Wastewater Regional Facility (CCWRF)														
No.	Project ID	Project Title	Budget				Contract							
			(a) Prior FY Expenditures thru 6/30/16 (\$)	(b) FY Budget 2016/17 (\$)	(c) FY 2016/17 Expenditures 7/1/16- 9/30/2016 (\$)	(d) Total Expenditures to Date thru 9/30/16 (A + C) (\$)	(e) Total Project Budget (\$)	(f) Phase	(g) Original Contract (\$)	(h) CO's/ Amendments (\$)	(i) CO's/ Amendments (H/G) (%)	(j) Contract Completion Date	(k) Projected/ Contract Completion Date (NOC)	(l) Float (J-K)
26	EN17006	CCWRF Odor Control and Headworks Replacements	6,951	610,000	15,434	22,385	7,000,000	Evaluation	Contract Has Not Been Awarded Yet					
27	EN17051	CCWRF Valve Replacement	-	250,000	1,662	1,662	250,000	Evaluation	In-House Design - Contract Has Not Been Awarded Yet					
Totals			6,951	860,000	17,096	24,047	7,250,000							

Chino Desalter Authority (CDA)														
No.	Project ID	Project Title	Budget				Contract							
			(a) Prior FY Expenditures thru 6/30/16 (\$)	(b) FY Budget 2016/17 (\$)	(c) FY 2016/17 Expenditures 7/1/16- 9/30/2016 (\$)	(d) Total Expenditures to Date thru 9/30/16 (A + C) (\$)	(e) Total Project Budget (\$)	(f) Phase	(g) Original Contract (\$)	(h) CO's/ Amendments (\$)	(i) CO's/ Amendments (H/G) (%)	(j) Contract Completion Date	(k) Projected/ Contract Completion Date (NOC)	(l) Float (J-K)
28	EN16021	TCE Plume Cleanup	1,089,754	3,000,000	307,441	1,397,195	12,000,000	Design	CDA Managed Project					
Totals			1,089,754	3,000,000	307,441	1,397,195	12,000,000							

Groundwater Recharge														
No.	Project ID	Project Title	Budget				Contract							
			(a) Prior FY Expenditures thru 6/30/16 (\$)	(b) FY Budget 2016/17 (\$)	(c) FY 2016/17 Expenditures 7/1/16- 9/30/2016 (\$)	(d) Total Expenditures to Date thru 9/30/16 (A + C) (\$)	(e) Total Project Budget (\$)	(f) Phase	(g) Original Contract (\$)	(h) CO's/ Amendments (\$)	(i) CO's/ Amendments (H/G) (%)	(j) Contract Completion Date	(k) Projected/ Contract Completion Date (NOC)	(l) Float (J-K)
39	EN17038	GWR Level Transmitter Upgrades	-	200,000	-	-	200,000	Not Started	Project Has Not Started					
40	RW15003	RW15003 Recharge Master Plan Update Projects	622,207	3,100,000	261,856	884,063	7,490,500	Pre-Design	768,950	9,434	1.23%	12/29/2017	12/29/2017	0
41	RW15004	Lower Day Basin RMPU	205,693	1,155,000	15,870	221,562	2,480,000	Pre-Design	38,720	28,985	74.86%	6/30/2018	6/30/2018	0
42	EN13001	San Savaine Basin Improvements	535,568	3,250,000	41,807	577,375	6,460,000	Design	358,828	4,734	1.32%	4/20/2019	4/20/2019	0
43	EN14047	GWR and RW SCADA Control Upgrades	233,626	455,263	47,872	281,498	932,000	Construction	250,989	-	-	1/23/2017	2/17/2017	-25
Totals			1,597,094	8,160,263	367,405	1,964,499	17,562,500		1,417,487	43,153				

General Manager's Report Regarding Agency Activities  
 November 16, 2016  
 Page 10 of 16

Collections														
No.	Project ID	Project Title	Budget					Contract						
			(a) Prior FY Expenditures thru 6/30/16 (\$)	(b) FY Budget 2016/17 (\$)	(c) FY 2016/17 Expenditures 7/1/16- 9/30/2016 (\$)	(d) Total Expenditures to Date thru 9/30/16 (A + C) (\$)	(e) Total Project Budget (\$)	(f) Phase	(g) Original Contract (\$)	(h) CO's/ Amendments (\$)	(i) CO's/ Amendments (H/G) (%)	(j) Contract Completion Date	(k) Projected/ Contract Completion Date (NOC)	(l) Float (J-K)
29	EN17050	Septic Conversion PDR	-	200,000	-	-	1,000,000	Not Started	Project Has Not Started – Still With Planning Department					
30	EN11039	TP-1 Disinfection Pump Improvements	95,367	225,000	8,226	103,593	1,288,302	Pre-Design	Contract Has Not Been Awarded					
31	EN17014	NRWS Manhole Upgrades - 16/17	-	350,000	-	-	350,000	Evaluation	In-House Design - Contract Has Not Been Awarded Yet					
32	EN17015	Collection System Upgrades 16/17	-	500,000	1,358	1,358	500,000	Evaluation	In-House Design - Contract Has Not Been Awarded Yet					
33	EN22002	NRW East End Flowmeter Replacement	3,325	175,000	5,747	9,071	300,000	Evaluation	Contract Has Not Been Awarded					
34	EN13028	Preserve Lift Station	19,774	100,000	4,901	24,675	100,000	Bid and Award	Contract Managed by Developer					
35	EN15042	SBCFCD Sewer Easement	415	275,000	-	415	302,500	Easement	Not Applicable					
36	EN15044	SBCFCD NRW Easement	338	515,000	-	338	565,000	Easement	Not Applicable					
37	EN16071	San Bernardino Avenue Gravity Sewer	203,227	1,300,000	37,542	240,768	1,500,000	Construction	992,240	-	0.00%	2/27/2017	3/3/2017	-4
38	EN13018	Montclair Diversion Structure Retrofit	1,068,186	180,000	123,856	1,192,043	3,030,095	Acceptance	557,565	(14,665)	-2.63%	7/17/2016	7/15/2016	2
Totals			1,390,632	3,820,000	181,630	1,572,262	8,935,897		1,549,805	(14,665)				

Headquarters														
No.	Project ID	Project Title	Budget					Contract						
			(a) Prior FY Expenditures thru 6/30/16 (\$)	(b) FY Budget 2016/17 (\$)	(c) FY 2016/17 Expenditures 7/1/16- 9/30/2016 (\$)	(d) Total Expenditures to Date thru 9/30/16 (A + C) (\$)	(e) Total Project Budget (\$)	(f) Phase	(g) Original Contract (\$)	(h) CO's/ Amendments (\$)	(i) CO's/ Amendments (H/G) (%)	(j) Contract Completion Date	(k) Projected/ Contract Completion Date (NOC)	(l) Float (J-K)
44	EN16012	CIPO Enhancements	-	175,000	-	-	175,000	Not Started	Project Has Not Started					
45	EN17023	HQ Drainage Investigations	-	50,000	-	-	50,000	Not Started	Ongoing Monitoring Requirements					
46	CP16003	Headquarters Roofing Replacement	9,822	450,000	12,364	22,186	450,000	Evaluation	Contract Has Not Been Awarded					
47	EN16048	As-Built Database Upgrades	24,599	150,000	6,174	30,773	200,000	Pre-Design	In House Database					
48	EN16049	Conference Rooms Audio Visual Upgrades	72,777	626,453	24,983	97,760	1,349,230	Bid and Award	85,102	-	0.00%	12/30/2016	6/30/2017	-182
49	EN16047	HQ Parking Lot FY15/16	50,765	415,000	8,295	59,060	443,000	Bid and Award	Bids exceeded Engineer's estimate. Rebid					
50	EN15052	Primavera Enhancements	116,435	57,447	102	116,537	178,400	Construction	80,000	-	0.00%	12/30/2016	12/30/2016	0
51	EN16055	Headquarters Back Up Generator	48,950	400,000	22,036	70,986	449,000	Construction	178,777	-	0.00%	2/13/2017	2/27/2017	-14
52	EN16068	Main Office Permit Office	18,068	293,000	23,661	41,728	312,000	Construction	52,890	1,824	3.45%	11/23/2016	11/17/2016	6
Totals			341,416	2,616,900	97,614	439,030	3,606,630		396,769	1,824				

General Manager's Report Regarding Agency Activities  
 November 16, 2016  
 Page 11 of 16

