



AGENDA

**COMMISSION MEETING OF THE
CHINO BASIN REGIONAL FINANCING AUTHORITY
AND
MEETING OF THE
INLAND EMPIRE UTILITIES AGENCY
BOARD OF DIRECTORS**

**WEDNESDAY, SEPTEMBER 21, 2016
10:00 A.M.**

**INLAND EMPIRE UTILITIES AGENCY*
AGENCY HEADQUARTERS
6075 KIMBALL AVENUE, BUILDING A
CHINO, CALIFORNIA 91708**

**CALL TO ORDER
OF THE CHINO BASIN REGIONAL FINANCING AUTHORITY 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. ACTION ITEMS

A. MINUTES

It is recommended that the Board approve the minutes from May 18, 2016 and July 20, 2016, Chino Basin Regional Financing Authority meeting.

B. ADOPTION OF RESOLUTION NO. 2016-7, APPROVING AND ADOPTING THE IEUA-POMONA-MVWD RW INTERTIE PROJECT CEQA AS CEQA-RESPONSIBLE AGENCY

It is recommended that the Board of Commissioners:

1. Adopt Resolution No. 2016-7, approving and adopting the Initial Study, Mitigated Negative Declaration (MND) and the Mitigation Monitoring and Reporting Program (MMRP) of the IEUA-Pomona-MVWD Intertie Project as a CEQA-Responsible Agency; and
2. Authorize IEUA's General Manager, or his designee, to file the Notice of Determination (NOD) with the San Bernardino County Clerk of the Board and Los Angeles County Clerk.

2. ADJOURN

*A Municipal Water District

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

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1. 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 August 3, Board meeting, August 17, Board meeting, and September 7, Board meeting.

B. REPORT ON GENERAL DISBURSEMENTS

It is recommended that the Board approve the total disbursements for the month of July 2016, in the amount of \$16,671,215.80.

C. BUDGET AMENDMENT FOR FY 2015/16 CARRY FORWARD OF OPEN ENCUMBRANCES AND NON-ENCUMBERED COMMITMENT RELATED BUDGET

It is recommended that the Board approve the carry forward of open encumbrances and non-encumbered commitments related budget in the amount of \$12,511,488 from FY 2015/16 to FY 2016/17.

D. SAP SOFTWARE MAINTENANCE CONTRACT RENEWAL

It is recommended that the Board approve a 4-year software maintenance contract renewal for mySAP Business Suite, U.S. Payroll Tax Processing (TaxFactory) and SAP BusinessObjects products for a not-to-exceed amount of \$179,019 annually, excluding applicable taxes.

E. MASTER SERVICE CONTRACT AWARD FOR OXYGEN TRANSFER EFFICIENCY MEASUREMENT SERVICES

It is recommended that the Board:

1. Approve Master Service Contract No. 4600002193 to DRH2O LLC of Irvine, California for a five-year contract (two year firm-fixed price with three, one-year options to extend) to provide Oxygen Transfer Efficiency Measurement Services for a not-to-exceed amount of \$250,000; and
2. Authorize the General Manager to execute the contract.

F. ADOPTION OF A RESOLUTION ADOPTING THE CITY OF ONTARIO'S RECYCLED WATER DISTRIBUTION SYSTEM PROJECT CEQA DOCUMENTATION

It is recommended that the Board:

1. Adopt Resolution No. 2016-9-2, approving and adopting the Initial Study/Mitigated Negative Declaration, and the Mitigation Monitoring and Reporting Program as a CEQA-Responsible Agency; and
2. Authorize IEUA's General Manager to file the Notice of Determination (NOD) with the San Bernardino County Clerk of the Board.

G. AUTHORIZING AGENCY MEMBERSHIP IN THE COALITION FOR ENVIRONMENTAL PROTECTION, RESTORATION AND DEVELOPMENT

It is recommended that the Board:

1. Approve membership in the Coalition for Environmental Protection, Restoration and Development for FY 2016/17, in the amount of \$25,000; and
2. Authorize the General Manager to pay the annual dues.

H. ADOPTION OF RESOLUTION NO. 2016-9-3, AMENDING THE SALARY SCHEDULE/MATRIX FOR ALL UNITS EXCEPT SUPERVISORS' UNIT, AND RESOLUTION NOS. 2016-9-4 AND 2016-9-5, AMENDING THE SALARY SCHEDULE/MATRIX AND THE MEMORANDUM OF UNDERSTANDING FOR THE SUPERVISORS' UNIT

It is recommended that the Board:

1. Adopt Resolutions No. 2016-9-3, amending the salary schedule/matrix for the Unrepresented, Executive Management, Laboratory Unit, Operators' Association, Professional Unit and General Unit; and
2. Adopt Resolution No. 2016-9-4, amending the salary schedule/matrix for the Supervisors' Unit; and
3. Adopt Resolution No. 2016-9-5, amending the Memorandum of Understanding (MOU) for the Supervisors' Unit, by adopting a Side Letter of Agreement.

I. RESOLUTION NO. 2016-9-6, APPROVING AN AMENDMENT TO THE 2013-2018 MEMORANDUM OF UNDERSTANDING (MOU) FOR THE GENERAL UNIT EMPLOYEES, BY ADOPTING A SIDE LETTER OF AGREEMENT

It is recommended that the Board adopt Resolution No. 2016-9-6, approving an amendment to the 2013–2018 Memorandum of Understanding (MOU) for the General Unit Employees.

J. APPOINTMENT OF IEUA ALTERNATE TO PA 23 COMMITTEE

It is recommended that the Board approve the appointment of IEUA's Santa Ana Watershed Project Authority (SAWPA) Commissioner to serve as the alternate committee member to the PA 23 Committee.

K. IMPORTED WATER SERVICES CONNECTION SHARED USE AGREEMENT

It is recommended that the Board:

1. Approve the Imported Water Service Connection Shared Use Agreement with Western Municipal Water District; and
2. Authorize the General Manager to execute the agreement.

L. ADOPTION OF RESOLUTION FOR TIER 1 ALLOCATIONS FOR PURCHASE OF IMPORTED WATER

It is recommended that the Board approve Resolution No. 2016-9-1, establishing allocations for the purchase of imported water within the IEUA service area.

M. CEQA ADOPTION – FONTANA WATER COMPANY RECYCLED WATER IMPROVEMENT PROJECT

It is recommended that the Board:

1. Adopt the California Environmental Quality Act (CEQA) Initial Study/Mitigated Negative Declaration for the Fontana Water Company Recycled Water Improvement Project; and
2. Authorize the General Manager to file the Notice of Determination (NOD) with the San Bernardino County Clerk of the Board.

N. WATER QUALITY LABORATORY SOLAR SYSTEM CONSTRUCTION CONTRACT AWARD

It is recommended that the Board:

1. Award the construction contract for the Water Quality Laboratory Solar System Project No. EN15008, to Electric Service and Supply Co. in the amount of \$259,300; and
2. Authorize the General Manager to execute the construction contract.

O. RP-5 RECYCLED WATER PIPELINE BOTTLENECK CONSULTING ENGINEERING SERVICES CONTRACT AWARD

It is recommended that the Board:

1. Award the consulting engineering services contract for the RP-5 Recycled Water Pipeline Bottleneck Project No. EN14043, to Stantec Consulting Services, Inc., for the not-to-exceed amount of \$201,987; and
2. Authorize the General Manager to execute the consulting engineering services contract.

P. RECYCLED WATER HYDRAULIC MODELING CONSULTANT CONTRACT AWARD

It is recommended that the Board:

1. Approve the consulting engineering services contract award for the Recycled Water Hydraulic Modeling, Project Nos. EN17011/EN18011/EN19011, to Carollo Engineers, Inc. for a not-to-exceed amount of \$300,000; and
2. Authorize the General Manager to execute the contract.

2. ACTION ITEMS

A. SAN BERNARDINO AVENUE GRAVITY SEWER CONSTRUCTION CONTRACT AWARD AND AGREEMENT AMENDMENTS

It is recommended that the Board:

1. Approve the construction contract award for the San Bernardino Avenue Gravity Sewer, Project No. EN16071, to Ferreira Construction Company for \$992,240; and
2. Authorize the General Manager to execute the construction contract and to amend the Agreements.

B. RP-1 MIXED LIQUOR PUMPS AND AERATION BASIN PANEL REPAIRS CONSTRUCTION AWARDS

It is recommended that the Board:

1. Award a construction contract for the RP-1 Mixed Liquor Return Pumps, Project No. EN16024 and RP-1 Aeration Basin Panel Repairs, Project No. EN17040, to J.F. Shea Construction, Inc., in the amount of \$6,633,000;
2. Approve a contract amendment to RMC Water and Environment for engineering services during construction for the not-to-exceed amount of \$203,000;
3. Approve total project budget amendment for RP-1 Mixed Liquor Return Pumps, Project No. EN16024 in amount of \$371,000; and
4. Authorize the General Manager to execute the construction contract, contract amendment, and budget amendment.

C. 2016 PRADO BASIN ADAPTIVE MANAGEMENT PLAN

It is recommended that the Board approve the proposed cost share for the ongoing O&M of the Prado Adaptive Management Plan.

3. INFORMATION ITEMS

A. ENGINEERING AND CONSTRUCTION MANAGEMENT PROJECT UPDATES (POWERPOINT)

B. WATER SOFTENER REBATE PROGRAM STATUS REPORT (WRITTEN)

RECEIVE AND FILE INFORMATION ITEMS

C. RECYCLED WATER SEMI-ANNUAL UPDATE FY 2015/16 AND THE ANNUAL RECYCLED WATER REPORT FOR FY 2015/16 (POWERPOINT)

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

- E. FY 2015/16 FOURTH QUARTER BUDGET VARIANCE, PERFORMANCE GOALS UPDATES, AND BUDGET TRANSFERS (WRITTEN/POWERPOINT)
- F. MASTER TRADE CONTRACTS AUDIT & RESPONSE (WRITTEN)
- G. INTERNAL AUDIT DEPARTMENT STATUS REPORT FOR SEPTEMBER 2016 (WRITTEN)
- 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. STATE LEGISLATIVE TRACKING MATRIX (WRITTEN)

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.

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

8. 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**

1. 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**

1. Four (4) Cases

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

1. Various Positions – Compensation Study
2. Various Positions

9. 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.

Declaration of Posting

Proofed by: 

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 Friday, September 16, 2016.


April Woodruff


**CONSENT
CALENDAR
ITEM**


1P


Date: September 21, 2016

To: The Honorable Board of Directors

Through: Engineering, Operations, and Biosolids Management Committee (09/14/16)

From: P. Joseph Grindstaff
General Manager 

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

Shaun J. Stone 
Manager of Engineering

Subject: Recycled Water Hydraulic Modeling Consultant Contract Award

RECOMMENDATION

It is recommended that the Board of Directors:

1. Approve the consulting engineering services contract award for the Recycled Water Hydraulic Modeling, Project Nos. EN17011/EN18011/EN19011, to Carollo Engineers, Inc. for a not-to-exceed amount of \$300,000; and
2. Authorize the General Manager to execute the contract.

BACKGROUND

The Agency's recycled water system is simulated in a computerized hydraulic model using the InfoWater software. The system components such as pipes, pumps, reservoirs and recycled water customers are depicted within the model. Various scenarios are created to represent changes in demands, operations and facilities in which the results are evaluated for system deficiencies and optimization. Under direction from Engineering and Planning staff, consulting engineering services are required to create the scenarios, update the model components, analyze the results, and provide recommendations on resolving operational challenges. These recommendations will result in initiating the scope of work of future capital improvement projects. The previous hydraulic modeling consulting services contract expired in June 2016. Modeling support was used to produce the Recycled Water Program Strategy, a master planning study which updated supply and demand forecasts to maximize the beneficial use of recycled water through year 2035.

Recycled Water Hydraulic Modeling

September 21, 2016

Page 2 of 2

A Request for Proposal for on-call hydraulic modeling services was issued on June 13, 2016, which resulted in the submittal of five proposals on July 12, 2016. A review committee consisting of Planning, Operations, and Engineering staff evaluated each proposal in regards to the consultant's understanding of the scope of work, project team qualifications and experience, and past performance on similar projects. The committee unanimously selected Carollo Engineers, Inc., as the most qualified firm and recommended the three-year contract award for a not-to-exceed amount of \$300,000.

Below is the project schedule:

Project Milestone	Date
Consulting Engineering Services Contract Award	September 2016
Contract Completion	June 2019

The Recycled Water Hydraulic Modeling project is consistent with the *Agency's Business Goal of Water Reliability* of commitment to support maximizing beneficial reuse of recycled water to enhance reliability and reduce dependence on imported water.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

If approved, the consulting engineering services contract award for the Recycled Water Hydraulic Modeling, Project Nos. EN17011/EN18011/EN19011, at a not-to-exceed amount of \$300,000 will be within the total ten-year budget of \$1,000,000 in the Recycled Water Administration (WC) Fund.

PJG:CB:SS:lm

Recycled Water Hydraulic Modeling Consultant Contract Award Project Nos. EN17011/EN18011/EN19011 September 2016



Project Location

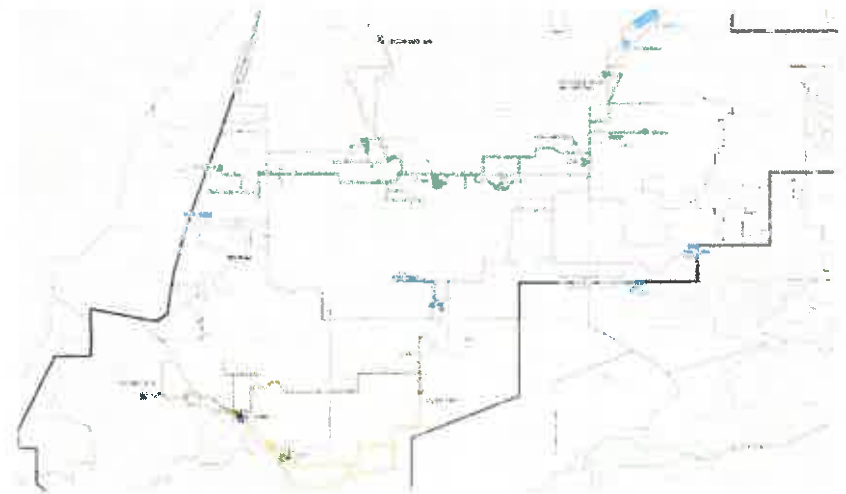


Project Background

- Recycled water system is simulated in InfoWater, a hydraulic modeling software
- Scenarios are created to reflect changes in demands, facilities, and operation
- Model results are used to detect system deficiencies
- System deficiencies become plans for improvements and upgrades to alleviate operational challenges
- Hydraulic modeling support began in 2008
- Previous hydraulic modeling consulting contract expired in June 2016

Project Scope

- Contract term is three years
- Task orders are assigned as necessary
- Update recycled water model components as connections to the existing system occur
- Create scenarios to simulate future demands and operational issues
- Present recommendations in technical memoranda



Consultant Selection

RFP was issued in June 2016

- Recycled Water Hydraulic Modeling On-Call Services

5 proposals evaluated

- 3 member review team from Planning, Operations & Engineering

Selection

- Carollo unanimously selected as most qualified consultant

Project Cost and Schedule

Description	Estimated Cost
Three-year On-call Hydraulic Modeling Services (NTE)	\$300,000
Total Project Cost	\$300,000
Total Project Budget	\$1,000,000

Project Milestone	Date
Receipt of Proposals	July 2016
Consultant Contract Award	September 2016
Consultant Contract Completion	June 2019



Recommendation

Staff recommends that the Board of Directors approve the consulting engineering services contract award for the Recycled Water Hydraulic Modeling, Project Nos. EN17011/18011/19011, to Carollo Engineers, Inc. for the not-to-exceed amount of \$300,000, and authorize the General Manager to execute the contract.

The Recycled Water Hydraulic Modeling project is consistent with the **Agency's Business Goal of Water Reliability** of commitment to support maximizing beneficial reuse of recycled water to enhance reliability and reduce dependence on imported water.



CONTRACT NUMBER: 4600002188
FOR
CONSULTING ENGINEERING SERVICES FOR
RECYCLED WATER HYDRAULIC MODELING,
FISCAL YEARS 2017 / 2018 / 2019
Project N^os. EN17011.00 / EN18011.00 / EN19011.00

THIS CONTRACT (the "Contract"), is made and entered into this _____ day of _____, 2016, by and between the Inland Empire Utilities Agency, a Municipal Water District, organized and existing in the County of San Bernardino under and by virtue of the laws of the State of California (hereinafter referred to as "Agency") and Carollo Engineers, Inc. with offices located in Riverside, California (hereinafter referred to as "Consultant") for Consulting Engineering Services required for three-year on-call service of the Recycled Water Hydraulic Modeling Projects for Fiscal Years 2017, 2018, and 2019.

NOW, THEREFORE, in consideration of the mutual promises and obligations set forth herein, the parties agree as follows:

1. PROJECT MANAGER ASSIGNMENT: All technical direction related to this Contract shall come from the designated Project Manager. Details of the Agency's assignment are listed below.

Project Manager: Liza Muñoz, Senior Engineer
Address: 6075 Kimball Avenue, Building "B"
Chino, California 91708-9174
Telephone: (909) 993-1522
Email: lmunoz@ieua.org
Facsimile: (909) 993-1982

CONSULTANT ASSIGNMENT: Special inquiries related to this Contract and the effects of this Contract shall be referred to the following:

Consultant: Inge Wiersema, P.E.
Address: 7888 Mission Grove Parkway South, Suite 100
Riverside, CA 92508
Telephone: (951) 776-3955
Facsimile: (951) 776-4207
Email: iwiersema@carollo.com

2. **ORDER OF PRECEDENCE:** The documents referenced below represent the Contract Documents. Where any conflicts exist between the General Terms and Conditions, or addenda attached, then the governing order of precedence shall be as follows:
 - A. Amendments to Contract 4600002188.
 - B. Contract Number 4600002188, General Terms and Conditions.
 - C. Agency's Request for Proposals RFP-RW-16-012 and all germane Addenda, incorporated herein by this reference and attached hereto as **Exhibit A**.
 - D. Consultant's proposal dated July 12, 2016, which is attached hereto, incorporated herein and made a part hereof by this reference.

3. **SCOPE OF WORK AND SERVICES:** Consultant services and responsibilities shall include and be in accordance with tasks identified in Project Manager's Request for Proposals RFP-RW-16-012, as posted June 13, 2016 to the PlanetBids System, which is attached hereto, incorporated herein, and made a part hereof by this reference as **Exhibit A**.

4. **TERM:** The term of this Contract shall extend from the date of the Notice to Proceed and terminate on June 30, 2019 unless agreed to by both parties, reduced to writing, and amended to this Contract. Agency hereby reserves the right to offer two (2) one-year term extensions.

5. **COMPENSATION:** The Agency shall pay Consultant's properly-executed invoices, subsequent to approval by the Project Manager, within thirty (30) calendar days following receipt of the invoice. Payment shall be based on rates submitted as Consultant's Fee Schedule, attached hereto, referenced herein, and made a part hereof as **Exhibit B**. Payment shall be withheld for any service which does not meet the requirements of this Contract or has proven unacceptable until such service is revised, resubmitted, and accepted by the Project Manager. Consultant shall utilize Consulting Services Invoice Template referenced herein as **Exhibit C**, attached hereto and made a part hereof, for the submittal of each invoice. Template in Excel format shall be furnished.

As compensation for work performed under this Contract, Agency shall pay Consultant a **NOT-TO EXCEED maximum of \$300,000.00**.

All invoices shall be submitted electronically with all required back-up to apgroup@ieua.org .

Payment shall be made according to milestones achieved by Consultant and accepted by the Agency's Project Manager.

6. **CONTROL OF THE WORK:** Consultant shall perform the Work in compliance with the Work Schedule. If performance of the Work falls behind schedule, the Consultant shall accelerate the

performance of the Work to comply with the Work Schedule as directed by the Project Manager. If the nature of the Work is such that Consultant is unable to accelerate the Work, Consultant shall promptly notify the Project Manager of the delay, the causes of the delay, and submit a proposed revised Work Schedule.

7. GRANT FUNDED PROJECTS: This is not a grant-funded project.

8. FITNESS FOR DUTY:

A. Fitness: Consultant and its Subcontractor personnel on the Jobsite:

1. Shall report for work in a manner fit to do their job;
2. Shall not be under the influence of or in possession of any alcoholic beverages or of any controlled substance (except a controlled substance as prescribed by a physician so long as the performance or safety of the Work is not affected thereby); and
3. Shall not have been convicted of any serious criminal offense which, by its nature, may have a discernible adverse impact on the business or reputation of Agency.

B. Compliance: Consultant shall advise all Consultant and subcontractor personnel and associated third parties of the requirements of this Contract ("Fitness for Duty Requirements") before they enter on the Jobsite and shall immediately remove from the Jobsite any employee determined to be in violation of these requirements. Consultant shall impose these requirements on its Subcontractors. Agency may cancel the Contract if Consultant violates these Fitness for Duty Requirements.

9. INSURANCE: INSURANCE: During the term of this Contract, the Consultant shall maintain at Consultant's sole expense, the following insurance.

A. Minimum Scope of Insurance: Coverage shall be at least as broad as:

1. Commercial General Liability (CGL): Insurance Services Office (ISO) Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than \$1,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
2. Automobile Liability: ISO Form Number CA 00 01 covering any auto (Code 1), or if Consultant has no owned autos, covering hired, (Code 8) and non-owned autos (Code 9), with limit no less than \$1,000,000 per accident for bodily injury and property damage.

3. **Workers' Compensation and Employers Liability:** Workers' compensation limits as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
 4. **Professional Liability (Errors and Omissions):** Insurance appropriate to the Consultant's profession, with limit no less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate.
- B. **Deductibles and Self-Insured Retention:** Any deductibles or self-insured retention must be declared to and approved by the Agency. At the option of the Agency, either: the insurer shall reduce or eliminate such deductibles or self-insured retention as respects the Agency, its officers, officials, employees and volunteers; or the Consultant shall procure a bond guaranteeing payment of losses and related investigations, claims administration and defense expenses.
- C. **Other Insurance Provisions:** The policies are to contain, or be endorsed to contain, the following provisions:
1. **General Liability and Automobile Liability Coverage**
 - a. **Additional Insured Status:** The Agency, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the Consultant including materials, parts or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Consultant's insurance (at least as broad as ISO Form CG 20 10 11 85 or both CG 20 10, CG 20 26, CG 20 33, or CG 20 38; and CG 20 37 forms if later revisions used).
 - b. **Primary Coverage:** The Consultant's insurance coverage shall be primary insurance coverage at least as broad as ISO CG 20 01 04 13 as respects the Agency, its officer, officials, employees and volunteers. Any insurance or self-insurance maintained by the Agency, its officers, officials, employees, volunteers, property owners or engineers under contract with the Agency shall be excess of the Consultant's insurance and shall not contribute with it.
 - c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Agency, its officers, officials, employees or volunteers.
 - d. The Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

e. The Consultant may satisfy the limit requirements in a single policy or multiple policies. Any such additional policies written as excess insurance shall not provide any less coverage than that provided by the first or primary policy.

2. **Workers' Compensation and Employers Liability Coverage**

The insurer hereby grants to Agency a waiver of any right to subrogation which any insurer of said Consultant may acquire against the Agency by virtue of the payment of any loss under such insurance. Consultant agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the Agency has received a waiver of subrogation endorsement from the insurer.

3. **All Coverages**

Each insurance policy required by this contract shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the Agency.

D. Acceptability of Insurers: All insurance is to be placed with insurers with a current A.M. Best's rating of no less than A-:VII, and who are admitted insurers in the State of California.

E. Verification of Coverage: Consultant shall furnish the Agency with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the Agency before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Consultant's obligation to provide them. The Agency reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

F. Submittal of Certificates: Consultant shall submit all required certificates and endorsements to the following:

Inland Empire Utilities Agency, a Municipal Water District
Attn: Ms. Angela Witte, Risk Specialist
P.O. Box 9020
Chino Hills, California 91709

10. **LEGAL RELATIONS AND RESPONSIBILITIES**

A. Professional Responsibility: The Consultant shall be responsible, to the level of competency presently maintained by other practicing professionals performing the same or similar type of work.

- B. **Status of Consultant:** The Consultant is retained as an independent Consultant only, for the sole purpose of rendering the services described herein, and is not an employee of the Agency.
- C. **Observing Laws and Ordinances:** The Consultant shall keep itself fully informed of all existing and future state and federal laws and all county and city ordinances and regulations which in any manner affect the conduct of any services or tasks performed under this Contract, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. The Consultant shall at all times observe and comply with all such existing and future laws, ordinances, regulations, orders and decrees, and shall protect and indemnify, as required herein, the Agency, its officers and employees against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by the Consultant or its employees.
- D. **Subcontract Services:** Any subcontracts for the performance of any services under this Contract shall be subject to the written approval of the Project Manager.
- E. **Hours of Labor:** The Consultant shall comply with all applicable provisions of California Labor Code Sections 1810 to 1817 relating to working hours. The Consultant shall, as a penalty to the Agency, forfeit \$25.00 for each worker employed in the execution of the Contract by the Consultant or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any one (1) calendar day and forty (40) hours in any one (1) calendar week in violation of the provisions of the Labor Code.
- F. **Travel and Subsistence Pay:** This clause does not apply to the Contract.
- G. **Liens:** Consultant shall pay all sums of money that become due from any labor, services, materials or equipment furnished to Consultant on account of said services to be rendered or said materials to be furnished under this Contract and that may be secured by any lien against the Agency. Consultant shall fully discharge each such lien at the time performance of the obligation secured matures and becomes due.
- H. **Conflict of Interest:** No official of the Agency who is authorized in such capacity and on behalf of the Agency to negotiate, make, accept or approve, or to take part in negotiating, making, accepting or approving this Contract, or any subcontract relating to services or tasks to be performed pursuant to this Contract, shall become directly or indirectly personally interested in this Contract.
- I. **Equal Opportunity and Unlawful Discrimination:** During the performance of this Contract, the Consultant shall not unlawfully discriminate against any employee or employment applicant because of race, color, religion, sex, age, marital status, ancestry, physical or mental disability, sexual orientation, veteran status or national origin. The Agency is committed to creating and maintaining an environment free from harassment and discrimination. To accomplish these goals the Agency has established procedures regarding the implementation and enforcement of the Agency's Harassment Prohibition and Equal Employment Opportunity commitments. Please refer to Agency Policies A-29 (Equal Employment Opportunity) and A-30 Harassment Prohibition for detailed information or contact the Agency's Human Resources Administrator. A copy of either of these Policies can be obtained by contacting the Project Manager for your respective Contract. Please advise any of your staff that believes they might have been harassed

or discriminated against while on Agency property, to report said possible incident to either the Project Manager, or the Agency's Human Resources Administrator. Please be assured that any possible infraction shall be thoroughly investigated by the Agency.

- J. Non-Conforming Work and Warranty: Consultant represents and warrants that the Work and Documentation shall be adequate to serve the purposes described in the Contract. For a period of not less than one (1) year after acceptance of the completed Work, Consultant shall, at no additional cost to Agency, correct any and all errors in and shortcomings of the Work or Documentation, regardless of whether any such errors or shortcoming is brought to the attention of Consultant by Agency, or any other person or entity. Consultant shall within three (3) calendar days, correct any error or shortcoming that renders the Work or Documentation dysfunctional or unusable and shall correct other errors within thirty (30) calendar days after Consultant's receipt of notice of the error. Upon request of Agency, Consultant shall correct any such error deemed important by Agency in its sole discretion to Agency's continued use of the Work or Documentation within seven (7) calendar days after Consultant's receipt of notice of the error. If the Project Manager rejects all or any part of the Work or Documentation as unacceptable and agreement to correct such Work or Documentation cannot be reached without modification to the Contract, Consultant shall notify the Project Manager, in writing, detailing the dispute and reason for the Consultant's position. Any dispute that cannot be resolved between the Project Manager and Consultant shall be resolved in accordance with the provisions of this Contract.

The total amount of all claims the Agency may have against the Consultant under this Contract or arising from the performance or non-performance of the Work under any theory of law, including but not limited to claims for negligence, negligent misrepresentation and breach of contract, shall be strictly limited to the lesser of the fees or \$500,000. As the Agency's sole and exclusive remedy under this Contract any claim, demand or suit shall be directed and/or asserted only against the Consultant and not against any of the Consultant's employees, officers or directors.

The Consultant's liability with respect to any claims arising out of this Contract shall be absolutely limited to direct damages arising out of the Work and the Consultant shall bear no liability whatsoever for any consequential loss, injury or damage incurred by the Agency, including but not limited to, claims for loss of use, loss of profits and loss of markets.

K. Disputes:

1. All disputes arising out of or in relation to this Contract shall be determined in accordance with this section. The Consultant shall pursue the work to completion in accordance with the instruction of the Agency's Project Manager notwithstanding the existence of dispute. By entering into this Contract, both parties are obligated, and hereby agree, to submit all disputes arising under or relating to the Contract, which remain unresolved after the exhaustion of the procedures provided herein, to independent arbitration. Except as otherwise provided herein, arbitration shall be conducted under California Code of Civil Procedure Sections 1280, et. seq, or their successor.

2. Any and all disputes during the pendency of the work shall be subject to resolution by the Agency Project Manager and the Consultant shall comply, pursuant to the Agency Project Manager instructions. If the Consultant is not satisfied with any such resolution by the Agency Project Manager, they may file a written protest with the Agency Project Manager within seven (7) calendar days after receiving written notice of the Agency's decision. Failure by Consultant to file a written protest within seven (7) calendar days shall constitute waiver of protest, and acceptance of the Agency Project Manager's resolution. The Agency's Project Manager shall submit the Consultant's written protests to the General Manager, together with a copy of the Agency Project Manager's written decision, for his or her consideration within seven (7) calendar days after receipt of said protest(s). The General Manager shall make his or her determination with respect to each protest filed with the Agency Project Manager within ten (10) calendar days after receipt of said protest(s). If Consultant is not satisfied with any such resolution by the General Manager, they may file a written request for arbitration with the Project Manager within seven (7) calendar days after receiving written notice of the General Manager's decision.

3. In the event of arbitration, the parties hereto agree that there shall be a single neutral Arbitrator who shall be selected in the following manner:
 - a. The Demand for Arbitration shall include a list of five names of persons acceptable to the Consultant to be appointed as Arbitrator. The Agency shall determine if any of the names submitted by Consultant are acceptable and, if so, such person shall be designated as Arbitrator.

 - b. In the event that none of the names submitted by Consultant are acceptable to Agency, or if for any reason the Arbitrator selected in Step (a) is unable to serve, the Agency shall submit to Consultant a list of five names of persons acceptable to Agency for appointment as Arbitrator. The Consultant shall, in turn, have seven (7) calendar days in which to determine if one such person is acceptable.

 - c. If after Steps (a) and (b), the parties are unable to mutually agree upon a neutral Arbitrator, the matter of selection of an Arbitrator shall be submitted to the San Bernardino County Superior Court pursuant to Code of Civil Procedure Section 1281.6, or its successor. The costs of arbitration, including but not limited to reasonable attorneys' fees, shall be recoverable by the party prevailing in the arbitration. If this arbitration is appealed to a court pursuant to the procedure under California Code of Civil Procedure Section 1294, et. seq., or their successor, the costs of arbitration shall also include court costs associated with such appeals, including but not limited to reasonable attorneys' fees which shall be recoverable by the prevailing party.

4. **Joinder in Mediation/Arbitration:** The Agency may join the Consultant in mediation or arbitration commenced by a contractor on the Project pursuant to Public Contracts Code Sections 20104 et seq. Such joinder shall be initiated by written notice from the Agency's representative to the Consultant.

11. **INDEMNIFICATION:** Consultant shall indemnify the Agency, its directors, employees and assigns, and hold them harmless from all liabilities, demands, actions, claims, losses and expenses, including reasonable attorneys' fees, which arise out of or are related to the negligence, recklessness or willful misconduct of the Consultant, its directors, employees, agents and assigns, in the performance of work under this contract. Notwithstanding the foregoing, to the extent that this Contract includes design professional services under Civil Code Section 2782.8, as may be amended from time to time, such duties of Consultant to defend and to indemnify Agency shall only be to the full extent permitted by Civil Code Section 2782.8. Notwithstanding the foregoing, for any claim alleging Consultant's negligent performance of professional services, Consultant's obligations regarding the Agency's defense under this paragraph include only the reimbursement of the Agency's reasonable defense costs incurred to the extent of Consultant's negligence as expressly determined by a final judgment, arbitration, award, order, settlement, or other final resolution. Consultant shall not be responsible for warranties, guarantees, fitness for a particular purpose, breach of fiduciary duty, or loss of anticipated profits. Additionally, Consultant shall not be responsible for acts and decisions of third parties, including governmental agencies, other than Consultant's subconsultants, that impact project completion and/or success.

12. **OWNERSHIP OF MATERIALS AND DOCUMENTS/CONFIDENTIALITY:** The Agency retains ownership of any and all partial or complete reports, drawings, plans, notes, computations, lists, and/or other materials, documents, information, or data ("Work Product") prepared by the Consultant and/or the Consultant's subcontractor(s) pertaining to this Contract upon full payment of all monies owed to the Consultant. Said materials and documents are confidential and shall be available to the Agency from the moment of their preparation, and the Consultant shall deliver same to the Agency whenever requested to do so by the Project Manager and/or Agency. The Consultant agrees that same shall not be made available to any individual or organization, private or public, without the prior written consent of the Agency.

13. **TITLE AND RISK OF LOSS:**
 - A. **Documentation:** Title to the Documentation shall pass to Agency when prepared; however, a copy may be retained by Consultant for its records and internal use. Consultant shall retain such Documentation in a controlled access file, and shall not reveal, display or disclose the contents of the Documentation to others without the prior written authorization of Agency or for the performance of Work related to the project.

 - B. **Material:** Title to all Material, field or research equipment, and laboratory models, procured or fabricated under the Contract shall pass to Agency when procured or

fabricated, and such title shall be free and clear of any and all encumbrances. Consultant shall have risk of loss of any Material or Agency-owned equipment of which it has custody.

- C. **Disposition:** Consultant shall dispose of items to which Agency has title as directed in writing by the Agreement Administrator and/or Agency.

14. **PROPRIETARY RIGHTS:**

- A. **Rights and Ownership:** Agency's rights to inventions, discoveries, trade secrets, patents, copyrights, and other intellectual property, including the Information and Documentation, and revisions thereto (hereinafter collectively referred to as "Proprietary Rights"), used or developed by Consultant in the performance of the Work, shall be governed by the following provisions:

Proprietary Rights conceived, developed, or reduced to practice by Consultant in the performance of the Work shall be the property of Agency, and Consultant shall cooperate with all appropriate requests to assign and transfer same to Agency.

If Proprietary Rights conceived, developed, or reduced to practice by Consultant prior to the performance of the Work are used in and become integral with the Work or Documentation, or are necessary for Agency to have complete enjoyment of the Work or Documentation, Consultant shall grant to Agency a non-exclusive, irrevocable, royalty-free license, as may be required by Agency for the complete enjoyment of the Work and Documentation, including the right to reproduce, correct, repair, replace, maintain, translate, publish, use, modify, copy or dispose of any or all of the Work and Documentation and grant sublicenses to others with respect to the Work and Documentation.

If the Work or Documentation includes the Proprietary Rights of others, Consultant shall procure, at no additional cost to Agency, all necessary licenses regarding such Proprietary Rights so as to allow Agency the complete enjoyment of the Work and Documentation, including the right to reproduce, correct, repair, replace, maintain, translate, publish, use, modify, copy or dispose of any or all of the Work and Documentation and grant sublicenses to others with respect to the Work and Documentation. All such licenses shall be in writing and shall be irrevocable and royalty-free to Agency.

- B. **No Additional Compensation:** Nothing Set forth in this Contract shall be deemed to require payment by Agency to Consultant of any compensation specifically for the assignments and assurances required hereby, other than the payment of expenses as may be actually incurred by Consultant in complying with this Contract.

15. **INFRINGEMENT:** Consultant represents and warrants that the Work and Documentation shall be free of any claim of trade secret, trade mark, trade name, copyright, or patent infringement or other violations of any Proprietary Rights of any person.

Consultant shall indemnify and hold harmless Agency, its officers, directors, employees, successors, assigns, and servants free and harmless from any and all liability, damages, losses, claims, demands, actions, causes of action, and costs including reasonable attorney's fees and expenses arising out of any claim that use of the Work or Documentation infringes upon any trade secret, trade mark, trade name, copyright, patent, or other Proprietary Rights.

Consultant shall, at its expense and at Agency's option, refund any amount paid by Agency under the Contract, or exert its reasonable efforts to procure for Agency the right to use the Work and Documentation, to replace or modify the Work and Documentation as approved by Agency so as to obviate any such claim of infringement.

16. **NOTICES:** Any notice may be served upon either party by delivering it in person, or by depositing it in a United States Mail deposit box with the postage thereon fully prepaid, and addressed to the party at the address set forth below:

Agency: Mr. Warren T. Green
Manager of Contracts and Facilities Services
Inland Empire Utilities Agency
P.O. Box 9020
Chino Hills, California 91709

Consultant: Dr. Graham Juby, P.E.
Vice President
Carollo Engineers, Inc.
7888 Mission Grove Parkway South, Suite100
Riverside, CA 92508

Any notice given hereunder shall be deemed effective in the case of personal delivery, upon receipt thereof, or, in the case of mailing, at the moment of deposit in the course of transmission with the United States Postal Service.

17. **SUCCESSORS AND ASSIGNS:** All of the terms, conditions and provisions of this Contract shall inure to the benefit of and be binding upon the Agency, the Consultant, and their respective successors and assigns. Notwithstanding the foregoing, no assignment of the duties or benefits of the Consultant under this Contract may be assigned, transferred or otherwise disposed of without the prior written consent of the Agency; and any such purported or attempted assignment, transfer or disposal without the prior written consent of the Agency shall be null, void and of no legal effect whatsoever.
18. **PUBLIC RECORDS POLICY:** Information made available to the Agency may be subject to the California Public Records Act (Government Code Section 6250 et seq.) The Agency's use and disclosure of its records are governed by this Act. The Agency shall use its best efforts to notify

Consultant of any requests for disclosure of any documents pertaining to Consultant. In the event of litigation concerning disclosure of information Consultant considers exempt from disclosure; (e.g., Trade Secret, Confidential, or Proprietary) Agency shall act as a stakeholder only, holding the information until otherwise ordered by a court or other legal process. If Agency is required to defend an action arising out of a Public Records Act request for any of the information Consultant has marked "Confidential," "Proprietary," or "Trade Secret," Consultant shall defend and indemnify Agency from all liability, damages, costs, and expenses, including attorneys' fees, in any action or proceeding arising under the Public Records Act.

19. **RIGHT TO AUDIT**: The Agency reserves the right to review and/or audit all Consultant's records related to the Work. The option to review and/or audit may be exercised during the term of the Contract, upon termination, upon completion of the Contract, or at any time thereafter up to twelve (12) months after final payment has been made to Consultant. The Consultant shall make all records and related documentation available within three (3) working days after said records are requested by the Agency.
20. **INTEGRATION**: The Contract Documents represent the entire Contract of the Agency and the Consultant as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered by the Contract Documents. This Contract may not be modified, altered or amended except by written mutual agreement by the Agency and the Consultant.
21. **GOVERNING LAW**: This Contract is to be governed by and constructed in accordance with the laws of the State of California.
22. **TERMINATION FOR CONVENIENCE**: The Agency reserves and has the right to immediately suspend, cancel or terminate this Contract at any time upon written notice to the Consultant. In the event of such termination, the Agency shall pay Consultant for all authorized and Consultant invoiced services up to the date of such termination.
23. **FORCE MAJEURE**: Neither party shall hold the other responsible for the effects of acts occurring beyond their control; e.g., war, riots, strikes, natural disasters, etcetera.
24. **NOTICE TO PROCEED**: No services shall be performed or furnished under this Contract unless and until this document has been properly signed by all responsible parties and a Notice to Proceed order has been issued to the Consultant.
25. **AGENCY-PROVIDED INFORMATION AND SERVICES**: The Agency shall furnish Consultant available studies, reports and other data pertinent to Consultant's services; obtain or authorize Consultant to obtain or provide additional reports and data as required; furnish to Consultant services of others required for the performance of Consultant's services hereunder, all subject to Agency's prior approval, and Consultant shall be entitled to use and rely upon all such information and services provided by the Agency or others in performing Consultant's services under this Agreement.

26. **ESTIMATES AND PROJECTIONS:** Consultant has no control over the cost of labor, materials, equipment or services furnished by others, over the incoming water quality and/or quantity, or over the way the Agency's plant and/or associated processes are operated and/or maintained. Data and cost projections are based on Consultant's opinion based on experience and judgment. Consultant cannot and does not guarantee that actual base unit quantities realized and/or costs will not vary from the data and cost projections prepared by Consultant and Consultant does not and will be not liable to and/or indemnify the Agency and/or any third party related to any inconsistencies between Consultant's data and/or cost projections and actual base unit quantities and/or associated energy cost savings realized by the Agency and/or any third party in the future. However, nothing herein shall relieve Consultant from liability for its failure to perform the work to the standard of skill and care expected of a consultant under the same or similar circumstances.
27. **THIRD PARTIES:** The services to be performed by Consultant are intended solely for the benefit of the Agency. No person or entity not a signatory to this Agreement shall be entitled to rely on Consultant's performance of its services hereunder, and no right to assert a claim against Consultant by assignment of indemnity rights or otherwise shall accrue to a third party as a result of this Agreement or the performance of Consultant's services hereunder.

IN WITNESS WHEREOF, the parties hereto have caused the Contract to be entered as of the day and year written above.

INLAND EMPIRE UTILITIES AGENCY:
(A Municipal Water District)

CAROLLO ENGINEERS, INC.:

P. Joseph Grindstaff (Date)
General Manager

Dr. Graham Juby, P.E. (Date)
Vice President

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Exhibit A



Inland Empire Utilities Agency

A MUNICIPAL WATER DISTRICT

June 2016

**REQUEST FOR PROPOSALS FOR
CONSULTING ENGINEERING SERVICES FOR THE**

RECYCLED WATER HYDRAULIC MODELING

FY 2017/2018/2019

Project Nos. EN17011.00/EN18011.00/EN19011.00

RFP-RW-16-012

Table of Contents

1.	REQUEST FOR PROPOSALS	- 1 -
2.	PROCESSING OF PROPOSALS	- 1 -
3.	AGENCY DESCRIPTION	- 2 -
4.	PROJECT BACKGROUND	- 3 -
5.	PROJECT DESCRIPTION.....	- 3 -
6.	SCOPE OF WORK.....	- 3 -
	A. KICKOFF MEETING.....	- 4 -
	B. ENVIRONMENTAL REVIEW	- 4 -
	C. HYDRAULIC MODELING & EVALUATION.....	- 4 -
	D. TRAINING	- 5 -
7.	DELINEATION OF RESPONSIBILITIES	- 5 -
	A. RESPONSIBILITIES OF THE CONSULTANT	- 5 -
	B. RESPONSIBILITIES OF IEUA	- 6 -
	C. TERMINATION OF CONTRACT	- 7 -
8.	CONTRACT DOCUMENT PREPARATION.....	- 7 -
	A. TECHNICAL MEMORANDA.....	- 7 -
9.	SUBMITTALS	- 7 -
	A. TECHNICAL MEMORANDA.....	- 7 -
10.	TASK ORDER SCHEDULE.....	- 7 -
11.	PAYMENT TO CONSULTANT	- 7 -
12.	PROPOSAL FORMAT	- 8 -
13.	SELECTION OF CONSULTANT	- 9 -
	A. QUALIFICATIONS.....	- 9 -
	B. CRITERIA FOR SELECTION	- 9 -
	C. INTERVIEWS	- 10 -
	D. NOTIFICATION OF UNSUCCESSFUL CONSULTANTS	- 10 -
	E. NEGOTIATION OF CONTRACT	- 10 -
	F. CONFLICT OF INTEREST INFORMATION.....	- 10 -
	G. PUBLIC RECORDS POLICY	- 10 -
14.	AVAILABLE REFERENCE MATERIAL	- 11 -
15.	ATTACHMENTS.....	- 12 -
	Attachment "A" – Vicinity Map	
	Attachment "B" – Project Schedule	
	Attachment "C" – Sample of Standard Contract	

Attachment "D" – Consulting Services Invoice
Attachment "E" – Exception Form
Attachment "F" – Workers' Compensation Insurance Certificate
Attachment "G" – Consultant Identification
Attachment "H" – Non-Collusion Affidavit
Attachment "I" – Business Ownership Information

Request For Proposals

RFP-RW-16-012

For

CONSULTING ENGINEERING SERVICES FOR

RECYCLED WATER HYDRAULIC MODELING FY

2017/2018/2019 Project Nos. EN17011, EN18011, & EN19011

1. REQUEST FOR PROPOSALS

Proposals are being accepted by Inland Empire Utilities Agency (IEUA) (hereinafter referred to as "Agency"), a Municipal Water District, for Consulting Engineering Services (hereinafter referred to as "Consultant") required for a 3-year on-call service of the Recycled Water Hydraulic Modeling for Fiscal Years 2017, 2018, and 2019.

2. PROCESSING OF PROPOSALS

Any relevant questions concerning the Request for Proposals (RFP) or the Scope of Work other than those asked at the pre-proposal meeting shall be directed in writing to the Agency's Project Manager:

Liza Muñoz
Inland Empire Utilities Agency
P.O. Box 9020
Chino Hills, California 91709
(909) 993-1522
Email: lmunoz@ieua.org

All questions must be received prior to Tuesday, June 28, 2016. Answers to these questions will be sent to all prospective Consultants. No answers will be given on an individual basis.

To receive consideration, eight (8) copies of the proposal, one complete electronic copy of the proposal (provided on CD/DVD/USB), and one separately sealed fee proposal envelope must be received at the Agency's Headquarters located on 6075 Kimball Ave, Building B, Chino, California, 91708 by 2:00 P.M. Tuesday, July 12, 2016 and addressed to the attention of Liza Muñoz. The package of the eight proposals and one electronic copy shall be clearly marked "**RECYCLED WATER HYDRAULIC MODELING – DO NOT OPEN**" and the fee proposal envelope marked "**FEE PROPOSAL – RECYCLED WATER HYDRAULIC MODELING - DO NOT OPEN**". All proposals will be held in confidence prior to the opening date of all proposals.

The Agency reserves the right, after opening the proposals, to reject any or all proposals, or, to accept proposal(s) that in its sole judgment, are in the best interest of the Agency.

Prospective Consultants assume the risk of any delay in mail or handling of mail by the Agency's employees. Applicants are therefore responsible for ensuring that proposals are received on time at the specified location by the specified time whether they are sent by mail or delivered in person. Oral, telegraphic, or telephonic proposals or modifications will not be considered. More than one proposal from an individual, firm, partnership, corporation or association under the same or different names shall not be considered.

3. AGENCY DESCRIPTION

Inland Empire Utilities Agency is a regional sewage treatment and water agency that provides sewage treatment, solids waste handling, and recycled water to the west end of San Bernardino county. Its 242 square mile service area includes the cities of Upland, Montclair, Ontario, Fontana, Chino and Chino Hills; Cucamonga Valley Water District which services the City of Rancho Cucamonga and the unincorporated areas of San Bernardino County, including the Chino Agricultural Preserve. The Agency, a special assessment district, is governed by a five seat publicly elected Board of Directors. Each director is assigned to one of the five divisions which are: Division 1-Upland/Montclair; Division 2- Ontario/ Agricultural Preserve; Division 3- Chino/ Chino Hills; Division 4- Fontana; Division 5- Rancho Cucamonga. The Regional Technical and Policy Committees provide information on technical and policy issues, and there are representatives from each of the contracting agencies on these committees.

Five regional water reclamation plants are used to treat sewage from the Agency's service area. They are: Regional Water Recycling Plant No. 1 (RP-1), located in the City of Ontario; Regional Water Recycling Plant No. 2 (RP-2), located in the City of Chino; Regional Water Recycling Plant No. 4 (RP-4), located in the City of Rancho Cucamonga; and Carbon Canyon Water Recycling Facility (CCWRF), located in the City of Chino and Regional Water Recycling Plant No. 5 (RP-5), located in the City of Chino.

The Agency has two main service areas: Northern Service Area and Southern Service Area which is divided by Riverside Drive in Ontario. The Northern Service area is approximately 162 square miles and it has two active treatment plants, RP-1 and RP-4, and one decommissioned treatment plant, RP-3. The Southern Service area has CCWRF, RP-5, RP-2, and the Agency's L.E.E.D. certified Administration Headquarters. In conjunction to these facilities, the Agency maintains and operates a desalter facility, Chino I Desalter, in the City of Chino and biosolids composting facility, Inland Empire Composting Facility, in the City of Rancho Cucamonga on behalf of the Chino Basin Desalter Authority and Inland Empire Regional Composting Authority, respectively. The Agency is also the Metropolitan Water District of Southern California representative for the contracting agencies.

4. PROJECT BACKGROUND

The Agency's recycled water system is simulated in a hydraulic model using InfoWater version 12.0 by Innovyze, Inc. The model comprises of pipes, junctions/nodes, pumps, valves, and reservoirs which was updated in 2014. The latest version of the model consists of 2015 demands along the Agency's recycled water system and local member agencies' laterals.

The Agency seeks the services of a consultant to perform on-call hydraulic modeling support for the Recycled Water Hydraulic Modeling under a three-year contract with two one-year optional extensions at the discretion of the Agency.

5. PROJECT DESCRIPTION

The Agency's recycled water hydraulic model is utilized to simulate the effects of existing and future demands in addition to proposed facilities on the recycled water distribution system within the Agency's service area. Hydraulic analyses is required on an on-call basis when changes to demands, operations and facilities are under evaluation. The system-wide analyses will be used for future planning of facilities under the Recycled Water Program Strategy and its subsequent updates.

6. SCOPE OF WORK

Under a three-year contract, the consultant shall perform on-call hydraulic modeling assigned by the Agency as task orders which consist of creating scenarios with the additions or modifications of proposed and future demands and facilities; revising the model to make corrections or modifications to any InfoWater component; analyzing the effects of the model scenarios, updates and revisions to current and future recycled water system operation and maintenance; troubleshooting and solving application and model errors. Critical to the success of the work will be the selected consultant providing recommendations on resolving operational challenges such as surge issues, supply and demand deficiencies; and preparing a clear and concise technical memorandum for each task order that shall discuss the results of the analysis and make recommendations to address any recycled water system operating issues and goals. The model update shall be performed in conjunction with the Recycled Water Program Strategy, proposed capital projects, and other Agency planning documents. At the term of the contract, the Agency reserves the right to grant two one-year extensions.

The Consultant shall provide the engineering services discussed and specified under this section and other sections such as Project Background, Project Description, and other requirements specified throughout the document including, but not limited to, the following:

A. KICKOFF MEETING

Prior to the first task order being issued, the Consultant shall review all necessary documents and shall attend an informal meeting to receive the Agency's input. Throughout the assignment of various hydraulic modeling services, the consultant shall be responsible for providing meeting agendas, preparing meeting handouts, and taking notes to prepare final meeting minutes.

B. ENVIRONMENTAL REVIEW

IEUA will be responsible for the preparation and processing of the required environmental review documents. The Consultant shall provide IEUA with detailed project descriptions, maps and pipeline alignments.

C. HYDRAULIC MODELING & EVALUATION (PER TASK ORDER)

The Consultant shall utilize the InfoWater software by Innowyze, Inc. that will allow the Agency to use a working copy of the hydraulic model in its current InfoWater version. When the Agency assigns a scenario and/or an update as a task order, the Consultant shall submit a cost proposal to include performing the modeling, analyzing the results, preparing the Technical Memorandum (TM), and attending review meetings. The task order shall be completed and submitted within five (5) working days after the issuance of the task order. The review meetings can be informal via email or telephone or in person at the Agency headquarters with staff and member agencies, if required.

The hydraulic modeling and evaluation shall include the following:

- i. Kickoff Meeting – Prior to beginning the modeling, the Consultant shall attend an informal meeting via telephone or in person to receive the Agency's requirements.
- ii. Alternative Analysis – The Consultant shall develop a minimum of two and a maximum of five alternatives to the proposed scenarios assigned by the Agency. The Consultant shall perform a hydraulic analysis of the alternative alignments for the present and ultimate conditions. The alternative analysis shall identify system deficiencies and its impact to the system, optimum operation and maintenance for current and future system capabilities, capital costs, the ability to serve currently identified potential users and to meet future demands. Based on this analysis, the Consultant shall make a recommendation on the reasonable, cost-effective alternative.
- iii. Construction Cost Estimate – Provide an estimate of the construction cost for the recommended improvements/modifications.

- iv. Upon completion of each task order, the Consultant shall submit a Technical Memorandum on each of the items listed below, as a minimum:
- Alternative Analysis – Include a description of each alternative, a comparison of alternatives, and recommendation for the most desirable project.
 - Project Description – Provide a description of the recommended project. The description shall include pump and pipe types and sizes; appurtenances; flow control, metering; design flow rates; operating pressures.
 - Design Criteria – Provide the design criteria recommended for the design of the project.
 - Calculations – Provide a set of calculations used in the alternative analysis and the preliminary sizing of the selected alternative.
 - Pump & Pipe Type Selection – The selection of the pump and pipe type shall be based on the recommendation from alternative analysis which takes into consideration: capital cost, operating and maintenance costs, track record and suitability of the pump and pipe type for the project.
 - Construction Cost Estimate – Provide an estimate of the construction cost for the alternatives.

The Consultant shall meet with Agency staff to receive comments on each task order. The Consultant's TM shall include comments provided by the Agency and its member agencies. The TM shall be submitted in a PDF format.

D. TRAINING

The Consultant shall provide hydraulic modeling support to Agency staff on the operation of the InfoWater software application as requested.

7. DELINEATION OF RESPONSIBILITIES

A. RESPONSIBILITIES OF THE CONSULTANT

The Agency intends to employ a Consultant who will provide the services necessary to complete the described scope of work. If the responsibility for any services required to complete the project are not specifically delineated herein, the Consultant is responsible for such activity.

- i. The Consultant shall keep the Agency informed at all times, on regular basis, the status of the current phase of the project and inform the Agency of decisions regarding the project as they are made. The Consultant may be called upon to attend meetings during any phase of the work as required by the Agency to give technical advice or to inform various groups on the status or nature of the project.
- ii. Insurance: The Consultant shall provide insurance while executing the work required under any contract which may result from submittal of his/her proposal. The insurance shall be provided by a firm acceptable to the Agency and the firm shall insure the Consultant and any one directly or indirectly employed by the Consultant. The firm shall also provide additional insurance for the Agency, and its officers, agents, and employees under the policy or policies outlined in specific endorsement. Specific insurance requirements shall be as specified in the negotiated contract. A sample contract is attached to this Request for Proposal as Attachment C.
- iii. Invoices: The Consultant shall submit invoices in accordance with the Agency's invoice format as shown in Attachment D.
- iv. Extra Work: If at any time during the project, the Consultant receives instructions outside the scope of work, he shall immediately notify the Agency and confirm the verbal statement in writing. No compensation will be made to the Consultant without a fully executed amendment prior initiating the extra work. If the nature of the instruction is such that an investigation is required to determine whether the work is outside the Engineer's contracted scope, the Engineer must notify the Agency within seven (7) calendar days of receiving the instruction. If the Agency does not receive the request for extra compensation within the seven days, no extra compensation will be paid for the work even if it is determined to be outside the Engineer's contracted scope.
- v. Graphics: The Consultant shall submit graphics that are legible (in both line weight and font size), clear, and concise. The Agency will have the final approval on use of colors, content, layout and style of all graphics.

B. RESPONSIBILITIES OF IEUA

The Agency shall provide to the Consultant all documents, studies, plans and specifications which are in the Agency's possession and will be useful in the study, design or construction of the Work described in the Scope of Work. However, the Consultant shall review the Agency's records, select the desired reference items and provide the required reproduction.

The Agency shall provide the Consultant with its adopted front-end boilerplate specifications.

Agency staff shall be available to discuss and provide examples of accepted procedures within IEUA for the review and processing of shop drawings.

C. TERMINATION OF CONTRACT

The Agency reserves the right to terminate any contract which may result from this proposal at any time with thirty (30) days written notice. In such cases, the Consultant shall be paid for work done through the termination date and all work done to that date shall become the property of the Agency.

8. CONTRACT DOCUMENT PREPARATION

A. TECHNICAL MEMORANDA

Final documents shall be prepared using Microsoft Word and Excel, latest version, as 8 ½"x11" in size and bound. Any schematics shall be prepared using Adobe Acrobat and depicted in color as 11"x17" in size.

9. SUBMITTALS

A. TECHNICAL MEMORANDA

During the hydraulic modeling and analysis, the Consultant shall keep the Agency informed of the basic design and hydraulic modeling decisions as they are made and shall seek the Agency's input. The Consultant shall document all decisions in technical memorandum.

Review submittals will be made at the completion of each task order. These submittals are to be reviewed by Agency staff.

10. TASK ORDER SCHEDULE

For each task order, the Consultant shall provide the required documents for the Agency to review which is expected to be within five (5) calendar days. Adherence to the task order completion schedule is of primary importance. The successful Consultant shall be required to meet (or exceed) all schedule milestones.

11. PAYMENT TO CONSULTANT

The Agency proposes to pay the consultant for services rendered based on the completion of each task order. The earned fee shall be based on the Agency-accepted task order cost proposal. The Consultant shall be responsible for the submission of invoices in accordance with the Agency's invoice format.

12. PROPOSAL FORMAT

The body of the proposal shall include the following items. Items referenced as an attachment shall be included in the appendices of the proposal. The proposal should include the following information as a minimum:

- A detailed proposed scope of work for the work effort based upon the information contained in the “Scope of Work” section of this Request for Proposal.
- Descriptions of the specific experience and capabilities relative to the previously outlined scope of work of the designated Project Manager, project engineer, and support staff. Include a schedule showing the percentage of time each will contribute to the project. Key personnel assigned to the project shall not be reassigned without prior written approval from the Agency. A resume of the proposed cost estimator shall be provided with reference for the last ten cost estimates completed and the associated bid amount.
- A description of the project team’s past record of performance on similar projects, with references. This will include a discussion of such factors as control of costs, innovations, quality of work and ability to meet schedules.
- Information about projects, which the interested firm has completed within the past five years. This information shall include, for each project, a brief description of the project, facility size, name, address, telephone number and recommendations from the facility owner.
- A description of the proposed method of proceeding with the project, including the method of keeping the Agency informed on the progress of the project.
- A description of any joint venture and/or proposed subcontract arrangements which would be utilized during the project.
- An organizational chart of your proposed team.
- Proposed time schedule for completion of each task order (a maximum of five (5) working days for each task order). A minimum of 10 working days shall be included for the Agency staff review period. Commitment, by a consultant, to a shorter schedule will be considered to be a positive item in the selection process.
- Work Effort: The Consultant shall provide, in the body of the proposal, fully itemized schedule of estimated effort for each task order, expressed in work hours, for each employee classification required to complete each phase of the work.
- Fee Schedule: The Consultant shall provide, in a separate sealed envelope, a fully itemized proposed fee to perform all scope items listed above broken down by phase and task.

The Consultant should consider presenting to the Agency “Optional” tasks which go above and beyond those items listed in the proposal scope of work that improve and/or enhance the project. These Optional tasks should have a separate line item with their associated fees.

If a sub-consultant is to be used, work hours for each sub-consultant shall be listed separately for each phase. The fees to be paid to sub-consultants shall be shown separately for each phase and for each sub-consultant.

A lump sum fee schedule is not acceptable. After all other parameters have been evaluated, the fee envelope of the most qualified consultant will be opened and the lump sum fee schedule will be negotiated.

- Exceptions to this Request for Proposals: Any changes from the provisions of this Request for Proposals and Sample of Standard Contract, which are desired by the Consultant, shall be specifically noted in the attached Exception Form (Attachment E).
- Documentation that personal or organization conflicts of interest prohibited by law do not exist. (The Consultant is subject to State and Federal conflict of interest)
- Firms shall complete and return with their proposal the Workers' Compensation Certificate form provided (Attachment F).
- The Consultant shall include résumés for the project team. The résumés shall provide specific information about the team member's experience with similar type projects.
- The Consultant shall complete and return with their proposal the Business Ownership Information form provided (Attachment I)

13. SELECTION OF CONSULTANT

A. QUALIFICATIONS

The Consultant may be a single firm or a joint venture and must show evidence of technical capability and experience in civil engineering including: groundwater recharge and recycled water distribution system, pump station, reservoir planning and design, and InfoWater/GIS programming and utilization. The Consultant shall also be familiar with the regulatory constraints. The consulting firm cannot submit a proposal as both a prime and a sub-consultant on a joint venture.

B. CRITERIA FOR SELECTION

Selection among the proposals received shall be based upon (but not necessarily in the order given) the following:

- The firm's organization, history, reputation, location and capability to perform all aspects of the work.
- The firm's ability to provide innovative, creative, cost reducing alternatives to meet the Agency's needs.

- Qualifications and experience of the personnel and project team to be assigned to the project including appropriate professional registrations.
- Ability to commence work immediately after execution of the contract and complete the required work within the desired time and allotted budget.
- Thoroughness of the Consultant's scope of the proposed work and realistic plan for completion of the project.
- Proposed staffing work effort.
- Exceptions to the request for proposals taken by the consultant.

C. INTERVIEWS

Interviews may be scheduled with some or all of the Consultants who submit a proposal. Each Consultant shall be ranked based on the interview and an evaluation of the before mentioned criteria. Following the ranking of the proposals received by Agency, the fee envelope for the top ranked Consultant will be opened. The top ranked Consultant and AGENCY will then negotiate the terms of the Contract. The Agency's Board of Directors shall approve the final selection.

D. NOTIFICATION OF UNSUCCESSFUL CONSULTANTS

Unsuccessful potential Consultants shall be notified as soon as possible by the Agency following determination at whatever point in the selection process such determination is made. It is estimated that the selection process will take, in its entirety, about sixty days.

E. NEGOTIATION OF CONTRACT

After selection of a Consultant, the Agency and the Consultant shall negotiate the contract under which the work shall be performed. All items submitted in the Consultant's Proposal shall be subject to negotiation.

F. CONFLICT OF INTEREST INFORMATION

Information on possible conflicts of interest shall be provided in the Proposal. Such information shall be taken into account in making a decision on the selection of the Consultant to perform the work.

G. PUBLIC RECORDS POLICY

Responses to this Request for Proposal (RFP) and the documents constituting any Contract entered into thereafter becomes the exclusive property of the Agency and shall be subject to the California Public Records Act (Government Code Section

6250 et seq.). The Agency's use and disclosure of its records are governed by this Act.

Those elements in each Proposal which Offeror considers to be trade secrets, as that term is defined in Civil Code Section 3426.1(d), or otherwise exempt by law from disclosure, should be prominently marked as "TRADE SECRET", "CONFIDENTIAL", or "PROPRIETARY", by Offeror. The Agency will use its best efforts to inform Offeror of any request for disclosures of any such document. Agency, shall not in any way, be liable or responsible for the disclosure of any such records including, without limitation, those so marked if disclosure is deemed to be required by law or by an order of the Court.

In the event of litigation concerning disclosure of information the Offeror considers exempt from disclosure, the Agency will act as a stakeholder only, holding the information until otherwise ordered by a court or other legal process. If the Agency is required to defend an action arising out of a Public Records Act requests, for any of the contents of a Offeror's proposal marked "Trade Secret", "Confidential", or "Proprietary", Offeror shall defend and indemnify Agency from all liability, damages, costs, and expenses, including attorneys' fees, in any action or proceeding arising under the Public Records Act.

To insure confidentiality, Offerors are instructed to enclose all "Trade Secret", "Confidential", or "Proprietary", data in separate, labeled, sealed envelopes, which are then included with the Bid/Proposal documents. Because the Bid/Proposal documents are available for review by any person following the Bid/Proposal opening, and during the review period, and after an award of a contract resulting from an Invitation to Bid/Request for Proposal, Agency shall not in any way be held responsible for disclosure of any "Trade Secret", "Confidential", or "Proprietary" documents that are not contained in labeled envelopes.

14. AVAILABLE REFERENCE MATERIAL

The following are a list of available reference materials:

1. IEUA Recycled Water Program Strategy
2. Current InfoWater hydraulic model
3. IEUA GIS database, which includes street centerlines, IEUA facilities, parcel maps, etc.

These and any other existing documentation will be made available for review to the Consultants and may be reviewed by appointment in the Agency's Headquarters Buildings, Building B located at 6075 Kimball Avenue, Chino, California, 91708.

15. ATTACHMENTS

The following attachments are included in the RFP:

Attachment "A" – Vicinity Map

Attachment "B" – Project Schedule

Attachment "C" – Sample of Standard Contract

Attachment "D" – Consulting Services Invoice

Attachment "E" – Exception Form

Attachment "F" – Workers' Compensation Insurance Certificate

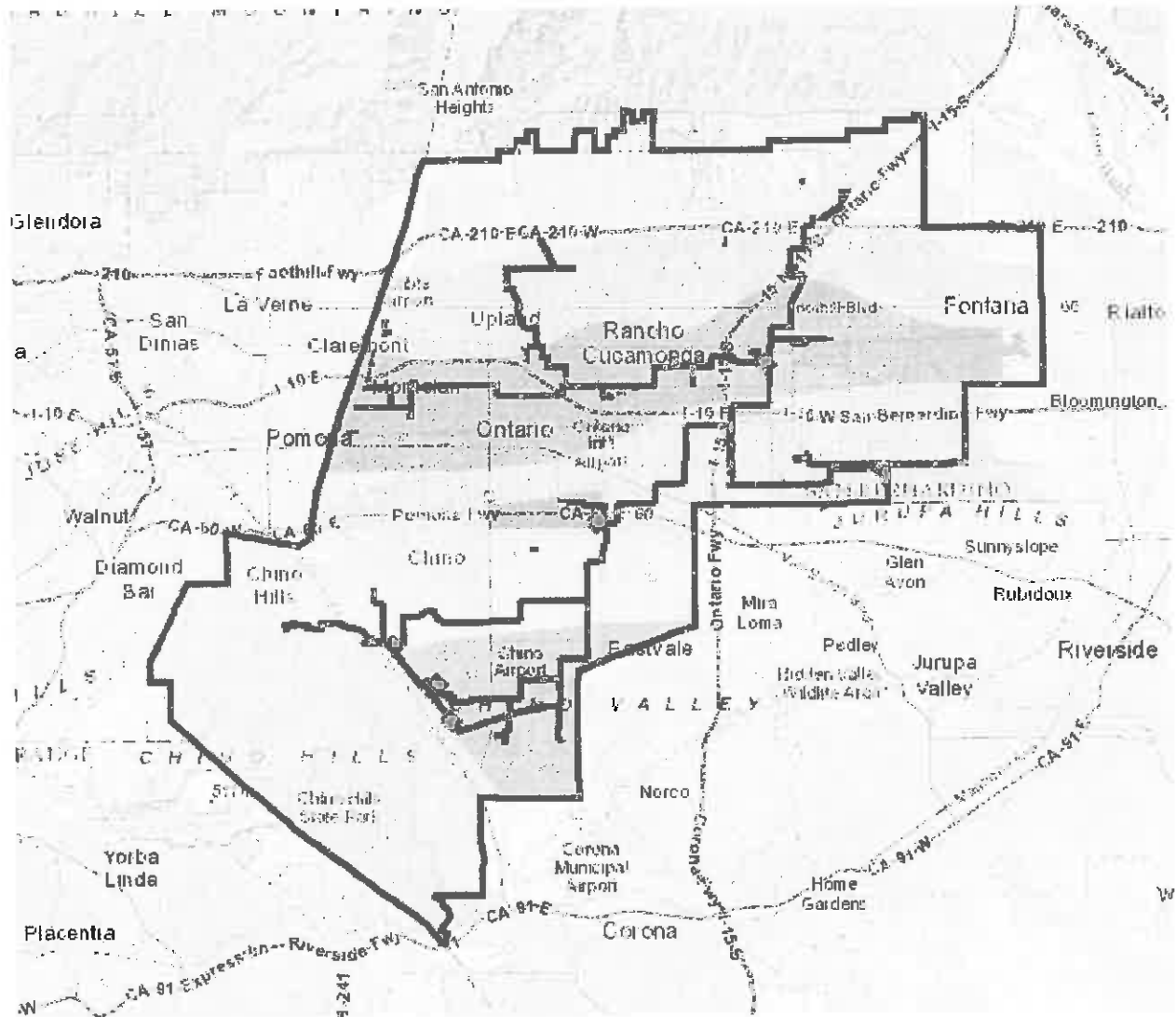
Attachment "G" – Consultant Identification

Attachment "H" – Non-Collusion Affidavit

Attachment "I" – Business Ownership Information

ATTACHMENT A

VICINITY MAP



ATTACHMENT B

SCHEDULE

Contract Award:	September 21, 2016
Kick Off Meeting:	September 28, 2016
Recycled Water Hydraulic Modeling FY 2017:	Award through June 30, 2017
Recycled Water Hydraulic Modeling FY 2018:	July 1, 2017 through June 30, 2018
Recycled Water Hydraulic Modeling FY 2019:	July 1, 2018 through June 30, 2019

Sample of Standard Contract

CONTRACT NUMBER: (RESERVED)

FOR

(PROJECT TITLE)

THIS CONTRACT (the "Contract"), is made and entered into this ____ day of _____, _____, by and between the Inland Empire Utilities Agency, a Municipal Water District, organized and existing in the County of San Bernardino under and by virtue of the laws of the State of California (hereinafter referred to as "Agency"), (COMPANY NAME), of (CITY), (STATE) (hereinafter referred to as "Consultant"), for (PROJECT DESCRIPTION).

NOW, THEREFORE, in consideration of the mutual promises and obligations set forth herein, the parties agree as follows:

1. **PROJECT MANAGER ASSIGNMENT:** All technical direction related to this Contract shall come from the designated Project Manager. Details of the Agency's assignment are listed below.

Project Manager:

Project Manager

Address: 6075 Kimball Avenue, Building B
Chino, California 91708

Telephone:

Email:

Facsimile:

2. **CONSULTANT ASSIGNMENT:** Special inquiries related to this Contract and the effects of this Contract shall be referred to the following:

Consultant: (NAME)

Address: (ADDRESS)
(CITY, STATE, ZIP)

Telephone: (AREA CODE) (NUMBER), Extension (NO.)

Email: (EMAIL ADDRESS)

Facsimile: (AREA CODE) (NUMBER)

3. **ORDER OF PRECEDENCE:** The documents referenced below represent the Contract Documents. Where any conflicts exist between the General Terms and Conditions, or addenda attached, then the governing order of precedence shall be as follows:
 1. Amendments to Contract number (*NO.*).
 2. Contract Number (*NO.*) General Terms and Conditions.
 3. Agency's Request for Proposals Number (*NO.*) and all germane Addenda.
 4. Consultant's Proposal, dated (*DATE*).
4. **SCOPE OF WORK AND SERVICES:** Consultant services and responsibilities shall include, and be in accordance with tasks identified in the Agency's Request for Proposals dated [date] which is incorporated herein by this reference.
5. **TERM:** The term of this Contract shall extend from the date of the Notice to Proceed, and terminate upon [date] OR [completion of project], unless agreed to by both parties, reduced to writing, and amended to this Contract.
6. **COMPENSATION:** Agency shall pay Consultant's properly-executed once-monthly invoice approved by the Project Manager within thirty (30) days following receipt of the invoice. Payment will be withheld for any service which does not meet or exceed Agency requirements or have proven unacceptable until such service is revised, resubmitted, and accepted by the Project Manager. All invoices shall be submitted electronically with all required back-up to apgroup@ieua.org .

Agency may at any time make changes to the Work including additions, reductions, and changes to any or all of the Work, as directed in writing by the Agency. Such changes shall be made by an Amendment to the Contract. The NOT-TO-EXCEED Amount and Work Schedule shall be equitably adjusted, if required, to account for such changes and shall be set forth in the Amendment.

In compensation for the work represented by this Contract, Agency shall pay Consultant a NOT-TO-EXCEED maximum lump-sum total of (NTE AMOUNT) for all services provided. Payment shall be made according to milestones achieved and accepted by the Agency's Project Manager.

7. **CONTROL OF THE WORK:** Consultant shall perform the Work in compliance with the Work Schedule. If performance of the Work falls behind schedule, the Consultant shall accelerate the performance of the Work to comply with the Work Schedule as directed by the Project Manager. If the nature of the Work is such that Consultant is unable to accelerate the Work, Consultant shall promptly notify the Project Manager of the delay, the causes of the delay, and submit a proposed revised Work Schedule.
8. **FITNESS FOR DUTY:**
 - A. **Fitness:** Consultant and its Subconsultant personnel on the Jobsite:

1. Shall report for work in a manner fit to do their job;
 2. Shall not be under the influence of or in possession of any alcoholic beverages or of any controlled substance (except a controlled substance as prescribed by a physician so long as the performance or safety of the Work is not affected thereby); and
 3. Shall not have been convicted of any serious criminal offense which, by its nature, may have a discernible adverse impact on the business or reputation of Agency.
- B. Compliance: Consultant shall advise all Consultant and subconsultant personnel and associated third parties of the requirements of this Contract ("Fitness for Duty Requirements") before they enter on the Jobsite and shall immediately remove from the Jobsite any employee determined to be in violation of these requirements. Consultant shall impose these requirements on its Subconsultants. Agency may cancel the Contract if Consultant violates these Fitness for Duty Requirements.
9. INSURANCE: During the term of this Contract, the Consultant shall maintain at Consultant's sole expense, the following insurance.
- A. Minimum Scope of Insurance:
1. General Liability: \$2,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. Coverage shall be at least as broad as Insurance Services Office form number GL 0001-87 covering Comprehensive General Liability. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location, or the general aggregate limit shall be twice the required single occurrence limit.
 2. Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage. Coverage shall be at least as broad as Insurance Services Office form number CA 00 01 87, covering Automobile Liability, including "any auto."
 3. Workers' Compensation and Employers Liability: Workers' compensation limits as required by the Labor Code of the State of California and employers Liability limits of \$1,000,000 per accident.
 4. Professional Liability Insurance in the amount of \$1,000,000 per occurrence.
- B. Deductibles and Self-Insured Retention: Any deductibles or self-insured retention must be declared to and approved by the Agency. At the option of the Agency, either: the insurer shall reduce or eliminate such deductibles or self-insured retention as respects the Agency, its officers, officials, employees and volunteers; or

the Consultant shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

C. Other Insurance Provisions: The policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability Coverage

- a. The Agency, its officers, officials, employees, volunteers, property owners and any engineers under contract to the Agency are to be covered as insureds, endorsements GL 20 11 07 66, CG2010 1185 and/or CA 20 01 (Ed. 0178), as respects: liability arising out of activities performed by or on behalf of the Consultant, products and completed operations of the Consultant, premises owned, occupied or used by the Consultant, or automobiles owned, leased, hired or borrowed by the Consultant. The coverage shall contain no special limitations on the scope of protection afforded to the Agency, its officers, officials, employees or volunteers.
- b. The Consultant's insurance coverage shall be primary insurance as respects the Agency, its officer, officials, employees and volunteers. Any insurance or self-insurance maintained by the Agency, its officers, officials, employees, or volunteers shall be excess of the Consultant's insurance and shall not contribute with it.
- c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Agency, its officers, officials, employees or volunteers.
- d. The Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- e. The Consultant may satisfy the limit requirements in a single policy or multiple policies. Any Such additional policies written as excess insurance shall not provide any less coverage than that provided by the first or primary policy.

2. Workers' Compensation and Employers Liability Coverage

The insurer shall agree to waive all rights of subrogation against the Agency, its officers, officials, employees and volunteers for losses arising from work performed by the Consultant for the Agency.

3. All Coverages

Each insurance policy required by this contract shall be endorsed to state that coverage shall not be suspended, voided, canceled by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the Agency.

- D. Acceptability of Insurers: All insurance is to be placed with insurers with a Best's rating of no less than A:VII, and who are admitted insurers in the State of California.
- E. Verification of Coverage: Consultant shall furnish the Agency with certificates of insurance and with original endorsements effecting coverage required by the Agency for themselves and all subconsultants prior to commencing work or allowing any subconsultant to commence work under any subcontract. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements are to be approved by the Agency before work commences. The Agency reserves the right to require complete, certified copies of all required insurance policies, at any time.
- F. Submittal of Certificates: Consultant shall submit all required certificates and endorsements to the following:

Attn. Ms. Angela Witte, Risk Specialist
c/o Inland Empire Utilities Agency
P.O. Box 9020
Chino Hills, California 91709-0902

10. LEGAL RELATIONS AND RESPONSIBILITIES

- A. Professional Responsibility: The Consultant shall be responsible, to the level of competency presently maintained by other practicing professionals performing the same or similar type of work.
- B. Status of Consultant: The Consultant is retained as an independent Consultant only, for the sole purpose of rendering the services described herein, and is not an employee of the Agency.
- B. Observing Laws and Ordinances: The Consultant shall keep itself fully informed of all existing and future state and federal laws and all county and city ordinances and regulations which in any manner affect the conduct of any services or tasks performed under this Contract, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. The Consultant shall at all times observe and comply with all such existing and future laws, ordinances, regulations, orders and decrees, and shall protect and indemnify, as required herein, the Agency, its officers, employees and agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by the Consultant or its employees.

- C. Subcontract Services: Any subcontracts for the performance of any services under this Contract shall be subject to the written approval of the Project Manager.
- D. Hours of Labor: The Consultant shall comply with all applicable provisions of California Labor Code Sections 1810 to 1817 relating to working hours. The Consultant shall, as a penalty to the Agency, forfeit \$25.00 for each worker employed in the execution of the Contract by the Consultant or by any subconsultant for each calendar day during which such worker is required or permitted to work more than eight hours in any one calendar day and forty (40) hours in any one calendar week in violation of the provisions of the Labor Code.
- E. Travel and Subsistence Pay: The Consultant shall make payment to each worker for travel and subsistence payments which are needed to execute the work and/or service, as such travel and subsistence payments are defined in the applicable collective bargaining agreements with the worker.
- F. Liens: Consultant shall pay all sums of money that become due from any labor, services, materials or equipment furnished to Consultant on account of said services to be rendered or said materials to be furnished under this Contract and that may be secured by any lien against the Agency. Consultant shall fully discharge each such lien at the time performance of the obligation secured matures and becomes due.
- G. Conflict of Interest: No official of the Agency who is authorized in such capacity and on behalf of the Agency to negotiate, make, accept or approve, or to take part in negotiating, making, accepting or approving this Contract, or any subcontract relating to services or tasks to be performed pursuant to this Contract, shall become directly or indirectly personally interested in this Contract.
- H. Equal Opportunity and Unlawful Discrimination: During the performance of this Contract, the Consultant shall not unlawfully discriminate against any employee or employment applicant because of race, color, religion, sex, age, marital status, ancestry, physical or mental disability, sexual orientation, veteran status or national origin. The Agency is committed to creating and maintaining an environment free from harassment and discrimination. To accomplish these goals the Agency has established procedures regarding the implementation and enforcement of the Agency's Harassment Prohibition and Equal Employment Opportunity commitments. Please refer to Agency Policies A-29 (Equal Employment Opportunity) and A-30 Harassment Prohibition for detailed information or contact the Agency's Human Resources Administrator. A copy of either of these Policies can be obtained by contacting the Project Manager for your respective Contract. Please advise any of your staff that believes they might have been harassed or discriminated against while on Agency property, to report said possible incident to either the Project Manager, or the Agency's Human Resources Administrator. Please be assured that any possible infraction will be thoroughly investigated by the Agency.

I. Non-Conforming Work and Warranty: Consultant represents and warrants that the Work and Documentation shall be adequate to serve the purposes described in the Contract. For a period of not less than one (1) year after acceptance of the completed Work, Consultant shall, at no additional cost to Agency, correct any and all errors in and shortcomings of the Work or Documentation, regardless of whether any such errors or shortcoming is brought to the attention of Consultant by Agency, or any other person or entity. Consultant shall within three (3) calendar days, correct any error or shortcoming that renders the Work or Documentation dysfunctional or unusable and shall correct other errors within thirty (30) calendar days after Consultant's receipt of notice of the error. Upon request of Agency, Consultant shall correct any such error deemed important by Agency in its sole discretion to Agency's continued use of the Work or Documentation within seven (7) calendar days after Consultant's receipt of notice of the error. If the Project Manager rejects all or any part of the Work or Documentation as unacceptable and agreement to correct such Work or Documentation cannot be reached without modification to the Contract, Consultant shall notify the Project Manager, in writing, detailing the dispute and reason for the Consultant's position. Any dispute that cannot be resolved between the Project Manager and Consultant shall be resolved in accordance with the provisions of this Contract.

J. Disputes:

1. All disputes arising out of or in relation to this Contract shall be determined in accordance with this section. The Consultant shall pursue the work to completion in accordance with the instruction of the Agency's Project Manager notwithstanding the existence of dispute. By entering into this Contract, both parties are obligated, and hereby agree, to submit all disputes arising under or relating to the Contract, which remain unresolved after the exhaustion of the procedures provided herein, to independent arbitration. Except as otherwise provided herein, arbitration shall be conducted under California Code of Civil Procedure Sections 1280, et. seq, or their successor.
2. Any and all disputes during the pendency of the work shall be subject to resolution by the Agency Project Manager and the Consultant shall comply, pursuant to the Agency Project Manager instructions. If the Consultant is not satisfied with any such resolution by the Agency Project Manager, they may file a written protest with the Agency Project Manager within seven (7) calendar days after receiving written notice of the Agency's decision. Failure by Consultant to file a written protest within seven (7) calendar days shall constitute waiver of protest, and acceptance of the Agency Project Manager's resolution. The Agency's Project Manager shall submit the Consultant's written protests to the General Manager, together with a copy of the Agency Project Manager's written decision, for his or her consideration within seven (7) calendar days after receipt of said protest(s). The General Manager shall make his or her determination with respect to each protest filed with the

Agency Project Manager within ten (10) calendar days after receipt of said protest(s). If Consultant is not satisfied with any such resolution by the General Manager, they may file a written request for arbitration with the Project Manager within seven (7) calendar days after receiving written notice of the General Manager's decision.

3. In the event of arbitration, the parties hereto agree that there shall be a single neutral Arbitrator who shall be selected in the following manner:
 - a. The Demand for Arbitration shall include a list of five names of persons acceptable to the Consultant to be appointed as Arbitrator. The Agency shall determine if any of the names submitted by Consultant are acceptable and, if so, such person will be designated as Arbitrator.
 - b. In the event that none of the names submitted by Consultant are acceptable to Agency, or if for any reason the Arbitrator selected in Step (a) is unable to serve, the Agency shall submit to Consultant a list of five names of persons acceptable to Agency for appointment as Arbitrator. The Consultant shall, in turn, have seven (7) calendar days in which to determine if one such person is acceptable.
 - c. If after Steps (a) and (b), the parties are unable to mutually agree upon a neutral Arbitrator, the matter of selection of an Arbitrator shall be submitted to the San Bernardino County Superior Court pursuant to Code of Civil Procedure Section 1281.6, or its successor. The costs of arbitration, including but not limited to reasonable attorneys' fees, shall be recoverable by the party prevailing in the arbitration. If this arbitration is appealed to a court pursuant to the procedure under California Code of Civil Procedure Section 1294, et. seq., or their successor, the costs of arbitration shall also include court costs associated with such appeals, including but not limited to reasonable attorneys' fees which shall be recoverable by the prevailing party.
 4. Joinder in Mediation/Arbitration: The Agency may join the Consultant in mediation or arbitration commenced by a consultant on the Project pursuant to Public Contracts Code Sections 20104 et seq. Such joinder shall be initiated by written notice from the Agency's representative to the Consultant.
- K. Grant-Funded Projects: For grant-funded (e.g., State Revolving Funds) projects, the Consultant shall be responsible to comply with all grant requirements related to the project. These may include, but shall not be limited to: Davis-Bacon Act, Endangered Species Act, Executive Order 11246 (Affirmative Action Requirements), Equal Opportunity, Competitive Solicitation, Record Retention and

Public Access to Records, and Compliance Review. Federally-funded projects will have separate, additional reporting accountability on the use of funds.

11. **INDEMNIFICATION:** Consultant shall indemnify the Agency, its directors, employees and assigns, and shall hold them harmless from all liabilities, demands, actions, claims, losses and expenses, including reasonable attorneys' fees, which arise out of or are related to the negligence, recklessness or willful misconduct of the Consultant, its directors, employees, agents and assigns, in the performance of work under this contract. Notwithstanding the foregoing, to the extent that this Contract includes design professional services under Civil Code Section 2782.8, as may be amended from time to time, such duties of Consultant to defend and to indemnify Agency shall only be to the full extent permitted by Civil Code Section 2782.8.

Consultant shall have no duty to defend Agency, but Consultant shall pay as damages to Agency all reasonable attorney's fees and costs incurred by Agency to the extent incurred by Agency arising out of Consultant's actual or alleged negligent acts, errors, or omissions. Further, Consultant shall assume sole responsibility for the investigation, analysis, and defense of any and all issues alleged against Agency or Consultant to the extent alleged, based on, or arising out of Consultant's scope of work, or Consultant's actual or alleged negligent acts, errors, or omissions.

12. **OWNERSHIP OF MATERIALS AND DOCUMENTS/CONFIDENTIALITY:** The Agency retains ownership of any and all partial or complete reports, drawings, plans, notes, computations, lists, and/or other materials, documents, information, or data prepared by the Consultant and/or the Consultant's subconsultant(s) pertaining to this Contract. Said materials and documents are confidential and shall be available to the Agency from the moment of their preparation, and the Consultant shall deliver same to the Agency whenever requested to do so by the Project Manager and/or Agency. The Consultant agrees that same shall not be made available to any individual or organization, private or public, without the prior written consent of the Agency.

13. **TITLE AND RISK OF LOSS:**

Documentation: Title to the Documentation shall pass to Agency when prepared; however, a copy may be retained by Consultant for its records and internal use. Consultant shall retain such Documentation in a controlled access file, and shall not reveal, display or disclose the contents of the Documentation to others without the prior written authorization of Agency or for the performance of Work related to the PROJECT.