Recycled Water														
No.	Project ID	Project Title	Budget					Contract						
			(a) Prior FY Expenditures thru 6/30/16 (\$)	(b) FY Budget 2016/17 (\$)	(c) FY 2016/17 Expenditures 7/1/16- 9/30/2016 (\$)	(d) Total Expenditures to Date thru 9/30/16 (A + C) (\$)	(e) Total Project Budget (\$)	(f) Phase	(g) Original Contract (\$)	(h) CO's/ Amendments (\$)	(i) CO's/ Amendments (H/G) (%)	(j) Contract Completion Date	(k) Projected/ Contract Completion Date (NOC)	(l) Float (J-K)
53	EN17007	930 To 800 West CCWRF PRV	5,481	100,000	263	5,744	600,000	Not Started	Project Has Not Started					
54	EN17041	Orchard Recycled Water Turnout Improvements	-	25,000	-	-	125,000	Not Started	Project Has Not Started					
55	EN12016	North CIM Lateral	14,631	450,000	1,582	16,212	450,000	Not Started	Contract Has Not Been Awarded					
56	EN17039	8th St. Basin RW Turnout Discharge Retrofit	-	25,000	155	155	275,000	Evaluation	In-House Design - Contract Has Not Been Awarded Yet					
57	EN17049	Baseline RWPL Extension	-	300,000	650	650	5,000,000	Evaluation	Contract Has Not Been Awarded					
58	EN15002	1158 Reservoir Site Cleanup	3,805	650,000	3,056	6,862	1,300,000	Evaluation	Contract Has Not Been Awarded					
59	EN16034	RW Pressure Sustaining Valve Installation FY 15/16	18,098	341,300	1,148	19,246	850,000	Evaluation	Contract Has Not Been Awarded					
60	EN17046	1630 East Pump Station Upgrades	-	100,000	1,255	1,255	300,000	Evaluation	Contract Has Not Been Awarded					
61	WR15021	Napa Lateral	60,019	500,000	12,861	72,880	6,050,000	Evaluation	Contract Has Not Been Awarded					
62	EN17011	RW Hydraulic Modeling FY 16/17	-	100,000	2,981	2,981	100,000	Design	Not Applicable					
63	EN15043	SBCFCD Recycled Water Easement	534,759	570,000	-	534,759	1,210,000	Easement	Not Applicable					
64	EN15055	1630 W. Recycled Water Pump Station - Surge Tank Installation	546,124	1,340,000	235,378	781,502	1,590,000	Construction	729,000	18,495	2.54%	10/14/2016	11/28/2016	-45
65	EN12014	East Avenue 1630 E RWP Relocation	504,666	388,148	9,893	514,558	890,108	Construction	384,950	10,733	2.79%	City of Rancho Cucamonga Project		
66	EN13045	Wineville RW Extension Segment B	10,786,069	100,000	30,183	10,816,253	11,880,300	Warranty	8,900,000	241,113	2.71%	7/25/2015	12/3/2015	-131
Totals			12,473,652	4,989,448	299,406	12,773,058	30,620,408		10,013,950	270,341				

General Manager's Report Regarding Agency Activities  
 November 16, 2016  
 Page 12 of 16

Regional Water Recycling Plant No. 1 (RP-1)														
No.	Project ID	Project Title	Budget					Contract						
			(a) Prior FY Expenditures thru 6/30/16 (\$)	(b) FY Budget 2016/17 (\$)	(c) FY 2016/17 Expenditures 7/1/16- 9/30/2016 (\$)	(d) Total Expenditures to Date thru 9/30/16 (A + C) (\$)	(e) Total Project Budget (\$)	(f) Phase	(g) Original Contract (\$)	(h) CO's/ Amendments (\$)	(i) CO's/ Amendments (H/G) (%)	(j) Contract Completion Date	(k) Projected/ Contract Completion Date (NOC)	(l) Float (J-K)
67	EN14042	RP-1 1158 RWPS Upgrades	75,543	475,000	14,037	89,580	4,000,000	Evaluation	Contract Has Not Been Awarded					
68	EN15012	RP-1 East Primary Effluent Pipe Rehab	13,547	500,000	23,595	37,142	1,885,000	Evaluation	Contract Has Not Been Awarded					
69	EN17042	Digester 6 and 7 Roof Repairs	-	400,000	1,157	1,157	3,800,000	Evaluation	Contract Has Not Been Awarded					
70	EN17044	RP-1 Power Reliability Building Controls Upgrades	-	350,000	6,665	6,665	1,500,000	Evaluation	Contract Has Not Been Awarded					
71	EN17047	RP-1 Dewatering Silo/Conveyor Safety Improvement Repairs	-	231,000	-	-	231,000	Evaluation	Contract Has Not Been Awarded					
72	EN17048	RP-1 Dewatering Vertical Conveyor Repairs	-	375,000	58	58	375,000	Evaluation	Contract Has Not Been Awarded					
73	EN18006	RP-1 Flare Improvements	-	600,000	8,459	8,459	4,000,000	Evaluation	Contract Has Not Been Awarded					
74	EN19003	RP-1 Parallel Outfall Pipeline from RP-1 to Riverside Dr	7,031	200,000	4,276	11,307	5,700,000	Evaluation	Contract Has Not Been Awarded					
75	EP17003	RP-1 Training Room	-	200,000	-	-	200,000	Evaluation	Contract Has Not Been Awarded					
76	EN13048	RP-1 930-Zone RW Pump Station Load Analysis	292,963	200,000	22,956	315,920	1,599,000	Pre-Design	269,380	-	0.00%	12/31/2016	1/18/2017	-18
77	EN15013	RP-1 TWAS and Primary Effluent Piping Replacement 2014	19,700	120,000	22,295	41,994	500,000	Pre-Design	56,000	-	0.00%	2/7/2017	2/7/2017	0
78	EN16025	RP-1 Expansion PDR	220,836	450,000	37,926	258,762	1,500,000	Pre-Design	451,288	-	0.00%	3/20/2017	3/31/2017	-11
79	EN14019	RP-1 Headworks Gate Replacement	243,916	1,500,000	12,724	256,640	10,500,000	Design	Contract Has Not Been Awarded					
80	EN16024	RP-1 Mixed Liquor Return Pumps	567,463	2,850,000	127,634	695,097	6,636,000	Construction	4,888,000	-	0.00%	1/19/2018	1/15/2018	4
81	EN17040	RP-1 Aeration Basin Panel Repairs	-	200,000	356	356	200,000	Construction	1,745,000	-	0.00%	1/19/2018	1/15/2018	4
82	EN16051	RP-1 Utility Water Flow Meter	71,330	260,000	29,544	100,873	331,400	Construction	127,584	-	0.00%	11/23/2016	12/30/2016	-37
Totals			1,512,328	8,911,000	311,681	1,824,009	42,957,400		7,537,252	-				

Regional Water Recycling Plant No. 2 (RP-2)														
No.	Project ID	Project Title	Budget					Contract						
			(a) Prior FY Expenditures thru 6/30/16 (\$)	(b) FY Budget 2016/17 (\$)	(c) FY 2016/17 Expenditures 7/1/16- 9/30/2016 (\$)	(d) Total Expenditures to Date thru 9/30/16 (A + C) (\$)	(e) Total Project Budget (\$)	(f) Phase	(g) Original Contract (\$)	(h) CO's/ Amendments (\$)	(i) CO's/ Amendments (H/G) (%)	(j) Contract Completion Date	(k) Projected/ Contract Completion Date (NOC)	(l) Float (J-K)
83	EN14012	RP-2 Drying Beds Rehabilitation	1,231,986	350,000	18,614	1,250,600	1,818,400	Construction	193,961	-	0.00%	12/15/2016	12/30/2016	-15
Totals			1,231,986	350,000	18,614	1,250,600	1,818,400		193,961	-				

Regional Water Recycling Plant No. 4 (RP-4)														
No.	Project ID	Project Title	Budget					Contract						
			(a) Prior FY Expenditures thru 6/30/16 (\$)	(b) FY Budget 2016/17 (\$)	(c) FY 2016/17 Expenditures 7/1/16- 9/30/2016 (\$)	(d) Total Expenditures to Date thru 9/30/16 (A + C) (\$)	(e) Total Project Budget (\$)	(f) Phase	(g) Original Contract (\$)	(h) CO's/ Amendments (\$)	(i) CO's/ Amendments (H/G) (%)	(j) Contract Completion Date	(k) Projected/ Contract Completion Date (NOC)	(l) Float (J-K)
84	EN17110	RP-4 Process Improvements	63	180,000	-	63	5,200,000	Not Started	Project Has Not Started					
85	EN17032	RP-4 Outfall Repair from Mission Blvd to RP-1	-	50,000	-	-	5,300,000	Evaluation	Contract Has Not Been Awarded					
86	EN17043	RP4 Primary Clarifier Rehab	-	400,000	2,076	2,076	1,900,000	Evaluation	Contract Has Not Been Awarded					
87	EN14018	RP-4 Disinfection System Retrofit	391,899	1,000,000	27,216	419,115	2,391,345	Re-Design	98,970	155,751	157.37%	12/31/2017	11/17/2017	44
Totals			391,962	1,630,000	29,293	421,255	14,791,345		98,970	155,751				

Regional Water Recycling Plant No. 5 (RP-5)														
No.	Project ID	Project Title	Budget					Contract						
			(a) Prior FY Expenditures thru 6/30/16 (\$)	(b) FY Budget 2016/17 (\$)	(c) FY 2016/17 Expenditures 7/1/16- 9/30/2016 (\$)	(d) Total Expenditures to Date thru 9/30/16 (A + C) (\$)	(e) Total Project Budget (\$)	(f) Phase	(g) Original Contract (\$)	(h) CO's/ Amendments (\$)	(i) CO's/ Amendments (H/G) (%)	(j) Contract Completion Date	(k) Projected/ Contract Completion Date (NOC)	(l) Float (J-K)
88	EN19001	RP-5 Expansion to 30 mgd	-	1,250,000	-	-	125,000,000	Not Started	Project Has Not Started					
89	EN19006	RP-5 SHF - RO	-	3,125,000	-	-	136,000,000	Not Started	Project Has Not Started					
90	EN14043	RP-5 RW Pipeline Bottleneck	56,637	600,000	20,917	77,554	2,755,000	Pre-Design	201,987	-	0.00%	8/24/2019	8/24/2019	0
91	EN16028	RP-5 Expansion PDR	712,311	2,111,086	91,343	803,654	2,823,400	Pre-Design	1,980,310	16,870	0.85%	3/20/2017	3/31/2017	-11
92	EN11031	RP-5 Flow Equalization and Effluent Monitoring	422,173	1,465,000	131,151	553,324	3,397,200	Design	159,986	197,635	123.53%	12/21/2017	12/21/2017	0
93	EN13012	Magnolia Channel Monitoring Maintenance	87,611	10,000	-	87,611	192,242	Monitoring	Ongoing Monitoring Requirements					
94	EN15008	Water Quality Laboratory	1,502,545	7,000,000	245,596	1,748,141	24,645,000	Construction	17,460,000		0.00%	8/6/2018	10/16/2018	-71
95	EN16132	Magnolia Channel Spillway Improvements	162,787	427,904	18,061	180,848	734,000	Construction	280,891		0.00%	11/23/2016	11/21/2016	2
Totals			2,944,063	15,988,990	507,068	3,451,131	295,546,842		20,083,174	214,505				

Overall Totals			30,703,241	59,360,454	2,695,309	33,398,550	462,445,922		45,921,143	771,320				
----------------	--	--	------------	------------	-----------	------------	-------------	--	------------	---------	--	--	--	--



General Manager's Report Regarding Agency Activities

November 16, 2016

Page 14 of 16

*Emergency Projects*

**FY15/16 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	Date of Award	Status
Collections									
1	EN16018.03	W.A. Rasic Construction	Grand Avenue Sinkhole	Collections	TO-034	36,163	22,085	6/16/2016	Complete
2	EN16018.04	Sancon Engineering	Grove Trunk Sewer Pipe Repair (Grove & 8th)	Collections	TO-001	63,000	4,338	6/28/2016	Complete

**October 2016 Emergency Projects**

	Contractor	Task Order Description	Details of the Circumstances/Cause of Emergency	Scope of Repair	Location	Date of Award	Not-to-Exceed /Estimate
1	Ferreira Construction	Street Subsidence and Blow off repair	Ferreira Construction responded and provided the Agency assistance to repair the street, curb & gutter, remove the existing blow-off box, and install a new 4" riser and wharf hydrant.	Excavate a 15'x25' paved section on Dupont Ave. in the City of Ontario. The street was showing signs of subsidence and the adjacent curb & gutter was beginning to crack and fail near a 2" blow-off installed on an IEUA 42" RW line.	Agency-wide	10/18/2016	21,903
2	Ferreira Construction	Valve Shear Pine Replacement on a Buried RW Line	The valve has been stuck in the closed position for nearly 2 months, and operations staff has the need to exercise this valve and others in the intersection to properly maintain the integrity of the system as a whole.	Excavate an existing 24" BF Valve on the RW System at the intersection of East Ave. & Baseline Rd.	Agency-wide	10/19/2016	6,209

**FY16/17 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	Date of Award	Status
CDA									
1	CDA000000012	W.A. Rasic Construction	Raw Water Line Repair	CDA	TO-035	3,341	963	7/18/2016	Complete
RP-1									
2	EN17017.01	Ferreira Construction	RP-1 Flow Meter Replacement	RP-1	TO-09	60,000	8,282	7/26/2016	Complete
Collections									
3	EN17018.01	W.A. Rasic Construction	Grove Ave. Manhole Repair	COLL	TO-036	7,000	1,881	8/11/2016	Complete
RP-2									
4	EN17019.01	W.A. Rasic Construction	RP-2 Underground Pipe Leak	RP-2	TO-037	5,000	892	9/12/2016	Complete
Agency wide									
5	EN17019.02	Ferreira Construction	RP-5 Repair an existing SS Pump Guide Rail	Agency wide	TO-010	25,000	1,166	9/15/2016	Complete
6	EN17017.02	Ferreira Construction	Street Subsidence and Blow off repair	Agency wide	TO-011	21,902	-	10/18/2016	Complete
7	EN17017.03	Ferreira Construction	Valve Shear Pine Replacement on a Buried RW Line	Agency wide	TO-012	6,209	-	10/19/2016	Complete

## **FINANCE ADMINISTRATION**

### **Sale of RDA Property by S.B. County Successor Agency**

On October 18, 2016, the Agency received payment of \$345,037 for its share of the proceeds from the sale of the Cherry and Randall ("Speedway") property; 14.3 acres located directly east of the Auto Club Speedway at 14544-14636 Randall Avenue and 9235-9295 Cherry Avenue. The Speedway property was sold for \$7.760 million to TEC Equipment Inc. FBO D. Thompson Properties LLC, and Oregon LLC for future redevelopment, well above the assessed valuation of \$5.1 million.

Pursuant to Health and Safety Code Section 34180(f), a Compensation Agreement was executed between the Agency and from the San Bernardino County Successor Agency to the former Redevelopment Agency (Successor Agency). The Compensation Agreement was approved by the Board on May 18, 2016, for the Speedway property, along with two other agreements; (1) the Rosemary and Iris property (9.14 acres) located at 9911 and 9935 Calabash Avenue, 13921-14050 Iris Drive, and 13920-14048 Rosemary Drive; and (2) the Fire Station property (2.36 acres) located on the south side of San Bernardino Avenue, just east of Commerce Drive.

The Rosemary and Iris property is also proposed to be sold for future redevelopment. The Fire Station property was donated by the Catellus Commercial Group to the Former Redevelopment Agency for the purposes of building a new fire station and county safety office to serve local area residents. The Successor Agency proposes to transfer this property for government use as it was originally designated.

The use and sale of the three sites is in line with the approved Long Range Property Management Plan (LRPMP) for the County Successor Agency. The County LRPMP, was approved by the Department of Finance (DOF) on September 10, 2015, which governs the disposition and use of former redevelopment agency (RDA) properties that were transferred to the successor agencies with the dissolution of the RDAs in 2012.

### **Contracts and Facilities Services - Key Activities**

On October 27, 2016, the Contracts & Facilities Services Department hosted a "Doing Business with IEUA" training event open to outside vendors and contractors. The training involved discussion on the Agency's TYCIP, our solicitation processes including how to register with PlanetBids, Agency insurance requirements, invoicing and payment processing, as well as Ethics. There were approximately 20 attendees representing 12 different companies.

### **Business Information Services – Key Activities**

**Water Connection Fee Dashboard (September 2016)** – The new web-based dashboard provides up-to-date and interactive information related to the dollar amounts, meter sizes, development types, corresponding agencies and many more. Users can also interact with the dashboard to see additional details by agency and by month. Since the program inception on January 1, 2016, IEUA has collected over \$1.5M, with the majority of new connections (88%) for residential development.

**SAP Upgrade to Enhancement Pack 8 (EHP8) (August 2016)** – SAP introduced its enhancement package strategy for SAP as a means to simplify the way customers manage and deploy new software functionality. With EHP8, IEUA can electively implement these software

innovations from SAP and activate the software upon business demand. As a result, customers can isolate the impact of software updates and bring new functionality online faster through shortened testing cycles. Some of the new enhancements include, ability to view personal data via Employee Self Service (ESS) portal, the ability to perform mass updates to work orders and improved user interface for ease of use.

## **GRANTS UPDATE**

### **Site Visits**

On November 9, 2016, Grants staff attended a site visit with SAWPA for SAWPA Projects 8, 11, and 15. These projects are San Sevaime Basins Improvement Project, Lower Day Basin Improvement, and the Regional Residential Landscape Retrofit Program.

On October 14, 2016, CDA and IEUA staff attended a site visit with the USBR regarding the CDA Expansion.

### **Grant/Loan Opportunities and Applications**

IEUA staff continue to work on the Groundwater Quality application, which is due November 14, 2016.

### **Other Department Activities**

On September 22, 2016, staff from the Grants Department attended a workshop regarding the Uniform Grant Guidance Training. The keynote speaker was one of the team of authors that wrote the Uniform Grant Guidelines. He went over the ten key points that are most important for agencies to follow in the new guidelines and covered primary audit issues that are occurring.

On October 26, 2016, Grants staff and a few key Engineering and Construction Management staff, attended Eastern Municipal Water District's "Public Works Compliance Seminar" at their location in Perris, CA. This seminar provided information pertaining to federal and state compliance requirements for externally funded public works projects including:

- Determination of Eligible and Allowable Incurred Costs
- Compilation and Preparation of Reimbursement Requests
- Debarment and Suspension Compliance
- Grants / Loans Compliance Management
- Disadvantaged Business Enterprise (DBE) Compliance
- Audits
- SB 854: Contractor Registration Requirement, Contractor and Awarding Agency Responsibilities
- Apprenticeship Requirements on Public Works, Contractor and Awarding Agency Responsibilities
- Davis-Bacon Requirements- Before and After the Bid Advertisement
- Federal Apprenticeship Requirements

**ACTION  
ITEM**



**3C**

Date: November 16, 2016

To: The Honorable Board of Directors

From:  P. Joseph Grindstaff  
General Manager

Submitted by:  Christina Valencia  
Chief Financial Officer

 Sharmeen Bhojani   
Manager of Human Resources

Subject: Adoption of Resolutions to Amend the Memoranda of Understanding and Salary Matrixes/Schedules for Unit Modification

---

### **RECOMMENDATION**

It is recommended that the Board of Directors adopt Resolution Nos. 2016-11-4 and 2016-11-5 to amend the Supervisors' Unit, General Unit and the Professional Unit Memoranda of Understanding (MOUs) and salary matrix/schedule to reflect a unit modification.

### **BACKGROUND**

The Agency's employee bargaining units are represented by City Employees Associates (CEA). In April 2016, the Agency received a request from CEA to modify the Supervisors' Unit in order to allow the transfer of three members from the Professional and General Units to the Supervisors' Unit. In addition to granting the request, staff also recommended to the Board that employees currently assigned to the Supervisors' Unit who do not have any supervisory responsibilities be transferred to the Professional Unit. These changes were adopted by the Board on July 20, 2016.