Material: Title to all Material, field or research equipment, and laboratory models, procured or fabricated under the Contract shall pass to Agency when procured or fabricated, and such title shall be free and clear of any and all encumbrances. Consultant shall have risk of loss of any Material or Agency-owned equipment of which it has custody.

Disposition: Consultant shall dispose of items to which Agency has title as directed in writing by the Agreement Administrator and/or Agency.

14. PROPRIETARY RIGHTS:

Rights and Ownership: Agency's rights to inventions, discoveries, trade secrets, patents, copyrights, and other intellectual property, including the Information and Documentation, and revisions thereto (hereinafter collectively referred to as "Proprietary Rights"), used or developed by Consultant in the performance of the Work, shall be governed by the following provisions:

Proprietary Rights conceived, developed, or reduced to practice by Consultant in the performance of the Work shall be the property of Agency, and Consultant shall cooperate with all appropriate requests to assign and transfer same to Agency.

If Proprietary Rights conceived, developed, or reduced to practice by Consultant prior to the performance of the Work are used in and become integral with the Work or Documentation, or are necessary for Agency to have complete enjoyment of the Work or Documentation, Consultant shall grant to Agency a non-exclusive, irrevocable, royalty-free license, as may be required by Agency for the complete enjoyment of the Work and Documentation, including the right to reproduce, correct, repair, replace, maintain, translate, publish, use, modify, copy or dispose of any or all of the Work and Documentation and grant sublicenses to others with respect to the Work and Documentation.

If the Work or Documentation includes the Proprietary Rights of others, Consultant shall procure, at no additional cost to Agency, all necessary licenses regarding such Proprietary Rights so as to allow Agency the complete enjoyment of the Work and Documentation, including the right to reproduce, correct, repair, replace, maintain, translate, publish, use, modify, copy or dispose of any or all of the Work and Documentation and grant sublicenses to others with respect to the Work and Documentation. All such licenses shall be in writing and shall be irrevocable and royalty-free to Agency.

B. No Additional Compensation: Nothing Set forth in this Contract shall be deemed to require payment by Agency to Consultant of any compensation specifically for the assignments and assurances required hereby, other than the payment of expenses as may be actually incurred by Consultant in complying with this Contract.

15. INFRINGEMENT: Consultant represents and warrants that the Work and Documentation shall be free of any claim of trade secret, trade mark, trade name, copyright, or patent infringement or other violations of any Proprietary Rights of any person.

Consultant shall defend, indemnify and hold harmless, Agency, its officers, directors, agents, employees, successors, assigns, servants, and volunteers free and harmless from any and all liability, damages, losses, claims, demands, actions, causes of action, and costs including reasonable attorney's fees and expenses arising out of any claim that use of the Work or Documentation infringes upon any trade secret, trade mark, trade name, copyright, patent, or other Proprietary Rights.

Consultant shall, at its expense and at Agency's option, refund any amount paid by Agency under the Contract, or exert its best efforts to procure for Agency the right to use the Work and Documentation, to replace or modify the Work and Documentation as approved by Agency so as to obviate any such claim of infringement, or to put up a satisfactory bond to permit Agency's continued use of the Work and Documentation.

16. **NOTICES:** Any notice may be served upon either party by delivering it in person, or by depositing it in a United States Mail deposit box with the postage thereon fully prepaid, and addressed to the party at the address set forth below:

Agency: Warren T. Green, Manager of Contracts
& Facilities Services
Inland Empire Utilities Agency
P.O. Box 9020
Chino Hills, California 91709-0902

Consultant: *(CONSULTANT'S REPRESENTATIVE)*
(COMPANY NAME)
(ADDRESS)
(CITY, STATE, ZIP)

Any notice given hereunder shall be deemed effective in the case of personal delivery, upon receipt thereof, or, in the case of mailing, at the moment of deposit in the course of transmission with the United States Postal Service.

17. **SUCCESSORS AND ASSIGNS:** All of the terms, conditions and provisions of this Contract shall inure to the benefit of and be binding upon the Agency, the Consultant, and their respective successors and assigns. Notwithstanding the foregoing, no assignment of the duties or benefits of the Consultant under this Contract may be assigned, transferred or otherwise disposed of without the prior written consent of the Agency; and any such purported or attempted assignment, transfer or disposal without the prior written consent of the Agency shall be null, void and of no legal effect whatsoever.
18. **PUBLIC RECORDS POLICY:** Information made available to the Agency may be subject to the California Public Records Act (Government Code Section 6250 et seq.) The Agency's use and disclosure of its records are governed by this Act. The Agency shall use its best efforts to notify Consultant of any requests for disclosure of any documents pertaining to Consultant.

In the event of litigation concerning disclosure of information Consultant considers exempt from disclosure; (e.g., Trade Secret, Confidential, or Proprietary) Agency shall act as a stakeholder only, holding the information until otherwise ordered by a court or other legal process. If Agency is required to defend an action arising out of a Public Records Act request for any of the information Consultant has marked "Confidential," "Proprietary," or "Trade Secret," Consultant shall defend and indemnify Agency from all liability, damages,

costs, and expenses, including attorneys' fees, in any action or proceeding arising under the Public Records Act.

19. **RIGHT TO AUDIT:** The Agency reserves the right to review and/or audit all Consultant's records related to the Work. The option to review and/or audit may be exercised during the term of the Contract, upon termination, upon completion of the Contract, or at any time thereafter up to twelve (12) months after final payment has been made to Consultant. The Consultant shall make all records and related documentation available within three (3) working days after said records are requested by the Agency.
20. **INTEGRATION:** The Contract Documents represent the entire Contract of the Agency and the Consultant as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered by the Contract Documents. This Contract may not be modified, altered or amended except by written mutual agreement by the Agency and the Consultant.
21. **GOVERNING LAW:** This Contract is to be governed by and constructed in accordance with the laws of the State of California.
22. **TERMINATION FOR CONVENIENCE:** The Agency reserves and has the right to immediately suspend, cancel or terminate this Contract at any time upon written notice to the Consultant. In the event of such termination, the Agency shall pay Consultant for all authorized and Consultant-invoiced services up to the date of such termination.
23. **FORCE MAJEURE:** Neither party shall hold the other responsible for the effects of acts occurring beyond their control; e.g., war, riots, strikes, natural disasters, etcetera.
24. **NOTICE TO PROCEED:** No services shall be performed or furnished under this Contract unless and until this document has been properly signed by all responsible parties and a Notice to Proceed order has been issued to the Consultant.

IN WITNESS WHEREOF, the parties hereto have caused the Contract to be entered as of the day and year written above.

INLAND EMPIRE UTILITIES AGENCY: (COMPANY NAME):

P. Joseph Grindstaff
General Manager

(Date)

(AUTH. REP.)
(TITLE)

(Date)

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ATTACHMENT D

SAMPLE CONSULTANT SERVICE INVOICE



**INLAND EMPIRE UTILITIES AGENCY
CONSULTING SERVICES INVOICE**

Consultant: Address:	Pay Estimate No.: Contract No.:	Contract Date: IEUA Project Manager:	Invoice Date: This Period: From: To: Invoice No. / Consult Ref No.
-------------------------	------------------------------------	---	--

ORIGINAL CONTRACT:

PO No.	SAP Line Item No.	WBS Element No.	Item Description	Original Contract Value		Total This Period From: To:		Total to Date From: To:		Progress to Date	Remaining Contract Value
				Amount (\$)	% Complete	Amount (\$)	% Complete	Amount (\$)	% Complete	Amount (\$)	% Complete
				\$0.00	0%	\$0.00	#DNV/DI	\$0.00	#DNV/DI		\$0.00
				\$0.00	0%	\$0.00	#DNV/DI	\$0.00	#DNV/DI		\$0.00
				\$0.00	0%	\$0.00	#DNV/DI	\$0.00	#DNV/DI		\$0.00
Subtotal Original Contract:				\$0.00		\$0.00		\$0.00			\$0.00

CONTRACT AMENDMENTS:

PO No.	SAP Line Item No.	WBS Element No.	Amendment Description	Amended Contract Value		Total This Period From: To:		Total to Date From: To:		Progress to Date	Remaining Contract Value
				Amount (\$)	% Complete	Amount (\$)	% Complete	Amount (\$)	% Complete	Amount (\$)	% Complete
						\$0.00		\$0.00	0%		0%
						\$0.00		\$0.00	0%		0%
						\$0.00		\$0.00	0%		0%
						\$0.00		\$0.00	0%		0%
Subtotal Contract Amendments:				\$0.00		\$0.00		\$0.00			\$0.00
Total Contract with Amendments:				\$0.00		\$0.00		\$0.00			\$0.00

PAYMENT SUMMARY FOR THIS PERIOD:

	From: To:
Amount Earned Original Contract	\$0.00
Amount Earned Amendments	\$0.00
Back Charges	\$0.00
Amount Due This Period	\$0.00

PRIOR PAYMENT SUMMARY:

	From: To:
Amount Earned Original Contract	\$0.00
Amount Earned Amendments	\$0.00
Back Charges	\$0.00
Prior Payments	\$0.00

TOTAL PAYMENT SUMMARY:

	Total Contract
Total Original Contract	\$0.00
Total Contract Amendments	\$0.00
Total Adjusted Contract	\$0.00
Total Payments to Date	\$0.00
Back Charges	\$0.00
Payment this period	\$0.00
Balance of Contract	\$0.00

CONTRACT SCHEDULE SUMMARY:

Contract Start Date:
Contract Duration:
Contract Completion Date: 10/1/00
Authorized Time Extension: 0
Revised Completion Date: 10/1/00

PROJECT COMPLETION SUMMARY:

Contract Time Expired: #DNV/DI
Contract Work Complete: #DNV/DI

Consultant Approval:

Title: _____ Signature: _____ Date: _____

Inland Empire Utilities Agency Approvals:

Project Engineer: _____ Date: _____ Assistant Gen. Mgr.: _____ Date: _____
Supervising Engineer: _____ Date: _____ General Manager: _____ Date: _____
Department Manager: _____ Date: _____

ATTACHMENT E

EXCEPTION FORM

Should your firm take exception to ANY of the terms and conditions or other contents provided in the Request for Proposal, submit the following form with your proposal. If no exception(s) are taken, enter "NONE" for the first item. Make additional copies of this form if necessary.

Page Number: _____ Section Title: _____

Paragraph Number: _____ Exception Taken: _____

Page Number: _____ Section Title: _____

Paragraph Number: _____ Exception Taken: _____

Page Number: _____ Section Title: _____

Paragraph Number: _____ Exception Taken: _____

Page Number: _____ Section Title: _____

Paragraph Number: _____ Exception Taken: _____

ATTACHMENT F

WORKERS' COMPENSATION CERTIFICATE

The Consultant shall execute this form to acknowledge and comply with the requirements of California Labor Code, Sections 1860 and 1861:

I am aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and on behalf of my Consultant, I will comply with such provisions before commencing the performance of the work of any contract entered into.

Signature

Company Name

Printed Name

Business License Number

Title

Date

ATTACHMENT G
CONSULTANT IDENTIFICATION

1. Legal name of Consultant: _____

2. Street Address: _____

3. Mailing Address: _____

4. Business Telephone: _____

5. Facsimile Telephone: _____

6. Email Address: _____

7. Type of Business:

Sole Proprietor Partnership Corporation

Other: _____

If corporation, indicate State where incorporated: _____

8. Business License number issued by the City where the Consultant's principal place of business is located.

Number: _____ Issuing City: _____

9. Federal Tax Identification Number: _____

10. Consultant's Project Manager: _____

ATTACHMENT H

NON-COLLUSION AFFIDAVIT

State of California)
) ss.
County of _____)

_____, being first duly sworn, deposes and says

that he or she is _____, of _____ ("Bidder") the party making the foregoing proposal that the proposal is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the proposal is genuine and not collusive or sham; that the Bidder has not directly or indirectly solicited any other Bidder to put in a false or sham proposal, and has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham proposal, or that anyone shall refrain from bidding; that the Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the proposal fee or the Bidder or any other Bidder, or to fix any overhead, profit, or cost element of the proposal fee, or of that of any other Bidder, or to secure any advantage against the public body awarding the Contract of anyone interested in the proposed Contract; that all statements contained in the proposal are true; and, further, that the Bidder has not, directly or indirectly, submitted his or her proposal fee or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, proposal depository, or to any member or agent thereof to effectuate a collusive or sham proposal.

Signature

Company Name

Printed Name

Consultant License Number

Title

Date

ATTACHMENT I

BUSINESS OWNERSHIP INFORMATION

Business Ownership Information

Are you a WMDVBE* certified business? Yes No

*(Women, Minority, Disabled, Veteran Business Enterprise)

Certification must be received from California Public Utilities Commission clearing House. Call Toll Free: 800-359-7998 or 415-928-6892 for additional information. Please check those that apply:

- | | |
|--|--|
| <input type="checkbox"/> Women-Owned Business | <input type="checkbox"/> African-American-Owned Business |
| <input type="checkbox"/> Disabled-Owned Business | <input type="checkbox"/> Veteran-Owned Business |
| <input type="checkbox"/> Native-American-Owned Business | <input type="checkbox"/> Hispanic-Owned Business |
| <input type="checkbox"/> Caucasian-American-Owned Business | <input type="checkbox"/> Underrepresented Asian-Owned Business |

All firms need to be registered with the Agency. Please logon to www.ieua.org and under the heading of Procurements, click on the registration tab. This will allow your firm to access solicitations for the commodities or services that apply. Additionally, other agencies have access to the vendor information in the Bid Net system which will increase your access for available solicitations.

Exhibit B

CAROLLO ENGINEERS, INC.

FEE SCHEDULE

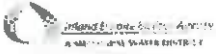


	Hourly Rate	
	2016	2017
Engineers/Scientists		
Assistant Professional— Aimee Zhao and Ryan Hejka	\$146.00	\$150.00
Professional I— Amy Martin, and Ryan Orgill	175.00	180.00
Professional II— Matt Huang	194.00	200.00
Project Professional— Tim Loper	230.00	237.00
Lead Project Professional— Inge Wiersema and Graham Juby	252.00	259.00
Technicians		
Technicians	119.00	123.00
Support Staff		
Document Processing / Clerical	106.00	109.00
Project Equipment Communication Expense (PECE) Per DL Hour	11.70	11.70
Other Direct Expenses		
Mileage at IRS Reimbursement Rate Effective January 1, 2016	\$0.54/mile	at IRS rate
Subconsultant	cost + 10%	cost + 10%
Other Direct Cost	cost + 10%	cost + 10%
Expert Witness	Rate x 2.0	Rate x 2.0

The Fee Schedule for 2018 is expected to be approximately 1 and 3% higher than the 2017 values shown above, and those for 2019 are expected to be between 1 and 3% higher than the 2018 values.

Exhibit C

**INLAND EMPIRE UTILITIES AGENCY
CONSULTING SERVICES INVOICE**



Company: ABC Company	Pay Est. No.:	Contract Date:	Invoice Date: 10/16/2015
Address:	Contract No.: 46-XXXX	IEUA Project Manager: Jamal Zugnoi	This Period: From: 9/1/2015 To: 9/30/2015
Phone No.:			Invoice No./Consult Ref: XXXXXX
Proj. Name & No.: KP-1 Improvements Project, EN15XXX			

ORIGINAL CONTRACT:

PO No.	SAP Line Item No.	WBS Element No.	Item Description	Original Contr. Value	Total This Period		Total to Date		Progress to Date	Remaining Contract Value
				Amount (\$)	% Complete	Amount (\$)	% Complete	Amount (\$)	% Complete	Amount (\$)
45-XXXX	1	EN15xxx.00.F.DN50	50% Design Services	\$0.00	#DIV/0!	\$0.00	#DIV/0!	\$0.00	#DIV/0!	\$0.00
	2	EN15xxx.00.F.DN85	85% Design Services	\$0.00	#DIV/0!	\$0.00	#DIV/0!	\$0.00	#DIV/0!	\$0.00
	3	EN15xxx.00.F.DFLP	Final Design	\$0.00	#DIV/0!	\$0.00	#DIV/0!	\$0.00	#DIV/0!	\$0.00
	4	EN15xxx.00.G.CNSW.00.A	Constr Support Services		#DIV/0!	\$0.00	#DIV/0!	\$0.00	#DIV/0!	\$0.00
Subtotal Original Contract				\$0.00		\$0.00		\$0.00		\$0.00

CONTRACT AMENDMENTS:

PO No.	SAP Line Item No.	WBS Element No.	Amendment Description	Amended Contract Value	Total This Period		Total to Date		Progress to Date	Remaining Contract Value
				Amount (\$)	% Complete	Amount (\$)	% Complete	Amount (\$)	% Complete	Amount (\$)
						\$0.00		\$0.00	0%	0%
						\$0.00		\$0.00	0%	0%
						\$0.00		\$0.00	0%	0%
Subtotal Contr. Amendme				\$0.00		\$0.00		\$0.00		\$0.00
Total Cont. with Amendme				\$0.00		\$0.00		\$0.00		\$0.00

PAYMENT SUMMARY FOR THIS PERIOD:

	From: 9/1/2015
	To: 9/30/2015
Amount Earned Original Contract	\$0.00
Amount Earned Amendments	\$0.00
Back Charges	\$0.00
Amount Due This Period	\$0.00

PRIOR PAYMENT SUMMARY:

	From:
	To:
Amount Earned Orig Contract	\$0.00
Amount Earned Amendments	\$0.00
Back Charges	\$0.00
Prior Payments	\$0.00

TOTAL PAYMENT SUMMARY:

	Total Contract
Total Original Contract	\$0.00
Total Contract Amendments	\$0.00
Total Payments to Date	\$0.00
Back Charges	\$0.00
Payment this period	\$0.00
Balance of Contract	\$0.00

CONTRACT SCHEDULE SUMMARY:

Contract Start Date:	10/9/2014
Contract Duration:	365
Contract Completion Date:	10/9/2015
Authorized Time Extension:	0
Revised Completion Date:	10/9/2015

PROJECT COMPLETION SUMMARY:

Contract Time Expired:	102%
Contract Work Complete:	#DIV/0!

Consultant Approval:

Title: _____ Signature: _____ Date: _____

Inland Empire Utilities Agency Approvals:

Proj. Engineer: _____ Date: _____ Exec Mgr. / Assistant GM: _____ Date: _____
 Deputy Manager: _____ Date: _____ General Manager: _____ Date: _____
 Dept. Manager: _____ Date: _____

**ACTION
ITEM**

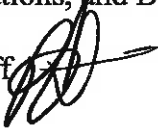
2A





Date: September 21, 2016

To: The Honorable Board of Directors

Through: Engineering, Operations, and Biosolids Management Committee (09/14/16)

From: P. Joseph Grindstaff 
General Manager

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

Shaun J. Stone 
Manager of Engineering

Subject: San Bernardino Avenue Gravity Sewer Construction Contract Award and Agreement Amendments

RECOMMENDATION

It is recommended that the Board of Directors:

1. Approve the construction contract award for the San Bernardino Avenue Gravity Sewer, Project No. EN16071, to Ferreira Construction Company for \$992,240; and
2. Authorize the General Manager to execute the construction contract and to amend the Agreements.

BACKGROUND

In November 2015, IEUA entered into agreements with the City of Fontana (City), Prologis, California Steel Industries (CSI), and the Auto Club Speedway (Speedway) to divert all sewer flows treated at the Prologis Wastewater Treatment Plant (PWWTP) to IEUA's San Bernardino Avenue Lift Station (SBLS) through a temporary and permanent sewer system. In January 2016, the temporary pumping system was installed to send the sewer flows through approximately 1,300 linear feet of above-ground 8-inch piping from the PWWTP lagoon to the SBLS. Operations staff has been monitoring the temporary system since the installation was completed.

Through coordination with staff from Prologis, CSI, and the Speedway, the design of the permanent sewer system was completed by TKE Engineering in July 2016. The permanent system consists of approximately 1,400 linear feet of a 15-inch and 18-inch gravity sewer pipeline

beginning at the PWWTP, aligned along San Bernardino Avenue and Mulberry Avenue, and ending at the SBLs. Along this alignment, existing sewer flows from Prologis, CSI and the Speedway will be intercepted. Upon completion and operation of the permanent sewer system, the temporary sewer system will be disconnected and removed.

On July 14, 2016, a request for bids was advertised to the prequalified contractor on the under \$2,000,000 list. Two contractors participated in the job walk held on July 25, 2016. On August 16, 2016, the following five bids were received:

Bidder's Name	Total Price
Ferreira Construction Company	\$992,240*
W.A. Rasic	\$1,152,285
Genesis Construction	\$1,351,369
Norstar Plumbing & Engineering	\$1,700,000
Ramona, Inc.	\$1,845,650
Engineer's Estimate	\$1,160,000

*corrected amount – mathematical error

Ferreira Construction Company (Ferreira) was the lowest responsive and responsible bidder with an original bid price of \$1,018,910. During staff's evaluation of the bid, a mathematical error was discovered. Ferreira was notified of the error and confirmed that there was an error in filling out the bid form. Ferreira's corrected bid price is \$992,240 which remains as the lowest bid. A bid protest was submitted by W.A. Rasic on August 23, 2016 declaring that Ferreira's bid should be declared nonresponsive due to the calculation errors. After consultation with General Counsel, it was confirmed that the corrected bid price was not an advantage to the low bidder and concurred with the recommendation to award to Ferreira as the lowest responsive and responsible bidder. The protest to reject the low bidder as nonresponsive was denied in accordance with General Counsel's determination.

Ferreira is on the Agency's under \$2,000,000 pre-qualified list; their contractor licenses were checked and found to be current and in good standing. Ferreira has performed several successful projects for the Agency in the past showing good workmanship and responsiveness.

The following table is the estimated project cost:

Description	Estimated Cost
Design	\$23,500
Construction Services (~15%)	\$149,000
Construction	\$992,240
Construction Contingency (~15%)	\$149,000
Total Project Cost	\$1,313,740
Total Project Budget	\$1,500,000

The following is the project schedule:

Project Milestone	Date
Construction Contract Award	September 2016
Construction Completion	February 2017

The San Bernardino Avenue Gravity Sewer project is consistent with the *Agency's Business Goal of Wastewater Management* in which IEUA systems will be master planned, managed and constructed to ensure that when expansion planning is triggered, designs/construction can be completed to meet regulatory/growth needs in an expeditious, environmentally responsible and cost effective manner.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

If approved, the construction award for the San Bernardino Avenue Gravity Sewer, Project No. EN16071, in the amount of \$992,240 is within the total project budget of \$1,500,000 in the Regional Wastewater Capital (RC) Fund. Per the agreements between the parties, all costs are reimbursable and are split equally among Prologis, CSI, and Speedway.

PJG:CB:SS:lm

San Bernardino Avenue Gravity Sewer Construction Contract Award

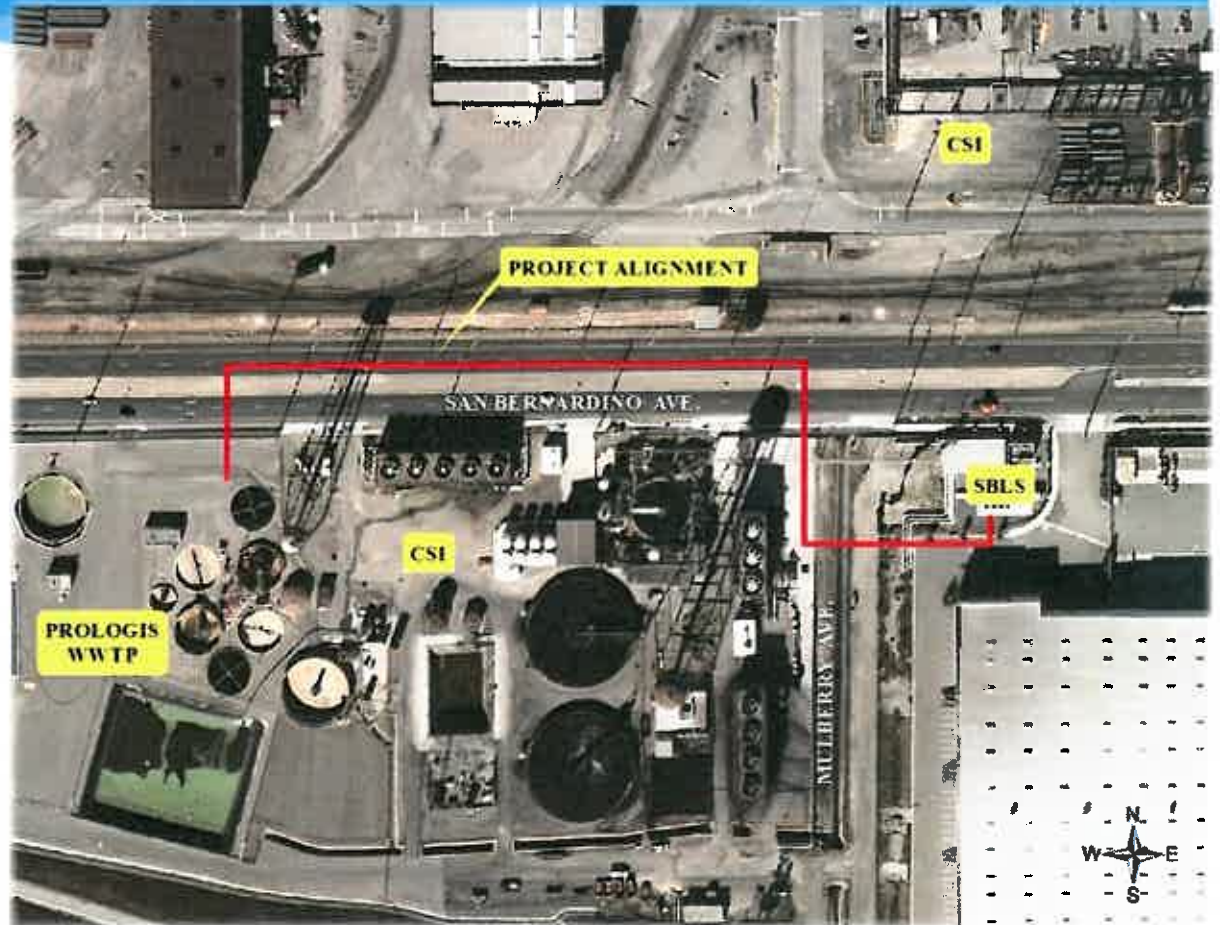
Project No. EN16071
September 2016



Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Project Location

LOCATION



Proposed Sewer Alignment

Project Background

- Prologis desires to decommission their wastewater treatment operations
- Executed agreements with City of Fontana, Prologis, California Steel Industries, and the Auto Club Speedway for IEUA to provide a permanent sewer system
- Temporary bypass sewer was installed at WWTP in January 2016
- Potholing and utility verification was performed in March 2016
- Permanent sewer system design was completed in July 2016



Temporary Bypass Sewer

Project Scope

- Installation of 1,300 linear feet of 15-inch and 18-inch Sewer Pipe
- Construction of 9 manholes
- Lateral connection points at 5 locations for CSI, Prologis & Speedway
- Connection to the San Bernardino Lift Station
- Replacement of street improvements



Temporary sewer bypass at SBLs

Bid Summary

- Five bids received on August 16, 2016
- One bid protest requesting low bidder be deemed non-responsive
 - Staff/General Counsel rejects protest

Bidder's Name	Total Price
Ferreira Construction Company	\$992,240 *
W.A. Rasic	\$1,152,285
Genesis Construction	\$1,351,369
Norstar Plumbing and Engineering	\$1,700,000
Ramona, Inc.	\$1,845,650
Engineer's Estimate	\$1,160,000

* Corrected amount

Project Cost and Schedule

Description	Estimated Cost
Design	\$23,500
Construction Services (~15%)	\$149,000
Construction	\$992,240
Construction Contingency (~15%)	\$149,000
Total Project Cost	\$1,313,740
Total Project Budget	\$1,500,000
Project Milestone	Date
Construction Contract Award	September 2016
Construction Completion	February 2017



Recommendation

Staff recommends that the Board of Directors award the construction contract to Ferreira Construction Company for the San Bernardino Avenue Gravity Sewer Project EN16071, in the amount of \$992,240 and authorize the General Manager to execute the contract.

The San Bernardino Avenue Gravity Sewer project is consistent with the **Agency's Business Goal of Wastewater Management** in which IEUA systems will be master planned, managed and constructed to ensure that when expansion planning is triggered, designs/construction can be completed to meet regulatory/growth needs in an expeditious, environmentally responsible and cost effective manner.

SECTION D - CONTRACT AND RELEVANT DOCUMENTS

1.0 CONTRACT

THIS CONTRACT, made and entered into this _____ day of _____, 2016, by and between _____, hereinafter referred to as "Contractor," and The Inland Empire Utilities Agency, a Municipal Water District, located in San Bernardino County, California, hereinafter referred to as "Agency".

WITNESSETH:

That for and in consideration of the promises and agreements hereinafter made and exchanged, the Agency and the Contractor agree as follows:

1. Contractor agrees to perform and complete in a workmanlike manner, all work required under the bidding schedule of said Agency's specifications entitled **SPECIFICATIONS FOR SAN BERNARDINO AVENUE GRAVITY SEWER**, in accordance with the specifications and drawings, and to furnish at their own expense, all labor, materials, equipment, tools, and services necessary, except such materials, equipment, and services as may be stipulated in said specifications to be furnished by said Agency, and to do everything required by this Contract and the said specifications and drawings.

2. For furnishing all said labor, materials, equipment, tools, and services, furnishing and removing all plant, temporary structures, tools and equipment, and doing everything required by this Contract and said specifications and drawings; also for all loss and damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen difficulties which may arise during the prosecution of the work until its acceptance by said Agency, and for all risks of every description connected with the work; also for all expenses resulting from the suspension or discontinuance of work, except as in the said specifications are expressly stipulated to be borne by said Agency; and for completing the work in accordance with the requirements of said specifications and drawings, said Agency will pay and said Contractor shall receive, in full compensation therefore, the price(s) set forth in this Contract.

3. That the Agency will pay the Contractor progress payments and the final payment, in accordance with the provisions of the contract documents, with warrants drawn on the appropriate fund or funds as required, at the prices bid in the Bidding and Contract Requirements, Section C - Bid Forms and accepted by the Agency, and set forth in this below.

Total Bid Price \$ 992,240.00 Dollars
and Zero Cents.

If this is not a lump sum bid and the contract price is dependent upon the quantities constructed, the Agency will pay and said Contractor shall receive, in full compensation for the work the prices named in the Bidding and Contract Requirements, Section C - Bid Forms.

4. The Agency hereby employs the Contractor to perform the work according to the terms of this Contract for the above-mentioned price(s), and agrees to pay the same at the time, in the manner, and upon the conditions stipulated in the said specifications; and the said parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to the full performance of the covenants herein contained.
5. The Notice Inviting Bids, Instructions to Bidders, Bid Forms, Information Required of Bidder, Performance Bond, Payment Bond, Contractors License Declaration, Specifications, Drawings, all General Conditions and all Special Conditions, and all addenda issued by the Agency with respect to the foregoing prior to the opening of bids, are hereby incorporated in and made part of this Contract, as if fully set forth.
6. The Contractor agrees to commence work under this Contract on or before the date to be specified in a written "Notice To Proceed" and to complete said work to the satisfaction of the Agency one hundred fifty (150) calendar days after award of the Contract. All work shall be completed before final payment is made.
7. Time is of the essence on this Contract.
8. Contractor agrees that in case the work is not completed before or upon the expiration of the contract time, damage will be sustained by the Agency, and that it is and will be impracticable to determine the actual damage which the Agency will sustain in the event and by reason of such delay, and it is therefore agreed that the Contractor shall pay to the Agency the amount of four thousand (\$4,000) dollars for each day of delay, which shall be the period between the expiration of the contract time and the date of final acceptance by the Agency, as liquidated damages and not as a penalty. It is further agreed that the amount stipulated for liquidated damages per day of delay is a reasonable estimate of the damages that would be sustained by the Agency, and the Contractor agrees to pay such liquidated damages as herein provided. In case the liquidated damages are not paid, the Contractor agrees that the Agency may deduct the amount thereof from any money due or that may become due to the Contractor by progress payments or otherwise under the Contract, or if said amount is not sufficient, recover the total amount.

In addition to the liquidated damages, which may be imposed if the Contractor fails to complete the work within the time agreed upon, the Agency may also deduct from any sums due or to become due the Contractor, liquidated damages in accordance with the Bidding and Contract Requirements, Section B - Instruction to Bidders, Part 5.0 "Liquidated Damages", for any violation of the General Conditions, Section D - Contractor's Responsibilities, Part 8, "Law and Regulations"; Bidding and Contract Requirements Contract Section D -Contract and Relevant Documents, Part 1.0, Paragraphs 9 through 11; General Conditions , Section D - Contractor's Responsibilities, Part 4.0, "Labor, Materials and Equipment"; General Conditions Section D - Contractor's Responsibilities, Part 12.0, "Safety and Protection" or General Conditions Section H - Legal Responsibilities, Part 8.0, "Disturbance of the Peace".

9. That the Contractor will pay, and will require subcontractors to pay, employees on the work a salary or wage at least equal to the prevailing salary or wage established for such work as set forth in the wage determinations and wage standards applicable to this work, contained in or referenced in the contract documents.

10. That, in accordance with Section 1775 of the California Labor Code, Contractor shall forfeit to the Agency, as a penalty, not more than Fifty (\$50.00) Dollars for each day, or portion thereof, for each worker paid, either by the Contractor or any subcontractor, less than the prevailing rates as determined by the Director of the California Department of Industrial Relations for the work.
11. That, except as provided in Section 1815 of the California Labor Code, in the performance of the work not more than eight (8) hours shall constitute a day's work, and not more than forty (40) hours shall constitute a week's work; that the Contractor shall not require more than eight (8) hours of labor in a day nor more than forty hours of labor in a week from any person employed by the Contractor or any subcontractor; that the Contractor shall conform to Division 2, Part 7, Chapter 1, Article 3 (Section 1810, et seq.) of the California Labor Code; and that the Contractor shall forfeit to the Agency, as a penalty, the sum of Twenty-Five (\$25.00) Dollars for each worker employed in the execution of the work by Contractor or any subcontractor for each day during which any worker is required or permitted to labor more than eight (8) hours in violation of said Article 3.
12. That the Contractor shall carry Workers' Compensation Insurance and require all subcontractors to carry Workers' Compensation Insurance as required by the California Labor Code.
13. That the Contractor shall have furnished, prior to execution of the Contract, two bonds approved by the Agency, one in the amount of one hundred (100) percent of the contract price, to guarantee the faithful performance of the work, and one in the amount of one hundred (100) percent of the contract price to guarantee payment of all claims for labor and materials furnished.
14. The Contractor hereby agrees to protect, defend, indemnify and hold the Agency and its employees, agents, officers, directors, servants and volunteers free and harmless from any and all liability, claims, judgments, costs and demands, including demands arising from injuries or death of persons (including employees of the Agency and the Contractor) and damage to property, arising directly or indirectly out of the obligation herein undertaken or out of the operations conducted by the Contractor, its employees agents, representatives or subcontractors under or in connection with this Contract.

The Contractor further agrees to investigate, handle, respond to, provide defense for and defend any such claims, demands or suit at the sole expense of the Contractor.

IN WITNESS WHEREOF, The Contractor and the General Manager of Inland Empire Utilities Agency*, thereunto duly authorized, have caused the names of said parties to be affixed hereto, each in duplicate, the day and year first above written.

Inland Empire Utilities Agency,*
San Bernardino County, California.

Contractor

By _____
General Manager

By  _____
Title: VICE PRESIDENT

*Municipal Water District

**ACTION
ITEM**

2B

Date: September 21, 2016

To: The Honorable Board of Directors

Through: Engineering, Operations, and Biosolids Management Committee (9/14/16)
Finance, Legal, and Administration Committee (9/14/16)

From: P. Joseph Grindstaff
General Manager

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

Shaun J. Stone
Manager of Engineering

Subject: RP-1 Mixed Liquor Pumps and Aeration Basin Panel Repairs
Construction Awards

RECOMMENDATION

It is recommended that the Board of Directors:

1. Award a construction contract for the RP-1 Mixed Liquor Return Pumps, Project No. EN16024 and RP-1 Aeration Basin Panel Repairs, Project No. EN17040, to J.F. Shea Construction, Inc., in the amount of \$6,633,000;
2. Approve a contract amendment to RMC Water and Environment for engineering services during construction for the not-to-exceed amount of \$203,000;
3. Approve total project budget amendment for RP-1 Mixed Liquor Return Pumps, Project No. EN16024 in amount of \$371,000; and
4. Authorize the General Manager to execute the construction contract, contract amendment, and budget amendment.

BACKGROUND

Operation of Groundwater Recharge (GWR) facilities has a permit condition for recharged flow to meet 5 mg/L Total Nitrogen (TN) measured at the lysimeters at each GWR basin. In general, this requirement is more stringent than the Agency's 12-month Agency wide average for Total Inorganic Nitrogen (TIN) of 8 mg/L. To ensure consistent recycled water compliance, RP-1 needs

RP-1 Mixed Liquor Pumps and Aeration Basin Panel Repairs Construction Award

September 21, 2016

Page 2 of 5

to improve nitrogen removal efficiencies in the secondary system. The RP-1 Mixed Liquor Return (MLR) Pumps project is expected to assist RP-1 in meeting nitrogen removal for recycled water use. As stated in the Facilities Master Plan, "RP-1 is near capacity at current flows to meet the 8 mg/L requirement and improvement is needed to meet the 5 mg/L GWR TN permit requirements."

Facilities Master Planning efforts have indicated several projects to improve secondary system capacity which include operational adjustments, large scale construction of system expansions, and smaller scale system improvements to the current secondary system. Due to the schedule of the planned RP-1 expansion, the Agency pursued the implementation of the small scale system improvement by adding MLR to the secondary system. This project provided the most cost effective and timely relief of to the RP-1 capacity challenges. It is anticipated that the implementation of the MLR Project will delay the need for large scale construction at RP-1 for at least 10-years.

The Aeration Basin Panel Repairs project is to repair and replace the aeration panels in all six aeration basins. The repair and replacement of the aeration basin panels is a routine maintenance project scheduled for this year by IEUA Maintenance. Since the MLR Pumps project requires a full aeration basin shutdown, the IEUA Operations and Maintenance Departments requested to use the shutdown to complete the aeration basin panel repair/replacement. Completing both projects under one shutdown would minimize operational disruptions and provides economies of scale in the construction contract.

On March 29, 2016, the Agency advertised a Request for Pre-qualification on *Planet Bids*. The prequalification process yielded four qualified contractors. On July 14, 2016, a request for bids was advertised to the four pre-qualified contractors. All four contractors participated in the job walk on July 28, 2016 and two contractors participated in a second job walk on August 3, 2016.

On August 16, 2016, the following bids were received:

Bidder's Name	Bid for the RP-1 MLR Pumps (EN16024)	Bid for the RP-1 Aeration Basin Panel Repairs (EN17040)	Lump Sum
J.F. Shea Construction, Inc.	\$4,888,000	\$1,745,000	\$6,633,000
W.M. Lyles Co.	\$4,868,321	\$2,920,000	\$7,788,321
Myers and Sons Construction, LP	\$5,580,000	\$3,408,000	\$8,989,000
Clark Construction, California, LP	\$7,695,000	\$3,095,000	\$10,790,000
Engineer's Estimate	\$4,700,000	\$1,700,000	\$6,400,000

J.F. Shea Construction, Inc., was the lowest prequalified, responsive, and responsible bidder with a bid price of \$6,633,000. During the prequalification process, IEUA staff evaluated J.F. Shea Construction, Inc.'s, financial statements and verified references. J.F. Shea Construction, Inc., has

RP-1 Mixed Liquor Pumps and Aeration Basin Panel Repairs Construction Award

September 21, 2016

Page 3 of 5

performed several successful projects for the Agency and has shown good workmanship and responsiveness.

In addition to the construction contract award, staff requests that the existing contract with RMC be amended to include engineering services during construction, increasing the contract from \$467,711 to \$670,711. The original contract with RMC for engineering design services was awarded on November 18, 2015, by the IEUA Board of Directors.

The following table is the estimated project cost:

Description	Estimated Project Cost		
	RP-1 MLR Pumps (EN16024)	RP-1 Aeration Basin Panel Repairs (EN17040)	Total
Design	\$675,000	\$15,000	\$690,000
Construction Services (~ 8%)	\$390,000	\$137,000	\$527,000
Engineering Services During Construction	\$195,000	\$8,000	\$203,000
Construction	\$4,888,000	\$1,745,000	\$6,633,000
Contingency (~10%)	\$488,000	\$175,000	\$663,000
Total Project Cost	\$6,636,000	\$2,080,000	\$8,716,000
Current Total Project Budget	\$6,265,000	\$0	\$6,265,000
Budget Transfer (FY16/17 and FY17/18)		\$2,080,000*	\$2,080,000
Requested Budget Amendment	\$371,000		\$371,000

*Represents a budget transfer from existing Operations Division project to Engineering Division

The budget for project EN17040 will be updated during the review of the Ten Year Capital Improvement Plan to reflect the funding needs in subsequent years.

Based on the bid results and anticipated total project cost, staff is requesting a total project budget amendment for the RP-1 MLR Pumps Project No. EN16024 of \$371,000 revising the budget from \$6,265,000 to \$6,636,000. The construction award and the engineering services during construction amendment in the amount of \$5,083,000 will be within the revised total project budget of \$6,636,000 in the Regional Wastewater Capital (RC) Fund. Projected expenditures for the FY will be within the approved fiscal year budget.

The following table is the breakdown of Project No. EN16024 budget by fiscal year:

Prior Year Expenditures	Current FY 2016/17 Budget	Requested FY 2017/18 Budget	Current FY 2018/19 Budget	Requested Total Project Budget
\$567,465	\$2,850,000	\$3,202,535	\$15,000	\$6,636,000

RP-1 Mixed Liquor Pumps and Aeration Basin Panel Repairs Construction Award

September 21, 2016

Page 4 of 5

The Agency-wide Aeration Panel Repair and Replacement Project (Panel Project), Project No. PA17006, was established in the Operations Division approved annual budget to repair and replace agency-wide aeration panels. The Operations Division requested the Engineering Division to administer the RP-1 portion of the Panel Project by combining with the RP-1 MLR Project. The RP-1 portion of the project budget will be transferred under project EN17040 for cost tracking and management. The construction award and the engineering services during construction amendment in the amount of \$1,753,000 will be within the total project budget of \$2,080,000 in the Regional Wastewater O&M (10800) Fund.

The following table is the breakdown of Project No. EN17040 budget by fiscal year:

Prior Year Expenditures	Requested FY 2016/17 Budget	Requested FY 2017/18 Budget	Requested FY 2018/19 Budget	Requested Total Project Budget
\$0	\$200,000	\$1,865,000	\$15,000	\$2,080,000

The following is the project schedule:

Project Milestone	Date
Construction Contract Award	September 2016
Construction Completion	January 2018

The RP-1 MLR Pumps and RP-1 Aeration Basin Panels projects are consistent with the *Agency's Business Goal of Wastewater Management* that systems will be master planned, managed and constructed to ensure that when expansion planning is triggered, designs/construction can be completed to meet regulatory/growth needs in an expeditious, environmentally responsible and cost effective manner.

PRIOR BOARD ACTION

On November 18, 2015, the Board of Directors approved a contract for the engineering services during design/bid for the RP-1 MLR Pumps to RMC Water and Environment for the not-to-exceed amount of \$424,198.

IMPACT ON BUDGET

Capital project RP-1MLR Pumps Project No. EN16024 budget will be amended in amount of \$371,000 to reflect a total project budget of \$6,636,000 in the Regional Wastewater Capital (RC) Fund.

New repair and replacement project RP-1 Aeration Basin Panel Repairs Project No. EN17040 budget will be in the amount of \$200,000 for FY 16/17 and \$1,880,000 for FY 17/18 with a transfer from Agency-wide Aeration Panel Repair and Replacement Project No. PA17006 for a total project budget amount of \$2,080,000. Given the operations and maintenance nature of Project No.

RP-1 Mixed Liquor Pumps and Aeration Basin Panel Repairs Construction Award
September 21, 2016
Page 5 of 5

EN17040, future year funding will be re-appropriated accordingly during the review of the Ten Year Capital Improvement Plan.

PJG:CB:SS:nm

RP-1 Mixed Liquor Return Pumps & Aeration Basin Panel Repairs

Contract Awards and Budget Transfer
Project Nos. EN16024 & EN17040
September 21, 2016



Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Nasrin Maleki, P.E.
Project Manager

Project Location



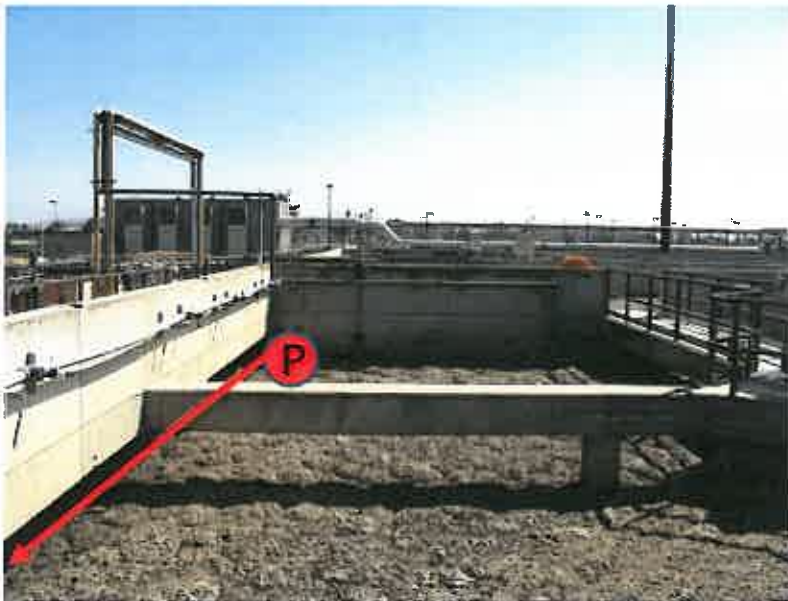
RP-1 Mixed Liquor Return Pump Locations

Project Background

- **Mixed Liquor Return Pumps**
 - Stringent current permit limitations:
 - Groundwater Recharge (GWR) Permit: 5 mg/L Total Nitrogen
 - NPDES Permit: 8 mg/L Total Inorganic Nitrogen
 - Facilities Master Planning 2015:
 - RP-1 is near capacity at current flows to meet the TIN and TN requirements
- **Aeration Panel Replacement**
 - Repair and replacement of aeration panels is a routine maintenance project
 - Occurs every 3 to 5 years based on decline in the performance of the panels
- **RMC Engineering Contract**
 - Provided design engineering for Mixed Liquor Return Pumps Project

Project Scope

- Add mixed liquor return functionality to all six trains
- Remove, repair, and replace the existing aeration panels



Aeration Basins

Bid Summary

On July 14, 2016, bids advertised to four prequalified contractors
On August 16, 2016, the following bids were received:

Bidder's Name	Mixed Liquor Return Pumps	Aeration Basin Panel Repairs	Lump Sum
J.F. Shea Construction, Inc.	\$4,888,000	\$1,745,000	\$6,633,000
W.M. Lyles Co.	\$4,868,321	\$2,920,000	\$7,788,321
Myers and Sons Construction, LP	\$5,580,000	\$3,408,000	\$8,989,000
Clark Construction, California, LP	\$7,695,000	\$3,095,000	\$10,790,000
Engineer's Estimate	\$4,700,000	\$1,700,000	\$6,400,000

Project Cost and Schedule

Description	Mixed Liquor Return Pump	Aeration Basin Panel Repairs	Combined
Design	\$675,000	\$15,000	\$690,000
Construction Services (~ 8%)	\$390,000	\$137,000	\$527,000
Engineering Services During Construction	\$195,000	\$8,000	\$203,000
Construction	\$4,888,000	\$1,745,000	\$6,633,000
Contingency (~10%)	\$488,000	\$175,000	\$663,000
Total Project Cost	\$6,636,000	\$2,080,000	\$8,716,000
Current Total Project Budget	\$6,265,000	\$0	\$6,265,000
Budget Transfer (FY16/17 and FY17/18)		\$2,080,000*	\$2,080,000
Requested Budget Amendment	\$371,000		\$371,000

*Represents a budget transfer from existing Operations Division project to Engineering Division

Project Milestone	Date
Construction Contract Award	September 2016
Construction Completion	January 2018



Recommendation

Staff Recommends the Board Approves:

- Award of a construction contract for the RP-1 Mixed Liquor Return Pumps, Project No. EN16024 and RP-1 Aeration Basin Panel Repairs, Project No. EN17040, to J.F. Shea Construction, Inc., in the amount of \$6,633,000;
- A contract amendment to RMC Water and Environment for engineering services during construction for the not-to-exceed amount of \$203,000; and
- Approve a total project budget increase for the RP-1 Mixed Liquor Return Pumps, Project No. EN16024 in the amount of \$371,000; and
- Authorize the General Manager to execute the construction contract, contract amendment, and budget amendment.

The RP-1 MLR Pumps and RP-1 Aeration Basin Panels projects are consistent with the **Agency's Business Goal of Wastewater Management** that systems will be master planned, managed and constructed to ensure that when expansion planning is triggered, designs/construction can be completed to meet regulatory/growth needs in an expeditious, environmentally responsible and cost effective manner.



CONTRACT AMENDMENT NUMBER: 4600002012-003

FOR

MIXED LIQUOR RETURN PUMPS, PROJECT NO. EN16024

THIS CONTRACT AMENDMENT THREE (the "Amendment"), is made and entered into this _____ day of _____, 2016, by and between the Inland Empire Utilities Agency, a Municipal Water District, organized and existing in the County of San Bernardino under and by virtue of the laws of the State of California (hereinafter referred to as "Agency") and RMC Water and Environment, Inc. with offices located in Irvine, California (hereinafter referred to as "Consultant"), to provide professional engineering services in support of Project EN16024, and shall revise the Contract as amended:

SECTION 4., SCOPE OF WORK AND SERVICES, IS REVISED TO ADD THE FOLLOWING ITEM: Additional services and responsibilities shall include and be in accordance with Exhibit A, which is incorporated herein, attached hereto and made a part hereof by this reference.

SECTION 6., COMPENSATION, IS REVISED TO ADD THE FOLLOWING ITEM:

In compensation for the work represented by this contract amendment, Agency shall pay Consultant a NOT-TO-EXCEED maximum total of \$670,268.00 for all services provided. (Note: This amendment represents a net increase of \$202,557.00 to the Contract as per Exhibit A which is incorporated herein, attached hereto and made a part hereof by this reference.)

ALL OTHER PROVISIONS OF THIS CONTRACT REMAIN UNCHANGED.

WITNESSETH, that the parties hereto have mutually covenanted and agreed as per the above amendment items, and in doing so have caused this document to become incorporated into the Contract Documents.

INLAND EMPIRE UTILITIES AGENCY:
(A Municipal Water District)

RMC WATER AND ENVIRONMENT, INC.:

P. Joseph Grindstaff
General Manager

(Date)

Scott Goldman
Principal-in-Charge

8-9-16
(Date)

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Exhibit A

**INLAND EMPIRE UTILITIES AGENCY
RP-1 MIXED LIQUOR RETURN PUMPS (PROJECT NO. EN16024) AND
RP-1 AERATION BASIN PANEL REPAIRS (PROJECT NO. EN17040)**

Scope of Services for Engineering Services During Construction

This Scope of Services defines the engineering services to be provided to the Inland Empire Utilities Agency (IEUA) to support construction of the RP-1 Mixed Liquor Return Pumps (Project No. EN16024) and RP-1 Aeration Basin Panel Repairs (Project No. EN17040) projects. The construction period for these projects is anticipated to be 16 months. Engineering services during construction will be performed by the Design Team for the projects and includes RMC and its design subconsultants: TJCAA (Instrumentation, Controls, Electrical and Structural) and DTN Engineers (HVAC). The RMC team will provide the following services during construction:

- Preparation of Conformed Drawings
- Meetings and Site Visits
- Submittal Reviews
- Respond to Requests for Information (RFIs)
- Review of Construction Change Order Requests
- Startup and Testing Assistance
- Preparation of Record Drawings
- Project Management

The scope of services are detailed in the following tasks and include assumptions used as the basis for RMC's Fee Estimate (see attached). The level of effort assumed herein is highly dependent upon variables beyond RMC's direct control and may require adjustment during the course of construction and startup.

Task 1 – Preparation of Conformed Drawings and Specifications

- RMC will prepare Conformed Drawings and Specifications to reflect addenda issued during the bid period. This task assumes 32 labor hours. Conformed drawings and specifications will be submitted electronically in CAD, PDF and MS Word Format.

Task 2 – Meetings and Site Visits

- RMC and appropriate TJCAA staff will attend the following workshops:
 - Preconstruction Meeting
 - Overall System Workshop
 - Electrical, I&C and Mechanical Workshop
 - SCADA System Programming Workshop
 - 70% Complete Workshop
 - Testing, Training, Start-Up and Commissioning Workshop

For budgeting purposes, RMC has assumed two attendees will participate in each workshop, except for the Preconstruction Meeting and the 70% Complete Workshop which will only have one RMC attendee. This task assumes 8 labor hours per attendee per workshop, including travel time and preparation.

- RMC will attend select weekly progress meetings by teleconference. For budgeting purposes, RMC will remotely attend 20 progress meetings via teleconference, assuming 1.5 labor hours per progress meeting.
- RMC will physically attend a limited number of construction meetings and/or site visits not included above. For budgeting purposes, RMC will physically attend 4 meetings/visits, assuming 6 labor hours per meeting/visit, including travel time and preparation.
- For 4 of the above workshops and 1 site visit, RMC has included a travel budget of \$1,500 for transportation for TJCAA.

Task 3 – Submittal Reviews

- The RMC team will review and respond to submittals provided by the Contractor via IEUA's Construction Manager. Based on the attached List of Anticipated Submittals, the total number of submittal reviews is estimated to be 151 (113 initial submittal reviews and 38 resubmittal reviews). However, based on typical practice, it is assumed that the Contractor will consolidate submittals prepared by the same supplier or manufacturer. As such, it is assumed that there will be approximately 60 initial submittals and 20 resubmittals, for a total of 80 submittal reviews. The level of effort is assumed to be 5 hours each per initial submittal and 3 hours each for each resubmittal on average, divided among the various disciplines and staff.

Task 4 – Respond to Requests for Information (RFIs)

- The RMC team will review and respond to Requests for Information (RFIs) from the Contractor via IEUA's Construction Manager. This task assumes review for 20 RFIs. The level of effort is assumed to be 4 hours per RFI on average, divided among the various disciplines and staff.

Task 5 – Review of Construction Change Order Requests

- The RMC team will review and respond to construction change order requests submitted by the Contractor via the IEUA Construction Manager. This task assumes 4 change order reviews. The level of effort is assumed to be 8 hours per review on average, divided among the various disciplines and staff.
- This task assumes 2 drawing revisions will be required. The level of effort is assumed to be 8 hours for each revision.

Task 6 – Startup and Testing Assistance

- RMC and TJCAA staff will be present to witness performance testing of equipment and will provide startup assistance during commissioning of the project. Startup assistance will include guidance and review of the Contractor's step-by-step Startup Plan and coordination with the Contractor to provide any design and/or operational information for the Testing, Training, Start-Up and Commissioning Workshop. This is in addition to meetings and site visits included under Task 1. For budgeting purposes, a total of 48 hours for startup and testing assistance is assumed. For witness performance testing, RMC has included a travel budget of \$900 for transportation for TJCAA for 3 site visits.
- RMC will schedule to attend up to two 1-day training sessions for IEUA staff on major pieces of equipment installed by the Contractor. RMC will coordinate with the Contractor to provide any design and/or operational information as a context for the training. For budgeting purposes, this task assumes 24 labor hours.

Task 7 – Preparation of Record Drawings

- RMC and its subconsultants will incorporate redline markups provided by the Contractor into the CAD files. For budgeting purposes, a total of 64 labor hours for as-built incorporation is assumed. RMC will not be responsible for interpretation of construction changes made in the field and will rely solely on a single set of redline drawings provided by the Contractor or the IEUA Construction Manager. Record drawings will be submitted electronically in CAD and PDF format.

Task 8 – Project Management

- Project management will include regular client communications; monthly progress reports to be submitted with the project invoice; and schedule, scope and budget tracking for this phase of the project. Project management effort is based on a 16-month duration for construction. For budgeting purposes, a total of 76 hours for project management is assumed.
- This task assumes 8 hours to support development and finalization of an Asset List for IEUA. For the 70% Complete Workshop, RMC will develop an Asset List that reflects actual equipment installed at that time and proposed remaining equipment to be installed. This list will be turned over to the Contractor to update with information such as cost, warranty period, etc. and submit at 95% Construction Completion. RMC will then review and prepare a Final Asset List for IEUA.

Scope of Work Assumptions

RMC's scope of work is based on the following assumptions and the assumptions included in the tasks above. In the event of any ultimate facts or events differ from such assumptions; RMC's scope of work, schedule, and compensation shall be adjusted accordingly.

- Special inspections (e.g., reinforcing steel, concrete, compaction testing etc.) are not included in the scope of work. RMC's team can provide these services upon request and at a negotiated scope and fee.
- All final decisions and direction to the Contractor will be made by the IEUA Construction Manager.

TRIA RP-1 MIXED LIQUOR RETURN PUMPS (PROJECT NO. ERL2045) AND RP-1 AERATION BASIN PANEL REPAIRS (PROJECT NO. ERL2046)
LIST OF ANTICIPATED SUBMITTALS

Section	Part	Description	RMC	TICAA	OTN	Responsibility
GC/D	1.8	Contractor's Representative	1			RMC
GC/S	1.A	Preliminary Schedule of Values	1			RMC
GC/S	1.A	Schedule of Values	1			RMC
GC/I	3	Asset Management Equipment Upload Data	1			RMC
GC/M	1.2.B	Scheduling Representative - Resume, Clarifications and References	1			RMC
GC/M	2.1	Preliminary Project Control Schedule	1			RMC
GC/M	2.1	Baseline Project Control Schedule	1			RMC
SC	7.0	Certification Letter - Compliance with AOMD/CARB	1			RMC
SC	10.0	Project Office - Owner's Representative	1			RMC
SC	18.0	WCC-15M: Portable Generator Sizing Calculations	1			RMC
SC	19.0	Start-Up Plan	1			TICAA
02050	1.3	Demolition Plan	1			RMC, TICAA
02200	1.3	PR and Backfill Materials - Material Data and Test Results	1			RMC
02200	1.3	Crushed Rock - Material Data and Test Results	1			RMC
02460	1.3	Asphalt Cement - Material Data and Test Results	1			RMC
02640	1.2	Hydraulic Test Plan	1			RMC
03100	1.4	Form Release Agent	1			RMC
03180	1.4	Location and Sequence of Concrete Placement (indicate locations of form joints, panel sizes, and patterns)	1			TICAA
03150	1.4	Rebar Breaker	1			TICAA
03200	1.4	Reinforcing Steel - Lay Sheets	1			TICAA
03200	1.4	Reinforcing Steel Test Reports - Mill Sheets	1			TICAA
03300	1.4	Concrete Mix Design	1			TICAA
03300	1.4	Controlled Low Strength Material Design	1			TICAA
03300	1.4	Liquid Curing Compound	1			TICAA
03366	1.4	Concrete Sealer	1			TICAA
03600	1.4	Nonshrink Cementitious Grout	1			TICAA
03600	1.4	Nonshrink Epoxy Grout	1			TICAA
03600	1.4	Cement Grout	1			TICAA
05000	1.4	Pipe Support Braces - Shop Drawings	1			TICAA
05500	1.4	Pipe Support Braces - Mill Sheets	1			TICAA
05800	1.4	Epoxy Anchors	1			TICAA
05900	1.2	Palut System (Incl. Mill Slampas)	1			TICAA
11152	1.3	Wind Upriser Return Pumps - Shop Drawings (includes Mounting and Anchorage Details and Calculations, Nameplates, Etc.)	1			RMC
11152	1.3	Deck Crane - Shop Drawings (includes Mounting and Anchorage Details and Calculations)	1			RMC
11152	1.3	Operation and Maintenance Manuals (includes Spare Parts List)	1			RMC
11152	3.2.B	Certified Factory Test Results	1			RMC
11152	3.3.C	Functional Test Procedures	1			RMC
11152	3.3.C	Certified Functional Test Results	1			RMC
11152	3.3.D	Performance Test Procedures	1			RMC
11152	3.3.D	Certified Performance Test Results	1			RMC
11205	1.3	Waters - Shop Drawings (includes Mounting and Anchorage Details and Calculations, Nameplates, Etc.)	1			RMC
11205	1.3	Deck Crane - Shop Drawings (includes Mounting and Anchorage Details and Calculations)	1			RMC
11205	1.3	Operation and Maintenance Manuals (includes Spare Parts List)	1			RMC
11205	3.2.B	Certified Factory Test Results	1			RMC
11205	3.3.C	Functional Test Procedures	1			RMC
11205	3.3.C	Certified Functional Test Results	1			RMC
11205	3.3.D	Performance Test Procedures	1			RMC
11205	3.3.D	Certified Performance Test Results	1			RMC

IEUA RP-3 MIXED LIQUOR RETURN PUMPS (PROJECT NO. 2R16004) AND RP-1 ABRATION BASIN PANEL REPAIRS (PROJECT NO. 2R17046)
 LIST OF ANTICIPATED SUBMITTALS

Section	Part	Description	Responsibility		Responsibility
			RMC	TICAA	
11460	1.3	Shop Drawings: 1. Descriptive literature and dimensional drawings for diffuser assemblies indicating materials of construction, number, spacing, and location of diffusers) 2. A testing plan designed to ensure consistently good quality and uniformity of the diffuser assemblies, including a sampling plan. 3. A complete shop welding procedure for stainless steel pipe. 4. Information on at least one successfully performing installation of comparable size and complexity contacted in the recent past, including contact name, telephone number, and address.	1		RMC
11450	1.3	Operation and Maintenance Manuals (includes Spare Parts List)	1		RMC
11450	3.3.A	Certified Factory Test Results	1		RMC
13900	1.3.B	PCSI Project Plan, Deviation List and Schedule		1	TICAA
13900	1.3.B	Coordination Workshop Agendas		1	TICAA
13900	1.3.B	Field Instrumentation		1	TICAA
13900	1.3.B	PAC, HMI, and Network Component Hardware		1	TICAA
13900	1.3.B	PAC and HMI Software		1	TICAA
13900	1.3.B	Control Panel		1	TICAA
13900	1.3.B	Interconnection Diagrams		1	TICAA
13900	1.3.B	Testing Plan		1	TICAA
13900	1.3.B	Training Plan		1	TICAA
13900	1.3.B	Spares, Expendables, and Test Equipment		1	TICAA
13900	3.2.C	Certified Factory Test Results		1	TICAA
13900	3.2.D	Operational Readiness Test (ORT) Results		1	TICAA
13900	3.2.D	Functional Acceptance Test (FAT) Results		1	TICAA
13900	3.2.D	Functional Acceptance Test (FAT) Results		1	TICAA
13900	3.2.D	Electromagnetic Interference - Shop Drawings		1	TICAA
15000	1.3	Flare Welding Coupling		1	RMC
15000	2.10	Expansion Joint		1	RMC
15000	2.12	Bolts and Hardware		1	RMC
15020	1.4	Pipe Supports - Shop Drawings		1	RMC
15050	1.3	Stainless Steel Pipe and Fittings - Shop Drawings and Certifications		1	RMC
15030	1.3	Manufacturer QA/QC Program		1	RMC
15065	1.3	HDPF Pipe and Fittings - Shop Drawings and Certifications		1	RMC
15065	1.3	Manufacturer QA/QC Program		1	RMC
15065	1.3	HDPF Flange Technicians - Qualifications and Experience		1	RMC
15209	1.7	Inline Check Valves - Shop Drawings and Certifications		1	RMC
15703	1.7	Operation and Maintenance Manuals (includes Spare Parts List)		1	RMC
16000	1.3	List of Systems and Equipment for which Seismic Anchoring Provided		1	TICAA
16000	1.3	Seismic Anchorage and Mounting Calculations		1	TICAA
16060	1.3	Product Data for Following: 1. Ground rods. 2. Ground rod boxes. 3. Isothermal welding materials and methods. 4. Mechanical and compression type grounding clamps including installation requirements and materials. 5. Grounding hubs and fittings.		1	TICAA
16080	1.3	Qualifications of Electrical Analytic Firm		1	TICAA
16080	3.3	Harmonic Analysis Study		2	TICAA
16080	3.4	Short Circuit and Protective Device Study		2	TICAA
16080	3.5	Acc Flash Hazard Study		2	TICAA

IEUA RP-1 MIXED LIQUOR RETURN PUMPS (PROJECT NO. ERL0024) AND RP-1 AERATION BASIN PANEL REPAIRS (PROJECT NO. ERL2046)
 LIST OF ANTICIPATED SUBMITTALS

Section	Pint	Description	Responsibility			
			SAC	TICAA	DTN	
16120	1.3	Product Data for Following: 1. Power, control, and instrumentation wire. 2. Termination and splicing materials. 3. Pulling lubrication compound. 4. Circuit identification system. Product Data for Following: 1. Fiber optic cable 2. Fiber optic installation and pulling equipment methods 3. Cable identification approach and scheme 4. Link loss budget calculations Product data for utilities, raceways, fittings, boxes, hardware, identification systems, and other materials specified in this Section. Layout and details of raceway supports, bracing, and connections, for all support systems (includes raceway support calculations stamped and signed by a licensed Professional Engineer (Civil or Structural) in California for mounting hardware and all raceway support systems)		2		TICAA
16222	1.3	Product Data for Following: 1. Filter optic cable 2. Fiber optic installation and pulling equipment methods 3. Cable identification approach and scheme 4. Link loss budget calculations Product data for utilities, raceways, fittings, boxes, hardware, identification systems, and other materials specified in this Section. Layout and details of raceway supports, bracing, and connections, for all support systems (includes raceway support calculations stamped and signed by a licensed Professional Engineer (Civil or Structural) in California for mounting hardware and all raceway support systems)	1			TICAA
16130	1.3	Product data for utilities, raceways, fittings, boxes, hardware, identification systems, and other materials specified in this Section. Layout and details of raceway supports, bracing, and connections, for all support systems (includes raceway support calculations stamped and signed by a licensed Professional Engineer (Civil or Structural) in California for mounting hardware and all raceway support systems)	2			TICAA
16140	1.3	Product data for Wiring Devices	2			TICAA
16150	1.3	Product Data for Miscellaneous Electrical Equipment	1			TICAA
16441	1.3	Product Data for Following: 1. Cabling cuts and descriptive literature for each type of panelboard and breaker provided. 2. Panelboard directory for each panelboard showing circuit allocations, breaker rating, poles, spare, short-circuit, and continuous bus ratings. 3. Outline drawings showing panel layouts, dimensions and weights. Panel layout shall show circuit breakers allocation and available space. Product Data for Low Voltage Dry Type Distribution Transformers		1		TICAA
16460	1.3	Integrated Power Centers: 1. Shop drawings showing plan and elevation views, equipment locations, construction details, equipment mounting details, and conduit installation details. 2. Complete bill of materials, product data sheets, and catalog numbers for all integral components provided by the IPC manufacturer.		2	2	TICAA, DTN
16480	1.3	Product Data for Following: 1. Motor Control Centers, VFDs, Harmonic Filters, Etc. 2. Inverter/Generator Diagrams 3. HVAC Equipment 4. Seismic, wind and anchorage calculations 5. O&M Manuals Concrete Mix Design - Ductbank Encasement Product Data for Following: 1. Handhole and splice boxes 2. Underground raceway installation accessories including conduit spacers, cable racks, pull rope, pulling lubricants, sealants, identification warning tape, and other underground system components Baffles - Redwood Baffles - Misc Steel (Hardware, Anchor Bolts, Etc.)		1		TICAA
MISC	Plans		2			TICAA
MISC	Plans					IEUA IEUA
			47	64	2	Initial Submittals
			16	22	0	Resubmittals (Assumes 35% of Initial Submittals)
			63	86	2	Total Submittals
			151			

CONTRACT

THIS CONTRACT, made and entered into this day of _____, 2016, by and between J. F. Shea Construction, Inc., hereinafter referred to as "Contractor," and The Inland Empire Utilities Agency, a Municipal Water District, located in San Bernardino County, California, hereinafter referred to as "Agency".

WITNESSETH:

That for and in consideration of the promises and agreements hereinafter made and exchanged, the Agency and the Contractor agree as follows:

1. Contractor agrees to perform and complete in a workmanlike manner, all work required under the bidding schedule of said Agency's specifications entitled SPECIFICATIONS FOR THE CONSTRUCTION OF THE RP-1 MIXED LIQUOR RETURN PUMPS, PROJECT NO. EN16024 AND RP-1 AERATION BASIN PANEL REPAIRS, PROJECT NO. EN17040, in accordance with the specifications and drawings, and to furnish at their own expense, all labor, materials, equipment, tools, and services necessary, except such materials, equipment, and services as may be stipulated in said specifications to be furnished by said Agency, and to do everything required by this Contract and the said specifications and drawings.
2. For furnishing all said labor, materials, equipment, tools, and services, furnishing and removing all plant, temporary structures, tools and equipment, and doing everything required by this Contract and said specifications and drawings; also for all loss and damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen difficulties which may arise during the prosecution of the work until its acceptance by said Agency, and for all risks of every description connected with the work; also for all expenses resulting from the suspension or discontinuance of work, except as in the said specifications are expressly stipulated to be borne by said Agency; and for completing the work in accordance with the requirements of said specifications and drawings, said Agency will pay and said Contractor shall receive, in full compensation therefore, the price(s) set forth in this Contract.
3. That the Agency will pay the Contractor progress payments and the final payment, in accordance with the provisions of the contract documents, with warrants drawn on the appropriate fund or funds as required, at the prices bid in the Bidding and Contract Requirements, Section C - Bid Forms and accepted by the Agency, and set forth in this below.

Total Bid Price \$ Six Million, Six Hundred Thirty-Three Thousand Dollars
and Zero Cents.

If this is not a lump sum bid and the contract price is dependent upon the quantities constructed, the Agency will pay and said Contractor shall receive, in full compensation for the work the prices named in the Bidding and Contract Requirements, Section C - Bid Forms.

4. The Agency hereby employs the Contractor to perform the work according to the terms of this Contract for the above-mentioned price(s), and agrees to pay the same at the time, in the manner, and upon the conditions stipulated in the said specifications; and the said parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to the full performance of the covenants herein contained.
5. The Notice Inviting Bids, Instructions to Bidders, Bid Forms, Information Required of Bidder, Performance Bond, Payment Bond, Contractors License Declaration, Specifications, Drawings, all General Conditions and all Special Conditions, and all addenda issued by the Agency with respect to the foregoing prior to the opening of bids, are hereby incorporated in and made part of this Contract, as if fully set forth.
6. The Contractor agrees to commence work under this Contract on or before the date to be specified in a written "Notice To Proceed" and to complete said work to the satisfaction of the Agency within four hundred and eighty-five (485) calendar days after award of the Contract. All work shall be completed before final payment is made.
7. Time is of the essence on this Contract.
8. Contractor agrees that in case the work is not completed before or upon the expiration of the contract time, damage will be sustained by the Agency, and that it is and will be impracticable to determine the actual damage which the Agency will sustain in the event and by reason of such delay, and it is therefore agreed that the Contractor shall pay to the Agency the amount of three thousand (\$3,000) dollars for each day of delay, which shall be the period between the expiration of the contract time and the date of final acceptance by the Agency, as liquidated damages and not as a penalty. Liquidated Damages will be assessed against the CONTRACTOR for CONTRACTOR's failure to meet schedule mandatory milestones as defined in the following Milestones table.

Milestones for RP-1 Mixed Liquor Return Pumps, Project No. EN16024	Liquidated Damages for Delay
Approval of shop drawings/submittals within 60 calendar days of Contract Award for the following items: <ul style="list-style-type: none"> • Submersible Propeller Pumps • Integrated Power Centers • Baffles 	\$1,000 / day
Approval of All Shop Drawings/submittals within 120 calendar days of Contract Award	\$750 / day
Milestones for RP-1 Mixed Liquor Return Pumps, Project No. EN16024 and RP-1 Aeration Basin Panel Repairs, Project No. EN17040	Liquidated Damages for Delay
All Contract work shall be completed within 485 calendar days after Contract Award	\$3,000 / day

9. All work shall be completed before final payment is made. It is further agreed that the amount stipulated for liquidated damages per day of delay is a reasonable estimate of the damages that would be sustained by the Agency, and the Contractor agrees to pay such liquidated damages as herein provided. In case the liquidated damages are not paid, the Contractor agrees that the Agency may deduct the amount thereof from any money due or that may become due to the Contractor by progress payments or otherwise under the Contract, or if said amount is not sufficient, recover the total amount per Milestones table in Item No. 7 of this Contract.

10. In addition to the liquidated damages, which may be imposed if the Contractor fails to complete the work within the time agreed upon, the Agency may also deduct from any sums due or to become due the Contractor, liquidated damages in accordance with the Bidding and Contract Requirements, Section B - Instruction to Bidders, Part 5.0 "Liquidated Damages", for any violation of the General Conditions, Section D - Contractor's Responsibilities, Part 8, "Law and Regulations"; Bidding and Contract Requirements Contract Section D -Contract and Relevant Documents, Part 1.0, Paragraphs 9 through 11; General Conditions, Section D - Contractor's Responsibilities, Part 4.0, "Labor, Materials and Equipment"; General Conditions Section D - Contractor's Responsibilities, Part 12.0, "Safety and Protection" or General Conditions Section H - Legal Responsibilities, Part 8.0, "Disturbance of the Peace".

11. That the Contractor will pay, and will require subcontractors to pay, employees on the work a salary or wage at least equal to the prevailing salary or wage established for such work as set forth in the wage determinations and wage standards applicable to this work, contained in or referenced in the contract documents.

12. That, in accordance with Section 1775 of the California Labor Code, Contractor shall forfeit to the Agency, as a penalty, not more than Fifty (\$50.00) Dollars for each day, or portion thereof, for each worker paid, either by the Contractor or any subcontractor, less than the prevailing rates as determined by the Director of the California Department of Industrial Relations for the work.
13. That, except as provided in Section 1815 of the California Labor Code, in the performance of the work not more than eight (8) hours shall constitute a day's work, and not more than forty (40) hours shall constitute a week's work; that the Contractor shall not require more than eight (8) hours of labor in a day nor more than forty hours of labor in a week from any person employed by the Contractor or any subcontractor; that the Contractor shall conform to Division 2, Part 7, Chapter 1, Article 3 (Section 1810, et seq.) of the California Labor Code; and that the Contractor shall forfeit to the Agency, as a penalty, the sum of Twenty-Five (\$25.00) Dollars for each worker employed in the execution of the work by Contractor or any subcontractor for each day during which any worker is required or permitted to labor more than eight (8) hours in violation of said Article 3.
14. That the Contractor shall carry Workers' Compensation Insurance and require all subcontractors to carry Workers' Compensation Insurance as required by the California Labor Code.
15. That the Contractor shall have furnished, prior to execution of the Contract, two bonds approved by the Agency, one in the amount of one hundred (100) percent of the contract price, to guarantee the faithful performance of the work, and one in the amount of one hundred (100) percent of the contract price to guarantee payment of all claims for labor and materials furnished.
16. The Contractor hereby agrees to protect, defend, indemnify and hold the Agency and its employees, agents, officers, directors, servants and volunteers free and harmless from any and all liability, claims, judgments, costs and demands, including demands arising from injuries or death of persons (including employees of the Agency and the Contractor) and damage to property, arising directly or indirectly out of the obligation herein undertaken or out of the operations conducted by the Contractor, its employees agents, representatives or subcontractors under or in connection with this Contract.


The Contractor further agrees to investigate, handle, respond to, provide defense for and defend any such claims, demands or suit at the sole expense of the Contractor.

IN WITNESS WHEREOF, The Contractor and the General Manager of Inland Empire Utilities Agency*, thereunto duly authorized, have caused the names of said parties to be affixed hereto, each in duplicate, the day and year first abovewritten.

Inland Empire Utilities Agency,*
San Bernardino County, California.

By _____
General Manager

Contractor
J.F. Shea Construction, Inc.

By 
Steven W. Cox, Executive V.P.
Title


**ACTION
ITEM**


2C


Date: September 21, 2016

To: The Honorable Board of Directors

Through: Public, Legislative Affairs, and Water Resources Committee (09/14/16)

From: P. Joseph Grindstaff
General Manager 

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

Sylvie Lee 
Manager of Planning and Environmental Resources

Subject: 2016 Prado Basin Adaptive Management Plan

RECOMMENDATION

It is recommended that the Board of Directors approve the proposed cost share for the ongoing O&M of the Prado Adaptive Management Plan.

BACKGROUND

In December 2010, the Inland Empire Utilities Agency (IEUA) approved the Peace II Subsequent Environmental Impact Report (SEIR). The Peace II SEIR was collaboratively completed by IEUA and Chino Basin Watermaster (CBWM) and laid the foundation for the implementation of hydraulic control, reoperation of the Chino Basin and continued use of recycled water. The SEIR required IEUA, CBWM, Orange County Water District (OCWD) and individual stakeholders that choose to participate, to convene a Prado Basin Habitat Sustainability Committee (Committee) to oversee, develop and implement the Prado Basin Habitat Sustainability Program (PBHSP).

The PBHSP was committed to ensuring that the Prado Basin riparian habitat will not incur unforeseeable significant adverse effects due to implementation of the Peace II Agreement (CBWM, 2007). To address the potential groundwater level drawdown and its impact on riparian vegetation, the monitoring and mitigation requirements in the SEIR (Biological Resources/Land Use & Planning— Section 4.4-3) required the Committee to develop and implement an Adaptive Management Plan (AMP). Under the supervision of the Committee, the AMP was completed and finalized in May 2016. The AMP is included as an attachment.

On April 20, 2016, the IEUA Board of Directors approved an amendment to the IEUA/CBWM reimbursement agreement in the amount of not-to-exceed \$934,500. Upon further discussion with CBWM, various line item costs were adjusted as summarized below. These changes reduced the total cost for the PBHSP from \$934,500 to \$770,000. Both Agencies worked together to revise the April 20, 2016 reimbursement agreement. The reduced cost identified above only includes costs incurred to establish the program monitoring and reporting regime, referred to as Start Up Costs in the agreement. The revised agreement is included as an attachment.

- Staff time from CBWM's consultant, Wildermuth Environmental Inc., was reduced to account for costs that might have otherwise been spent as CBWM staff time.
- Future ongoing costs associated with vegetation surveys and license fees were removed and reassigned to the budget associated with the annual monitoring reports.

Part of the requirements of the Prado AMP is to develop an initial annual report that establishes the baseline including historical data. After the initial report, parameters for monitoring and frequency will be established on an annual basis by the Committee. The AMP will develop annual reports that will include recommendations for monitoring and alternative water management activities. The recommendations from each annual report will adjust and adapt based on observed data. Throughout the term of the PBHSP, staff will bring forward each annual report to the CBWM and IEUA Board of Directors for consideration.

Program costs that are ongoing (Ongoing Costs) are proposed to be cost-shared between Watermaster and IEUA on a 50/50 basis with the exception of efforts associated with groundwater level, groundwater quality and surface water monitoring, which are addressed in the 2008 Bright Line Agreement as 100% CBWM responsibility. These Ongoing Costs were not made part of the April 2016 agreement and have now been included to clarify cost sharing for future monitoring expenses. Ongoing Costs would be in addition to the Start Up Cost of \$770,000 and will include the following activities:

- Ongoing Costs are defined as the costs associated with the following Program activities:
 1. A Riparian Habitat Monitoring Program:
 - i. Site-specific vegetation monitoring program with the United States Bureau of Reclamation and OCWD
 - ii. Custom flight to collect high-resolution air photo of the Prado Basin Region
 - iii. Historical air photos and vegetation survey data in the Prado Basin Region
 - iv. Historical Landsat data in the Prado Basin region
 2. Climate Monitoring Program to collect data on an annual basis
 3. Preparation of the AMP Annual Report:
 - i. Water level monitoring, vegetation survey, photo monitoring, Landsat data, climate data and analysis of the components
 - ii. Prepare the Annual Report
 4. Annual license fees for monitoring wells
- The first year total expense to be cost shared is approximately \$400,000, with IEUA's share being \$150,000.

- The projected future years is estimated at \$150,000, with each agency's share of \$75,000.

The Peace II SEIR does not explicitly state a duration for the monitoring and mitigation program. It is logical to assume that the program will last until the drawdown impacts, if any, on the riparian habitat from Peace II activities are fully manifested and not predicted to worsen, and that mitigation measures, if any are required, are fully implemented. Upon the termination of the monitoring and any necessary mitigation obligations, the parties may elect to terminate the cost share agreement.

The cost share agreement and the Prado AMP were approved by the CBWM Board in August 2016.

The PBHS Program is consistent with the *Agency's Business Goal of Water Reliability* by maximizing the beneficial reuse of recycled water and sources of groundwater within the Chino Basin.

PRIOR BOARD ACTION

On April 20, 2016, the IEUA Board of Directors approved an amendment to the IEUA/CBWM reimbursement agreement in the amount of not-to-exceed \$934,500.

On August 21, 2013, the IEUA Board of Directors awarded the contract for installation of the groundwater monitoring wells and approved an amendment to IEUA/CBWM reimbursement agreement in the amount of not-to-exceed \$600,000.

On October 17, 2012, the IEUA Board of Directors approved an MOU with the United States Bureau of Reclamation and the CBWM for the Prado Basin Habitat Sustainability Program to perform the vegetation surveys.

On October 3, 2012, the IEUA Board of Directors approved the reimbursement agreement in the amount of \$440,000 with CBWM for the Prado Basin Habitat Sustainability Program.

On October 6, 2010, the IEUA Board of Directors approved the Peace II SEIR.

IMPACT ON BUDGET

IEUA's cost share for the first Annual Report for the Prado AMP is included in the RW Fund, WR13022 FY 16/17 budget of \$334,711.

Attachments: 2016 Prado Basin Adaptive Management Plan
Cost-Share Agreement

IEUA Contract No.: **4600001511-002**

Watermaster Contract No.:

AGREEMENT BETWEEN CHINO BASIN WATERMASTER AND INLAND EMPIRE UTILITIES AGENCY REGARDING REIMBURSEMENT OF THE PEACE II SUBSEQUENT ENVIRONMENTAL IMPACT REPORT MITIGATION MEASURE 4.4.3 (PRADO BASIN HABITAT SUSTAINABILITY PROGRAM)

THIS AMENDMENT NUMBER 2, to Contract Number 4600001511, between the Chino Basin Watermaster (**Watermaster**) and the Inland Empire Utilities Agency (**IEUA**) shall revise the Agreement as follows:

REVISE SECTION 3, TO READ AS FOLLOWS:

Program costs will be shared between the Watermaster and IEUA as indicated below and in Attachments A and B.

- a) Costs that are incurred to establish the Program monitoring and reporting regime (**Start Up Costs**) will be cost-shared between Watermaster and IEUA on a 50/50 basis, subject to the following limitation: Watermaster and IEUA will contribute up to a combined total of \$770,000 in **Start Up Costs**. These **Start Up Costs** are costs associated with tasks that have already completed. Refer to Attachment A and B for additional details on these costs. For the purposes of this agreement, **Start Up Costs** are defined as the costs associated with the following Program activities:
 1. Development of the Adaptive Management Plan (**AMP**); and,
 2. Installation of monitoring wells, including project management, construction, contract labor, environmental and regulatory permitting, acquisition of required easements and licenses, and contingency costs

- b) Program costs that are ongoing (**Ongoing Costs**) will be cost-shared between Watermaster and IEUA, split on a 50/50 basis, subject to the following limitation: in each fiscal year, neither Watermaster nor IEUA shall be obligated to reimburse the other for **Ongoing Costs** that exceed the amount that the reimbursing party has budgeted for **Ongoing Costs** in that fiscal year, except as agreed upon by both parties in writing or as amended during the fiscal year. The first year expense to be cost shared is approximately \$300,000, with projected future years estimated at approximately \$150,000. For the purposes of this agreement, **Ongoing Costs** are defined as the costs associated with the following Program activities:
 1. A Riparian Habitat Monitoring Program, including, but not limited to, the following sub-tasks:
 - i. Design and implement a site-specific vegetation monitoring program with the United States Bureau of Reclamation (**USBR**) and Orange County Water District, pursuant to which USBR will perform site-specific vegetation surveys.
 - ii. Manage and perform custom flight to collect a high-resolution air photo of the Prado Basin Region

- iii. Collect, check and upload historical air photos and vegetation survey data in the Prado Basin region
 - iv. Collect, check, and upload historical Landsat data in the Prado Basin region
 - 2. A Climate Monitoring Program, including, but not limited to, the following sub-task:
 - i. Collect, check, and upload climatic data on an annual basis
 - 3. Preparation of the AMP Annual Report (**Annual Report**), including, but not limited to, the following sub-tasks:
 - i. Water level monitoring, vegetation survey, photo monitoring, landsat data, climate data and analysis of the components.
 - ii. Analyze data and prepare an administrative draft of the Annual Report for Watermaster/IEUA
 - iii. Incorporate Watermaster and IEUA comments and prepare a draft Annual Report for review by the PBHSC
 - iv. Meet with PBHSC to review draft Annual Report
 - v. Incorporate PBHSC comments and finalize the Annual Report
 - 4. Annual license fees for monitoring wells
 - 5. Project management and administration activities associated with the Program undertaken by a Party's consultant, including, but not limited to, the following sub-tasks:
 - i. Ad-Hoc Meetings
 - ii. Preparation of scope and budget for the Program
 - iii. Project administration and financial reporting
 - 6. Other costs required to fulfill the requirements of Peace II Subsequent EIR mitigation measure 4.4-3
- c) Watermaster shall be responsible for the costs associated with the Groundwater Level Monitoring Program, Groundwater Quality Monitoring Program, and Surface Water Monitoring Program.
- d) Watermaster and IEUA shall each have responsibility for its own administrative costs, excluding the tasks and expenses included under **Set-Up Costs** and **Ongoing Costs**.
- e) Watermaster and IEUA will meet to review the cost-sharing structure under this agreement and negotiate any necessary adjustments in good faith on at least an annual basis.
- f) The Peace II SEIR does not explicitly state a duration for the monitoring and mitigation program. It is logical to assume that the program will last until the drawdown impacts, if any, on the riparian habitat from Peace II activities are fully manifested and not predicted to worsen, and that mitigation measures, if any are required, are fully implemented. This is not a perpetual agreement. Upon the termination of the monitoring and any necessary mitigation obligations, the parties may elect to terminate the cost share agreement.