Given that the parties were unable to resolve all grievances related to this matter, the Agency reached agreement with the Supervisors' Unit to reinstate the status quo prior to the Board meeting in July. The Agency will be holding a consultation meeting with all affected Units and return to the Board with additional recommended changes.

Adoption of Resolutions to Amend the Memoranda of Understanding and Salary Matrix/Schedule for  
Unit Modification  
November 16, 2016  
Page 2

**PRIOR BOARD ACTION**

The last update to the salary schedule/matrix for all groups was approved by the Board on September 21, 2016.

**IMPACT ON BUDGET**

None

**RESOLUTION NO. 2016-11-4**

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE  
INLAND EMPIRE UTILITIES AGENCY\*, SAN  
BERNARDINO COUNTY, CALIFORNIA, AMENDING THE  
SUPERVISORS' UNIT MEMORANDUM OF  
UNDERSTANDING AND THE SALARY  
MATRIX/SCHEDULE**

**WHEREAS**, the Agency has classification and unit changes for the Supervisors' Unit Memorandum of Understanding and the salary schedule/matrix as a result of a unit modification, and

**WHEREAS**, the Agency now desires to update the salary and classification information to comply with the California Code of Regulations (CCR) §570.5, and

**NOW, THEREFORE**, the Board of Directors of the Inland Empire Utilities Agency\* does hereby **RESOLVE, DETERMINE AND ORDER** as follows:

**Section 1:** The salary schedule/matrix is hereby adopted and set forth in Exhibit "1" of this resolution.

**Section 2:** The salary information contained in Exhibit "1" shall be effective as of November 20, 2016.

**ADOPTED** the 16<sup>TH</sup> day of November, 2016.

---

Terry Catlin  
President of the Inland Empire  
Utilities Agency\* and of the  
Board of Directors thereof

**ATTEST:**

---

Steven J. Elie  
Secretary/Treasurer of the Inland Empire  
Utilities Agency\* and of the  
Board of Directors thereof



STATE OF CALIFORNIA )  
COUNTY OF ) SS  
SAN BERNARDINO )

I, Secretary/Treasurer of the Inland Empire Utilities Agency\*, DO HEREBY CERTIFY that the foregoing Resolution being No. 2016-11-4, was adopted at a regular Board Meeting on November 16, 2016, of said Agency by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

---

Steven J. Elie  
Secretary/Treasurer

**SUPERVISORS' UNIT  
SALARY MATRIX  
Effective November 20, 2016**

**Exhibit 1**

<b>CLASSIFICATION TITLE</b>	<b>SALARY RANGES</b>
Accounting Supervisor	SU 099
Administrative Coordinator	SU 098
Business Systems Supervisor	SU 100
Compost Facility Superintendent	SU 101
Construction Project Manager	SU 100
Construction Project Manager - PE	SU 103
Groundwater Recharge Coordinator/Hydrogeologist	SU 104
Inventory Resources Coordinator	SU 102
Maintenance Supervisor	SU 101
Materials Management Supervisor	SU 099
Operations Supervisor*	SU 100
Process Automation & Controls Supervisor	SU 101
Senior Chemist	SU 100
Senior Water Resources Analyst	SU 098
Source Control/Environmental Resources Supervisor	SU 104
Supervising Contract & Programs Administrator	SU 099
Supervising Management Analyst	SU 099
Supervising Warehouse Systems & Inventory	SU 099
Supervisor of Engineering Administration	SU 100

\* Non-Exempt Classification

**SUPERVISORS' UNIT  
SALARY MATRIX  
Effective November 20, 2016**

**Exhibit 1**

Range	Step	Hourly	Bi-weekly	Monthly	Annual
SU088	1	24.2428	1,939.43	4,202.09	50,425
	2	24.8489	1,987.91	4,307.14	51,686
	3	25.4702	2,037.61	4,414.83	52,978
	4	26.1068	2,088.55	4,525.18	54,302
	5	26.7595	2,140.76	4,638.31	55,660
	6	27.4284	2,194.27	4,754.26	57,051
	7	28.1143	2,249.14	4,873.14	58,478
	8	28.8170	2,305.36	4,994.95	59,939
	9	29.5374	2,362.99	5,119.81	61,438
SU089	1	25.4551	2,036.41	4,412.22	52,947
	2	26.0916	2,087.33	4,522.54	54,270
	3	26.7438	2,139.50	4,635.59	55,627
	4	27.4123	2,192.98	4,751.47	57,018
	5	28.0977	2,247.81	4,870.26	58,443
	6	28.8001	2,304.01	4,992.02	59,904
	7	29.5201	2,361.61	5,116.82	61,402
	8	30.2581	2,420.65	5,244.74	62,937
	9	31.0147	2,481.18	5,375.88	64,511
SU090	1	26.7284	2,138.27	4,632.93	55,595
	2	27.3967	2,191.74	4,748.77	56,985
	3	28.0816	2,246.53	4,867.47	58,410
	4	28.7837	2,302.69	4,989.17	59,870
	5	29.5034	2,360.27	5,113.92	61,367
	6	30.2409	2,419.27	5,241.75	62,901
	7	30.9968	2,479.74	5,372.78	64,473
	8	31.7717	2,541.74	5,507.09	66,085
	9	32.5659	2,605.27	5,644.76	67,737
SU091	1	28.0633	2,245.07	4,864.31	58,372
	2	28.7650	2,301.20	4,985.94	59,831
	3	29.4842	2,358.73	5,110.59	61,327
	4	30.2212	2,417.70	5,238.35	62,860
	5	30.9767	2,478.14	5,369.30	64,432
	6	31.7511	2,540.09	5,503.53	66,042
	7	32.5448	2,603.58	5,641.10	67,693
	8	33.3585	2,668.68	5,782.14	69,386
	9	34.1925	2,735.40	5,926.70	71,120

**SUPERVISORS' UNIT  
SALARY MATRIX  
Effective November 20, 2016**

**Exhibit 1**

Range	Step	Hourly	Bi-weekly	Monthly	Annual
SU092	1	29.4678	2,357.42	5,107.74	61,293
	2	30.2045	2,416.36	5,235.45	62,825
	3	30.9596	2,476.77	5,366.33	64,396
	4	31.7336	2,538.69	5,500.50	66,006
	5	32.5269	2,602.15	5,637.99	67,656
	6	33.3401	2,667.21	5,778.95	69,347
	7	34.1736	2,733.89	5,923.43	71,081
	8	35.0280	2,802.24	6,071.51	72,858
	9	35.9037	2,872.30	6,223.31	74,680
SU093	1	30.9404	2,475.23	5,363.00	64,356
	2	31.7139	2,537.11	5,497.08	65,965
	3	32.5066	2,600.53	5,634.48	67,614
	4	33.3193	2,665.54	5,775.34	69,304
	5	34.1523	2,732.18	5,919.73	71,037
	6	35.0062	2,800.50	6,067.74	72,813
	7	35.8812	2,870.50	6,219.41	74,633
	8	36.7782	2,942.26	6,374.89	76,499
	9	37.6977	3,015.81	6,534.26	78,411
SU094	1	32.4877	2,599.01	5,631.19	67,574
	2	33.3000	2,664.00	5,772.00	69,264
	3	34.1325	2,730.60	5,916.29	70,996
	4	34.9857	2,798.86	6,064.19	72,770
	5	35.8603	2,868.83	6,215.79	74,589
	6	36.7569	2,940.55	6,371.19	76,454
	7	37.6758	3,014.06	6,530.47	78,366
	8	38.6177	3,089.41	6,693.73	80,325
	9	39.5831	3,166.65	6,861.07	82,333
SU095	1	34.1123	2,728.99	5,912.80	70,954
	2	34.9652	2,797.21	6,060.63	72,728
	3	35.8392	2,867.14	6,212.13	74,546
	4	36.7351	2,938.81	6,367.42	76,409
	5	37.6535	3,012.28	6,526.61	78,319
	6	38.5950	3,087.60	6,689.79	80,278
	7	39.5597	3,164.78	6,857.02	82,284
	8	40.5488	3,243.90	7,028.46	84,342
	9	41.5625	3,325.00	7,204.17	86,450

**SUPERVISORS' UNIT  
SALARY MATRIX  
Effective November 20, 2016**

**Exhibit 1**

Range	Step	Hourly	Bi-weekly	Monthly	Annual
SU096	1	35.8174	2,865.39	6,208.34	74,500
	2	36.7128	2,937.03	6,363.56	76,363
	3	37.6307	3,010.46	6,522.66	78,272
	4	38.5714	3,085.71	6,685.71	80,229
	5	39.5357	3,162.86	6,852.86	82,234
	6	40.5242	3,241.93	7,024.19	84,290
	7	41.5374	3,322.99	7,199.81	86,398
	8	42.5758	3,406.06	7,379.81	88,558
	9	43.6402	3,491.22	7,564.31	90,772
SU097	1	37.6080	3,008.64	6,518.72	78,225
	2	38.5484	3,083.87	6,681.72	80,181
	3	39.5121	3,160.97	6,848.76	82,185
	4	40.4998	3,239.98	7,019.96	84,240
	5	41.5124	3,320.99	7,195.48	86,346
	6	42.5502	3,404.02	7,375.37	88,504
	7	43.6140	3,489.12	7,559.76	90,717
	8	44.7045	3,576.36	7,748.78	92,985
	9	45.8220	3,665.76	7,942.48	95,310
SU098	1	39.4892	3,159.13	6,844.79	82,137
	2	40.4764	3,238.11	7,015.91	84,191
	3	41.4882	3,319.06	7,191.29	86,295
	4	42.5255	3,402.04	7,371.08	88,453
	5	43.5887	3,487.09	7,555.37	90,664
	6	44.6785	3,574.28	7,744.27	92,931
	7	45.7955	3,663.64	7,937.88	95,255
	8	46.9403	3,755.23	8,136.32	97,636
	9	48.1139	3,849.11	8,339.75	100,077
SU099	1	41.4390	3,315.12	7,182.75	86,193
	2	42.4749	3,398.00	7,362.32	88,348
	3	43.5368	3,482.95	7,546.39	90,557
	4	44.6253	3,570.02	7,735.05	92,821
	5	45.7409	3,659.27	7,928.42	95,141
	6	46.8843	3,750.75	8,126.62	97,519
	7	48.0565	3,844.52	8,329.79	99,957
	8	49.2578	3,940.62	8,538.02	102,456
	9	50.4892	4,039.14	8,751.46	105,018

**SUPERVISORS' UNIT  
SALARY MATRIX  
Effective November 20, 2016**

**Exhibit 1**

Range	Step	Hourly	Bi-weekly	Monthly	Annual
SU100	1	43.5353	3,482.83	7,546.13	90,554
	2	44.6237	3,569.89	7,734.77	92,817
	3	45.7393	3,659.14	7,928.15	95,138
	4	46.8829	3,750.63	8,126.36	97,516
	5	48.0549	3,844.39	8,329.51	99,954
	6	49.2563	3,940.50	8,537.76	102,453
	7	50.4877	4,039.02	8,751.20	105,014
	8	51.7498	4,139.98	8,969.97	107,640
	9	53.0437	4,243.49	9,194.23	110,331
SU101	1	45.7122	3,656.98	7,923.45	95,081
	2	46.8549	3,748.39	8,121.52	97,458
	3	48.0262	3,842.10	8,324.54	99,894
	4	49.2270	3,938.16	8,532.68	102,392
	5	50.4577	4,036.82	8,746.01	104,952
	6	51.7191	4,137.53	8,964.64	107,576
	7	53.0121	4,240.97	9,188.77	110,265
	8	54.3373	4,346.99	9,418.47	113,022
	9	55.6958	4,455.66	9,653.94	115,847
SU102	1	47.9976	3,839.81	8,319.59	99,835
	2	49.1978	3,935.82	8,527.62	102,331
	3	50.4276	4,034.21	8,740.78	104,889
	4	51.6883	4,135.06	8,959.30	107,512
	5	52.9806	4,238.44	9,183.30	110,200
	6	54.3051	4,344.41	9,412.89	112,955
	7	55.6626	4,453.01	9,648.19	115,778
	8	57.0542	4,564.34	9,889.40	118,673
	9	58.4806	4,678.45	10,136.64	121,640
SU103	1	50.3976	4,031.81	8,735.59	104,827
	2	51.6576	4,132.61	8,953.98	107,448
	3	52.9490	4,235.92	9,177.83	110,134
	4	54.2727	4,341.82	9,407.27	112,887
	5	55.6296	4,450.37	9,642.46	115,710
	6	57.0202	4,561.62	9,883.51	118,602
	7	58.4458	4,675.66	10,130.60	121,567
	8	59.9069	4,792.55	10,383.86	124,606
	9	61.4047	4,912.38	10,643.48	127,722

**SUPERVISORS' UNIT  
SALARY MATRIX  
Effective November 20, 2016**

**Exhibit 1**

<u>Range</u>	<u>Step</u>	<u>Hourly</u>	<u>Bi-weekly</u>	<u>Monthly</u>	<u>Annual</u>
SU104					
	1	52.9175	4,233.40	9,172.38	110,069
	2	54.2405	4,339.24	9,401.69	112,820
	3	55.5964	4,447.71	9,636.71	115,641
	4	56.9864	4,558.92	9,877.65	118,532
	5	58.4110	4,672.88	10,124.58	121,495
	6	59.8713	4,789.70	10,377.69	124,532
	7	61.3680	4,909.44	10,637.12	127,645
	8	62.9022	5,032.17	10,903.04	130,837
	9	64.4749	5,157.99	11,175.65	134,108



**RESOLUTION NO. 2016-11-5**

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE INLAND EMPIRE UTILITIES AGENCY\*, SAN BERNARDINO COUNTY, CALIFORNIA, AMENDING THE PROFESSIONAL UNIT AND GENERAL UNIT MEMORANDUMS OF UNDERSTANDING AND THE SALARY SCHEDULE/MATRIX FOR THE UNREPRESENTED, EXECUTIVE MANAGEMENT, LABORATORY UNIT, OPERATORS' ASSOCIATION, PROFESSIONAL UNIT AND GENERAL UNIT**

**WHEREAS**, the Agency has classification and unit changes for the Professional Unit and the General Unit Memorandums of Understanding and the consolidated salary matrix for the Unrepresented, Executive Management, Laboratory Unit, Operators' Association, Professional Unit and General Unit employees as a result of a unit modification for the Professional and General Unit, and

**WHEREAS**, the Agency now desires to update the salary and classification information to comply with the California Code of Regulations (CCR) §570.5, and

**NOW, THEREFORE**, the Board of Directors of the Inland Empire Utilities Agency\* does hereby **RESOLVE, DETERMINE AND ORDER** as follows:

**Section 1:** The salary schedule/matrix is hereby adopted and set forth in Exhibit "1" of this resolution.

**Section 2:** The salary information contained in Exhibit "1" shall be effective as of November 20, 2016.

**ADOPTED** the 16<sup>TH</sup> day of November, 2016.

---

Terry Catlin  
President of the Inland Empire  
Utilities Agency\* and of the  
Board of Directors thereof

ATTEST:

\_\_\_\_\_  
Steven J. Elie  
Secretary/Treasurer of the Inland Empire  
Utilities Agency\* and of the  
Board of Directors thereof

STATE OF CALIFORNIA    )  
COUNTY OF                ) SS  
SAN BERNARDINO         )

I, Secretary/Treasurer of the Inland Empire Utilities Agency\*, DO HEREBY  
CERTIFY that the foregoing Resolution being No. 2016-11-5, was adopted at a regular Board  
Meeting on November 16, 2016, of said Agency by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

\_\_\_\_\_  
Steven J. Elie  
Secretary/Treasurer

**Salary Matrix**  
**Effective November 20, 2016**

**EXHIBIT 1**

<b>CLASSIFICATION TITLE</b>	<b>Salary Range</b>	<b>Unit</b>	<b>FLSA</b>
Accountant I	173	UN	Exempt
Accountant II	175	PR	Exempt
Accounting Technician I	169	UN	Non-exempt
Accounting Technician I	170	GU	Non-exempt
Accounting Technician II	173	GU	Non-exempt
Administrative Assistant I	171	GU	Non-exempt
Administrative Assistant I (confidential)	171	UN	Non-exempt
Administrative Assistant II	174	PR	Non-exempt
Administrative Assistant II (confidential)	174	UN	Non-exempt
Assistant Engineer	179	UN	Exempt
Associate Engineer	182	UN	Exempt
Biologist <sup>1</sup>	181	LB	Exempt
Board Secretary/Office Manager	188	UN	Exempt
Budget Officer	186	UN	Exempt
Business Systems Analyst I	179	PR	Exempt
Business Systems Analyst II	181	PR	Exempt
CAD Designer	178	UN	Non-exempt
Chemist	181	LB	Exempt
Chief Financial Officer/Assistant General Manager	196	EX	Exempt
Collection System Operator I	171	GU	Non-exempt
Collection System Operator II	175	GU	Non-exempt
Collection System Operator III	177	GU	Non-exempt
Collection System Supervisor	182	GU	Exempt
Compost Operator	174	GU	Non-exempt
Compost Sales Representative	181	PR	Exempt
Compost Worker	170	GU	Non-exempt
Construction Project Inspector	180	UN	Non-exempt
Contracts Administrator I	177	PR	Exempt
Contracts Administrator II	180	PR	Exempt
Control Systems Analyst I	180	GU	Non-exempt
Control Systems Analyst II	182	GU	Non-exempt
Deputy Manager of Capital Improvement Projects	188	UN	Exempt
Deputy Manager of Construction Management	188	UN	Exempt
Deputy Manager of Engineering	189	UN	Exempt
Deputy Manager of Human Resources	188	UN	Exempt
Deputy Manager of Integrated Systems Services	188	UN	Exempt
Deputy Manager of Maintenance	188	UN	Exempt
Deputy Manager of Operations	188	UN	Exempt
Deputy Manager of Planning & Environmental Resources	189	UN	Exempt
Electrical & Instrumentation Technician I	176	GU	Non-exempt
Electrical & Instrumentation Technician II	179	GU	Non-exempt
Electrical & Instrumentation Technician III	181	GU	Non-exempt
Electrical & Instrumentation Technician III <sup>2</sup>	182	GU	Non-exempt