ALL OTHER PROVISIONS OF THIS CONTRACT REMAIN UNCHANGED.

The parties hereto have mutually covenanted and agreed as per the above amendment item(s), and in doing so have caused this document to become incorporated into the Contract documents.

**INLAND EMPIRE UTILITIES AGENCY:
(*A MUNICIPAL WATER DISTRICT)**

CHINO BASIN WATERMASTER:

P. Joseph Grindstaff (Date)
General Manager

Peter Kavounas (Date)
General Manager

038350\0035\14944422.2

**2016 Adaptive Management Plan
for the
Prado Basin Habitat Sustainability Program**

May 31, 2016

Prepared for:

**Inland Empire Utilities Agency
&
Chino Basin Watermaster**

Prepared by:

Wildermuth Environmental, Inc.

Table of Contents

Section 1 – Background and Objectives	1-1
1.1 Environmental Setting – Chino Basin and Prado Basin.....	1-1
1.2 Chino Basin Judgment, OBMP, and Peace Agreement.....	1-1
1.3 The Peace II Agreement and its Subsequent EIR.....	1-2
1.4 Adaptive Management Plan for the PBHSP	1-4
Section 2 – Monitoring Program for the PBHSP	2-1
Section 3 – Predictive Groundwater Modeling	3-1
Section 4 – Annual Reporting	4-1
4.1 Annual Report of the Prado Basin Habitat Sustainability Committee	4-1
4.2 Scope and Budget for Future Fiscal Years.....	4-2
Section 5 – Process to Revise the AMP	5-1
Section 6 – Mitigation Measures	6-1
Section 7 – References	7-1
Appendix A – Monitoring Program for the PBHSP	
Appendix B – Comments and Responses	



List of Figures

- 1-1 Santa Ana River Watershed Tributary to Prado Dam
- 1-2 Prado Basin and the Chino Desalter Wells
- 1-3 Depth to Groundwater for Spring 2011
- 1-4 Projected Change in Groundwater Levels – FY 2005 to 2030 – *Peace II Alternative*
- 1-5 Projected Change in Groundwater Levels – 2011 to 2030 – *Scenario 5A*



Acronyms, Abbreviations, and Initialisms

acre-ft/yr	acre-feet per year
AMP	Adaptive Management Plan
CBWM	Chino Basin Watermaster
IEUA	Inland Empire Utilities Agency
OBMP	Optimum Basin Management Plan
OCWD	Orange County Water District
PBHSC	Prado Basin Habitat Sustainability Committee
PBHSP	Prado Basin Habitat Sustainability Program
POTWs	Publically owned treatment works
SAR	Santa Ana River
SEIR	Subsequent Environmental Impact Report
TDS	Total Dissolved Solids
WEI	Wildermuth Environmental Inc.
MWDSC	Metropolitan Water District of Southern California



Section 1 – Background and Objectives

Pursuant to the monitoring and mitigation requirements of the Peace II Subsequent Environmental Impact Report (SEIR) (Tom Dodson, 2010), the Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (Watermaster) convened the Prado Basin Habitat Sustainability Committee (PBHSC) to develop the Prado Basin Habitat Sustainability Program (PBHSP). The PBHSP is an adaptive management program to ensure that the Prado Flood Control Basin (Prado Basin) riparian habitat will not incur unforeseeable significant adverse effects due to implementation of the Peace II Agreement (CBWM, 2007). The Adaptive Management Plan (AMP) described herein was developed to describe the PBHSP and facilitate its implementation.

1.1 Environmental Setting – Chino Basin and Prado Basin

Figure 1-1 shows the location of the Chino Basin in western Riverside and southwestern San Bernardino Counties within the central portion of the Santa Ana River Watershed. The Chino Basin is a large alluvial groundwater basin with storage in excess of five million acre-feet.

Figure 1-1 also shows the principal surface-water features that overlie the Chino Basin, including the Santa Ana River (SAR) and its tributaries to Prado Dam. The main tributaries that flow into the Prado Basin include the San Antonio/Chino Creeks, Cucamonga/Mill Creeks, and Temescal Creek that drains the Temescal Valley from the south. Flow within the middle SAR and its tributaries discharge into and through the Prado Basin behind Prado Dam, the main flood-control facility on the middle SAR. The US Army Corps of Engineers, in coordination with the Orange County Water District (OCWD), regulates releases from Prado Dam for the purposes of flood control and groundwater recharge in Orange County. The major components of flow within the SAR and its tributaries are: runoff from precipitation, discharge of tertiary-treated effluent from wastewater treatment plants, rising groundwater, discharge of untreated imported water for groundwater recharge, and other dry-weather runoff.

Figure 1-2 shows that the SAR and its tributaries are unlined across the Prado Basin, which allows for groundwater/surface-water interaction. Groundwater in Chino Basin generally flows from the forebay regions in the north towards Prado Basin in the south. Figure 1-3 shows that depth to groundwater is relatively shallow in the Prado Basin area, where groundwater losses can occur via evapotranspiration by riparian vegetation and rising-groundwater outflow to the SAR and its tributaries. Groundwater-modeling studies of Chino Basin have estimated that in 2011 groundwater losses were about 36,000 acre-ft/yr, with 18,000 acre-ft/yr lost to evapotranspiration and about 18,000 acre-ft/yr lost to rising-groundwater outflow (WEI, 2014). Most of these groundwater losses from Chino Basin occur in the Prado Basin area.

1.2 Chino Basin Judgment, OBMP, and Peace Agreement

A 1978 Judgment entered in the Superior Court of the State of California for the County of San Bernardino (Chino Basin Municipal Water District *v.* City of Chino et al.) established



pumping and storage rights in the Chino Basin. The Judgment established the Watermaster to oversee the implementation of the Judgment, and provided Watermaster with the discretionary authority to develop an Optimum Basin Management Plan (OBMP) to maximize the beneficial use of the Basin. The OBMP was developed by Watermaster and the parties to the Judgment in the late 1990s (WEI, 1999). The OBMP mapped a strategy to provide for enhanced yield of the Chino Basin and reliable water supplies for the development that was expected to occur. The goals of the OBMP are: to enhance basin water supplies, to protect and enhance water quality, to enhance the management of the Basin, and to equitably finance the OBMP.

In 2000, the Chino Basin parties executed the so-called Peace Agreement (CBWM, 2000), which codified the Parties' intent to implement the OBMP. The Peace Agreement included an OBMP Implementation Plan, which outlined the time frames for implementing tasks and projects in accordance with the Peace Agreement and OBMP. The OBMP Implementation Plan is a comprehensive, long-range water-management plan for the Chino Basin and includes: the use of recycled water for direct reuse and artificial recharge, the capture of increased quantities of high-quality storm-water runoff, the recharge of imported water when total dissolved solids (TDS) concentrations are low, the desalting of poor-quality groundwater, the support of regulatory efforts to improve water quality in the Basin, and the implementation of management activities that will result in the reduced outflow of high-TDS/high-nitrate groundwater to the SAR, thus ensuring the protection of downstream beneficial uses in Orange County.

The IEUA, then named the Chino Basin Municipal Water District, is plaintiff in the legal action that resulted in the Judgment, and is the major regional wastewater treatment/recycling agency and wholesale supplemental-water supplier in the Chino Basin. For OBMP implementation, IEUA has served as the lead agency for compliance with the California Environmental Quality Act (CEQA). IEUA certified the Program Environmental Impact Report for the OBMP (SCH#2000041047) in July 2000 (Tom Dodson, 2000).

1.3 The Peace II Agreement and Its Subsequent EIR

To further implement the goals and objectives of the OBMP, Watermaster executed the so-called Peace II Agreement in 2007, which modified the OBMP Implementation Plan (CBWM, 2007). The Peace II Agreement is an update and revision of the OBMP. In 2010, IEUA certified the Peace II SEIR (Tom Dodson, 2010) to address the potential significant adverse environmental impacts that could result from implementing the Peace II Agreement.

The Peace II SEIR describes the main activities of the Peace II Agreement:

Watermaster and the parties to the Judgment have been working to develop changes to the original Peace Agreement that, among other things, provide for Re-Operation and the attainment of hydraulic control for the Chino Groundwater Basin. "Hydraulic control" is defined as the reduction of groundwater discharge from the Chino North Management Zone to the Santa Ana River to de minimis quantities. Hydraulic control ensures that the water management activities in the Chino North Management Zone will not impair the beneficial



uses designated for water quality of the Santa Ana River downstream of Prado Dam. “Re-Operation” means the increase in controlled overdraft of the Chino Basin, as defined in the Judgment, from 200,000 acre-ft over the period of 1978 through 2017 to 600,000 acre-ft through 2030. Both of these program components, hydraulic control through desalter expansion in the southwestern portion of the Chino Basin and Re-operation (controlled overdraft over the whole of the Chino Basin) are required to achieve hydraulic control, which is the primary objective of the Peace II Agreement. Hydraulic control would be achieved through expansion of the desalter program from its current approximate 27,000 acre feet per year (afy) of production to 40,000 afy, and additional groundwater extractions throughout the Basin to increase overdraft to 600,000 acre-feet (total cumulative overdraft) through 2030.

The proposed project has two main features: the expansion of the desalter program such that the groundwater pumping for the desalters will reach 40,000 afy and that the pumping will occur in amounts and at locations (southwestern Chino Basin) that contribute to the achievement of hydraulic control; and the strategic reduction in groundwater storage (Re-Operation) by an additional 400,000 acre-feet (cumulative total overdraft of 600,000 through 2030) that, along with the expanded desalter program, substantially achieves hydraulic control for the Chino Groundwater Basin.

Expansion of the desalter program would be accomplished with the installation and operation of a new well field, referred to as the Chino Creek Well Field (CCWF). The actual capacity of the CCWF will be determined during the design of the well field, but the available groundwater data estimates the capacity of this well field could range from about 5,000 acre-ft/yr to 7,700 acre-ft/yr [...].

One of the potential impacts of the Peace II activities described above is the lowering of groundwater levels (drawdown) in the Prado Basin area, which may impact riparian vegetation that is dependent upon groundwater. Watermaster performed modeling studies to predict the extent and magnitude of the drawdown associated with the implementation of the Peace II Agreement. Figure 1-4 (Figure 4.4-10 from the Peace II SEIR) shows the model-predicted drawdown in the Prado Basin area for the period of 2005-2030. In general, the drawdown in the Prado Basin area was predicted to be less than five feet by 2030.

The production capacity of the final CCWF is approximately 1,500 acre-ft/yr. This is significantly less than the planned capacity of 5,000 to 7,700 acre-ft/yr assumed in the Peace II SEIR. Figure 1-5 shows more recent model results of predicted change in groundwater levels in the Prado Basin area for the period of 2011-2030 assuming a final CCWF production capacity of 1,500 acre-ft/yr (WEI, 2014). In this scenario, groundwater levels are predicted to rise in the Prado Basin area by up to five feet by 2030.

To address the potential drawdown and its impact on riparian vegetation, the monitoring and mitigation requirements in the Peace II SEIR (Biological Resources/Land Use & Planning—Section 4.4-3) call for the development and implementation of an adaptive management program for the Prado Basin habitat—the PBHSP:



The Chino Basin Stakeholders are committed to ensuring that the Peace II Agreement actions will not significantly adversely impact the Prado Basin riparian habitat. This includes the riparian portions of Chino and Mill Creek's between the terminus of hard lined channels and Prado Basin proper.

The available modeling data in the SEIR indicates that Peace II Agreement implementation will not cause significant adverse effects on the Prado Basin riparian habitat. However, the following contingency measure will be implemented to ensure that the Prado Basin riparian habitat will not incur unforeseeable significant adverse effects, due to implementation of Peace II. IEUA, Watermaster, OCWD and individual stakeholders, that choose to participate, will jointly fund and develop an adaptive management program that will include, but not be limited to:

- *monitoring riparian habitat quality and extent;*
- *investigating and identifying essential factors to long-term sustainability of Prado Basin riparian habitat;*
- *identification of specific parameters that can be monitored to measure potential effects of Peace II Agreement implementation effects on Prado Basin; and*
- *identification of water management options to minimize the Peace II Agreement effects on Prado Basin.*

This adaptive management program will be prepared as a contingency to define available management actions by Prado Basin stakeholders to address unforeseeable significant adverse impacts, as well as to contribute to the long-term sustainability of the Prado Basin riparian habitat.

The above effort will be implemented under the supervision of a newly-formed Prado Basin Habitat Sustainability Committee. This Committee will include representatives from all interested parties and will be convened by the Watermaster and IEUA. Annual reports will be prepared and will include recommendations for ongoing monitoring and any adaptive management actions required to mitigate any measured loss or prospective loss of riparian habitat that may be attributable to the Peace II Agreement. As determined by Watermaster and IEUA, significant adverse impacts to riparian habitat that are attributable to the Peace II Agreement will be mitigated.

1.4 Adaptive Management Plan for the PBHSP

Pursuant to the monitoring and mitigation requirements stated above, IEUA and Watermaster convened three meetings of the PBHSC to develop the PBHSP.

The PBHSP is an adaptive management program that will answer the following questions to satisfy the monitoring and mitigation requirements of the Peace II SEIR:



1. *What are the factors that potentially can affect the extent and quality of the riparian habitat?*
2. *What is a consistent, quantifiable definition of “riparian habitat quality,” including metrics and measurement criteria?*
3. *What has been the historical extent and quality of the riparian habitat in the Prado Basin?*
4. *How has the extent and quality of the riparian habitat changed during implementation of Peace II?*
5. *How have groundwater levels and quality, surface-water discharge, weather, and climate changed over time? What were the causes of the changes? And, did those changes result in an adverse impact to riparian habitat in the Prado Basin?*
6. *Are there other factors besides groundwater levels, surface-water discharge, weather, and climate that affect riparian habitat in the Prado Basin? What are those factors? And, did they (or do they) result in an adverse impact to riparian habitat in the Prado Basin?*
7. *Are the factors that result in an adverse impact to riparian habitat in the Prado Basin related to Peace II implementation?*
8. *Are there areas of prospective loss of riparian habitat that may be attributable to the Peace II Agreement?*
9. *What are the potential mitigation actions that can be implemented if Peace II implementation results in an adverse impact to the riparian habitat?*

IEUA and Watermaster prepared this AMP to answer the questions above and to facilitate the implementation the PBHSP.

This AMP is organized into the following sections:

Section 1 – Background and Objectives. This section describes the historical context for the AMP and its objectives.

Section 2 – Monitoring Program for the PBHSP. This section outlines the PBHSP monitoring program, which includes the monitoring of riparian habitat, groundwater, surface water, weather, and climate. Because the PBHSP monitoring program may adjust from year to year, the detailed description of the 2016 monitoring program has been included herewith as Appendix A.

Section 3 – Predictive Groundwater Modeling. This section describes the needs and methods for predictive groundwater modeling to identify areas (if any) of prospective loss of riparian habitat due to the implementation of the Peace II Agreement.



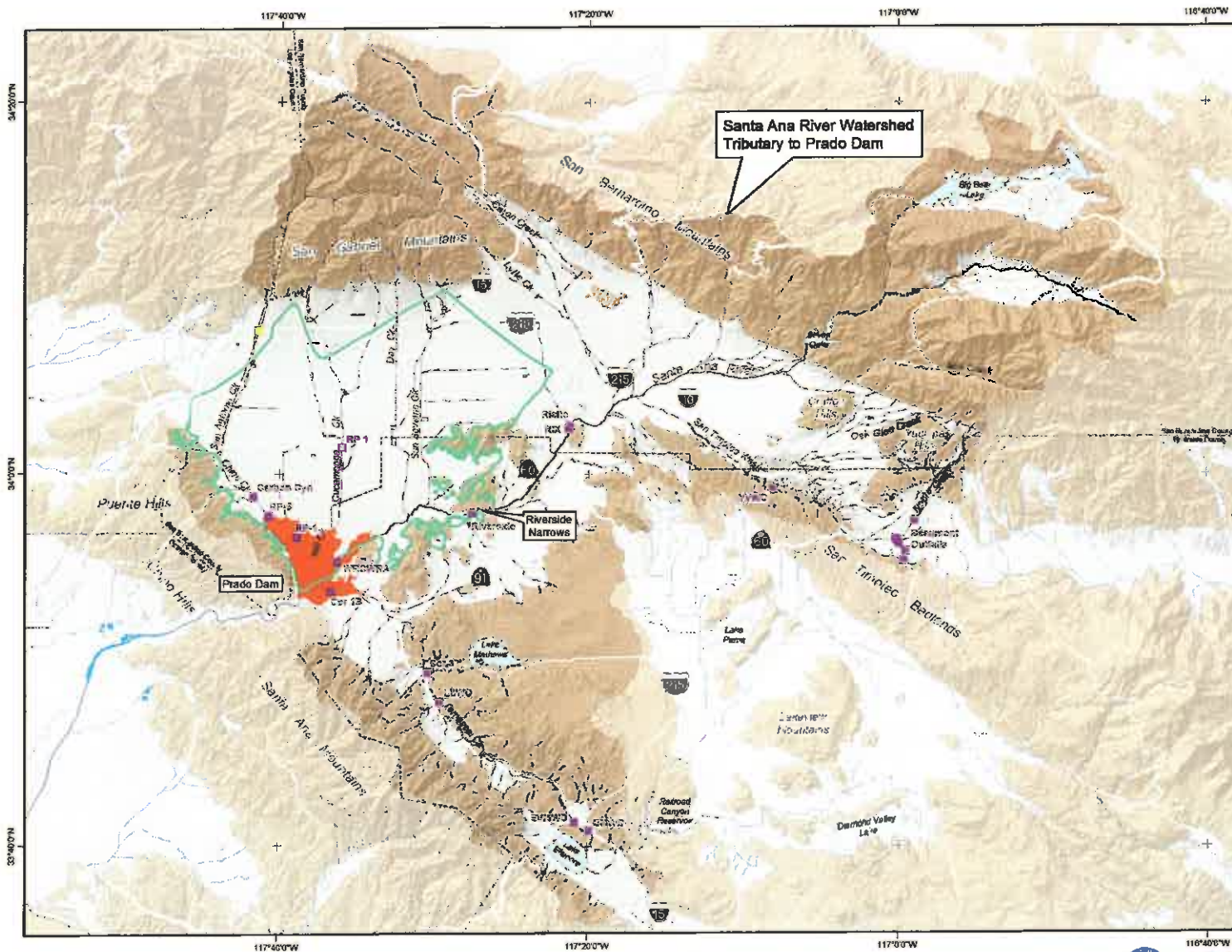
Section 4 – Annual Reporting. This section describes the process for the annual review and analysis of the data generated from the PBHSP monitoring program and the annual reporting on results, interpretations, and recommendations.











Section 5 – Process to Revise the AMP. This section describes the process to revise the AMP in the future, if necessary.

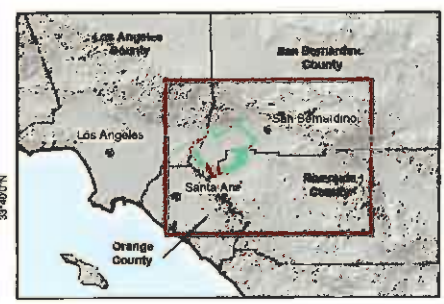
Section 6 – Mitigation Measures. This section provides a list of potential strategies to mitigate adverse impacts to riparian habitat in Prado Basin in the event that such impacts are documented and attributed to the implementation of the Peace II Agreement.

Section 7 – References. This section lists the publications referenced within this document.





-  Prado Flood Control Basin
 -  Chino Basin Hydrologic Boundary
 -  POTW Discharge Location
 -  MWSC Turnout OC-59
 -  OCWD Recharge Facilities
 -  Streams & Flood Control Channels
 -  Santa Ana River
 -  Lakes and Reservoirs
- Geology**
- Water-Bearing Sediments**
 -  Quaternary Alluvium
 - Consolidated Bedrock**
 -  Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks



Prepared by:

 WATERWAYS MANAGEMENT, INC.

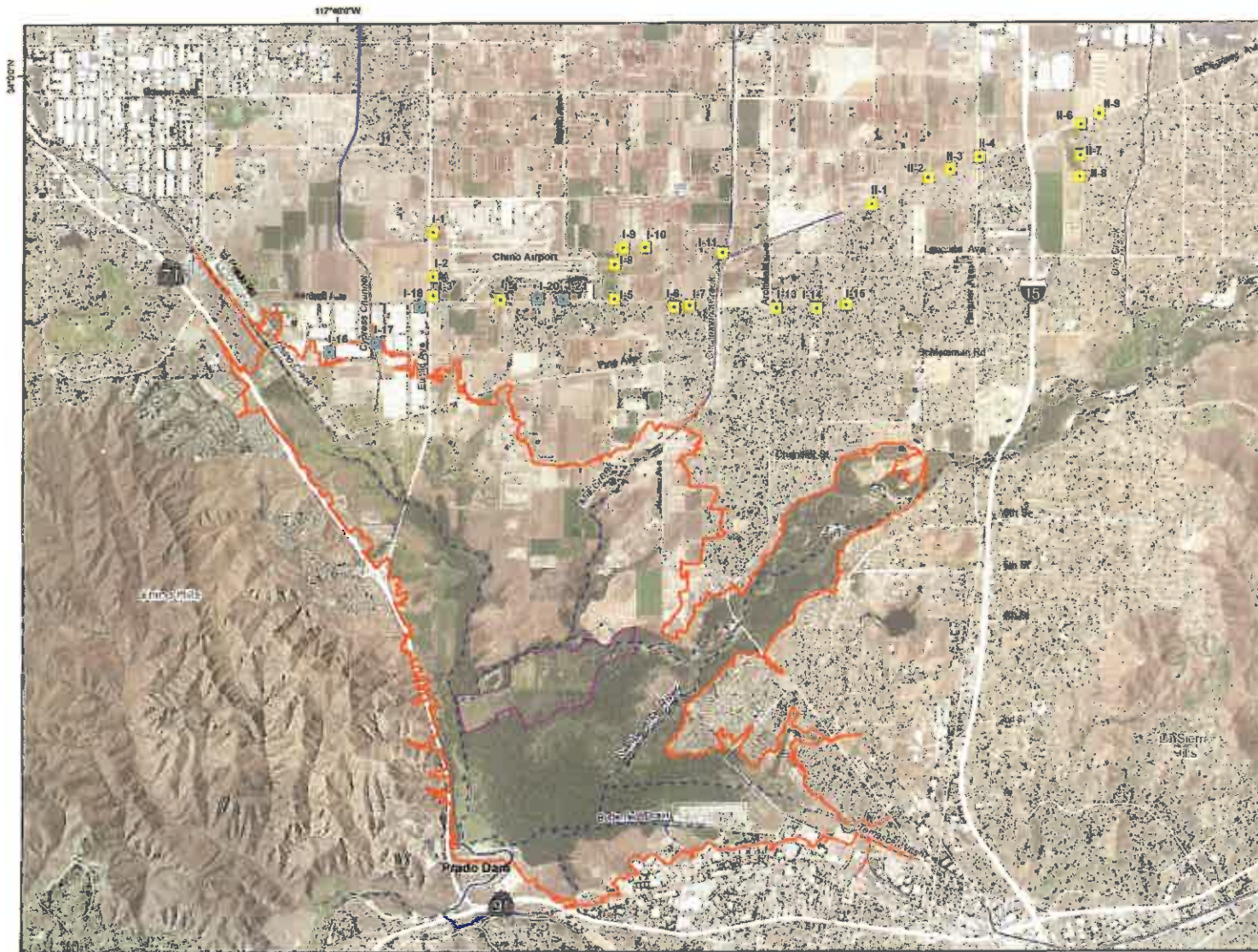
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 Date: 1/28/2016
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 2016 PBHSP Adaptive Management Plan
 Prado Basin Habitat Sustainability Committee

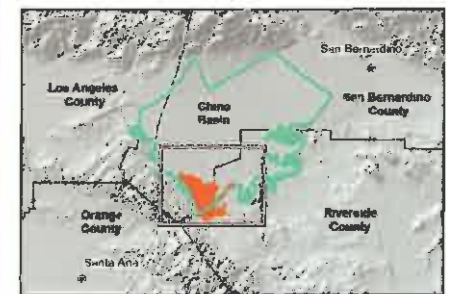
**Santa Ana River Watershed
 Tributary to Prado Dam**

Figure 1-1



-  Prado Flood Control Basin
-  Chino Basin Desalter Authority Well
-  Chino Creek Well Field
-  OCWD Prado Wetlands
-  Concrete-Lined Channels
-  Unlined Rivers and Streams

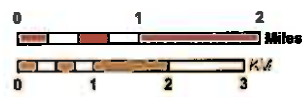
Aerial Photo: USDA, 2014. Mosaic of photo from May 13, 2014 to June 3, 2014



Prepared by:



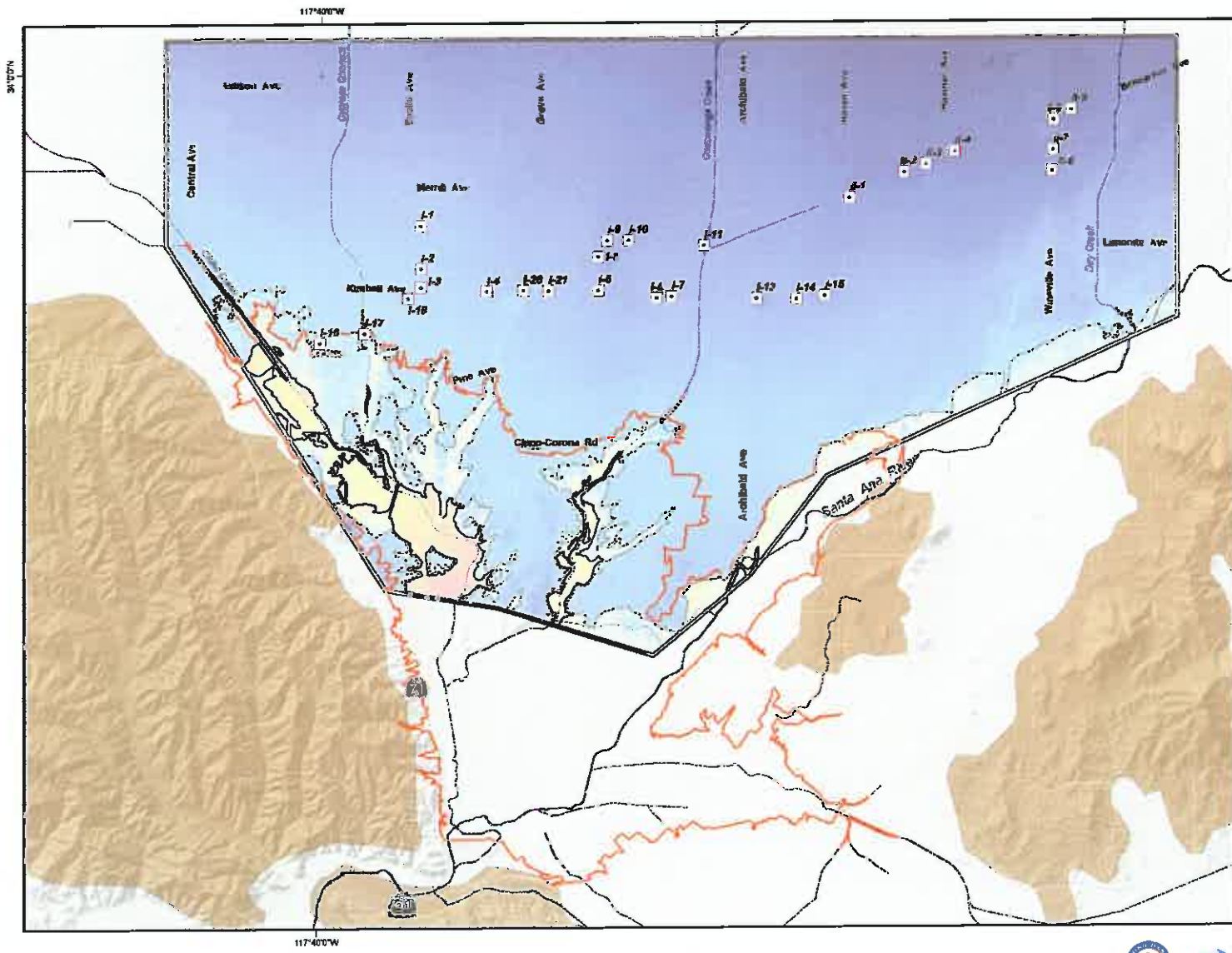
Author: TCR
 Date: 1/28/2016
 File: Figure 1-2_StudyArea



2016 PBHSP Adaptive Management Plan
 Prado Basin Habitat Sustainability Committee

Prado Basin and the Chino Desalter Wells

Figure 1-2



Depth to Groundwater Spring 2011
(feet below ground surface)

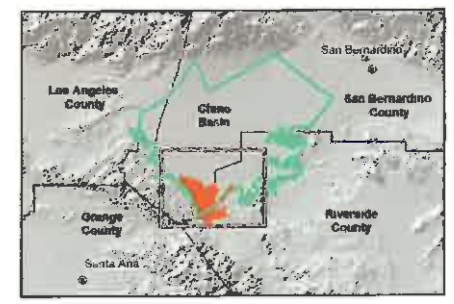
0 -20 ft ↑ Areas of rising groundwater
 -20 -+20 ft
 +200 ft

Extent of Groundwater Level Data Used in Mapping Depth to Groundwater
 Chino Desalter Well
 Streams & Flood Control Channels
 Santa Ana River
 Prado Flood Control Basin

Geology

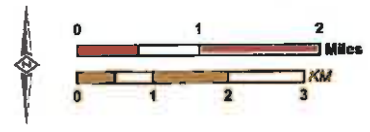
Water-Bearing Sediments
 Quaternary Alluvium

Consolidated Bedrock
 Undifferentiated Pre-Tertiary to Early Pleistocene Igneous, Metamorphic, and Sedimentary Rocks



Prepared by:
 WEI
 WILSON/URUM ENVIRONMENTAL, INC.

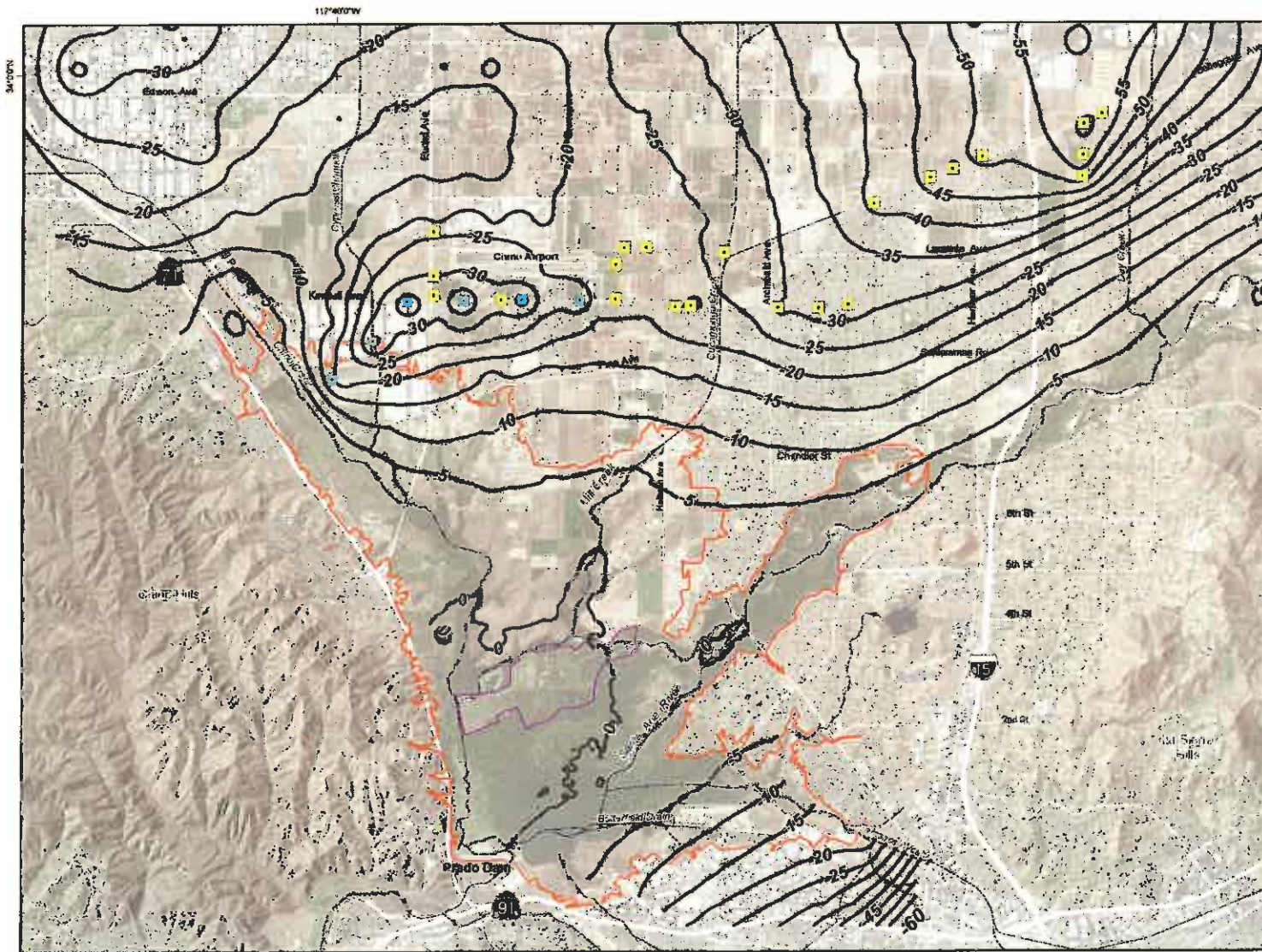
Author: TCR
 Date: 1/28/2016
 File: Figure 1-3_DTW



2016 PBHSP Adaptive Management Plan
 Prado Basin Habitat Sustainability Committee

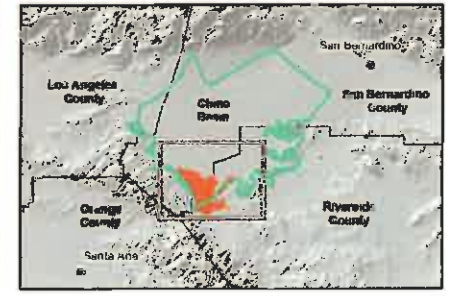
Depth to Groundwater for Spring 2011
 Shallow Aquifer System

Figure 1-3



- Change in Groundwater Levels FY2005 to 2030, feet
- Prado Flood Control Basin
- Chino Basin Desalter Authority Well
- Chino Creek Well Field (as modeled for the Peace II SEIR)
- OCWD Prado Wetlands
- Rivers and Streams

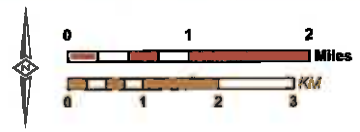
Aerial Photo: USDA, 2014. Mosaic of photos from May 13, 2014 to June 3, 2014



Prepared by:



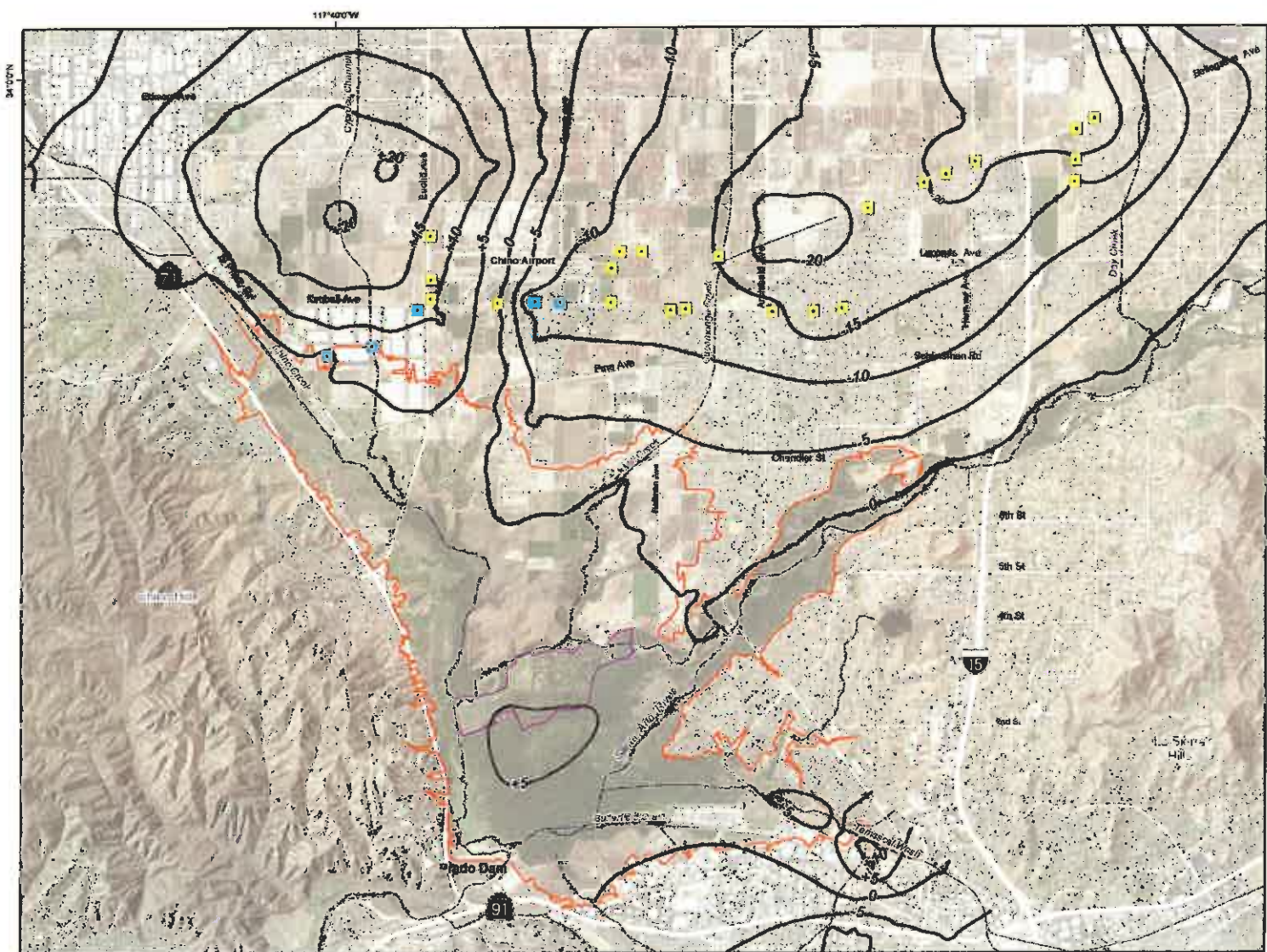
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2016 PBHSP Adaptive Management Plan
 Prado Basin Habitat Sustainability Committee

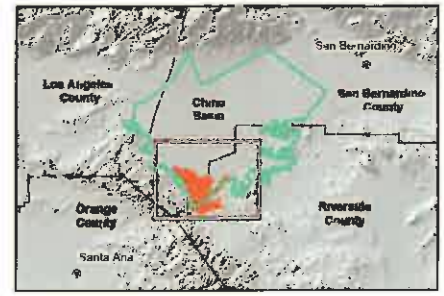
Projected Change in Groundwater Levels
 FY2005 to 2030 – Peace II Alternative

Figure 1-4



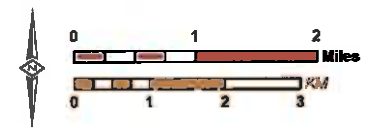
- Change in Groundwater Levels Spring 2011 to Spring 2030, feet
- Prado Flood Control Basin
- Chino Basin Desalter Authority Well
- Chino Creek Well Field (actual)
- OCWD Prado Wetlands
- Rivers and Streams

Aerial Photo: USDA, 2014. Mosaic of photos from May 13, 2014 to June 3, 2014



Prepared by:
WEI
 WILDERMUTH ENVIRONMENTAL, INC.

Author: TCR
 Date: 6/28/2016
 File: Figure 1-6_Scenario5a_illustration



2016 PBHSP Adaptive Management Plan
 Prado Basin Habitat Sustainability Committee

Projected Change in Groundwater-Levels
 2011 to 2030 – Scenario 5A

Figure 1-5

Section 2 – Monitoring Program for the PBHSP

IEUA and Watermaster developed the initial monitoring program for the PBHSP. The intent of the monitoring program is to characterize the historical, current, and future extent and quality of riparian habitat in Prado Basin, and if the degradation of the riparian habitat is documented, to provide information on the cause(s) of that degradation. If the cause(s) of degradation are attributed to Peace II implementation, the data from the monitoring program will aid in the development of efficient and effective mitigation measures.

The design of the initial monitoring program was based on the answer to Question 1 from Section 1:

- 1. What are the factors that potentially can affect the extent and quality of the riparian habitat?*

The main factors that potentially can affect riparian habitat in the Prado Basin include, but are not limited to: groundwater levels, surface-water discharge, weather events, and long-term climate. Therefore, the initial monitoring program must include, at a minimum, integrated programs for the monitoring of the riparian habitat, groundwater, surface-water, weather, and climate.

The monitoring data will be stored in a centralized, relational PBHSP database. The data will be analyzed, interpreted, and reported on annually. Annual reporting will form the basis to adjust the monitoring program in future years, if necessary, to achieve the objectives of the PBHSP. Each year, the monitoring program may increase, decrease, or remain unchanged based on the analysis of the data and model results within the annual report. Because the PBHSP monitoring program may adjust from year to year, the detailed description of the monitoring program is a stand-alone document. The 2016 PBHSP monitoring program is attached herewith as Appendix A.



Section 3 – Predictive Groundwater Modeling

The monitoring and mitigation requirements in the Peace II SEIR (Biological Resources/Land Use & Planning—Section 4.4-3) call for annual reporting for the PBHSP that will include the following:

*Annual reports will be prepared and will include recommendations for ongoing monitoring and any adaptive management actions required to mitigate any measured loss or **prospective loss** of riparian habitat that may be attributable to the Peace II Agreement (emphasis added).*

The meaning of “prospective loss” in this context is “future potential loss” of riparian habitat. A method to identify areas of prospective loss of riparian habitat is to use Watermaster’s groundwater model to predict groundwater-level changes within the Prado Basin under the current and projected future conditions in the Basin, including but not limited to, the plans for pumping, storm-water recharge and supplemental-water recharge.

Most recently, Watermaster’s 2013 groundwater model was used to evaluate past and future conditions in the Chino Basin, including, but not limited to, net recharge, the state of hydraulic control, and time histories of groundwater levels and storage (WEI, 2014). Figure 1-5 shows the model results of predicted change in groundwater levels in the Prado Basin area over the period of 2011-2030 (WEI, 2014). In this scenario, groundwater levels are predicted to rise in the Prado Basin area by up to five feet by 2030, which is not suggestive of prospective loss of riparian habitat due to declining groundwater levels.

Under Watermaster’s proposed 2015 Safe Yield Reset Agreement, Watermaster’s groundwater model will be updated every five years at a minimum, starting in 2019/20. The model updates will utilize all available information collected since the prior update, including the data collected for the PBHSP. The model results will be used to project the future hydrology of the Chino Basin for the purpose of redetermination of Safe Yield. The model will also be updated periodically, and used for other purposes, including assessment of hydraulic control, management of land subsidence, assessment of the balance of recharge and discharge, among others.

For the PBHSP, the Watermaster’s most recent predictive modeling results will be used to answer the following question from Section 1 of the AMP:

8. *Are there areas of prospective loss of riparian habitat that may be attributable to the Peace II Agreement?*

The model results will be mapped and analyzed to identify areas (if any) where groundwater levels are projected to decline to depths that may negatively impact the riparian habitat in Prado Basin. The results and interpretations of this effort will be included in the Annual Report.



Section 4 – Annual Reporting

The monitoring and mitigation requirements in the Peace II SEIR (Biological Resources/Land Use & Planning—Section 4.4-3) call for annual reporting for the PBHSP that will include the following:

Annual reports will be prepared and will include recommendations for ongoing monitoring and any adaptive management actions required to mitigate any measured loss or prospective loss of riparian habitat that may be attributable to the Peace II Agreement.

4.1 Annual Report of the Prado Basin Habitat Sustainability Committee

During the fourth quarter of each calendar year, Watermaster and IEUA will analyze the data and information generated from the monitoring and modeling activities performed during the prior water year ending on September 30, and will prepare a draft *Annual Report of the Prado Basin Habitat Sustainability Committee* (Annual Report). The draft Annual Report will include the following sections:

Section 1 – Introduction. This section will describe the background and objectives of the PBHSP and the Annual Report.

Section 2 – Monitoring and Modeling Activities. This section will describe the monitoring and groundwater-modeling activities performed during the previous water year for the PBHSP.

Section 3 – Results and Interpretations. This section will discuss and interpret the monitoring data and groundwater-modeling results analyzed during the previous water year and prior years. The types of data graphics and tables prepared for this section may include, but will not be limited to, the following:

- Maps, charts, and/or tables that depict the extent and quality of the riparian habitat, and how the riparian habitat has changed over time.
- Maps, charts, and/or tables that describe the factors that influence the riparian habitat (e.g. groundwater, surface water, weather, and climate) and how these factors have changed over time, and are predicted to change over time.
- Maps, charts, and/or tables that describe the relationships between the factors that impact the riparian habitat and observed changes in the riparian habitat, if any.
- Maps, charts, and/or tables that describe the predictive model results for future groundwater levels in the Prado Basin, and identify areas of prospective loss of riparian habitat.

Section 4 – Conclusions and Recommendations. This section will summarize the



main conclusions derived from the monitoring and modeling efforts through the previous water year, and will recommend activities for the monitoring program and annual reporting for the following fiscal year(s).

Section 5 – Mitigation Measures. This section will describe recommended measures to mitigate significant adverse impacts to the riparian habitat that have been attributed to Peace II implementation, if any. The Annual Report shall:

- Document the measured loss or prospective loss of riparian habitat.
- Describe how the implementation of the Peace II Agreement contributed to the measured or prospective loss of riparian habitat.
- Describe the specific mitigation measure(s), or the process and schedule to develop and implement mitigation measure(s), and how it is expected to mitigate the measured or prospective loss of riparian habitat.

Section 6 – Scope, Schedule, and Budget for Subsequent Fiscal Year. This section will describe scope-of-work, schedule, and budget for the PBHSP monitoring program, reporting, and mitigation measures for the subsequent fiscal year.

Section 7 – References. This section will list the publications cited in the report.

Appendix A – Monitoring Program for the PBHSP. This appendix will describe the current PBHSP monitoring program, which will include the recommended changes to the monitoring program described in *Section 4 – Conclusions and Recommendations*.

The draft Annual Report will be submitted to PBHSC members on or around January 31 of each year. Watermaster and IEUA will convene an annual meeting of the PBHSC in February of each year to review the draft Annual Report and call for comments and suggested revisions. Watermaster and IEUA will prepare a final Annual Report on or around April 1 of each fiscal year based on feedback from the PBHSC. The final Annual Report will be presented to the Watermaster and IEUA Boards for their receipt and filing by the end of each fiscal year (June 30).

4.2 Scope and Budget for Future Fiscal Years

Sections 4 and 5 of the draft Annual Report will describe recommended activities for the monitoring program, annual reporting, and mitigation measures, if any, for future fiscal year(s). Section 6 of the draft Annual Report will describe these recommendations in the form of a proposed scope-of-work, schedule, and budget¹. The recommended scope-of-work and budget will be included for consideration by the Watermaster Pool Committees, Advisory Committee and Watermaster Board (and IEUA if necessary) for revisions and approval, as part of its regular budget approval process. Watermaster's budgeting process typically occurs

¹ According to the Memorandum of Understanding for Cooperative Efforts for Monitoring Programs between IEUA and Watermaster (IEUA, 2008), Watermaster is responsible for funding the monitoring, data analysis, and reporting for the PBHSP. IEUA and Watermaster fund capital improvement projects on a 50% cost-share basis.



during the fourth quarter of each fiscal year, and will coincide with schedule for drafting and approval of the Annual Report, described in Section 4.1, above.



Section 5 – Process to Revise the AMP

The main goal of the AMP is to continually verify its protective nature against adverse impacts to the riparian habitat caused by the implementation of the Peace II Agreement. Initially, this verification is accomplished through monitoring and annual reporting, and revision of the monitoring program and/or the AMP when appropriate.

The process to revise the AMP begins with recommendations in the Annual Report. These recommendations may include, but are not limited to, adjustments to the annual reporting and/or the implementation of mitigation measures. It is the sole discretion of Watermaster and IEUA to implement the mitigation measures and/or other revisions to the AMP recommended in the Annual Report. Decisions regarding implementation of the mitigation measures and/or other revisions to the AMP will be made in good faith and coordinated with the Prado Basin Habitat Sustainability Committee. To the extent that the recommendations in the Annual Report does not follow the recommendations of the PBHSC, a written statement explaining the differences will be provided in the Annual Report by the Watermaster and IEUA. Adjustments to the PBHSP monitoring program will be documented in the Annual Report in *Appendix A – Monitoring Program for the PBHSP*, which will not be considered a revision to the AMP.

Upon the recommendation of the PBHSC, IEUA and Watermaster will prepare a draft revised AMP, addressing any recommendations in the Annual Report. IEUA and Watermaster staff will prepare staff reports describing the recommended changes to the AMP and their fiscal impact, for consideration by the Watermaster and IEUA Boards.



Section 6 – Mitigation Measures

The monitoring and mitigation requirements in the Peace II SEIR (Biological Resources/Land Use & Planning—Section 4.4-3) call for the:

[...] identification of water management options to minimize the Peace II Agreement effects on Prado Basin.

And, they state that:

Annual reports will be prepared and will include recommendations for ongoing monitoring and any adaptive management actions required to mitigate any measured loss or prospective loss of riparian habitat that may be attributable to the Peace II Agreement. As determined by Watermaster and IEUA, significant adverse impacts to riparian habitat that are attributable to the Peace II Agreement will be mitigated.

“Water management options” are herein referred to as “mitigation measures” and may include, but are not limited to, the following:

- Modification of groundwater production patterns, rates, and/or schedules.
- Modification of surface-water discharge in tributaries that flow through the Prado Basin.
- Targeted irrigation of impacted riparian habitat.

Specific mitigation measures will be developed and implemented to mitigate any measured loss or prospective loss of riparian habitat that is attributed to the implementation of the Peace II Agreement. Currently, there are no documented measured or prospective losses of riparian habitat that are attributable to the Peace II Agreement; hence, there are no mitigation measures being implemented. Future mitigation measures, if any, will be developed jointly by IEUA and Watermaster through the annual reporting process and will be recommended in the Annual Report.

The description of specific mitigation measures, if such measures are necessary, will be added to this section of AMP pursuant to the process described in *Section 5 – Process to Revise the AMP*.



Section 7 – References

- Chino Basin Watermaster (CBWM). 2000. Peace Agreement, Chino Basin. SB 240104 v 1:08350.0001. 29 June 2000.
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Appendix A

2016 Monitoring Program for the PBHSP

2016
Monitoring Program for the
Prado Basin Habitat Sustainability Program

May 31, 2016

Prepared for:

**Inland Empire Utilities Agency
&
Chino Basin Watermaster**

Prepared by:

Wildermuth Environmental, Inc.

Table of Contents

Appendix A – 2016 Monitoring Program for the PBHSP	A-1
A.1 Riparian Habitat Monitoring Program	A-1
A.1.1 Regional Assessment of Riparian Habitat	A-2
A.1.2 Site-Specific Assessment of Riparian Habitat.....	A-2
A.1.3 Collect and Compile Historical Vegetation Data	A-2
A.2 Groundwater Monitoring Program.....	A-3
A.3 Surface-Water Monitoring Program.....	A-4
A.4 Weather and Climate Monitoring Program.....	A-5
A.5 Other Factors that can Affect the Riparian Habitat.....	A-7
A.6 PBHSP Database	A-7
References	A-8
Exhibit A - Monitoring Program for the PBHSP	



List of Tables

- A-1 Monitoring Wells Installed for the Monitoring Program for the Prado Basin Habitat Sustainability Program
- A-2 Groundwater Quality Analyte List
- A-3 Parameters Measured at USGS Gaging Stations
- A-4 Monitoring Sites for POTW Discharge Outfalls Tributary to Prado Dam
- A-5 Grab-Sample Parameters Measured at POTW Outfalls
- A-6 Composite-Sample Parameters Measured at POTW Outfalls
- A-7 Surface-Water Quality Analyte List

List of Figures

- A-1 Current and Historical Vegetation Monitoring Sites in Prado Basin
- A-2 Groundwater Monitoring Program
- A-3 Surface-Water Monitoring Program
- A-4 Weather and Climate Monitoring Program



Acronyms, Abbreviations, and Initialisms

AMP	Adaptive Management Plan
CBWM	Chino Basin Watermaster
CIMIS	California Irrigation Management Information System
CIWQS	California Integrated Water Quality System Project
GHCN	Global Historical Climatology Network
GMP	Groundwater Monitoring Program
IEUA	Inland Empire Utilities Agency
MPE	Multisensor Precipitation Estimator
NEXRAD	Next Generation Radar
NWIS	National Water Information System
NWS	National Weather Service
OCWD	Orange County Water District
PBHSC	Prado Basin Habitat Sustainability Committee
PBHSP	Prado Basin Habitat Sustainability Program
POTWs	Publically owned treatment works
RHMP	Riparian Habitat Monitoring Program
SAR	Santa Ana River
SWMP	Surface-Water Monitoring Program
TDS	Total Dissolved Solids
USBR	United States Bureau of Reclamation
USGS	United States Geological Survey
WCMP	Weather and Climate Monitoring Program
WEI	Wildermuth Environmental Inc.



Appendix A – 2016 Monitoring Program for the PBHSP

The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (Watermaster) developed this initial monitoring program (2016 monitoring program) for the Prado Basin Habitat Sustainability Program (PBHSP). The intent of this monitoring program is to characterize the historical, current, and future extent and quality of the riparian habitat in Prado Basin, and if degradation of the riparian habitat is documented, to provide the data necessary to describe the cause(s) of that degradation. If the cause(s) of degradation is conclusively attributed to Peace II implementation (CBWM, 2007), then the data from the monitoring program will aid in the development of the most efficient and effective mitigation measures.

The monitoring data will be stored in a centralized, relational PBHSP database. The data will be analyzed, interpreted, and reported on annually pursuant to Section 4 of the Adaptive Management Plan (AMP) for the PBHSP. Annual reporting will form the basis to adjust the monitoring program in future years, if necessary, to achieve the objectives of the PBHSP. Each year, the monitoring program may increase, decrease, or remain unchanged based on the analysis of the data and model results within the annual report. Because the PBHSP monitoring program may adjust from year to year, the detailed description of the monitoring program is a stand-alone document. The 2016 monitoring program is described herein (Appendix A) and Exhibit A shows the main monitoring locations of the 2016 monitoring program.

The design of the 2016 monitoring program was based on the answers to Question [1] from Section 1 of the AMP:

1. *What are the factors that potentially can affect the extent and quality of the riparian habitat?*

The main factors that potentially can affect the riparian habitat in the Prado Basin include, but are not limited to: groundwater-levels, surface-water discharge, weather events, and the long-term climate. As such, the 2016 monitoring program includes integrated programs for the monitoring of the riparian habitat, groundwater, surface-water, weather, and climate.

A.1 Riparian Habitat Monitoring Program

The objective of the Riparian Habitat Monitoring Program (RHMP) is to collect data to help answer the following questions from Section 1 of the AMP:

2. *What is a consistent quantifiable definition of “riparian habitat quality,” including metrics and measurement criteria?*
3. *What has been the historical extent and quality of the riparian habitat in the Prado Basin?*
4. *How has the extent and quality of the riparian habitat changed during the implementation of Peace II?*



To answer these questions, the RHMP will produce a time-series of data and information on the extent and quality of the riparian habitat.

The RHMP will be collaboratively prepared by the Watermaster, IEUA, and OCWD. Thus, the RHMP as described herein is conceptual, and is referred to as the “Conceptual RHMP.” The Conceptual RHMP includes two main types of monitoring and assessment of the riparian habitat: regional and site-specific.

A.1.1 Regional Assessment of Riparian Habitat

The objective of the regional assessment of riparian habitat will be to identify regional changes in the extent and quality of the riparian habitat in Prado Basin. Two potential methods for the regional assessment of the riparian habitat are:

1. Periodic mapping of the extent and quality of the riparian habitat through GIS analysis of high-resolution air photos. This type of analysis has been performed previously in the Prado Basin for the IEUA (USBR, 2008a). IEUA has retained the USBR to conduct similar surveys in 2015, 2018, and 2021.
2. Periodic mapping of the extent and quality of the riparian habitat through GIS analysis of multi-spectral remote-sensing data. This type of analysis has been performed previously in the Prado Basin for OCWD (Intera, 2015).

A.1.2 Site-Specific Assessment of Riparian Habitat

The objectives of the site-specific assessment of riparian habitat will be to ground-truth the changes identified in the regional assessment of the riparian habitat and to characterize those changes.

The methods of site-specific monitoring and assessment can be qualitative (such as repeated terrestrial photography) and/or quantitative (such as vegetation surveys). These types of site-specific monitoring and assessment have been performed previously in the Prado Basin for IEUA through vegetation surveys (USBR, 2008b) and by OCWD in its seasonal photo-monitoring program (OCWD, 2015; Harvey, 2015). Figure A-1 shows a composite high-resolution air photo of the Prado Basin taken during May and June 2014 and the locations where existing or historical site-specific riparian habitat monitoring has been performed.

A.1.3 Collect and Compile Historical Vegetation Data

To definitively characterize the impacts of Peace II implementation on the riparian habitat, it is necessary to understand the long-term historical extent and quality of riparian habitat and the factors that have affected it. This understanding can only be achieved through analysis of the historical data.

Existing data and information that has been collected, analyzed, or can be analyzed, to characterize the historical extent and quality of riparian habitat in the Prado Basin will be compiled into the PBHSP database. This effort is necessary because the riparian habitat in the



Prado Basin has changed in response to long-term anthropogenic and natural factors. The Peace II Agreement was signed in 2007, but Basin Re-Operation and progress toward Hydraulic Control functionally began in 2000 when the Chino Desalter wells began pumping.

A.2 Groundwater Monitoring Program

The implementation of the Peace II Agreement will change groundwater levels in the Chino Basin, which may influence the extent and quality of riparian habitat in the Prado Basin. The objective of the Groundwater Monitoring Program (GMP) is to help answer the following questions from Section 1 of the AMP:

5. *How have groundwater levels and quality, surface-water discharge, weather, and climate changed over time? What were the causes of the changes? And, did those changes result in an adverse impact to riparian habitat in the Prado Basin?*
7. *Are the factors that result in an adverse impact to riparian habitat in the Prado Basin related to Peace II implementation?*
9. *What are the potential mitigation actions that can be implemented if Peace II implementation results in an adverse impact to the riparian habitat?*

The intent of the GMP is to create a time-series of groundwater-production, groundwater-level, and groundwater-quality data that, in conjunction with analytical tools, will be used answer the above questions. Figure A-2 shows the locations of the monitoring wells in the GMP. The wells listed in Table A-1 were installed specifically for the GMP. Those wells, plus HCMP-5/1 and RP2-MW3, are specifically being monitored for groundwater levels and quality as part of the PBHSP monitoring program.

The wells shown in Figure A-2 are symbolized by the type of data collected, which include:

- *Groundwater Production.* Groundwater production is a major stress that affects groundwater levels. Watermaster collects groundwater-production data quarterly from all active production wells within the Chino Basin. Production data from all active wells, including and between the Chino Basin Desalter Wells and Prado Dam, will be collected and analyzed for the PBHSP.
- *Groundwater Levels.* Declining groundwater levels can be a factor related to Peace II implementation that adversely impacts the riparian habitat. Watermaster collects groundwater-level data at various wells in the vicinity of the Prado Basin to support its various monitoring programs. At many wells, groundwater-level data are collected by pressure transducers once every 15 minutes, including all of the wells listed on Table A-1. These data are retrieved on a quarterly basis. At some wells, groundwater levels are measured and recorded monthly by manual methods.
- *Groundwater Quality.* Groundwater-quality data will be compared to surface-water quality data to characterize groundwater/surface-water interactions in the Prado Basin,



which will help to determine whether and to what extent these interactions are important to the sustainability of the riparian habitat. The 2016 monitoring program for the PBHSP includes quarterly sampling and analysis at all 18 of the wells listed in Table A-1 for the chemical parameters listed in Table A-2. Future Annual Reports for the PBHSP will likely recommend changes to the frequency of sampling and the parameters analyzed. Watermaster also collects groundwater-quality data at other wells in the vicinity of the Prado Basin quarterly, annually and triennially to support its various monitoring programs. These other data may also be used in the analyses performed for the Annual Reports.

A.3 Surface-Water Monitoring Program

There are three primary components of surface-water discharge in the SAR and its tributaries above Prado Dam: storm flow, non-tributary flow, and base flow. Storm flow is rainfall runoff. Non-tributary flow typically originates from outside the watershed, such as imported water, or is an episodic transfer of water within the watershed. Base flow is the remainder and mainly includes tertiary-treated wastewater discharge from Publicly-Owned Treatment Works (POTWs), rising groundwater, and dry-weather runoff. Surface-water discharge that flows into the Prado Basin is either lost to evapotranspiration, percolates to groundwater, or becomes impounded behind Prado Dam. The US Army Corps of Engineers, in coordination with OCWD, controls the release of surface water through Prado Dam to Orange County.

The surface-water hydrology of the southern Chino Basin affects riparian habitat in the Prado Basin. For example, flood events can inundate portions of the Prado Basin and damage the riparian habitat. Surface water can also provide source water that supports riparian habitat. The full implementation of the Peace II Agreement will change groundwater levels in the Chino Basin, which may change the surface-water hydrology in the southern Chino Basin and in turn, may influence the extent and quality of riparian habitat in the Prado Basin. The surface-water hydrology must be tracked to ascertain its impact on the riparian habitat relative to other factors.

The objective of the Surface-Water Monitoring Program (SWMP) is to help answer the following questions from Section 1 of the AMP:

5. *How have groundwater levels and quality, surface-water discharge, weather, and climate changed over time? What were the causes of the changes? And, did those changes result in an adverse impact to riparian habitat in the Prado Basin?*
7. *Are the factors that result in an adverse impact to riparian habitat in the Prado Basin related to Peace II implementation?*
9. *What are the potential mitigation actions that can be implemented if Peace II implementation results in an adverse impact to the riparian habitat?*

The intent of the SWMP is to create a time-series of surface-water parameters in the vicinity of the Prado Basin that, in conjunction with analytical tools, can be used to answer the above



questions. The main surface-water parameters of interest include discharge in the SAR and its tributaries, the reservoir elevation behind Prado Dam, and water quality. No new surface-water monitoring sites are proposed as part of the 2016 PBHSP monitoring program. The SWMP will leverage publically-available datasets to create a historical and ongoing time-series of these parameters. Specific data sources include:

1. The United States Geological Survey (USGS) collects and compiles daily surface-water discharge rates and water-quality data at seven monitoring stations along the SAR and its tributaries in the vicinity of the Prado Basin. These data will be collected from the USGS's National Water Information System (NWIS). Figure A-3 shows the monitoring station locations. Table A-3 summarizes the data available from each of the USGS sites.
2. POTWs located upstream of Prado Dam record discharge rates and water-quality data for tertiary-treated effluent discharged to the SAR and its tributaries. Data already recorded by the POTWs will be collected and compiled quarterly from the State Water Resources Control Board's California Integrated Water Quality System Project (CIWQS) online database. Figure A-3 shows the POTW discharge outfall locations. Table A-4 lists the monitoring sites for the POTW discharge outfalls. Table A-5 summarizes the frequency that grab-sample parameters are collected from each of the POTWs sites and Table A-6 lists the parameters and calculation types available from composite-sample data measured at each of the POTWs sites.
3. Watermaster measures surface-water quality quarterly at two sites along the SAR as part of its Chino Basin Maximum Benefit Monitoring Program pursuant to the 2014 Work Plan (WEI, 2013). Figure A-3 shows the monitoring site locations. Table A-7 lists the analytes collected at these sites.
4. The US Army Corps of Engineers measures and records the elevation of the reservoir behind Prado Dam.

A.4 Weather and Climate Monitoring Program

Weather and climate are factors that can affect riparian habitat in the Prado Basin. Parameters that describe weather and climate are: air temperature, precipitation, humidity, solar radiation, and wind. The difference between weather and climate is duration. Weather is the atmospheric conditions over short periods of time (i.e. minutes to months). Climate describes the long-term behavior of atmospheric conditions (i.e. years to decades). Weather and climate are not factors related to Peace II implementation. That said, the historical, current, and future conditions for weather and climate must be characterized to ascertain their impact on riparian habitat in the Prado Basin relative to other factors.

The objective of the Weather and Climate Monitoring Program (WCMP) is to help answer the following questions from Section 1 of the AMP:

5. *How have groundwater levels and quality, surface-water discharge, weather, and climate*



changed over time? What were the causes of the changes? And, did those changes result in an adverse impact to riparian habitat in the Prado Basin?

7. *Are the factors that result in an adverse impact to riparian habitat in the Prado Basin related to Peace II implementation?*
9. *What are the potential mitigation actions that can be implemented if Peace II implementation results in an adverse impact to the riparian habitat?*

The WCMP of the PBHSP includes the monitoring of the following parameters in the vicinity of the Prado Basin: precipitation, temperature, and potential evapotranspiration. The WCMP will leverage publically-available datasets that are published online to create a historical and ongoing time-series of these parameters. Figure A-4 shows the locations of the climatic monitoring stations.

Two types of publically-available climatic datasets will be collected and compiled:

- *Time-series data measured at weather stations.* Available data will be acquired from monitoring stations in the Global Historical Climatology Network (GHCN), the National Weather Service (NWS) Cooperative Observer Program, the California Irrigation Management Information System (CIMIS), and the San Bernardino County Flood Control District (SBCFCD).

The data from GHCN stations include: precipitation (daily), evaporation (daily), minimum temperature (daily), and maximum temperature (daily) from 1900 to the present. The data from NWS stations include: 15-minute and hourly precipitation from 1900 to the present. Based on their proximity to the Prado Basin and the quality of the historical data, the most important stations in these programs for the PBHSP are:

- Prado Dam
- Ontario Airport
- Chino Airport
- San Bernardino Hospital

Data from CIMIS stations include: daily maximum and minimum values for measured parameters (air temperature, relative humidity, solar radiation, and wind speed) and calculated parameters (reference evapotranspiration [ET_o], net radiation, and dew point temperature). Based on their proximity to the Prado Basin and the quality of the historical data, the most important CIMIS stations for the PBHSP are:

- Pomona



- Riverside
- *Spatially-gridded datasets.* Available data come from radar scans of the high-resolution Multisensor Precipitation Estimator (MPE, also known as NEXRAD Stage IV) and from the PRISM Climate Group.

The NEXRAD datasets include: hourly, 6-hour interval, and daily precipitation on a 4-kilometer grid within the continental US from 2002 to the present.

The PRISM datasets include: monthly precipitation, minimum temperature, and maximum temperature on an 800-meter grid within California from 1895 to present. Figure A-4 displays an example of a gridded dataset of annual precipitation from PRISM across the Chino Basin area.

A.5 Other Factors that can Affect the Riparian Habitat

There are other potential factors that can affect riparian habitat in the Prado Basin. These factors may include, but are not limited to: fire, disease, pests, invasive species, and anthropogenic activities. To the extent necessary and possible, information on other factors that can affect the riparian habitat will be collected, compiled, and analyzed in the annual reporting described in Section 4 of the AMP.

The objective of this effort is to help answer the following question from Section 1 of the AMP:

6. *Are there other factors besides groundwater levels, surface-water discharge, weather, and climate that affect riparian habitat in the Prado Basin? What are those factors? And, did they (or do they) result in an adverse impact to riparian habitat in the Prado Basin?*

A.6 PBHSP Database

All data, information, imagery, and GIS layers collected under the monitoring program will be uploaded into a centralized, relational PBHSP database maintained by Watermaster. The database will be made available to the Prado Basin Habitat Sustainability Committee (PBHSC) upon request. Private well information obtained by Watermaster will be excluded from the PBHSP database unless authorization is obtained through Watermaster's process to release such information.



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- Wildermuth Environmental, Inc (WEI). 2013. *Optimum Basin Management Program, Maximum Benefit Monitoring Program, 2014 Work Plan*. Prepared for the Chino Basin Watermaster and the Inland Empire Utilities Agency. December 2013.



Table A-1
Monitoring Wells Installed for the
Monitoring Program for the Prado Basin Habitat Sustainability Program

Well Name	Well Owner	Latitude	Longitude	Ground Surface Elevation	Reference Point Elevation	Well Depth	Nominal Well Diameter	Minimum Perforation Depth	Maximum Perforation Depth
		<i>decimal degrees</i>	<i>decimal degrees</i>	<i>ft-bgs</i>	<i>ft-bgs</i>	<i>ft-bgs</i>	<i>inches</i>	<i>ft-bgs</i>	<i>ft-bgs</i>
PB-1/1	IEUA	33.935322	-117.622051	536.65	538.32	60	4	25	55
PB-1/2	IEUA	33.935322	-117.622051	536.99	538.67	100	4	75	95
PB-2	IEUA	33.953535	-117.611258	575.22	577.02	67	4	42	62
PB-3/1	IEUA	33.940928	-117.588583	584.13	583.13	60	4	44.5	54.5
PB-3/2	IEUA	33.940928	-117.588583	583.96	583.96	105	4	80	100
PB-4/1	IEUA	33.951528	-117.559210	579.67	581.27	30	4	15	25
PB-4/2	IEUA	33.951528	-117.559210	579.72	581.34	70	4	45	75
PB-5/1	IEUA	33.921525	-117.628847	525.75	527.5	55	4	30	50
PB-5/2	IEUA	33.921525	-117.628847	525.8	527.58	85	4	60	80
PB-6/1	IEUA	33.930003	-117.639720	520.08	521.74	45	4	30	40
PB-6/2	IEUA	33.930003	-117.639720	520.25	521.72	95	4	58.5	88.5
PB-7/1	IEUA	33.941830	-117.654240	517.68	520.03	20	4	10	15
PB-7/2	IEUA	33.941830	-117.654240	517.94	520.06	90	4	60	85
PB-8	IEUA	33.952388	-117.669068	537.22	536.95	95	4	60	90
PB-9/1	IEUA	33.963099	-117.677509	560.31	561.95	45	4	30	40
PB-9/2	IEUA	33.963099	-117.677509	560.4	562.17	100	4	70	95

Table A-2
Groundwater Quality Analyte List
Monitoring Program for the Prado Basin Habitat Sustainability Program

Analyte	MRL	Units	Analysis Method
Alkalinity in CaCO3 units	2	mg/L	SM2320B
Ammonia Nitrogen	0.05	mg/L	EPA 350.1
Arsenic Total ICAP/MS	1	ug/L	EPA 200.8
Bicarbonate as HCO3 <i>Calculated</i>	2	mg/L	SM2320B
Boron Total ICAP	0.05	mg/L	EPA 200.7
Calcium Total ICAP	1	mg/L	EPA 200.7
Carbonate as CO3 <i>Calculated</i>	2	mg/L	SM2320B
Chloride	1	mg/L	EPA 300.0
Chromium Total ICAP/MS	1	ug/L	EPA 200.8
Fluoride	0.05	mg/L	SM 4500-C
Hexavalent Chromium (Dissolved)	0.02	ug/L	EPA 218.6
Hydroxide as OH <i>Calculated</i>	2	mg/L	SM2320B
Kjeldahl Nitrogen	0.2	mg/L	EPA 351.2
Magnesium Total ICAP	0.1	mg/L	EPA 200.7
Nitrate as Nitrogen by IC	0.1	mg/L	EPA 300.0
Nitrate as NO3 <i>Calculated</i>	0.44	mg/L	EPA 300.0
Nitrite as Nitrogen by IC	0.05	mg/L	EPA 300.0
Organic Nitrogen <i>Calculated</i>	0.2	mg/L	EPA 351.2
Perchlorate	4	ug/L	EPA 314.0
pH (H3=past HT not compliant)	0.1	Units	SM4500-HB
Potassium Total ICAP	1	mg/L	EPA 200.7
Sodium Total ICAP	1	mg/L	EPA 200.7
Specific Conductance, 25 C	2	umho/cm	SM2510B
Sulfate	0.5	mg/L	EPA 300.0
Silica	0.5	mg/L	EPA 200.7
Total Dissolved Solids (TDS)	10	mg/L	E160.1/SM2540C
Total Hardness as CaCO3 by ICP <i>Calcula</i>	3	mg/L	SM 2340B
Total Organic Carbon	0.3	mg/L	SM5310C/E415.3
Turbidity	0.05	NTU	EPA 180.1
Volatile Organic Compounds		ug/L	EPA 524.2
1,2,3-Trichloropropane (Low Level)	0.01	ug/L	CASRL-524M-TCP

Table A-3
Parameters Measured at USGS Gaging Stations
Monitoring Program for the Prado Basin Habitat Sustainability Program

Parameter	Measurement Frequency at USGS Gaging Stations*					
	SAR at MWD Xing	Temescal Creek above Main Street	San Antonio Creek at Riverside Drive	Chino Creek at Schaeffer Avenue	Cucamonga Creek	Santa Ana River below Prado Dam
Absorbance, 254 nm						irregular
Absorbance, UV, organic constituents, 280 nm, 1 cm path length						irregular
Alkalinity, field as calcium carbonate						irregular
Alkalinity, laboratory as calcium carbonate						irregular
Aminomethylphosphonic acid, filtered (0.7 micron glass fiber filter), recoverable						irregular
Ammonia as N						irregular
Ammonia as NH4						irregular
Ammonia plus organic nitrogen, as N, filtered						irregular
Ammonia plus organic nitrogen, as N, unfiltered						irregular
Arsenic						irregular
Barometric pressure						irregular
Bicarbonate						irregular
Boron						irregular
Calcium						irregular
Carbon dioxide, water						irregular
Carbonate						irregular
Chloride						irregular
Cloud cover, percent						irregular
Discharge (mean)	daily	daily	daily	daily	daily	daily
Dissolved oxygen						irregular
Dissolved oxygen, unfiltered, percent of saturation						irregular
Dissolved solids dried at 180 degrees Celsius	irregular					irregular
Dissolved solids	irregular					irregular
Fluoride						irregular
Gage height	instantaneous (15-min)	irregular		irregular	irregular	irregular
Glufoisinate, (0.7 micron glass fiber filter), recoverable						irregular
Glyphosate (0.7 micron glass fiber filter), recoverable						irregular
Hardness as calcium carbonate						irregular
Hydrogen ion						irregular
Iron						irregular
Lithium						irregular
Magnesium						irregular
Nitrate as N						irregular
Nitrate plus nitrite, as N						irregular
Nitrate as nitrate						irregular
Nitrite as N						irregular
Nitrite as nitrite						irregular
Noncarbonate hardness as calcium carbonate, field						irregular
Noncarbonate hardness as calcium carbonate, lab						irregular
Organic carbon						irregular
Organic nitrogen as N, filtered						irregular
Organic nitrogen as N, unfiltered						irregular
Orthophosphate as phosphorus						irregular
Orthophosphate as PO4,						irregular
Particulate nitrogen, suspended						irregular
pH, field						irregular
pH, laboratory						irregular
Phosphorus as phosphorus, filtered						irregular

Table A-3
Parameters Measured at USGS Gaging Stations
Monitoring Program for the Prado Basin Habitat Sustainability Program

Parameter	Measurement Frequency at USGS Gaging Stations*					
	SAR at MWD Xing	Temescal Creek above Main Street	San Antonio Creek at Riverside Drive	Chino Creek at Schaeffer Avenue	Cucamonga Creek	Santa Ana River below Prado Dam
Phosphorus as phosphorus, unfiltered						irregular
Potassium						irregular
Ratio of particulate nitrogen to particulate organic carbon						irregular
Selenium						irregular
Silica as SiO2						irregular
Sodium adsorption ratio						irregular
Sodium fraction of cations						irregular
Sodium						irregular
Specific conductance, field	irregular					irregular
Specific conductance, laboratory	irregular					irregular
Specific UV Absorbance, 254 nm, 1 cm path length, calculated						irregular
Stream width	irregular					irregular
Strontium						irregular
Sulfate						irregular
Suspended sediment concentration						irregular
Suspended sediment discharge						irregular
Suspended sediment, sieve diameter, percent smaller than 0.0625 millimeters						irregular
Temperature, air	irregular					irregular
Temperature, water	irregular					irregular
Total carbon [Inorganic plus organic], suspended sediment						irregular
Total dissolved solids						irregular
Total inorganic carbon, suspended sediment						irregular
Total nitrogen [nitrate + nitrite + ammonia + organic-N], analytically determined						irregular
Total nitrogen [nitrate + nitrite + ammonia + organic-N], filtered						irregular
Total nitrogen [nitrate + nitrite + ammonia + organic-N], unfiltered						irregular
Total organic carbon, suspended sediment						irregular
Turbidity, unfiltered						irregular
Vanadium						irregular
Velocity at point in stream	irregular					irregular
Weather, World Meteorological Organization code	irregular					irregular
Wind speed						irregular

* "Irregular" frequency is typically several times per month

Table A-4
Monitoring Sites for POTW Discharge Outfalls Tributary to Prado Dam
Monitoring Program for the Prado Basin Habitat Sustainability Program

POTW	Monitoring Site	Site Type	Associated Effluent Monitoring Site	Receiving Water	Site Description
City of Corona WWTP #1	M-001	Effluent Monitoring	001	Reach 3 of Santa Ana River	Tertiary effluent to Butterfield Drain (to Temescal Creek) after dechlorination chamber
	R-001D	Receiving Water Monitoring	001	Prado Basin	500 feet downstream of outfall to Butterfield Drain
	R-001U	Receiving Water Monitoring	001	Prado Basin	100 feet upstream of outfall to Butterfield Drain
Western Riverside County Regional Wastewater Treatment Plant (WRCRWTP)	M-001	Effluent Monitoring	001	Prado Basin Management Zone and Reach 3 of the Santa Ana River	Effluent pump station for discharge to Reach 3 of Santa Ana River
	R-001D	Receiving Water Monitoring	None	Santa Ana River Reach 3	Receiving water, 500 feet downstream of the discharge to Reach 3 of Santa Ana River
	R-001U	Receiving Water Monitoring	None	Santa Ana River Reach 3	Receiving water, approximately 100 feet upstream of the discharge to Reach 3 of Santa Ana River
City of Riverside Regional Water Quality Control Plant (RCWRF)	M-001A	Effluent Monitoring	001, 002	Santa Ana River Reach 3	Effluent to Reach 3 of Santa Ana River, close to the end of effluent pipeline
	M-001B	Effluent Monitoring	001, 002	Santa Ana River Reach 3	At the end of the chlorine contact tank 3. This station is for coliform testing
	R-001D	Receiving Water Monitoring	None	Santa Ana River Reach 3	Santa Ana River, downstream of the most downstream point of discharge
	R-001U	Receiving Water Monitoring	None	Santa Ana River Reach 3	Receiving surface water, upstream of Santa Ana River at the Metropolitan Water District pipeline crossing
RIX	M-001	Effluent Monitoring	001	Santa Ana River Reach 4, which overlies the Riverside-A Groundwater Management Zone	Extracted tertiary treated and disinfected effluent
Rialto	M-001	Effluent Monitoring	001	Lined flood control channel tributary to Santa Ana River, Reach 4, which overlies the Riverside-A Groundwater Management Zone	Final effluent downstream of dechlorination
	M-001A	Effluent Monitoring	001	"	Immediately downstream of filters
	M-001B	Effluent Monitoring	001	"	Discharge weir of chlorine contact tank
IEUA	M-001A	Effluent Monitoring	001	Prado Park Lake	RP-1 effluent Outfall to Prado Park Lake
	M-001B	Effluent Monitoring	001	N/A	At the RP-1 splitter box
	M-002A	Effluent Monitoring	002	Reach 1 of Cucamonga Creek	RP-1 and RP-4 Effluent outfall to Reach 1 of Cucamonga Creek
	M-003	Effluent Monitoring	003	Reach 2 of Chino Creek	RP-5 Effluent to Reach 2 of Chino Creek
	M-004	Effluent Monitoring	004	Reach 2 of Chino Creek	CCWRF Effluent to Reach 2 of Chino Creek
	R-002D	Receiving Water Monitoring	002	Cucamonga Creek	Cucamonga Creek within 500 feet downstream of DP 002 after blending
	R-002U	Receiving Water Monitoring	002	Cucamonga Creek	Cucamonga Creek within 100 feet upstream of the DP 002
	R-003D	Receiving Water Monitoring	003	Chino Creek	Chino Creek within 500 feet downstream of DP 003 in
	R-003U	Receiving Water Monitoring	003	Chino Creek	Chino Creek within 100 feet upstream of DP 003
	R-004U	Receiving Water Monitoring	004	Chino Creek	Chino Creek within 100 feet upstream of DP 004

Table A-5
 Grab-Sample Parameters Measured at POTW Outfalls
 Monitoring Program for the Prado Basin Habitat Sustainability Program

Parameter	Priority 1		Priority 2		Priority 3				Priority 4		Priority 5					
	Category	Frequency	Category	Frequency	Category	Frequency	Category	Frequency	Category	Frequency	Category	Frequency	Category	Frequency	Category	Frequency
1,1,1-Trichloroethane	Quarterly	Annual			Annual	Annual										
1,1,2,2-Tetrachloroethane	Quarterly	Annual			Annual	Annual										
1,1,2-Trichloroethane	Quarterly	Annual			Annual	Annual										
1,3-Dichloroethane	Quarterly	Annual			Annual	Annual										
1,1-Dichloroethylene	Quarterly	Annual			Annual	Annual										
1,2,4-Trichlorobenzene	Quarterly	Annual			Annual	Annual										
1,2-Dichlorobenzene	Quarterly	Annual			Annual	Annual										
1,2-Dichloroethane	Quarterly	Annual			Annual	Annual										
1,2-Dichloropropane	Quarterly	Annual			Annual	Annual										
1,2-Diphenylhydrazine	Quarterly	Annual			Annual	Annual										
1,3-Dichlorobenzene	Quarterly	Annual			Annual	Annual										
1,3-Dichloropropylene, Sum	Quarterly	Annual			Annual	Annual										
1,4-Dichlorobenzene	Quarterly	Annual			Annual	Annual										
2,3,7,8-TCDD (Dioxin)	Quarterly	Annual			Quarterly	Annual										
2,4,6-Trichlorophenol	Quarterly	Annual			Annual	Annual										
2,4-Dichlorophenol	Quarterly	Annual			Annual	Annual										
2,4-Dinitrophenol	Quarterly	Annual			Annual	Annual										
2,4-Dinitrophenol	Quarterly	Annual			Annual	Annual										
2,4-Dinitrotoluene	Quarterly	Annual			Annual	Annual										
2,6-Dinitrotoluene	Quarterly	Annual			Annual	Annual										
2-Chloroethoxyethyl Ether	Quarterly	Annual			Annual	Annual										
2-Chloronaphthalene	Quarterly	Annual			Annual	Annual										
2-Chlorophenol	Quarterly	Annual			Annual	Annual										
2-Nitrophenol	Quarterly	Annual			Annual	Annual										
3,3-Dichlorobenzidine	Quarterly	Annual			Annual	Annual										
4,4-DDD	Quarterly	Annual			Annual	Annual										
4,4-DDE	Quarterly	Annual			Annual	Annual										
4,4-DDT	Quarterly	Annual			Annual	Annual										
4,6-Dinitro-2-methylphenol	Quarterly	Annual			Annual	Annual										
4-Bromophenyl Phenyl Ether	Quarterly	Annual			Annual	Annual										
4-Chloro-3-methylphenol	Quarterly	Annual			Annual	Annual										
4-Chlorophenyl Phenyl Ether	Quarterly	Annual			Annual	Annual										
4-Nitrophenol	Quarterly	Annual			Annual	Annual										
Acenaphthene	Quarterly	Annual			Annual	Annual										
Acenaphthylene	Quarterly	Annual			Annual	Annual										
Acrolein	Quarterly	Annual			Annual	Annual										
Acrylonitrile	Quarterly	Annual			Annual	Annual										
Acute Toxicity									Monthly		Biweekly		Weekly		Monthly	
Aldrin	Quarterly	Annual			Annual	Annual										
Alkalinity, Bicarbonate (as CaCO3)												Biweekly		Weekly		Monthly
Alkalinity, Carbonate (as CaCO3)												Monthly		Weekly		Monthly
alpha-BHC	Quarterly	Annual			Annual	Annual										
Aluminum, Total Recoverable	Quarterly	Annual			Quarterly	Annual						Monthly		Monthly		Monthly
Ammonia, Total (as N)	Daily	Monthly			Daily	Annual		Weekly		Weekly		Monthly		Monthly		Monthly
Anthracene	Quarterly	Annual			Annual	Annual										
Anthracene, Total	Quarterly	Annual			Annual	Annual										
Antimony, Total Recoverable	Quarterly	Annual			Annual	Annual						Monthly		Monthly		Monthly
Arsenic, Total	Quarterly	Annual			Annual	Annual						Monthly		Monthly		Monthly
Arsenic, Total Recoverable	Quarterly	Annual			Quarterly	Annual						Monthly		Monthly		Biweekly
Barium, Total Recoverable	Quarterly	Annual			Quarterly	Annual						Monthly		Monthly		Monthly
Benzene	Quarterly	Annual			Annual	Annual										
Benzidine	Quarterly	Annual			Annual	Annual										
Benzo(a)anthracene	Quarterly	Annual			Annual	Annual										
Benzo(a)pyrene	Quarterly	Annual			Annual	Annual										
Benzo(b)fluoranthene	Quarterly	Annual			Annual	Annual										
Benzo(g)hperylene	Quarterly	Annual			Annual	Annual										
Benzo(k)fluoranthene	Quarterly	Annual			Annual	Annual										
Beryllium, Total	Quarterly	Annual			Annual	Annual										
Beryllium, Total Recoverable	Quarterly	Annual			Annual	Annual						Monthly		Monthly		Monthly
bis-BHC	Quarterly	Annual			Quarterly	Annual		Weekly		Weekly		Monthly		Monthly		Monthly
Bicarbonate Ion (as HCO3)	Quarterly	Annual			Quarterly	Annual										
Biochemical Oxygen Demand (BOD) [5-day @ 20 Deg. C]	Weekly	Monthly			Daily	Annual			Weekly		Weekly		Monthly		Monthly	Monthly
Bis (2-Chloroethoxy) Methane	Quarterly	Annual			Annual	Annual						Monthly		Monthly		Monthly
Bis (2-Chloroethyl) Ether	Quarterly	Annual			Annual	Annual										
Bis (2-Chloroisopropyl) Ether	Quarterly	Annual			Annual	Annual										
Bis (2-Ethylhexyl) Phthalate	Weekly	Quarterly	Monthly		Annual	Annual			Monthly		Weekly		Monthly		Monthly	Monthly
BOD5 @ 20 Deg. C, Percent Removal												Monthly		Monthly		Monthly
Boron, Total Recoverable	Quarterly	Annual			Quarterly	Annual						Monthly		Monthly		Monthly
Bromoform	Quarterly	Annual			Annual	Annual										
Bromomethane	Quarterly	Annual			Annual	Annual										
Butylbenzyl Phthalate	Quarterly	Annual			Annual	Annual										