**Salary Matrix**  
**Effective November 20, 2016**

**EXHIBIT 1**

<b>CLASSIFICATION TITLE</b>	<b>Salary Range</b>	<b>Unit</b>	<b>FLSA</b>
Manager of Finance & Accounting	190	UN	Exempt
Manager of Human Resources	190	UN	Exempt
Manager of Internal Audit	190	UN	Exempt
Manager of Laboratories	190	UN	Exempt
Manager of Operations & Maintenance	192	UN	Exempt
Manager of Planning & Environmental Resources	192	UN	Exempt
Manager of Regional Compost Authority	190	UN	Exempt
Manager of Technical Services	190	UN	Exempt
Mechanic I	172	GU	Non-exempt
Mechanic I <sup>4</sup>	173	GU	Non-exempt
Mechanic II	176	GU	Non-exempt
Mechanic III	179	GU	Non-exempt
Mechanic IV	181	GU	Non-exempt
Network Administrator	183	PR	Exempt
Office Assistant (confidential)	166	UN	Non-exempt
Office Assistant	166	GU	Non-exempt
Operations Specialist	179	UN	Exempt
Pretreatment & Source Control Inspector I	174	GU	Non-exempt
Pretreatment & Source Control Inspector II	177	GU	Non-exempt
Procurement Specialist I	174	PR	Non-exempt
Procurement Specialist II	175	PR	Non-exempt
Project Manager I	184	PR	Exempt
Project Manager II	185	PR	Exempt
Records Specialist	173	GU	Non-exempt
Recycled Water Distribution Operator	179	OP	Non-exempt
Risk Specialist	174	UN	Non-exempt
RW/Groundwater Recharge Systems Maintenance Technician	176	GU	Non-exempt
RW/Groundwater Recharge Operations & Maintenance Specialist	179	UN	Exempt
Safety Analyst	178	UN	Exempt
Safety Officer	183	UN	Exempt
Senior Accountant	179	PR	Exempt
Senior Associate Engineer	184	UN	Exempt
Senior Associate Engineer - PE	185	UN	Exempt
Senior Compost Operations & Maintenance Technician	181	GU	Non-exempt
Senior Construction Project Inspector	182	UN	Exempt
Senior Engineer	187	PR	Exempt
Senior Environmental Resources Planner	184	UN	Exempt
Senior External Affairs Specialist	180	UN	Exempt
Senior Financial Analyst	183	PR	Exempt
Senior Information Systems Analyst	182	PR	Exempt
Senior Internal Auditor	182	UN	Exempt
Senior Operations Specialist	184	UN	Exempt
Senior Project Manager	187	PR	Exempt

**Salary Matrix  
Effective November 20, 2016**

**EXHIBIT 1**

<b>CLASSIFICATION TITLE</b>	<b>Salary Range</b>	<b>Unit</b>	<b>FLSA</b>
Senior Pretreatment & Source Control Inspector	180	GU	Non-exempt
Senior Wastewater Treatment Plant Operator	181	OP	Non-exempt
Senior Water Plant Operator	181	OP	Non-exempt
Senior Water Resources Analyst	182	PR	Exempt
Supervisor-Environmental Compliance & Energy	188	PR	Exempt
Systems Administrator	181	PR	Exempt
Technology Specialist I	178	GU	Non-exempt
Technology Specialist II	180	GU	Non-exempt
Technology Specialist III	182	GU	Non-exempt
Warehouse Technician	171	GU	Non-exempt
Wastewater Treatment Plant Operator I	174	OP	Non-exempt
Wastewater Treatment Plant Operator II	176	OP	Non-exempt
Wastewater Treatment Plant Operator III	178	OP	Non-exempt
Wastewater Treatment Plant Operator IV, V	180	OP	Non-exempt
Wastewater Treatment Plant Operator-in-Training	171	OP	Non-exempt
Water Plant Operator I	174	OP	Non-exempt
Water Plant Operator II	176	OP	Non-exempt
Water Plant Operator III	178	OP	Non-exempt
Water Plant Operator IV, V	180	OP	Non-exempt

**Notes:**

1. Incumbent Biologist in this position prior to 7/1/01 shall be non-exempt.
2. Salary range for Incumbent Senior Electrical & Instrumentation Tech employee reclassified to Electrical & Instrumentation Technician III.
3. The Y-Rated salary for this position is reflective of the incumbent in the position effective 11/1/14 formerly classified as CIP Coordinator.
4. Salary range for Incumbent Plant Maintenance Technician II employees reclassified to Mechanic I.

**Unrepresented, Executive, General Unit, Laboratory Unit, Operators' Association,  
and Professional Unit Salary Matrix  
Effective November 20, 2016**

**EXHIBIT 1**

<b>Range/Step</b>	<b>Hourly</b>	<b>Bi-Weekly</b>	<b>Monthly</b>	<b>Annually</b>
<b>165</b>				
1	18.1975	1,455.80	3,154.23	37,851
2	18.6524	1,492.19	3,233.08	38,797
3	19.1186	1,529.49	3,313.90	39,767
4	19.5967	1,567.73	3,396.76	40,761
5	20.0865	1,606.92	3,481.66	41,780
6	20.5887	1,647.10	3,568.71	42,825
7	21.1034	1,688.27	3,657.93	43,895
8	21.6310	1,730.48	3,749.37	44,992
9	22.1718	1,773.75	3,843.11	46,117
<b>166</b>				
1	19.1061	1,528.49	3,311.72	39,741
2	19.5837	1,566.69	3,394.50	40,734
3	20.0733	1,605.86	3,479.37	41,752
4	20.5751	1,646.01	3,566.35	42,796
5	21.0895	1,687.16	3,655.51	43,866
6	21.6167	1,729.34	3,746.90	44,963
7	22.1571	1,772.57	3,840.56	46,087
8	22.7110	1,816.88	3,936.58	47,239
9	23.2788	1,862.30	4,034.99	48,420
<b>167</b>				
1	20.0609	1,604.87	3,477.23	41,727
2	20.5624	1,644.99	3,564.15	42,770
3	21.0764	1,686.12	3,653.25	43,839
4	21.6034	1,728.27	3,744.59	44,935
5	22.1435	1,771.48	3,838.20	46,058
6	22.6971	1,815.76	3,934.16	47,210
7	23.2645	1,861.16	4,032.52	48,390
8	23.8462	1,907.69	4,133.33	49,600
9	24.4423	1,955.38	4,236.66	50,840
<b>168</b>				
1	21.0621	1,684.96	3,650.76	43,809
2	21.5886	1,727.09	3,742.02	44,904
3	22.1283	1,770.27	3,835.58	46,027
4	22.6815	1,814.52	3,931.46	47,178
5	23.2485	1,859.88	4,029.74	48,357
6	23.8298	1,906.39	4,130.51	49,566
7	24.4256	1,954.04	4,233.76	50,805
8	25.0362	2,002.89	4,339.61	52,075
9	25.6621	2,052.96	4,448.09	53,377
<b>169</b>				
1	22.1137	1,769.10	3,833.04	45,997
2	22.6666	1,813.33	3,928.87	47,146
3	23.2332	1,858.65	4,027.08	48,325
4	23.8141	1,905.13	4,127.77	49,533

**Salary Matrix**  
**Effective November 20, 2016**

**EXHIBIT 1**

<b>CLASSIFICATION TITLE</b>	<b>Salary Range</b>	<b>Unit</b>	<b>FLSA</b>
Electrical & Instrumentation Technician IV	182	GU	Non-exempt
Engineering Services Analyst	182	PR	Exempt
Engineering Services Specialist	179	UN	Exempt
Engineering Technician	175	GU	Non-exempt
Environmental Resources Planner I	179	UN	Exempt
Environmental Resources Planner II	182	UN	Exempt
Executive Assistant	178	UN	Exempt
Executive Manager of Engineering/Assistant General Manager	196	EX	Exempt
Executive Manager of Operations/Assistant General Manager	196	EX	Exempt
Executive Manager of Policy Development/Assistant General Manager	196	EX	Exempt
External Affairs Analyst	180	UN	Exempt
External Affairs Specialist I	171	UN	Exempt
External Affairs Specialist I (Y-Rated) <sup>3</sup>	202	UN	Exempt
External Affairs Specialist II	177	UN	Exempt
Facilities Specialist	177	PR	Exempt
Facilities Specialist - Landscape	177	UN	Exempt
Facilities Program Supervisor	183	PR	Exempt
Financial Analyst I	179	PR	Exempt
Financial Analyst II	181	PR	Exempt
General Manager	203	EX	Exempt
GIS Specialist	178	UN	Exempt
Grants Administrator	179	PR	Exempt
Grants Officer	186	UN	Exempt
Human Resources Analyst I	177	UN	Exempt
Human Resources Analyst II	179	UN	Exempt
Human Resources Officer	183	UN	Exempt
Human Resources Technician	171	UN	Non-exempt
HVAC Technician	177	GU	Non-exempt
Industrial Engine Technician I	177	GU	Non-exempt
Industrial Engine Technician II	181	GU	Non-exempt
Information Systems Analyst I	179	PR	Exempt
Information Systems Analyst II	181	PR	Exempt
Intern	001	N/A	Non-exempt
Internal Auditor	179	UN	Exempt
Laboratory Assistant	172	LB	Non-exempt
Laboratory Scientist I	177	LB	Non-exempt
Laboratory Scientist II	179	LB	Non-exempt
Maintenance Planner	181	GU	Non-exempt
Maintenance Specialist	201	UN	Non-exempt
Manager of Business Information Services	190	UN	Exempt
Manager of Contracts & Facility Services	190	UN	Exempt
Manager of Engineering	192	UN	Exempt
Manager of External Affairs	190	UN	Exempt



**Unrepresented, Executive, General Unit, Laboratory Unit, Operators' Association,  
and Professional Unit Salary Matrix  
Effective November 20, 2016**