Table A-5
 Gmb-Sample Parameters Measured at POTW Outfalls
 Monitoring Program for the Prado Basin Habitat Sustainability Program

Parameter	Causal			Inorganic			Nutrient				pH	Metal				Trace							
	NO3	NO2	NO	NO3	NO2	NO	NO3	NO2	NO	NO3		NO2	NO	NO3	NO2	NO	NO3	NO2	NO				
Nitrogen, Total Inorganic (as N)	Monthly			Monthly			Daily					Weekly	Twice per month			Monthly	Twice per week	Monthly	Monthly	Weekly	Monthly	Twice per week	
N-Nitrosodimethylamine	Quarterly		Quarterly	Annual			Daily					Weekly	Twice per month			Monthly	Twice per week	Monthly	Monthly	Weekly	Monthly	Twice per week	
N-Nitrosod-n-Propylamine			Quarterly	Annual			Annual					Monthly											
N-Nitrosodiphenylamine			Quarterly	Annual			Annual					Monthly											
PCB-3016			Quarterly	Annual			Annual					Monthly											
PCB-3221			Quarterly	Annual			Annual					Monthly											
PCB-3232			Quarterly	Annual			Annual					Monthly											
PCB-3242			Quarterly	Annual			Annual					Monthly											
PCB-3248			Quarterly	Annual			Annual					Monthly											
PCB-3254			Quarterly	Annual			Annual					Monthly											
PCB-3260			Quarterly	Annual			Annual					Monthly											
Parachlorophenol			Quarterly	Annual			Annual					Monthly											
pH	Daily	Weekly			Monthly	Monthly				Weekly	Weekly	Daily							Weekly	Weekly	Weekly	Monthly	Twice per week
Phenanthrene			Quarterly	Annual			Annual					Monthly											
Phenol, Single Compound			Quarterly	Annual			Annual					Monthly											
Phenols, Total			Quarterly	Annual			Annual					Monthly											
Pyrene			Quarterly	Annual			Annual					Monthly											
Selenium, Total			Quarterly	Annual			Annual					Monthly											
Selenium, Total Recoverable	Quarterly		Quarterly	Annual			Quarterly					Monthly	Daily			Monthly							
Silver, Total			Quarterly	Annual			Annual					Monthly	Daily			Monthly	Weekly						
Silver, Total Recoverable	Quarterly		Quarterly	Annual			Quarterly				Monthly	Weekly	Twice per week			Monthly	Weekly						
Sulfate, Total Recoverable	Quarterly		Quarterly	Annual			Quarterly				Monthly	Weekly	Twice per week			Monthly	Weekly						
Sulfate, Total (as SO4)	Quarterly		Quarterly	Annual			Quarterly				Monthly	Weekly	Twice per week			Monthly	Weekly						
Temperature		Weekly		Monthly	Monthly	Monthly				Weekly	Weekly	Daily							Weekly	Weekly	Weekly	Weekly	Twice per week
Tetrachloroethene			Quarterly	Annual			Annual					Monthly											
Thallium, Total			Quarterly	Annual			Annual					Monthly											
Thallium, Total Recoverable			Quarterly	Annual			Annual					Monthly											
Toluene	Quarterly		Quarterly	Annual			Annual					Monthly											
Total Coliform			Quarterly	Annual			Annual					Monthly											
Total Dissolved Solids (TDS)	Monthly		Monthly	Monthly			Twice Weekly		Daily			Monthly	Daily		Biweekly	Weekly	Weekly	Twice per week	Daily		Weekly	Weekly	Twice per week
Total Organic Carbon (TOC)	Daily		Monthly	Monthly			Quarterly					Monthly	Weekly		Weekly	Weekly	Monthly	Monthly	Daily				
Total Suspended Solids (TSS)	Daily		Monthly	Monthly			Daily					Weekly	Weekly		Weekly	Weekly	Monthly	Monthly	Daily	Quarterly	Quarterly	Quarterly	Quarterly
Total Suspended Solids (TSS), Percent Removal			Quarterly	Annual			Annual					Monthly											
Toxaphene			Quarterly	Annual			Annual					Monthly											
trans-1,2-Dichloroethene			Quarterly	Annual			Annual					Monthly											
Trichloroethene			Quarterly	Annual			Annual					Monthly											
Turbidity	Daily		Quarterly	Annual			Quarterly					Daily											
Vinyl Chloride			Quarterly	Annual			Quarterly					Monthly											
Zinc, Total			Quarterly	Annual			Annual					Monthly											
Zinc, Total Recoverable	Quarterly		Quarterly	Annual			Quarterly					Monthly											

Table A-6
Composite-Sample Parameters Measured at POTW Outfalls
Monitoring Program for the Prado Basin Habitat Sustainability Program

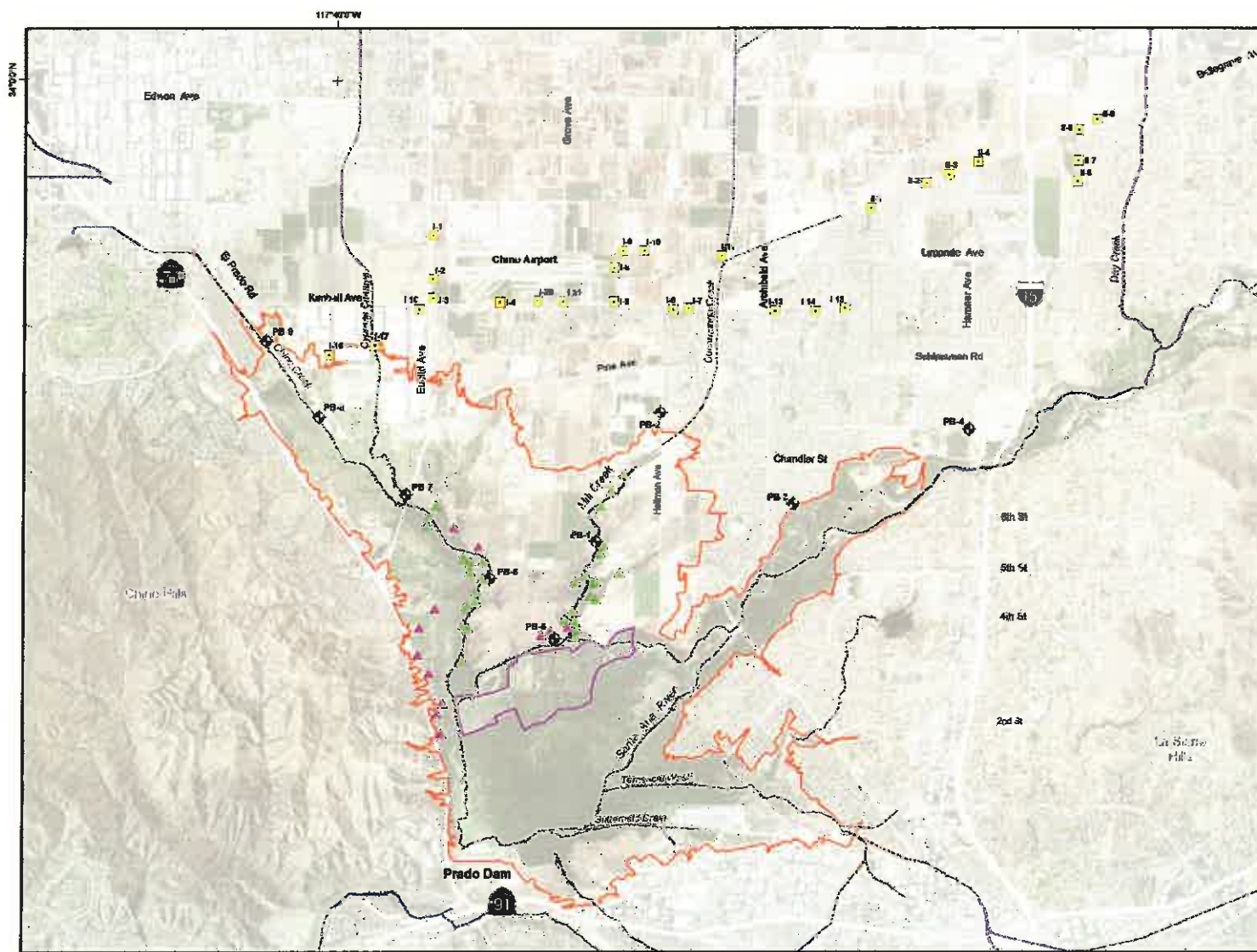
Parameter	Calculation Type	Contra			WRDWRTP			RDWRF			R1X	Ratio			EQA				
		M-001	R-001C	R-001U	M-061	R-061B	R-061D	M-001A	M-001B	R-001D		R-001U	M-001	M-001A	M-001B	M-001C	M-001D	M-001E	M-001F
2,3,7,8-TCDD (Dioxin)	Daily Maximum																		
2,3,7,8-TCDD (Dioxin)	Monthly Average (Mean)	X																	
Aluminum, Total Recoverable	Daily Maximum							X											
Ammonia, Total (as N)	Average Monthly (AMEL)							X											
Ammonia, Total (as N)	Daily Maximum	X						X											
Ammonia, Total (as N)	Monthly Average (Mean)	X						X											
Arsenic, Total Recoverable	Daily Maximum							X											
Barium, Total Recoverable	Daily Maximum							X											
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	7-Day Average of Daily Maximums										X								
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	Average Monthly (AMEL)							X											
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	Average Weekly (AWEL)				X			X				X							
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	High Weekly Average																		
Biochemical Oxygen Demand (BOD) (5-day @ 20 Deg. C)	Monthly Average (Mean)	X						X				X							
Bis (2-Ethylhexyl) Phthalate	Average Monthly (AMEL)																		
Bis (2-Ethylhexyl) Phthalate	Maximum Daily (MDEL)				X														
BOD5 @ 20 Deg. C, Percent Removal	Average Monthly (AMEL)														X		X		X
BOD5 @ 20 Deg. C, Percent Removal	Percent Reduction	X																	
BOD5 @ 20 Deg. C, Percent Removal	Percent Reduction (Daily)																		
Boron, Total Recoverable	Daily Maximum							X											
Cadmium, Total Recoverable	Daily Maximum							X											
Calcium, Total Recoverable	Daily Maximum							X											
Carbonate Ion (as CO3)	Daily Maximum							X											
Chloride	Daily Maximum							X											
Chlorine, Total Residual	Daily Average (Mean)																		
Chlorine, Total Residual	Daily Maximum							X							X		X		X
Chlorine, Total Residual	Instantaneous Maximum (IMAX)							X							X		X		X
Chloroform	Daily Maximum							X											
Chromium, Total Recoverable	Daily Maximum							X											
Chronic Toxicity	Average Monthly (AMEL)					X													
Chronic Toxicity	Daily Maximum							X											
Chronic Toxicity	Monthly Median of Mean Daily										X								
Cobalt, Total Recoverable	Daily Maximum							X											
Copper, Total Recoverable	Daily Maximum							X											
Cyanide, Free Available	Average Monthly (AMEL)					X													
Cyanide, Free Available	Daily Maximum							X											
Cyanide, Free Available	Maximum Daily (MDEL)					X													
Dibenzo(a,h)anthracene	Daily Maximum					X													
Dibenzo(a,h)anthracene	Monthly Average (Mean)	X																	
Dissolved Oxygen	Daily Maximum									X									
Electrical Conductivity @ 25 Deg. C	Average Monthly (AMEL)							X											
Electrical Conductivity @ 25 Deg. C	Daily Average (Mean)					X							X				X		X
Electrical Conductivity @ 25 Deg. C	Daily Maximum							X					X				X		X
Electrical Conductivity @ 25 Deg. C	Instantaneous Maximum (IMAX)					X							X				X		X
Electrical Conductivity @ 25 Deg. C	Monthly Average (Mean)					X							X				X		X
Flow	Average Monthly (AMEL)					X													
Flow	Daily Average (Mean)					X							X				X		X
Flow	Daily Discharge					X							X				X		X
Flow	Daily Maximum					X							X				X		X
Flow	Monthly Average (Mean)					X							X				X		X
Fluoride, Total	Daily Maximum							X											
Hardness, Total (as CaCO3)	Daily Maximum							X											
Iron, Total Recoverable	Daily Maximum							X											
Lead, Total Recoverable	Daily Maximum							X											
Magnesium, Total Recoverable	Daily Maximum							X											
Manganese, Total Recoverable	Daily Maximum							X											
Mercury, Total	Daily Maximum					X													
Mercury, Total	Monthly Average (Mean)	X																	
Mercury, Total Recoverable	Daily Maximum							X											
Nickel, Total Recoverable	Daily Maximum							X											
Nitrate, Total (as N)	Average Monthly (AMEL)							X											
Nitrate, Total (as N)	Daily Maximum							X											
Nitrogen, Total Inorganic (as N)	12-Month Average					X													
Nitrogen, Total Inorganic (as N)	Average Monthly (AMEL)							X											
Nitrogen, Total Inorganic (as N)	Daily Maximum							X											
pH	24-hour Average												X						
pH	Daily Average (Mean)												X						
pH	Daily Instantaneous Maximum (IMAX)							X											

Table A-6
Composite-Sample Parameters Measured at POTW Outfalls
Monitoring Program for the Prado Basin Habitat Sustainability Program

Parameter	Calculation Type	Corona			WRCRWTP			RCWRP			RIM	RIBA			ICUA			
		M-001	R-001D	R-001U	M-001	R-001D	R-001U	M-001A	M-001B	R-001D		R-001U	M-001	M-001A	M-001B	M-001A	M-001B	M-001C
pH	Daily Instantaneous Minimum (IMIN)																	
pH	Daily Maximum																	
pH	Daily Minimum																	
pH	Instantaneous Maximum (IMAX)																	
pH	Instantaneous Minimum (IMIN)																	
Phenols, Total	Daily Maximum																	
Selenium, Total Recoverable	Daily Maximum																	
Silver, Total Recoverable	Daily Maximum																	
Sodium, Total Recoverable	Daily Maximum																	
Sulfate, Total (as SO4)	Daily Maximum																	
Temperature	Daily Average (Mean)																	
Temperature	Daily Maximum																	
Total Coliform	7-Day Average of Daily Maximums																	
Total Coliform	7-Day Median																	
Total Coliform	Instantaneous Maximum (IMAX)																	
Total Dissolved Solids (TDS)	12-Month Average	x																
Total Dissolved Solids (TDS)	Average Monthly (AMEL)																	
Total Dissolved Solids (TDS)	Daily Maximum																	
Total Dissolved Solids (TDS)	Delta from Background																	
Total Organic Carbon (TOC)	Daily Maximum																	
Total Suspended Solids (TSS)	7-Day Average of Daily Maximums																	
Total Suspended Solids (TSS)	Average Monthly (AMEL)																	
Total Suspended Solids (TSS)	Average Weekly (AWEL)																	
Total Suspended Solids (TSS)	High Weekly Average	x																
Total Suspended Solids (TSS)	Monthly Average (Mean)	x																
Total Suspended Solids (TSS)	Weekly Average (Mean)																	
Total Suspended Solids (TSS), Percent Removal	Average Monthly (AMEL)																	
Total Suspended Solids (TSS), Percent Removal	Percent Reduction	x																
Total Suspended Solids (TSS), Percent Removal	Percent Reduction (Weekly)																	
Turbidity	24-hour Average																	
Turbidity	Daily Average (Mean)																	
Turbidity	Daily Maximum	x																
Turbidity	Instantaneous Maximum (IMAX)																	
Turbidity	Monthly Average (Mean)																	
Zinc, Total Recoverable	Daily Maximum																	

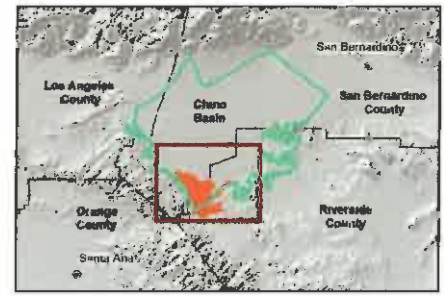
Table A-7
Surface-Water Quality Analyte List
Monitoring Program for the Prado Basin Habitat Sustainability Program

Analytes	Method
Major cations: K, Na, Ca, Mg	EPA 200.7
Major anions: Cl, SO ₄ , NO ₂ , NO ₃	EPA 300.0
Total Hardness	SM 2340B
Total Alkalinity (incl. Carbonate, Bicarbonate, Hydroxide)	SM 2320B
Boron	EPA 200.7
Ammonia-Nitrogen	EPA 350.1
pH	SM 4500-HB
Specific Conductance	SM 2510B
Total Dissolved Solids	E160.1/SM2540C
Total Kjeldahl Nitrogen (TKN)	EPA 351.2
Organic Nitrogen	EPA 351.2
Turbidity	EPA 180.1
Total Organic Carbon	SM5310C/E415.3



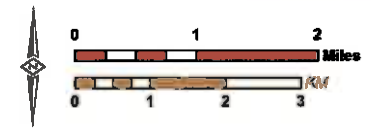
- Current and Historical Vegetation Monitoring Sites**
- ▲ USBR Vegetation Monitoring Site
 - ▲ OCWD Photo-Monitoring Site
- Other Features**
- Prado Flood Control Basin
 - Chino Basin Desalter Authority Well
 - ◆ PBHSP Monitoring Well
 - OCWD Prado Wetlands
 - Rivers and Streams

Aerial Photo: USDA, 2014. Mosaic of photos from May 13, 2014 to June 3, 2014



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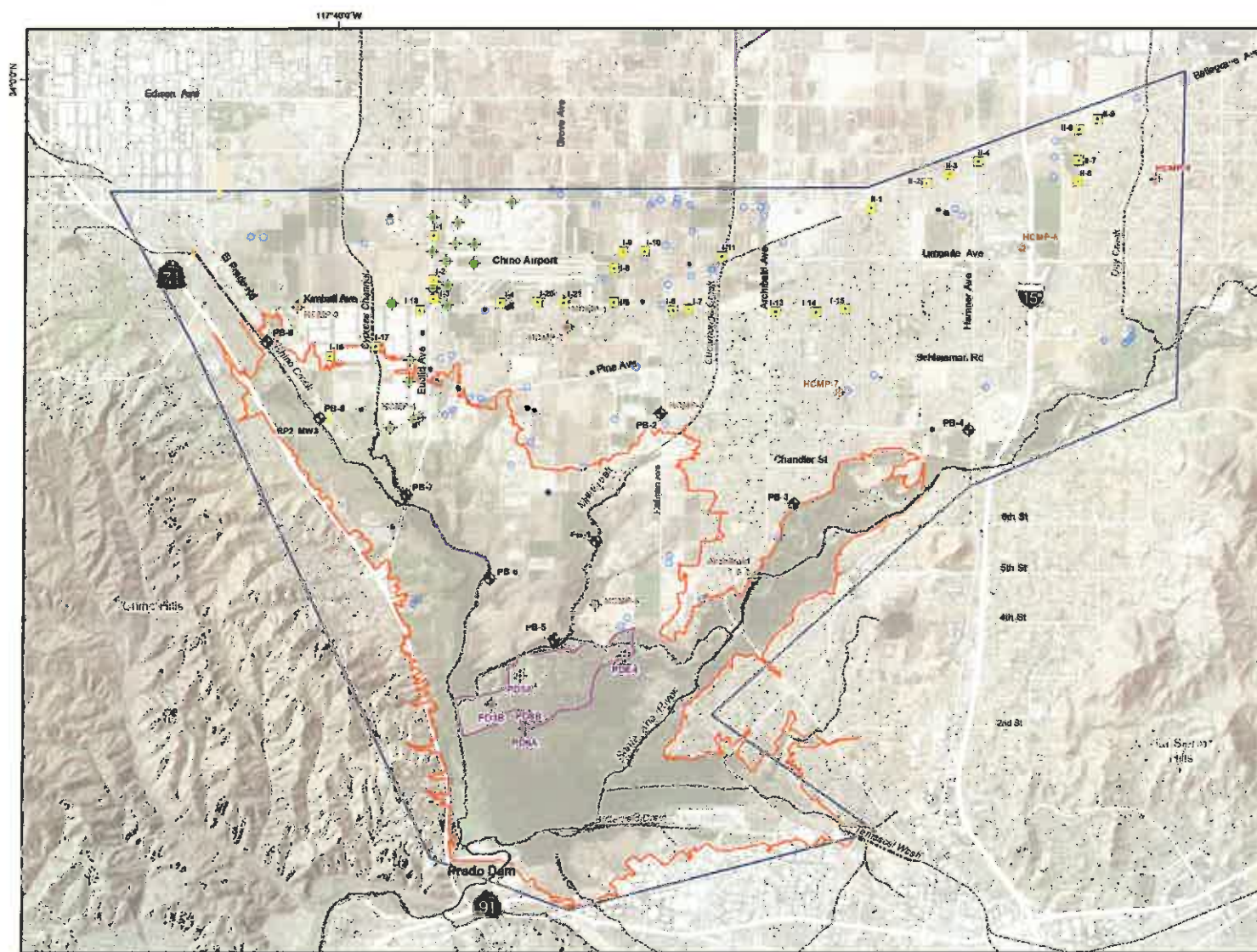
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 Date: 4/28/2016
 File: Figure A-1_Veg_sldeshow



PBHSP 2016 Monitoring Program
 Prado Basin Habitat Sustainability Committee

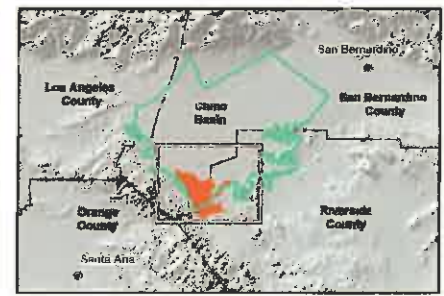
Current and Historical Vegetation Monitoring Sites in Prado Basin

Figure A-1



- Groundwater Monitoring Sites**
- ◆ PBHSP Monitoring Well Site
 - ◇ Hydraulic Control Monitoring Program Well Site
 - ◇ Chino Airport Monitoring Well Site
 - ◆ OCWD Prado Wetlands Monitoring Well
 - Public Well Monitored by CBWM for Groundwater Levels and/or Quality
 - Private Well Monitored by CBWM for Groundwater Levels and/or Quality
 - Chino Basin Dealer Authority Well
 - Active Well Monitored by CBWM for Groundwater Production (water year 2015)
- Other Features**
- Groundwater Monitoring Program Study Area
 - ▭ Prado Flood Control Basin
 - ▭ OCWD Prado Wetlands
 - ~ Streams & Flood Control Channels
 - ~ Santa Ana River

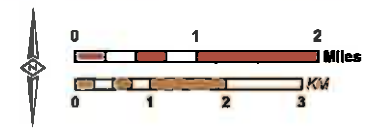
Aerial Photo: USDA, 2014. Mosaic of photos from May 13, 2014 to June 3, 2014



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 W1.DERMUTH ENVIRONMENTAL, INC.

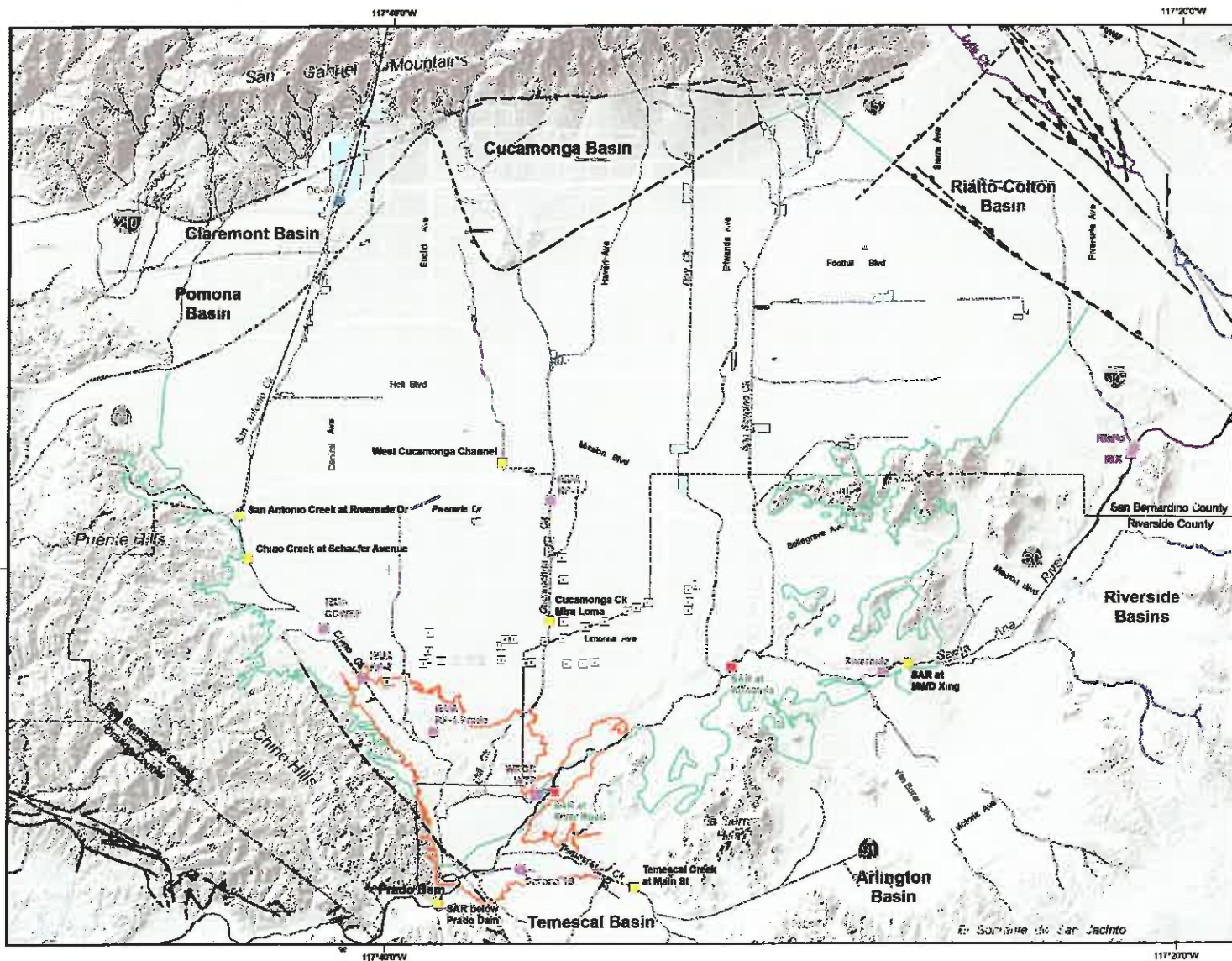
Author: TCR
 Date: 4/28/2016
 File: Figure A-2_Groundwaters_slideshow



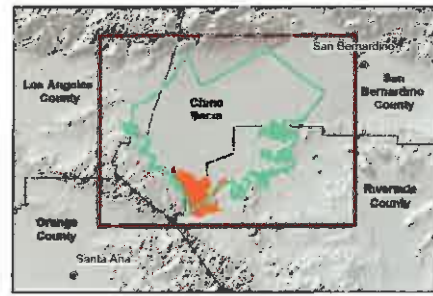
 
PBHSP 2016 Monitoring Program
 Prado Basin Habitat Sustainability Committee

Groundwater Monitoring Program

Figure A-2

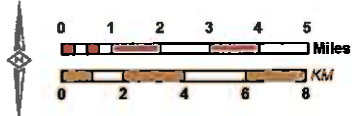


- Surface-Water Monitoring Sites**
- POTW Discharge Outfall
 - USGS Stream Gage Station
 - Maximum Benefit Monitoring Program Site
 - MWSDSC Imported Water Turnout
- Other Features**
- Chino Basin Hydrologic Boundary
 - Prado Flood Control Basin
 - Rivers and Streams
 - Flood Control & Conservation Basins
 - Chino Basin Desalter Authority Wall
- Faults**
- Location Certain
 - Location Approximate
 - Location Concealed
 - Location Uncertain
 - Approximate Location of Groundwater Barrier



Prepared by:
WEI
 WILDMOUTH ENVIRONMENTAL, INC.

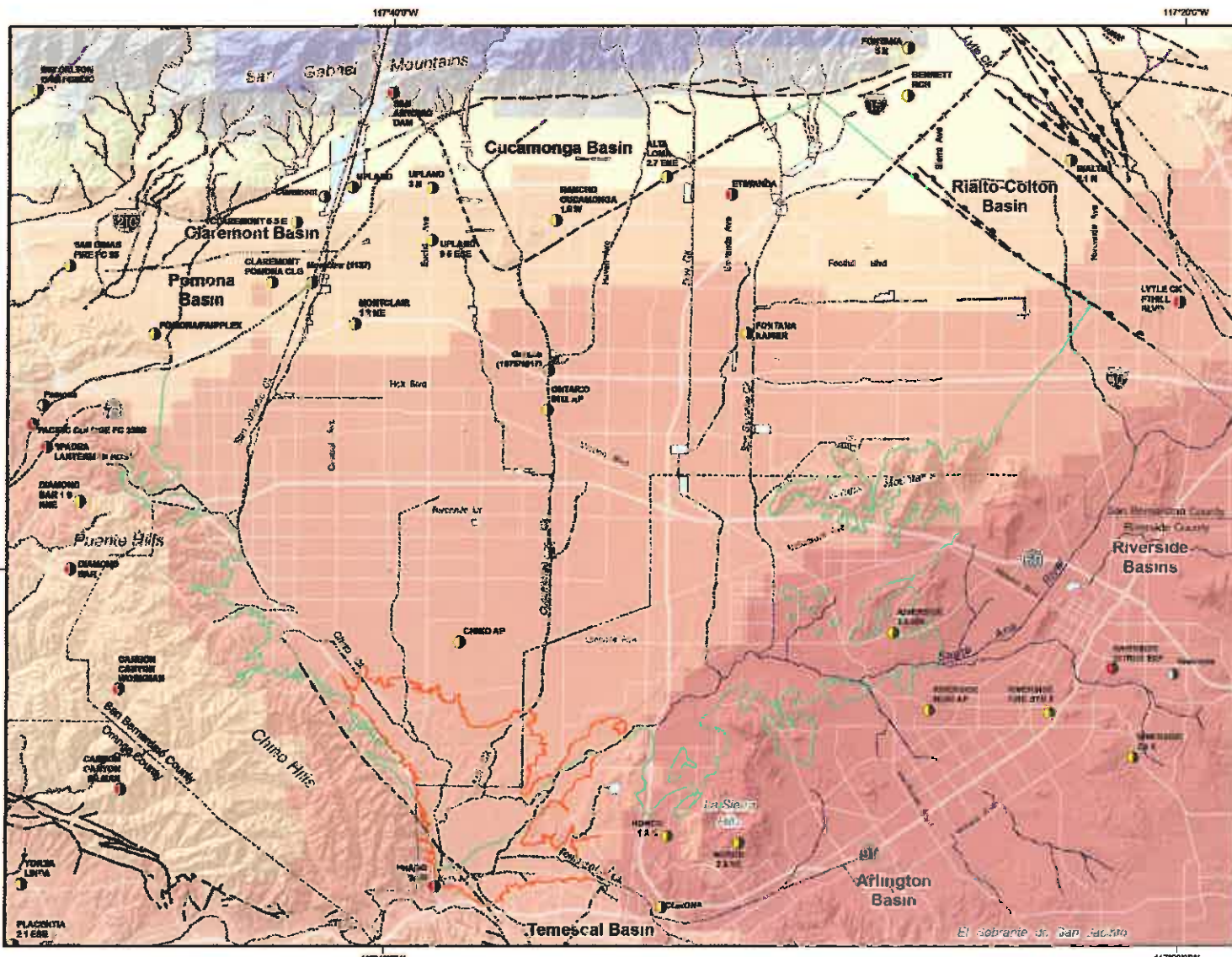
Author: TCR
 Date: 4/25/2018
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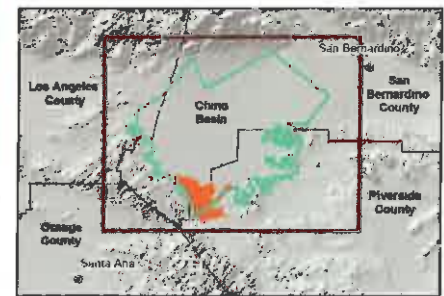
PBHSP 2016 Monitoring Program
 Prada Basin Habitat Sustainability Committee

Surface-Water Monitoring Program

Figure A-3

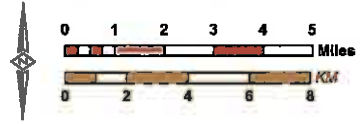


- Climatic Monitoring Stations**
- NWS Cooperative Observer Program
 - Global Historical Climatology Network
 - CIMIS
 - SBCFCD Precipitation Station
- Average Annual Precipitation for Water Year 2009-10 from PRISM Climate Group (inches, 800 x 800 meter grid)**
- <15
 - 15 - 20
 - 20 - 25
 - 25 - 30
 - 30 - 35
 - >35
- Other Features**
- Prado Flood Control Basin
 - Chino Basin Hydrologic Boundary
 - Streams & Flood Control Channels
 - Flood Control & Conservation Basins
- Faults**
- Location Certain
 - Location Approximate
 - Location Concealed
 - Location Uncertain
 - Approximate Location of Groundwater Barrier



Prepared by:
 WEI
 WILDERMUTH ENVIRONMENTAL, INC.

Author: TCR
 Date: 4/28/2010
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PBHSP 2016 Monitoring Program
 Prado Basin Habitat Sustainability Committee

Weather and Climate Monitoring Program

Figure A-4

Exhibit A

2016 Monitoring Program for the PBHSP



Riparian-Vegetation Monitoring

- USBR Vegetation Monitoring Site
- OCWD Photo-Monitoring Stations

Boundaries

- Groundwater Monitoring Program Study Area
- OCWD Prudhoe Wetlands

Groundwater Monitoring

- Desalter Well
- HCMP Monitoring Well
- PBHSP Monitoring Well
- China Airport Monitoring Well
- OCWD Prudhoe Wetlands Monitoring Well
- Public Well Monitored by CBWM for Groundwater Production, Levels, and/or Quality
- Private Well Monitored by CBWM for Groundwater Production, Levels, and/or Quality
- Active Production Well (water year 2015)

Surface-Water Monitoring Stations

- POTW Discharge Outfall
- USGS Stream Gage Station
- Maximum Benefit Monitoring Program Site

Climatic Monitoring Stations

- NWS Cooperative Observer Program
- Global Historical Climatology Network

Author: YCP
Date: 2/20/2018
File: EAHM_01.mxd



2016 PBHSP Adaptive Management Plan
Prudhoe Bay Habitat Sustainability Committee



2016 Monitoring Program
for the PBHSP

Exhibit A

Appendix B

Comments and Responses

Appendix B
Comments and Responses
on the Draft 2016 Adaptive Management Plan for the Prado Basin Habitat Sustainability Program

B-1 SANTA ANA WATERSHED PROJECT AUTHORITY

Comment Number	Reference	Comment	Response
1	Appendix A, Section A.4	The draft AMP on page 2-1 states that some of the main factors that potentially can affect riparian habitat in the Study Area are weather events and long-term climate. It would increase the strength of the monitoring to establish an evapotranspiration monitoring station in or near the Study Area. There is a Department of Water Resources CIMIS station near Claremont/Pomona, but to rely on that station, an agency would need to use "spatial CIMIS" which the Department of Water Resources also manages. Spatial CIMIS is increasingly accurate when there are other stations located near each other. For the Claremont/Pomona Station, the nearby station would be in the City of Riverside. Spatial CIMIS relies on interpolation and interpolation accuracy is affected by the density of the CIMIS stations and geographic features of the region. Since there are few CIMIS stations near the Study Area, the accuracy of spatial CIMIS is reduced. A map of ET monitoring stations in the Santa Ana River Watershed is attached.	We agree that a CIMIS station at or near the Prado Basin would strengthen the weather/climate monitoring program. We recommend that the PBHSC discuss, and consider for recommendation, the construction of a CIMIS-type station at or near Prado Basin at a future meeting. No changes to the AMP text were made to address the comment.
2	Appendix A, Sections A.1 and A.4	There are private sector firms as well as publicly available satellite data that provide remote sensing data that can also be used. For example, Landsat satellite collects data related to vegetation coverage seen from its flight path. This vegetation coverage data can be used as part of a regression analysis creating a relationship to weather data that is collected in the field to the satellite data, thereby creating an estimated evapotranspiration rate value. Local professor Dr. Michael Goulden of UC Irvine has done this regression analysis before while analyzing the national forest.	<p>Comment noted, but no changes to the AMP text were made to address this comment.</p> <p>As stated in Section A.1 "...the RHMP [Riparian Habitat Monitoring Program] as described herein is conceptual, and is referred to as the 'Conceptual RHMP'." That said, analysis of remote-sensing data to detect changes in the extent and quality of the riparian habitat is contemplated in the AMP.</p> <p>The RHMP is currently being collaboratively developed by the Watermaster, IEUA, and OCWD. Analysis of remote-sensing data will be assessed for its possible use in the PBHSP, and incorporated into the</p>



SANTA ANA WATERSHED PROJECT AUTHORITY COMMENTS AND RESPONSES

Comment Number	Reference	Comment	Response
4	Appendix A, Section A.4	<p>Evapotranspiration rate monitoring also has the benefit of assisting retail water agencies who want to pursue or adopt a rate structure that accounts for weather. This also seems to be the direction the State is moving in per Governor Brown's Executive Order released on Monday. One of the stipulations in the Executive Order is for the Department of Water Resources and the State Water Board to develop a standard for "outdoor irrigation, in a manner that incorporates landscape area, local climate, and new satellite imagery data."</p> <p>If you have any questions about evapotranspiration rate monitoring data please contact me and I would be happy to help.</p>	<p>monitoring program as appropriate.</p> <p>Comment noted, and thank you.</p>
5	Appendix A, Section A.1	<p>The Monitoring Program, Attachment A, also discusses regional assessments using periodic mapping. SAWPA has acquired 3-inch resolution color imagery and infrared digital orthophotography through a summer 2015 flight survey (survey area attached). The Corps of Engineers is also mapping the River and major tributaries through the Coordinated Ground Truth and Airborne Hyperspectral and Topographic Lidar Survey Project through a 2015 flight survey. The flight path for that survey is attached. The SAWPA data as well as the Corps data should be available this year. Our GIS staff has been in contact with Gary Te at IEUA for the SAWPA data.</p>	<p>Comment noted, but no changes to the AMP text were made to address this comment.</p> <p>As stated in Section A.1 "...the RHMP [Riparian Habitat Monitoring Program] as described herein is conceptual, and is referred to as the 'Conceptual RHMP'." That said, analysis of air photos to detect changes in the extent and quality of the riparian habitat is contemplated in the AMP.</p> <p>The RHMP is currently being collaboratively developed by the Watermaster, IEUA, and OCWD. Data currently being collected by stakeholders will be assessed for its possible use in the PBHSP, and incorporated into the monitoring program as appropriate.</p>



**INFORMATION
ITEM**

3A

Engineering and Construction Management Project Updates September 2016



Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

John Scherck
Acting Deputy Manager of Engineering

EN11031 – RP-5 Equalization and Effluent Monitoring Project

- Engineering Consultant: Lee & Ro, Inc.
- Current Contract (Design): \$358K
- Total Project Budget: \$1.54M
- Project Completion: September 2016
- Scope of Work:
 - Install two gate actuators
 - Replace chemical pumps
- Current Activities:
 - Preparing 100% design
 - Review proposed equipment cut sheets
 - Finalize Process Control Narratives (PCN) for actuators



Primary Effluent Diversion Structure



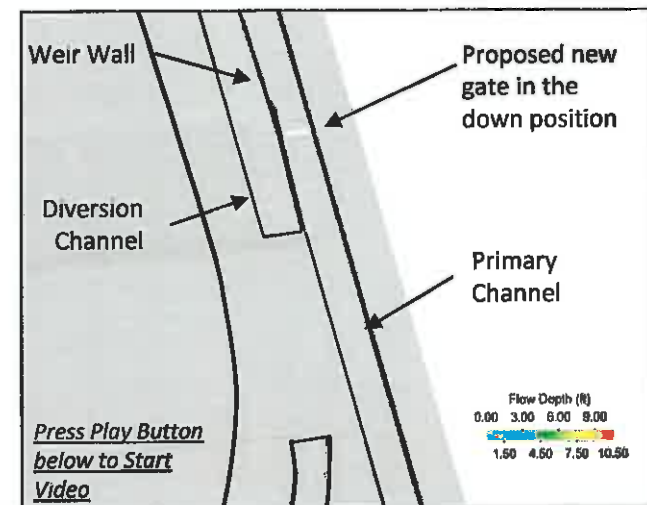
Sodium Hypochlorite Chemical Pumps

RW15004 Lower Day Basin

- Pre-Design Consultant: Scheevel Engineering
- Current Contract (Design): \$71K
- Total Project Budget: \$2.48M
- Project Completion: July 2018
- Scope of Work:
 - Modify the existing intake structure
 - Install diversion gate in channel
- Current Activities:
 - Analysis of design alternatives and channel flow modeling
 - Selection of best alternative
 - Minimize impact to flood control operation



Day Creek Channel Aerial Photo



Water flow simulation video of channel with proposed new gate

EN18006 – RP-1 Flare Improvements

- Engineering Consultant: TBD
- Current Contract (Design): TBD
- Total Project Budget: \$4M
- Project Completion: January 2019
- Scope of Work:
 - Replace existing candlestick flare with high efficiency emission control flare(s)
- Current Activities:
 - Completing Project Charter
 - Prepare consultant solicitation RFP
 - Grant application coordination



RP-1 Candlestick Flare



Potential Flare Style

EN13018 – Montclair Diversion Structure Rehabilitation

- Contractor: J.F. Shea
- Current Contract (Construction): \$560K
- Total Project Budget: \$3M
- Project Completion: July 2016
- Scope of Work:
 - Install three remotely operated gates
 - Upgrade existing metering station
- Current Activities:
 - Project Close-out
 - Distribute O&M Manuals
 - Document as-builts
 - File Notice of Completion



New Control Panel Installed & Street Paved



New Hatches

WR15021 – Napa Lateral

- Contractor: TBD
- Current Contract (Design/Build): TBD
- Total Project Budget: \$6M
- Project Completion: August 2018
- Scope of Work: Construct approximately 2 miles of recycled water pipelines
- Current Activities:
 - Design/Build Team prequalification
 - Complete project specifications



Napa Lateral Alignments

**INFORMATION
ITEM**

3B

Date: September 21, 2016

To: The Honorable Board of Directors

Through: Public, Legislative Affairs, and Water Resources Committee (09/14/16)

From: P. Joseph Grindstaff
General Manager

Submitted by: Kathy Besser
Manager of External Affairs

Subject: Water Softener Rebate Program Status Report

RECOMMENDATION

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

BACKGROUND

In 2008, the Inland Empire Utilities Agency (IEUA/Agency) developed a program, approved by the Regional Technical and Policy Committees, to offer a rebate program for the voluntary removal of self-regenerating water softeners. Implemented in partnership with the Metropolitan Water District of Southern California, National Water Research Institute, the Southern California Salinity Coalition, and the contracting agencies, IEUA developed fact sheets, billing inserts (for inclusion in residential monthly bills), newspaper and cable TV ads, and even a video that could be shown on local cable stations explaining to the public the impact of salt discharged from the use of residential self-regenerating water softeners on the regional recycled water supply.

In 2009, Governor Schwarzenegger signed the IEUA-sponsored AB 1366 (2009, Feuer) which provided local governments with expanded authority to regulate residential self-regenerating water softeners, especially in areas of the state with identified salt problems (e.g., water bodies that are adversely impacted by salinity and high-use groundwater basins that are hydro-geologically vulnerable to salinity pollution). The bill applies only to cities and local and regional agencies that own and operate a community sewer or water recycling facility.

The first step in the process of implementing the new law was for the Santa Ana Regional Water Quality Control Board (Regional Board) to adopt a finding as part of a formal order that the "control of residential salinity input will contribute to the achievement of water quality objectives." Although IEUA's Regional Water Recycling Permit conditions included the requirement that IEUA and the contracting agencies regulate residential self-regenerating water softeners to the extent allowed by law, the language did not include the specific finding required by AB 1366.

Water Softener Rebate Program Status Report

September 21, 2016

Page 2 of 4

In March 2010, the Regional Board adopted Order R8-2010-0008, which amended IEUA's Regional Water Recycling Permit, Order R8-2009-0021, and made the necessary finding that control of the discharge of waste from residential self-regenerating water softeners into the collection systems will contribute to the achievement of the water quality objectives approved in the Basin Plan Amendment.

In January 2011, IEUA and the contracting agencies formed a Water Softener Task Force with the goal of developing ordinance language to prohibit the future installation of self-regenerating water softeners in homes. The language would not prohibit existing softeners or exchange tank services for water softeners. The Task Force further recommended that the Agency adopt the regional ordinance amendment first, and that the contracting agencies follow, adopting their individual ordinances at their earliest convenience. This recommendation was unanimously approved by both the Technical and Policy Committees in February 2011.

Consistent with AB 1366, the Agency properly noticed and held a public hearing on June 15, 2011 to amend the Agency's Ordinance No. 87, to prohibit the future installation of residential self-regenerating water softeners. The Agency received unanimous public support for the ordinance. To date, the water softener prohibition ordinance revisions have been adopted by the following member agencies:

- City of Montclair in December 2011
- City of Upland in January 2012
- City of Fontana in April 2012
- Cucamonga Valley Water District in July 2014

Staff Plan: (External Affairs Department assumed work April 2015)

- IEUA staff will respond to public inquiries via e-mail and phone
- Continue bi-annual store audits with follow-up letters where needed (last audit Jan 2016, next Aug 2016)
- Work with member agencies to include bill inserts bi-annually
- Advertise in local newspapers (English and Spanish) twice per year
- Utilize social media

Public Outreach

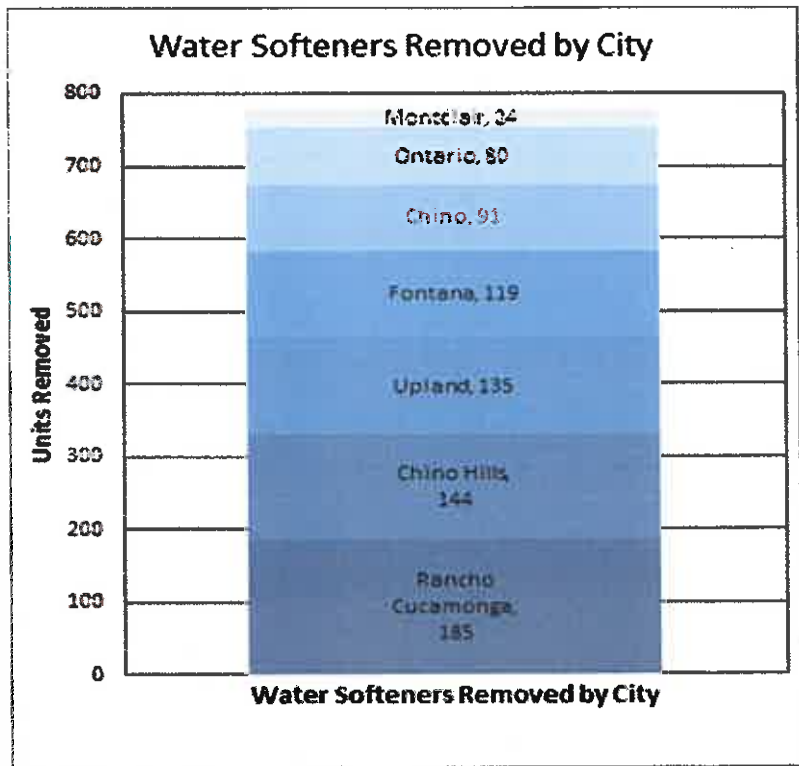
- FY 2015/2016
 - Advertised media –
 - Foothill Reader/LA Times – AWS - Sunday, June 12th
 - Foothill Reader/LA Times - No Drugs Down The Drain - Sunday, June 19th
 - Daily Bulletin - AWS - Sunday, June 5th
 - Daily Bulletin - No Drugs Down The Drain - Sunday, June 19th
 - La Opinion - No Drugs Down The Drain - Monday, June 13th
 - La Opinion – AWS - Monday, June 20th
 - Fontana Herald – AWS - June/November 2015

- Daily Bulletin - AWS - November 2015
- 4'x7' Banners located at:
 - Turner Basin (English & Spanish) – July 2015 – Jan 2016 Flood Control requested the removal.
 - Carbon Canyon Facility – July 2015 - Present
 - HQ-A – July 2015 – April 2016 (damaged)
- City of Fontana TV channel KFON, website & newsletter - January 2016
- Press Release - IEUA supports National Prescription Drug Take-Back Day - April 25th
- Bill insert – Member agencies were limited on their participation to include IEUA inserts as they were focusing on drought messages and conservation tips in 2015 and most of 2016.

▪ City of Chino	AWS	16,316	Feb/Mar 2016
▪ CVWD	AWS	49,500	Jan/Feb 2016
▪ City of Upland	AWS	18,000	Nov 2015
▪ City of Chino Hills	AWS	23,000	Apr 2015

- Work with Inland Valleys Association of REALTORS to promote public education about the water softener ordinance and the availability of the rebate program.

One self-regenerating water softener releases about 30 pounds of salt into the sewer system every month. Since 2008 the Agency has removed 778 water softeners (Graph 1) keeping over 140 tons of salt every year out of the regional sewer system.



Agency Business Goal: *IEUA will strive to implement actions that enhance or promote environmental sustainability and the preservation of the region's heritage.*

PRIOR BOARD ACTION

On July 20, 2011, the IEUA Board adopted the amendment to IEUA Ordinance No. 87 prohibiting the future installation of self-regenerating water softeners.

IMPACT ON BUDGET

The Water Softener Removal Rebate Program, Project No, WR 16001, has a budget of \$60,000 for Fiscal Year 2016/17.

Annual Budgets:

	<u>Spent</u>	<u>Budget</u>
2012/2013	\$150,000	\$200,000
2013/2014	\$ 43,000	\$125,000
2014/2015	\$ 81,000	\$100,000
2015/2016	\$100,000	\$100,000
2016/2017	\$ 60,000	\$ 60,000

**INFORMATION
ITEM**

3C

Date: September 21, 2016

To: The Honorable Board of Directors

Through: Public, Legislative Affairs & Water Resources Committee (09/14/16)

From: P. Joseph Grindstaff
General Manager

Chris Berch
Executive Manager of Engineering/Assistant General Manager

Submitted by: Sylvie Lee
Manager of Planning & Environmental Resources

Subject: Recycled Water Semi-Annual Update FY 2015/16 and
the Annual Recycled Water Report for FY 2015/16

RECOMMENDATION

This is an informational item for the Board of Directors to review.

BACKGROUND

The Recycled Water Semi-Annual Update (attached) provides information on recycled water direct use, groundwater recharge and capital project development for Fiscal Year 2015/16. It lists the status of projects to increase reliability and demands. Of note, the Wineville recycled water pipeline is now operational and has allowed increased recharge flows for RP3 basin and new flows to Declez basin. The 2015/16 Recycled Water Annual Report accompanies the update and provides a detailed breakdown of the 32,619 acre-feet of recycled water delivered during the past fiscal year. Data are presented in the report by IEUA retail member agencies, by usage types and by customers. The report provides summaries of the program history, describes recent construction and gives an overview of the IEUA treatment plants. The report includes appendices of water quality compliance data for IEUA water recycling plants and lists individual customer uses.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

None.

Inland Empire Utilities Agency
2015/16 RECYCLED WATER
ANNUAL REPORT

Water Smart
Thinking in Terms of Tomorrow



Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

TABLE OF CONTENTS

INTRODUCTION..... 1

DEMANDS 2

DEMANDS BY USE TYPE..... 3

RETAIL DEMANDS 4

CUSTOMERS DEMANDS 5

HISTORY 7

RECYCLED WATER CAPITAL PROGRAM 9

PROJECTS COMPLETED 9

PROJECTS IN CONSTRUCTION 9

PROJECTS IN DESIGN 10

FUTURE REUSE PROJECTS 10

TREATMENT PLANTS 11

FIGURES

Figure 1 - IEUA Service Area 1

Figure 2 – Historical Recycled Water Direct Use and Groundwater Recharge..... 2

Figure 3 –Recycled Water Demand by Use Type for 2015/16 3

Figure 4 - RP-1 Treatment Process 12

Figure 5 - RP-4 Treatment Process 14

Figure 6 - CCWRF Treatment Process 16

Figure 7 - RP-5 Treatment Process 18

TABLES

Table 1 – Recycled Water Demand by Use Type for 2015/16 3

Table 2 –Recycled Water Demand by Agency for 2015/16..... 4

Table 3 –Top 10 Recycled Water Customers for 2015/16..... 5

Table 4 –Retail Agency Water Rates for 2015/16 6

Table 5 - Capital Project Summary for 2015/16 9

APPENDICES

APPENDIX A Recycled Water Effluent Monitoring Data for Calendar Year 2015

APPENDIX B Recycled Water Compliance Data for Calendar Year 2015

APPENDIX C Recycled Water Users and Demands for Fiscal Year 2015/16

INTRODUCTION

The 2015/16 Recycled Water Annual Report for the Inland Empire Utilities Agency (IEUA) recycled water program provides annual delivery data by IEUA retail member agencies, by usage types, and by customers. The 2015/16 report is for IEUA's fiscal year, which runs from July 2015 to June 2016. The report summarizes the program history, describes recent construction, and gives an overview of the IEUA treatment plants. IEUA provides wastewater treatment for its seven member agencies: the Cities of Chino, Chino Hills, Fontana, Montclair, Ontario, and Upland and Cucamonga Valley Water District. Recycled water from the treatment process is generated and delivered to its retail water agencies for use in the IEUA service area.

IEUA owns and operates five wastewater recycling facilities that serve over 870,000 people. Figure 1 shows the IEUA service area, its member agencies, and the locations of IEUA's treatment plants. Of the five plants, four produce tertiary-treated, Title 22-quality recycled water. Of the treatment plants, RP-2 does not have any liquid treatment processes, and as such does not produce any recycled water. The general layout and capacities of the water recycling plants are discussed in the last section of the report. Appendices A and B contain the recycled water effluent monitoring data and recycled water compliance data, respectively, for the 2015 calendar year for the four recycled water facilities.

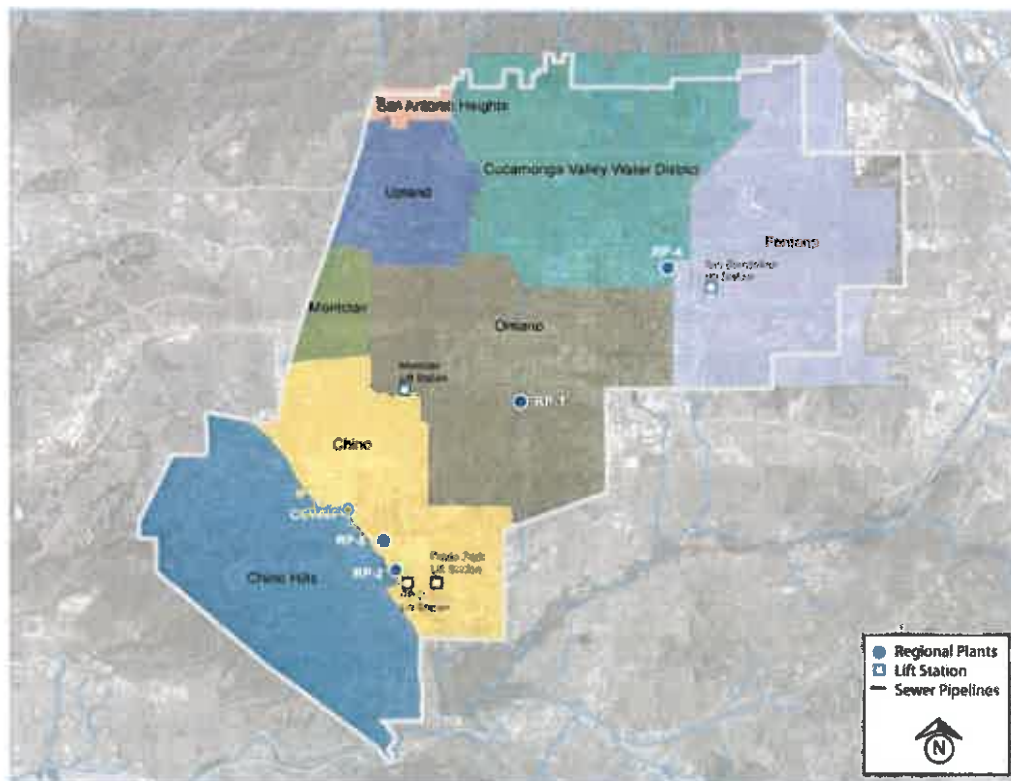


Figure 1 - IEUA Service Area

DEMANDS

During 2015/16, the average recycled water supply from IEUA's facilities was approximately 48.4 million gallons per day (MGD), or 54,169 acre-feet per year (AFY). Recycled water groundwater recharge usage was 13,222 AFY and recycled water direct usage was 19,397 AFY. Total recycled water demands during 2015/16 were 32,619 acre-feet (AF), a decrease by 3% from the previous fiscal year. Recycled water recharge was up 22% and direct use was down 14%. The recycled water delivery volumes of direct use and groundwater recharge can vary seasonally and annually based on a variety of factors (e.g. the rainfall intensity, rainfall duration, and recharge basin maintenance activities). Figure 2 shows IEUA's historical direct use and groundwater recharge of recycled water for the past 10 years.

Recycled water demands for the combined direct use and recharge purposes were approximately 43 percent of the available supply. During the peak demand summer months (July through September), the total recycled water demand was approximately 90 percent of the available supply.

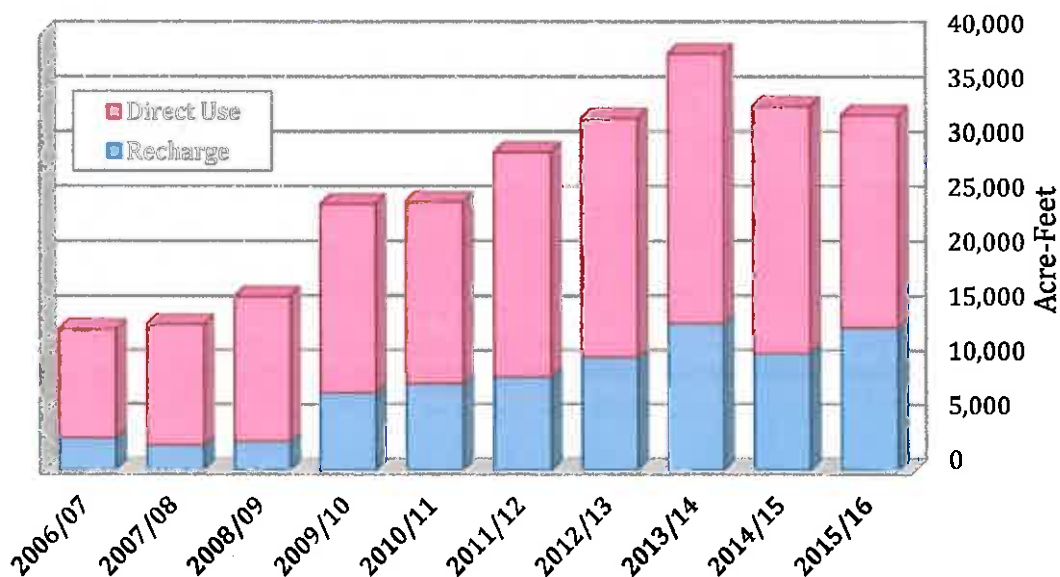


Figure 2 – Historical Recycled Water Direct Use and Groundwater Recharge

DEMANDS BY USE TYPE

Delivered recycled water was beneficially reused for a variety of applications including landscape irrigation, agricultural irrigation, industrial process water, groundwater recharge and construction. Table 1 and Figure 3 show the 2015/16 recycled water demand by use type.

Table 1 – Recycled Water Demand by Use Type for 2015/16

Type of Use	Demand (AF)	Percent of Demand
Recharge	13,222	41%
Agriculture	8,868	27%
Landscape	8,346	26%
Industrial	1,392	4%
Construction	791	2%
Total Demand	32,619	100%

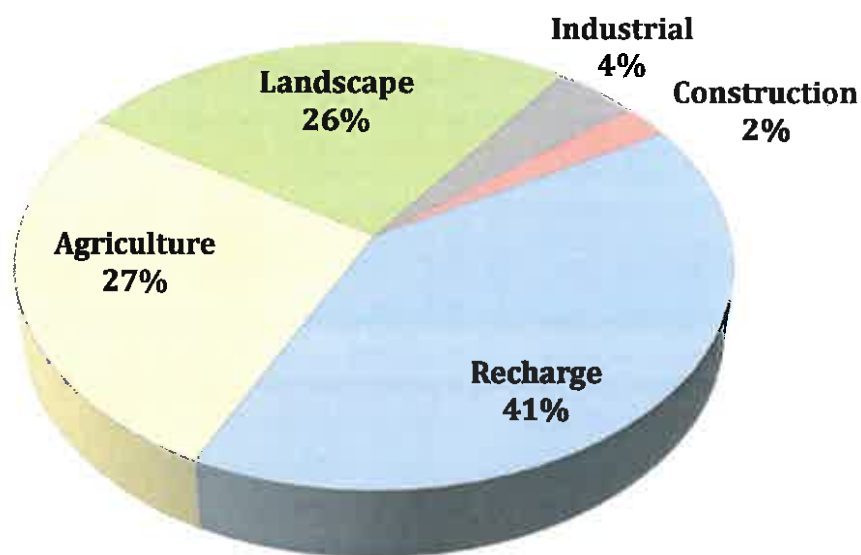


Figure 3 – Recycled Water Demand by Use Type for 2015/16

RETAIL DEMANDS

IEUA is the wholesale recycled water provider to its member agencies, which in turn are retail agencies that directly serve their customers. IEUA member agencies which served recycled water in 2015/16 include:

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

Monte Vista Water District (MVWD) and Fontana Water Company (FWC) are the water retailers in the Cities of Montclair and Fontana, respectively, but are not IEUA member agencies. MVWD and FWC retail recycled water obtained from their overlying cities which are IEUA member agencies. San Bernardino County is currently a direct use customer of IEUA based on long standing historical contracts. Jurupa Community Services District (JCSD), located directly south of Fontana, is not an IEUA member agency yet will receive a recycled water groundwater recharge allocation through 2025 based on an allocation formula in a 2013 agreement between IEUA and JCSD.

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

Table 2 –Recycled Water Demand by Agency for 2015/16

Retail Agency	Direct Use (AF)	Recharge Allocation (AF)	Agency Total (AF)
Chino	7,217	1,302	8,519
Ontario	7,566	2,667	10,233
Chino Hills	1,394	1,097	2,491
CVWD	1,146	3,099	4,244
San Bernardino County	536	0	536
IEUA	541	0	541
Upland	719	1,226	1,945
Montclair/MVWD	278	548	827
Fontana/FWC	0	2,368	2,368
JCSD	0	915	915
Subtotal	19,397	13,222	32,619

CUSTOMERS DEMANDS

Appendix C lists the recycled water direct use customers of each retail agency and their demands for the fiscal year. Table 3 lists the top ten largest direct reuse customer sites for the fiscal year (excluding groundwater recharge sites). During 2015/16, one hundred and sixty eight (168) new connections were made to the recycled water system with a total new demand estimated at 1,794 AFY. Connected new demand is the anticipated annual usage based on land size and previous potable water usage history.

Table 3 -Top 10 Recycled Water Customers for 2015/16

Customer	Use (AF)	Type of Use	Retailer
Weststeyn Dairy	969	Agricultural	Chino
Cal Poly Pomona	897	Agricultural	Chino
New Indy Ontario	867	Industrial	Ontario
Lewis Farms	702	Agricultural	Ontario
Cleveland Farm	616	Agricultural	Ontario
Cleveland Farm	552	Agricultural	Chino
Whispering Lakes Golf Course	475	Landscape	Ontario
CW Farms	434	Agricultural	Chino
Nyenhius Dairy	405	Agricultural	Chino
El Prado Park	373	Landscape	San Bernardino County
Subtotal	6,291		

ECONOMIC AND ENVIRONMENTAL IMPACTS

The 32,619 AF of recycled water used during the fiscal year is the equivalent of the water supply for roughly 66,840 homes. The use of 2015/16 produced recycled water reduces the need to pump State Water Project water over the Tehachapi Mountains, an equivalent net energy demand reduction of 2,657 kilowatt-hours (kWh) per AF, and an overall reduction of approximately 79 percent in carbon dioxide emissions.

IEUA's wholesale recycled water rate to its member agencies for 2015/16 was \$350/AF for direct usage and \$410/AF for recharge. Table 4 lists the IEUA retail agencies' recycled water rates in 2015/16.

Table 4 – Retail Agency Water Rates for 2015/16

City of Chino			
Source	Usage Type	Usage (HCF)	Effective Oct. 1, 2015
Potable Water	Flat Rate	1	\$1.77
Recycled Water	Non-Agricultural	1	\$1.24
	Agricultural	1	\$0.62

City of Chino Hills				
Source	Zone	Single Family Usage (HCF)	Multi-family Usage (HCF)	Effective July 1, 2015
Potable Water	Low	Tier 1 (0-12)	Tier 1 (0-7)	\$2.28
		Tier 2 (13-30)	Tier 2 (8-20)	\$2.60
		Tier 3 (>30)	Tier 3 (>21)	\$3.64
	Intermediate	Tier 1 (0-12)	Tier 1 (0-7)	\$2.47
		Tier 2 (13-30)	Tier 2 (8-20)	\$2.79
		Tier 3 (>30)	Tier 3 (>21)	\$3.83
	High	Tier 1 (0-12)	Tier 1 (0-7)	\$2.76
		Tier 2 (13-30)	Tier 2 (8-20)	\$3.09
		Tier 3 (>30)	Tier 3 (>21)	\$4.12
Recycled Water	Low	Flat Rate		\$1.91
	Intermediate			\$2.04
	High			\$2.25
	Temporary			\$2.31

City of Ontario		
Source	Usage (HCF)	Effective March 4, 2016
Potable Water	0-15	\$2.39
	>15	\$2.78
Recycled Water	Flat Rate	\$1.63

CVWD			
Source	Stage	Usage (HCF)	Effective July 1, 2015
Potable Water	Non-drought	Tier 1 (0-10)	\$1.59
		Tier 2 (11-40)	\$2.11
		Tier 3 (41-100)	\$2.62
		Tier 4 (>100)	\$2.99
Recycled Water		Flat Rate	\$1.58

MVWD				
Source	Usage Type	Tier	Usage (HCF)	Effective March 1, 2016
Potable Water	Residential	Tier 1	Allocation	\$1.86
		Tier 2	Allocation	\$2.47
		Tier 3	Allocation	\$4.71
		Tier 4	Allocation	\$5.39
	Non-residential	Domestic Water	Flat Rate	\$2.28
Recycled Water	Non-residential	Recycled Water	Flat Rate	\$1.88

Fontana Water Company			
Source	Usage Type	Usage (HCF)	Effective July 1, 2015
Potable Water	Conservation Rates	Tier 1 (0-16)	\$2.50
		Tier 2 (>16)	\$2.88
	General Rate	1	\$2.72
Recycled Water		Flat Rate	\$2.04

City of Upland				
Source	Usage Type	Usage (HCF)	Effective January 1, 2016	
Potable Water	Single Family Residential Rate	Tier 1 (0-20)	\$1.43	
		Tier 2 (21-50)	\$1.70	
		Tier 3 (>50)	\$2.32	
	Multi-Family Residential Rate	Flat Rate	\$1.76	
		Rates for Other Classes	Landscape:	\$2.03
			Commercial:	\$1.69
			Schools:	\$1.99
			Public Agencies:	\$1.88
Recycled Water		Flat Rate	\$1.52	

HISTORY

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

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

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

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

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

expand groundwater recharge capacity through the Chino Basin Facilities Improvement Program.

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

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

Based on the series of regional decisions since 2000, over \$350 million was invested into the implementation of a robust Recycled Water Program. The region has achieved program success by leveraging heavily on grant funding and loans. With unanimous regional support, annual recycled water use grew from approximately 5,000 AF in 2004/05 to 38,251 AF in FY 2013/14. Over the past two fiscal years, recycled water demand has fallen slightly and was 32,619 AF in 2015/16.

RECYCLED WATER CAPITAL PROGRAM

IEUA currently produces nearly 50 MGD of recycled water, and there are several projects under way to expand the use of recycled water within its service area. Table 5 lists the 2015/16 recycled water capital projects and their locations. The projects that were in design or construction during 2015/16 are summarized in the following paragraphs.

Table 5 - Capital Project Summary for 2015/16

Projects in Design/Construction	Engineering Budget	Total Grants	Total Loans	FY 15/16 Expenses
San Sevaine Basin Improvements	\$6,646,000	\$1,125,000	\$0	\$311,648
Groundwater & Recycled Water SCADA Control Upgrades	\$932,000	\$932,000	\$0	\$117,891
Wineville RW Pipeline	\$31,632,218	\$10,418,950	\$22,206,050	\$7,203,630
Subtotal	\$32,564,218	\$12,475,950	\$22,206,050	\$7,633,169

PROJECTS COMPLETED

The Wineville Recycled Water Pipeline project consists of 1 mile of 24-inch and over 5 miles of 36-inch pipelines installed in the cities of Ontario and Fontana. The pipelines deliver recycled water from the 1158 pressure zone to be used for landscape irrigation and recharge activities at RP-3 and Declez basins. The pipeline was completed in 2015 and RP3 and Declez basins began using the Wineville pipeline for deliveries in September and December, respectively. The Groundwater and Recycled Water SCADA Central Upgrades project consists of the installation of new hardware and software for 20 remote groundwater and recycled water stations which will transition communication onto a faster, more reliable network.

PROJECTS IN CONSTRUCTION

The Groundwater and Recycled Water SCADA Control Upgrades project will upgrade five obsolete programmable logic controller (PLC) hardware and software at five recharge basins that each has an inflatable rubber dam system. The project will replace the older PLCs with newer and fully supported PLCs that will extend the reliability by 10 years. This SCADA project is estimated to be completed January 2017.

PROJECTS IN DESIGN

The San Sevaine Basin Improvements project will enhance stormwater capture and recycled water recharge at the basin. The project will include a pump station at basin 5 and piping to deliver stormwater recycled water to the upper three basins. A grant application for the State Water Resources Control Board Proposition 1 funding opportunity was submitted for this project and is expected to be awarded by the end of December 2016. The San Sevaine Basin improvements are estimated to be completed in January 2018.

FUTURE REUSE PROJECTS

IEUA and its member agencies desire to increase the use of recycled water within IEUA's boundary. By implementing the Recycled Water Program Strategy, recycled water projects will increase the development of recycled water delivery, groundwater recharge, and the reliability of potable supplies for residents and customers. Future recycled water projects will allow IEUA and its member agencies to continue to provide a reliable alternate water supply to its customers to offset the demand for imported water for non-potable uses.

IEUA submitted an application for the State Water Resources Control Board Proposition 1 grant funding for water recycling projects. The projects identified in the application were: RP-1 1158 Recycled Water Pump Station Upgrades, RP-5 Recycled Water Pipeline Bottleneck, RP-1 Parallel Outfall Pipeline, Baseline Pipeline Extension, Napa Lateral, and Recycled Water Pressure Sustaining Valve Installation. Upon notification of award (anticipated to be awarded two groups in December 2016 and February 2017), these projects will begin preliminary design phases.

TREATMENT PLANTS

IEUA owns and operates five regional water recycling facilities: RP-1, RP-2, RP-4, RP-5, and CCWRF. Of the treatment plants, RP-2 does not have any liquid treatment processes, and as such does not produce any recycled water. The combined treatment capacity of the remaining four plants is approximately 85 MGD.

Regional Water Recycling Plant No. 1

RP-1 is located in the city of Ontario and has been in operation since 1948. The plant has undergone several expansions to increase the design hydraulic domestic sewage (wastewater) treatment capacity to 44 MGD. The plant serves areas of Chino, Fontana, Montclair, Ontario, Rancho Cucamonga, Upland, and solids removed from RP-4, located in Rancho Cucamonga. The plant treats an average influent wastewater flow of approximately 23 MGD. The plant is divided into two separate treatment sections: liquids and solids.

The liquid treatment section consists of preliminary screening and grit removal, primary clarification, secondary treatment by aeration basins and clarification, tertiary treatment by filtration and disinfection, and dechlorination. Wastewater liquid is treated to California Department of Public Health Title 22 Code of Regulations standards for disinfected tertiary recycled water. The solids treatment section begins with thickening the solids removed from the primary and secondary clarification processes. The thickened solids are pumped to anaerobic digestion and then to the centrifuges for dewatering. Wastewater solids are digested to a minimum Class B biosolids standard, as defined by the United States Environmental Protection Agency Code of Federal Regulations. After dewatering, the biosolids are hauled to the Inland Empire Regional Composting Facility in the City of Rancho Cucamonga for further treatment to produce Class A compost. Figure 4 illustrates the RP-1 treatment processes.

Regional Water Recycling Plant No. 1

Plant Capacity:	44.0 MGD
2015/16 Influent Flow:	23.5 MGD
2015/16 RW Delivery:	16 MGD
2015/16 Creek Discharge:	9.3 MGD*

**RP-1 and RP-4 have a combined effluent outfall; therefore, creek discharge reported for RP-1 is for both plants combined.*



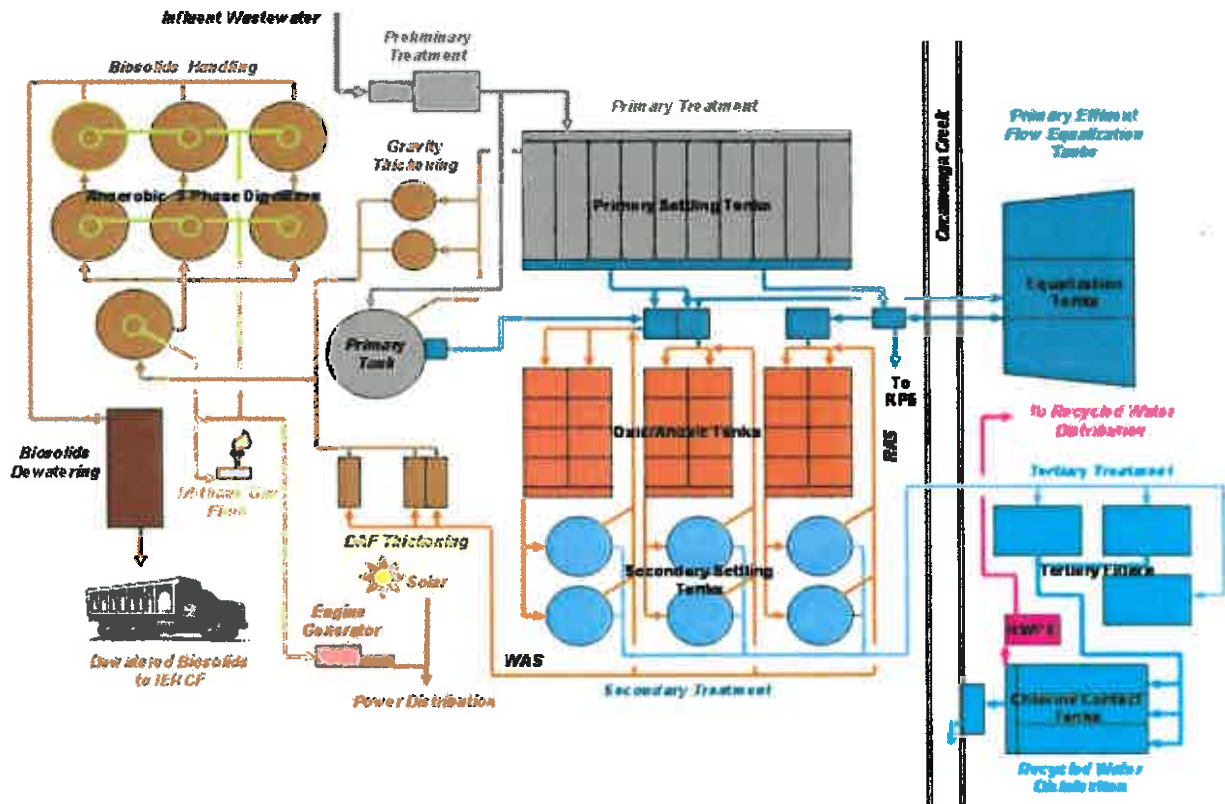


Figure 4 - RP-1 Treatment Process

Regional Water Recycling Plant No. 4

RP-4 is located in the city of Rancho Cucamonga and has been in operation since 1997. The plant has undergone an expansion to increase the design hydraulic domestic sewage (wastewater) treatment capacity to 14 MGD. The plant serves areas of Fontana, Rancho Cucamonga, and San Bernardino County. The plant treats the liquid portion of an average influent wastewater flow of approximately 10 MGD.

The liquid treatment section consists of preliminary screening and grit removal, primary clarification, secondary treatment by aeration basins and clarification, and tertiary treatment by filtration and disinfection. Wastewater liquid is treated to California Department of Public Health Title 22 Code of Regulations standards for disinfected tertiary recycled water. The solids removed from RP-4 are conveyed by gravity through the regional sewer system to the influent of RP-1 for thickening, anaerobic digestion, and dewatering. Figure 5 illustrates the RP-4 treatment process. Tertiary water from RP-1 and RP-4 that is not utilized for direct sales or groundwater recharge is discharged to Cucamonga Creek at RP-1.

Regional Water Recycling Plant No. 4

Plant Capacity:	14.0 MGD
2015/16 Influent Flow:	10.0 MGD
2015/16 RW Delivery:	8.4 MGD
2015/16 Creek Discharge:	0.0 MGD*

**RP-1 and RP-4 have a combined effluent outfall; therefore, creek discharge reported for RP-1 is for both plants combined.*



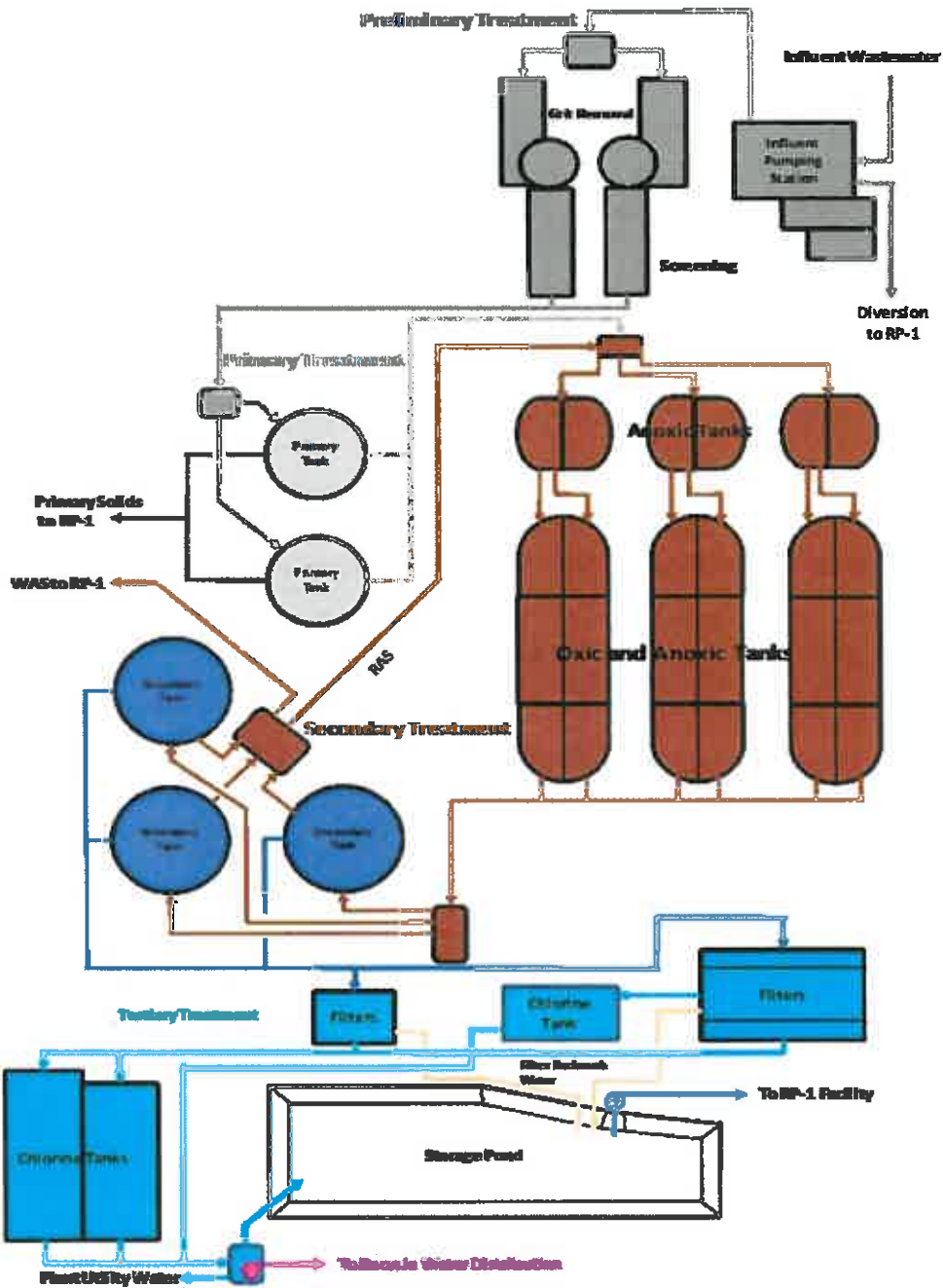



Figure 5 - RP-4 Treatment Process

Carbon Canyon Water Recycling Facility

CCWRF is located in the city of Chino and has been in operation since 1992. The design hydraulic domestic sewage (wastewater) treatment capacity was 11.4 million gallons per day until April 2014 when the facility’s design capacity was re-rated based on an updated filter loading rate, which removed the tertiary filters as the bottleneck in the plant. The re-rating increased the plant capacity to 12.0 MGD. The updated capacity will be included in the 2015 NPDES permit renewal. The plant serves areas of Chino, Chino Hills, Montclair and Upland. The plant treats the liquid portion of an average influent wastewater flow of approximately 7 MGD.

The liquid treatment section consists of preliminary screening and grit removal, primary clarification, secondary treatment by aeration basins and clarification, tertiary treatment by filtration and disinfection, and dechlorination. Wastewater liquid is treated to California Department of Public Health Title 22 Code of Regulations standards for disinfected tertiary recycled water. The solids removed from CCWRF are pumped to RP-2 for thickening, anaerobic digestion, and dewatering. Figure 6 illustrates the CCWRF treatment process.