**EXHIBIT 1**

<b>Range/Step</b>	<b>Hourly</b>	<b>Bi-Weekly</b>	<b>Monthly</b>	<b>Annually</b>
5	24.4093	1,952.75	4,230.95	50,771
6	25.0197	2,001.57	4,336.74	52,041
7	25.6451	2,051.61	4,445.15	53,342
8	26.2862	2,102.90	4,556.28	54,675
9	26.9433	2,155.47	4,670.18	56,042
<b>170</b>				
1	23.2201	1,857.60	4,024.81	48,298
2	23.8005	1,904.04	4,125.42	49,505
3	24.3955	1,951.64	4,228.55	50,743
4	25.0054	2,000.43	4,334.27	52,011
5	25.6305	2,050.44	4,442.62	53,311
6	26.2713	2,101.70	4,553.69	54,644
7	26.9281	2,154.25	4,667.54	56,010
8	27.6013	2,208.11	4,784.23	57,411
9	28.2914	2,263.31	4,903.84	58,846
<b>171</b>				
1	24.3810	1,950.48	4,226.04	50,712
2	24.9906	1,999.24	4,331.70	51,980
3	25.6153	2,049.22	4,439.98	53,280
4	26.2556	2,100.45	4,550.98	54,612
5	26.9121	2,152.97	4,664.77	55,977
6	27.5849	2,206.79	4,781.38	57,377
7	28.2745	2,261.96	4,900.92	58,811
8	28.9813	2,318.51	5,023.43	60,281
9	29.7059	2,376.47	5,149.02	61,788
<b>172</b>				
1	25.6009	2,048.07	4,437.48	53,250
2	26.2409	2,099.27	4,548.43	54,581
3	26.8970	2,151.76	4,662.14	55,946
4	27.5693	2,205.55	4,778.68	57,344
5	28.2586	2,260.69	4,898.16	58,778
6	28.9651	2,317.21	5,020.62	60,247
7	29.6892	2,375.13	5,146.12	61,753
8	30.4315	2,434.52	5,274.79	63,297
9	31.1922	2,495.38	5,406.65	64,880
<b>173</b>				
1	26.8797	2,150.38	4,659.15	55,910
2	27.5516	2,204.13	4,775.62	57,307
3	28.2405	2,259.24	4,895.02	58,740
4	28.9465	2,315.72	5,017.39	60,209
5	29.6701	2,373.61	5,142.82	61,714
6	30.4118	2,432.95	5,271.39	63,257
7	31.1722	2,493.77	5,403.17	64,838
8	31.9515	2,556.12	5,538.27	66,459
9	32.7503	2,620.03	5,676.72	68,121

**Unrepresented, Executive, General Unit, Laboratory Unit, Operators' Association,  
and Professional Unit Salary Matrix**

**EXHIBIT 1**

**Effective November 20, 2016**

<b>Range/Step</b>	<b>Hourly</b>	<b>Bi-Weekly</b>	<b>Monthly</b>	<b>Annually</b>
<b>174</b>				
1	28.2215	2,257.72	4,891.73	58,701
2	28.9271	2,314.16	5,014.02	60,168
3	29.6503	2,372.02	5,139.38	61,673
4	30.3916	2,431.33	5,267.88	63,215
5	31.1514	2,492.11	5,399.57	64,795
6	31.9301	2,554.41	5,534.55	66,415
7	32.7284	2,618.27	5,672.92	68,075
8	33.5466	2,683.73	5,814.74	69,777
9	34.3852	2,750.82	5,960.11	71,521
<b>175</b>				
1	29.6308	2,370.46	5,136.00	61,632
2	30.3716	2,429.72	5,264.40	63,173
3	31.1308	2,490.46	5,396.00	64,752
4	31.9091	2,552.73	5,530.91	66,371
5	32.7068	2,616.55	5,669.19	68,030
6	33.5245	2,681.96	5,810.91	69,731
7	34.3626	2,749.01	5,956.19	71,474
8	35.2217	2,817.73	6,105.09	73,261
9	36.1022	2,888.18	6,257.72	75,093
<b>176</b>				
1	31.1115	2,488.92	5,392.66	64,712
2	31.8893	2,551.14	5,527.48	66,330
3	32.6865	2,614.92	5,665.66	67,988
4	33.5036	2,680.29	5,807.29	69,688
5	34.3412	2,747.30	5,952.47	71,430
6	35.1998	2,815.98	6,101.30	73,216
7	36.0797	2,886.38	6,253.82	75,046
8	36.9817	2,958.54	6,410.16	76,922
9	37.9063	3,032.50	6,570.42	78,845
<b>177</b>				
1	32.6678	2,613.43	5,662.42	67,949
2	33.4845	2,678.76	5,803.98	69,648
3	34.3217	2,745.74	5,949.09	71,389
4	35.1798	2,814.38	6,097.82	73,174
5	36.0592	2,884.74	6,250.27	75,003
6	36.9607	2,956.86	6,406.52	76,878
7	37.8848	3,030.78	6,566.69	78,800
8	38.8318	3,106.55	6,730.85	80,770
9	39.8026	3,184.21	6,899.11	82,789
<b>178</b>				
1	34.2999	2,744.00	5,945.32	71,344
2	35.1575	2,812.60	6,093.96	73,128
3	36.0364	2,882.91	6,246.32	74,956
4	36.9374	2,954.99	6,402.47	76,830

**Unrepresented, Executive, General Unit, Laboratory Unit, Operators' Association,  
and Professional Unit Salary Matrix  
Effective November 20, 2016**

**EXHIBIT 1**

<b>Range/Step</b>	<b>Hourly</b>	<b>Bi-Weekly</b>	<b>Monthly</b>	<b>Annually</b>
5	37.8608	3,028.86	6,562.53	78,750
6	38.8073	3,104.58	6,726.60	80,719
7	39.7775	3,182.20	6,894.77	82,737
8	40.7719	3,261.75	7,067.14	84,806
9	41.7912	3,343.29	7,243.81	86,926
<b>179</b>				
1	36.0163	2,881.30	6,242.82	74,914
2	36.9167	2,953.33	6,398.89	76,787
3	37.8396	3,027.16	6,558.86	78,706
4	38.7856	3,102.85	6,722.83	80,674
5	39.7552	3,180.42	6,890.91	82,691
6	40.7491	3,259.93	7,063.18	84,758
7	41.7678	3,341.43	7,239.76	86,877
8	42.8120	3,424.96	7,420.75	89,049
9	43.8823	3,510.59	7,606.27	91,275
<b>180</b>				
1	37.8166	3,025.33	6,554.88	78,659
2	38.7621	3,100.97	6,718.77	80,625
3	39.7312	3,178.49	6,886.73	82,641
4	40.7244	3,257.95	7,058.89	84,707
5	41.7425	3,339.40	7,235.36	86,824
6	42.7860	3,422.88	7,416.24	88,995
7	43.8557	3,508.46	7,601.65	91,220
8	44.9521	3,596.17	7,791.70	93,500
9	46.0760	3,686.08	7,986.50	95,838
<b>181</b>				
1	39.7054	3,176.43	6,882.26	82,587
2	40.6981	3,255.84	7,054.33	84,652
3	41.7155	3,337.24	7,230.69	86,768
4	42.7583	3,420.66	7,411.44	88,937
5	43.8273	3,506.19	7,596.74	91,161
6	44.9230	3,593.84	7,786.66	93,440
7	46.0461	3,683.69	7,981.33	95,776
8	47.1972	3,775.78	8,180.85	98,170
9	48.3771	3,870.17	8,385.37	100,624
<b>182</b>				
1	41.6909	3,335.27	7,226.42	86,717
2	42.7331	3,418.65	7,407.08	88,885
3	43.8014	3,504.11	7,592.25	91,107
4	44.8965	3,591.72	7,782.06	93,385
5	46.0189	3,681.51	7,976.61	95,719
6	47.1694	3,773.55	8,176.03	98,112
7	48.3486	3,867.89	8,380.42	100,565
8	49.5574	3,964.59	8,589.94	103,079
9	50.7962	4,063.70	8,804.68	105,656

**Unrepresented, Executive, General Unit, Laboratory Unit, Operators' Association,  
and Professional Unit Salary Matrix  
Effective November 20, 2016**

**EXHIBIT 1**

<b>Range/Step</b>	<b>Hourly</b>	<b>Bi-Weekly</b>	<b>Monthly</b>	<b>Annually</b>
<b>183</b>				
1	43.7772	3,502.18	7,588.05	91,057
2	44.8718	3,589.74	7,777.77	93,333
3	45.9936	3,679.48	7,972.22	95,667
4	47.1434	3,771.47	8,171.52	98,058
5	48.3219	3,865.75	8,375.80	100,510
6	49.5300	3,962.40	8,585.19	103,022
7	50.7683	4,061.46	8,799.84	105,598
8	52.0374	4,162.99	9,019.82	108,238
9	53.3384	4,267.07	9,245.33	110,944
<b>184</b>				
1	45.9647	3,677.17	7,967.21	95,607
2	47.1138	3,769.10	8,166.39	97,997
3	48.2916	3,863.33	8,370.55	100,447
4	49.4989	3,959.92	8,579.82	102,958
5	50.7364	4,058.91	8,794.31	105,532
6	52.0048	4,160.38	9,014.16	108,170
7	53.3050	4,264.40	9,239.52	110,874
8	54.6375	4,371.00	9,470.50	113,646
9	56.0036	4,480.28	9,707.28	116,487
<b>185</b>				
1	48.2615	3,860.92	8,365.32	100,384
2	49.4680	3,957.44	8,574.46	102,893
3	50.7046	4,056.37	8,788.80	105,466
4	51.9723	4,157.78	9,008.53	108,102
5	53.2716	4,261.73	9,233.74	110,805
6	54.6034	4,368.27	9,464.59	113,575
7	55.9685	4,477.48	9,701.20	116,414
8	57.3677	4,589.41	9,943.73	119,325
9	58.8019	4,704.15	10,192.33	122,308
<b>186</b>				
1	50.6760	4,054.08	8,783.83	105,406
2	51.9429	4,155.43	9,003.43	108,041
3	53.2414	4,259.31	9,228.51	110,742
4	54.5725	4,365.80	9,459.23	113,511
5	55.9368	4,474.95	9,695.71	116,349
6	57.3353	4,586.82	9,938.11	119,257
7	58.7686	4,701.49	10,186.55	122,239
8	60.2378	4,819.02	10,441.22	125,295
9	61.7438	4,939.50	10,702.26	128,427
<b>187</b>				
1	53.2084	4,256.67	9,222.78	110,673
2	54.5385	4,363.08	9,453.34	113,440
3	55.9020	4,472.16	9,689.67	116,276
4	57.2995	4,583.96	9,931.92	119,183