Carbon Canyon Water Recycling Facility		
Plant Capacity:	11.4 MGD	
2015/16 Influent Flow:	6.9 MGD	
2015/16 RW Delivery:	3.5 MGD	
2015/16 Creek Discharge:	3.2 MGD	

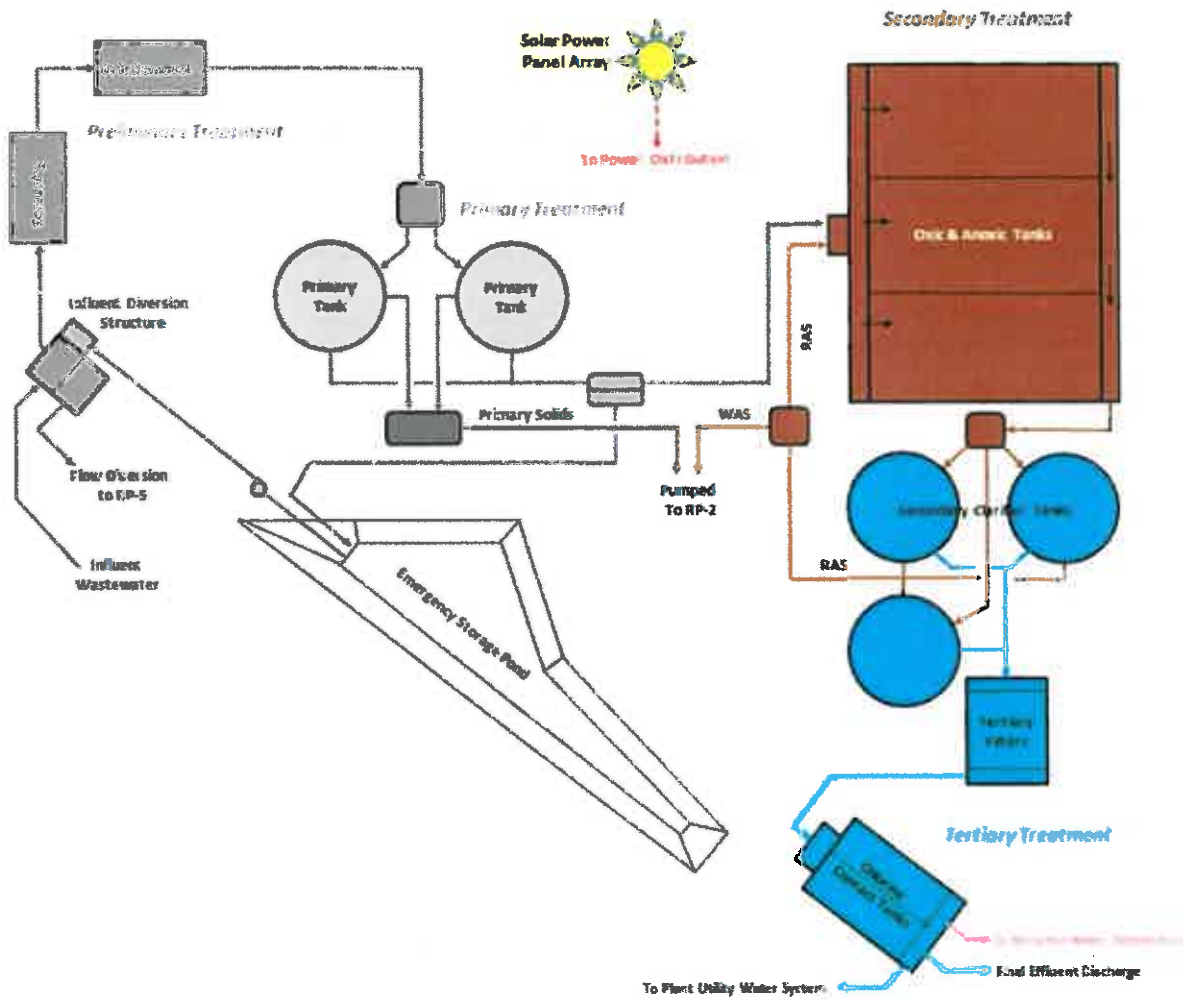


Figure 6 - CCWRF Treatment Process

Regional Water Recycling Plant No. 5

RP-5 is located in the city of Chino and has been in operation since 2004. The design hydraulic domestic sewage (wastewater) treatment capacity is 15 MGD, which includes 1.3 MGD of solids processing returned from RP-2. The plant serves areas of Chino, Chino Hills, and Ontario. The plant treats the liquid portion of an average influent wastewater flow, including RP-2 returned flow, of approximately 8 MGD.

The liquid treatment section consists of preliminary screening and grit removal, primary clarification, secondary treatment by aeration basins and clarification, tertiary treatment by filtration and disinfection, and dechlorination. Wastewater liquid is treated to California Department of Public Health Title 22 Code of Regulations standards for disinfected tertiary recycled water. The solids removed from RP-5 are pumped to RP-2 for thickening, anaerobic digestion, and dewatering. Figure 7 illustrates the RP-5 treatment process.

Regional Water Recycling Plant No. 5

Plant Capacity:	15.0 MGD
2015/16 Influent Flow:	8.0 MGD
2015/16 RW Delivery:	3.2 MGD
2015/16 Creek Discharge:	2.7 MGD



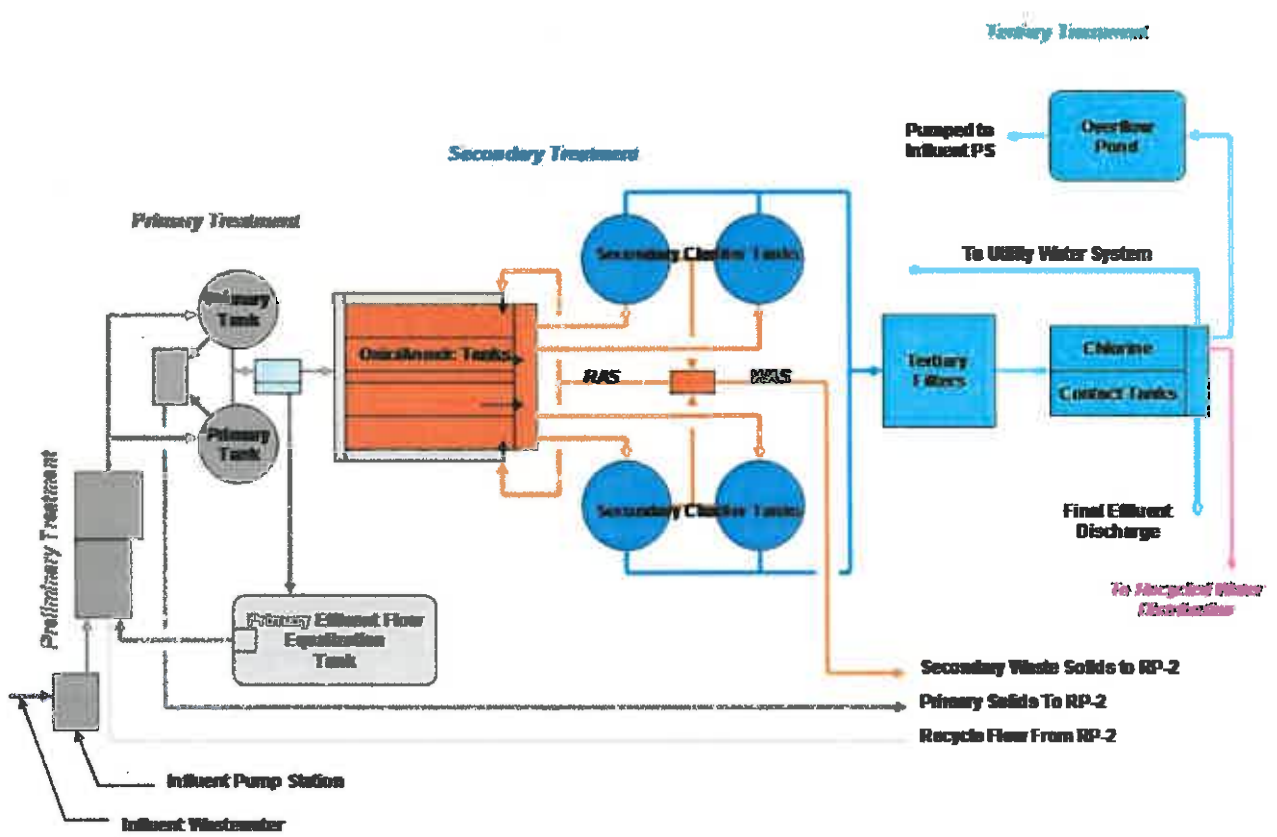


Figure 7 - RP-5 Treatment Process

APPENDIX A

RECYCLED WATER

EFFLUENT MONITORING DATA

FOR CALENDAR YEAR 2015

Inland Empire Utilities Agency
Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

RP-1 (M-001A & M-001B) & RP-1/RP-4 (M-002A) Effluent Monitoring and Coliform Data

Table No. 5a

Date	001 Turbidity		002 Turbidity		001 Temp		002 Temp		001 Daily Coliform		001 7-day Median		002 Daily Coliform*		002 7-day Median		001 FLR	001 DT	001 CT	002 FLR	002 DT	002 CT
	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Max	Min	Min	Max	Min	Min
	NTU		NTU		°C		°C				MPN / 100 mL						gpm/ft ²	min	mg-min/L	gpm/ft ²	min	mg-min/L
Jan-15	0.6	0.9	0.6	0.8	23.3	24.2	22.9	23.7	<2	2	<2	<2	<2	2	<2	<2	4	123	622	4	155	710
Feb-15	0.8	1.0	0.7	1.6	23.8	24.6	23.8	24.2	<2	4	<2	2	<2	4	<2	2	4	125	633	4	150	780
Mar-15	0.5	0.6	0.5	0.7	24.9	26.1	24.4	25.7	<2	4	<2	<2	<2	4	<2	<2	4	138	623	4	161	701
Apr-15	0.5	0.6	0.5	0.6	25.7	26.8	25.5	26.5	<2	2	<2	<2	<2	2	<2	<2	4	141	591	4	161	696
May-15	0.7	0.9	0.4	0.6	26.4	27.6	25.9	26.7	<2	2	<2	<2	<2	2	<2	<2	3	163	718	3	174	771
Jun-15	0.6	1.0	0.5	0.6	28.3	29.3	27.8	28.8	<2	<2	<2	<2	<2	<2	<2	<2	3	165	721	3	172	731
Jul-15	0.5	0.6	0.4	0.6	28.8	30.2	29.0	29.9	<2	2	<2	<2	<2	2	<2	<2	3	168	654	3	166	702
Aug-15	0.6	0.8	0.4	1.3	30.0	30.7	30.0	30.7	<2	2	<2	<2	<2	2	<2	<2	3	167	695	3	158	710
Sep-15	0.7	0.9	0.6	0.7	29.6	30.8	30.0	30.8	<2	2	<2	<2	<2	2	<2	<2	3	153	603	3	134	530
Oct-15	0.7	0.9	0.6	1.6	29.1	30.0	29.1	29.9	<2	12	<2	<2	<2	12	<2	<2	3	162	667	3	141	605
Nov-15	0.7	0.9	0.6	3.0	25.8	27.9	26.0	27.9	<7	2	<2	<2	<7	2	<2	<2	3	167	616	3	138	614
Dec-15	0.7	0.9	0.7	1.0	23.4	24.8	23.8	25.1	<2	2	<2	<2	<2	2	<2	<2	4	147	493	4	139	560
Avg	0.6	0.8	0.5	1.1	26.6	27.8	26.5	27.5	<2	3	<2	<2	<2	3	<2	<2	3	151	635	3	154	676
Min	0.5	0.6	0.4	0.6	23.3	24.2	22.9	23.7	<2	<2	<2	<2	<2	<2	<2	<2	3	123	493	3	134	530
Max	0.8	1.0	0.7	3.0	30.0	30.8	30.0	30.8	<7	12	<2	2	<7	12	<2	2	4	167	721	4	174	780

Requirements for disinfected tertiary-treated recycled water Title 22 Compliance: Min: 450 mg/L-min CT & 90 min DT
*Beginning August 2009, 002 effluent coliform compliance point at M-001B (splitter box).

RP-5 (M-003) & CCWRF (M-004) Effluent Monitoring and Coliform Data

Table No. 5b

Date	003 Turbidity		004 Turbidity		003 Temp		004 Temp		003 Daily Coliform		003 7-day Median		004 Daily Coliform		004 7-day Median		003 FLR	003 DT	003 CT	004 FLR	004 DT	004 CT
	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Max	Min	Min	Max	Min	Min
	NTU		NTU		°C		°C				MPN / 100 mL						gpm/ft ²	min	mg-min/L	gpm/ft ²	min	mg-min/L
Jan-15	0.7	1.6	0.4	0.8	23.0	23.2	21.9	22.7	<2	2	<2	<2	<2	2	<2	<2	4	149	492	1	192	602
Feb-15	0.9	1.2	0.8	1.5	23.7	24.3	18.6	24.4	<2	4	<2	<2	<2	2	<2	<2	4	138	493	1	180	588
Mar-15	0.8	1.0	0.5	0.7	24.2	25.0	24.4	26.1	<2	2	<2	<2	<2	2	<2	<2	4	144	494	1	190	495
Apr-15	0.8	1.1	0.5	0.7	25.5	26.4	26.0	32.2	<2	2	<2	<2	<2	<2	<2	<2	4	168	500	1	182	538
May-15	0.7	0.9	0.5	1.0	25.7	26.2	25.4	27.5	<2	2	<2	<2	<2	2	<2	<2	4	112	558	1	163	570
Jun-15	0.6	0.7	0.5	0.7	26.8	28.2	27.2	29.1	<2	2	<2	<2	<2	<2	<2	<2	4	151	502	1	165	586
Jul-15	0.6	0.8	0.5	0.7	-	-	27.9	30.5	<2	2	<2	<2	<2	4	<2	<2	4	174	518	1	152	450
Aug-15	0.8	1.2	0.5	0.7	-	-	27.6	29.8	<2	<2	<2	<2	<2	2	<2	<2	4	186	524	2	146	486
Sep-15	0.6	0.9	0.6	0.7	30.0	30.1	28.7	29.9	<2	2	<2	<2	<2	<2	<2	<2	4	156	713	2	135	499
Oct-15	0.8	1.3	0.7	1.1	27.7	30.0	27.2	28.0	<2	2	<2	<2	<2	<2	<2	<2	4	156	477	2	127	541
Nov-15	0.8	1.0	0.6	1.0	24.0	26.0	24.2	25.1	<2	<2	<2	<2	<2	2	<2	<2	4	156	525	2	143	587
Dec-15	0.7	1.0	0.7	1.3	23.0	26.2	21.1	22.8	<2	2	<2	<2	<2	4	<2	<2	4	173	504	2	145	450
Avg	0.7	1.1	0.6	0.9	25.3	26.6	25.0	27.3	<2	2	<2	<2	<2	2	<2	<2	4	155	526	1	160	533
Min	0.6	0.7	0.4	0.7	23.0	23.2	18.6	22.7	<2	<2	<2	<2	<2	<2	<2	<2	4	112	477	1	127	450
Max	0.9	1.6	0.8	1.5	30.0	30.1	28.7	32.2	<2	4	<2	<2	<2	4	<2	<2	4	186	713	2	192	602

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

Inland Empire Utilities Agency
Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

RP-1 (M-001A) & RP-1/RP-4 (M-002A) Effluent and Receiving Water (R-002U & R-002D) Data

Table No. 6a

Date	M-001A Cl ₂ Residual ^a				M-002A Cl ₂ Residual ^a				Upstream Cucamonga Creek (R-002U)								Downstream Cucamonga Creek (R-002D)															
	Avg		Max		Avg		Max		DO		Temp		pH		TDS		TIN		Total Hardness		TSS		DO		Temp		pH		Total Hardness		TSS	
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Avg	Min	Avg	Max	Min	Max	Avg	Avg	Avg	Avg	Avg	Min	Max	Min	Max	Avg	Min	Max	Avg	Max	Min	Max	Avg	Avg
Jan-15	0.0	0.0	0.0	0.0	12.7	12.0	10.2	18.8	7.4	10.5	642	1.7	242	<2	9.4	8.4	20.4	22.2	7.2	7.7	164	<2										
Feb-15	0.0	0.0	0.0	0.0	13.0	11.0	13.0	14.2	8.9	9.6	352	3.7			9.6	8.7	20.1	21.7	7.8	8.2												
Mar-15	0.0	0.0	0.0	0.0	13.0	11.0	13.0	14.7	8.9	9.6	674	1.3			9.6	8.7	20.1	21.7	7.8	8.2												
Apr-15	0.0	0.0	0.0	0.0	11.4	10.9	14.1	17.0	9.0	9.6	494	2.6	154	8	8.2	6.8	21.7	23.3	7.3	8.4	148	3										
May-15	0.0	0.0	0.0	0.0	11.5	11.2	17.5	21.8	9.3	10.7	526	0.9			12.3	9.9	21.8	25.1	7.5	9.2												
Jun-15	0.0	0.0	0.0	0.0	9.8	9.2	18.4	20.4	9.0	10.6	378	1.1			8.2	7.5	21.7	23.9	8.4	9.4												
Jul-15	0.0	0.0	0.0	0.0	9.2	8.7	19.4	22.3	9.9	10.4	532	<0.2	199	5	7.1	6.4	23.5	27.7	8.7	9.4	167	3										
Aug-15	0.0	0.0	0.0	0.0	10.3	9.2	20.0	22.8	10.1	11.1	524	3.2			8.0	6.5	22.0	24.0	9.3	9.4												
Sep-15	0.0	0.0	0.0	0.0	10.7	9.9	20.0	22.0	10.1	10.6	376	<0.2			9.0	8.1	25.4	27.4	8.5	9.0												
Oct-15	0.0	0.0	0.0	0.0	11.1	10.5	16.9	21.3	10.1	10.4	136	1.5	52	9	8.4	7.5	24.0	27.4	8.3	9.0	138	2										
Nov-15	0.0	0.0	0.0	0.0	13.9	12.8	11.5	15.6	9.8	10.8	320	0.3			9.3	8.5	22.7	25.0	8.5	8.8												
Dec-15	0.0	0.0	0.0	0.0	13.6	10.3	7.7	17.5	7.4	10.4	395	1.4			9.5	9.1	20.6	23.0	8.0	8.7												
Avg	0.0	0.0	0.0	0.0	11.7	10.6	15.1	19.0	9.2	10.4	446	1.5	162	6	9.0	8.0	22.0	24.4	8.1	8.8	154	3										
Min	0.0	0.0	0.0	0.0	8.2	8.7	7.7	14.2	7.4	9.6	136	<0.2	52	9	7.1	6.4	20.1	21.7	7.2	7.7	138	<2										
Max	0.0	0.0	0.0	0.0	13.9	12.8	20.0	22.8	10.1	11.1	674	3.7	242	9	12.3	9.9	25.4	27.7	9.3	9.4	167	3										

RP-5 (M-003) & CCWRF (M-004) Effluent and Receiving Water (R-003U, R-003D, & R-004U) Data

Table No. 6b

Date	M-003 Cl ₂ Residual ^a				M-004 Cl ₂ Residual ^a				Upstream Chino Creek (R-003U)								Downstream Chino Creek (R-003D)								Upstream Chino Creek (R-004U)																					
	Avg		Max		Avg		Max		DO		Temp		pH		TDS		TIN		Total Hardness		TSS		DO		Temp		pH		Total Hardness		TSS		DO		Temp		pH		TDS		TIN		Total Hardness		TSS	
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Avg	Min	Avg	Max	Min	Max	Avg	Avg	Avg	Avg	Avg	Min	Max	Min	Max	Avg	Min	Max	Avg	Max	Min	Max	Avg	Min	Max	Avg	Max	Avg	Avg	Avg	Avg	Avg	Avg					
Jan-15	0.0	0.0	0.0	0.0	8.6	7.7	21.8	22.8	9.7	10.2	522	6	179	6	7.2	6.6	20.7	22.3	6.9	7.6	214	2	13.6	11.2	18.0	23.4	10.5	13.3	702	3.2	407	40														
Feb-15	0.0	0.0	0.0	0.0	11.7	10.1	16.8	24.8	8.0	11.9	1014	4.8			6.9	6.7	23.1	23.6	7.1	7.3			12.4	11.1	19.4	26.8	9.5	12.7	1062	6.9																
Mar-15	0.0	0.0	0.0	0.0	14.4	10.1	24.6	29.7	7.9	10.1	534	5.2			6.5	6.1	21.2	21.9	7.2	8.0			12.8	11.7	24.9	31.5	9.8	10.9	810	2.0																
Apr-15	0.0	0.0	0.0	0.0	15.2	7.7	24.2	27.3	7.4	9.9	606	4.1	194	2	6.8	6.2	22.4	25.0	7.4	7.6	250	15	12.5	10.9	26.8	33.3	8.4	10.6	366	4.2	170	3														
May-15	0.0	0.0	0.0	0.0	11.6	10.4	25.2	27.8	7.6	7.9	590	3.1			6.9	6.4	23.0	23.7	7.0	7.4			13.5	13.1	25.8	34.5	9.0	10.9	758	0.9																
Jun-15	0.0	0.0	0.0	0.0	12.8	7.2	26.7	28.5	7.4	8.4	572	4			7.1	6.8	25.4	26.5	6.7	6.9			13.2	12.1	31.4	35.4	8.7	10.4	988	0.2																
Jul-15	0.0	0.0	0.0	0.0	13.9	10.8	27.8	30.7	7.7	8.6	586	1.1	185	69									13.3	11.4	27.1	34.7	8.2	10.2	934	0.3	581	331														
Aug-15	0.0	0.0	0.0	0.0	15.1	8.6	29.2	31.6	7.5	8.9	592	4.1											11.0	7.0	29.1	34.2	8.6	10.2	964	0.2																
Sep-15	0.0	0.0	0.0	0.0	12.2	8.4	29.3	31.1	7.6	9.3	608	3.4			5.8	5.8	27.4	27.4	7.1	8.8			11.7	9.2	30.6	36.3	8.7	10.5	878	2.2																
Oct-15	0.0	0.0	0.0	0.0	9.8	7.6	27.1	28.5	7.1	8.8	566	4.3	178	4	6.2	5.8	23.0	26.5	7.1	7.4	216	11	13.2	11.7	23.1	26.5	7.2	9.3	294	1.8	131	1														
Nov-15	0.0	0.0	0.0	0.0	11.2	7.2	24.7	25.6	7.2	8.4	588	6.8			7.0	6.6	18.0	20.8	7.3	7.6			13.8	10.4	22.9	25.1	7.7	9.9	708	1.9																
Dec-15	0.0	0.0	0.0	0.0	10.0	7.3	21.7	23.8	7.3	7.5	568	5.8			7.7	6.9	18.8	20.5	7.1	7.5			15.0	14.1	14.9	20.9	8.0	10.5	820	3.8																
Avg	0.0	0.0	0.0	0.0	12.2	8.4	24.9	27.7	7.7	9.2	612	4.4	184	20	6.8	6.4	22.3	23.8	7.1	7.6	227	9	13.0	11.2	24.5	30.2	8.7	10.8	774	2.3	322	94														
Min	0.0	0.0	0.0	0.0	8.6	6.4	16.8	22.8	7.1	7.5	522	1.1	178	2	5.8	5.8	18.0	20.5	6.7	6.9	214	2	11.0	7.0	14.9	20.9	7.2	9.3	294	0.2	131	1														
Max	0.0	0.0	0.0	0.0	15.2	10.8	29.3	31.6	9.7	11.9	1,014	6.8	194	69	7.2	6.9	27.4	27.4	7.4	8.8	250	15	15.0	14.1	31.4	36.3	10.5	13.3	1,062	6.9	581	331														

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

Inland Empire Utilities Agency
 Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

RP-1 (REC-001) & RP-4 (REC-002) Recycled Water Data

Table No. 7a

Date	REC-001											REC-002											
	Flow	pH	Turbidity	CT	Daily Coliform		7-day Median		BOD	TSS	TDS	Flow	pH	Turbidity	CT	Daily Coliform		7-day Median		BOD	TSS	TDS	
	Avg	Avg	Avg	Min	Avg	Max	Avg	Max	Avg	Avg	Avg	Avg	Avg	Avg	Min	Avg	Max	Avg	Max	Avg	Avg	Avg	
	mgd	unit	NTU	mg-min/L	MPN / 100 mL				mg/L				mgd	unit	NTU	mg-min/L	MPN / 100 mL				mg/L		
Jan-15	9.2	7.0	0.6	622	<2	4	<2	<2	<2	<2	532	5.5	7.3	0.4	777	<2	2	<2	<2	<2	<2	495	
Feb-15	14.9	7.1	0.8	633	<2	2	<2	<2	<2	<2	559	7.4	7.3	0.5	819	<2	2	<2	<2	<2	<2	498	
Mar-15	15.0	7.0	0.5	623	<2	4	<2	<2	<2	<2	529	10.1	7.2	0.5	763	<2	2	<2	<2	<2	<2	482	
Apr-15	15.4	7.0	0.5	591	<2	4	<2	2	<2	<2	517	10.6	7.1	0.5	813	<2	<2	<2	<2	<2	<2	497	
May-15	14.8	7.1	0.7	718	<2	7	<2	2	<2	<2	506	9.2	7.2	0.5	534	<2	<2	<2	<2	<2	<2	498	
Jun-15	19.1	7.3	0.6	721	<2	4	<2	<2	<2	<2	504	10.6	7.2	0.5	605	<2	<2	<2	<2	<2	<2	488	
Jul-15	20.3	7.2	0.5	654	<2	2	<2	<2	<2	<2	477	9.6	7.3	0.6	965	<2	<2	<2	<2	<2	<2	487	
Aug-15	21.2	7.2	0.6	695	<2	2	<2	<2	<2	<2	487	10.7	7.2	0.5	708	<2	<2	<2	<2	<2	<2	463	
Sep-15	16.5	7.2	0.7	603	<2	4	<2	<2	<2	<2	495	9.7	7.2	0.9	579	<2	<2	<2	<2	<2	<2	473	
Oct-15	13.8	7.2	0.7	667	<2	<2	<2	<2	<2	<2	482	10.1	7.1	0.7	836	<2	<2	<2	<2	<2	<2	466	
Nov-15	10.0	7.2	0.7	616	<7	140	<2	<2	<2	<2	476	15.0	7.2	0.7	759	<2	2	<2	<2	<2	<2	466	
Dec-15	13.3	7.1	0.7	493	<2	4	<2	<2	<2	<2	484	12.7	7.1	0.4	915	<2	<2	<2	<2	<2	<2	458	
Avg	15.3	7.1	0.6	639	<2	15	<2	<2	<2	<2	504	10.1	7.2	0.5	772	<2	<2	<2	<2	<2	<2	481	
Min	9.2	7.0	0.5	493	<2	<2	<2	<2	<2	<2	476	5.5	7.1	0.4	534	<2	<2	<2	<2	<2	<2	458	
Max	21.2	7.3	0.8	721	<7	140	<2	2	<2	<2	559	15.0	7.3	0.9	965	<2	2	<2	<2	<2	<2	498	

RP-5 (REC-003) & CCWRF (REC-004) Recycled Water Data

Table No. 7b

Date	REC-003											REC-004											
	Flow	pH	Turbidity	CT	Daily Coliform		7-day Median		BOD	TSS	TDS	Flow	pH	Turbidity	CT	Daily Coliform		7-day Median		BOD	TSS	TDS	
	Avg	Avg	Avg	Min	Avg	Max	Avg	Max	Avg	Avg	Avg	Avg	Avg	Avg	Min	Avg	Max	Avg	Max	Avg	Avg	Avg	
	mgd	unit	NTU	mg-min/L	MPN / 100 mL				mg/L				mgd	unit	NTU	mg-min/L	MPN / 100 mL				mg/L		
Jan-15	0.3	7.0	0.7	492	<2	2	<2	<2	<2	<2	527	0.1	7.2	0.4	602	<2	2	<2	<2	<2	<2	556	
Feb-15	0.4	6.9	0.9	493	<2	4	<2	<2	<2	<2	546	3.5	7.1	0.8	588	<2	2	<2	<2	<2	<2	574	
Mar-15	3.0	7.0	0.8	494	<2	2	<2	<2	<2	<2	518	2.6	7.1	0.5	495	<2	2	<2	<2	<2	<2	540	
Apr-15	3.7	6.9	0.8	500	<2	2	<2	<2	<2	<2	558	2.8	6.9	0.5	538	<2	<2	<2	<2	<2	<2	560	
May-15	3.6	6.9	0.7	558	<2	2	<2	<2	<2	<2	519	2.4	7.0	0.5	570	<2	2	<2	<2	<2	<2	527	
Jun-15	4.9	7.0	0.6	502	<2	2	<2	<2	<2	<2	536	4.1	6.9	0.5	586	<2	<2	<2	<2	<2	<2	549	
Jul-15	5.2	7.1	0.6	518	<2	2	<2	<2	<2	<2	521	4.9	6.9	0.5	450	<2	4	<2	<2	<2	<2	551	
Aug-15	6.0	7.1	0.8	524	<2	<2	<2	<2	<2	<2	530	5.1	6.8	0.5	486	<2	2	<2	<2	<2	<3	573	
Sep-15	3.7	7.1	0.6	713	<2	2	<2	<2	<2	<2	511	4.3	6.8	0.6	499	<2	<2	<2	<2	<2	<2	572	
Oct-15	4.1	7.0	0.8	477	<2	2	<2	<2	<2	<2	526	4.2	6.9	0.7	541	<2	<2	<2	<2	<2	<2	570	
Nov-15	2.8	6.9	0.8	525	<2	<2	<2	<2	<2	<2	526	3.4	7.0	0.6	587	<2	2	<2	<2	<2	<2	555	
Dec-15	1.9	6.9	0.7	504	<2	2	<2	<2	<2	<2	520	2.8	7.0	0.7	450	<2	4	<2	<2	<2	<2	568	
Avg	3.3	7.0	0.7	508	<2	2	<2	<2	<2	<2	528	3.4	7.0	0.6	536	<2	2	<2	<2	<2	<2	558	
Min	0.3	6.9	0.6	477	<2	<2	<2	<2	<2	<2	511	0.1	6.8	0.4	450	<2	<2	<2	<2	<2	<2	527	
Max	6.0	7.1	0.9	558	<2	4	<2	<2	<2	<2	558	5.1	7.2	0.8	602	<2	4	<2	<2	<2	<3	574	

Inland Empire Utilities Agency
Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

RP-1 (M-001B) Effluent Monthly Inorganic & Organic Data

Table No. 8a

Date	Total Hardness	HCO ₃ ²⁻	B	Ca	CO ₃ ²⁻	Cl	F	Mg	Na	SO ₄	Cd, TR	Cr, Total	Cu, TR	Pb, TR	Hg, TR	Se, TR	Ag, TR	Zn, TR	Chloro-bromomethane	Bromo-chloromethane	2,3,7,8-TCDD
Limits	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pg/L
Jan-15	158	150	0.2	48	0	114	0.2	9	100	63	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	24	4	19	
Feb-15	162	144	0.2	49	0	115	0.3	10	106	62	<0.25	1.1	4	<0.5	<0.05	<2	<0.25	31	5	20	
Mar-15	151	137	0.3	46	0	123	0.3	9	109	72	<0.25	0.9	3	<0.5	<0.05	<2	<0.25	27			
Apr-15	146	147	0.2	45	0	114	0.3	8	107	67	<0.25	1.6	5	<0.5	<0.05	<2	<0.25	24	5	23	
May-15	147	150	0.3	45	0	110	0.3	9	105	60	<0.25	1.1	4	<0.5	<0.05	<2	<0.25	27			
Jun-15	160	178	0.2	50	0	106	0.3	8	93	51	<0.25	1.5	4	<0.5	<0.05	<2	<0.25	24			
Jul-15	196	150	0.2	48	0	105	0.3	9	97	50	<0.25	0.7	3	<0.5	<0.05	<2	<0.25	28	4	21	
Aug-15	158	155	0.2	49	0	99	0.2	9	101	46	<0.25	<0.5	3	<0.5	<0.05	<2	<0.25	27			
Sep-15	157	148	0.2	48	0	108	0.2	9	94	47	<0.25	0.5	4	<0.5	<0.05	<2	<0.25	25			
Oct-15	153	165	0.2	48	0	101	0.2	8	97	46	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	21	3	19	0.000
Nov-15	163	159	0.2	50	0	104	0.3	9	97	51	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	29			
Dec-15	148	165	0.2	45	0	112	0.3	9	107	51	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	25			
Avg	155	154	0.2	48	0	109	0.3	9	101	55	<0.25	0.8	4	<0.5	<0.05	<2	<0.25	26	4	20	0.000
Min	146	137	0.2	45	0	99	0.2	8	93	46	<0.25	<0.5	3	<0.5	<0.05	<2	<0.25	21	3	19	0.000
Max	163	178	0.3	50	0	123	0.3	10	109	72	<0.25	1.6	5	<0.5	<0.05	<2	<0.25	31	5	23	0.000

RP-1/RP-4 (M-002A) Effluent Monthly Inorganic & Organic Data

Table No. 8b

Date	Total Hardness	HCO ₃ ²⁻	B	Ca	CO ₃ ²⁻	Cl	F	Mg	Na	SO ₄	Cd, TR	Cr, Total	Cu, TR	Pb, TR	Hg, TR	Se, TR	Ag, TR	Zn, TR	Chloro-bromomethane	Bromo-chloromethane	2,3,7,8-TCDD	
Limits	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	pg/L
											1 mo avg; 2 max daily		14 mo avg; 20 max daily	8 mo avg; 15 max daily				120 mo avg; 150 max daily				
Jan-15	154	147	0.2	47	0	116	0.2	9	103	78	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	23	4	18		
Feb-15	161	141	0.2	49	0	107	0.3	9	113	73	<0.25	1.1	4	<0.5	<0.05	<2	<0.25	32				
Mar-15	154	131	0.3	46	0	123	0.3	9	113	87	<0.25	0.7	4	<0.5	<0.05	<2	<0.25	28				
Apr-15	151	147	0.3	47	0	112	0.3	8	112	80	<0.25	1.4	5	<0.5	<0.05	<2	<0.25	24	5	19		
May-15	145	140	0.2	44	0	112	0.3	9	109	78	<0.25	1.0	4	<0.5	<0.05	<2	<0.25	26				
Jun-15	158	172	0.2	50	0	106	0.3	8	96	68	<0.25	0.9	4	<0.5	<0.05	<2	<0.25	24				
Jul-15	160	141	0.2	49	0	107	0.3	9	104	74	<0.25	1.1	4	<0.5	<0.05	<2	<0.25	29	2	13		
Aug-15	152	179	0.2	46	0	106	0.2	9	115	102	<0.25	0.6	4	<0.5	<0.05	<2	<0.25	27				
Sep-15	159	130	0.2	49	0	107	0.2	9	108	99	<0.25	0.7	4	<0.5	<0.05	<2	<0.25	24				
Oct-15	151	164	0.2	47	0	101	0.2	8	101	63	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	21	3	18	0.000	
Nov-15	160	152	0.2	49	0	102	0.3	9	101	67	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	27				
Dec-15	146	161	0.2	44	0	119	0.3	9	115	66	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	23				
Avg	154	146	0.2	47	0	110	0.3	9	108	78	<0.25	0.8	4	<0.5	<0.05	<2	<0.25	26	3	17	0.000	
Min	145	129	0.2	44	0	101	0.2	8	96	63	<0.25	<0.5	4	<0.5	<0.05	<2	<0.25	21	2	13	0.000	
Max	161	172	0.3	50	0	123	0.3	9	115	102	<0.25	1.4	5	<0.5	<0.05	<2	<0.25	32	5	19	0.000	

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

Inland Empire Utilities Agency
Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

RP-5 (M-003) Effluent Monthly Inorganic Data

Table No. 8c

Date	Total Hardness	HCO ₃ ²⁻	B	Ca	CO ₃ ²⁻	Cl	F	Mg	Na	SO ₄	Cd, TR	Cr, Total	Cu, TR	Pb, TR	Hg, TR	Se, TR	Ag, TR	Zn, TR	Chlorodibromomethane	Bromodichloromethane	2,3,7,8-TCDF
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Limits																			34 mo avg; 68 max daily		0.014 mo avg; 0.028 max
Jan-15	173	126	0.3	51	0	140	0.1	11	96	71	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	45	12	28	
Feb-15	192	137	0.3	58	0	138	0.2	11	108	69	<0.25	1.3	5	<0.5	<0.05	<2	<0.25	51	4	20	
Mar-15	177	117	0.3	52	0	136	0.2	11	100	67	0.35	1.0	6	<0.5	<0.05	<2	<0.25	54	6	22	
Apr-15	197	131	0.2	59	0	137	0.2	12	112	80	<0.25	1.7	8	<0.5	<0.05	<2	<0.25	52	5	23	
May-15	186	146	0.2	58	0	134	0.2	10	103	73	<0.25	1.4	8	<0.5	<0.05	<2	<0.25	56	6	25	
Jun-15	185	132	0.2	56	0	138	0.2	11	102	87	0.83	1.2	8	<0.5	<0.05	<2	<0.25	52	6	28	
Jul-15																					
Aug-15																					
Sep-15	204	135	0.3	61	0	148	0.1	12	110	64	<0.25	0.7	8	<0.5	<0.05	<2	<0.25	56	8	35	
Oct-15	184	133	0.2	55	0	129	0.1	11	101	64	<0.25	<0.5	6	<0.5	<0.05	<2	<0.25	45	3	20	0.000
Nov-15	210	145	0.2	65	0	132	0.2	12	102	73	<0.25	0.7	9	<0.5	<0.05	<2	<0.25	64	12	36	0.000
Dec-15	196	138	0.2	57	0	140	0.2	13	104	63	<0.25	0.6	9	<0.5	<0.05	<2	<0.25	49	8	27	0.660
Avg	190	134	0.2	57	0	137	0.2	11	104	71	<0.32	1.0	7	<0.5	<0.05	<2	<0.25	52	7	26	0.220
Min	173	117	0.2	51	0	129	0.1	10	96	63	<0.25	<0.5	5	<0.5	<0.05	<2	<0.25	45	3	20	0.000
Max	210	146	0.3	65	0	148	0.2	13	112	87	0.83	1.7	9	<0.5	<0.05	<2	<0.25	64	12	36	0.660

CCWRF (M-004) Effluent Monthly Inorganic Data

Table No. 8d

Date	Total Hardness	HCO ₃ ²⁻	B	Ca	CO ₃ ²⁻	Cl	F	Mg	Na	SO ₄	Cd, TR	Cr, Total	Cu, TR	Pb, TR	Hg, TR	Se, TR	Ag, TR	Zn, TR	Chlorodibromomethane	Bromodichloromethane	2,3,7,8-TCDF
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Limits																			34 mo avg; 68 max daily	46 mo avg; 67 max daily	
Jan-15	168	138	0.2	50	0	131	0.3	11	101	74	<0.25	0.5	7	<0.5	<0.05	<2	<0.25	49	25	37	
Feb-15	181	138	0.3	55	0	142	0.2	11	115	75	<0.25	1.3	5	<0.5	<0.05	<2	<0.25	51			
Mar-15	176	137	0.3	53	0	135	0.2	10	105	68	<0.25	1.1	5	<0.5	<0.05	<2	<0.25	55			
Apr-15	187	149	0.3	57	0	145	0.2	11	107	75	<0.25	1.8	8	<0.5	<0.05	<2	<0.25	71	18	37	
May-15	172	136	0.2	52	0	133	0.3	10	112	100	<0.25	1.3	7	<0.5	<0.05	<2	<0.25	57			
Jun-15	178	150	0.2	55	0	130	0.2	10	103	80	<0.25	1.5	8	<0.5	<0.05	<2	<0.25	61			
Jul-15	182	133	0.2	55	0	135	0.2	11	113	96	<0.25	1.0	7	<0.5	<0.05	<2	<0.25	66	11	27	
Aug-15	181	140	0.3	55	0	137	0.2	11	125	96	<0.25	0.8	7	<0.5	<0.05	<2	<0.25	53			
Sep-15	180	121	0.3	54	0	150	0.2	11	117	96	<0.25	0.8	7	<0.5	<0.05	<2	<0.25	59			
Oct-15	176	124	0.2	53	0	146	0.2	11	118	87	<0.25	0.9	8	<0.5	<0.05	<2	<0.25	65	26	43	0.000
Nov-15	195	122	0.2	58	0	137	0.2	12	121	100	<0.25	0.8	8	<0.5	<0.05	<2	<0.25	61	23	38	
Dec-15	175	128	0.3	52	0	152	0.2	11	126	100	<0.25	0.8	8	<0.5	<0.05	<2	<0.25	68	23	40	
Avg	179	135	0.3	54	0	139	0.2	11	114	87	<0.25	1.1	7	<0.5	<0.05	<2	<0.25	60	21	37	0.000
Min	168	121	0.2	50	0	130	0.2	10	101	68	<0.25	0.5	5	<0.5	<0.05	<2	<0.25	49	11	27	0.000
Max	195	150	0.3	58	0	152	0.3	12	126	100	<0.25	1.8	8	<0.5	<0.05	<2	<0.25	71	26	43	0.000

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

Inland Empire Utilities Agency
Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

RP-1 (M-001B) Effluent Quarterly Data

Table No. 9a

	Al, TR	Sb, TR	As, TR	Ba, TR	Co, TR	Ni, TR
Date	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Jan-15	35	<1	<2	15	<1	2
Feb-15	36	<1	<2	11	<1	3
Mar-15	33	<1	<2	12	<1	2
Apr-15	<25	<1	<2	19	<1	4
May-15	26	0.8	<2	15	<1	2
Jun-15	38	0.8	<2	12	<1	2
Jul-15	40	0.9	<2	15	<1	3
Aug-15	35	0.8	<2	13	<1	2
Sep-15	40	0.9	<2	16	<1	3
Oct-15	35	0.8	<2	14	<1	3
Nov-15	47	0.8	<2	15	<1	3
Dec-15	35	0.8	<2	14	<1	2
Avg	35	1	<2	14	<1	3
Min	<25	1	<2	11	<1	2
Max	47	<1	<2	19	<1	4

RP-1/RP-4 (M-002A) Effluent Quarterly Data

Table No. 9b

	Al, TR	Sb, TR	As, TR	Ba, TR	Co, TR	Ni, TR
Date	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Jan-15	35	<1	<2	14	<1	2
Feb-15	35	<1	<2	11	<1	2
Mar-15	32	<1	<2	12	<1	2
Apr-15	<25	<1	<2	18	<1	3
May-15	<25	0.8	<2	15	<1	2
Jun-15	44	0.8	<2	12	<1	2
Jul-15	35	0.9	<2	16	<1	3
Aug-15	32	0.7	<2	13	<1	3
Sep-15	34	0.9	<2	16	<1	3
Oct-15	41	0.8	<2	14	<1	3
Nov-15	47	0.7	<2	15	<1	3
Dec-15	33	0.8	<2	15	<1	2
Avg	35	0.9	<2	14	<1	3
Min	<25	0.7	<2	11	<1	2
Max	47	<1.0	<2	18	<1	3

RP-5 (M-003) Effluent Quarterly Data

Table No. 9c

	Al, TR	Sb, TR	As, TR	Ba, TR	Co, TR	Ni, TR
Date	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Jan-15	<25	<1	<2	17	<1	3
Feb-15	<25	<1	<2	32	<1	2
Mar-15	<25	<1	<2	22	<1	2
Apr-15	<25	<1	<2	33	<1	3
May-15	<25	0.5	<2	42	<1	3
Jun-15	<25	0.5	2	29	<1	3
Jul-15						
Aug-15						
Sep-15	<25	<0.5	<2	38	<1	3
Oct-15	<25	<0.5	<2	25	<1	3
Nov-15	<25	0.6	<2	37	<1	3
Dec-15	<25	<0.5	<2	37	<1	2
Avg	<25	<1	<2	31	<1	3
Min	<25	<1	<2	17	<1	2
Max	<25	<1	2	42	<1	3

CCWRF (M-004) Effluent Quarterly Data

Table No. 9d

	Al, TR	Sb, TR	As, TR	Ba, TR	Co, TR	Ni, TR
Date	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Jan-15	<25	<1	<2	13	<1	2
Feb-15	50	<1	<2	16	<1	2
Mar-15	75	<1	<2	18	<1	2
Apr-15	86	<1	2	23	<1	4
May-15	65	0.5	<2	26	<1	2
Jun-15	64	0.6	2	21	<1	2
Jul-15	72	0.6	2	23	<1	3
Aug-15	<25	<0.5	<2	22	<1	2
Sep-15	54	0.6	<2	24	<1	3
Oct-15	45	0.5	<2	22	<1	3
Nov-15	50	0.6	3	16	<1	3
Dec-15	73	0.5	<2	22	<1	2
Avg	57	1	<2	21	<1	3
Min	<25	<1	<2	13	<1	2
Max	86	<1	3	26	<1	4

Inland Empire Utilities Agency

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

Table No. 10

Mo-Yr	Discharged Eff Flow			TIN						Agency-wide TIN				
	RP1/RP4	RP5	CC	RP1/RP4		RP5		CC		Discharge		Limit		12-MRA
	MGD			mg/L	lbs/day	mg/L	lbs/day	mg/L	lbs/day	flow wt.	total	flow wt.	total	flow-wt.
										mg/L	lbs/day	mg/L	lbs/day	mg/L
Jan-15	20.0	9.8	6.8	9.1	1,510	7.9	650	4.4	250	7.9	2,410	8	5,338	5.2
Feb-15	13.1	9.9	2.4	6.9	750	8.9	730	3.9	80	7.4	1,560	8	5,338	5.3
Mar-15	14.8	4.5	1.9	6.2	770	7.0	260	3.8	60	6.2	1,090	8	5,338	5.4
Apr-15	13.8	2.7	1.3	5.0	570	6.8	150	3.6	40	5.2	760	8	5,338	5.4
May-15	12.6	3.9	3.2	7.1	750	5.1	170	3.5	90	6.1	1,010	8	5,338	5.4
Jun-15	5.8	0.7	1.8	4.6	220	6.4	40	3.7	60	4.6	320	8	5,338	5.4
Jul-15	6.3	0.0	1.8	5.8	310	6.3	0	3.0	40	5.2	350	8	5,338	5.6
Aug-15	3.1	0.0	1.6	5.3	130	6.5	0	3.6	50	4.7	180	8	5,338	5.7
Sep-15	10.8	1.1	2.2	4.8	430	6.8	60	3.9	70	4.8	560	8	5,338	5.7
Oct-15	12.8	2.9	2.4	4.7	510	6.8	170	5.6	110	5.2	790	8	5,338	5.8
Nov-15	20.3	2.8	3.6	5.2	890	6.4	150	5.6	170	5.4	1,210	8	5,338	5.7
Dec-15	18.1	3.4	4.0	6.2	940	7.3	210	5.1	170	6.2	1,320	8	5,338	5.7
Avg	12.6	3.5	2.8	5.9	650	6.8	220	4.1	100	5.7	960	8	5,338	5.5
Min	3.1	0.0	1.3	4.6	130	5.1	0	3.0	40	4.6	180	8	5,338	5.2
Max	20.3	9.9	6.8	9.1	1,510	8.9	730	5.6	250	7.9	2,410	8	5,338	5.8

Inland Empire Utilities Agency
Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

Agency-wide TDS 12-Month Running Averages

Table No. 11

Mo-Yr	Flows								Total Dissolved Solids (TDS)								Agency-wide TDS					
	RP-1		RP-4		RP-5		CC		001	RP-1		RP-4		RP-5		CC		Discharge		Limit		12-MRA
	001 ¹	RW	002	RW	RP-5	RW	CC	RW		001	RW ²	002	RW	RP-5	RW ²	CC	RW ²	flow wt. mg/L	total lbs/day	flow wt. mg/L	total lbs/day	
	MGD								mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L						
Jan-15	2.3	9.2	17.8	5.5	9.8	0.3	6.8	0.1	584	532	552	495	555	527	568	556	546	267,120	550	366,960	525	
Feb-15	2.6	14.9	10.4	7.4	9.9	0.4	2.4	3.5	571	559	576	498	573	546	611	574	560	235,860	550	366,960	529	
Mar-15	1.9	15.0	12.9	10.1	4.5	3.0	1.9	2.6	548	529	542	482	562	518	578	540	528	225,870	550	366,960	532	
Apr-15	2.3	15.4	11.4	10.6	2.7	3.7	1.3	2.8	566	517	538	497	585	558	588	560	531	214,470	550	366,960	533	
May-15	2.0	14.8	10.6	9.2	3.9	3.6	3.2	2.4	541	506	532	498	550	519	562	527	520	218,990	550	366,960	533	
Jun-15	3.0	19.1	2.8	10.6	0.7	4.9	1.8	4.1	558	504	518	488	596	536	561	549	515	191,800	550	366,960	534	
Jul-15	2.7	20.3	3.6	9.6	0.0	5.2	1.8	4.9	529	477	507	487	NA	521	571	551	500	185,940	550	366,960	534	
Aug-15	1.9	21.2	1.2	10.7	0.0	6.0	1.6	5.1	533	487	523	463	NA	530	598	573	503	182,830	550	366,960	534	
Sep-15	3.3	16.5	7.5	9.7	1.1	3.7	2.2	4.3	538	495	501	473	555	511	598	572	508	194,000	550	366,960	532	
Oct-15	1.8	13.8	11.0	8.6	2.9	4.1	2.4	4.2	526	482	503	466	548	526	586	570	506	198,020	550	366,960	529	
Nov-15	3.0	10.0	17.3	7.8	2.8	2.8	3.6	3.4	526	476	496	476	547	526	579	555	505	214,540	550	366,960	524	
Dec-15	3.3	13.3	14.8	7.0	3.4	1.9	4.0	2.8	518	484	491	458	528	520	599	568	503	217,570	550	366,960	519	
Avg	2.5	15.3	10.1	8.9	3.5	3.3	2.8	3.4	545	504	523	482	560	528	583	558	519	212,250	550	366,960	530	
Min	1.8	9.2	1.2	5.5	0.0	0.3	1.3	0.1	518	476	491	458	528	511	561	527	500	182,830	550	366,960	519	
Max	3.3	21.2	17.8	10.7	9.9	6.0	6.8	5.1	584	559	576	498	596	558	611	574	560	267,120	550	366,960	534	

NOTES: ¹ Prior to April 2010, 001 effluent flow included recycled water flow.
² Flow and TDS added to flow-weight for RP-1, RP-5, and CCWRF recycled water (May 2010)
NA: Not Analyzed, due to no discharge

APPENDIX B

RECYCLED WATER

COMPLIANCE DATA

FOR CALENDAR YEAR 2015

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

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

Table 18a

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

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)	<0.5	<0.5	<0.5	<0.5	0.8	0.8	0.9	0.8	0.9	0.8	0.8	0.8	0.9
Arsenic (As)	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Beryllium (Be)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium (Cd)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Chromium (Cr)	<0.5	1.1	0.9	1.7	1.1	1.5	0.7	<0.5	0.5	<0.5	<0.5	<0.5	1.7
Copper (Cu)	3.8	3.7	3.4	4.7	4.1	3.6	3.4	3.4	3.7	3.5	3.9	3.9	4.7
Lead (Pb)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nickel (Ni)	2.3	2.5	1.8	3.9	2.4	2.5	2.5	2.4	2.7	2.6	2.7	2.1	3.9
Selenium (Se)	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Silver (Ag)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Thallium (Tl)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Zinc (Zn)	24	31	27	24	27	24	28	27	25	21	29	25	31
CN, Aquatic Free	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2			<2

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

1,1,1-Trichloroethane										<1			<1
1,1,2,2-Tetrachloroethane										<0.5			<0.5
1,1,2-Trichloroethane										<1			<1
1,1-Dichloroethane										<0.5			<0.5
1,1-Dichloroethene										<1			<1
1,2-Dichlorobenzene										<1			<1
1,2-Dichloroethane										<1			<1
1,2-Dichloropropane										<0.5			<0.5
1,3-Dichlorobenzene										<1			<1
1,4-Dichlorobenzene										<1			<1
2-Chloroethyl vinyl ether										<1			<1
Benzene										<1			<1
Bromodichloromethane	19	20		23			21			19			23
Bromoform	<1	<1		<1			<1			<1			<1
Bromomethane										<1			<1
Carbon tetrachloride										<1			<1
Chlorobenzene										<1			<1
Chloroethane										<1			<1
Chloroform	56	52		61			79			74			79
Chloromethane										<1			<1
cis-1,3-Dichloropropene										<1			<1
Dibromochloromethane	4	5		5			4			3			5
Ethylbenzene										<1			<1
Methylene chloride										<1			<1
Tetrachloroethene										<1			<1
Toluene										<1			<1
trans-1,2-Dichloroethene										<0.5			<0.5
trans-1,3-Dichloropropene										<1			<1
Trichloroethene										<1			<1
Trichlorofluoromethane										<2			<2
Vinyl chloride										<1			<1
Acrolein										<2			<2
Acrylonitrile										<2			<2

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

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

Table 18b

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

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

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

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

Table 18c

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

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD										<0.006			<0.006
4,4-DDE										<0.006			<0.006
4,4-DDT										<0.008			<0.008
Aldrin										<0.004			<0.004
Alpha-BHC										<0.008			<0.008
Beta-BHC										<0.005			<0.005
Delta-BHC										<0.007			<0.007
Dieldrin										<0.006			<0.006
Endosulfan I										<0.01			<0.01
Endosulfan II										<0.007			<0.007
Endosulfan Sulfate										<0.009			<0.009
Endrin										<0.009			<0.009
Endrin aldehyde										<0.006			<0.006
Gamma-BHC										<0.01			<0.01
Heptachlor										<0.006			<0.006
Heptachlor epoxide										<0.007			<0.007
Chlordane										<0.1			<0.1
PCB-1016										<0.5			<0.5
PCB-1221										<0.5			<0.5
PCB-1232										<0.5			<0.5
PCB-1242										<0.5			<0.5
PCB-1248										<0.5			<0.5
PCB-1254										<0.5			<0.5
PCB-1260										<0.5			<0.5
Toxaphene										<0.5			<0.5
RP-1 (M-001B) Effluent Dioxins & Furans, pg/L (reported values based on detection limit)													
PCDD/PCDF Congeners*										0.0			0.0

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

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

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

Table 19a

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

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)	<0.5	<0.5	<0.5	<0.5	0.8	0.8	0.9	0.7	0.9	0.8	0.7	0.8	0.9
Arsenic (As)	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Beryllium (Be)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium (Cd)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Chromium (Cr)	<0.5	1.1	0.7	1.4	1.0	0.9	1.1	0.6	0.7	<0.5	<0.5	<0.5	1.4
Copper (Cu)	3.7	3.8	3.7	4.6	4.2	4.0	3.7	3.6	4.1	3.7	4.0	3.8	4.6
Lead (Pb)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nickel (Ni)	2.3	2.5	1.8	2.6	2.4	2.5	2.7	2.6	2.9	2.6	2.7	2.3	2.9
Selenium (Se)	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Silver (Ag)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Thallium (Tl)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Zinc (Zn)	23	32	28	24	26	24	29	27	24	21	27	23	32
CN, Aquatic Free	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2			<2

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

1,1,1-Trichloroethane										<1			<1
1,1,2,2-Tetrachloroethane										<0.5			<0.5
1,1,2-Trichloroethane										<1			<1
1,1-Dichloroethane										<0.5			<0.5
1,1-Dichloroethene										<1			<1
1,2-Dichlorobenzene										<1			<1
1,2-Dichloroethane										<1			<1
1,2-Dichloropropane										<0.5			<0.5
1,3-Dichlorobenzene										<1			<1
1,4-Dichlorobenzene										<1			<1
2-Chloroethyl vinyl ether										<1			<1
Benzene										<1			<1
Bromodichloromethane	18			19			13			18			19
Bromoform	<1			<1			<1			<1			<1
Bromomethane										<1			<1
Carbon tetrachloride										<1			<1
Chlorobenzene										<1			<1
Chloroethane										<1			<1
Chloroform	68			59			57			76			76
Chloromethane										<1			<1
cis-1,3-Dichloropropene										<1			<1
Dibromochloromethane	4			5			2			3			5
Ethylbenzene										<1			<1
Methylene chloride										<1			<1
Tetrachloroethene										<1			<1
Toluene										<1			<1
trans-1,2-Dichloroethene										<0.5			<0.5
trans-1,3-Dichloropropene										<1			<1
Trichloroethene										<1			<1
Trichlorofluoromethane										<2			<2
Vinyl chloride										<1			<1
Acrolein										<2			<2
Acrylonitrile										<2			<2

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

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

Table 19b

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

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

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

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

Table 19c

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

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD										<0.006			<0.006
4,4-DDE										<0.006			<0.006
4,4-DDT										<0.008			<0.008
Aldrin										<0.004			<0.004
Alpha-BHC										<0.008			<0.008
Beta-BHC										<0.005			<0.005
Delta-BHC										<0.007			<0.007
Dieldrin										<0.006			<0.006
Endosulfan I										<0.01			<0.01
Endosulfan II										<0.007			<0.007
Endosulfan Sulfate										<0.009			<0.009
Endrin										<0.009			<0.009
Endrin aldehyde										<0.006			<0.006
Gamma-BHC										<0.01			<0.01
Heptachlor										<0.006			<0.006
Heptachlor epoxide										<0.007			<0.007
Chlordane										<0.1			<0.1
PCB-1016										<0.5			<0.5
PCB-1221										<0.5			<0.5
PCB-1232										<0.5			<0.5
PCB-1242										<0.5			<0.5
PCB-1248										<0.5			<0.5
PCB-1254										<0.5			<0.5
PCB-1260										<0.5			<0.5
Toxaphene										<0.5			<0.5
RP-1/RP-4 (M-002A) Effluent Dioxins & Furans, pg/L (reported values based on detection limit)													
PCDD/PCDF Congeners*										0.0			0.00

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

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

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

Table 20a

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

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)	<0.5	<0.5	<0.5	<0.5	0.5	0.5			<0.5	<0.5	0.6	<0.5	0.6
Arsenic (As)	<2	<2	<2	<2	<2	2			<2	<2	<2	<2	2
Beryllium (Be)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium (Cd)	<0.25	<0.25	0.35	<0.25	<0.25	0.83			<0.25	<0.25	<0.25	<0.25	0.83
Chromium (Cr)	<0.5	1.3	1.0	1.7	1.4	1.2			0.7	<0.5	0.7	0.6	1.7
Copper (Cu)	6.0	5.1	6.3	8.1	8.0	7.5			8.2	6.2	8.5	9.2	9.2
Lead (Pb)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5			<0.5	<0.5	<0.5	<0.5	<0.5
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05			<0.05	<0.05	<0.05	<0.05	<0.05
Nickel (Ni)	2.5	2.5	1.9	3.3	2.9	3.0			2.6	2.7	3.0	2.5	3.3
Selenium (Se)	<2	<2	<2	<2	<2	<2			<2	<2	<2	<2	<2
Silver (Ag)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25			<0.25	<0.25	<0.25	<0.25	<0.25
Thallium (Tl)	<1	<1	<1	<1	<1	<1			<1	<1	<1	<1	<1
Zinc (Zn)	45	51	54	52	56	52			56	45	64	49	64
CN, Aquatic Free	<2	<2	<2	<2	<2	<2			<2	<2			<2

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

1,1,1-Trichloroethane										<1			<1
1,1,2,2-Tetrachloroethane										<0.5			<0.5
1,1,2-Trichloroethane										<1			<1
1,1-Dichloroethane										<0.5			<0.5
1,1-Dichloroethene										<1			<1
1,2-Dichlorobenzene										<1			<1
1,2-Dichloroethane										<1			<1
1,2-Dichloropropane										<0.5			<0.5
1,3-Dichlorobenzene										<1			<1
1,4-Dichlorobenzene										<1			<1
2-Chloroethyl vinyl ether										<1			<1
Benzene										<1			<1
Bromodichloromethane	28	20	22	23	25	28			35	20	36	27	36
Bromoform	<1	<1	<1	<1	<1	<1			<1	<1	<1	<1	<1
Bromomethane										<1			<1
Carbon tetrachloride										<1			<1
Chlorobenzene										<1			<1
Chloroethane										<1			<1
Chloroform	47	66	53	63	65	73			84	81	57	61	84
Chloromethane										<1			<1
cis-1,3-Dichloropropene										<1			<1
Dibromochloromethane	12	4	6	5	6	6			8	3	12	8	12
Ethylbenzene										<1			<1
Methylene chloride										<1			<1
Tetrachloroethene										<1			<1
Toluene										<1			<1
trans-1,2-Dichloroethene										<0.5			<0.5
trans-1,3-Dichloropropene										<1			<1
Trichloroethene										<1			<1
Trichlorofluoromethane										<2			<2
Vinyl chloride										<1			<1
Acrolein										<2			<2
Acrylonitrile										<2			<2

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

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

Table 20b

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

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

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

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

Table 20c

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

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
4,4-DDD										<0.006			<0.006
4,4-DDE										<0.006			<0.006
4,4-DDT										<0.008			<0.008
Aldrin										<0.004			<0.004
Alpha-BHC										<0.008			<0.008
Beta-BHC										<0.005			<0.005
Delta-BHC										<0.007			<0.007
Dieldrin										<0.006			<0.006
Endosulfan I										<0.01			<0.01
Endosulfan II										<0.007			<0.007
Endosulfan Sulfate										<0.009			<0.009
Endrin										<0.009			<0.009
Endrin aldehyde										<0.006			<0.006
Gamma-BHC										<0.01			<0.01
Heptachlor										<0.006			<0.006
Heptachlor epoxide										<0.007			<0.007
Chlordane										<0.1			<0.1
PCB-1016										<0.5			<0.5
PCB-1221										<0.5			<0.5
PCB-1232										<0.5			<0.5
PCB-1242										<0.5			<0.5
PCB-1248										<0.5			<0.5
PCB-1254										<0.5			<0.5
PCB-1260										<0.5			<0.5
Toxaphene										<0.5			<0.5
RP-5 (M-003) Effluent Dioxins & Furans, pg/L (reported values based on detection limit)													
PCDD/PCDF Congeners*	<5**									0.0	0.0	0.660	<5

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

**Single compound only, 2,3,7,8-TCDD

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

CCWRF (M-004) Effluent Remaining Priority Pollutants

Table 21a

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

Constituent	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Max.
Antimony (Sb)	<0.5	<0.5	<0.5	<0.5	0.5	0.6	0.6	<0.5	0.6	0.5	0.6	0.5	0.6
Arsenic (As)	<2	<2	<2	3	<2	2	2	<2	<2	<2	3	<2	3
Beryllium (Be)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium (Cd)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Chromium (Cr)	0.5	1.3	1.1	1.8	1.3	1.5	1.0	0.8	0.8	0.9	0.8	0.8	1.8
Copper (Cu)	6.9	5.3	5.0	8.0	6.8	7.7	7.0	6.6	6.9	7.9	8.4	7.9	8.4
Lead (Pb)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Nickel (Ni)	2.3	2.2	1.7	3.5	2.5	2.4	2.6	2.2	2.6	2.8	2.9	2.3	3.5
Selenium (Se)	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Silver (Ag)	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Thallium (Tl)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Zinc (Zn)	49	51	55	71	57	61	66	53	59	65	61	68	71
CN, Aquatic Free	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2			<2

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

1,1,1-Trichloroethane										<1			<1
1,1,2,2-Tetrachloroethane										<0.5			<0.5
1,1,2-Trichloroethane										<1			<1
1,1-Dichloroethane										<0.5			<0.5
1,1-Dichloroethene										<1			<1
1,2-Dichlorobenzene										<1			<1
1,2-Dichloroethane										<1			<1
1,2-Dichloropropane										<0.5			<0.5
1,3-Dichlorobenzene										<1			<1
1,4-Dichlorobenzene										<1			<1
2-Chloroethyl vinyl ether										<1			<1
Benzene										<1			<1
Bromodichloromethane	37			37			27			43	38	40	43
Bromoform	3			2			<1			3	3	2	3
Bromomethane										<1			<1
Carbon tetrachloride										<1			<1
Chlorobenzene										<1			<1
Chloroethane										<1			<1
Chloroform	38			55			45			49	40	43	55
Chloromethane										<1			<1
cis-1,3-Dichloropropene										<1			<1
Dibromochloromethane	25			18			11			26	23	23	26
Ethylbenzene										<1			<1
Methylene chloride										<1			<1
Tetrachloroethene										<1			<1
Toluene										<1			<1
trans-1,2-Dichloroethene										<0.5			<0.5
trans-1,3-Dichloropropene										<1			<1
Trichloroethene										<1			<1
Trichlorofluoromethane										<2			<2
Vinyl chloride										<1			<1
Acrolein										<2			<2
Acrylonitrile										<2			<2

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

CCWRF (M-004) Effluent Remaining Priority Pollutants

Table 21b

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

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

INLAND EMPIRE UTILITIES AGENCY

Regional Plant Nos. 1, 4, 5, & Carbon Canyon Water Recycling Facility, 2015 NPDES Annual Report

CCWRF (M-004) Effluent Remaining Priority Pollutants

Table 21c

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

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

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

PCDD/PCDF Congeners*	<5**									0.0			<5
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*TEQ is calculated based on congener concentrations below the reporting limit (RL) set to zero

APPENDIX C

RECYCLED WATER

USERS AND DEMANDS

FOR FISCAL YEAR 2015/16

**APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16**

City of Chino		
Customer Name	Usage Type	Value_AF
Viaverde Nursery	Agricultural	0.21
H PLACENICIA NURSERY	Agricultural	88.45
Nyenhius Dairy	Agricultural	404.70
WESTSTEYN DAIRY	Agricultural	969.44
CW Farms II	Agricultural	35.58
La Brucherie Farms	Agricultural	288.83
C W FARMS IV	Agricultural	330.14
CLEVELAND FARM #1	Agricultural	356.01
CW Farms III	Agricultural	363.30
CW Farms	Agricultural	434.15
Cleveland Farm	Agricultural	552.15
Cal Poly Pomona	Agricultural	896.94
Superior Sod #4	Agricultural	118.15
Superior Sod	Agricultural	158.35
SUPERIOR SOD AIRPORT #1	Agricultural	207.42
Cleveland Farm	Agricultural	47.46
Chino Agricultural Usage		5251.25
5150 EDISON PARTNERS	Construction	1.16
HENKELS & MC COY INC	Construction	0.00
STICE COMPANY INC	Construction	0.02
MAGNUS PACIFIC CONSTRUCTION	Construction	0.03
Earth Basics	Construction	0.06
SANCON ENGINEERING	Construction	0.08
LENNAR HOMES OF CA	Construction	0.08
SANDERS HYDROSEEDING INC	Construction	0.13
ORANGE COUNTY WATER DISTRICT	Construction	0.43
LENNAR HOMES OF CA	Construction	0.47
NORM WILSON & SONS INC	Construction	0.79
PARKCREST CONSTRUCTION INC	Construction	1.78
WATSON LAND COMPANY	Construction	3.46
Sares Regis Vintage Apartments	Construction	4.35
HILLWOOD CONSTRUCTION	Construction	5.46
BRIDGE HOUSING CORPORATION	Construction	5.88
Portrait Construction, Inc.	Construction	8.57
PARK WEST RESCOM INC	Construction	8.74
Cleveland Farm	Construction	46.23
BOBERG ENGINEERING	Construction	62.41
Griffith Company	Construction	0.08
DR Horton	Construction	0.53
Standard Pacific	Construction	1.17
NORM WILSON & SONS INC	Construction	1.68
KB Homes	Construction	1.88
Lewis Operating Corp	Construction	3.28
Chino Development Corporation	Construction	4.21
PARKCREST CONSTRUCTION INC	Construction	4.50
LENNAR HOMES OF CA	Construction	6.75
WATSON LAND COMPANY	Construction	6.84
Lewis Operating Corp	Construction	30.94

**APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16**

K HOVNANIAN HOMES	Construction	0.05
R J NOBLE COMPANY	Construction	0.20
MILLIE AND SEVERSON	Construction	0.24
STANDARD PACIFIC OF OC	Construction	0.46
LEMASTER GRADING	Construction	0.49
PARK WEST LANDSCAPE MAINTENANCE	Construction	0.56
KB Homes	Construction	0.56
LEWIS OPERATING CORP	Construction	0.73
CLARK & SONS CONTRACTING	Construction	1.13
Commerce Construction	Construction	1.41
TELEPHONE AVE-SIEROTY BLDG	Construction	1.63
CANNON CONSTRUCTORS	Construction	1.97
LENNAR HOMES OF CA	Construction	12.00
BOBERG ENGINEERING	Construction	14.67
	Chino Construction Usage	248.05
Repet Inc	Industrial	22.11
OLS ENERGY CHINO (WAS CALIF COGEN)	Industrial	144.58
	Chino Industrial Usage	166.68
Excel INC	Landscape	0.00
Inland BioEnergy (IBE)	Landscape	0.01
ROADWAY ENGINEERING	Landscape	0.03
Inland Empire Utilities Agency	Landscape	0.08
5150 EDISON PARTNERS	Landscape	0.17
J F MANUFACTURING INC	Landscape	0.31
Shamrock Marketing	Landscape	0.39
Redbuilt LLC	Landscape	0.45
Colonial Electric	Landscape	0.73
DBRS Medical System	Landscape	0.75
Collins Company	Landscape	0.83
HYUNDAI-KIA AMERICA	Landscape	0.89
KPS GLOBAL LLC	Landscape	1.01
EQUIPMENT WHOLESALERS	Landscape	1.06
Funding Resources	Landscape	1.22
SCOTT ENGINEERING	Landscape	1.51
Valbruna	Landscape	1.60
Gro-Power Inc	Landscape	1.63
Chandler Real Properties	Landscape	1.64
Garrett Concrete	Landscape	1.72
NEXGRILL INDUSTRIES INC	Landscape	1.85
Farrand Enterprises	Landscape	2.00
WESTERN A WEST CA, LLC	Landscape	2.14
Yin, Zhihua	Landscape	2.18
CT Storage-Chino LLC	Landscape	2.21
Yoshimura R&D	Landscape	2.30
Chino Industrial Commons	Landscape	2.41
Kinfine USA Inc	Landscape	2.45
El Prado Rd Business Owners	Landscape	2.54
FUSION 5 CONDO ASSOCIATION	Landscape	2.56
DO + ABLE Product	Landscape	2.66
Redwood Business Center	Landscape	2.78

**APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16**

Quetico Schaefer Properties	Landscape	2.82
EVERBLOOM ENTERPRISE LLC	Landscape	2.90
EDE GROUP INC	Landscape	2.96
RANCHO DEL CHINO LLC	Landscape	3.07
Chino Industrial Commons-Owners	Landscape	3.37
HILL PHOENIX INC	Landscape	3.75
The Campus Owners Corp	Landscape	3.88
SYNNEX CORPORATION	Landscape	3.92
CENTREPOINTE DISTRIBUTION CENT	Landscape	4.32
CITRUS COMMONS	Landscape	4.43
MOTIVATIONAL FULFILLMENT	Landscape	4.51
Central Business Owners Assoc	Landscape	4.94
Oltmans Construction	Landscape	4.96
PORT LOGISTICS GROUP	Landscape	5.20
MC KESSON MEDICAL	Landscape	5.50
Standard Pacific	Landscape	5.66
SADDLE CREEK CORPORATION	Landscape	5.80
OMNIA ITALIAN DESIGN	Landscape	5.88
DSC Logistics	Landscape	5.90
Chino Hills Ford	Landscape	6.30
WAL-MART STORES INC #07-8103	Landscape	6.67
UMA ENTERPRISES INC	Landscape	7.02
Majestic Management	Landscape	7.40
GILBERT WEST	Landscape	8.06
Warehouse Technology	Landscape	9.27
CP BUSINESS PARK PARTNERS LP	Landscape	9.82
Sundance Spas	Landscape	9.82
EURO-PRO OPERATING INC	Landscape	10.59
NORCO INJECTION MOLDING	Landscape	10.67
Yorba Industrial Center	Landscape	10.70
American Power Conversion	Landscape	11.54
Trammel Crow So Cal Inc	Landscape	12.05
LENNAR HOMES OF CA	Landscape	13.60
WATSON LAND COMPANY	Landscape	16.04
MAJESTIC CHINO GATEWAY	Landscape	17.05
Central Park Industrial PTNRS	Landscape	17.33
VIRAMONTES EXPRESS	Landscape	21.98
AMERICAN HONDA MOTOR CO INC	Landscape	25.31
National Distribution Center	Landscape	32.92
Dept. of Corrections State	Landscape	38.58
Chino Development Corporation	Landscape	65.64
Richardson, Don	Landscape	87.05
ALBERS MANUFACTURING INC	Landscape	0.03
Southern California Edison	Landscape	0.29
San Bdn County Fairgrounds	Landscape	9.65
College Park Community Assoc	Landscape	1.11
Standard Pacific	Landscape	2.00
City of Chino Ayala Park	Landscape	107.63
Evergreen at the Preserve (222671-2)	Landscape	0.06
MEF Realty LLC	Landscape	0.99

**APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16**

Preserve Master Community	Landscape	1.63
W L Homes	Landscape	2.01
Jasmine Willows HOA	Landscape	2.10
College Park Community Assoc 1	Landscape	2.23
DR Horton	Landscape	3.02
Woodbury Neighborhood Association	Landscape	4.78
WESTERN NATION CONTRACTORS	Landscape	5.39
COLLEGE PARK COMMUNITES	Landscape	6.11
Evergreen at The Preserve	Landscape	7.41
College Park Community Assoc 2	Landscape	7.45
STANDARD PACIFIC OF OC	Landscape	7.65
AGAVE NEIGHBORHOOD ASSOCIATION	Landscape	7.97
Panattoni Construction	Landscape	9.25
SEACOUNTRY HOMES	Landscape	9.29
Preserve Master Corp	Landscape	15.26
Tetherwinds Neighborhood	Landscape	23.61
Sares Regis Vintage Apartments	Landscape	26.20
The Preserve Master Community	Landscape	26.64
Lewis Operating Corp	Landscape	29.77
Preserve Maintenance Corp	Landscape	30.11
KB Homes	Landscape	37.71
PRESERVE MASTER MAINTENANCE	Landscape	65.54
College Park Community Assoc	Landscape	85.10
LENNAR HOMES OF CA	Landscape	107.02
Chaffey College	Landscape	9.18
K-8 SCHOOL (PRESERVE)	Landscape	14.63
BIRCHWOOD & GREENBRIER COMM ASSOC	Landscape	1.42
Cal Trans	Landscape	1.51
Chino Development Corporation	Landscape	2.73
WELLESLEY NEIGHBORHOOD	Landscape	3.10
KB Homes	Landscape	3.54
Standard Pacific	Landscape	7.59
MONTE VISTA #3	Landscape	10.38
LENNAR HOMES OF CA	Landscape	12.56
STANDARD PACIFIC OF OC	Landscape	15.40
LEWIS OPERATING CORP	Landscape	20.50
UMA ENTERPRISES INC	Landscape	22.08
NMC BUILDERS LLC	Landscape	22.82
City of Chino	Landscape	169.87
Lewis Operating Corp	Landscape	2.33
HARPER CONSTRUCTION	Landscape	2.86
	Chino Landscape Usage	1550.69
	Chino Total Usage	7216.68

**APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16**

City of Chino Hills		
Customer Name	Usage Type	Value AF
Fullmer Construction	Construction	1.10
D'Vargas Construction	Construction	1.42
Fairfield Chino Hills LP	Construction	2.00
Jeremy Harris Construction Inc.	Construction	0.06
Standard Pacific	Construction	4.44
Standard Pacific	Construction	6.65
Avalonbay Communities, Inc.	Construction	8.71
Altfillisch Contractors	Construction	-16.53
Chino Hills Construction Usage		7.84
Circle K	Landscape	0.32
Pinehurst Hills Comm Assoc	Landscape	0.41
Vista San Juan/ C.C. Medical Center	Landscape	1.34
Country Club Market Place II	Landscape	1.49
Hyoung Corp	Landscape	1.88
Chino Hills Storage	Landscape	1.94
Dennys	Landscape	2.78
7-Eleven (15450 Fairfield Ranch Rd)	Landscape	3.41
Chino Hills Mall	Landscape	3.77
Chino Valley Community Church	Landscape	4.38
Albertsons	Landscape	4.40
City of Chino Hills	Landscape	5.76
Pine Corp Center (4274439)	Landscape	5.91
Pine Corp Center (4279489)	Landscape	11.18
DZ Properties, Inc.	Landscape	13.18
EGM Management	Landscape	18.94
Artisan	Landscape	31.59
Standard Pacific	Landscape	43.26
Chino Hills Business Park	Landscape	46.70
CVUFD	Landscape	0.09
Country Club Villa	Landscape	2.36
Vellano	Landscape	2.40
City of Chino Hills	Landscape	3.88
Standard Pacific	Landscape	4.01
Vellano Golf Course	Landscape	18.29
Los Serranos Golf Course	Landscape	292.31
Chino Valley Fire	Landscape	1.44
Sycamore Heights Comm Assoc	Landscape	0.31
Fairfield Chino Hills LP	Landscape	2.97
City of Chino Hills	Landscape	5.56
Chino Hills Community Center	Landscape	10.52
Rincon Park	Landscape	15.77
Big League Dreams	Landscape	47.27
Fairfield Chino Hills LP	Landscape	0.00
Fieldstone	Landscape	0.57
Lexington	Landscape	0.65
Sycamore Heights Comm Assoc	Landscape	1.36
BRE Properties	Landscape	6.52
Fairfield Ranch HOA	Landscape	6.75

**APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16**

Los Serranos Ranch Comm. Assoc.	Landscape	9.19
Higgins Ranch Community	Landscape	10.21
Taylor Woodrow	Landscape	12.34
BRR HOA	Landscape	20.31
Centex	Landscape	23.56
Ridgegate HOA	Landscape	57.79
Vellano Homeowner	Landscape	115.21
New Vellano	Landscape	250.33
Chapparral Elem. School (4342912)	Landscape	7.62
Wickman Elem	Landscape	9.61
C.U.S.D.	Landscape	28.56
Natures Image Inc	Landscape	2.98
Cal Trans	Landscape	3.59
Ridgegate Neighborhood Assoc	Landscape	3.93
Felfam,Ltd	Landscape	8.69
Standard Pacific	Landscape	10.82
City of Chino Hills	Landscape	185.59
	Chino Hills Landscape Usage	1,385.93
	City of Chino Hills Total Usage	1,393.77

**APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16**

Cucamonga Valley Water District (CVWD)		
Customer Name	Usage Type	Value AF
Lennar Homes (CVWD)	Construction	25.71
San Bernardino county flood control	Construction	0.19
CVWD Construction Usage		25.90
Prologis	Landscape	30.89
PSIP WR Etiwanda LLC	Landscape	27.02
O & S Holdings	Landscape	24.94
Bradshaw International, Inc	Landscape	24.21
Srathmore Maintenance Corp.	Landscape	21.35
Home Depot	Landscape	20.21
Hilemen Development Co.	Landscape	19.32
Bass Pro Shop	Landscape	18.76
Owens and Minor Distributing inc	Landscape	16.71
Cal Development LLC	Landscape	16.30
Victoria Gardens(Shea Homes)	Landscape	16.08
Exchange Professional Center	Landscape	15.71
CPT 6th & Cleveland LLC	Landscape	14.68
Frito Lay Inc.	Landscape	13.77
Cabot Industrial Trust	Landscape	11.61
Earth Basics	Landscape	11.34
CIP Real Estate	Landscape	10.56
Stadium Plaza South	Landscape	10.04
Market Place Properties	Landscape	9.67
Southern California Edison	Landscape	9.26
Life Way Church	Landscape	7.70
Stadium Plaza North	Landscape	7.50
pac r cucamonga lp	Landscape	6.86
Mission Business Center LLC	Landscape	6.85
O&S(Foothill Crossings)	Landscape	5.07
Richard Dick & Associates	Landscape	4.26
Rackafeller group	Landscape	3.25
DEDEAUX PROPERTIES LLC	Landscape	2.71
Facility Builders & Erectors	Landscape	2.13
ASAP power sports	Landscape	1.74
Vega Industries	Landscape	1.65
Comfort - Pedic Mattress USA	Landscape	1.61
CSF INC	Landscape	1.15
Milliken Hospitality LLC	Landscape	1.07
Stanley Steamers	Landscape	1.02
Toyota Motor Sales	Landscape	0.76
Wells Fargo Bank	Landscape	0.75
CalTrans	Landscape	0.74
Cal National Bank	Landscape	0.51
Murfco INC.	Landscape	0.45
Starbuck's Coffee	Landscape	0.33
Harrys Pacific Grill	Landscape	0.31
Oak Creek Ranch Golf Club Inc.	Landscape	289.16
City of Rancho Cucamonga	Landscape	0.49
City of Rancho Cucamonga	Landscape	0.15

**APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16**

Goodman Rancho SPE, LLC	Landscape	39.26
Day creek aps	Landscape	33.08
The Hawthornes	Landscape	5.29
Alta Loma High School	Landscape	52.71
Etiwanda School District	Landscape	47.15
City of Rancho Cucamonga	Landscape	240.16
City of Fontana	Landscape	7.32
Haven Rock	Landscape	3.77
CVWD Recycled Water Useage (AF)	Landscape	0.14
Various	Landscape	0.07
	CVWD Landscape Usage	1119.61
	CVWD Total Usage	1145.50

**APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16**

Inland Empire Utilities Agency (IEUA)		
Customer Name	Usage Type	Value_AF
ESCI	Industrial	3.47
Genon Energy Plant	Industrial	253.12
IERCF	Industrial	14.43
IEUA Industrial Total		271.02
Greenlee Nursery	Landscape	0.00
Chino Creek Park Evaporation	Landscape	122.84
IEUA Headquarters	Landscape	129.46
Chino Creek Wetlands and Educational Park	Landscape	17.76
IEUA Landscape Total		270.06
IEUA Total Usage		541.08

**APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16**

Monte Vista Water District (MVWD)		
Customer Name	Usage Type	Value_AF
Montclair Hi School	Landscape	63.24
Saratoga Park	Landscape	39.37
Montclair Town Center	Landscape	25.59
Montclair Town Center	Landscape	4.27
Buena Vista Elem School	Landscape	25.18
Sunset Park	Landscape	20.60
Montclair Medical Center	Landscape	17.38
Monte Vista Elementary School	Landscape	12.13
Alma Hoffman Park	Landscape	11.91
Kingsley Elem School	Landscape	10.76
Kingsley Park	Landscape	10.38
Lehigh Elementary School	Landscape	9.80
Wilderness Basin Park	Landscape	8.38
Sunrise Park	Landscape	7.47
Library/City Hall	Landscape	6.16
City Hall	Landscape	3.28
Our Lady of Lourdes Church	Landscape	1.26
Demonstration Garden	Landscape	0.58
Monte Vista Water District	Landscape	0.57
Golden Girls Park	Landscape	0.00
Montclair Towncenter HOA	Landscape	0.00
	MVWD Landscape Usage	278.32
	MVWD Total Usage	278.32

**APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16**

Ontario		
Customer Name	Usage Type	Value_AF
Rojo Farms	Agricultural	7.42
FRUIT GROWERS SUPPLY	Agricultural	21.02
Barth Farms	Agricultural	53.49
Yoog II Farm Inc.	Agricultural	101.98
Breezy Boots, Inc	Agricultural	105.93
LaBrucherie Farm	Agricultural	107.73
Legend Dairies (Petersma)	Agricultural	109.71
Bootsma Farm	Agricultural	137.61
Li Yuan Farms	Agricultural	203.57
Li Farm (Western Oriental Growers)	Agricultural	213.40
Cleveland Farm	Agricultural	238.08
GH Dairy	Agricultural	317.16
Murai Farm	Agricultural	327.88
GH Dairy	Agricultural	351.18
Cleveland Farm	Agricultural	615.72
Lewis Farms	Agricultural	702.18
Ontario Agricultural Usage		3614.05
The Realty Associates Fund X LP	Construction	0.29
City of Ontario Street Sweepers	Construction	1.24
Majestic Mgt CCC IV (Bldg. 6)	Construction	1.38
Tri Pointe Homes	Construction	1.51
NMC Builders LLC	Construction	1.79
SL Ontario Development Co	Construction	3.10
Advent Companies	Construction	4.44
Salsbury Engineering	Construction	5.47
Stice Company	Construction	19.20
James McMinn, Inc	Construction	101.49
STICE COMPANY INC	Construction	368.59
Ontario Construction Usage		508.50
Cintas	Industrial	87.14
New Indy Ontario	Industrial	866.95
Ontario Industrial Usage		954.09
Aladdin Industrial Corporation	Landscape	0.00
Diesel Emissions	Landscape	0.05
Kellogg Supply Inc.	Landscape	0.10
Parks Dept. (Holt Median W/O Vineyard)	Landscape	0.24
Panattoni Developement (03453746) 2250 S Archibald	Landscape	0.31
Top & Tech	Landscape	0.33
24 Hour Fitness	Landscape	0.36
Sierra Insulation	Landscape	0.45
Pacific Lewis Properties	Landscape	0.47
LBA Realty (4 meters)	Landscape	0.48
Dial Chemical	Landscape	0.55
Dura Coat Powder Coating	Landscape	0.59
Piemonte Business Park (04306405)	Landscape	0.60
BP West Coast Products,LLC #5965	Landscape	0.63
Khaloghli, Khosro	Landscape	0.68
Ontario Collision Center	Landscape	0.76

**APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16**

M. Craitenberger	Landscape	0.78
Stein & Roitblat Living Trusts	Landscape	0.78
Cal Trans Do8 ONT	Landscape	0.79
Inland Empire Utilities Agency	Landscape	0.80
City of Ontario (Fire Station #6)	Landscape	0.81
So Cal Mechanical	Landscape	0.87
Just Do It 4 Less.Com LLC	Landscape	0.88
JMS Wineville	Landscape	0.88
CBWCD Ely Basin #3	Landscape	0.93
Acco America	Landscape	1.00
Roshan LLC (La Galleria at the Mills)	Landscape	1.05
Parks Dept. (Haven Parkway)	Landscape	1.09
Akzo Nobel Coatings (Haven B)	Landscape	1.17
Piemonte Business Park (04930593)	Landscape	1.23
Piemonte Business Park (04920427)	Landscape	1.27
LBA Realty (4 meters)	Landscape	1.41
CK Restaurants	Landscape	1.44
Brookfield Ontario Builders	Landscape	1.52
Castle Industries	Landscape	1.54
Woodside 055LP	Landscape	1.56
City of Ontario (Holt/Guasti East)	Landscape	1.61
Archibald Freeway Center Owners Assoc.	Landscape	1.66
Customized Distribution	Landscape	1.73
NMC Builders LLC	Landscape	1.74
Advanced Innovative Technology	Landscape	1.77
Caliber Collision	Landscape	1.83
Piemonte Business Park (04725037)	Landscape	1.88
SJC II/Fourth and Haven	Landscape	2.00
City of Ontario (Holt/Guasti West)	Landscape	2.04
Nexen Tire America Inc	Landscape	2.09
Target	Landscape	2.44
Mabela LP	Landscape	2.59
Comstock Homes	Landscape	2.64
Poseidon Ontario Airport Plaza	Landscape	2.76
KB Homes	Landscape	2.83
Concours Retail	Landscape	2.85
Haliburton	Landscape	2.85
Vineyard Industrial II, LLC	Landscape	2.87
Ontario Convention Center (North)	Landscape	2.87
Piemonte 5-story	Landscape	2.96
Brookfield Land Const	Landscape	2.96
Majestic Management	Landscape	3.05
Ont Industrial Partn	Landscape	3.18
Haven Ave LLC	Landscape	3.23
Wella Mfg	Landscape	3.25
Chevron Land	Landscape	3.38
Hino Motor Manufacturing	Landscape	3.42
Park Place Master Community Assoc	Landscape	3.72
Golden State Container	Landscape	3.94
G & K Services	Landscape	3.98

**APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16**

Warmington Residential Comm. (04748546)	Landscape	3.98
Piemonte Business Park (04934728)	Landscape	3.99
Vineyard Industrial II, LLC	Landscape	4.03
Panattoni Development (Best Buy)	Landscape	4.16
Niagara Water	Landscape	4.16
City of Ontario (4th/Milliken Parkway)	Landscape	4.17
T S Express	Landscape	4.29
Ruth Group	Landscape	4.33
Archibald & Philadelph (03624103) 2260 S Archibald	Landscape	4.62
Flags Importer	Landscape	4.77
Bedford Properties	Landscape	4.86
Parks Dept. (Galanis Park)	Landscape	5.08
Archibald Freeway Center Owners Assoc.	Landscape	5.09
Ontario Lodging Associates LLC	Landscape	5.32
Lord Baltimore Properties	Landscape	5.42
HMC Architects	Landscape	5.47
OM Guasti	Landscape	5.55
Brookfield Land Const	Landscape	5.77
Mercedes Benz of Ontario	Landscape	6.09
Concours Plaza	Landscape	6.82
Camden Development Inc	Landscape	7.11
Lennar Homes	Landscape	7.33
RYLAND HOMES OF CA	Landscape	7.51
Ontario Commerce Park	Landscape	7.85
Vintage Apts.	Landscape	7.87
NMC Builders LLC	Landscape	8.21
Ferrari Corporate Center LLC	Landscape	8.28
Camden Development Inc	Landscape	8.44
CCC-N	Landscape	8.53
Dorothy Gibson Continuation School	Landscape	8.64
Vina Danks Junior High	Landscape	9.58
Kohls	Landscape	9.80
Brookfield Land Const	Landscape	10.11
Stratham Communities	Landscape	10.39
City of Ontario	Landscape	10.52
Grove Memorial Park	Landscape	10.70
Airport Corp. Center @ Centrelake	Landscape	11.83
Tri Pointe Homes	Landscape	12.33
Walmart	Landscape	12.40
Del Norte Elementary School	Landscape	13.13
Vineyard Park	Landscape	13.80
City of Ontario	Landscape	14.68
Brookfield Land Const	Landscape	15.34
Kaiser	Landscape	15.59
Shelby Office Park (PDEV04-006)	Landscape	16.05
Corona Elementary School (OMSD)	Landscape	16.10
Ont/Mont School Dist - Elem School	Landscape	16.12
Parkside Ontario Community Assoc	Landscape	16.16
Ont Convention Center	Landscape	16.68
Ontario Motor Speedway Park	Landscape	17.05

**APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16**

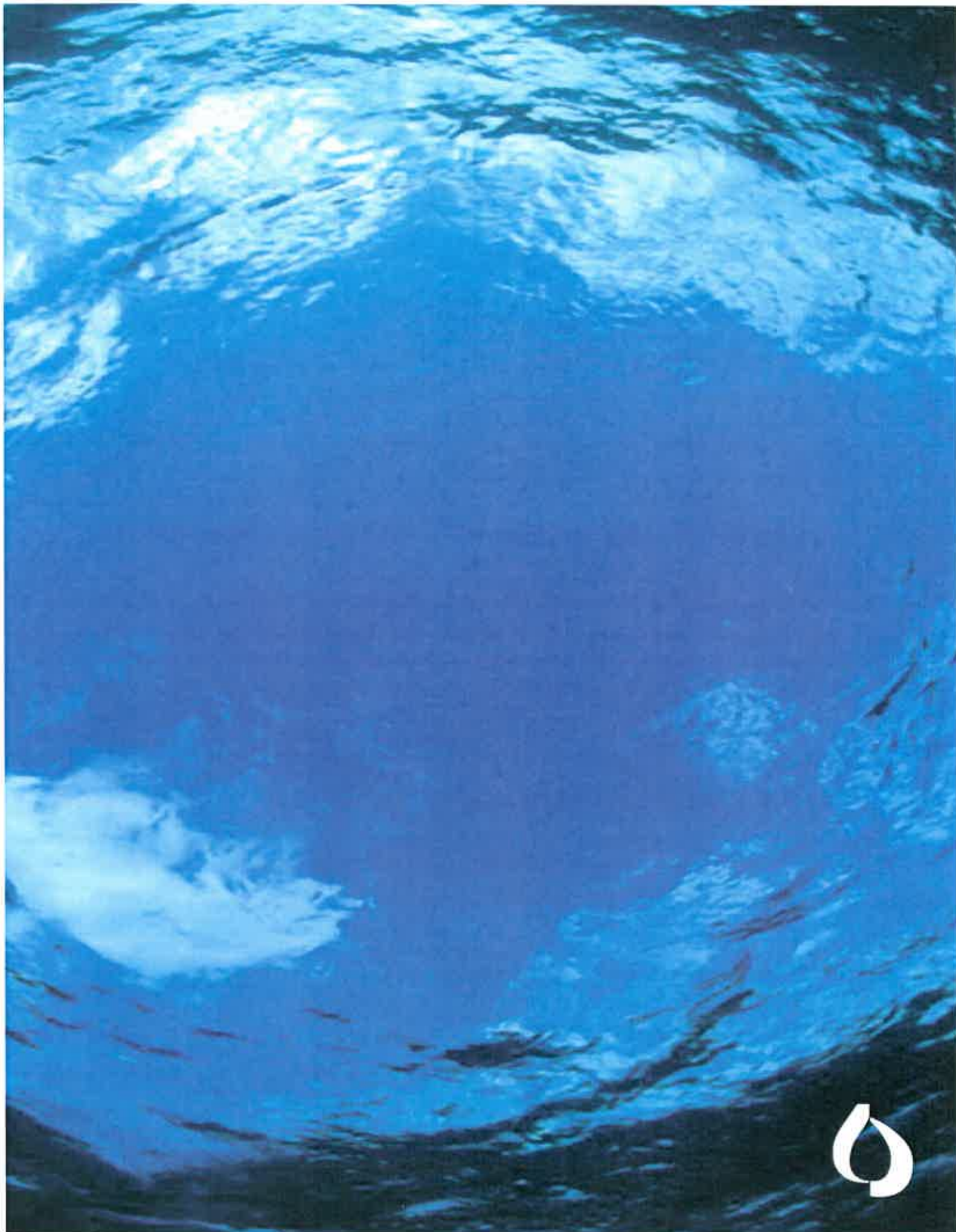
Ontario Health Education	Landscape	17.88
Cal Trans Do8 ONT	Landscape	18.55
Empire Towers	Landscape	19.48
Brookfield Ontario Builders	Landscape	19.81
Parks Dept. (Veterans Park)	Landscape	20.25
Pier 1 Imports	Landscape	22.15
Ontario Airport Center	Landscape	22.58
Pancal Portfolio, LLC	Landscape	24.45
Doubletree	Landscape	25.06
Ontario Montclair School Dist.	Landscape	25.43
Chaffey High School (Valley View)	Landscape	25.93
Mathis Brothers Furniture	Landscape	25.94
Parks Dept. (Galvin Park West)	Landscape	26.93
Centrelake Assn	Landscape	28.10
California Commerce Center	Landscape	31.19
Galvin Park	Landscape	31.38
Calif Com Cntr Owners (North)	Landscape	32.54
Ontario Center (Founders Garden)	Landscape	34.13
Chaffey High School	Landscape	34.81
Prologis California	Landscape	37.11
City of Ontario (Soccer Complex)	Landscape	42.24
CCC-S	Landscape	42.37
Vineyard STEM School	Landscape	45.53
SL Ontario Development Co	Landscape	46.57
Munoz Park	Landscape	50.67
Westwind Park	Landscape	56.22
AEG Ontario Arena	Landscape	59.16
Toyota	Landscape	59.97
CalTrans	Landscape	65.34
Majestic Reality	Landscape	70.45
CCC-N	Landscape	74.24
Chevron Land	Landscape	99.47
Guasti Park	Landscape	103.15
Bellevue Cemetary	Landscape	120.98
Whispering Lakes Golf Course	Landscape	475.17
	Ontario Landscape Usage	2489.79
	Ontario Total Usage	7566.42

**APPENDIX C
RECYCLED WATER USES AND DEMANDS
FY 2015/16**

Recharge Basins		
Customer Name	Usage Type	Value_AF
RP-3	Recharge	3282.00
Banana Basin	Recharge	2106.00
Turner Basin	Recharge	1958.00
7th & 8th Street	Recharge	1470.00
Brooks Basin	Recharge	1215.00
Ely Basin	Recharge	1012.00
Declez Basin	Recharge	969.00
Victoria Basin	Recharge	635.00
Hickory Basin	Recharge	575.00
San Sevaine No. 5	Recharge	0.00
Recharge Basins Total		13222.00

San Bernardino County		
Customer Name	Usage Type	Value_AF
El Prado Park	Landscape	373.33
El Prado Golf Course	Landscape	162.78
SBCO Landscape Usage		536.11
SBCO Total Usage		536.11

Upland		
Customer Name	Usage Type	Value_AF
Garrison Foothill Nursery	Agricultural	0.43
Tolle Nursery	Agricultural	2.32
Upland Agricultural Usage		2.75
Cal - Trans	Construction	3.72
Upland Construction Usage		3.72
Drydock Depot	Landscape	2.13
SCE	Landscape	5.01
San Antonio Hospital	Landscape	9.49
Upland Hills Country Club	Landscape	370.29
Western Inn	Landscape	2.30
Bouquet Estates	Landscape	7.50
City of Upland / Sierra Vista Park	Landscape	17.29
City of Upland / Memorial Park	Landscape	72.21
Upland Meadows Estates	Landscape	8.83
Mountain View Estates	Landscape	17.30
Upland Unified School District	Landscape	2.47
Upland JR H.S.	Landscape	14.07
Sierra Vista Elementary	Landscape	16.66
Upland Elementary	Landscape	19.38
Foothill Knolls Elementary	Landscape	25.60
San Antonio Hospital	Landscape	1.58
City of Upland	Landscape	120.20
Upland Landscape Usage		712.32
Upland Total Usage		718.78



Recycled Water Semi-Annual Update FY 2015/16



Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Andy Campbell

IEUA Board of Directors Meeting
September 2016

RW Project- Wineville Pipeline

■ Wineville Extension to RP3

- Capital Improvements Complete
- Approx. 3,000 AFY RW Capacity
- Increased RP3 Delivery Capacity
 - 4 cfs to 20 cfs
 - Initiated Sept. 9 2015
 - RP3 RW 15/16 delivery was 3282 AF
- Allows Declez Basin RW Start-Up
 - 4 to 8 cfs
 - Initiated Dec. 23, 2015
 - Declez RW 15/16 delivery was 969 AF



RW Project- San Sevaine

- San Sevaine 5 Pump Station & Pipeline to upper 3 Basins
 - 85% design August 2016
 - January 2017 Bid & Award
 - 1 year Construction
 - Estimated Completion January 2018
 - Approx. 4,000-6,000 AFY RW Capacity



RW Projects

■ Prop 1 Grant Projects

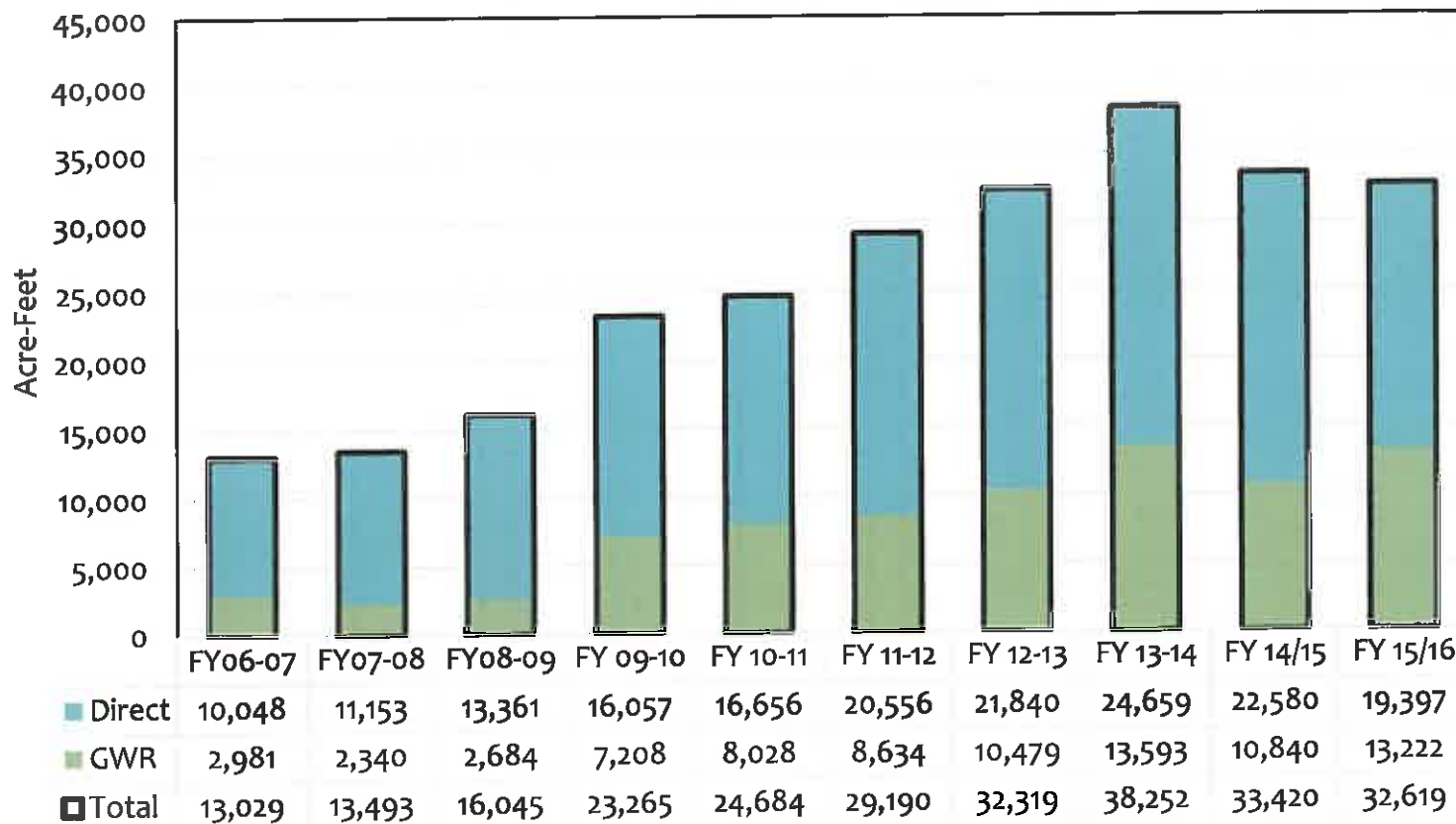
- State Board requested additional CEQA Information
- Pending Award Notifications (1) December 2016 and (2) February 2017

Project Name	Status	Estimated Completion Date	Project Benefit (AFY)	Prop 1 Group
San Sevaine Basin Improvements	Design	Jan-18	4,000 - 6,000	1
Napa Lateral	Pre Design	Dec-18	1,000	1
RP-1 1158 PS Upgrades	Pre Design	Jul-19	Reliability	2
RP-5 RW Pipeline Bottleneck	Pre Design	Dec-18	Reliability	2
Pressure Sustaining Valve Installation	Pre Design	Dec-18	Reliability	2
RP-1 Parallel Outfall Pipeline	Pre Design	Dec-18	Reliability	2
Baseline RW Extension (Village of Heritage)	Pre Design	Dec-18	100	2
City of Ontario Euclid/Riverside Pipeline	Design	Dec-18	600 - 1,200	2

■ 1630 W. and 1630 E. Surge Projection Projects

- Estimated completion: October 2016

FY15/16 RW Demand



RW GWR Allocations

Agency	Pro Rata Share	Recharge Allocation * (Acre-Feet) FY15/16
Chino	10.6%	1,302
Chino Hills	8.9%	1,097
CVWD	25.2%	3,099
Fontana	19.2%	2,368
Montclair	4.5%	548
Ontario	21.7%	2,667
Upland	10.0%	1,226
Total	100.0%	
JCSD's Allocation:		915
Total Amount Recharged:		13,222

*Updated from August 25 Technical and September 1 Policy Committee Presentations

**INFORMATION
ITEM**

3D



Date: September 14, 2016
To: The Honorable Board of Directors
Through: Finance, Legal, and Administration Committee (09/07/16)
From: P. Joseph Grindstaff
General Manager
Submitted by: Christina Valencia
Chief Financial Officer/ Assistant General Manager
Javier Chagoyen-Lazaro
Manager of Finance and Accounting
Subject: Treasurer's Report of Financial Affairs

RECOMMENDATION

The Treasurer's Report of Financial Affairs for the month ended July 31, 2016, is an informational item for the Board of Director's review.

BACKGROUND

The Treasurer's Report of Financial Affairs for the month ended July 31, 2016, is submitted in a format consistent with State requirements. The monthly report denotes investment transactions that have been executed in accordance with the criteria stated in the Agency's Investment Policy (Resolution No. 2016-5-1).

Total cash, investments, and restricted deposits of \$178,439,771 reflects a decrease of \$7,670,943 compared to the total reported for June 2016. The decrease can be attributed to pay down of the pension unfunded accrued liability (UAL) and 2010A principal and interest debt service. The average days of cash on hand for the month ended July 31, 2016 was 249 days. Average days of cash on hand is calculated using the monthly ending balance of unrestricted cash and cash equivalents divided by disbursements associated with operating expenses, debt service, and capital expenditures as recorded in the Agency's cash flow. New connection fees collected and held by member agencies are excluded from the days of cash on hand calculation.

The Agency's investment portfolio average rate of return in July 2016 was 0.869%, an increase of 0.059% compared to the average yield of 0.810% reported in June 2016. The increase can be attributed to an increase in LAIF and other Local Government Investment Fund yields.

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

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

The interest earned on the Agency's investment portfolio increases the Agency's reserves.

Attachment: July 2016 Treasurer's Report of Financial Affairs

TREASURER'S REPORT OF FINANCIAL AFFAIRS

For the Month Ended July 31, 2016



All investment transactions have been executed in accordance with the criteria stated in the Agency's Investment Policy (Resolution No. 2016-5-1) adopted by the Inland Empire Utilities Agency's Board of Directors during its regular meeting held on May 18, 2016.

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

* A Municipal Water District

INLAND EMPIRE UTILITIES AGENCY
Cash and Investment Summary

Month Ended
July 31, 2016

	<u>July</u>	<u>June</u>
<u>Cash, Bank Deposits, and Bank Investment Accounts</u>	\$545,415	\$1,126,857
<u>Investments</u>		
Citizens Business Bank (CBB) Repurchase (Sweep)	\$10,458,173	\$23,149,836
Local Agency Investment Fund (LAIF)	30,542,452	30,498,647
CalTrust	16,057,901	16,052,880
California Asset Management Program (CAMP)	5,008,156	5,005,834
Certificates of Deposit	3,874,000	3,874,000
Medium Term Notes	9,605,972	9,607,958
U.S. Treasury Notes	999,933	999,917
U.S. Government Sponsored Entities	<u>29,428,338</u>	<u>27,427,285</u>
Total Investments	\$105,974,925	\$116,616,357
 Total Cash and Investments Available to the Agency	 <u>\$106,520,340</u>	 <u>\$117,743,214</u>
 <u>Restricted Deposits</u>		
Debt Service Accounts	\$7,283,494	\$2,544,729
CCRA Deposits Held by Member Agencies	55,133,818	56,503,833
OPEB (CERBT) Account	<u>9,502,119</u>	<u>9,318,938</u>
Total Restricted Deposits	\$71,919,431	\$68,367,500
 Total Cash, Investments, and Restricted Deposits	 <u>\$178,439,771</u>	 <u>\$186,110,714</u>

INLAND EMPIRE UTILITIES AGENCY
Cash and Investment Summary

Month Ended
July 31, 2016

Cash, Bank Deposits, and Bank Investment Accounts

CBB Demand Account (Offset by CBB Sweep Balance)	\$314,581
CBB Workers' Compensation Account	47,679
Bank of America (BoFA) Payroll Account	56,274
BoFA Payroll Taxes Account	59,791
Subtotal Demand Deposits	\$478,325
Other Cash and Bank Accounts	
Petty Cash	\$2,250
Subtotal Other Cash	\$2,250
US Bank Pre-Investment Money Market Account	\$64,840
Total Cash and Bank Accounts	\$545,415

Investments

CBB Repurchase (Sweep) Investments	
Federal Home Loan	\$6,897,371
Fannie Mae	3,560,802
Subtotal CBB Repurchase (Sweep)	\$10,458,173
Local Agency Investment Fund (LAIF)	
LAIF Non-Restricted Fund	\$30,542,452
Subtotal Local Agency Investment Fund	\$30,542,452
CalTrust	
Short Term	\$10,090,688
Medium Term - Restricted	5,967,213
Subtotal CalTrust	\$16,057,901
California Asset Management Program (CAMP)	
Pool	\$5,008,156
Subtotal CAMP	\$5,008,156

INLAND EMPIRE UTILITIES AGENCY
Cash and Investment Summary

Month Ended
July 31, 2016

Investments Continued

Certificates of Deposit

Brokered Certificates of Deposit	\$3,874,000
Subtotal Certificates of Deposit	<u>\$3,874,000</u>

Medium Term Notes

John Deere Capital Corp.	\$1,000,994
Toyota Motor Credit Corp.	2,000,000
JP Morgan Chase & Co.	999,370
Johnson & Johnson	2,022,558
Microsoft	2,071,915
Wells Fargo Bank N.A.	1,511,135
Subtotal Medium Term Notes	<u>\$9,605,972</u>

U.S. Treasury Notes

Treasury Note	\$999,933
Subtotal U.S. Treasury Notes	<u>\$999,933</u>

U.S. Government Sponsored Entities

Fannie Mae Bank	\$7,749,484
Freddie Mac Bank	7,479,862
Federal Farm Credit Bank	11,198,992
Federal Home Loan Bank	3,000,000
Subtotal U.S. Government Sponsored Entities	<u>\$29,428,338</u>

Total Investments \$105,974,925

Restricted Deposits

Debt Service Reserves

08B Debt Service Accounts	\$2,544,719
10A Debt Service Accounts	4,738,775
Subtotal Debt Service Reserves	<u>\$7,283,494</u>

INLAND EMPIRE UTILITIES AGENCY
Cash and Investment Summary

Month Ended
July 31, 2016

CCRA Deposits Held by Member Agencies	
City of Chino	\$12,461,412
Cucamonga Valley Water District	11,594,817
City of Fontana	9,482,594
City of Montclair	2,406,445
City of Ontario	10,518,357
City of Chino Hills	5,250,644
City of Upland	3,419,549
Subtotal CCRA Deposits Held by Member Agencies	\$55,133,818
CalPERS	
OPEB (GERBT) Account	\$9,502,119
Subtotal CalPERS Accounts	\$9,502,119
<i>Total Restricted Deposits</i>	<i>\$71,919,431</i>
<i>Total Cash, Investments, and Restricted Deposits as of July 31, 2016</i>	<i>\$178,439,771</i>
Total Cash, Investments, and Restricted Deposits as of 7/31/16	\$178,439,771
Less: Total Cash, Investments, and Restricted Deposits as of 6/30/16	186,110,714
<i>Total Monthly Increase (Decrease)</i>	<i>(\$7,670,943)</i>

INLAND EMPIRE UTILITIES AGENCY

Cash and Investment Summary

Month Ended
July 31, 2016

	Credit Rating @ Purchase		CHANGES IN Credit Rating		Par Amount	Cost Basis Amount	Term (Days)	July Amortization	July Value	% Coupon	% Yield to Maturity	Maturity Date	Market Value
	S&P	Moody's	S&P	Moody's									
Cash, Bank Deposits, and Bank Investment Accounts													
Citizens Business Bank (CBB)													
Demand Account*					\$314,581	\$314,581	N/A	N/A	\$314,581		N/A	N/A	\$314,581
Workers' Compensation Account					47,679	47,679	N/A	N/A	47,679		N/A	N/A	47,679
Subtotal CBB Accounts					<u>\$362,260</u>	<u>\$362,260</u>			<u>\$362,260</u>				<u>\$362,260</u>
Bank of America (BoFA)													
Payroll Checking					\$56,274	\$56,274	N/A	N/A	\$56,274		N/A	N/A	\$56,274
Payroll Tax Checking					59,791	59,791	N/A	N/A	59,791		N/A	N/A	59,791
Subtotal B of A Accounts					<u>\$116,065</u>	<u>\$116,065</u>			<u>\$116,065</u>		N/A		<u>\$116,065</u>
US Bank (USB)													
Federated Automated MMA					\$64,840	\$64,840	N/A	N/A	\$64,840		0.01%	N/A	\$64,840
Subtotal USB Account					<u>\$64,840</u>	<u>\$64,840</u>			<u>\$64,840</u>		0.01%		<u>\$64,840</u>
Petty Cash													
					<u>\$2,250</u>	<u>\$2,250</u>	N/A	N/A	<u>\$2,250</u>		N/A	N/A	<u>\$2,250</u>
Total Cash, Bank Deposits and Bank Investment Accounts					<u>\$545,415</u>	<u>\$545,415</u>			<u>\$545,415</u>				<u>\$545,415</u>
<i>*Negative demand checking balance is offset by the Daily Repurchase (Sweep) Account balance</i>													
Investments													
CBB Daily Repurchase (Sweep) Accounts													
Federal Home Loan					\$6,897,371	\$6,897,371	N/A	N/A	\$6,897,371		0.40%	N/A	\$6,897,371
Fannie Mae					3,560,802	3,560,802	N/A	N/A	3,560,802		0.40%		3,560,802
Subtotal CBB Repurchase Accounts					<u>\$10,458,173</u>	<u>\$10,458,173</u>			<u>\$10,458,173</u>		0.40%		<u>\$10,458,173</u>
LAIF Accounts													
Non-Restricted Funds					\$30,542,452	\$30,542,452	N/A	N/A	\$30,542,452		0.588%	N/A	\$30,542,452
Subtotal LAIF Accounts					<u>\$30,542,452</u>	<u>\$30,542,452</u>			<u>\$30,542,452</u>		0.588%		<u>\$30,542,452</u>
CALTRUST Accounts													
Short-Term					\$10,090,688	\$10,090,688	N/A	N/A	\$10,090,688		0.72%	N/A	\$10,090,688
Medium-Term (Self Insurance Reserves)					5,967,213	5,967,213	N/A	N/A	5,967,213		1.00%	N/A	5,967,213
Subtotal CalTrust Accounts					<u>\$16,057,901</u>	<u>\$16,057,901</u>			<u>\$16,057,901</u>		0.824%		<u>\$16,057,901</u>
CAMP Accounts													
Short-Term					\$5,008,156	\$5,008,156	N/A	N/A	\$5,008,156		0.55%	N/A	\$5,008,156
Subtotal CAMP Accounts					<u>\$5,008,156</u>	<u>\$5,008,156</u>			<u>\$5,008,156</u>		0.55%		<u>\$5,008,156</u>

INLAND EMPIRE UTILITIES AGENCY

Cash and Investment Summary

Month Ended
July 31, 2016

	Credit Rating @ Purchase		CHANGES IN Credit Rating		Par Amount	Cost Basis Amount	Term (Days)	July Amortization	July Value	% Coupon	% Yield to Maturity	Maturity Date	Market Value
	S&P	Moody's	S&P	Moody's									
Investments (continued)													
Brokered Certificates of Deposit (CDs)													
Ally Bank	N/A				\$245,000	\$245,000	551		\$245,000	0.80%	0.80%	01/17/17	\$245,233
Capital One National Association	N/A				240,000	240,000	552		240,000	0.80%	0.80%	01/17/17	240,228
Compass Bank	N/A				245,000	245,000	552		245,000	0.85%	0.85%	01/17/17	245,233
Comenity Capital Bank	N/A				240,000	240,000	731		240,000	1.15%	1.15%	07/13/17	240,624
Discover Bank	N/A				240,000	240,000	552		240,000	1.15%	1.15%	07/17/17	240,593
Medallion Bank	N/A				240,000	240,000	733		240,000	1.20%	1.20%	07/17/17	240,593
Sallie Mae Bank	N/A				248,000	248,000	743		248,000	1.15%	1.15%	11/06/17	249,195
Key Bank National Association	N/A				248,000	248,000	732		248,000	1.10%	1.10%	11/13/17	249,235
Capital One Bank	N/A				240,000	240,000	916		240,000	1.35%	1.35%	01/16/18	241,754
Goldman Sachs Bank USA	N/A				240,000	240,000	916		240,000	1.40%	1.40%	01/16/18	241,927
BMW Bank of North America	N/A				240,000	240,000	915		240,000	1.40%	1.40%	01/17/18	241,930
American Express Bank	N/A				240,000	240,000	1097		240,000	1.70%	1.70%	07/16/18	242,532
American Express Centurion	N/A				240,000	240,000	1097		240,000	1.70%	1.70%	07/16/18	242,532
HSBC Bank USA, NA Step	N/A				244,000	244,000	1827		244,000	1.25%	2.51%	07/29/20	244,956
JPM Chase NA Step	N/A				244,000	244,000	1827		244,000	1.25%	2.32%	07/31/20	244,000
Synchrony Bank	N/A				240,000	240,000	1827		240,000	2.25%	2.25%	10/02/20	248,760
Subtotal Brokered CDs					\$3,874,000	\$3,874,000		\$0	\$3,874,000		1.426%		\$3,899,325
US Treasury Note													
US Treasury Note	N/A	AAA			\$1,000,000	\$999,463	1092	15	\$999,933	0.63%	0.64%	12/15/16	\$1,000,950
Subtotal US Treasuries					\$1,000,000	\$999,463		15	\$999,933		0.64%		\$1,000,950
U.S. Government Sponsored Entities													
Federal Farm Credit Bank (<i>Sinking Fund Reserves</i>)	AA+	AAA			\$5,195,000	\$5,199,431	447	(303)	\$5,198,992	0.75%	0.68%	09/13/17	\$5,200,247
Freddie Mac Bond	AA+	AAA			2,000,000	2,000,000	714		2,000,000	1.05%	1.05%	05/10/18	2,001,280
Fannie Mae Bond	AA+	AAA			2,000,000	2,000,000	1,097		2,000,000	1.20%	1.20%	11/28/18	2,002,880
Fannie Mae Bond	AA+	AAA			2,000,000	2,000,000	1,459		2,000,000	1.63%	1.63%	12/28/18	2,009,120
Federal Farm Credit Bank	AA+	AAA			3,000,000	3,000,000	1,079		3,000,000	1.15%	1.15%	02/22/19	3,001,980
Freddie Mac Bond	AA+	AAA			1,000,000	1,003,132	1,023	(95)	1,002,930	1.25%	1.14%	03/15/19	1,010,900
Federal Home Loan Bank	AA+	AAA			3,000,000	3,000,000	1,186		3,000,000	1.50%	1.50%	04/26/19	3,008,610
Federal Farm Credit Bank	AA+	AAA			2,000,000	2,000,000	1,460		2,000,000	1.52%	1.52%	06/24/19	2,034,060
Freddie Mac Bond	AA+	AAA			1,500,000	1,500,000	1,080		1,500,000	1.15%	1.15%	07/26/19	1,500,510
Fannie Mae Step Bond	AA+	AAA			1,500,000	1,500,000	1,080		1,500,000	0.88%	1.33%	07/27/19	1,499,205
Fannie Mae Bond	AA+	AAA			900,000	899,460	1,153	14	899,484	1.25%	1.25%	08/23/19	900,396
Fannie Mae Bond	AA+	AAA			1,350,000	1,350,000	1,157		1,350,000	1.25%	1.25%	08/26/19	1,351,674
Freddie Mac Bond	AA+	AAA			3,000,000	2,972,928	1,359	618	2,976,932	1.25%	1.50%	10/02/19	3,032,100
Federal Farm Credit Bank	AA+	AAA			1,000,000	1,000,000	1,461		1,000,000	1.42%	1.42%	10/21/19	1,000,710
Subtotal U.S. Gov't Sponsored Entities					\$29,445,000	\$29,424,951		\$234	\$29,428,338		1.218%		\$29,553,672
(As of August 2011, all US GSE's have been downgraded to AA+ Rating by S&P)													

INLAND EMPIRE UTILITIES AGENCY

Cash and Investment Summary

Month Ended
July 31, 2016

	Credit Rating @ Purchase		CHANGES IN Credit Rating		Par Amount	Cost Basis Amount	Term (Days)	July Amortization	July Value	% Coupon	% Yield to Maturity	Maturity Date	Market Value
	S&P	Moody's	S&P	Moody's									
Medium Term Notes													
John Deere Capital Corp	A	A2			\$1,000,000	\$1,004,000	1,754	(71)	\$1,000,994	1.20%	1.11%	10/10/17	\$1,003,690
Toyota Motor Credit Corp	AA-	AA3			2,000,000	2,000,000	1,045		2,000,000	1.10%	1.10%	04/25/18	1,981,800
JP Morgan Chase & Co	A-	A3			1,000,000	999,000	1,037	30	999,370	1.63%	1.66%	05/15/18	1,007,460
Johnson & Johnson	AAA	AAA			2,000,000	2,027,480	1,044	(816)	2,022,558	1.65%	1.16%	12/05/18	2,034,640
Microsoft	AAA	AAA			2,050,000	2,076,691	1,045	(792)	2,071,915	1.63%	1.16%	12/06/18	2,081,796
Wells Fargo Bank	AA-	Aa2			1,500,000	1,511,655	1,061	(336)	1,511,135	1.75%	1.48%	05/24/19	1,520,760
Subtotal Medium Term Notes					<u>\$9,550,000</u>	<u>\$9,618,826</u>		<u>(\$1,985)</u>	<u>\$9,605,972</u>		<u>1.25%</u>		<u>\$9,630,146</u>
Total Investments					<u>\$105,935,682</u>	<u>\$105,983,921</u>			<u>\$105,974,925</u>				<u>\$106,150,775</u>
<i>(Source of Investment Market Value: US Bank)</i>													
Restricted Deposits													
Debt Service and Arbitrage Accounts													
08B Debt Service Accounts					\$2,544,719	\$2,544,719	N/A	N/A	\$2,544,719		0.00%		\$2,544,719
10A Debt Service Accounts					4,738,775	4,738,775	N/A	N/A	4,738,775		0.10%		4,738,775
Total Debt Service Accounts					<u>\$7,283,494</u>	<u>\$7,283,494</u>			<u>\$7,283,494</u>		0.07%		<u>\$7,283,494</u>
CCRA Deposits Held by Member Agencies													
City of Chino					\$12,461,412	\$12,461,412	N/A	N/A	\$12,461,412		N/A	N/A	\$12,461,412
Cucamonga Valley Water District					11,594,817	11,594,817	N/A	N/A	11,594,817		N/A	N/A	11,594,817
City of Fontana					9,482,594	9,482,594	N/A	N/A	9,482,594		N/A	N/A	9,482,594
City of Montclair					2,406,445	2,406,445	N/A	N/A	2,406,445		N/A	N/A	2,406,445
City of Ontario					10,518,357	10,518,357	N/A	N/A	10,518,357		N/A	N/A	10,518,357
City of Chino Hills					5,250,644	5,250,644	N/A	N/A	5,250,644		N/A	N/A	5,250,644
City of Upland					3,419,549	3,419,549	N/A	N/A	3,419,549		N/A	N/A	3,419,549
Subtotal CCRA Deposits Held by Member Agencies					<u>\$55,133,818</u>	<u>\$55,133,818</u>			<u>\$55,133,818</u>				<u>\$55,133,818</u>
<i>(Reported total as of June 30, 2016)</i>													
CalPERS Deposits													
OPEB (CERBT) Account					\$9,000,000	\$9,000,000	N/A	N/A	\$9,502,119		1.97%	N/A	\$9,502,119
Subtotal CalPERS Deposits					<u>\$9,000,000</u>	<u>\$9,000,000</u>			<u>\$9,502,119</u>				<u>\$9,502,119</u>
Total Restricted Deposits					<u>\$71,417,312</u>	<u>\$71,417,312</u>			<u>\$71,919,431</u>				<u>\$71,919,431</u>
Total Cash, Investments, and Restricted Deposits as of July 31, 2016					<u>\$177,898,409</u>	<u>\$177,946,649</u>			<u>\$178,439,771</u>				<u>\$178,615,621</u>

INLAND EMPIRE UTILITIES AGENCY
Cash and Investment Summary

Month Ended
July 31, 2016

July Purchases

No.	Date	Transaction	Investment Security	Par Amount Purchased	Investment Yield
1	07/26/16	Purchase	Freddie Mac Bond	\$ 1,500,000	1.150%
2	07/26/16	Purchase	Fannie Mae Step Bond	\$ 1,500,000	0.875%
Total Purchases				<u>\$ 3,000,000</u>	

July Investment Maturities, Calls & Sales

No.	Date	Transaction	Investment Security	Par Amount Matured/Sold	Investment Yield to Maturity
1	07/13/16	Called	Federal Home Loan Bank Bond	\$ 1,000,000	1.400%
Total Maturities, Calls & Sales				<u>\$ 1,000,000</u>	

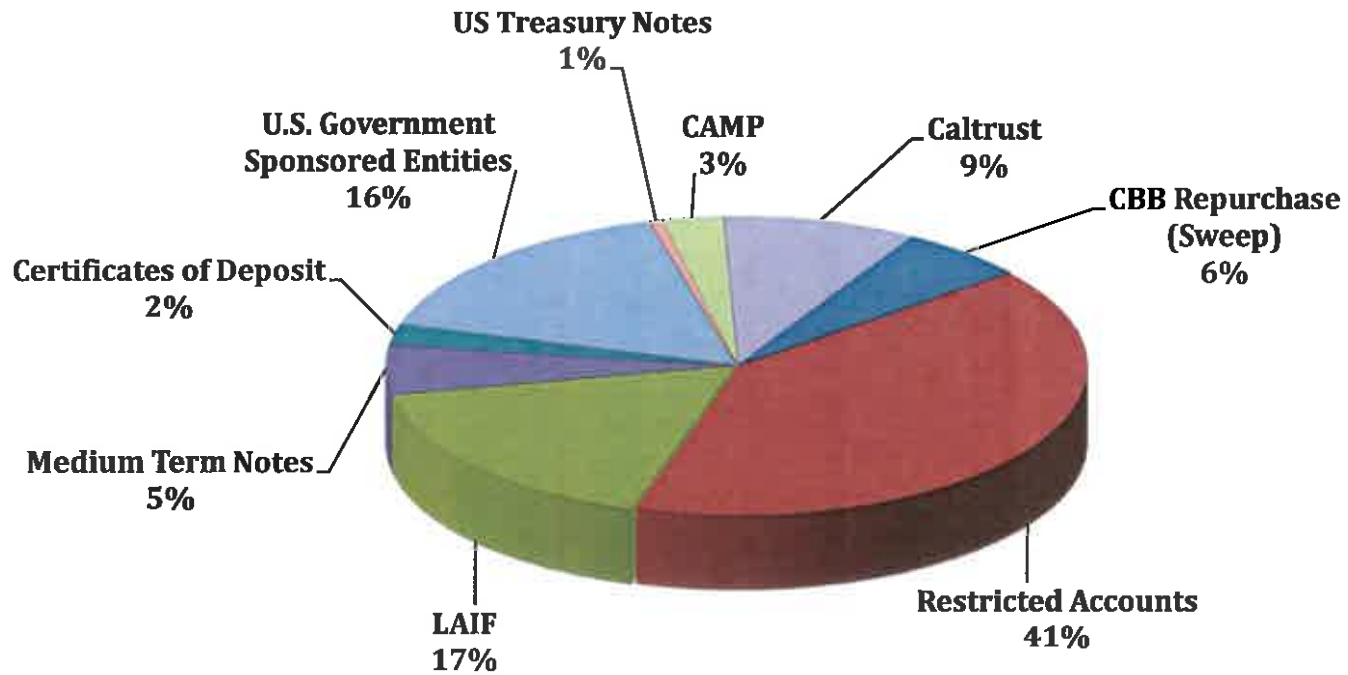
INLAND EMPIRE UTILITIES AGENCY
Cash and Investment Summary

Month Ended
July 31, 2016

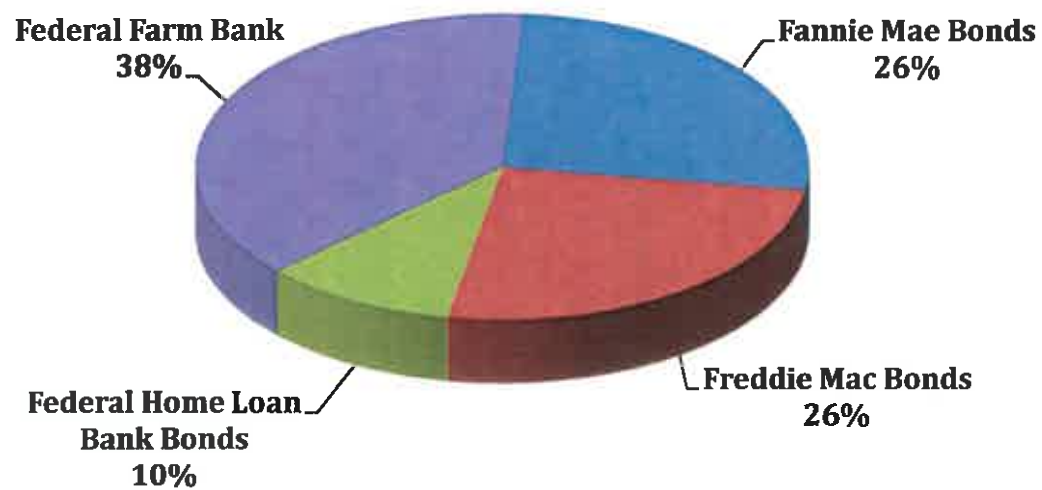
<u>Directed Investment Category</u>	<u>Amount Invested</u>	<u>Yield</u>
CBB Repurchase (Sweep)	\$10,458,173	0.400%
LAIF	30,542,452	0.588%
CalTrust	16,057,901	0.824%
CAMP	5,008,156	0.550%
Medium Term Notes	9,605,972	1.245%
US Treasury Notes	999,933	0.640%
U.S. Government Sponsored Entities	29,428,338	1.218%
	\$102,100,925	0.848%
 Bank Deposit and Investment Accounts		
Various Banks - Brokered Certificates of Deposit	\$3,874,000	1.426%
	\$3,874,000	1.426%
 Total Investment Portfolio		
	\$105,974,925	
Investment Portfolio Rate of Return		0.869%
 Restricted/Transitory/Other Demand Accounts		
	<u>Amount Invested</u>	<u>Yield</u>
CCRA Deposits Held by Member Agencies	\$55,133,818	N/A
CalPERS OPEB (CERBT) Account	9,502,119	1.970%
US Bank - 2008B Debt Service Accounts	2,544,719	0.065%
Citizens Business Bank - Demand Account	314,581	N/A
US Bank - 2010A Debt Service Accounts	4,738,775	0.100%
US Bank - Pre-Investment Money Market Account	64,840	0.010%
Citizens Business Bank - Workers' Compensation Account	47,679	N/A
Other Accounts*	118,315	N/A
	\$72,464,846	
Total Other Accounts		
Average Yield of Other Accounts		0.087%
 Total Agency Directed Deposits		
	\$178,439,771	

* Note: Bank of America Payroll Deposits used as compensating balances for bank services.

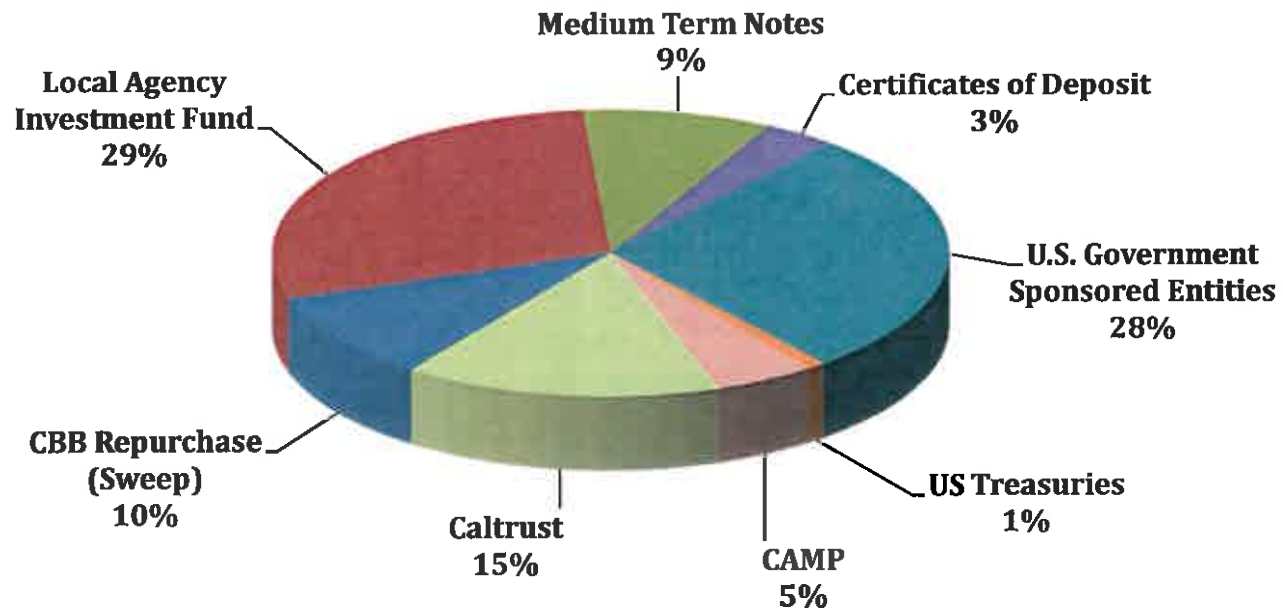
Inland Empire Utilities Agency
Treasurer's Report of Financial Affairs
For the Month Ended July 31, 2016
Agency Investment Portfolio (net of escrow accounts)
\$178,439,771



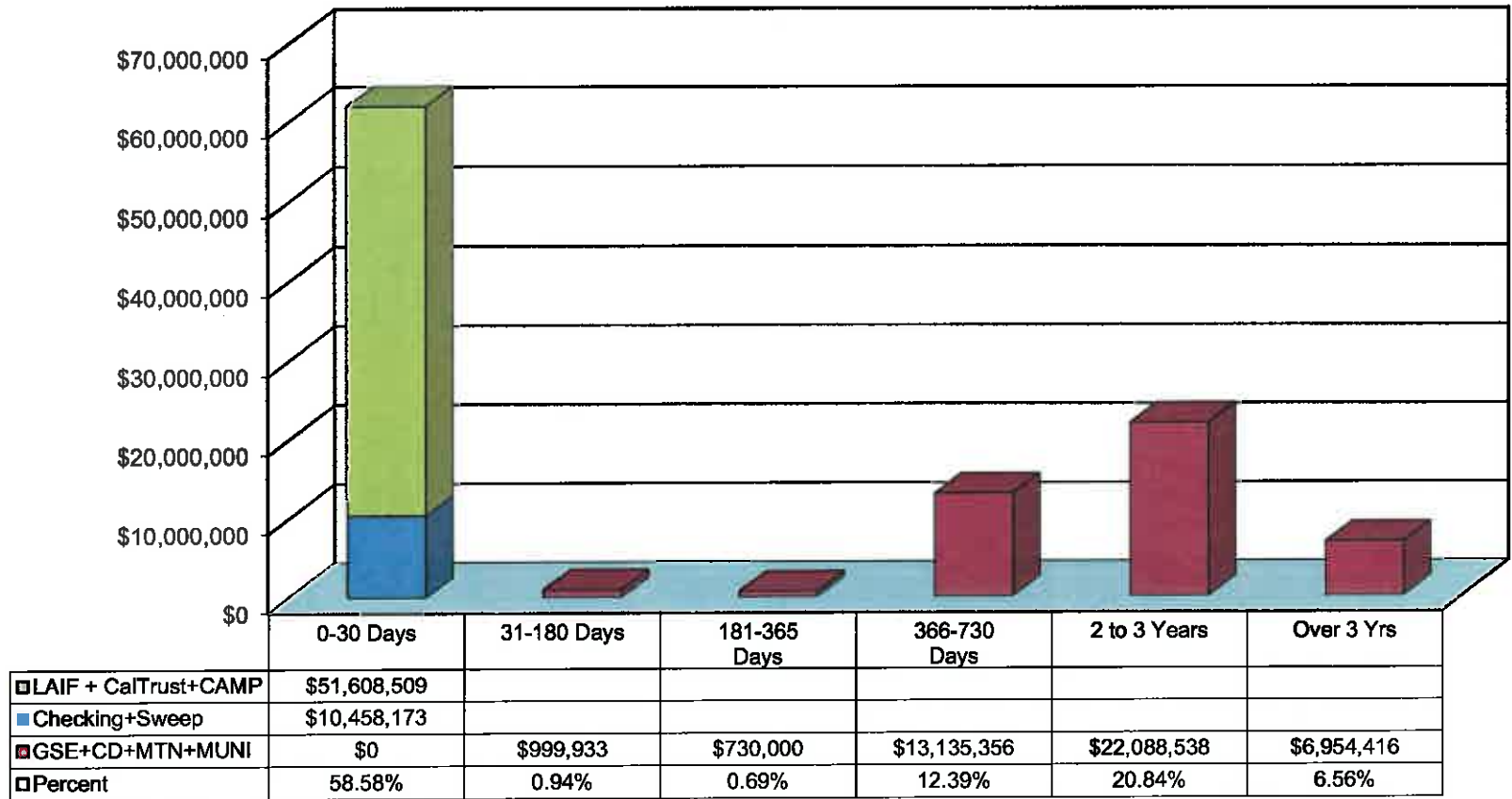
Inland Empire Utilities Agency
Treasurer's Report of Financial Affairs
For the Month Ended July 31, 2016
U.S. Government Sponsored Entities Portfolio
\$29,428,338



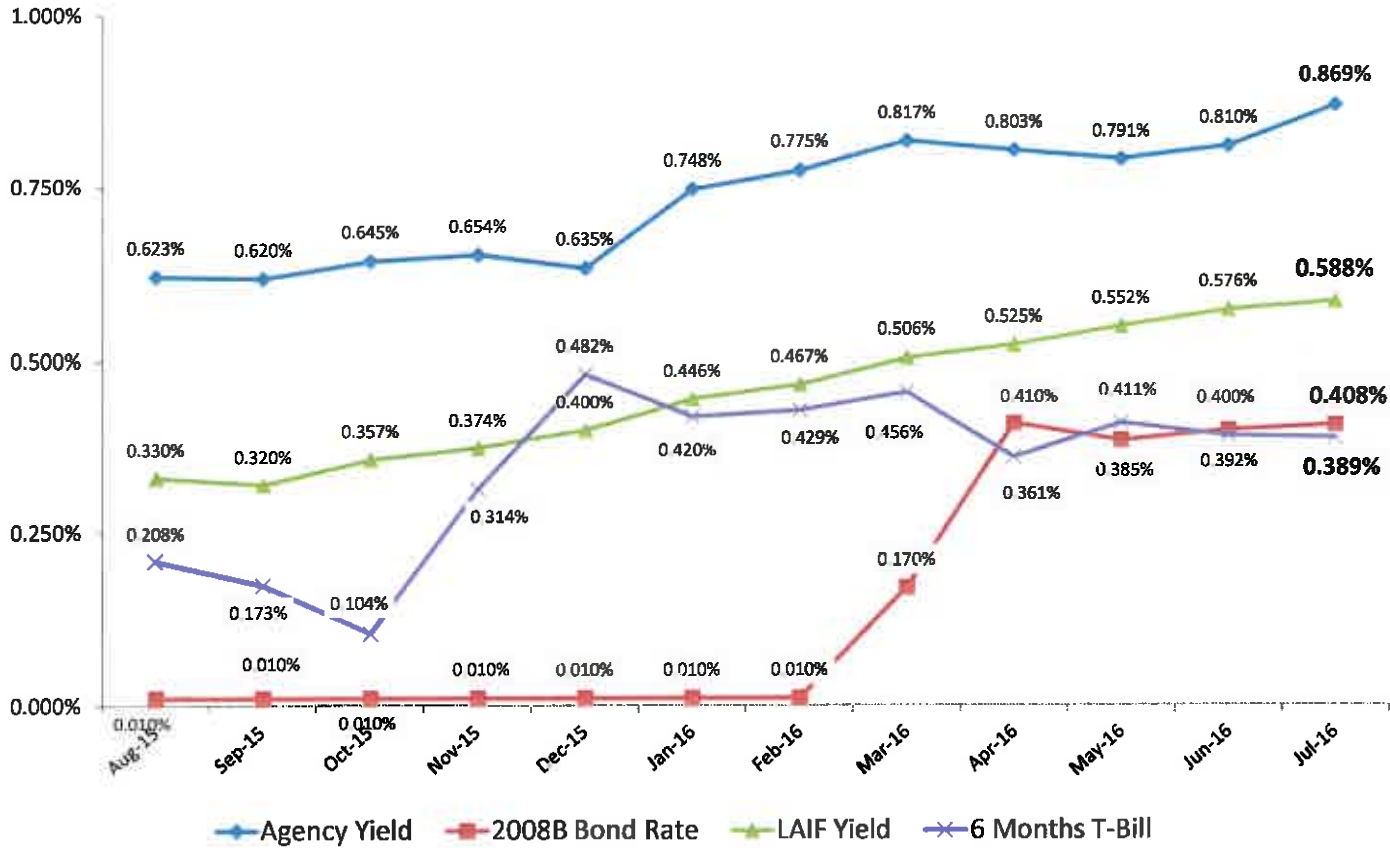
Inland Empire Utilities Agency
Treasurer's Report of Financial Affairs
For the Month Ended July 31, 2016
Unrestricted Agency Investment Portfolio
\$105,974,925



Inland Empire Utilities Agency
Treasurer's Report of Financial Affairs
For the Month Ended July 31, 2016
Agency Investment Portfolio Maturity Distribution
\$105,974,925



Inland Empire Utilities Agency
Treasurer's Report of Financial Affairs
Agency Investment Portfolio Yield Comparison



Treasurer's Report of Financial Affairs for July 31, 2016

**September 2016
Board Meeting**

Report of Financial Affairs

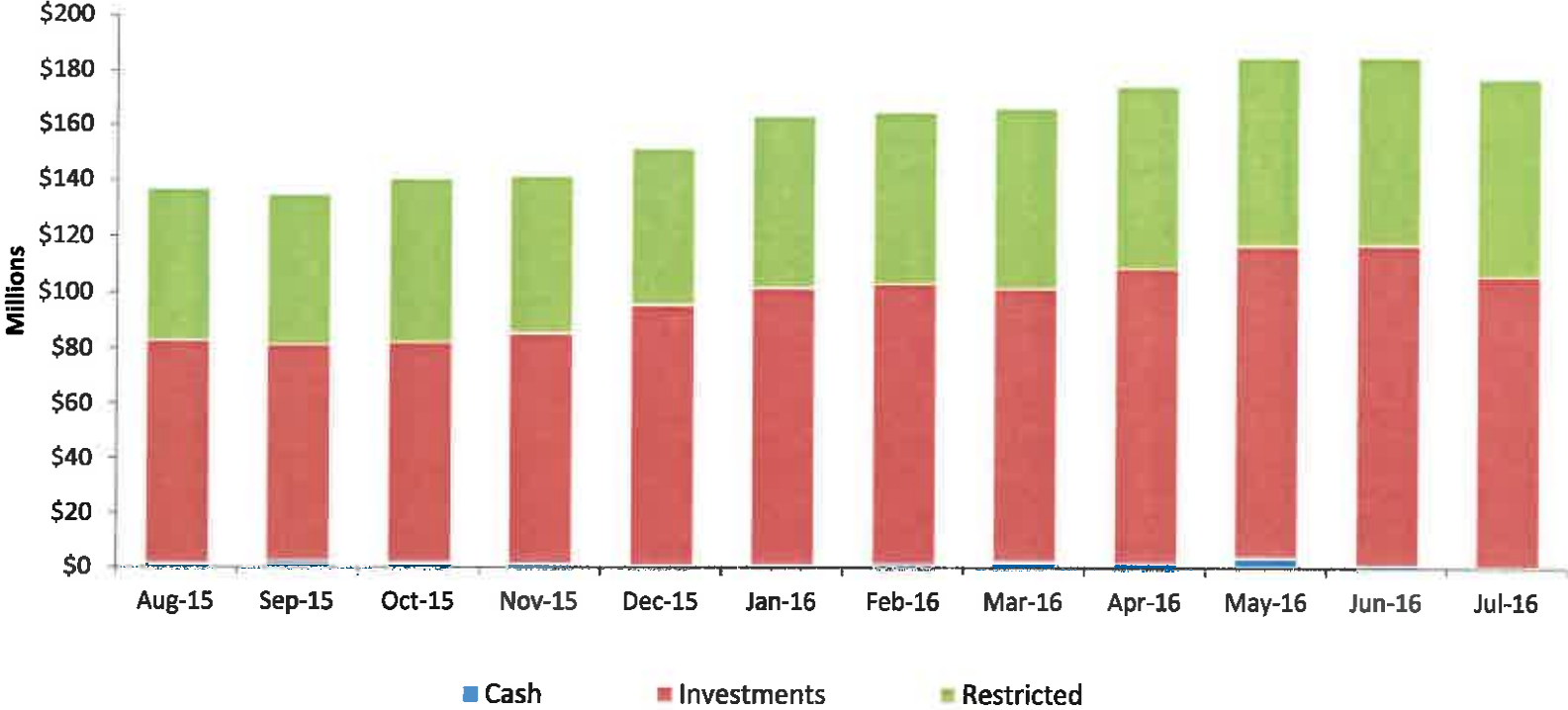
Liquidity

Description	July 2016 (\$ million)	June 2016 (\$ million)	Increase (Decrease) (\$ million)
Total Cash, Investments, and Restricted Deposits	\$178.4	\$186.1	(\$7.7)
Total Investment Portfolio	\$105.9	\$116.6	(\$10.7)
Investment Portfolio Yield	0.869%	0.810%	0.059%
Weighted Average Duration (years)	0.89	0.86	0.01
Average Cash on Hand (days)	249	283	(18)

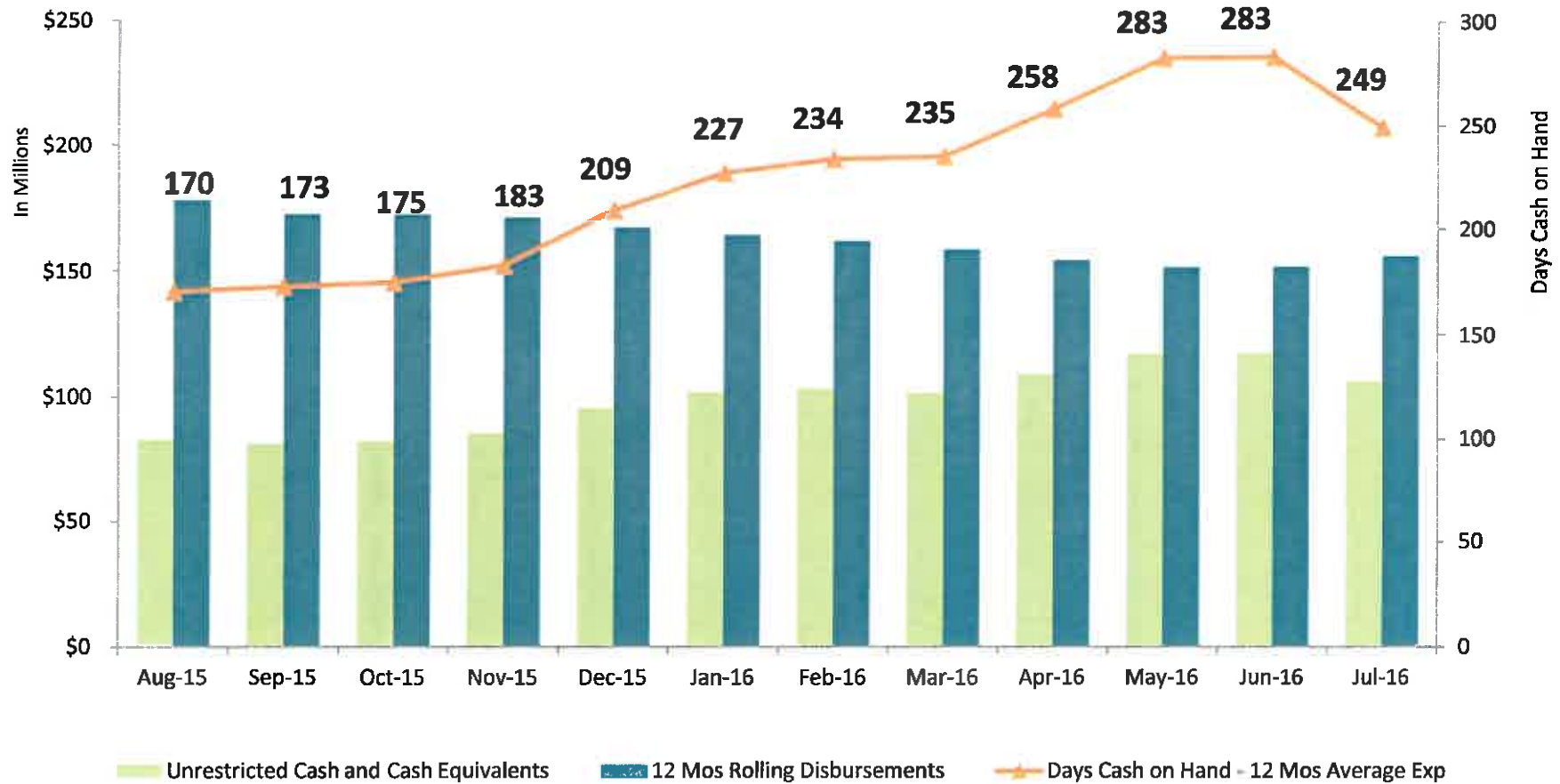
Portfolio

Term	Description	Allowable Threshold (\$ million)	Investment Value (\$ million)	Yield	Current Portfolio %
Short Term, Under 1 Year:	LAIF	\$65	\$30.5	0.588%	28.8%
	CalTrust	\$20	\$16.1	0.824%	15.1%
	Citizens Business – Sweep	40%	\$10.5	0.40%	9.9%
	CAMP	\$20	\$5.0	0.55%	4.7%
	Brokered CD's	30%	\$1.4	0.99%	1.2%
	US Treasury Note	n/a	\$1.0	0.64%	1.0%
1 to 3 Years:	Brokered CDs	30%	\$1.7	1.40%	1.6%
	US Government Securities	n/a	\$23.2	1.17%	21.9%
	Medium Term Notes	10%	\$9.6	1.25%	9.0%
Over 3 Years:	Brokered CDs	30%	\$0.7	2.36%	0.9%
	US Government Securities	n/a	\$6.2	1.40%	5.9%

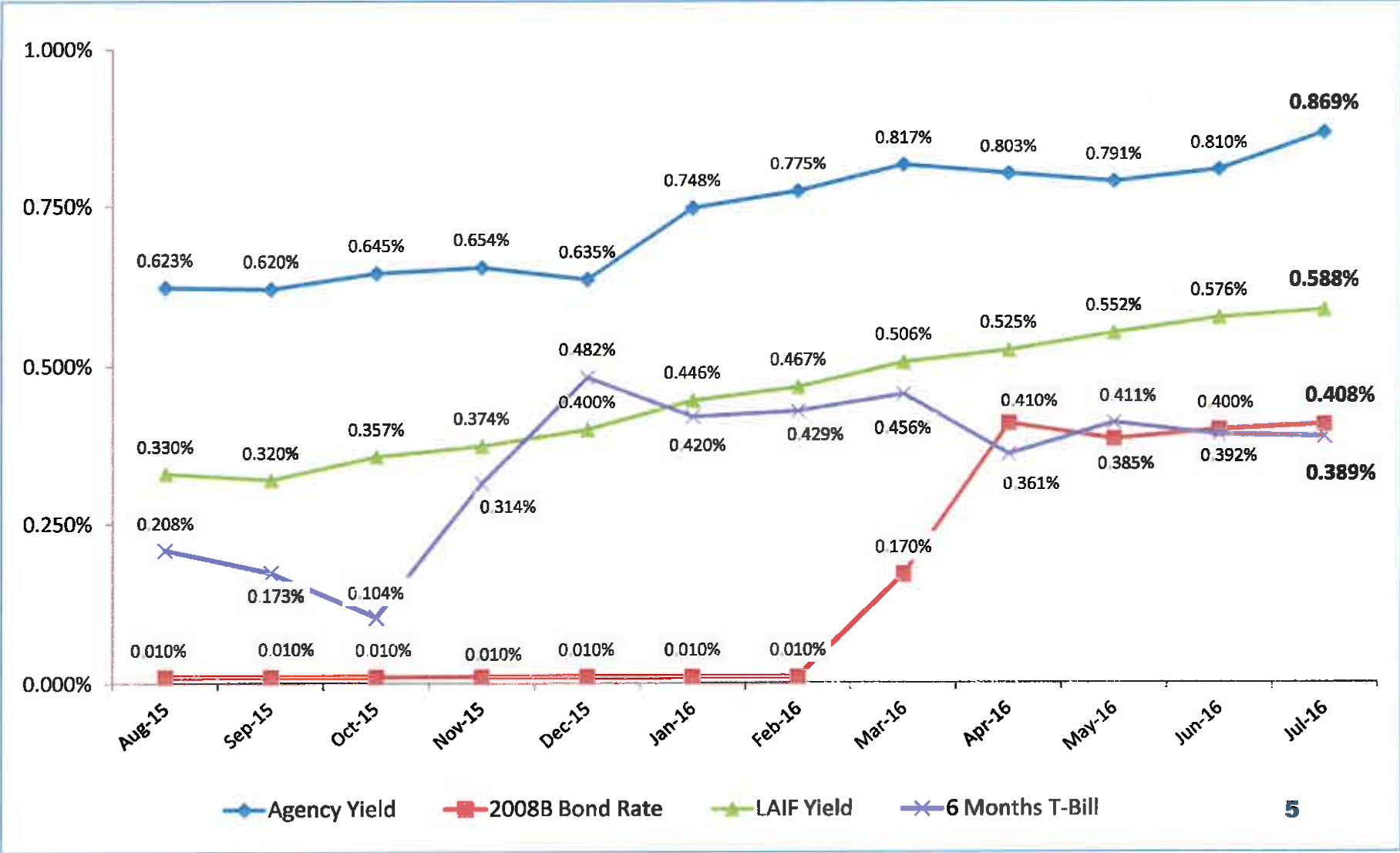
Cash, Investments and Restricted Deposits



Day Cash On Hand 12 Months Rolling Average



Month End Portfolio Yield Comparison





Questions?

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


**INFORMATION
ITEM**


3E


Date: September 21, 2016

To: The Honorable Board of Directors

Through: Finance, Legal, and Administration Committee (09/14/16)

From:  P. Joseph Grindstaff
General Manager

Submitted by:  Christina Valencia
Chief Financial Officer/Assistant General Manager

 Javier Chagoyen-Lazaro
Manager of Finance and Accounting

Subject: FY 2015/16 Fourth Quarter Budget Variance, Performance Goals Updates,
and Budget Transfers

RECOMMENDATION

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

BACKGROUND

The Budget Variance report presents the Agency's financial performance through the fourth quarter ending June 30, 2016, includes various analyses in the following attachments:

- Exhibit A provides a comparison of actual revenues and expenses against the current FY 2015/16 amended budget including a discussion of major categories with the most significant variances.
- Exhibit B provides a progress status of Division and Department Goals and Objectives as established in the FY 2015/16 adopted budget.
- Exhibit C-1 presents a summary of Operations and Maintenance (O&M) and capital project budget transfers approved by management during the fourth quarter.
- Exhibit C-2 presents a summary of the GM contingency account activity.
- Exhibit D lists Board approved budget amendments and management approved budget transfers for capital and O&M projects, with changes to total project budget.
- Exhibit E provides a FY 2015/16 financial overview of each of the Agency's programs.

Upon conclusion of the annual audit, a supplemental report will be provided to the Board identifying any material changes.

TOTAL REVENUES AND OTHER FUNDING SOURCES

Overall, the Agency received total revenues and other funding sources through the end of the fourth quarter of FY 2015/16 of \$194.0 million, or 91.9% of the amended budget (Exhibit A detail). The following section highlights key variances:

- **Connection Fees** – Total new equivalent dwelling unit (EDU) connections reported were \$25.8 million or 110.8% compared to the budget of \$23.2 million. A total of 4,774 new wastewater connections were reported by member agencies which includes 610 new EDU connections from Prologis, CSI, and California Speedway, compared to the budgeted new EDU connections for FY 2015/16 of 4,330. New connections are primarily from residential, retail stores, restaurants, and industrial facilities developments. The one-time 333 new EDU connections generated from California Speedway will be repaid in the form of Water Rights transfer to IEUA per the agreement for the provision of sewer and recycled water service dated November 24, 2015.
- **User Charges** – User charges were \$67.0 million, or 99.9% of the budget. The user charges also include EDU volumetric fees of \$49.6 million actual fees paid by users discharging to the regional wastewater system, \$10.7 million for Non-Reclaimable Wastewater pass-through fees paid by industrial and commercial users connected to the brine line system, \$4.7 million for imported water meter service charges to meet the readiness-to-serve obligation from Metropolitan Water District of Southern California (MWD) and water use efficiency programs, and \$1.9 million for other service charges.
- **Recycled Water Sales** – Recycled water sales at the end of fiscal year was \$11.4 million, or 95.4% compared to the budget of \$11.9 million. Direct sales were \$6.0 million or 19,397 acre feet (AF) and groundwater recharge sales were \$5.4 million or 13,222 AF, for total deliveries of 32,619 AF compared to the projected 35,150 AF. The demand for direct sales of recycled water decreased due to lower agricultural use and loss of customers but was partially offset with the increase in groundwater recharge deliveries.
- **MWD Imported Water Sales** – Total MWD adjusted imported water sales were \$17.3 million or 63.4% of the budget. A total of 29,441 AF of pass through water was delivered at the end of the fourth quarter compared to 50,000 AF budget. The lower sales can be attributed to the continuous response to drought condition and public outreach efforts aimed at water conservation.
- **Property Taxes** – Tax receipts were \$45.6 million or 110.9% of the amended budget. General ad-valorem property tax receipts from the San Bernardino County Tax Assessor (County) were \$29.3 million and “pass-through” incremental taxes received were \$15.2 million. The increase in tax receipts was accounted by incremental taxes of \$2.7 million the city of Ontario and a 5% growth in general ad valorem taxes compared to prior fiscal year receipt.

- **Grants & Loans** – Total receipts of \$14.1 million or 66.4% of the amended budget were received through the end of the fiscal year. Total grant receipts were \$6.2 million or 69.4% of the \$8.9 million budget for the Regional Recycled Water Distribution System, ground water supply wells and basins, water quality laboratory and drought and water conservation. Actual SRF Loan proceeds were \$7.9 million or 64.2% of the \$12.3 million budget for Wineville area project, new water quality laboratory and other recycled water projects. Grants and loans receipts are dependent on projects spending.
- **Other Revenues** – Total other revenues were \$3.5 million, or 57.4% of the amended budget. Actuals include \$1.4 million from lease revenue and energy rebates and \$1.8 million in project reimbursements. Delays in the reimbursable projects from Recycled Water and Water Resources Programs accounted for the lower revenue.

TOTAL EXPENSES AND USES OF FUNDS

The Agency's total expenses and uses of funds through the end of the fiscal year were \$148.2 million, or 66.7% of the amended budget. The following section highlights key variances:

- **Employment Expenses** – This category includes both wages and benefits. Employment expenses were \$38.0 million or 93.7% of the amended budget. Higher than anticipated vacancy factor of 9% (26 positions) compared to budgeted vacancy rate of 4% (12 positions) provides savings in wages and benefits.
- **Professional Fees & Services** – Total expenses were \$6.1 million, or 62.0% of the amended budget. The favorable variance can be attributed to timing of planned work or services not executed in the fiscal year, or work started in FY 2015/16 but expected to be completed in the following fiscal year. For example, delays in contract services, such as acquiring on-site professional service due to new requirements from California Environmental Quality Act (CEQA), and deferral of SAP related contract services. As a result, \$1.2 million of the FY 2015/16 amended budget was identified to be carried forward to FY 2016/17.
- **Chemicals** – Total expenses were \$3.9 million, or 83.6% of the amended budget. Favorable variance was due in large part to price decreases from re-bidding of certain chemicals, including sodium hypochlorite, ferric chloride, and sodium. Decrease in chemical use and reduction in plant influent flow enabled operations and maintenance to sustain lower expenditures.

- **Operating Fees** – Total expenses were \$11.3 million, or 85.5% of the amended budget. Favorable variance in this category was contributed by lower than anticipated strength and imbalance charges (pass through) in the Non Reclaimable Waste (NRW) system. In addition to industries being proactive in treating their water before discharging to the system helped reduced the strength charges.
- **Utilities** – Expenses in this category were \$8.8 million or 82.1% of the amended budget.
 - Electricity was slightly higher at \$6.6 million compared to \$6.0 million budget. Low production from fuel cell at RP-1 accounted for the increase in electricity costs. The current average rate for imported electricity of \$0.108 compared to \$0.125/kWh budgeted rate. Total usage through the end of the fiscal year was measured at 58,321,635 kWh.
 - Natural gas expense was low due to the lower rate (averaging \$0.41/therm compared to the budgeted rate of \$0.80/therm) and lower usage measured at 853,251 therms, or 71% of the annual agency average of 1,200,000 therms.
 - Fuel cell was \$1.1 million or 41.5% compared to \$2.6 million budget due to lower production of electricity.
 - Solar energy was slightly lower at 89.0% of the budgeted amount for the end of fiscal year. Electricity generated from solar power has slightly diminished which can be attributed to the age of the solar panels.
- **MWD Imported Water Purchases** – Total MWD pass-through imported water purchases were \$18.7 million or 31,714 AF compared to 50,000 AF budgeted. The decline in water purchase can be attributed to the continuous response to drought condition and public outreach efforts aimed at water conservation.
- **O&M and Reimbursable Projects** – The combined special and reimbursable project expenditures were \$7.2 million or 25.4% of the amended budget. The favorable variance was mainly due to the Chino Basin Groundwater Wells and Raw Water Pipeline budgeted at \$9.0 million or 31% of the category's amended budget, of which only \$1.1 million was expended. A total of \$6.5 million of the FY 2015/16 amended budget has been identified to be carried forward to FY 2016/17.
- **Capital Projects**–Total capital project expenditures were \$24.5 million or 47.7% compared to the amended budget of \$51.4 million. The amended budget includes encumbrances of \$8.0 million of capital project budget carried forward from FY 2014/15 budget. Lower capital spending is attributed to delays in construction for the SCADA enterprise system, San Sevaine Basin Improvements and RP-1 related projects. A total of \$4.5 million of the FY 2015/16 amended budget has been identified to be carried forward to FY 2016/17.

As of June 30, 2016, there were an estimated eighty-eight (88) projects identified as eligible for closure since the start of the fiscal year.

Table 1 below identifies projects with project budget over \$500,000 which are not projected to be expended in the current fiscal year. These projects account for variances of approximately \$19.5 million, or 34.2% of the amended budget. Spending levels are largely driven by changes in project scope and schedule, construction bid results, regulatory issues, and available resources associated with such undertakings.

Table 1: Project Budget Not Planned to be Expended in FY 2015/16

Project #	Description	FY 15/16 Actuals	FY 15/16 Budget	Variance (FY Budget - FY Forecast)	Reason for Variance
1	EN06025 Wineville Ext RW Pipeline Segment A	1,125,665	2,135,354	1,009,689	The project finished under budget.
2	EN11031 RP-5 Flow Equalization and Effluent Monitoring	180,581	1,255,263	1,074,682	The project scope was modified to meet Agency operating requirements causing a schedule delay. Contract modifications are complete and the project has restarted
3	EN13001 San Sevalne Basin Improvements	318,956	3,500,000	3,181,044	The majority of the expenses are construction related and will begin during FY 2016/17.
4	EN13016 SCADA Enterprise System	3,476,753	4,297,500	820,747	Job is progressing with less than anticipated internal costs.
5	EN13018 Montclair Diversion Structure Retrofit	753,954	1,203,874	449,920	The expenditures were delayed to allow the contractor time to procure all materials necessary prior to closing the street to lessen the length of time for the road closure.
6	EN13045 Wineville RW Extension Segment B	1,694,443	2,506,255	811,812	The project completed under budget.
7	EN13048 RP-1 930-Zone RW Pump Station Load Analysis	291,168	1,000,000	708,832	An extensive analysis of the RP-1 existing load was required prior to launching the design. The majority of the budget (design and construction) will be consumed in FY 2016/17.
8	EN14018 RP-4 Disinfection System Retrofit	264,064	759,516	495,452	Additional scope to rehab the south side of the existing building impacted the completion of the design schedule.
9	EN14047 GWR and RW SCADA Control Upgrades	117,891	816,265	698,374	The planned schedule did not account for a lengthy pre-design effort. This pushed all of the construction cost to FY 2016/17.
10	EN15043 SBCFCD Recycled Water Easement	2,058	567,298	565,240	San Bernardino County has not completed the appraisal report reviews.
11	EN15044 SBCFCD NRW Easement	267	514,929	514,662	San Bernardino County has not completed the appraisal report reviews.
12	EN16021 Chino Basin Groundwater Supply Wells and Raw Water Pipelines	1,089,754	9,000,000	7,910,247	The project work has been delayed due to the ongoing settlement negotiations with the Regional Board. CDA has initiated project management with Michael Baker International, but design and construction cannot begin until Regional Board settlement is complete, per IEUA's agreement with CDA. The Regional Board has delayed the issuance of the Cleanup Order, which has pushed back the project start date. It is anticipated that the Regional Board will issue the Cleanup Order in Q3 of 2016.
13	EN16024 RP-1 Mixed Liquor Return Pumps	567,463	1,000,000	432,537	The project evaluation period was extended based on a review of project expectations and Stakeholder requirements. This reduced the amount of funding required for this year and moved expenditures into FY 2016/17.
14	EN16025 RP-1 Expansion PDR	220,836	1,000,000	779,164	The original Budget assumed 50/50 cost split between RP-1 & RP-5. Actual cost split is 20/80. Remaining \$850,000 will be transferred to EN16028.
		10,103,852	29,556,254	19,452,402	

Source: ECM Project Status – GM Report, July 2016

- **Debt Service** – Total principal, interest, financial, and inter-fund loan expenses were \$20.5 million or 87.3% compared to budget through the end of fiscal year. Actual costs included \$11.5 million in principal payments and \$9.0 million in interest, and other financial administration fee expense. The 2008B Variable Rate Demand Bonds interest rate continues to stay below the budgeted 1% rate, with the actual average rate of 0.12%, resulting in \$0.4 million in savings.

A detailed explanation of significant revenue and expenses are included in the attached Exhibit A.

FUND BALANCES AND RESERVES

Based on the preliminary unaudited year-end results, fiscal year 2015/16 indicated an increase of \$45.8 in total sources of funds over total uses of funds, resulting in an ending fund balance of \$191.9 million. Timing of expenditures, staff's continuous effort to improve and identify opportunities to reduce expenditures, and deferred execution of projects can be attributed for the increase in fund balance. Table 2 provides an overview of the fiscal year end budget variance in revenue, expense, and fund balance.

Table 2: Fiscal Year End Revenues, Expenses, and Fund Balance (\$Millions)

Operating	FY 2015/16 Amended Budget	Fourth Quarter Ended 6/30/16	Actual % of Amended Budget
Operating Revenue	\$118.8	\$106.9	90.0 %
Operating Expense	\$147.2	\$102.8	69.9%
Operating Net Increase/(Decrease)	(\$28.4)	\$4.1	
Non- Operating			
Non-Operating Revenue	\$92.2	\$87.1	94.4%
Non-Operating Expense	\$75.2	\$45.4	60.4%
Non-Operating Net Increase/(Decrease)	\$17.0	\$41.7	
Consolidated	FY 2015/16 Amended Budget	Fourth Quarter Ended 6/30/16	Actual % of Amended Budget
Total Sources of Funds	\$211.0	\$194.0	91.9%
Total Uses of Funds	\$222.4	\$148.2	66.6%
Total Net Increase/(Decrease)	(\$11.4)	\$45.8	
Beginning Fund Balance	\$146.1	\$146.1	
Ending Fund Balance	\$134.7	\$191.9	

GOALS AND OBJECTIVES

Exhibit B provides information on division and related department goals and objectives and the status of each through the end of the fiscal year. The goals and objective indicators are used to track the volume and complexity of work by type and to track the effort invested to accomplish that work. Staff also uses the indicators to track productivity and to justify current resource allocation, re-allocation and requests for additional staff.

BUDGET TRANSFERS AND AMENDMENTS

O&M budget transfers for the fourth quarter totaled \$384,060 and Capital budget transfer of \$205,000 as detailed in Exhibit C-1.

General Manager (GM) Contingency Account budget of \$500,000 included \$400,000 in the Regional Wastewater Operations & Maintenance (RO) Fund and \$100,000 in the Administrative Services (GG) Fund. Through the end of the fiscal year, \$238,000 from the RO Fund and \$76,700 from the GG Fund was utilized to support the unexpected and necessary expenses as listed in Exhibit C-2.

Capital and O&M projects budget transfers totaled approximately \$691,150, including net changes in total project budget of approximately \$95,350 approved by management during the fourth quarter as listed in Exhibit D.

The budget variance analysis report was consistent with the Agency's business goal of Fiscal Responsibility: to demonstrate the Agency appropriately funded operational, maintenance, and capital costs.

PRIOR BOARD ACTION

None.

IMPACT ON BUDGET

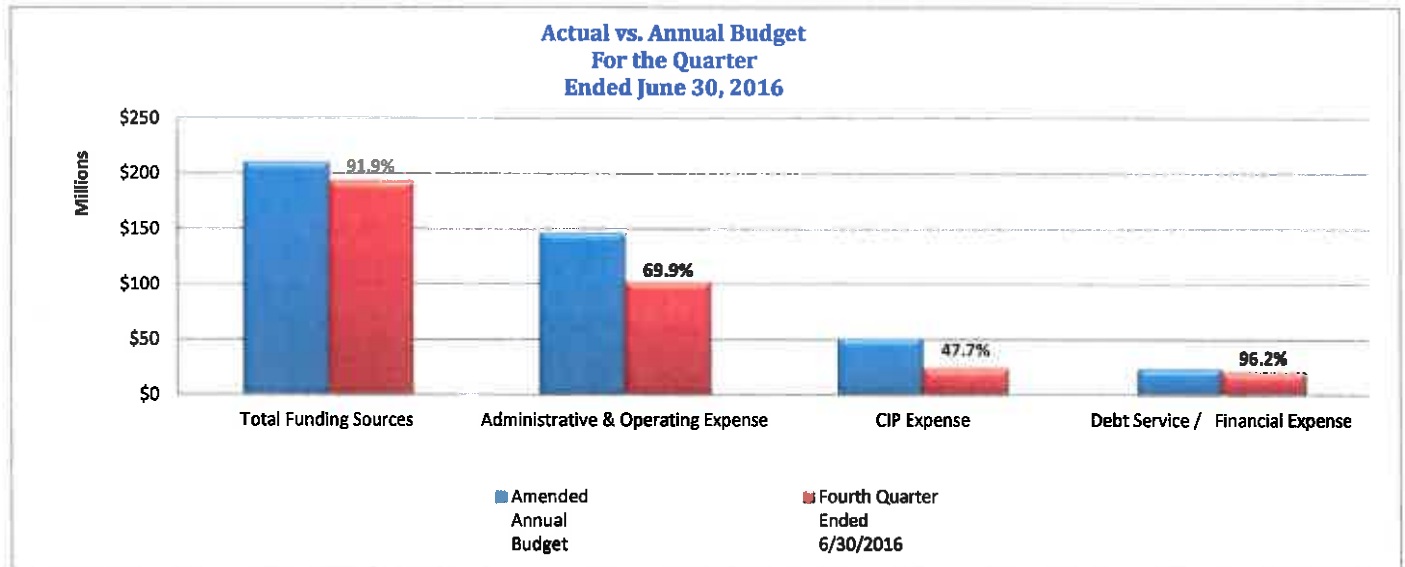
The net increase in total revenues over total expenses in the amount of \$45.8 million resulted in a total estimated fund balance of \$191.9 million, for the fiscal year ended June 30, 2016.