**Unrepresented, Executive, General Unit, Laboratory Unit, Operators' Association,  
and Professional Unit Salary Matrix**

**EXHIBIT 1**

**Effective November 20, 2016**

<b>Range/Step</b>	<b>Hourly</b>	<b>Bi-Weekly</b>	<b>Monthly</b>	<b>Annually</b>
5	58.7320	4,698.56	10,180.21	122,163
6	60.2004	4,816.03	10,434.73	125,217
7	61.7053	4,936.43	10,695.59	128,347
8	63.2480	5,059.84	10,962.99	131,556
9	64.8292	5,186.33	11,237.06	134,845
<b>188</b>				
1	55.8669	4,469.35	9,683.59	116,203
2	57.2635	4,581.08	9,925.68	119,108
3	58.6951	4,695.61	10,173.82	122,086
4	60.1624	4,812.99	10,428.15	125,138
5	61.6665	4,933.32	10,688.86	128,266
6	63.2082	5,056.66	10,956.09	131,473
7	64.7884	5,183.08	11,230.00	134,760
8	66.4081	5,312.65	11,510.74	138,129
9	68.0684	5,445.47	11,798.52	141,582
<b>189</b>				
1	58.6599	4,692.79	10,167.72	122,013
2	60.1265	4,810.12	10,421.93	125,063
3	61.6296	4,930.37	10,682.47	128,190
4	63.1704	5,053.63	10,949.53	131,394
5	64.7496	5,179.97	11,223.27	134,679
6	66.3683	5,309.47	11,503.84	138,046
7	68.0275	5,442.20	11,791.44	141,497
8	69.7283	5,578.26	12,086.24	145,035
9	71.4715	5,717.72	12,388.40	148,661
<b>190</b>				
1	61.5919	4,927.35	10,675.93	128,111
2	63.1317	5,050.54	10,942.83	131,314
3	64.7100	5,176.80	11,216.40	134,597
4	66.3277	5,306.22	11,496.80	137,962
5	67.9860	5,438.88	11,784.23	141,411
6	69.6856	5,574.84	12,078.83	144,946
7	71.4277	5,714.22	12,380.80	148,570
8	73.2134	5,857.07	12,690.33	152,284
9	75.0437	6,003.50	13,007.58	156,091
<b>191</b>				
1	64.6711	5,173.69	11,209.65	134,516
2	66.2878	5,303.03	11,489.89	137,879
3	67.9450	5,435.60	11,777.14	141,326
4	69.6437	5,571.49	12,071.57	144,859
5	71.3847	5,710.78	12,373.35	148,480
6	73.1694	5,853.55	12,682.70	152,192
7	74.9986	5,999.89	12,999.76	155,997
8	76.8736	6,149.89	13,324.76	159,897
9	78.7955	6,303.64	13,657.88	163,895

**Unrepresented, Executive, General Unit, Laboratory Unit, Operators' Association,  
and Professional Unit Salary Matrix**

**EXHIBIT 1**

**Effective November 20, 2016**

<b>Range/Step</b>	<b>Hourly</b>	<b>Bi-Weekly</b>	<b>Monthly</b>	<b>Annually</b>
<b>192</b>				
1	67.9059	5,432.47	11,770.35	141,244
2	69.6036	5,568.29	12,064.62	144,775
3	71.3437	5,707.50	12,366.24	148,395
4	73.1272	5,850.18	12,675.38	152,105
5	74.9555	5,996.44	12,992.28	155,907
6	76.8293	6,146.34	13,317.07	159,805
7	78.7501	6,300.01	13,650.01	163,800
8	80.7187	6,457.50	13,991.25	167,895
9	82.7368	6,618.94	14,341.04	172,093
<b>193</b>				
1	71.3006	5,704.05	12,358.77	148,305
2	73.0831	5,846.64	12,667.73	152,013
3	74.9102	5,992.81	12,984.43	155,813
4	76.7829	6,142.63	13,309.03	159,708
5	78.7025	6,296.20	13,641.77	163,701
6	80.6700	6,453.60	13,982.81	167,794
7	82.6868	6,614.94	14,332.38	171,989
8	84.7540	6,780.32	14,690.69	176,288
9	86.8728	6,949.83	15,057.96	180,696
<b>194</b>				
1	74.8677	5,989.42	12,977.07	155,725
2	76.7394	6,139.15	13,301.50	159,618
3	78.6579	6,292.63	13,634.03	163,608
4	80.6243	6,449.94	13,974.88	167,699
5	82.6400	6,611.20	14,324.26	171,891
6	84.7060	6,776.48	14,682.37	176,188
7	86.8236	6,945.89	15,049.42	180,593
8	88.9942	7,119.53	15,425.66	185,108
9	91.2190	7,297.52	15,811.30	189,736
<b>195</b>				
1	78.6115	6,288.92	13,625.99	163,512
2	80.5767	6,446.14	13,966.64	167,600
3	82.5913	6,607.30	14,315.82	171,790
4	84.6560	6,772.48	14,673.70	176,084
5	86.7724	6,941.79	15,040.55	180,487
6	88.9417	7,115.34	15,416.57	184,999
7	91.1653	7,293.22	15,801.98	189,624
8	93.4444	7,475.55	16,197.03	194,364
9	95.7805	7,662.44	16,601.96	199,224
<b>196</b>				
1	82.5404	6,603.23	14,307.01	171,684
2	84.6040	6,768.32	14,664.69	175,976
3	86.7190	6,937.52	15,031.30	180,376
4	88.8870	7,110.96	15,407.09	184,885

**Unrepresented, Executive, General Unit, Laboratory Unit, Operators' Association,  
and Professional Unit Salary Matrix**

**EXHIBIT 1**

**Effective November 20, 2016**

<b>Range/Step</b>	<b>Hourly</b>	<b>Bi-Weekly</b>	<b>Monthly</b>	<b>Annually</b>
5	91.1091	7,288.73	15,792.25	189,507
6	93.3869	7,470.96	16,187.07	194,245
7	95.7216	7,657.73	16,591.74	199,101
8	98.1146	7,849.16	17,006.52	204,078
9	100.5674	8,045.39	17,431.69	209,180
<b>197</b>				
1	86.6670	6,933.36	15,022.28	180,267
2	88.8336	7,106.69	15,397.83	184,774
3	91.0545	7,284.36	15,782.78	189,393
4	93.3309	7,466.47	16,177.35	194,128
5	95.6641	7,653.13	16,581.78	198,981
6	98.0558	7,844.46	16,996.34	203,956
7	100.5072	8,040.58	17,421.25	209,055
8	103.0199	8,241.59	17,856.78	214,281
9	105.5953	8,447.63	18,303.19	219,638
<b>198</b>				
1	90.9997	7,279.98	15,773.29	189,279
2	93.2747	7,461.97	16,167.61	194,011
3	95.6066	7,648.52	16,571.80	198,862
4	97.9968	7,839.74	16,986.10	203,833
5	100.4466	8,035.73	17,410.75	208,929
6	102.9578	8,236.63	17,846.02	214,152
7	105.5318	8,442.54	18,292.18	219,506
8	108.1701	8,653.61	18,749.48	224,994
9	110.8743	8,869.95	19,218.21	230,619
<b>199</b>				
1	97.8269	7,826.15	16,956.67	203,480
2	100.2726	8,021.80	17,380.58	208,567
3	102.7794	8,222.35	17,815.09	213,781
4	105.3489	8,427.91	18,260.47	219,126
5	107.9827	8,638.61	18,716.99	224,604
6	110.6822	8,854.58	19,184.92	230,219
7	113.4493	9,075.94	19,664.54	235,974
8	116.2855	9,302.84	20,156.15	241,874
9	119.1926	9,535.41	20,660.05	247,921
<b>200</b>				
1	105.1631	8,413.04	18,228.26	218,739
2	107.7922	8,623.37	18,683.97	224,208
3	110.4870	8,838.96	19,151.08	229,813
4	113.2492	9,059.93	19,629.85	235,558
5	116.0804	9,286.43	20,120.60	241,447
6	118.9824	9,518.59	20,623.61	247,483
7	121.9570	9,756.56	21,139.21	253,671
8	125.0059	10,000.47	21,667.69	260,012
9	128.1310	10,250.48	22,209.37	266,512



**Unrepresented, Executive, General Unit, Laboratory Unit, Operators' Association,  
and Professional Unit Salary Matrix  
Effective November 20, 2016**

**EXHIBIT 1**

<b>Range/Step</b>	<b>Hourly</b>	<b>Bi-Weekly</b>	<b>Monthly</b>	<b>Annually</b>
<b>201</b>				
1	55.6958	4,455.66	9,653.94	115,847
<b>202</b>				
1	42.9806	3,438.45	7,449.97	89,400
<b>203</b>				
1	139.8935	11,191.48	24,248.20	290,978
<b>001</b>				
1	10.0000			
2	11.0000			
3	12.0000			
4	13.0000			
5	14.0000			
6	15.0000			