I. Actual vs. Budget Summary:

Fourth Quarter Ended June 30, 2016

% of the Year
Elapsed: 100%

	Adopted Annual Budget	Amended Annual Budget	Fourth Quarter Ended 6/30/2016	Amended vs. Actual	% of Amended Budget
Operating Revenues	\$130,814,725	\$118,833,896	\$106,928,732	(\$11,905,164)	90.0%
Non-Operating (Other Sources of Fund)	91,839,772	92,229,615	87,083,557	(5,146,058)	94.4%
TOTAL FUNDING SOURCES	222,654,497	211,063,511	194,012,289	(17,051,222.58)	91.9%
Administrative & Operating Expense	(152,929,623)	(147,150,528)	(102,812,437)	44,338,091	69.9%
CIP Expense	(43,886,402)	(51,443,821)	(24,519,900)	26,923,921	47.7%
Debt Service / Financial Expense	(23,802,656)	(23,802,656)	(20,907,247)	2,895,409	87.8%
TOTAL USES OF FUNDS	(220,618,681)	(222,397,005)	(148,239,584)	74,157,421	66.7%
Surplus/(Deficit)	\$2,035,816	(\$11,333,494)	\$45,772,705	\$57,106,198	



2. Actual Revenue vs. Budget:

% of the Year
Elapsed: 100%

	Adopted Annual Budget	Amended Annual Budget	Fourth Quarter Ended 6/30/2016	Amended vs. Actual	% of Amended Budget
Operating Revenues:					
User Charges	\$67,040,941	\$67,040,941	\$66,997,802	\$43,139	99.9%
Recycled Water Sales	11,942,682	11,942,682	11,389,182	553,500	95.4%
MWD Water Sales	41,440,829	29,460,000	18,653,793	10,806,207	63.4%
MWD LPP Rebate	2,079,000	2,079,000	2,079,000	0	100.0%
Property Tax - O&M	1,792,530	1,792,530	1,987,411	(194,881)	110.9%
Cost Reimbursement	5,482,843	5,482,843	5,258,477	224,366	95.9%
Interest	1,035,900	1,035,900	563,067	472,833	54.4%
OPERATING REVENUES	130,814,725	118,833,896	106,928,732	11,905,164	90.0%
Non-Operating Revenues:					
Property Tax - Debt, Capital, Reserves	\$39,364,099	\$39,364,099	\$43,643,703	(\$4,279,604)	110.9%
Connection Fees	23,329,423	23,329,423	25,843,506	(2,514,083)	110.8%
Grants & Loans	21,257,262	21,257,262	14,115,504	7,141,758	66.4%
Other Revenue	7,888,988	8,278,831	3,480,845	4,797,986	42.0%
NON-OPERATING REVENUES	91,839,772	92,229,615	87,083,558	5,146,057	94.4%
Total Revenues	\$222,654,497	\$211,063,511	\$194,012,289	\$17,051,222	91.9%

- User Charges, 99.9%** User charges were \$67.0 million, or 99.9% of the Amended Budget. The category includes equivalent dwelling unit (EDU) volumetric charges of \$49.6 million, \$10.7 million Non-Reclaimable wastewater fees paid by industrial and commercial users connected to the brine line system; \$4.7 million for water meter service charge to meet our Readiness-to-Serve obligation from MWD and water use efficiency programs; and \$1.9 million for other service charges.
- Property Tax/ AdValorem, 110.9%** Total property tax receipts were \$45.6 million or 110.9% of the amended budget. General ad-valorem property tax receipts from the San Bernardino County Tax Assessor (County) were \$29.3 million and "pass-through" incremental from Regional Development Agency (RDA) taxes received were \$15.2 million. The increase in tax receipts was accounted by the "one-time" incremental property tax receipts of \$2.7 million received in December 2015, as a result of the dissolution of redevelopment agencies and a 5% growth in tax receipts from the county compared to prior fiscal year receipt.
- Recycled Water Sales, 95.4%** Recycled water actual direct and groundwater recharge sales were \$6.0 million (19,397 AF) and \$5.4 million (13,222 AF) respectively, for a combined total \$11.4 million compared to \$11.9 million budgeted. Total year to date deliveries are 32,618 AF compared to the 35,150 AF projected for the fiscal year. The demand of recycled water increased in the drought season as the reliability of the supply of imported water may be uncertain.
- Interest Income, 54.4%** Interest Income is \$0.6 million or 54.4% of the annual budget. The current low interest rate environment accounts for low interest earnings with average sweep and LAIF pooled investments yielding 0.42% compared to the budgeted interest rate of 0.50%.
- MWD Water Sales, 63.4%** Total MWD pass-through imported water revenue was \$18.7 million or 63.4% of amended budget. The variance is due to the continuous response to drought condition and public outreach efforts aimed at reducing water. A total of 29,441 AF of pass through water was delivered at the end of the fourth quarter compared to 50,000 AF budgeted for FY 2015/16.
- MWD LPP Rebates, 100%** MWD LPP rebate was budgeted at \$2.1 million or \$154/AF for direct recycled water deliveries up to 17,000 AFY, excluding the initial 3,500 AFY. Total rebate of \$2.1 million or 100% of budget, a total of 17,000 AF was applied for at the end of the fiscal year.

- Connection Fees, 110.8%** Member agencies reported \$25.8 million or 110.8% of the budget. A total of 4,774 new wastewater connections were reported by member agencies which includes 610 new EDU connections from Prologis, CSI, and California Speedway, compared to the budgeted new EDU connections for FY 2015/16 of 4,330.
- Grants and Loans, 66.4%** Current grant and loan receipts total \$14.1 million at the end of the fiscal year or 66.4% of the amended budget of \$24.2 million. Total grant receipts were \$6.2 million or 69.4% of the \$8.9 million budget for the Regional Recycled Water Distribution System, ground water supply wells and basins, water quality laboratory and drought and water conservation. Actual SRF Loan proceeds were \$7.9 million or 64.2% of the \$12.3 million budget for Wineville area project, new water quality laboratory and other recycled water projects. Grant and loan revenues are cyclical in nature due to project spending trends and the multi-year funding for large projects.
- Cost Reimbursements JPA, 95.9%** Total cost reimbursements were \$5.3 million, or 95.9% of the amended budget. Category actuals include reimbursements of \$3.4 million from the Inland Empire Regional Composting Authority (IERCA), \$1.4 million from Chino Basin Desalter Authority (CDA), and \$0.6 million from Chino Basin Watermaster (CBWM). Total cost reimbursement budget of \$5.5 million includes: \$3.4 million from IERCA, \$1.4 million from CDA, and \$0.7 million from CBWM.
- Other Revenues, 42%** Total other revenues were \$3.5 million, or 57.4% of the amended budget. Actuals include \$1.4 million from lease revenue and energy rebates and \$1.8 million in project reimbursements. Delays in the reimbursable projects from Recycled Water and Water Resources Programs accounted for the lower revenue.

3. Actual Operating and Capital Expense vs. Budget:

**% of the Year
Elapsed: 100%**

	Adopted Annual Budget	Amended Annual Budget	Fourth Quarter Ended 6/30/2016	Amended vs. Actual	% of Amended Budget
Operating Expenses:					
Employment	\$40,609,906	\$40,609,906	\$38,037,089	\$2,572,817	93.7%
Admin & Operating	112,319,717	106,540,622	64,775,348	\$41,765,275	60.8%
OPERATING EXPENSES	\$152,929,623	\$147,150,528	\$102,812,437	\$44,338,092	69.9%
Non-Operating Expenses:					
Capital	43,886,402	51,443,821	24,519,900	\$26,923,921	47.7%
Debt Service and All Other Expenses	23,802,656	23,802,656	20,907,245	\$2,895,410	87.8%
NON-OPERATING EXPENSES	\$67,689,058	\$75,246,477	\$45,427,145	\$29,819,331	60.4%
Total Expenses	\$220,618,681	\$222,397,005	\$148,239,582	\$74,157,423	66.7%

Employment Expense *Employment , 93.7%*
This category includes both wages and benefits. Employment expenses were \$38.0 million or 93.7% of the Amended Budget. Higher than anticipated vacancy factor of 9% (26 positions) compared to budgeted vacancy rate of 4% (12 positions) provides savings in wages and benefits.

Administrative & Operating Expense *Office and Administrative, 73.5%*
The favorable variance was due in part to the inclusion of \$185,000 for the GM contingency under this category. In addition, expenses related to conferences, training, and travel related expenses represent a savings of \$200,000 compared to budget as staffs continue to participate in free training and webinar sessions.

Professional Fees & Services , 62%

The favorable variance can be attributed to timing of planned work or services not executed in the fiscal year, or work started in FY 2015/16 but expected to be completed in the following fiscal year. For example, delays in contract services, such as acquiring on-site professional service due to new requirements from California Environmental Quality Act (CEQA), and deferral of SAP related contract services. As a result, \$1.2 million of the FY 2015/16 amended budget was identified to be carried forward to FY 2016/17.

INLAND EMPIRE UTILITIES AGENCY
Fiscal Year 2015/16
CONSOLIDATED BUDGET VARIANCE ANALYSIS REPORT
Fourth Quarter Ended June 30, 2016

	Adopted FY 2015/16 Annual Budget	Amended FY 2015/16 Annual Budget	Unaudited YTD Actual	YTD Variance	YTD % Budget Used
<u>OPERATING REVENUES</u>					
User Charges	\$67,040,941	\$67,040,941	\$66,997,802	(\$43,139)	99.9%
Recycled Water	11,942,682	11,942,682	11,389,182	(553,500)	95.4%
MWD Water Sales	41,440,829	29,460,000	18,653,793	(10,806,207)	63.4%
MWD LPP Rebates	2,079,000	2,079,000	2,079,000	-	100.0%
Property Tax - O&M	1,792,530	1,792,530	1,987,411	194,881	110.9%
Cost Reimbursement from JPA	5,482,843	5,482,843	5,258,477	(224,366)	95.9%
Interest Revenue	1,035,900	1,035,900	563,067	(472,833)	54.4%
TOTAL OPERATING REVENUES	\$130,814,725	\$118,833,896	\$106,928,732	(\$11,905,164)	90.0%
<u>NON-OPERATING REVENUES</u>					
Property Tax - Debt, Capital, Reserves	\$39,364,099	\$39,364,099	\$43,643,703	\$4,279,604	110.9%
Connection Fees	23,329,423	23,329,423	25,843,506	2,514,083	110.8%
Grants	8,942,419	8,942,419	6,208,230	(2,734,189)	69.4%
SRF Loan Receipts	12,314,843	12,314,843	7,907,274	(4,407,569)	64.2%
Project Reimbursements	4,994,447	5,384,290	1,818,003	(3,566,287)	33.8%
Other Revenue	2,894,541	2,894,541	1,662,841	(1,231,700)	57.4%
TOTAL NON OPERATING REVENUES	\$91,839,772	\$92,229,615	\$87,083,557	(\$5,146,058)	94.4%
TOTAL REVENUES	\$222,654,497	\$211,063,511	\$194,012,289	(\$17,051,222)	91.9%
<u>ADMINISTRATIVE and OPERATING EXPENSES</u>					
EMPLOYMENT EXPENSES					
Wages	\$22,448,006	\$22,448,006	\$24,006,053	(\$1,558,047)	106.9%
Benefits	18,161,900	18,161,900	14,031,036	4,130,864	77.3%
TOTAL EMPLOYMENT EXPENSES	\$40,609,906	\$40,609,906	\$38,037,089	\$2,572,817	93.7%
ADMINISTRATIVE EXPENSES					
Office & Administrative	\$1,281,624	\$1,870,444	\$1,375,450	\$494,994	73.5%
Insurance Expenses	775,500	747,425	673,039	74,386	90.0%
Professional Fees & Services	9,249,989	9,811,913	6,083,477	3,728,436	62.0%
O&M Projects	22,106,625	26,969,627	6,231,551	20,738,076	23.1%
Reimbursable Projects	100,000	1,534,476	962,252	572,223	62.7%
TOTAL ADMINISTRATIVE EXPENSES	\$33,513,738	\$40,933,885	\$15,325,769	\$25,608,116	37.4%

INLAND EMPIRE UTILITIES AGENCY
Fiscal Year 2015/16
CONSOLIDATED BUDGET VARIANCE ANALYSIS REPORT
Fourth Quarter Ended June 30, 2016

	Adopted FY 2015/16 Annual Budget	Amended FY 2015/16 Annual Budget	Unaudited YTD Actual	YTD Variance	YTD % Budget Used
OPERATING EXPENSES					
Material & Supplies/Leases	\$2,798,809	\$3,257,341	\$2,928,312	\$329,029	89.9%
Biosolids Recycling	4,358,631	4,204,597	3,797,996	406,601	90.3%
Chemicals	4,394,574	4,715,551	3,942,589	772,962	83.6%
MWD Water Purchases	41,440,829	29,460,000	18,653,793	10,806,207	63.4%
Operating Fees/RTS Fees/Exp. Alloc.	14,663,144	13,206,572	11,289,657	1,916,915	85.5%
Utilities	11,149,992	10,762,677	8,837,232	1,925,445	82.1%
TOTAL OPERATING EXPENSES	\$78,805,979	\$65,606,737	\$49,449,579	\$16,157,159	75.4%
TOTAL ADMINISTRATIVE and OPERATING EXPENSES	\$152,929,623	\$147,150,528	\$102,812,437	\$44,338,092	69.9%
<u>NON-OPERATING EXPENSES</u>					
CAPITAL OUTLAY	\$43,886,402	\$51,443,821	\$24,519,900	\$28,923,921	47.7%
FINANCIAL EXPENSES					
Principal, Interest and Financial Expenditure	23,462,656	23,462,656	20,492,764	2,969,892	87.3%
OTHER NON OPERATING EXPENSES	340,000	340,000	414,483	(74,483)	121.9%
TOTAL NON-OPERATING EXPENSES	\$67,689,058	\$75,246,477	\$45,427,147	\$29,819,330	60.4%
TOTAL EXPENSES	\$220,618,681	\$222,397,005	\$148,239,584	\$74,157,422	66.7%
REVENUES IN EXCESS/ (UNDER) EXPENSES	\$2,035,816	(\$11,333,494)	\$45,772,705	\$57,106,199	
FUND BALANCE SUMMARY					
Unaudited Beginning Balance, July 01	\$125,635,403	\$146,104,580	\$146,104,580	\$0	
Surplus/ (Deficit)	2,035,816	(11,333,494)	45,772,705	57,106,199	
ENDING BALANCE, June 30	\$127,671,219	\$134,771,086	\$191,877,285	\$57,106,199	

Business Goals & Objectives Report By Department

8/24/2016

Department: ALL
 Report Month: April, May, June : Year: 2016

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
Agency Management														
219	FY 2015/16	Quarterly	Agency Management	C	Continue to apply Lean management principles to streamline current business processes and systems and eliminate waste and redundancies	Develop and implement a standardized procedure for writing and processing committee/board letter	Completed by June 30, 2017	Implement two procedures per quarter until completed	April Woodruff	August	2016	On Schedule		The board letter process is expected to be completed in November 2016.
220	FY 2015/16	Quarterly	Agency Management	C	Continue to apply Lean management principles to streamline current business processes and systems and eliminate waste and redundancies	Develop a standard operating procedure handbook for the Executive Management Department area	Completed by June 30, 2017	Implement two procedures per quarter until completed	April Woodruff	August	2016	On Schedule		Four SOPs have been developed and are under review.
221	FY 2015/16	Quarterly	Agency Management	C	Continue to apply Lean management principles to streamline current business processes and systems and eliminate waste and redundancies	Update and maintain "Duties and Annual Calendar or Responsibilities" manual for the Board Secretary position	Completed by June 30, 2017	Update 25% per quarter	April Woodruff	August	2016	On Schedule		Project is on hold due to not being fully staffed.
222	FY 2015/16	Quarterly	Agency Management	C	Continue to apply Lean management principles to streamline current business processes and systems and eliminate waste and redundancies	Increase the efficiency of the executive administrative group through streamlining processes	Ongoing	Review and improve two processes per quarter	April Woodruff	August	2016	On Schedule		Agency Management staff works to continually improve procedures within the department to further streamline processes.
217	FY 2015/16	Quarterly	Agency Management	C	Continue to apply Lean Management principles to streamline current business processes and systems and eliminate waste and redundancies	Develop and implement a standardized procedure for writing and processing committee/board letter	Completed by June 30, 2017	Implement two procedures per quarter until completed	April Woodruff	August	2016	On Schedule		The board letter process is expected to be completed in November 2016.
Business Information Services														
248	FY 2015/16	Quarterly	Finance and Administration	A	Continue commitment to cost containment for operating and capital costs.	Maintain cost of external SAP support to be within contracted amounts for all vendors	Meet the set KPI	Actuals <= quarterly average of the contracted amounts	Kanea Pantayatiwong	June	2016	On-Schedule		Support cost for this quarter was \$35,643. The high cost for this quarter is attributed to a special project for the SAP EHP8 upgrade and the assistance with processing the Affordable Care Act report requirements - first time for the Agency.
249	FY 2015/16	Quarterly	Finance and Administration	B	Ensure staff understands and upholds their role in achieving the Agency's Mission, Vision, and Values	Release new enhancements to Agency's various software applications at fixed intervals (every 4 months).	Ongoing by June 2016	100% of enhancements released plus or minus two calendar weeks from scheduled release date	Kanea Pantayatiwong	June	2016	On Schedule		Completed a major update to the Engineering Dashboard to include multiple baselines and cost information; completed a pilot project - Shift Notes - as a potential electronic replacement for Operations Daily Log Books; provided integration and automation for Water Connection Fee database and SAP invoice process
251	FY 2015/16	Monthly	Finance and Administration	B	Prepare and implement a Disaster Preparedness Plan and conduct periodic emergency response drills by July 2017	Implement recommended disaster plan per TMP.	Ongoing	BIS to lead the Business Continuity / Disaster Recover Subcommittee	Kanea Pantayatiwong	June	2016	On Schedule		Working with ISS and secure contract with Sungard to provide near real-time backup of SAP server (every 2 hours). The remote access and testing was conducted successfully. In September, the team will be performing test at Sungard facility in Cypress for off-site testing. This will also provide the team with an opportunity to train as well as identifying any gaps.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
252	FY 2015/16	Quarterly	Finance and Administration	C	Replace the legacy Document Management system to ensure it meets Agency-wide and regulatory public records requirements and eliminates redundant archiving systems by December 2015	Determine business requirements incorporating an updated taxonomy	Final report by July 2015	Issue final report to be used for software solution requirements.	Kanea Pantayathwong	June	2016	On Schedule		The project was completed in FY2016.
253	FY 2015/16	Quarterly	Finance and Administration	C	Continue to apply Lean management principles to streamline current business processes and systems and eliminate waste and redundancies	Determine requirements for new SAP enhancement that improves cost tracking for projects that qualify for multiple grants	Establish baseline data; develop requirements; Implement prototype.	>= 10% reduction in process time for grants analyst after implementation	Kanea Pantayathwong	June	2016	On Schedule		Please see item #177.
254	FY 2015/16	Quarterly	Finance and Administration	C	Continue to apply Lean management principles to streamline current business processes and systems and eliminate waste and redundancies	Evaluate potential improvements to budgeting process, if appropriate, through enhancing SAP functionality.	Assess potential solutions; determine change impact; obtain go/no-go decision to implement.	>= 10% reduction in budgeting cycle days for O&M and capital budgets.	Kanea Pantayathwong	June	2016	On Schedule		Please see item #178.
255	FY 2015/16	Quarterly	Finance and Administration	C	Continue to apply Lean management principles to streamline current business processes and systems and eliminate waste and redundancies	Assess challenges with Agency's financial processes; develop RFP for long term modifications.	Assess processes; develop requirements; develop change impact and proposal.	35% reduction in spreadsheets used by finance staff; 25% increase in report performance	Kanea Pantayathwong	June	2016	Behind Schedule		Due to priority with identifying and corrections for payroll retros, the team was not able to allocate time for this project in FY2016. BIS and Finance & Accounting will team up to draft the RFP with the goal of engaging consultant in Q2 or Q3 of FY2017.
177	FY 2015/16	Quarterly	Finance and Administration	C	Continue to apply Lean management principles to streamline current business processes and systems and eliminate waste and redundancies	Determine requirements for new SAP enhancement that improves cost tracking for projects that qualify for multiple grants – Timeline 15/16 reads: Establish baseline data; develop requirements; implement prototype	Ongoing	< 3 systems in use	Kanea Pantayathwong	June	2016	Behind Schedule	No	A combination of both Grants department transitioning to a different division and BIS analyst, specialized in grants management in SAP, being occupied with payroll retro analysis and GU MOU changes, this project was deferred until resources can be available. The project will begin in Q1 of FY2017.
178	FY 2015/16	Quarterly	Finance and Administration	C	Continue to apply Lean management principles to streamline current business processes and systems and eliminate waste and redundancies	Evaluate potential improvements to budgeting process, if appropriate, through enhancing SAP functionality	Ongoing	< 3 systems in use	Kanea Pantayathwong	June	2016	On Schedule	No	Following a product demo in February 2016, there have been several conversations to explore the possibility of using spreadsheet-like tool that is integrated to SAP. BIS and Accounting & Finance will team up to work on the SAP Finance roadmap, which will address this needs along with other finance-related needs by all users. The needs assessment RFP will be developed in Q1 and Q2, with planned start date of Q3 in FY2017.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
179	FY 2015/16	Quarterly	Finance and Administration	C	Continue to apply Lean management principles to streamline current business processes and systems and eliminate waste and redundancies	Assess challenges with Agency's financial processes; develop RFP for long term modifications	Ongoing	< 3 systems in use	Kanees Pantayatiwong	June	2016	Behind Schedule	No	Due to resource constraint with payroll retro analysis in Q3 and Q4 of FY2016, this project was not started and completed within that fiscal year. BIS and Accounting & Finance will team up to work on the SAP Finance roadmap, which will address this needs along with other finance-related needs by all users. The needs assessment RFP will be developed in Q1 and Q2, with planned start date of Q3 in FY2017.
180	FY 2015/16	Quarterly	Finance and Administration	C	Continue to apply Lean management principles to streamline current business processes and systems and eliminate waste and redundancies	Reduce the number of external spreadsheets utilized to address NRW rate questions	Ongoing	< 3 systems in use	Kanees Pantayatiwong	June	2016	On Schedule	No	Planning Department's availability was limited and focused on other priorities in FY2016. BIS will re-engage this project in FY2017.
<u>Contracts and Facilities Services</u>														
173	FY 2015/16	Quarterly	Finance and Administration	B	Promote a safer work environment by administering and monitoring required safety and regulatory trainings	Conduct Agency training on department processes that are in line with the Agency's MVV	Ongoing		Warren Green	August	2016	On Schedule	No	Additional training was completed regarding procedures on security alarms and protocols.
174	FY 2015/16	Quarterly	Finance and Administration	C	Continue to apply Lean management principles to streamline current business processes and systems and eliminate waste and redundancies	Maintain average processing time within CFS's published service level objectives =95%	Ongoing		Warren Green	August	2016	On Schedule	No	Ongoing
175	FY 2015/16	Quarterly	Finance and Administration	C	Provide timely updates to the Regional Committees and the IEUA Board on long term planning needs	Identify and participate in organizations that advance the Agency MV and key initiatives	Ongoing		Warren Green	August	2016	On Schedule	No	Staff continued to meet with the cooperative purchasing group in support of exploring saving opportunities. The Agency piggybacked on a number of contracts including Planet Bids.
176	FY 2015/16	Quarterly	Finance and Administration	F	Ensure Agency programs promote environmental stewardship, sustainability, and preservation of heritage measures, utilizing green procurement and reuse of surplus materials, equipment, and parts when possible.	Ensure all current and future landscaping, as well as new facilities, are in cooperation with current LEED and water-efficiency programs and advancements	complete by June 2016	Increase educational signage for Agency facilities where accessible by the public by 15%.	Warren Green	August	2016	On Schedule	No	Signage for landscape conversion projects have been posted at all Agency regional plant locations to provide the public with awareness that sites at the facilities are irrigated with non-potable recycled water and converting to drought tolerant landscapes.
113	FY 2015/16	Quarterly	Finance and Administration	F	Complete a performance assessment of the Platinum LEED rated headquarters and develop a plan to ensure performance, as appropriate, to the platinum standard	Evaluate the current standards for LEED qualifications and develop a plan for the Agency's HQ to maintain the ranking.	June-2016	Cross reference existing qualifications against new standards.	Warren Green	August	2016	On Schedule	No	The Agency has the consultant's report and is meeting with Maintenance staff in support of reviewing the details associated with LEED O&M requirements, as well as the processes required to reach and meet the goal.
242	FY 2015/16	Quarterly	Finance and Administration	C	Replace the legacy Document Management System to ensure it meets Agency-wide and regulatory public records requirement and eliminate redundant archiving systems	Implement the new ECM System, Agency taxonomy project, and legal holds process	Ongoing	Will conduct inventory of both paper and electronic records by October 15, 2016	Linda Johnson	August	2016	On Schedule		Staff is currently heavily involved in the ECMS project. Inventory of the shared drives, liberynet and SAP have been identified and with Liberty and SAP being transferred over as part of the file conversion.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
243	FY 2015/16	Annual	Finance and Administration	C	Replace the legacy Document Management System to ensure it meets Agency-wide and regulatory public records requirement and eliminates redundant archiving systems	In collaboration with BIS, implement an email or Electronic Data Interchange (EDI) solution for purchase order transmission to the vendors.	Ongoing	Transmission of purchase orders to vendors via direct email or EDI by January 2017.	Warren Green	August	2016	On Schedule		Purchase Orders issued from online catalogs are created and sent from SAP to email in PDF files. Staff has been testing this process before we go direct EDI with the catalogs. Unfortunately all Agency vendors are capable of supporting the EDI process so we will continue to evaluate.
244	FY 2015/16	Annual	Finance and Administration	C	Replace the legacy Document Management System to ensure it meets Agency-wide and regulatory public records requirement and eliminates redundant archiving systems	In collaboration with BIS, establish purchase requisition accessible Open Catalog Interface (OCI) catalogs for end user.	Ongoing	Add two new OCI vendors, open for use by all staff through the PR process, by June 2017	Warren Green	August	2016	On Schedule		Several OCI catalogs have been added include Office Depot, Grainger, etc. We will continue to evaluate vendor capabilities to support our OCI catalog goal.
245	FY 2015/16	Quarterly	Finance and Administration	C	Continue to apply Lean management principles to streamline current business processes and systems and eliminate waste and redundancies	Maintain average processing time within CFS's published service level objectives = 95%	Ongoing	Run quarterly staff and department service level reports and publish in the General Manager's quarterly report	Warren Green	August	2016	On Schedule		Ongoing
246	FY 2015/16	Monthly	Finance and Administration	C	Continue to apply Lean management principles to streamline current business processes and systems and eliminate waste and redundancies	Provide exceptional and responsive customer service.	Continuous	Increase facilities services response time for support services by 15%.	Warren Green	August	2016	On Schedule		Facilities Services staff continued to work diligently to complete all requests received from internal customers and has received appreciation from those customers for the timeliness and appreciation for staff efforts. To date a total of 361 support tickets have been completed.
247	FY 2015/16	Quarterly	Finance and Administration	F	Ensure Agency programs promote environmental stewardship, sustainability, and preservation of heritage measures, utilizing green procurement and reuse of surplus materials, equipment, and parts when possible	Identify educational opportunities for environmentally friendly facilities and landscapes	Ongoing	Increase educational signage by 10% for Agency facilities that are accessible by the public.	Lucia Diaz	August	2016	On Schedule		The educational signage for Regional Plant No. 5 was completed with coordination of External Affairs and the Operations departments. Install will be done in the new fiscal year.
Engineering														
214	FY 2015/16	Quarterly	Engineering, Planning and Science	E	Provide engineers training to understand business aspects of capital projects and increase engineering consultant design services in lieu of in-house designs to complete more projects in a shorter timeframe by July 2022	Provide high quality project management design for Capital Improvement Projects.	Ongoing	In-House Design Engineer = 10%	Shaun Stone	June	2016	Behind Schedule		16.98%, 9 of 53 Projects are in house design
215	FY 2015/16	Quarterly	Engineering, Planning and Science	E	Provide engineers training to understand business aspects of capital projects and increase engineering consultant design services in lieu of in-house designs to complete more projects in a shorter timeframe by July 2022	Provide high quality project management design for Capital Improvement Projects.	Ongoing	Fiscal Year Capital Spending = 90%	Shaun Stone	June	2016	Behind Schedule		FY Budget = \$53m; Projected spending = \$21M Overall projection = 40%. As of 06/30 Eng had 14 projects representing \$21M in budget variance mainly due to delay in construction activities, increase in scope and projects completing under budget. Please see our June 2016 GM report for detail variances for the 14 projects.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
216	FY 2015/16	Quarterly	Engineering, Planning and Science	E	Conduct Lesson's Learned sessions to evaluate key construction implementations	Review and evaluate all projects for best practices that can be applied to future projects.	Ongoing	10x/year > 90%	Shaun Stone	June	2016	On Schedule		Conducted 3 Lessons Learned; RP-1 Primary Clarifier Rehab 2015; RP-4 MCC Bldg Stairway; Montclair Diversion Structure
156	FY 2015/16	Once Complete	Engineering, Planning and Science	E	Evaluate advances in laboratory design for inclusion in the construction of the Water Quality Laboratory facility	Upon funding, design and construct latest technology lab	48 months after funding is received	Upon funding 12 months for design and 36 months to construct	Shaun Stone	June	2018	On Schedule	No	The consultant contract was awarded in May 2015 and the design was completed 8 months later in February 2016. The construction contract was awarded in May 2016. The construction work is scheduled to be completed in August 2018.
External Affairs														
166	FY 2015/16	Quarterly	Agency Management	C	Promote regional projects and initiatives through presentations to community based organizations, service groups, and stakeholders	Cultivate positive relationships with local and regional media	Ongoing	Present to 6 associations /groups	Kathy Besser	August	2016	On Schedule	No	Presented to one city council and one professional organization on drought and conservation standards.
167	FY 2015/16	Quarterly	Agency Management	D	13. Advocate strategies that help anticipate and mitigate the impacts of droughts and climate change on the region	Develop, support, promote, and participate in water education programs	Ongoing		Kathy Besser	August	2016	On Schedule	No	Continued tours and other outreach to children. Increased digital marketing campaign utilizing new marketing logos and new platforms. Started using videos as a means of outreach to Millennials.
168	FY 2015/16	Quarterly	Agency Management	F	Support legislation to reduce drugs in waterways through take back programs	Support legislation to reduce drugs in waterways through take back programs	Completed by FY 16/17		Kathy Besser	August	2016	On Schedule	No	Sent out press releases and used digital outreach to spread the word about a drug takeback day offered by local police departments.
223	FY 2015/16	Quarterly	Agency Management	E	Ensure staff understands and upholds their role in achieving the Agency's Mission, Vision, and Values	Incorporate the Agency's Mission, Vision, and Values into all staff activities including: creating collateral materials, employee newsletter, and posting to the IEUA website. Increase public recognition of Agency brand	By June 2016 and ongoing	Continue to update printed materials, newsletters, and website with current content	Kathryn Besser	August	2016	On Schedule		Updated website to include a portal specifically for member agencies, added links for state reporting requirements.
224	FY 2015/16	Monthly	Agency Management	C	Update and maintain the Agency's website to clearly communicate key activities, issues, policies, and key documents, and continue to optimize use of social network media	Serve as the Agency Webmaster and provide current and timely information	By June 2016 and ongoing	Review the website for accuracy on a continual basis	Kathryn Besser	August	2016	On Schedule		Switched out front page "sliders" on a timely basis to ensure most current information was easiest to access.
225	FY 2015/16	Quarterly	Agency Management	C	Meet annually with affiliated agencies and elected representatives	Maintain strong relationships with local stakeholders and city and county elected representatives in our region.	By June 2016	Meet with all member agencies in FY 2015/16; host facility tours and presentations for elected officials. Host quarterly Leadership Breakfasts, Meet with 60% of service area's school principals and superintendents	Kathryn Besser	August	2016	On Schedule		This continues to occur, with tours taking place on a regular basis. Achieved goal of meeting with 60% of principals in service area and hosted three leadership breakfasts.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
226	FY 2015/16	Quarterly	Agency Management	C	Meet annually with the region's congressional and state delegations to advance key legislation	Maintain strong relationships with elected officials here and in DC/Sacramento	Travel to Sacramento and Washington D.C. in FY2015/16	Attend Lobby Days in Sacramento and Washington D.C., Host facility tours and presentations for officials and/or staff Host quarterly Leadership Breakfasts.	Kathryn Besser	August	2016	On Schedule		Attended conferences in Sacramento and DC, and went to DC one additional time with Board member and Sacramento three additional times to advocate on behalf of SB970 with staff and agency officials.
227	FY 2015/16	Monthly	Agency Management	C	Identify and participate in organizations that advance the Agency's mission, vision, and key initiatives	Communicate the role of the Agency in the region through local partnerships.	By June 2016	Attend one association/organization meeting a month	Kathryn Besser	August	2016	On Schedule		This continues on an ongoing basis.
228	FY 2015/16	Quarterly	Agency Management	C	Promote regional projects and initiatives through presentations to community based organizations, service groups, and stakeholders	Communicate the importance of regional/local water independence and conservation	By June 2016 and ongoing	Form a Drought Task Force with member agencies. Continue marketing campaign and social media outreach. Present to associations or community organizations quarterly	Kathryn Besser	August	2016	On Schedule		Regional drought campaign throughout the service area continues, changing messaging for summer months to address different water usage. All marketing now being done in Spanish and English.
229	FY 2015/16	Quarterly	Agency Management	D	Complete water softener ordinance by December 2014 and continue to reduce salinity and nutrients in recycled water	Work with the cities of Chino, Chino Hills, and Ontario to pass the water softener ordinance	By June 2016 and ongoing	Remaining cities to pass ordinance by end of FY 2015/16	Kathryn Besser	August	2016	On Schedule		Three remaining cities have not passed ordinance. Auditing of "big box" stores continues, with results showing that they still do not sell the salt-based water softeners.
230	FY 2015/16	Monthly	Agency Management	F	Develop a communication plan to promote being a good neighbor	Communicate the Agency-wide goals, services, and functions to our entire service area, including all community members, businesses, and stakeholders.	By June 2016 and ongoing	FY2015/16 will continue to increase number of events attended in order to reach the entire service area	Kathryn Besser	August	2016	On Schedule		Brochures and technical illustrations continue to be updated and sent to interested parties. Outreach list for press materials continues to grow, adding almost 100 in the past year. Significantly increased number of press releases and social media postings.

FY 2015/16

Finance and Accounting

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
257	FY 2015/16	Quarterly	Finance and Administration	A	Adopt rates that fully meet cost of service for key Agency programs; Non-Reclaimable Wastewater (NRW) System by July 2019, Water Resources by July 2020.	Adopt rates that fully meet cost of service for key Agency programs; Non-Reclaimable Wastewater (NRW) System by July 2019, Water Resources by July 2020.	Complete by June 2016	Adopt rates that meet cost of service.	Javier Chagoyen-Lazaro	August	2016	On Schedule		Proposed FY 2016/17 rates and rate resolutions on RTS (TYRA), MELs, NRWS north and south system, laboratory fees and equipment rentals were adopted in June 2016. Began the participation in the Sewer Service Fee Study conducted by Carolco; provided financial data on Regional capital and O&M revenues and expenditures and related TYCIP Information
258	FY 2015/16	Quarterly	Finance and Administration	A	Advocate for continued receipt of property taxes and optimize grants and other funding sources to support Agency and regional investments.	Advocate for continued receipt of property taxes and optimize grants and other funding sources to support Agency and regional investments.	Ongoing	Review program fund allocations and adjust if necessary to meet program needs.	Tina Cheng	August	2016	On Schedule		The updated FY 2016/17 budget amendments included the transfer of property tax from Administrative Service (GG) fund to Water Resources (WW) fund to support water resources initiatives not supported by the water rates, such as SARCUJP and IRP Phase II projects, as well as RTS fees not recovered through the TYRA direct charge (a 7-year implementation period)
259	FY 2015/16	Annual	Finance and Administration	A	Fully fund the Other Post Employment Benefit (OPEB) unfunded accrued liability by July 2019	Fully fund the Other Post Employment Benefit (OPEB) unfunded accrued liability by July 2019	Annual funding by June 2016	Annual contributions until reaching fully funded status.	Javier Chagoyen-Lazaro	August	2016	On Schedule		Scheduled payment in July to fund the Agency's OPEB contributions for FY 2015/16
260	FY 2015/16	Annual	Finance and Administration	A	Fully fund the pension unfunded accrued liability by July 2024	Fully fund the pension unfunded accrued liability by July 2024	Annual funding by June 2016	Annual contributions until reaching fully funded status.	Javier Chagoyen-Lazaro	August	2016	On Schedule		Scheduled payment to CalPERS in July to fund the Agency's retirement unfunded liability
261	FY 2015/16	Semi-Annual	Finance and Administration	A	Integrate projects identified in the long range financial planning documents, such as the Urban Water Management Plan, and Integrated Resources Plan	Work with pertinent departments in identifying projects from various master plan and integrated into the respective program budget	Complete by June 2016	Additional projects identified are to be included in the FY 2016/17 updated budget document.	Tina Cheng	August	2016	On Schedule		Updated FY 2016/17 TYCIP and budget amendments on revenues and expenditures in the Agency's business system
52	FY 2015/16	Quarterly	Finance and Administration	A	Annually, review and update the Agency's reserve policy to ensure sufficient funding to meet operating, capital, debt service, obligations, unforeseen events, and comply with legally mandated requirements	Reserve levels will be evaluated as part of the budget/rate setting process using the financial model to ensure all short term and long term initiatives are supported	June 30, 2015	Annually	Javier Chagoyen-Lazaro	August	2016	On Schedule	No	Revised Reserve Policy adopted by Board on May 18, 2016. Renewed contract with Raffelle in updating the financial model which allows various scenarios on Agency's financial resources, expenditures, and impact on reserve level for various programs
184	FY 2015/16	Quarterly	Finance and Administration	A	Reinstate the Agency's long term credit rating to AAA and maintain a debt coverage ratio to support such rating	Reinstate the Agency's long term credit rating to AAA and maintain a debt coverage ratio to support such rating	Ongoing		Tina Cheng	August	2016	On Schedule	No	Will continue the review with the financial advisor regarding the strategies for refinancing or retiring the 2008A bonds, which will have positive effect on the Agency's debt coverage ratio and credit rating in the long term.
185	FY 2015/16	Quarterly	Finance and Administration	A	Continue to monitor market opportunities for retirement, refunding, or restructuring of outstanding debt to reduce costs.	Monitor market opportunities for retirement, refunding, or restructuring of outstanding debt to reduce costs.	Ongoing		Tina Cheng	August	2016	On Schedule	No	Continue to review with the financial advisor in developing the strategies and scenarios in the refinancing/retirement of 2008A bonds
196	FY 2015/16	Quarterly	Finance and Administration	B	Promote a safer work environment by administering and monitoring required safety and regulatory trainings.	Promote a safer work environment by administering and monitoring required safety and regulatory trainings.	Ongoing		Tina Cheng	August	2016	On Schedule	No	Staff attended all required safety training sessions.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
Grants														
181	FY 2015/16	Quarterly	Engineering, Planning and Science	A	Advocate for continued receipt of property taxes and optimize grants and other funding sources to support Agency and regional investments	Recommend potential grant opportunities that align with the Agency mission and financial goal	Ongoing		Jason Gu	August	2016	On Schedule	No	Recommended multiple State and Federal Grant and SRF loan opportunities that align with the Agency mission and financial goal. Several applications and pre-applications were submitted.
182	FY 2015/16	Quarterly	Engineering, Planning and Science	A	Advocate for continued receipt of property taxes and optimize grants and other funding sources to support Agency and regional investments	Pursue new grant awards to diversify revenue	Ongoing		Jason Gu	August	2016	On Schedule	No	Major new grant applications and pre-applications were submitted to the State Water Resources Control Board and USBR. Opportunities through the CEC's Electric Program Investment Charge (EPIC) Program and through the DOE (Department of Energy) are continually being reviewed for potential grants.
183	FY 2015/16	Quarterly	Engineering, Planning and Science	A	Advocate for continued receipt of property taxes and optimize grants and other funding sources to support Agency and regional investments	Collaborate with departments that have projects that need grant funding	Ongoing		Jason Gu	August	2016	On Schedule	No	Collaborating with Planning, Engineering, Construction Management, and Operations on preparing, submitting and monitoring grant and SRF loan applications for eligible projects.
273	FY 2015/16	Semi-Annual	Engineering, Planning and Science	A	Advocate for continued receipt of property taxes and optimize grants and other funding sources to support Agency and regional investments	Manage congressional grant authorizations for water desalination projects in the Chino Basin	Ongoing	Until completion of the \$26M congressional authorization	Jason Gu	August	2016	On Schedule		IEUA has received \$20.75 million out of the \$26M Congressional Grant Authorization.
Human Resources														
33	FY 2015/16	Quarterly	Finance and Administration	B	Draft a new consolidated Personnel Rules and Regulations for the Agency across all bargaining units, thereby streamlining individual Unit MOUs by July 2016	Draft a new consolidated Personnel Rules and Regulations	July-2016	Prepare a first draft for review by April 2016	Shameen Bhojani	June	2016	Behind Schedule	No	A draft outline will be prepared in the beginning of the second quarter for FY 16/17.
187	FY 2015/16	Quarterly	Finance and Administration	B	Ensure staff understands and upholds their role in achieving the Agency's Mission, Vision, and Values	Assist in the development of the cross-training program by providing guidance, coordination, and administrative skills in the program design, course content development, marketing and evaluation with various stakeholders and subject matter experts	Ongoing June 2015???	Survey and employee feedback/ Number of on-site visits, lunch and learns and other educational sessions held	Shameen Bhojani	June	2016	Behind Schedule	No	Meet with the new Executive Manager of Operations in the first quarter of FY 16/17 to determine the priorities and timeline for this project
188	FY 2015/16	Quarterly	Finance and Administration	B	Implement strategies and recruitment practices that provide flexible and responsive solutions to assist the Agency in filling positions in a timely and effective manner	Draft a new consolidated Personnel Rules and Regulations	Ongoing	Track the average number of weeks it takes to complete the recruitment process from beginning to end	Shameen Bhojani	June	2016	Behind Schedule	No	Average number of weeks is 12 weeks.
282	FY 2015/16	Semi-Annual	Finance and Administration	B	Ensure staff understands and upholds their role in achieving the Agency's Mission, Vision, and Values	Promote a positive work environment that holds managers, supervisors and employees accountable for creating and maintaining positive work relationships.	Ongoing	Survey and employee feedback	Shameen Bhojani	June	2016	Behind Schedule		Training topics for supervisors and managers has been determined for the next FY. Dates have been set for the in house training provided by HR staff for first quarter in FY 16/17.

FY 2015/16

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263	FY 2015/16	Quarterly	Finance and Administration	B	Ensure staff understands and upholds their role in achieving the Agency's Mission, Vision, and Values	Develop creative communication methods and continue education of employee benefits to increase knowledge of benefit programs and services including visiting and scheduling appointments with employees at other facilities, holding continuous lunch and learn sessions and other educational workshops/presentations.	Ongoing	Number of onsite visits, lunch and learns, and other educational sessions held	Sharmeen Bhojani	June	2016	On Schedule		Retirement workshop was held on June 15th with over 70 employees attending.
264	FY 2015/16	Quarterly	Finance and Administration	B	Develop and implement plan to mentor and prepare the next generation of Agency leaders by July 2017	Develop a process to identify potential leaders within the Agency; utilize the Leadership Academy and other training opportunities to enhance existing talent.	Leadership Academy January – June 2016	Number of employee participants in the Academy and other training programs. Percentage of internal promotions	Sharmeen Bhojani	June	2016	On Schedule		5 managers participated in the 2016 Leadership Academy
265	FY 2015/16	Semi-Annual	Finance and Administration	B	Develop a plan to conduct a feedback study to measure employee satisfaction.	Create and distribute an employee satisfaction survey	Employee Climate Survey by June 2016	Conduct an Employee Climate Survey after Class and Comp Study implementation	Sharmeen Bhojani	June	2016	Behind Schedule		Climate survey was postponed due to class and comp study.
266	FY 2015/16	Quarterly	Finance and Administration	B	Develop a plan to conduct a feedback study to measure employee satisfaction.	Identify strategies to increase employee morale and promote employee retention.	Ongoing	Surveys and employee feedback/Retention of employees	Sharmeen Bhojani	June	2016	On Schedule		Completed the implementation of the General Unit's Class and Comp Study retroactively to November 2014 by early June. The majority of the unit received retroactive pay.
267	FY 2015/16	Semi-Annual	Finance and Administration	B	Implement the Agency-wide Classification and Compensation Study.	Finalize the Agency-wide Classification and Compensation Study to develop a fair, consistent and competitive compensation program	Complete by June 2016	Successfully ratify and implement the new structure for remaining represented units.	Sharmeen Bhojani	June	2016	Behind Schedule		Pursuing unit modification for six employees to ensure proper unit representation based on their job responsibilities. Scheduled to go to the board in the first quarter of FY 16 17.
268	FY 2015/16	Annual	Finance and Administration	B	Review and update the STAR Award program to more effectively recognize outstanding performance	Change the format of the STAR Award Program to ensure more employees have an opportunity to receive the award	Review and recommendation by June 2016	Updated Agency Policy A-79.	Sharmeen Bhojani	June	2016	Behind Schedule		Policy review is deferred to the first quarter of FY 16 17 due to higher priority for other policies which have been identified by labor and agency counsel.
269	FY 2015/16	Quarterly	Finance and Administration	B	Achieve a Cal Star Award certification from OSHA by June 2019	Research requirements needed to obtain the award/certification by OSHA; work with Maintenance and Operations to develop a plan that ensures commendable safety and risk management practices.	Schedule meetings with Operations and Maintenance to review requirements and develop an action plan by June 2016	Prepare applications submittal(s) by November 2016.	Sharmeen Bhojani	June	2016	On Schedule		A meeting has been scheduled with Operations and Maintenance in July to discuss what is required in order to achieve a Cal-Star Voluntary Protection Program Certification from Cal-OSHA. An Action Log will be provided after the meeting detailing department specific responsibilities. Status meetings will be held periodically. Based on outside information gathered, this is generally a long process with preparation taking 4 / 5 years. Once the Agency is in compliance with the required elements an application will be submitted to Cal-OSHA. Upon application acceptance by Cal-OSHA, a full inspection of all our facilities will be conducted. Results of the inspection will determine our certification status.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
Internal Audit														
231	FY 2015/16	Monthly	Agency Management	A	Continue commitment to cost containment for operating and capital costs.	Promote a strong control environment by conducting independent and objective audits of Agency operations where the focus and audit scope includes identifying areas and providing recommendations for cost containment, effectiveness and efficiency in operations and opportunities to improve and areas of cost containment	On-going and through the audits approved by the Audit Committee and the Board during the Annual Audit Plan presentation	Completed planned and scheduled audits approved through the Annual Audit Plan. Comments and discussions during Audit Committee Meetings and exit meeting	Teresa Velarde	August	2016	On Schedule		Completed and On-Going. This objective is achieved with the performance and completion of each operational audit. In those audits, IA makes recommendations to the business units providing opportunities to improve processes, contain costs, consider methods to complete work in a more effective and efficient manner. By completing operational audits, this objective is realized each and every time. The audit observations and recommendations are discussed in detailed during the regularly scheduled Audit Committee meetings as well as with management and line supervisors. Recommendations are provided to promote a strong control environment.
232	FY 2015/16	Monthly	Agency Management	A	Initiate discussions to revise and renew the Regional Sewerage Service Contract set to expire in 2023 by January 2018	Close out and finalize the Regional Contract Review with recommendations to improve the consistent and fair application of the Regional Contract requirements among all Regional Contract Agencies. Additionally, provide recommendations to Agency management to improve and clarify clauses and requirements of the contract to negotiate a new contract going forward. Complete the evaluation of the connection and monthly sewer rate calculations, as well as Exhibit J application, as well as RCA's internal processes and procedures, supporting documentation to determine if these meet the intent and requirements of the contract. And provide workshops for the Board of Directors and the Regional Policy and Technical Committees, and provide workshops for the Board of Directors and the Regional Policy and Technical Committees	On-going follow-up review or additional evaluation as needed or requested by Management or the Board	Completion. Comments and discussions during Executive Management Meetings, Audit Committee Meetings and exit meetings	Teresa Velarde	August	2016	On Schedule		Completed the audits of the 7 member agencies, discussed the results with the contracting agencies, IEJAs Planning Department and Executive Management Team, the Audit Committee and the Board as well as with Tech Committee. The Final Report was completed in October of 2015. Over 20 recommendations were provided to evaluate, change and improve the monthly sewer billing, the connection fee billing, the business model of the Regional Contract. Various meetings, discussions and presentations were provided by IAD. IAD continues to stay involved, and is ready and available to assist as needed and as requested with discussions of moving forward, implementing the recommendations, and helping correct issues. IA stands ready to assist in any way possible and requested.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
233	FY 2015/16	Annual	Agency Management	☐	Develop and implement a plan to mentor and prepare the next generation of Agency leaders by July 2017	Maintain knowledgeable, skilled and experienced audit staff and promote continuous professional development and professional certifications and higher education, as recommended and required under the auditing standards and the IAD Charter to ensure continuous IAD improvement and to stay abreast of developing trend	Annually and on-going complete training and professional development training and participation	A minimum of sixteen hours of continuous professional development, annually. Participation in a professional association	Teresa Velarde	August	2016	On Schedule		Completed and On-Going. Training and professional development is mandatory for professional internal auditors, as a requirement of their job and required by the Institute of Internal Auditors and the IAD Charter. All auditors attend at minimum of 8 continuing professional education hours of training and development in various subjects of internal auditing, along with additional in-house, Agency-specific training. Additionally, to enhance the quality of the audits and demonstrate our commitment to the profession of internal auditing, all three auditors in the department are preparing for the certification. All three plan to complete the certification requirements by December 2016. All three auditors already have a higher professional designation and regularly attend continuous professional development to stay abreast of best practices. All three auditors have passed parts 1 and 2 of the examination and only part 3 is pending and scheduled for completion.
234	FY 2015/16	Monthly	Agency Management	☐	Develop a plan to conduct a feedback study to measure employee satisfaction	Perform a survey of auditee/customer satisfaction at the conclusion of each audit project to gather information about auditor involvement, professionalism, knowledge and ability to communicate to gain information on continuous improvement	After each completed audit/project	Feedback from customers. Discussions during regularly scheduled Audit Committee Meetings	Teresa Velarde	August	2016	On Schedule		Completed during and after each audit. Either via email, paper or discussion to evaluate the overall satisfaction with the audit process.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
335	FY 2015/16	Monthly	Agency Management	#	Uphold a strong internal control environment by conducting independent objective internal and external audits of Agency finances and operations	Promote a strong control environment by conducting independent objective audits of Agency operations where the focus and audit scope includes identifying areas and providing recommendations for strong internal controls, effectiveness and efficiency in operations. Broaden, improve and expand knowledge, reliance and utilization of financial and information systems to gather, research, analyze, and examine different types, more detailed and larger scopes of data to evaluate and test during audit procedures for any type of audit or reviewed. Promote a strong control environment that preserve the public perception of the Agency and safeguard Agency assets where the focus is identifying areas and providing recommendations to improve customer service that is effective and responsive Per direction or approval by the Audit Committee and Board, and through coordination with senior management, Internal Audit would identify areas for audit where the goal and scope are to measure the performance of a program, a process, or a service or compare results to goals and identify areas for improvement, make recommendations to improve efficiencies. Conduct independent objective audits of Agency operations	Ongoing and through approved audits as approved through the Annual Audit Plan	Completed audits. Comments and discussions from stakeholders and during Executive Management Meetings, Audit Committee Meetings and exit meetings	Teresa Velarde	August	2016	On Schedule		Completed and On-Going. The Internal Audit Department must complete projects proposed through the Board-approved Annual Audit Plan and any amendments if any. IAD completes are projects proposed and assigned and provides recommendations for the improvement of Agency processes and procedures. Any changes to the plans are communicated to the Audit Committee and the Board. In addition to scheduled projects, IA maintains a list of on-going and potential audit projects. The list of potential/proposed audit projects is a list of items that can be evaluated and audited should the risk increase or IA is directed to accelerate the planned and proposed projects.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
236	FY 2015/16	Monthly	Agency Management	B	Prepare and implement a Disaster Preparedness Plan and conduct periodic emergency response drills by July 2017	Update and maintain the IAD's Disaster Preparedness Plan and submit to the Audit Committee for review and submittal to the Board	Annually as part of the review of all IAD procedures and Charter	Review with the Audit Committee Advisor and Audit Committee members as well as Executive Management	Teresa Velarde	August	2016	On Schedule		The Internal Audit Department documented IA SOP -006 Business Continuity and Disaster Recovery in 2013 and is reviewed for any needed updates, annually, as required by the Charter. This SOP requires that IA assist any critical mission of the Agency first, before continuing with audit assignments, when and in the event of an emergency/disaster. Additionally, the Manager has recently attended FEMA training and is assigned the Communications Liaison. Other members of the IAD are on the Safety Committee and also are responsible for ensuring the department completes are required Safety Tailgate topics. The IAD is proactive when it comes to disaster/emergency preparedness and response ready. Additionally, the Manager of IA recently completed several on-line trainings and attended meetings to discuss the roles and responsibilities expected during a disaster or emergency.
237	FY 2015/16	Annual	Agency Management	B	Promote a safe work environment by administering and monitoring required safety and regulatory trainings	Comply with all required IEUA safety and regulatory trainings for required department personnel	Annually as assigned by Safety personnel	Safety Tailgate Tracker	Teresa Velarde	August	2016	On Schedule		Completed and ongoing. Each year IA completes all required safety trainings as required by the Agency, in addition to other outside and volunteer training.
238	FY 2015/16	Semi-Annual	Agency Management	B	Develop and implement a plan to mentor and prepare the next generation of Agency leaders by July 2017	Achieve the Certified Internal Auditor Designation by two auditors	One by December 2015	Certification	Teresa Velarde	August	2016	On Schedule		All three auditors in the department are preparing for the certification exam. The only globally accepted certification for the profession of Internal Auditing. All three plan to complete the certification requirements by December 2016. All three auditors already have a higher professional designation and regularly attend continuous professional development to stay abreast of best practices. All three auditors have passed parts 1 and 2 of the examination and only part 3 is pending and scheduled for completion by December 2016.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
239	FY 2015/16	Semi-Annual	Agency Management	B	Develop and implement a plan to mentor and prepare the next generation of Agency leaders by July 2017	Conduct Control Self-Assessment of the Internal Audit Department	On-going	Certification	Teresa Velarde	August	2016	On Schedule		Planned and on schedule. As required by the IAD Charter, each year, we review the IAD Charters, the department SOPs and the Annual Audit Plan and make the necessary adjustments according to best practices, new/requested project and other requirements. The IAD is continuously self-evaluating. A comprehensive self-evaluation is planned for the end of 2016. Once all three auditors have attained the certification of Certified Internal Auditor, a peer review of the IAD will be planned and completed for the purpose of evaluating the internal auditing activity and make the necessary adjustments/changes based on any recommendations provided. Certifications are planned for December 2016. A self-assessment is planned for early 2017 and a peer review for December 2017.
240	FY 2015/16	Semi-Annual	Agency Management	B	Develop and implement a plan to mentor and prepare the next generation of Agency leaders by July 2017	Peer-review of the Internal Audit Department functions	Work on Preparation	Peer-review certification or approval	Teresa Velarde	August	2016	On Schedule		Planned and on schedule. As required by the IAD Charter, each year, we review the IAD Charters, the department SOPs and the Annual Audit Plan and make the necessary adjustments according to best practices, new/requested project and other requirements. The IAD is continuously self-evaluating. A comprehensive self-evaluation is planned for the end of 2016. Once all three auditors have attained the certification of Certified Internal Auditor, a peer review of the IAD will be planned and completed for the purpose of evaluating the internal auditing activity and make the necessary adjustments/changes based on any recommendations provided. Certifications are planned for December 2016. A self-assessment is planned for early 2017 and a peer review for December 2017.
241	FY 2015/16	Monthly	Agency Management	C	Leverage private/public partnership opportunities	Establish, maintain and strengthen audit-related private/public partnership opportunities to have network ties and associates where audit-related topics can be shared, discussed, and evaluated with the goal of continuous internal audit processes improvement	On-going	Feedback from auditees, senior/Executive Management, the Audit Committee Advisor, the Audit Committee and Board	Teresa Velarde	August	2016	On Schedule		This is achieved through every audit project as it becomes an opportunity to promote friendly, helpful customer service, build the business networks and provide any assistance or information necessary.
169	FY 2015/16	Quarterly	Agency Management	B	Develop and implement a plan to mentor and prepare the next generation of Agency leaders by July 2017	Achieve the Certified Internal Auditor Designation by two auditors – One by Dec. 2015, one by Dec. 2016	One completed by December 2015, One completed by December 2016	A minimum of eight hours of continuous professional development, annually.	Teresa Velarde	August	2016	On Schedule	No	This goal is in progress. Two auditors will take the exam before December 31, 2016. One auditor will be deferring plans to complete the designation due to a recent medical leave.
170	FY 2015/16	Quarterly	Agency Management	B	Develop and implement a plan to mentor and prepare the next generation of Agency leaders by July 2017	Conduct control self-assessment of the internal audit dept.	Complete by December 2016	A minimum of eight hours of continuous professional development, annually.	Teresa Velarde	August	2016	On Schedule	No	In Progress. Staff is preparing for a self assessment. Research and plans and test documents are in progress of being developed. A self-assessment is planned before the end of December 2016.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
171	FY 2015/16	Quarterly	Agency Management	B	Develop and implement a plan to mentor and prepare the next generation of Agency leaders by July 2017	Peer-review of the Internal Audit dept functions	Complete by December 2016	A minimum of eight hours of continuous professional development, annually.	Teresa Velarde	August	2016	Behind Schedule	No	This goal is postponed for calendar year 2017. Before a peer review can be scheduled and completed, it is desirable there is one Certified Internal Auditor in the Department. With two auditors planning to be certified in the next few months, it would be prudent to plan the Peer Review after the certifications.
218	FY 2015/16	Annual	Agency Management	B	Ensure staff understands and upholds their role in achieving the Agency's Mission, Vision, and Values	<p>*Promote a strong control environment by conducting independent objective audits of Agency operations where the focus and audit scope includes identifying areas and providing recommendations for strong internal controls, effectiveness and efficiency in operations</p> <p>Broaden, improve and expand knowledge, reliance and utilization of financial and information systems to gather, research, analyze, and examine different types, more detailed and larger scopes of data to evaluate and test during audit procedures for any type of audit or reviewed</p> <p>Promote a strong control environment that preserve the public perception of the Agency and safeguard Agency assets where the focus is identifying areas and providing recommendations to improve customer service that is effective and responsive</p> <p>For direction or approval by the Audit Committee and Board, and through coordination with senior management, Internal Audit would identify areas for audit where the goal and scope are to measure the performance of a program, a process, or a service or compare results to goals and identify areas for improvement, make recommendations to improve efficiencies. Conduct independent objective audits of Agency operations</p>	*Ongoing and through approved audits as approved through the Annual Audit Plan	*Completed audits, Comments and discussions from stakeholders and during Executive Management Meetings, Audit Committee Meetings and exit meetings	Teresa Velarde	August	2016	On Schedule	-	Completed and On-Going. This objective is achieved with the performance and completion of each operational audit. In those audits, IA makes recommendations to the business units providing opportunities to improve processes, contain costs, consider methods to complete work in a more effective and efficient manner. By completing operational audits, this objective is realized each and every time. The audit observations and recommendations are discussed in detailed during the regularly scheduled Audit Committee meetings as well as with management and line supervisors. Recommendations are provided to promote a strong control environment.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Start Month	End Year	Status	Complete	Notes
Laboratory														
300	FY 2015/16	Quarterly	Engineering, Planning and Science	A	Continue commitment to cost containment for operating and capital costs	Evaluate advances in laboratory design for inclusion in the construction of the new Water Quality Laboratory	December 2015	Support Engineering during design phase by participation in design review.	Nel Groenveld	August	2016	On Schedule		Design phase complete, Lab staff has communicated to Engineering staff any critical information regarding instrumentation.
301	FY 2015/16	Annual	Engineering, Planning and Science	A	Continue commitment to cost containment for operating and capital costs	Maintain Laboratory certification for all current analysis performed, add certification if justified to reduce cost of contracting out some analysis	December 2015	Annually obtain 100% acceptable results on PE samples	Nel Groenveld	August	2016	On Schedule		Lab had 100% acceptable results on Annual Performance Evaluation samples to maintain laboratory ELAP certification.
302	FY 2015/16	Monthly	Engineering, Planning and Science	B	Promote a safer work environment by administering and monitoring required safety and regulatory trainings	Meet the bi-weekly safety tailgate meeting requirement	December 2015	Hold bi-weekly safety meetings	Nel Groenveld	August	2016	On Schedule		Continue to have required safety tailgates to meet safety regulations
303	FY 2015/16	Annual	Engineering, Planning and Science	F	Annually review and update Key Performance Indicators (KPIs) to monitor and comply with all regulatory requirements	Annually review and update monitoring and analysis protocols to reflect any new regulatory requirements	December 2015	Ongoing review of approved test methods	Nel Groenveld	August	2016	On Schedule		Lab is reviewing new method and instrument regulations, is in the process of obtaining certification to perform Coliform analysis using the Colifert method in order to obtain results in 24 hours, after the Colifert method was approved for Recycled Water in May 2016.
197	FY 2015/16	Quarterly	Engineering, Planning and Science	B	Promote a safer work environment by administering and monitoring required safety and regulatory trainings.	Complete a Review/Update of the Laboratory Chemical Hygiene Plan annually. (CHP)	Complete by December 2015		Nel Groenveld	August	2016	On Schedule	No	Annual review is complete and new revision has been issued
Maintenance														
142	FY 2015/16	Annual	Operations	B	Ensure staff understands and upholds their role in achieving the Agency's Mission, Vision, and Values	Develop a training program for the Operations division	FY 2015/16	Complete training program for Maintenance Department	Nelson Hloy	August	2016	On Schedule	No	Training schedule is currently ongoing. a training schedule is developed to complete the Mechanical, Electrical, and Instrumentations Modules through January 2017. A contract with a training vendor was recently approved by the Board of Directors to provide instructions for the needed training modules.
308	FY 2015/16	Quarterly	Operations	B	Establish a cross training program across departments and divisions to enhance understanding of Agency programs	Develop and implement a division-wide training program to enhance understanding by Agency staff of wastewater treatment process and compliance; modern maintenance practices; and recycled water maintenance.	By June 30, 2016	Hold one training session each quarter	Randy Lee	August	2016	Behind Schedule		This particular division training was put on hold due to the priority of CBM and Class & Comp related maintenance training. The effort to revisit this training will occur in mid-FY16/17.
309	FY 2015/16	Annual	Operations	E	Ensure reliability of Agency assets by annually implementing the asset management monitoring and assessment program (Asset Management Plan)	Conduct major condition assessments annually.	By June 30, 2016	Complete condition assessments of RP-5 and CCWRF	Randy Lee	August	2016	On Schedule		Condition assessment of major structures at RP-4 and RP-5 were completed. condition assessments of Preliminary through Secondary Treatment processes at CCWRF are currently being planned through Maintenance, Operations, and Engineering.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
Operations														
304	FY 2015/16	Quarterly	Operations	B	Review and revise the Emergency Preparedness Plan by July 2017	Support Human Resources in the development of an Emergency Preparedness Plan for the Operations Department.	As needed	Attend quarterly meetings and provided requested support within requested timeline.	Chander Letulle/Matt	July	2016	On Schedule		Operations staff have attended required meetings. An Operations specific plan has been developed and shared with HR/Safety.
306	FY 2015/16	Quarterly	Operations	F	Strive for 100% use of Agency bi-products by 2021	Support the development and implementation of the Energy Management Plan to ensure 100% use of digester gas	By June 2016 Ongoing	Meet 100% of established implementation goals; on-going	Chander Letulle, Matt Melendrez	July	2016	On Schedule		Operations has supported all implementation goals. Due to equipment issues at RP-1 and RP-2 gas utilization is lower than expected.
307	FY 2015/16	Monthly	Operations	F	Strive for 100% use of Agency bi-products by 2021	Maximize use of biosolids by sending 90% of organics to IERCF	By June 2016 Ongoing	Send 90% of organics to IERCF; on-going	Randy Lee	July	2016	On Schedule		All Agency biosolids have been sent to the IERCF, processed into compost and sold into landscape and agricultural markets.
79	FY 2015/16	Quarterly	Operations	D	Optimize IEUA's use of potable and recycled water by July 2016	Measure baseline usage of potable and recycle water at all Agency facilities.	FY 2015/16	One facility per quarter	Matt Melendrez	July	2016	On Schedule	No	Potable water usage data is collected and monitored for all sites. Recycled water usage data is collected and monitored at RP-5, CCWRF, and RP-2. Projects are identified and scheduled to add meters at RP-1 and RP-4.
198	FY 2015/16	Quarterly	Operations	D	Develop and implement a communication plan to promote water use efficiency and the value of water by July 2015	Measure baseline usage of potable and recycled water usage.	Ongoing through June 2016		Chander Letulle, Matt Melendrez	July	2016	On Schedule	No	Potable water usage data is collected and monitored for all sites. Recycled water usage data is collected and monitored at RP-5, CCWRF, and RP-2. Projects are identified and scheduled to add meters at RP-1 and RP-4.
199	FY 2015/16	Quarterly	Operations	D	Develop and implement a communication plan to promote water use efficiency and the value of water by July 2015	Maintain peak demand management readiness	Ongoing through June 2016		Steve Smith	August	2016	On Schedule	No	
199	FY 2015/16	Quarterly	Operations	D	Develop and implement a communication plan to promote water use efficiency and the value of water by July 2015	Maintain peak demand management readiness	Ongoing through June 2016		Steve Smith	August	2016	On Schedule	No	This goal was completed and on-going. Weekly Internal peak demand meetings are held to discuss strategies to meet customer demands and maximize GWR.
200	FY 2015/16	Quarterly	Operations	D	Develop and implement a communication plan to promote water use efficiency and the value of water by July 2015	Maintain pump station readiness	Ongoing through June 2016		Steve Smith	August	2016	On Schedule	No	This goal was met by coordinating weekly peak demand management meetings to discuss pump station readiness and reliability to meet direct use and GWR demands.
201	FY 2015/16	Quarterly	Operations	D	Develop and implement a communication plan to promote water use efficiency and the value of water by July 2015	Continue weekly Peak Demand Management meetings with key operations staff for start of 2016 Peak Demand season.	Ongoing through June 2016		Steve Smith	August	2016	On Schedule	No	Demand Management meeting were held with member Agencies (Chino and Ontario) to discuss strategies to meet GWR goals while maintaining adequate pressure and flow to direct use Ag customers.
202	FY 2015/16	Quarterly	Operations	D	Develop plan to improve the quality of recycled water to meet customer's needs by June 2017	Prepare and submit to CDPH start-up reports for new basin as delivery mechanisms are completed	Completed by June 2016 and Ongoing		Steve Smith	August	2016	On Schedule	No	Declez Basin Start up period began in December 2015. Due to the interference of storms with sample data, DDW has given a 4 month extension to the SUP at Declez and will be complete at the end of October 2016
203	FY 2015/16	Quarterly	Operations	D	Identify and protect the best recharge land sites in the service region by June 2016	Ensure all treatment standards are met to maximize availability of recycled water.	Completed by June 2016 and Ongoing		Matt Melendrez and	July	2016	On Schedule	No	According to Compliance's Incident Report Summary all facilities are meeting or exceeding standards.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
204	FY 2015/16	Quarterly	Operations	D	Identify and protect the best recharge land sites in the service region by June 2016	Identify projects necessary to reduce potable and promote recycled water usage	Completed by June 2016 and Ongoing		Matt Melendrez and	July	2016	On Schedule	No	Projects have been identified to switch processes from potable to recycle water. Operations is working with Maintenance, and Engineering to complete these projects. For example San Bernardino Lift Station packing water system.
205	FY 2015/16	Quarterly	Operations	D	Identify and protect the best recharge land sites in the service region by June 2016	Develop recycled and groundwater recharge SCADA Improvements that implement storage and delivery strategies by working with the DCS department	Completed by June 2016		Steve Smith	August	2016	On Schedule	No	Several RW/GWR department work orders were completed that resulted in more efficiency while managing the RW/GWR activities. 1) developed code to auto-report monthly RW deliveries (Vantagepoint), 2) improved SCADA screens to more accurately reflect critical basin structure elevations, and 3) refined code to increase RW deliveries and decrease discharge to creeks.
206	FY 2015/16	Quarterly	Operations	D	Conduct research to find new methods to safely recharge more water into Chino Basin by June 2016	Maintain basin readiness through basin cleanings	Completed by June 2016 and Ongoing		Steve Smith	August	2016	On Schedule	No	8th Street Basin and Turner Basin 1 cleaning were completed in FY15/16. Contracts were awarded for the RP-3 cell 1 and Victoria Basin infiltration restoration. RFP's are being developed for the Junupa Station Clean-up, Turner basin 3 and 4a IR, and Declez Basin cell 1 clean up.
207	FY 2015/16	Quarterly	Operations	D	Conduct research to find new methods to safely recharge more water into Chino Basin by June 2016	Develop written RW storage and delivery strategies to meet department forecasts of diurnally variable RW supplies and seasonally variable RW demands	Completed by June 2016	Written strategies and forecasts to be developed by RW and GWR staff	Steve Smith	August	2016	On Schedule	No	Continuing to work with both Ops and Planning staff to develop written RW storage and delivery strategies.
Planning and Environmental Compliance														
189	FY 2015/16	Quarterly	Engineering, Planning and Science	A	Initiate discussions to revise and renew the Regional Sewerage Service Contract set to expire in 2023 by January 2018	Develop consensus on the language for revision of the Regional Sewerage Contract. Update to meet current practices and needs.	To be Completed by January 2016		Sylvia Lee	August	2016	Behind Schedule	No	Recycled Water Policy Principles approved by Resolutions adopted in June 2016. The remainder of the contract amendments has been delayed. Parties discussing possibility of bringing in facilitator to assist in the contract renegotiation process.
190	FY 2015/16	Quarterly	Engineering, Planning and Science	C	Continue to apply Lean management principles to streamline current business processes and systems and eliminate waste and redundancies	Apply LEAN management principles to streamline current practices and develop long-term strategy for permitting of the O&M activities of recharge basins	To be Completed by June 2017		Sylvia Lee	August	2016	On Schedule	No	IEUA and consultant met US Army Corps of Engineers (ACOE) on 6/21/2016 to discuss about the application. IEUA will submit additional information requested by ACOE.
191	FY 2015/16	Quarterly	Engineering, Planning and Science	C	Continue to apply Lean management principles to streamline current business processes and systems and eliminate waste and redundancies	Develop a regulatory permitting strategy to support the implementation of the regional water and wastewater programs as identified in the planning documents	To be Completed by June 2017		Sylvia Lee	August	2016	On Schedule	No	Consultant preparing the draft Programmatic Environmental Impact Report for the Agency's planning initiatives. Notice of Preparation completed, Public Scoping Meeting on 7/21/2016. Adoption expected Winter 2017.
192	FY 2015/16	Annual	Engineering, Planning and Science	D	Identify and protect the best recharge land sites in the service region by June 2016	Strategically pursue projects to maximize funding/grant opportunities	To be Completed by June 2016	Meet the schedule as defined by the IRP	Sylvia Lee	August	2016	On Schedule	No	Project list developed in IRP Phase 1 will be modified in FY16/17 during IRP Phase 2 to include grant-searchable terms and project prioritization.
193	FY 2015/16	Quarterly	Engineering, Planning and Science	D	Identify and protect the best recharge land sites in the service region by June 2016	Evaluate new projects and programs to support regional water reliability	Continuous	Meet the schedule as defined by the IRP	Sylvia Lee	August	2016	On Schedule	No	Routine updates being performed on planning doc

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
194	FY 2015/16	Quarterly	Engineering, Planning and Science	D	Conduct research to find new methods to safely recharge more water into Chino Basin by June 2016	Develop and implement the RWPDM to optimize efficient use of recycled water. Work with member agencies to encourage new developments to connect to recycled water.	To be completed by June 2016	Develop the plans	Sylvia Lee	August	2016	On Schedule	No	Agency has been continuing to work with member agencies on an ongoing basis to seek, educate and help convert customers to recycled water
195	FY 2015/16	Quarterly	Engineering, Planning and Science	D	Conduct research to find new methods to safely recharge more water into Chino Basin by June 2016	Complete the MWD Foundational Action Research Program and develop a tertiary injection research project plan to find new methods to safely recharge more water in to Chino Basin	Through June 2016 and Ongoing	Develop the plans	Sylvia Lee	August	2016	On Schedule	No	RW Injection Pilot demonstration project - Evaluated proposals for contracting with a hydrogeologist to start an initial investigation.
196	FY 2015/16	Quarterly	Engineering, Planning and Science	D	Accelerate implementation of capital projects where appropriate to "drought proof" regional water supplies and optimize use of available federal and state grants and low interest rate financing	Accelerate implementation of "Drought Proof" projects to optimize use of federal and state grants and loans; develop the project list based on priority.	Continuous	Keep updated project list and be coordinated with member agencies	Sylvia Lee	August	2016	On Schedule	No	The drought projects will be discussed in the IRP Phase 2. IRP Phase 2 discussions are expected to begin in Summer 2016
89	FY 2015/16	Quarterly	Engineering, Planning and Science	D	Identify and protect the best recharge land sites in the service region by June 2016	Implement the schedule consistent with the IRP	continuous	Meet the schedule as defined by the IRP	Sylvia Lee	August	2016	On Schedule	No	IRP Phase 1 complete, pending CEQA per PEIR. Phase 2 to commence in 4th qtr 2016.
270	FY 2015/16	Monthly	Engineering, Planning and Science	A	Advocate for continued receipt of property taxes and optimize grants and other funding sources to support Agency and regional investments	Recommend potential grant opportunities that align with the Agency mission and financial goal.	Ongoing	Grants Opportunities announcements to Agency departments and member agencies.	Sylvia Lee	August	2016	Behind Schedule		The Department is continuing to work with the Grants Department on the Strategic Plan and should be completed by the first quarter.
271	FY 2015/16	Monthly	Engineering, Planning and Science	A	Initiate discussions to revise and renew the Regional Sewerage Service Contract set to expire in 2023 by January 2018	Collaborate with the Member agencies, JPAs, and the regional leaders on projects that can be partially funded by grant or SRF loan programs	Ongoing	Collaborating with IEUA and member agencies on preparing, submitting and monitoring grant and SRF loan applications for eligible projects.	Sylvia Lee	August	2016	On Schedule		CEQA was adopted for the Pomona/MVWD/IEUA Recycled Water Intertie Project. The Feasibility Study is near completion, and the agencies will be evaluating the next stages of the project.
272	FY 2015/16	Monthly	Engineering, Planning and Science	A	Advocate for continued receipt of property taxes and optimize grants and other funding sources to support Agency and regional investments	Pursue new grant awards to diversify revenue.	Ongoing	Grants Opportunities announcements to Agency departments and member agencies.	Sylvia Lee	August	2016	On Schedule		Agency received \$200,000 Grant to develop a regional drought contingency plan from USBR.
276	FY 2015/16	Quarterly	Engineering, Planning and Science	A	Integrate projects identified in the long	NRWS & IEBL - Develop rate models to fully support cost of service	July 2014-June 2019	Collect revenues to be within 5% of actual cost of program.	Sylvia Lee	August	2016	On Schedule		NRWS and IEBL programs are meeting cost of service.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
277	FY 2015/16	Quarterly	Engineering, Planning and Science	A	Integrate projects identified in the long range financial planning documents, such as the Urban Water Management Plan, and the Integrated Resources Plan	Integrate projects identified in the various planning documents into the TYCIP (Biennial).	Complete by March 2016	Adopt the Biennial TYCIP by March 2016.	Sylvie Lee	August	2016	On Schedule		Completed
278	FY 2015/16	Annual	Engineering, Planning and Science	C	Identify and participate in organizations that advance the Agency's mission, vision, and key initiatives	Participate in local and regional meetings such as CASA, SCAP, Water Reuse, SCWC, CWEA, and ACWA, to advance the Agency's mission, vision and key initiatives.	Continuous	Attend at regular meetings	Sylvie Lee	August	2016	On Schedule		On going. Staff is actively attending meetings and workshops.
279	FY 2015/16	Quarterly	Engineering, Planning and Science	C	Promote regional projects and initiatives to boost business and industry relocations and promote economic development in the regions	Promote local initiatives; consider and recognize the business impacts when developing regulations, policies, and planning documents	Continuous	Maintain the schedules as established in the regulations, policies and planning documents	Sylvie Lee	August	2016	On Schedule		On going. Its considered in each of the planning initiatives for the department.
280	FY 2015/16	Monthly	Engineering, Planning and Science	C	Provide timely updates to the Regional Committees and the IEUA Board on long term planning needs	Provide regular updates to the Regional Committees and IEUA Board on long term planning needs.	Continuous	Provide monthly/ quarterly/annual updates as needed.	Sylvie Lee	August	2016	On Schedule		Updates have been provided on planning issues through the quarter.
281	FY 2015/16	Quarterly	Engineering, Planning and Science	D	Complete update of the Water Efficiency Business Plan, the Integrated Resources Plan, and the Urban Water Management Plan	Complete update of the WUE, and UWMP	WUE: Nov 2015	Completion and adoption of WUE and UWMP	Sylvie Lee	August	2016	On Schedule		Water Use Efficiency Business Plan and the 2015 Regional Urban Water Management Plan (UWMP) were presented to the Board in June for adoption. The UWMP was filed with DWR on June 29th as requirement of the State statute and deadline of July 1, 2016. Both plans were completed in May 2016
282	FY 2015/16	Annual	Engineering, Planning and Science	D	Develop new targets and programs to achieve 20 x 2020 requirement through water use efficiency measures, including: improve rate structures, integrate water use in to billing, expand outdoor water use efficiency, and increase local use of stormwater	Revise and develop annual targets, tools, and programs to achieve the 20 x 2020 requirements	Complete by August 2016	226 gpcd by 2015	Sylvie Lee	August	2016	On Schedule		The Regional Water Use Efficiency Business Plan was completed in June 2016. This document serves as the roadmap over the next five years to meet the 20x2020 target. Several new programs were launched in June 2016. A residential Pressure Regulation Program and an Education, Survey and controller Upgrade Program consistent with continuing to target residential demand reduction through the service area.
283	FY 2015/16	Quarterly	Engineering, Planning and Science	D	Advocate for ordinances requiring use of permeable pavement in new parking lots	Work with member agencies to develop ordinances, programs, and initiatives to promote storm water capture.	June 2016 Ongoing	Ongoing development of programs, plans, and policies to support storm water capture	Sylvie Lee	August	2016	On Schedule		The Stormwater Resources Plan was adopted into OWOW in June 2016 by the SAWPA Commission.
284	FY 2015/16	Semi-Annual	Engineering, Planning and Science	D	Optimize IEUAs use of potable and recycled water by July 2016	Optimize IEUA's use of potable and recycled water by completion of the recommended updates of the Recycled Water Program Strategy (RWPS).	June 2016 Ongoing	Adopt the RWPS	Sylvie Lee	August	2016	On Schedule		RWPS completed. Projects are being implemented on schedule with the RWPS and are included in TYCIP and IRP project lists.
285	FY 2015/16	Quarterly	Engineering, Planning and Science	D	Identify and evaluate supplemental water supplies for the region	Identify and evaluate supplemental water supplies for the region through completion of the Integrated Resources Plan (IRP).	January 2016	Adopt the IRP by January 2016	Sylvie Lee	August	2016	On Schedule		IRP was adopted in June 2016

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
286	FY 2015/16	Annual	Engineering, Planning and Science	D	Achieve 20,000 acre feet of recycled water recharge in Dry Years by June 2019	Implement the planning and permitting schedule of the Recharge Master Plan Update.	June 2020	Meet the schedules as defined by the RMPU	Sylvie Lee	August	2016	On Schedule		IEUA staff meet monthly with the RIPcom at CBWM to discuss and present project design and budget status.
287	FY 2015/16	Quarterly	Engineering, Planning and Science	D	Identify and protect the best recharge land sites in the service region by June 2016	Strategically pursue projects to maximize funding/grant opportunities	Annual	Participate with SAWPA and other Regional Agencies in developing potential project lists.	Sylvie Lee	August	2016	On Schedule		East Declez project has been closed. Other sites and conceptual projects will be discussed during IRP Phase 2.
288	FY 2015/16	Quarterly	Engineering, Planning and Science	D	Identify and protect the best recharge land sites in the service region by June 2016	Evaluate new projects and programs to support regional water reliability	Continuous	Identify and evaluate new opportunities for water reliability	Sylvie Lee	August	2016	On Schedule		A new MOU of the SARCCUP parties was approved in June 2016. IEUA began the PEIR process as the SARCCUP lead. SARCCUP members have met with MWD to develop banking opportunities.
289	FY 2015/16	Annual	Engineering, Planning and Science	D	Conduct research to find new methods to safely recharge more water into Chino Basin by June 2016	Develop and implement the Recycled Water Peak Demand Management Plan to optimize efficient use of recycled water. Work with member agencies to encourage new developments to connect to recycled water.	Continuous	Continuous dialogue with member agencies and through customers as needed to connect new customers and support demand management initiatives.	Sylvie Lee	August	2016	On Schedule		Coordination with Member Agencies for RW demand management is ongoing.
290	FY 2015/16	Annual	Engineering, Planning and Science	E	Update Wastewater Facilities Master Plan to ensure timely expansion of Agency facilities to address anticipated growth	Update annual demand forecast to address anticipated regional growth	October 2015	Update regional wastewater flow forecast annually based on member agency input, and verify with projections provided in the Wastewater Facility Master Plan.	Sylvie Lee	August	2016	On Schedule		Completed. Demand forecast was updated as part of the FY16/17 TYCIP per Member Agency EDU forecasts. Additional projections in the WWFMPU were developed based on actual flow monitoring.
291	FY 2015/16	Monthly	Engineering, Planning and Science	E	Monitor and integrate the Building Activity Report (BAR) data for actual and projected growth with the Asset Management Plan into regional wastewater planning	Continue to work with regional contracting agencies to review and maintain accurate building activity reports		Provide monthly updates on the status of the connections in the region	Sylvie Lee	August	2016	On Schedule		Continue to work with RCAs to review and maintain accurate building activity reports.
292	FY 2015/16	Annual	Engineering, Planning and Science	E	Develop comprehensive Energy Management Master Plan	Develop and coordinate an Energy Management Master Plan (EMP) consistent with IEUA planning documents (BI-Annual).	June 2016	Provide annual review of the Agency's progress based on the initiatives included in the EMP.	Sylvie Lee	August	2016	On Schedule		Energy Management Plan update to the Board scheduled for October 2016.
293	FY 2015/16	Annual	Engineering, Planning and Science	E	Complete an Agency-wide greenhouse gas emission (GHG) baseline assessment using the Climate Registry protocol to allow the Agency to sell credits by July 2016	Develop annual GHG emission report	June 2016	Complete annual emissions report	Sylvie Lee	August	2016	On Schedule		Staff is preparing the 2015 GHG report. Verified emission report to The Climate Registry is due 12/15/2016.
294	FY 2015/16	Annual	Engineering, Planning and Science	F	Complete odor baselines report	Conduct odor surveys consistent with the needs of the Agency	August 2015	Provide annual updates of the results of the odor surveys including recommendations for process optimization	Sylvie Lee	August	2016	On Schedule		Odor survey results will be presented during the quarterly Planning and Environmental Resources update.

FY 2015/16

Goal ID	FY Start	Reporting Required	Division	Bus. Goal	Work Plan	Department Goal	Time Line	KPI	Assigned To	Note Month	Note Year	Status	Complete	Notes
295	FY 2015/16	Quarterly	Engineering, Planning and Science	F	Develop a communication plan to promote being a good neighbor	Develop a communication plan to neighboring businesses of odor performance monitoring.	Continuous	Periodic/as needed monitoring performed	Sylvie Lee	August	2016	On Schedule		Perform quarterly odor survey at all facilities.
296	FY 2015/16	Quarterly	Engineering, Planning and Science	F	Develop a communication plan to promote being a good neighbor	Asset Operations and External Affairs with odor complaint investigations and assist with mitigation.	Continuous	Provide support as needed	Sylvie Lee	August	2016	On Schedule		Perform odor monitoring, as needed to assist Operations, External Affairs during complaints investigation and mitigation.
297	FY 2015/16	Quarterly	Engineering, Planning and Science	F	Lead efforts to advocate for emerging trends and proposed changes to rules and regulations	Actively participate in the legislative process through advice letters and comments	Continuous	Actively participate and submit comments/letters as issues arise through ACWA, WaterReuse, SCAP.	Sylvie Lee	August	2016	On Schedule		Several initiatives were completed during the fourth quarter including RW general order, emergency regulations for drinking water, organics initiative, and comment letter to the California Public Utilities Commission to express support for the Alternate Proposed Decision on Interconnection Cost Certainty.
298	FY 2015/16	Quarterly	Engineering, Planning and Science	F	Ensure Agency programs promote environmental stewardship, sustainability, and preservation of heritage measures, utilizing green procurement and reuse of surplus materials, equipment, and parts when possible	Update IEBL Ordinance and Enforcement Response Plan.	March 2016	Adopt the IEBL Ordinance by March 2016	Sylvie Lee	August	2016	On Schedule		IEBL Ordinance will be completed upon adoption of SAWPA Ordinance No. 8 in Oct. '16. ERP scheduled for completion in early '17.
299	FY 2015/16	Annual	Engineering, Planning and Science	F	Develop a regionally focused Comprehensive Mitigation Plan for construction projects by July 2018	Complete a Santa Ana River Multi Species Habitat Conservation Plan (SAR-MSHCP) and develop a long-term strategy for mitigation for other regional projects.	June 2017	Adopt the SAR-MSHCP by June 2017	Sylvie Lee	August	2016	On Schedule		SBVMWD completed hydraulic modeling and is working on biological impacts evaluation with expected completion in Jan. 2017.
Technical Services														
310	FY 2015/16	Annual	Operations	C	Review and update the Asset Management Plan	Update the AMP	February 2017	Complete and distribute AMP	Jeff Noelte	August	2016	On Schedule		The FY 16/17 AMP was completed and distributed in July.
208	FY 2015/16	Quarterly	Operations	D	Work with other agencies on the implementation of local regional programs to meet the region's goal of reaching 50,000 AFY of recycled water use by June 2022	Perform evaluations to identify measures to improve recycled water quality and implement measures based on priority.	Ongoing	Install recycle water screens at RP-1 and RP-5	Jeff Noelte	August	2016	On Schedule	No	It was determined that strainer gates could not be installed in a cost-effective manner at the RP-5 CCB. Straining equipment will be evaluated as part of the RP-5 RW piping upgrades project.

**Inland Empire Utilities Agency
Inter-Departmental/Division Budget Transfer
FY 2015/16 - 4th Quarter**

Fund	Date	O & M Transfer From	Category	Amt Transfer Out	O & M Transfer To	Category	Amount Transfer In	Description	QTR
10200	4/7/16	521080	Other Cont. Services	\$10,000	512950	Promotional Items	\$10,000	Transfer to fund purchase of promotional product inventory for the upcoming Earth Day event.	4
10200	4/28/16	520980	Prof. Svcs. - Other	\$10,000	512730	Leases and Rentals	\$10,000	A lease and rental category needed to be created in order for invoices to be charge to the appropriate category. Budget needed to be transferred to that new account.	4
10200	5/9/16	521080	Other Contract Services	\$11,000	521080	Other Contract Services	\$11,000	Transfer to fund new contract with Rafells to update/modify the existing LRPF model.	4
10200	6/2/16	513020	Conference Expense	\$2,700	511230	Travel/ Transportation	\$2,700	Transfer required as more funds were required than was expected for department travel.	4
10200	6/2/16	513030	Contributions/ Sponsorship	\$9,300	511230	Travel/ Transportation	\$9,300	Transfer required as more funds were required than was expected for department travel.	4
10200	6/6/16	511250	Travel/ Lodging	\$1,600	511230	Travel/ Transportation	\$1,600	Transfer to cover travel expenses.	4
10200	6/6/16	514110	Subscriptions/ Publications	\$6,000	511230	Travel/ Transportation	\$6,000	Transfer to cover travel expenses.	4
10200	6/16/16	513020	Conference Expense	\$2,500	521010	Contract Labor	\$2,500	Transfer to cover deficit within fund.	4
10300	6/15/16	555010	Interest Expense	\$11,408	520920	Professional Services - Other	\$11,408	Transfer for service that were not fully covered due to an increase in Midge Fly prevention services and an increase in chemical costs	4
10300	6/15/16	555010	Interest Expense	\$48,592	520920	Professional Services - Other	\$48,592	Transfer for service that were not fully covered due to an increase in Midge Fly prevention services and an increase in chemical costs	4
10500	5/19/16	521410	Computer Maint	\$10,000	545110	Electricity	\$10,000	Transfer to cover slight increase in energy costs for pumping a the Philly Lift Station due to piping pressure issues.	4
10600	5/11/16	521010	Contract Labor	\$15,000	512160	Lab Supplies	\$15,000	Transfer to cover the purchase of high grade solvents and standards for the testing of Priority Pollutants in the Lab	4
10600	6/21/16	521080	Other Contract Services	\$40,000	521220	Lab Svcs - Outside	\$40,000	Transfer for analysis sampling that is required per new regulation requirements.	4
10800	5/4/16	521110	Out Svcs - Lndscp	\$35,000	PK11001	Water Discovery Field Trip & Bus Grant	\$35,000	Transfer required to fund unplanned, Grant-Related programming for the Water Discovery program for the Chino Creek Wetlands and Educational Park to finish out the fiscal year.	4
10800	6/2/16	521080	Other Contract Services	\$1,500	519530	Fines & Penalties	\$1,500	Transfer to cover the expense for the RP-5 NOV settlement agreement to the appropriate account.	4
10800	6/16/16	545370	Water	\$3,460	512170	Materials & Supplies	\$3,460	Transfer to cover expenses that were charged to 10200 and subsequently reclassified to 10800, leaving a shortage of \$3,460.	4
10800	6/21/16	526310	Residuals Disposal	\$38,000	530028	Polymer	\$38,000	Transfer to cover chemical costs	4
10800	6/21/16	526310	Residuals Disposal	\$37,000	530012	Aluminum Sulfate	\$37,000	Transfer to cover chemical costs	4
10800	6/21/16	545370	Water	\$1,000	512110	General Supplies	\$1,000	Transfer due to warehouse supply orders that caused the category to be over budget	4

**Inland Empire Utilities Agency
Inter-Departmental/Division Budget Transfer
FY 2015/16 - 4th Quarter**

Fund	Date	O & M Transfer From	Category	Amt Transfer Out	O & M Transfer To	Category	Amount Transfer In	Description	QTR
10800	6/27/16	EN14039	Dig. Gas Analysis & RP1 Net Metrng	\$65,000	520980	Professional Services - Other	\$65,000	Transfer needed for inspection services related to SIO No. EN-14: RP-5 Battery Storage	4
10900	6/27/16	EN15032	Agency-wide HVAC Improvements	\$25,000	EN13056	RP4 MCC PC5 Roof Access	\$25,000	Transfer needed for the construction phase of the project and for TP purposes/annual BOD.	4
			Total O&M Transfers Out	\$384,060		Total O&M Transfers In	\$384,060		

Fund	Date	Project	Project Description	Amt Transfer Out	Project	Project Description	Amt Transfer In	Justification	QTR
10900	6/30/16	EN11031	RP5 Flow Eq and EFF Monitor	\$205,000	EN13056	RP4 MCC PC5 Roof Access	\$205,000	Transfer needed to reconcile the FY 15/16 budget overage for EN13056	4
			Total Project Transfers Out	\$205,000		Total Project Transfers In	\$205,000		

**Inland Empire Utilities Agency
FY 2015/16 GM Contingency Account Activity (10200-112100-100000-519010)**

Exhibit C-2

Date	Description	Account/Project No.	Requestor	GM Contingency Budget	Transfers	Balance
7/1/2015	FY 2015/16 Adopted budget	RO Fund 10800-112100-501000-519010		\$400,000		\$400,000
3/3/2016	Budget transfer to cover legal litigation projection in Water Resources fund	RO Fund 10700-112100-110000-520230	J. Chagoyen-Lazaro		\$105,000	\$295,000
3/3/2016	Budget transfer to cover general legal projection in Water Resources fund	RO Fund 10700-112100-110000-520210	J. Chagoyen-Lazaro		\$16,000	\$279,000
3/3/2016	Budget transfer to cover general legal projection in Recycled Water fund	RO Fund 10600-112100-130000-520210	J. Chagoyen-Lazaro		\$67,000	\$212,000
3/3/2016	Budget transfer to cover general legal projection in Regional Capital fund	RO Fund 10900-112100-500000-520210	J. Chagoyen-Lazaro		\$50,000	\$162,000
RO Fund GM Contingency				\$400,000	\$238,000	\$162,000
7/1/2015	FY 2015/16 Adopted budget	GG Fund 10200-112100-100000-519010		\$100,000		\$100,000
7/6/2015	Budget transfer to cover fees for hiring temporary help within Agency Mgmt Dept	GG Fund 10200-112100-100000-521080	A. Woodruff		\$30,000	\$70,000
1/11/2016	Budget transfer to hire consultant for proposed consolidation of CBWCD	GG Fund 10200-113100-100000-520980	K. Besser		\$40,000	\$30,000
3/24/2016	Budget transfer to purchase computer hardware for CAFS department	GG Fund IS16015	K. Baxter		\$1,500	\$28,500
3/23/2016	Budget transfer to purchase a laptop for new hire in Engineering department	GG Fund IS16015	S. Stone		\$2,200	\$26,300
3/31/2016	Budget transfer to purchase a computer for new hire in Records Management	GG Fund IS16015	W. Green		\$1,500	\$24,800
GG Fund GM Contingency				\$100,000	\$75,200	\$24,800
GM CONTINGENCY GRAND TOTAL				\$500,000	\$313,200	\$186,800

cc: Joe Grindstaff, Christina Valencia

Inland Empire Utilities Agency
Changes in Total Project Budgets: Inter-Departmental/Division Budget Transfer FY 2015/16 - 4th Quarter

Fund	Line Item or Spec Proj.	Request Date	Total Proj Budget Change (Y/N)?	Annual Proj Budget Change (Y/N)?	New Proj? Y/N	Project Number	Project Title	Adopted Total Project Budget	Prior FY 2015/16 TP Changes	Current Total Project Budget	Amt of Transfer In / (Out)	New TP Budget	FY 2015/16 Annual Project Budget	Annual Proj Budget Change	New Annual Project Budget	Project Transferred To/(From)	Justification
10200	Capital	4/28/16	Yes	Yes	No	IS16015	Workstation Replacement	\$118,000	\$27,600	\$145,600	\$1,500	\$147,100	\$145,600	\$1,500	\$147,100	(GM Contingency)	Transfer from the GM Contingency to IS16015 to fund the purchase of a computer for the new hire in Contracts & Procurement.
Capital	5/19/16	Yes	Yes	No	IS15004	Executive Dashboard	\$84,000	\$75,700	\$159,700	(\$5,500)	\$154,200	\$307,723	(\$5,500)	\$102,223	IS16015	Transfer from IS15004 to IS16015 to provide additional funding for new workstations for new Maintenance staff during the current fiscal year.	
					IS16015	Workstation Replacement	\$118,000	\$28,100	\$147,100	\$5,500	\$152,600	\$147,100	\$5,500	\$152,600	(IS15004)		
Capital	6/2/16	Yes	Yes	No	FP10200	Financial Planning Forecast	\$2,718,000	\$0	\$2,718,000	(\$80,000)	\$2,638,000	\$162,000	(\$80,000)	\$82,000	CP16006	Transfer from FP10200 to CP16006 to fund purchase of HQ staff chairs in a timely and efficient manner.	
					CP16006	HQ Chairs Replacement	\$0	\$7,300	\$7,300	\$80,000	\$87,300	\$7,300	\$80,000	\$87,300	(CP16006)		
Capital	6/8/16	Yes	Yes	No	EN15052	Primavera Enhancements	\$200,000	\$0	\$200,000	(\$6,600)	\$193,400	\$109,270	(\$6,600)	\$102,670	IS16015	Transfer from EN15052 to IS16015 to fund the purchase of computers for three new Limited Term Assistant Engineers hired in the Engineering department.	
					IS16015	Workstation Replacement	\$118,000	\$34,600	\$152,600	\$6,600	\$159,200	\$152,600	\$6,600	\$159,200	(EN15052)		
Capital	7/12/16	Yes	Yes	No	FP10200	Financial Planning Forecast	\$2,718,000	(\$80,000)	\$2,638,000	(\$82,000)	\$2,556,000	\$82,000	(\$82,000)	\$0	IS16021	Transfer from FP10200 to support implementation of IS16021 during FY 2016/17. After this transfer FP10200 will be closed.	
					IS16021	SAP Roadmap & Strategy	\$300,000	(\$280,000)	\$20,000	\$82,000	\$102,000	\$20,000	\$82,000	\$102,000	(FP10200)		
Capital	7/12/16	Yes	Yes	No	IS14025	Finance Process/ SAP Function	\$48,000	\$0	\$48,000	(\$48,000)	\$0	\$48,000	(\$48,000)	\$0	IS16021	Transfer from IS14025 to support implementation of IS16021 during FY 2016/17. After this transfer IS14025 will be closed.	
					IS16021	SAP Roadmap & Strategy	\$300,000	(\$198,000)	\$102,000	\$48,000	\$150,000	\$102,000	\$48,000	\$150,000	(IS14025)		
Subtotal Administration (GG)							\$6,722,000				\$6,339,800	\$1,083,593		\$1,083,593			
10300	Capital	4/20/16	Yes	Yes	No	WR13022	Prado Basin Habitat Well Monitoring	\$800,000	\$30,000	\$830,000	\$304,500	\$934,500	\$60,968	\$334,500	\$395,468	(RW Reserves)	Board approved amendment to the reimbursement agreement with Chino Basin Watermaster for the Prado Basin Habitat Sustainability Program. Total project cost is estimated to be \$934,500.
Subtotal Groundwater Recharge (RW)							\$800,000				\$934,500	\$60,968		\$395,468			
10800	Capital	4/28/16	Yes	Yes	Yes	EN17004	Energy Efficiency Improvements	\$1,700,000	\$0	\$1,700,000	(\$100,000)	\$1,600,000	\$200,000	(\$100,000)	\$100,000	EN16070	Transfer from EN17004 to new project, EN16070, to cover the costs of the next energy efficiency project, as EN17004 is close to completion.
						EN16070	Agencywide Pumps Efficiencies	\$0	\$0	\$0	\$100,000	\$100,000	\$0	\$100,000	\$100,000	(EN17004)	
Capital	6/27/16	Yes	Yes	No	EN13054	Montclair Lift Station Upgrades	\$3,549,600	\$0	\$3,549,600	(\$15,000)	\$3,534,600	\$83,883	(\$15,000)	\$68,883	EN16067	Transfer from EN13054 to EN16067 for costs incurred during the close-out of EN16067.	
					EN16067	RP-1 DAFs Plug Valve Replacement	\$0	\$120,000	\$120,000	\$15,000	\$135,000	\$120,000	\$15,000	\$135,000	(EN13054)		
Subtotal Regional Operations (RO)							\$5,249,600				\$5,369,600	\$89,883		\$403,883			

Inland Empire Utilities Agency
Changes in Total Project Budgets: Inter-Departmental/Division Budget Transfer FY 2015/16 - 4th Quarter

Fund	Capital or Oper Proj	Request Date	Total Proj Budget Change (Y/N)?	Annual Proj Budget Change (Y/N)?	New Proj? Y/N	Project Number	Project Title	Adopted Total Project Budget	Prior FY 2015/16 TP Changes	Current Total Project Budget	Amt of Transfer In / (Out)	New TP Budget	FY 2015/16 Annual Project Budget	Annual Proj Budget Change	New Annual Project Budget	Project Transferred To/(From)	Justification		
10900	Capital	6/27/16	Yes	Yes	No	EN15032	Agency-Wide HVAC Improvements Pckg No 3	\$1,200,000	(\$20,000)	\$1,180,000	(\$25,000)	\$1,155,000	\$989,250	(\$25,000)	\$964,250	EN13056	Transfer from EN15032 to EN13056 to cover the construction phase of the project.		
						EN13056	Agency-Wide HVAC Improvements Pckg No 2	\$1,086,500	\$20,000	\$1,106,500	\$25,000	\$1,131,500	\$90,556	\$25,000	\$115,556	(EN15032)			
Subtotal Regional Capital (RC)								\$2,286,500		\$2,286,500		\$2,286,500	\$1,079,806		\$1,079,806				
								Capital Total Project Budget		Capital Total Project Budget		Total Annual Capital Budget							
								Adopted		Amended		Adopted		Amended					
								\$14,858,100		\$14,930,400		\$2,628,250		\$2,964,250					
10200	O&M Proj	6/1/16	Yes	Yes	No	CP16004	Headquarters LEED OM Certification Process	\$25,000	\$0	\$25,000	\$23,050	\$48,050	\$25,000	\$23,050	\$48,050	(O&M: 521080)	Transfer from Contract Labor to CP16004 to fund additional services for the LEED certification process.		
Subtotal Administration (GG)								\$25,000		\$25,000		\$48,050		\$25,000		\$48,050			
								O&M Total Project Budget		O&M Total Project Budget		Total Annual O&M Project Budget							
								Adopted		Amended		Adopted		Amended					
								\$25,000		\$48,050		\$25,000		\$48,050					
											Total Capital and O&M Project Transfers	\$891,150							
											TPB Change - Capital	\$72,300							
											TPB Change - O&M Project	\$23,050							
											Net Change - TPB	\$95,350							

FY 2015/16
Budget Variance Report
4th Quarter ended June 30, 2016

Board of Directors
September 21, 2016

Sources of Funds Highlights

Actuals compared to Amended Budget

Favorable Variance:

- ❖ **Wastewater Connection Fees:** \$25.8M, 110.8%
 - 4,774 new EDU connections vs. 4,330 budgeted new EDU
- ❖ **Property Taxes:** \$45.6M, 110.9%
 - 5% growth year-to-date vs. 4% budgeted growth, plus a one-time RDA tax receipt of \$2.7M

Unfavorable Variance:

- ❖ **Recycled Water Sales:** \$11.4M, 95.4%
 - 32,619 AF actual year to date vs. 35,150 AFY budgeted
- ❖ **Water Sales:** \$18.7M, 63.4%
 - 29,441 AF vs. 50,000 AF budgeted
- ❖ **Grants & Loans:** \$14.1M, 66.4%
 - Due to delayed execution of related projects



Uses of Funds Highlights

Actuals compared to Amended Budget

Favorable Variance:

- ❖ **Employment Expenses: \$38.0M, 93.7%**
 - Higher vacancy factor of 9% (26 positions) compared to budgeted vacancy rate of 4% (12 positions)
- ❖ **Utilities: \$8.8M, 82.1%**
 - Electricity rate \$0.108/kWh vs. \$0.125/kWh budgeted
 - Natural gas rate \$0.41/therm vs. \$0.80/therm budgeted
- ❖ **Debt Service: \$20.5M, 87.3%**
 - 2008B Variable Bond rate 0.12% average vs. 1.0% budgeted
- ❖ **Capital Projects: \$24.5M, 47.7%**
 - Delayed spending due timing in the project execution and/or changes in project scope and schedule



Updates

❖ Project Closure

- An estimated 88 capital projects, or 66% of active capital projects, identified as eligible for closure by the end of FY 2015/16

❖ Total Project Budget Change

- \$0.7M of Total Project Budget transferred between projects in the fourth quarter
- Net increase in Total Project Budget was \$0.1M or 15 projects changed this quarter



FY 2015/16 4Q Consolidated Fund Balance

Operating	FY 2015/16 Amended Budget	Fourth Quarter Ended 6/30/16	Actual % of Amended Budget
Operating Revenue	\$118.8	\$106.9	90.0 %
Operating Expense	\$147.2	\$102.8	69.9%
Operating Net Increase/(Decrease)	(\$28.4)	\$4.1	
Non- Operating			
Non-Operating Revenue	\$92.2	\$87.1	94.4%
Non-Operating Expense	\$75.2	\$45.4	60.4%
Non-Operating Net Increase/(Decrease)	\$17.0	\$41.7	
Consolidated	FY 2015/16 Amended Budget	Fourth Quarter Ended 6/30/16	Actual % of Amended Budget
Total Sources of Funds	\$211.0	\$194.0	91.9%
Total Uses of Funds	\$222.4	\$148.2	66.6%
Total Net Increase/(Decrease)	(\$11.4)	\$45.8	
Beginning Fund Balance	\$146.1	\$146.1	
Ending Fund Balance	\$134.7	\$191.9	

Questions?

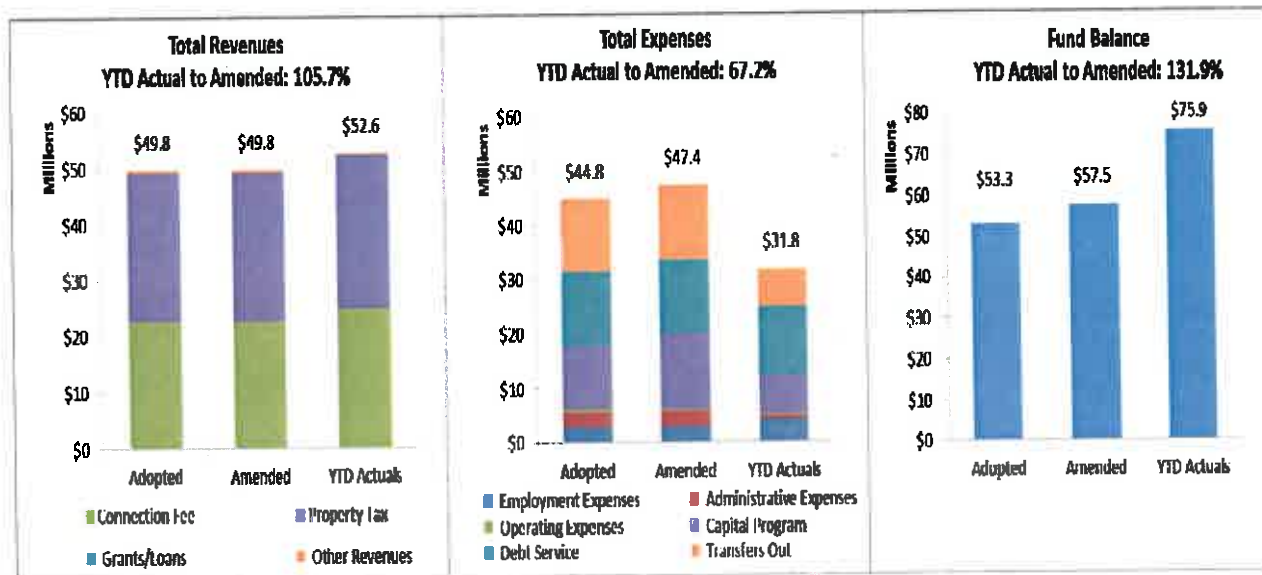


The budget variance analysis report is consistent with the Agency's business goal of fiscal responsibility

**Financial Overview of Agency's Programs
FY 2015/16 Fiscal Year ended June 30, 2016
Total Revenues, Expenses, and Fund Balance
(Unaudited)**

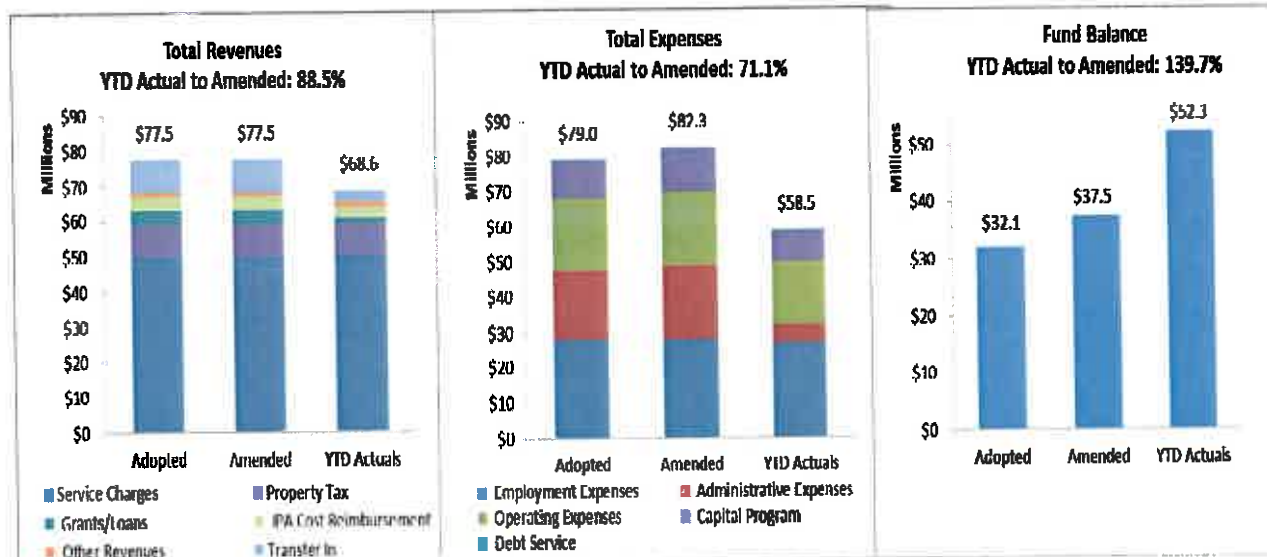
Regional Wastewater Capital Improvement (RC) Fund

The unaudited ending fund balance indicated an increase of \$18.4 million compared to the amended budget primarily due to higher connection fee revenues, increase in property tax receipts, low capital spending and eliminated the \$6 million transfer to the RO fund for supporting the Plume Cleaning project, which will be supported by grants and property tax. A total of \$2.5 million of FY 2015/16 amended budget was identified to be carried forward to FY 2016/17.



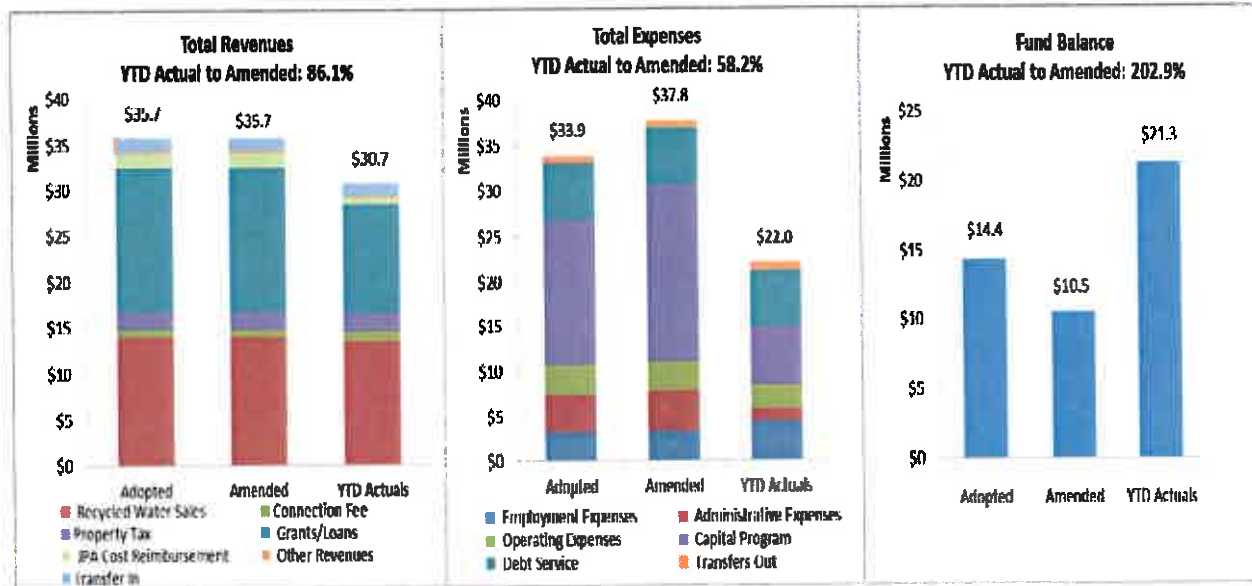
Regional Wastewater Operations and Maintenance (RO) Fund

The unaudited ending fund balance indicated an increase of \$14.8 million compared to the amended budget mainly due to the delayed execution of O&M and capital replacement and rehabilitation projects. A total of \$2.5 million of FY 2015/16 amended budget was identified to be carried forward to FY 2016/17.



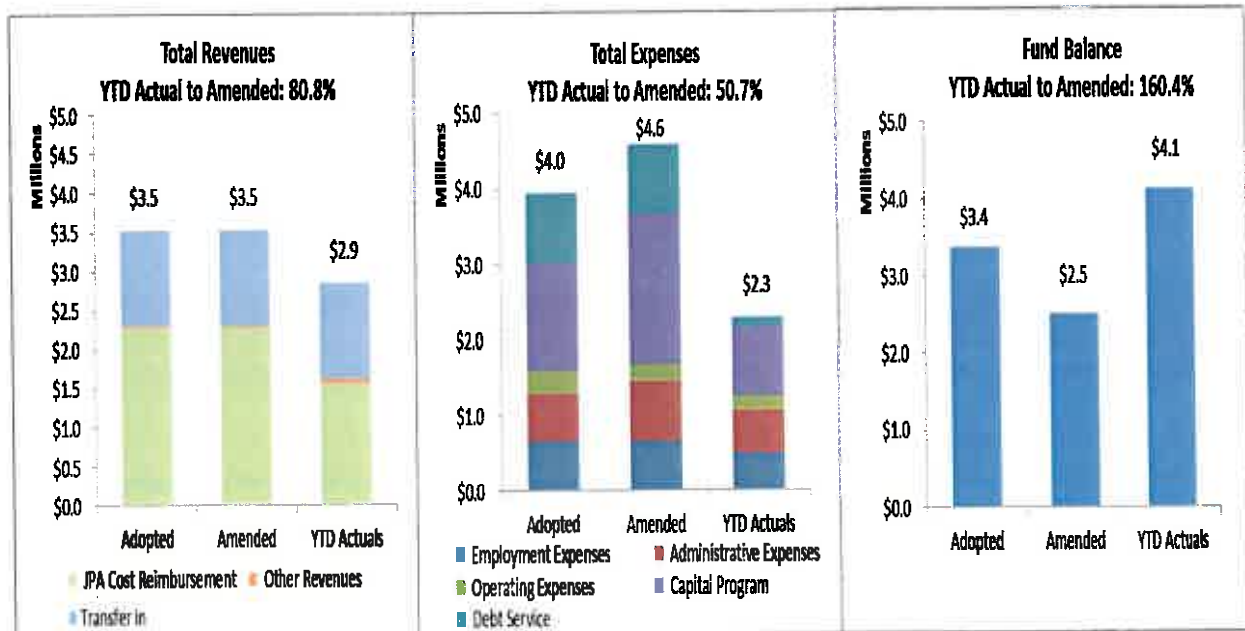
Recycled Water (WC) Fund

The unaudited ending fund balance indicated an increase of \$10.8 million compared to the amended budget primarily due to low administrative expenses and delay in the execution of capital projects. A total of \$2.6 million of FY 2015/16 amended budget was identified to be carried forward to FY 2016/17.



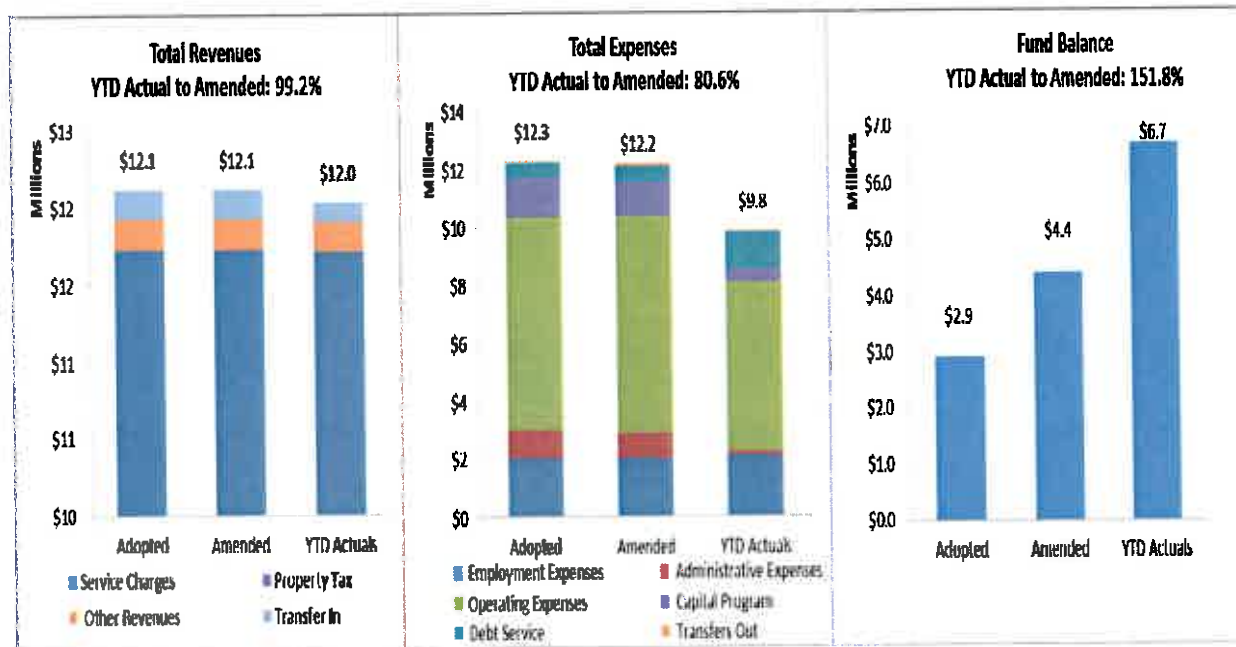
Recharge Water (RW) Fund

The unaudited ending fund balance shows a slight increase of \$1.6 million compared to the amended budget due to timing of operation spending & delays in capital project execution. A total of \$0.8 million of FY 2015/16 amended budget was identified to be carried forward to FY 2016/17.



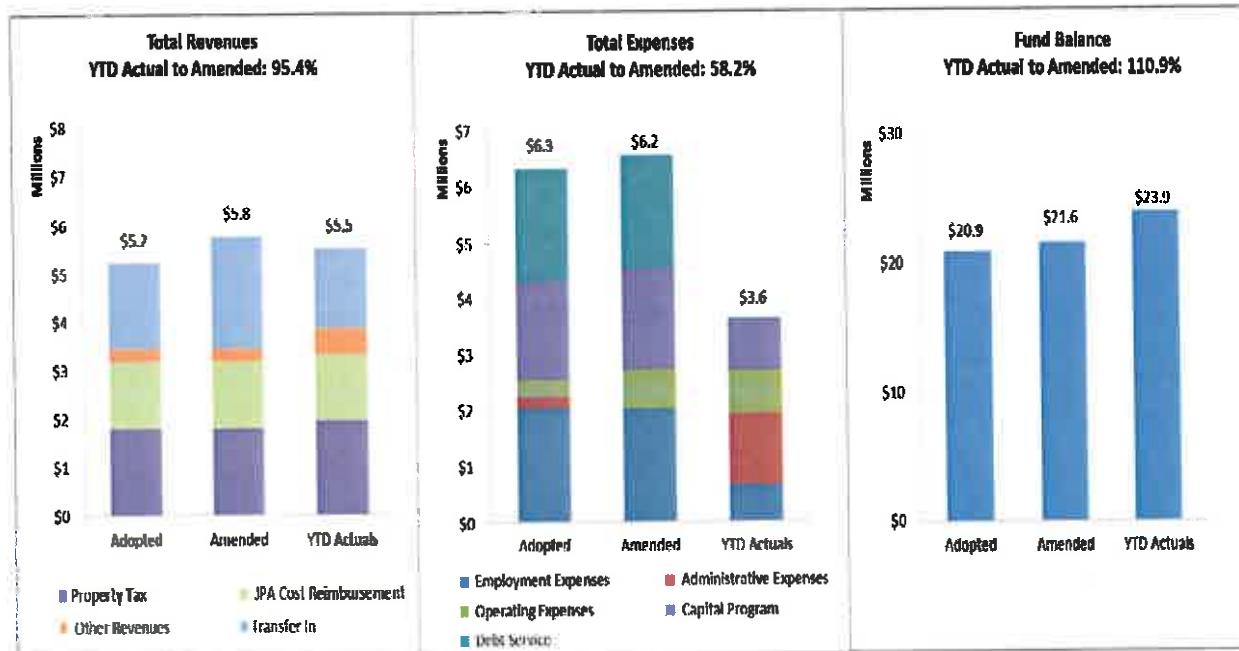
Non-Reclaimable Wastewater (NRW) Fund

The unaudited ending fund balance indicated an increase of \$2.3 million compared to the amended budget due to low administrative expense and delays in capital project execution.



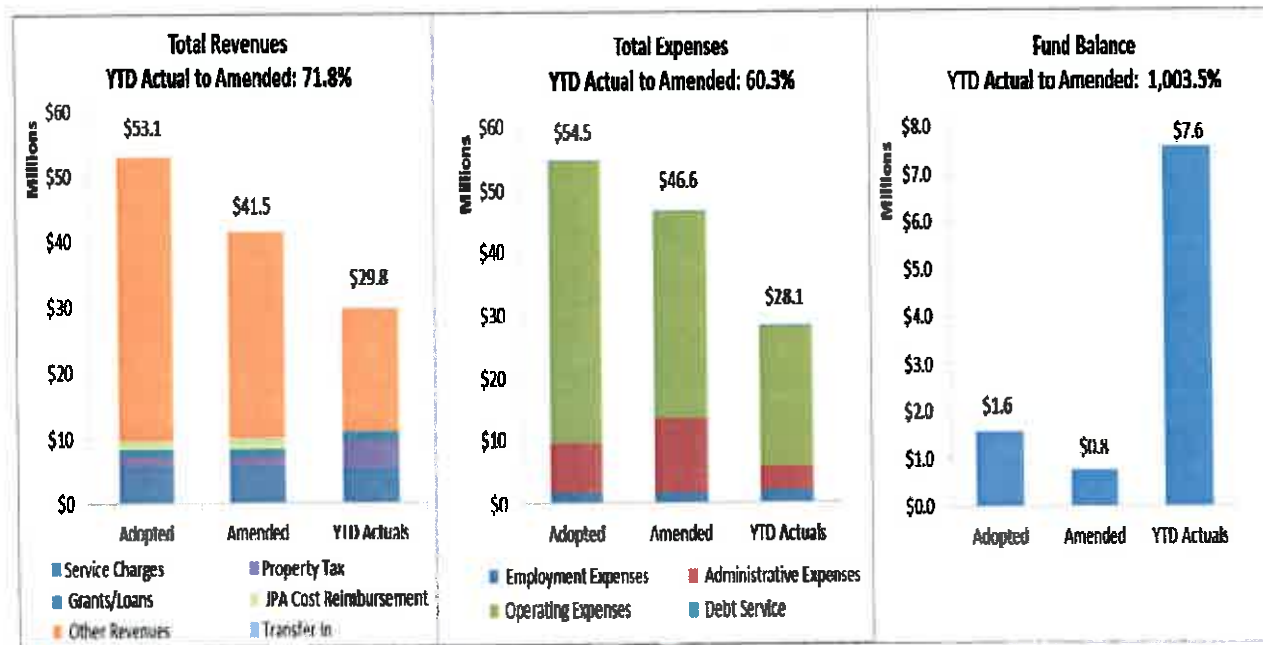
Administrative Services (GG) Fund

The unaudited ending fund balance indicated an increase of \$2.4 million compared to the amended budget due higher than anticipated property tax receipts, deferment of inter-fund loan to WW fund, and lower capital expenditures. A total of \$1.9 million of FY 2015/16 amended budget was identified to be carried forward to FY 2016/17.



Water Resources (WW) Fund

The unaudited ending fund balance indicates an increase of \$6.8 million compared to the amended budget due to addition of the one-time RDA tax receipt of \$2.7 million and lower spending on special projects. A total of \$3.5 million of FY 2015/16 amended budget was identified to be carried forward to FY 2016/17.



**INFORMATION
ITEM**

3F

Date: September 21, 2016
To: The Honorable Board of Directors
Through: Audit Committee (09/14/16)
From: Teresa V. Velarde *T. Velarde*
Manager of Internal Audit
Subject: Master Trade Contracts Audit & Response

RECOMMENDATION

This is an informational item for the Board of Directors.

BACKGROUND

Internal Audit (IA) performed an audit of Master Trade Contracts according to the Fiscal Year 2016/17 Annual Audit Plan. The objectives of the audit included:

- To evaluate compliance with policies and procedures for the establishment of Master Trade Contracts.
- To evaluate how work is issued, verified and approved under the Master Trade Contracts.
- To evaluate whether Master Trade Contract processes follow Agency procurement policies and procedures, other legal requirements and whether they promote fair contracting and good business practices.
- To identify where policies and operations can be made more effective and efficient to ensure that contracts are utilized and monitored as intended.

The Contracts and Facilities Services Department (CFS) administers the Master Trade Contracts. CFS has primary responsibility for the issuance of Master Trade Contracts.

IA will continue to work closely with E&CM and CFS on other similar reviews. Additional work is planned to evaluate compliance with policies for the establishing of Master Service Contracts for emergencies, minor construction and repairs under \$100,000 and procedures for issuing task orders under those contracts. A final report will be issued by December 2016.

Overall, CFS provides effective oversight over the establishment and use of the Master Trade Contracts. The attached report provides details of IA's observations and recommendations. Exhibit G to the report, contains CFS' response. The bullet points below provide a summary:

- The responsibility for proposal evaluations is sometimes handled by an Agency department other than CFS. IA recommends CFS determine the need to retain all supporting documents, including the evaluation documents in their centralized filing system, and work with the end-user department to ensure the final contract and the information communicated to the Board of Directors are consistent and agree. There are instances where a department other than CFS has the primary responsibility for proposal evaluation and reporting the contract information to the Board. The evaluation process is summarized in the Board letter requesting Board approval, which is filed by CFS in the contract file. The audit noted two instances where a department other than CFS completed the evaluation process and the Board letter. IA noted that the final documents (the contract vs. the Board letter) were not consistent in the information reported. To assist the end-user department, CFS plans to develop a new cover sheet that will summarize the contract terms similar to a checklist and provide a method for summarizing the proposal evaluation process to help ensure the end-user communication to the Board is consistent with the contract.
- IA recommends CFS work with the Business Information Department (BIS) to fully utilize the Agency's systems to implement automated controls to ensure that spending on contracts and groups of contracts do not exceed Board approved limits. Master Trade Contracts generally have individual limits on contract spending, but in some cases the Board approved dollar limit is for a group of trade contracts as a whole, rather than for each individual contract. Currently the only method available to ensure that the overall limit is not exceeded is to regularly reconcile spending using a separate spreadsheet. CFS is not aware of any ongoing reconciliation to ensure the spending limit is not exceeded. An automated tool would provide an additional control and assurance that spending limits are not exceeded. CFS and BIS should determine the cost benefit of implanting a new control at this time. During the audit, IA noted that the corrosion assessment group of Master Trade contracts were at 88% of the total group maximum Board approved spending limit and the end-user department, nor CFS had been alerted that spending was reaching the maximum allowed limit. With the Agency's ERP system, users are able to run a report for individual contracts to determine total costs against total contract value. This provides a great tool; however, either the end-user or CFS would have to run the report periodically to monitor spending, as there is no alert that notifies either CFS or the end-user.
- In conjunction with the implementation of the Agency's Enterprise Content Management System (ECMS) - Laserfiche, CFS is working with BIS to develop and implement a taxonomy structure for electronic filing and retrieval of contract documents. IA supports and encourages this initiative which will organize and centralize contract documents, facilitate research and access to information, streamline recordkeeping, and eliminate multiple copies of the same documents. CFS serves as the Agency's centralized resource of contracting knowledge and expertise, as well as the centralized area to maintain procurement records. With the implementation of the Agency-wide ECMS Laserfiche system, procurement files will be automated, making them easily accessible to CSF and

designated Agency staff. The goals for Laserfiche are to enhance the filing and storage system, expedite research and eliminate duplicate copies. ECMS Phase I implementation is planned for early 2017.

- IA recommends CFS work with Human Resources and the Executive Management Team to enhance communications with Agency employees, vendors and contractors, about the Agency's ethical responsibilities and expectations regarding procurement activities, as a best practice recommendation and good internal control. Currently, CFS maintains ethical guidelines under the Procurement tab in the Agency's internal website. Additionally, the Agency website refers to the Ethics Resolution under the Ethics Hotline tab which links to the Ethics-Point site, and other related Agency policies. Finally, each year (as part of the required tailgate topics) all Agency employees are required to review the Agency's Ethics Resolution and related Agency policies. In addition to these efforts, IA recommends CFS periodically remind employees and contractors/vendors of the ethical expectations and guidelines specifically with regards to procurement activities. Agency management may also want to incorporate references to the Agency's Ethics Hotline and Ethics Point "FAQs" in that communication. Additionally, as a general best practice, IA recommends CFS staff annually attend ethics training specific to their procurement activities as a way to achieve greater understanding, learn new trends related to these topics and then share with Agency employees and contractors/vendors.
- IA recommends CFS consider the benefits of job rotation within the department, in addition to the current practices of cross-training and ensuring coverage during staff absences and to develop a plan for succession as well. CFS has recently hired new staff and is using the opportunity to cross-train the new employees on various department responsibilities. Rotating procurement responsibilities within the procurement area is a recommended best practice.

IA appreciates the Contracts and Facilities Services Department staff and the Maintenance Department staff for their cooperation and assistance during this audit. Attached as Exhibit G to this report is CFS' response.

The Master Trade Contracts Audit is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment and Business Practices by providing an independent evaluation of IEUA's contracting policies and practices and suggesting recommendations for improvements.

PRIOR BOARD ACTION

On June 15, 2016 the Board of Directors approved the Annual Audit Plan for Fiscal Year 2016/17, the Master Trade Contracts Audit was included in that plan.

On December 16, 2015, the Board of Directors reconfirmed the approved Audit Committee and Internal Audit Charters.

IMPACT ON BUDGET

None.



Inland Empire Utilities Agency

A MUNICIPAL WATER DISTRICT

6075 Kamdar Ave. • Chino, CA 91708
P.O. Box 9020 • Chino Hills, CA 91709
TEL: (909) 941-7000 • FAX: (909) 947-8675
WWW.IEUA.ORG

DATE: September 1, 2016

TO: Joseph P. Grindstaff
General Manager

FROM: 
Teresa V. Velarde
Manager of Internal Audit

SUBJECT: Master Trade Contracts Audit & Response

Audit Authority

The Inland Empire Utilities Agency (IEUA or Agency) Internal Audit Department (IA) performed an audit of the Agency's Master Trade Contracts. The Master Trade Contracts are groups of contracts pre-established to make procurement of trade services more efficient. IA evaluated compliance with policies and procedures for the establishment of Master Trade Contracts and how work is issued under those contracts. The audit was performed under the authority given by the IEUA Board of Directors and according to the Fiscal Year 2016/17 Annual Audit Plan. Attached is the report with details of the observations and recommendations; Exhibit G includes the department's response.

Audit Objective and Scope

The audit of Master Trade Contracts had several objectives:

- To evaluate compliance with policies and procedures for the establishment of Master Trade Contracts.
- To evaluate how work is issued, verified and approved under Master Trade Contracts.
- To evaluate whether the Master Trade Contract processes follow Agency procurement policies and procedures, other legal requirements and whether they promote fair contracting and good business practices.
- To identify where policies and operations can be made more effective and efficient to ensure that contracts are utilized and monitored as intended.

The Contracts and Facilities Services Department (CFS) administers the Master Trade Contracts. CFS has primary responsibility for the establishing of the Master Trade Contracts.

Water Smart – Thinking in Terms of Tomorrow

Terry Catlin
President

Michael E. Camacho
Vice President

Steven J. Elle
Secretary/Treasurer

Jasmin A. Hail
Director

Paul Hofer
Director

P. Joseph Grindstaff
General Manager

Audit Results – Executive Summary

Overall, CFS provides effective oversight over the establishment and use of the Master Trade Contracts. The attached report provides details of IA's observations and recommendations. Exhibit G contains CFS' response. The bullet points below provide a summary:

- ***The responsibility for proposal evaluations is sometimes handled by an Agency department other than CFS. IA recommends CFS determine the need to retain all supporting document, including the evaluation documents, in their centralized filing system and work with the end-user department to ensure the final contract and the information communicated to the Board of Directors are consistent and agree: There are instances where a department other than CFS has the primary responsibility for proposal evaluation and reporting the contract information to the Board. The evaluation process is summarized in the Board letter requesting Board approval, which is filed by CFS in the contract file. The audit noted two instances where a department other than CFS completed the evaluation process and the Board letter. IA noted that the final documents (the contract vs. the Board letter) were not consistent in the information reported. To assist the end-user department, CFS plans to develop a new cover sheet that will summarize the contract terms similar to a checklist and provide a method for summarizing the proposal evaluation process to help ensure the end-user communication to the Board is consistent with the contract.***
- ***IA recommends CFS work with the Business Information Department (BIS) to fully utilize the Agency's systems to implement automated controls to ensure that spending on contracts and groups of contracts do not exceed Board approved limits. Master Trade Contracts generally have individual limits on contract spending, but in some cases the Board approved dollar limit is for a group of trade contracts as a whole, rather than for each individual contract. Currently the only method available to ensure that the overall limit is not exceeded is to regularly reconcile spending using a separate spreadsheet. CFS is not aware of any ongoing reconciliation to ensure the spending limit is not exceeded. An automated tool would provide an additional control and assurance that spending limits are not exceeded. CFS and BIS should determine the cost benefit of implanting a new control at this time. During the audit, IA noted that the corrosion assessment group of Master Trade contracts were at 88% of the total group maximum Board approved spending limit and the end-user department, nor CFS had not been alerted that spending was reaching the maximum allowed limit. With the Agency's ERP system, users are able to run a report for individual contracts to determine total costs against total contract value. This provides a great tool; however, either the end-user or CFS would have to run the report periodically to monitor spending, as there is no alert that notifies either CFS or the end-user.***

- ***In conjunction with the implementation of the Agency's Enterprise Content Management System (ECMS) - Laserfiche, CFS is working with BIS to develop and implement a taxonomy structure for electronic filing and retrieval of contract documents. IA supports and encourages this initiative which will organize and centralize contract documents, facilitate research and access to information, streamline recordkeeping and eliminate multiple copies of the same documents: CFS serves as the Agency's centralized resource of contracting knowledge and expertise, as well as the centralized area to maintain procurement records. With the implementation of the Agency-wide ECMS Laserfiche system, procurement files will be automated making them easily accessible to CSF and designated Agency staff. The goals for Laserfiche are to enhance the filing and storage system, expedite research and eliminate duplicate copies. ECMS Phase I implementation is planned for early 2017.***
- ***IA recommends CFS work with Human Resources and the Executive Management Team to enhance communications with Agency employees, vendors and contractors, about the Agency's ethical responsibilities and expectations regarding procurement activities, as a best practice recommendation and good internal control. Currently, CFS maintains ethical guidelines under the Procurement tab in the Agency's internal website. Additionally, the Agency website refers to the Ethics Resolution under the Ethics Hotline tab which links to the Ethics-Point site, and other related Agency policies. Finally, each year (as part of the required tailgate topics) all Agency employees are required to review the Agency's Ethics Resolution and related Agency policies. In addition to these efforts, IA recommends CFS periodically remind employees and contractors/vendors of the ethical expectations and guidelines specifically with regards to procurement activities. Agency management may also want to incorporate references to the Agency's Ethics Hotline and Ethics Point "FAQs" in that communication. Additionally, as a general best practice, IA recommends CFS staff annually attend ethics training specific to their procurement activities as a way to achieve greater understanding learn new trends related to these topics and then share with Agency employees and contractors/vendors.***
- ***IA recommends CFS consider the benefits of job rotation within the department, in addition to the current practices of cross-training and ensuring coverage during staff absences, and to develop a plan for succession. CFS has recently hired new staff and using the opportunity to cross-train the new employees on various department responsibilities. Rotating procurement responsibilities within the procurement area is a recommended best practice.***

Acknowledgements

We would like to extend our appreciation to the Contracts and Facilities Services Department staff and the Maintenance Department staff for their cooperation and assistance during this audit. Attached to this report is CFS' response to IA's observations and recommendations.

Discussion with Management

We discussed the results of this audit with Warren Green, Manager of Contracts and Facilities Services and Kathleen Baxter, Supervising Contracts and Programs Administrator on August 23, 2016.

TV:ps

cc: Randy Lee, Executive Manager of Operations/Assistant General Manager
Christina Valencia, Chief Financial Officer/Assistant General Manager
Warren Green, Manager of Contracts and Facilities Services
Kathleen Baxter, Supervising Contracts and Programs Administrator

Master Trade Contracts Audit Background

IEUA is responsible for building, improving and maintaining water/wastewater infrastructure in the region. These public works projects require effective and efficient procurement processes for all types of activities from initial construction, to operations, repairs and maintenance. The procurement processes must be able to fulfill responsibilities as broad as constructing a new laboratory or sewage treatment plant to miscellaneous repairs, maintenance and other projects.

In order to streamline and make the procurement process more efficient, IEUA revises its procurement practices from time to time to adopt procurement "best practices" in the industry. The intent is to save time and resources and ensure only the most qualified contractors able to provide the best overall value services, are selected. The current procurement processes utilized at the Agency are:

- Pre-Qualified Contractors for major public works projects above and below a \$2 million dollar threshold (see separate Prequalification Process Audit Report, dated June 8, 2016 for additional information).
- Master Service Contracts for maintenance, repairs and minor construction under \$100,000.
- Master Service Contracts for emergencies, mostly related to construction activities.
- Master Service Contracts for professional services.
- Master Trade Contracts for smaller maintenance and repairs with specific trades that include Corrosion Assessment, Painting, Roofing, Fencing and Asphalt Repair.

This audit focuses on controls over Master Trade Contracts.

Master Trade Contracts

Master Trade Contracts are administered by CFS primarily on behalf of the Maintenance Department (Maintenance). Most of the contracts are limited to a maximum of \$100,000 in services over the contract term and involve a competitive process of pre-selecting contractors in each trade to establish the contracts. The responsibility for the bidding process has varied with the Maintenance occasionally being responsible for the selection rather than CFS. The contracts for the "trade" or "craft" are generally established for a specific amount of time (3 – 5 years) and the not to exceed dollar amount. The current pre-approved list includes a total of 19 contractors in five "trade" or "craft" designations:

Trade/Craft	Length of Contract	Names of Contractors
Corrosion Assessment	Through 2/28/2017 (one two-year extension available)	HDR Engineering Lockwood, Andrews, Newman Russell Corrosion Consultants V & A Consulting
Roofing	Through 6/30/2021	Rite-Way Roof Corporation Best Contracting Services, Inc. Exbon Development, Inc. Tecta America Southern Calif, Inc.
Fencing	Through 6/30/2021	Moore Fence Company, Inc. Harris Steel Fence Co., Inc. Ferreire Const. Co., Inc. Ace Fence Company
Asphalt	Through 6/30/2021	Terra Pave, Inc. G. M. Sager Construction Co., Inc. Medina Construction EBS General Engineering, Inc.
Painting	Through 6/30/2020	KCC Painting U. S. National Corporation Tony Painting

Additional details for the approved contractors are included at Exhibits A and B.

Internal Audit reviewed transactions in the Agency's accounting system (SAP) to determine how much IEUA had spent on Master Trade Contracts in recent years. This activity is summarized below:

TYPE	CONTRACTOR	# 460000 ...	FY 13/14	FY 14/15	FY 15/16 only to 12/31/15	Total spent since 2013
Corrosion Assessment	HDR Engineering	1622	\$ 20,507	\$ 27,747	\$ 30,316	\$ 78,570
Corrosion Assessment	V & A Consulting	**1614	\$ -	\$ 1,796	\$ 19,156	\$ 20,952
Painting Contractors	KCC Painting	*362/ 1891	\$ -	\$ 29,800	\$ -	\$ 29,800
Painting Contractors	Industrial Coatings	364	\$ 23,598	\$ -	\$ -	\$ 23,598
Roofing	All Weather Roofing	929	\$ 4,241	\$ -	\$ -	\$ 4,241
Roofing	Rite-Way Roofing Corp.	930	\$ 7,373	\$ 2,730	\$ 8,488	\$ 18,591
Fencing	Moore Fence	620	\$ 23,837	\$ 140	\$ 140	\$ 24,117
Fencing	Harris Steel Fence	621	\$ 8,305	\$ 34,100	\$ 48,883	\$ 91,288
Asphalt	Terra Pave	1200	\$ 31,837	\$ -	\$ 4,980	\$ 36,817
TOTALS			\$ 119,698	\$ 96,313	\$ 111,963	\$ 327,974

* KCC Painting Contract # changed from 362 to 1891 due to changes in information received with their W-9.

** In addition to the Master Trade Contract, V & A Consulting also used on a separate project for \$169,874

The total spent utilizing the Master Trade Contracts is less than \$330,000 for the past two and a half years with the largest amounts being spent for corrosion assessment and fencing. While, it appears that reliance on Master Trade Contracts is increasing, with additional contractors placed on the lists and additional usage, it is still only a fraction in comparison to total construction. Construction in progress per the "Budget in Brief" is \$66.1 million for 2015/16 and \$68.6 million for 2016/2017.

In addition to the Master Trade Contracts, V&A Consulting was also used under a separate contract for the inspection of a 72 inch Mixed Liquor pipeline at CCWRF. The total payments for this work amounted to \$169,874. A contract of this magnitude requires Board approval and would generally have been bid among the prequalified contractors under \$2 million. According to E&CM staff the range of specialties on that list did not include any with the expertise in corrosion assessment that the Agency needed. Therefore, staff obtained proposals from the list of corrosion assessment Master Trade contractors which led to V&A Consulting's selection.

IA Evaluation of Master Trade Contracts

IA Evaluation of the Selection Process:

Master Trade Contracts are administered by CFS on behalf of IEUA primarily for use by Maintenance. The Master Trade Contracts were set up to complete multiple small projects with a pool of contractors that could be mobilized quickly using task orders.

The selection process is summarized below:

- Multiple maintenance type trade contractors were solicited by CFS and evaluated by CFS or Maintenance through Requests for Proposal (RFP) processes utilizing an online bidding service.
- Based on the responses to the RFP, contracts were established with multiple responsible bidders.

The department responsible for evaluation of the proposals and for obtaining Board approval has varied from solicitation to solicitation:

Trade/Craft	Length of Contract	Names of Contractors	Department responsible for proposal review and Board Letter
Corrosion Assessment	Through 2/28/2017	HDR Engineering Lockwood, Andrews, Newman Russell Corrosion Consultants V&A Consulting	Operations
Roofing	Through 6/30/2021	Rite-Way Roof Corporation Best Contracting Services, Inc. Exbon Development, Inc. Tecta America Southern Calif, Inc.	Finance & Administration Contracts and Facilities Services
Fencing	Through 6/30/2021	Moore Fence Company, Inc. Harris Steel Fence Co., Inc. Ferreire Const. Co., Inc. Ace Fence Company	Finance & Administration Contracts and Facilities Services
Asphalt	Through 6/30/2021	Terra Pave, Inc. G. M. Sager Construction Co., Inc. Medina Construction EBS General Engineering, Inc.	Finance & Administration Contracts and Facilities Services
Painting	Through 6/30/2020	KCC Painting U.S. National Corporation Tony Painting	Operations Maintenance

To test controls over the RFP process for Master Trade Contracts, IA reviewed the available contract folders maintained by CFS, including the RFP, the control over the bids that were received and the documentation of the selection process for all categories of trade contractors in the most recent rounds of solicitations. The RFP process varied for the different procurements, depending on the trade and who conducted the evaluation.

Asphalt Contractors, Fencing Contractors, Roofing Contractors:

CFS staff administered each of these procurements. In each case CFS issued an on-line solicitation and received four responsive proposals. For each solicitation, CFS staff reviewed the proposals that were received and performed the necessary verifications, including contractor licenses, prevailing wage certification with Department of Industrial Relations (DIR) registration, insurance coverage and reference checks. Since all of the proposals that were received were responsive all of them were included in the recommendation to the Board for contract approval. Per CFS staff, once the contracts were in place the individual contractors would still need to compete on price to be selected to fulfill a particular task order, thus providing an additional level of assurance that IEUA would be obtaining the best value for the services rendered.

IA noted that CFS staff maintain manual files for each contract/vendor. The department does not maintain centralized electronic files and there is no separate master file to keep documentation of the RFP process (evaluation documents, Board Letter, Minutes, etc.). This results in multiple copies of these including Board reports, minutes, etc. being placed in each individual contract file. IA reviewed these files and noted that there was manual documentation to support the steps of the RFP process (evaluation and scoring documents, etc.). IA noted that documentation describing the reasoning used to support the selection of all the submitted proposals is summarized in the Board letter. Since none

of the proposals was eliminated, the overall selection justification was the responsiveness of the proposals that were received.

Painting Services:

Maintenance administered this procurement. IA noted that nine painting contractors were listed on an evaluation spreadsheet. Six were newly submitted proposals to the RFP and one was a proposal from an existing contractor (KCC Painting). The other two remaining existing contractors from the prior solicitation were also included for comparison although they did not submit new proposals. From this list of nine potential painting contractors, three were chosen to be on the new Master Trade Contractors list.

Maintenance used a spreadsheet to summarize and evaluate 10 criteria areas and information about each contractor:

- Overall record
- Years of experience of personnel
- Staffing plan
- References
- Availability of crews
- Exceptions
- Amount of equipment owned
- Responsiveness to proposal requirements
- Fees/Discount
- Comments

Three maintenance staff members documented their top four selections from the nine painting contractors under consideration; three had submitted proposals: KCC Painting, U.S. National Corp. and Tony Painting. The fourth was an existing painting contractor, Industrial Coating. According to Maintenance staff, although the existing contractors were on the list for comparison, they could not have been selected without a proposal, therefore only three painting contractors were presented to the Board. Additionally, in describing the proposals that had been received, the communication to the Agency's Board (Board Letter) inadvertently left off one of the possible painting contractors.

Corrosion Assessment:

Maintenance administered this procurement. This is a newly established category of Master Trade Contracts as of 2014 and CFS believes it will not remain an ongoing part of the Master Trade Contracts since the corrosion assessment process has a limited time frame. CFS issued an on-line solicitation and received four responsive proposals. Maintenance and CFS staff reviewed the proposals that were received and performed the necessary verifications, including contractor licenses, DIR registration, insurance coverage and reference checks. Since all of the proposals that were received were responsive, all of them were included in the recommendation to the Board for contract approval. Per CFS staff, once the contracts were in place the individual contractors would still need to compete on price to be selected to fulfill a particular task order, thus providing an additional level of assurance that IEUA would be obtaining the best value for the services rendered.

Unlike the other Master Trade Contracts, the corrosion assessment contracts are not bound by a \$100,000 maximum or a five year term. Instead, the communication to the Board (Board Letter) states that the group of contractors as a whole will “perform corrosion and condition assessment services for the Agency’s physical assets for a total not-to-exceed amount of \$240,000 over a three-year period.” Additionally the Board Letter states that the “resulting contracts offer an option of two, one-year extensions”, although the actual contracts provide for one two-year extension.

IA Observations & Recommendations

CFS provides valuable service to the Agency in standardizing contracting procedures and ensuring compliance with procurement laws and regulations. CFS are the Agency’s subject matter experts on contracting and procurement laws, rules and ethics. The observations and recommendations noted below are intended to enhance the fulfillment of those responsibilities and the operations of the department.

Contract and Contractor Evaluation Documentation

Observation: IA’s review noted that the proposal evaluation process and the retention of evaluation documents (scoring sheets, etc.) for the Master Trade Contracts vary by the nature of the services being requested and by the Department completing the evaluation. There does not appear to be a uniform methodology for the completion of a proposal evaluation which is reasonable given the different types of services needed. In addition, when a department other than CFS has been responsible for requesting approval from the Board (Board Letter) for a group of Master Trade Contracts, the communication to the Board has been incomplete or was not entirely in agreement with the contract terms. CFS was primarily responsible for evaluating the proposals for Asphalt, Roofing and Fencing services, whereas the Operations and Maintenance Department was primarily responsible for evaluating the proposals for Painting and Corrosion Assessment. IA noted that in instances where CFS was not primarily responsible for the communication to the Board of Directors (Board Letter), the Board Letter differed from the signed contract or did not list all of the proposing contractors. CFS indicated that the proposal process for routine types of contracts are best managed by CFS, but if specialized knowledge is required the responsible department is best equipped to evaluate proposals, and therefore request Board approval. Additionally, CFS agrees the Board letter should reflect the contract. To assist the end-user department, CFS plans to develop a summary cover sheet as a checklist for the project managers to follow to ensure all final communications are consistent.

Recommendation #1:

IA recommends that even in instances where a different department has primary responsibility for the proposal evaluation process, CFS work with the end-user department to ensure the information communicated to the Board of Directors accurately reflects the signed contract terms. Additionally, CFS should determine

the need to request from the evaluating department the evaluation documentation, or a staff memo summarizing the selection process and have it available/filed.

CFS Response: CFS indicated that in an effort to assist the end-user department, they plan to prepare a one-page contract overview checklist document that summarizes the primary and other significant contract terms and provides options to check-off. This will provide a summarized record that can ensure that CFS and the responsible department are in agreement with the contract terms and conditions. This document will simplify the Board Letter preparation process, can provide a place for documentation of the evaluation process and can also include reminders to reinforce ethical contracting practices.

Approved Contract Spending Limits

Observation: There is a need for controls that warn the contract administrators and/or the end-user department when total contract spending is near the approved limit to ensure limits are not exceeded. IA recommends CFS work with the Business Information Department (BIS) to fully utilize the Agency's systems to implement automated controls that ensure that spending on contracts and groups of contracts do not exceed Board-approved limits. However, there are instances where the limits vary or are set on the group of contracts instead of the individual contract, complicating the oversight and monitoring of spending. Currently, the only method available to ensure that the overall limit is not exceeded is to regularly reconcile spending using a separate spreadsheet. IA did not note any instances where the total contract spending amount went over the approved limit. However, it was noted that the contracts for corrosion assessment did not set a limit on spending within the individual contract; instead, an overall limit of \$240,000 was established for the entire group of contractors regardless of how much was incurred for an individual contractor. At the time of the audit, the limits had not been exceeded, but the Corrosion Assessment contracts had incurred \$211,500 or 88% of total spending; approaching the maximum Board-approved limit of \$240,000 and was unknown to the administrators or the end-user department. There is no periodic reconciliation either manually with the use of a spreadsheet or an automated control in place to monitor total spending or warn the contract administrator when total spending is nearing.

It has been CFS' practice that all multi-year contracts be taken to the Board for approval. However, the terms may vary and those limits are set by the CFS administrator, as there is no consistent Agency policy or procedure on the appropriate limits. In the case of corrosion assessment, however, the only limit is in the Board letter for the entire group of contractors, there are not set limits within the individual contract documents.

CFS noted that all contractors in a particular trade are invited to bid on any task order that comes up. This helps ensure that the lowest prices are obtained for the Agency. With a contractor based contractual dollar limit a lower priced contractor might be precluded from bidding on a task order if their individual limit had been reached (even though the overall limit for this trade for the Agency has not been exceeded).

Recommendation #2:

IA recommends that CFS work with BIS to research built-in tools within SAP to implement automated controls necessary to ensure that spending on contracts and groups of contracts do not exceed Board approved limits and determine the cost benefit of implementing those monitoring tools.

CFS Response: CFS indicated that they have requested tools of this type from BIS. However, BIS and CFS must work together to determine the cost-benefit of implementing these controls and plan accordingly. CFS agrees with IA that these controls are important and will work with BIS to determine their feasibility or determine whether other third-party automated solutions are available.

Document Filing Procedures

Observation: CFS is establishing its taxonomy structure within the Agency's new Enterprise Content Management System (ECMS) to automate contract records to ensure records are centrally located and maintained, easily accessible and streamlined to avoid duplicate copies and records. IA supports CFS efforts to fully utilize Agency technology to automate contract records.

CFS currently maintains separate manual contract folders by contractor with information related to the RFP process their proposal relates to and only for the contractors that were awarded contracts. Each folder includes information about the RFP, the Board report, Board minutes and similar information. Therefore, for RFP's such as Master Trade Contracts where more than one contractor is selected, multiple copies of the same documents are copied and maintained in various hard-copy folders. Many of these documents are available electronically. Additionally, there is no separate consolidated file that documents the overall selection process for each such procurement.

When CFS administers the procurement, CFS maintains electronic files for some of the contract documents; however, CFS staff noted that these are segregated by individual and not accessible department-wide. Currently departmental contract files are limited to the manual, hard-copy folders.

CFS should serve as the Agency's centralized resource of contracting knowledge and information and should ensure all procurement files are retained. CFS is in the process of implementing the new ECMS called Laser-fiche, presenting opportunities for process changes. The first phase of this implementation is expected to be completed by January 2017.

Having access to an automated departmental filing system of contracts, proposals and proposal evaluation information, prevailing wage certifications, reference checks and insurance verifications, contract history, contracted continuing responsibilities, department checklists and other information provides the possibility for cross-department knowledge, information and skills. It can also be used as a contract evaluation, management and oversight tool as well as to expedite needed research, public records requests, etc.

Recommendation #3:

IA supports and encourages the initiative to fully implement the Agency's Enterprise Content Management System (ECMS) - Laserfiche. CFS should continue to work closely with BIS to implement the Agency's ECMS - Laserfiche to assist with the organization and centralizing of contract documents, facilitate research and access to information, streamline recordkeeping and eliminate multiple copies of the same documents.

CFS response: CFS is an enthusiastic supporter of the ECMS effort and is looking forward to implementing the electronic tools as they become available. Phase one implementation is scheduled for 2017.

Procurement Activities

Observation: CFS should work closely with Human Resources and the Executive Management Team to enhance communications about the Agency's expectations of ethical responsibilities expected of all Agency employees, vendors and contractors, with regards to procurement activities to actively foster an ethical procurement environment. Currently, CFS maintains ethical guidelines under the Procurement tab in the Agency's internal website (See Exhibit C). Additionally, the Agency website refers to the Ethics Resolution under the Ethics Hotline tab which links to the Ethics-Point site, and each year (as part of the required tailgate topics) all Agency employees are required to review the Agency's Ethics Resolution and policy.

CFS discussed the importance of fostering an ethical environment with IA and noted that this is an ongoing responsibility for everyone at the Agency. As an example, CFS noted that something as simple as leftover supplies and materials such as paint or asphalt resulting from a task order belong to the Agency. Allowing a contractor to use these elsewhere or take possession of them could constitute a gift of public funds. For reasons such as this, IA recommends CFS take a greater role in actively communicating and encouraging an ethical procurement environment.

The Agency has in the past provided annual reinforcement and notifications to employees about ethical guidelines. This was discontinued several years ago. It is a best practice to reinforce this "tone at the top" and a good internal control to embed these ethical expectations as part of the Agency's culture.

Recommendation #5:

IA recommends that CFS enhance communications about the Agency's ethical procurement responsibilities and expectations to all Agency employees as well as Agency vendors and contractors to actively foster an ethical procurement environment. CFS should consider creating an ethics outreach plan and developing an approach with Agency Executive Management and Human Resources about reinforcing the "tone at the top" to actively remind employees and contractors/vendors about the Agency's ethical expectations including once-again providing annual notifications of ethical guidelines to vendors and staff.

Agency management may also want to incorporate references to the Agency's Ethics Hotline and Ethics Point "FAQs" in that communication.

CFS response: CFS indicated that although they understand the importance of this responsibility, they do not have enforcement powers in the way that the Human Resources department has. CFS suggested that this sort of communication may be regarded more seriously coming from a source with the responsibility of setting the "tone at the top" such as Executive Management or the Board of Directors. CFS will take the lead to develop an approach in collaboration with Human Resources and Executive Management.

Recommendation #6:

IA recommends CFS staff attend annual training related to ethics in their respective procurement activities.

CFS response: CFS is committed to the highest standards in having a high-quality, well-trained professional staff that stays current in their professional development.

Job Rotation & Cross-training

Observation: CFS staff serve as subject matter experts for individual contracting areas; however, cross-training and job rotation is a best practice internal control. Existing staff have been assigned specific contractual responsibilities based upon their areas of expertise, backgrounds and the relationships they have developed with different IEUA departments. CFS staff mentioned that each individual serves as an expert in their particular contracting responsibilities. To the extent that job rotation occurs it is limited to "covering" another staff member's desk when they are on vacation, sick or out for other reasons. IA enquired about job rotation as a training tool and as an internal control feature. CFS noted that additional contracts administrators had been hired recently and the department is actively cross-training the new staff. IA suggests that CFS consider the potential benefits of job rotation within the CFS department.

Recommendation #6: In addition to the cross-training that is already occurring, IA suggests that CFS consider the potential benefits of job rotation within the CFS department as a training and internal control technique with multiple benefits.

CFS response: CFS concurs with the benefits associated with job rotation and will plan accordingly.

ANALYSIS OF TRANSACTIONS

The clusters of contractors in various trades has been maintained to allow for rapid completion of small, one-time projects and maintenance items through the use of task orders that do not fall under the responsibility of Construction Management. The task orders are for smaller dollar amounts. The pre-approved list includes a total of 19 contractors in five designations: Corrosion Assessment, Roofing, Fencing, Asphalt Repair and Painting. There is also an additional category for Electrician Support at the Inland Empire Regional Composting Facility (IERCF).

In order to analyze the utilization of contractors in the Master Trade Contracts category, IA examined transactions posted to SAP for these contractors over the last several years. The full year total spending for Master Trade Contracts in fiscal 2013-2014 was about \$120,000 and in fiscal year 2014-2015 about \$96,000 and the largest amount to an individual contractor was \$34,000 for fencing. Additionally one contractor also performed services under a separate contract (V&A Consulting for approximately \$170,000). Spending for Master Trade Contracts for the current fiscal year amounts to \$112,000 for half a year with close to half of that spending going to fencing once again. Overall, however, the amounts in total and individually by year are not significant and are spread among multiple contractors. Based on this review of payments, the utilization of master trade contractors is functioning as intended.

The detailed results of the transaction analysis are included as Exhibit B.

**EXHIBIT A:
INLAND EMPIRE UTILITIES AGENCY
LIST OF CURRENT MASTER TRADE CONTRACTORS**

SPECIALTY	CONTRACTOR	CONTRACT #	BOARD APPROVAL	EXPIRATION
Corrosion Assessment	HDR Engineering	4600001622	3/19/2014	2/28/2017
	Lockwood, Andrews, Newman	4600001616	3/19/2014	2/28/2017
	Russell Corrosion Consultants	4600001617	3/19/2014	2/28/2017
	V & A Consulting	4600001614	3/19/2014	2/28/2017
Roofing	Rite-Way Roof Corporation	4600002065	3/16/2016	6/30/2021
	Best Contracting Services, Inc.	4600002074	3/16/2016	6/30/2021
	Exbon Development, Inc.	4600002078	3/16/2016	6/30/2021
	Tecta America Southern Calif, Inc.	4600002073	3/16/2016	6/30/2021
Fencing	Moore Fence Company, Inc.	4600002066	3/16/2016	6/30/2021
	Harris Steel Fence Co., Inc.	4600002069	3/16/2016	6/30/2021
	Ferreire Const. Co., Inc.	4600002070	3/16/2016	6/30/2021
	Ace Fence Company	4600002071	3/16/2016	6/30/2021
Asphalt	Terra Pave, Inc.	4600002067	3/16/2016	6/30/2021
	G. M. Sager Construction Co., Inc.	4600002075	3/16/2016	6/30/2021
	Medina Construction	4600002076	3/16/2016	6/30/2021
	EBS General Engineering, Inc.	4600002077	3/16/2016	6/30/2021
Painting	KCC Painting	4600001946	8/19/2015	6/30/2020
	U. S. National Corporation	4600001949	8/19/2015	6/30/2020
	Tony Painting	4600001947	8/19/2015	6/30/2020

**Exhibit B:
 Analysis of Transaction Activity**

TYPE	CONTRACTOR	#	BEGIN	TERM END	13 - 14	14 - 15	15 to 12/31	#
Corrosion Assessment	HDR Engineering	1622	3/19/2014	2/28/2017	\$ 20,507	\$ 27,747	\$ 30,316	9
Corrosion Assessment	Lockwood, Andrews, Newman	1616	3/19/2014	2/28/2017	\$ -	\$ -	\$ -	
Corrosion Assessment	Russell Corrosion Consultants	1617	3/19/2014	2/28/2017	\$ -	\$ -	\$ -	
Corrosion Assessment	V & A Consulting	1614	3/19/2014	2/28/2017	\$ -	\$ 1,796	\$ 18,156	4
Electr. Support (IERCF)	Southern Contracting Co.	1894	6/5/2015	6/30/2017	IERCF is a separate entity; per CFS \$15,944 has been incurred on contract			
Electr. Support (IERCF)	Pacific Winds Building	1893	6/9/2015	6/30/2017	IERCF is a separate entity; per CFS \$0 has been incurred on contract			
Electr. Support (IERCF)	Tamang Electric	1887	6/9/2015	6/30/2017	IERCF is a separate entity; per CFS \$11,680 has been incurred on contract			
Painting Contractors	KCC Painting	*362/ 1891	2/6/2009	6/30/2015	\$ -	\$ 29,800	\$ -	1
Painting Contractors	KCC Painting	1946	8/19/2015	6/30/2020	\$ -	\$ -	\$ -	
Painting Contractors	JFP Company	363	2/18/2009	6/30/2016	\$ -	\$ -	\$ -	
Painting Contractors	Industrial Coatings	364	2/4/2009	6/30/2015	\$ 23,598	\$ -	\$ -	2
Painting Contractors	Tony's Painting	1947	8/19/2015	6/30/2020	\$ -	\$ -	\$ -	
Painting Contractors	U.S. National Corp.	1949	8/19/2015	6/30/2020	\$ -	\$ -	\$ -	
Roofing	All Weather Roofing	929	6/13/2011	6/30/2015	\$ 4,241	\$ -	\$ -	1
Roofing	Rite-Way Roofing Corp.	930	6/13/2011	6/30/2015	\$ 7,373	\$ 2,730	\$ 8,488	5
Roofing	Rite-Way Roofing Corp.	2065	3/16/2016	6/30/2021	n/a	n/a	n/a	n/a
Roofing	Best Contracting Services, Inc.	2074	3/16/2016	6/30/2021	n/a	n/a	n/a	n/a
Roofing	Exbon Development, Inc.	2078	3/16/2016	6/30/2021	n/a	n/a	n/a	n/a
Roofing	Tecta America Southern Calif., Inc.	2073	3/16/2016	6/30/2021	n/a	n/a	n/a	n/a
Fencing	Moore Fence	620	4/14/2010	6/30/2015	\$ 23,837	\$ 140	\$ 140	7
Fencing	Moore Fence	2066	3/16/2016	6/30/2021	n/a	n/a	\$ -	
Fencing	Harris Steel Fence	621	4/14/2010	12/31/2015	\$ 8,305	\$ 34,100	\$ 48,883	5
Fencing	Harris Steel Fence	2069	3/16/2016	6/30/2021	n/a	n/a	n/a	n/a
Fencing	All Cities Fence & Const.	622	4/14/2010	6/30/2014	\$ -	\$ -	\$ -	
Fencing	Ferreire Const. Co., Inc.	2070	3/16/2016	6/30/2021	n/a	n/a	n/a	n/a
Fencing	Ace Fence Company	2071	3/16/2016	6/30/2021	n/a	n/a	n/a	n/a
Asphalt	Terra Pave	1200	7/5/2012	8/31/2015	\$ 31,837	\$ -	\$ 4,980	2
Asphalt	Terra Pave	2067	3/16/2016	6/30/2021	n/a	n/a	n/a	n/a
Asphalt	Vance Corp.	1201	7/5/2012	5/1/2014	\$ -	\$ -	\$ -	
Asphalt	Laird Construction	1202	7/5/2012	5/1/2014	\$ -	\$ -	\$ -	
Asphalt	Golden Arrow	1203	4/30/2012	5/1/2014	\$ -	\$ -	\$ -	
Asphalt	G.M. Sager Construction Co., Inc.	2075	3/16/2016	6/30/2021	n/a	n/a	n/a	n/a
Asphalt	Medina Construction	2076	3/16/2016	6/30/2021	n/a	n/a	n/a	n/a
Asphalt	EBS General Engineering	2077	3/16/2016	6/30/2021	n/a	n/a	n/a	n/a
TOTALS (not including IERCF)					\$ 119,698	\$ 96,313	\$ 111,963	

KCC Painting Contract # changed from 362 to 1891 due to changes in information received with their W-9.

**Exhibit C:
Purchasing Ethics from Contracts and Facilities Services web-page**

Purchasing Ethics

- **Refrain from soliciting or accepting money, loans, credit, or prejudicial discounts, and the acceptance of gifts, entertainment, favors, or services from present or potential suppliers which might influence purchasing decisions. (Reference Agency Policy No. [A-28](#))**
- **Agency employees or immediate relatives are not to utilize discounts offered to the Agency nor utilize their position with the Agency to obtain discounts or concessions from Agency suppliers for their personal purchases. (Reference Agency Policy No. [A-28](#))**
- **Refrain from any private or professional business activity which might create a conflict between your personal interests and the interests of the Agency.**
- **Avoid situations which could be viewed as compromising the Agency's interests.**
- **Follow the lawful instructions of the Agency and use reasonable care to expend Agency funds in a fiscally-prudent manner, within the authority granted.**
- **Purchase without prejudice seeking to obtain the maximum benefit from each dollar expended and ensure adequate and fair competition to all responsible suppliers.**
- **Promote positive supplier relationships by showing impartiality, fairness, honesty, and courtesy to all current and potential suppliers.**
- **Consider the ethical and legal consequences when handling proprietary or confidential information of the Agency and its suppliers.**
- **Eliminate all forms of illegal discrimination, fraud, and mismanagement of Agency funds and support coworkers in their responsible efforts to correct such abuses.**

**EXHIBIT D:
 INLAND EMPIRE UTILITIES AGENCY
 MAJOR PUBLIC WORKS PROJECTS**

CONTRACT TYPE & PRIMARY RESPONSIBILITY:		Major Public Works Contracts over \$2 Million (E & CM)	Major Public Works Contracts under \$2 Million (E & CM)
QUALIFICATION PROCESS	REQUEST FOR QUALIFICATIONS	New "Request for qualifications" for each contract to establish a minimum group of qualified bidders.	Numerous contractors by various trades have been "pre-qualified" by E & CM through a "Request for Qualifications" evaluation process. This list is the group of contractors contacted for new projects.
BID/PROPOSAL APPROACH	INVITATION FOR BID or REQUEST FOR BID (Agency must accept lowest responsible bid)	The contractors that have been approved from the "Request for Qualifications" process are solicited through an "Invitation for Bid".	When a new project is approved, contractors in the applicable trade from the "pre-qual" list are solicited through an "Invitation for Bid".
	REQUEST FOR PROPOSAL (Agency may select based on additional pre-established criteria)	N/A	N/A; however Agency may also request proposals through online bidding network in addition to using the prequalified contractors.
CONTRACT	CONTRACT	New contract established with lowest responsible bidder.	New contract established with lowest responsible bidder.
AUTHORIZATION TO PAY/PAYMENT PROCESS	PAY ESTIMATE	Work proceeds and payment is based on milestones or percentage of completion.	Work proceeds and payment is based on milestones or percentage of completion.
	NOT TO EXCEED QUOTE FOLLOWED BY TASK ORDER	N/A	N/A
	TASK ORDER	N/A	N/A
	INVOICE BASED ON CONTRACT TERMS	N/A	N/A

NOTE:

CFS: The Contracts and Facilities Services Department has primary responsibility for these contracts.

E & CM: The Engineering and Construction Management Department has primary responsibility for these contracts. CFS provides contracting expertise and oversight.

**EXHIBIT E:
 INLAND EMPIRE UTILITIES AGENCY
 EMERGENCY PROCUREMENTS**

CONTRACT TYPE & PRIMARY RESPONSIBILITY:		Emergency Procurements Level 1 (E & CM)	Emergency Procurements Level 2 (E & CM)	Emergency Procurements Level 3 (E & CM)
QUALIFICATION PROCESS	REQUEST FOR QUALIFICATIONS	N/A	N/A	N/A
BID/PROPOSAL APPROACH	INVITATION FOR BID (IFB) or REQUEST FOR BID (RFB) (Agency must accept lowest responsible bid)	N/A	N/A	N/A
	REQUEST FOR PROPOSAL (RFP) (Agency may select based on additional pre-established criteria)	Maintenance, minor construction & emergency procurement contractors have been "pre-qualified" through an "RFP" process. RFP used because no individual discrete project has been established. This group of contractors is contacted when emergency occurs.	Maintenance, minor construction & emergency procurement contractors have been "pre-qualified" through an "RFP" process. RFP used because no individual discrete project has been established. This group of contractors is contacted when emergency occurs.	Maintenance, minor construction & emergency procurement contractors have been "pre-qualified" through an "RFP" process. RFP used because no individual discrete project has been established. This group of contractors is contacted when emergency occurs.
CONTRACT	CONTRACT	Based on the "RFPs", contracts have been established with multiple responsible bidders with "not to exceed" totals.	Based on the "RFPs", contracts have been established with multiple responsible bidders with "not to exceed" totals.	Based on the "RFPs", contracts have been established with multiple responsible bidders with "not to exceed" totals.
AUTHORIZATION TO PAY/PAYMENT PROCESS	PAY ESTIMATE	N/A	N/A	N/A
	NOT TO EXCEED QUOTE FOLLOWED BY TASK ORDER	N/A	N/A	Select 3 responders to a "job-walk" at site of emergency and responders provide "not to exceed" bid.
	TASK ORDER	With Level 1 emergency, IEUA selects 1 st response to e-mail blast and contractor must be on-site within 2 hours. Task order prepared after work completed.	With Level 2 emergency, IEUA selects 1 st response to e-mail blast and contractor must be on-site within 24 hours. Task order prepared after work completed.	Lowest responsible bid accepted & "task order" provided once work starts.
	INVOICE BASED ON CONTRACT TERMS	Payment based on invoice.	Payment based on invoice.	Payment based on invoice.

**EXHIBIT F:
 INLAND EMPIRE UTILITIES AGENCY
 MAINTENANCE & MINOR CONSTRUCTION, PROFESSIONAL SERVICES
 AND MASTER TRADE CONTRACTS**

CONTRACT TYPE & PRIMARY RESPONSIBILITY:		Maintenance & Minor Construction (E & CM)	Professional Services (CFS)	Master Trade Contracts (CFS)
QUALIFICATION PROCESS	REQUEST FOR QUALIFICATIONS	N/A	N/A	N/A
BID/PROPOSAL APPROACH	INVITATION FOR BID (IFB) or REQUEST FOR BID (RFB) (Agency must accept lowest responsible bid)	N/A	N/A	N/A
	REQUEST FOR PROPOSAL (RFP) (Agency may select based on additional pre-established criteria)	Maintenance, minor construction & emergency procurement contractors have been "pre-qualified" through an "RFP" process. RFP used because no individual discrete project has been established. This group of contractors contacted for maintenance & minor construction projects.	Professional services contractors have been "pre-qualified" through an "RFP" process. RFP used because no individual discrete project has been established. This group of contractors is contacted for professional services projects.	Trade contractors (Roofing, Fencing, Painting, Asphalt) have been "pre-qualified" through an "RFP" process. RFP used because no individual discrete project has been established. This group of contractors is contacted if "Trades" type project comes up (usually maintenance department).
CONTRACT	CONTRACT	Based on the "RFPs", contracts have been established with multiple responsible bidders with "not to exceed" totals.	Based on the "RFPs", contracts have been established with multiple responsible bidders with "not to exceed" totals.	Based on the "RFPs", contracts have been established with multiple responsible bidders with "not to exceed" totals.
AUTHORIZATION TO PAY/PAYMENT PROCESS	PAY ESTIMATE	N/A	N/A	N/A
	ON-CALL	N/A	Generally select one professional services contractor in the relevant specialty to perform the necessary task based on a phone call or e-mail.	N/A
	NOT TO EXCEED QUOTE FOLLOWED BY TASK ORDER	Generally set-up a "job-walk" at site of project; responders provide "not to exceed" bid.	N/A	Provide a "job-walk" at site of project and responders provide "not to exceed" bid.
	TASK ORDER	Lowest responsible bid accepted & "task order" provided once work starts.	N/A	IEUA accepts the lowest responsible bid and provides a "task order" to start work.
	INVOICE BASED ON CONTRACT TERMS	Payment based on invoice.	Payment based on hours/services invoice.	Payment based on invoice.

**Exhibit G – page 1: Response from Contracts and Facilities Services
INLAND EMPIRE UTILITIES AGENCY**

MEMORANDUM

DATE: August 23, 2016

TO: Teresa V. Velarde
Manager of Internal Audits

FROM: Warren T. Green
Manager of Contracts and Facilities Services

Kathleen Baxter
Supervising Contracts & Programs Administrator

SUBJECT: MASTER TRADE CONTRACTS AUDIT

Thank you for meeting with us today to discuss the draft of the subject audit. CFS management and supervision concurs with the audit and recommendations with the updated language proposed in the review meeting. CFS management and staff appreciate the opportunity to work with Internal Audits to strengthen the Agency's internal controls while identifying ways to promote efficiencies and effectiveness in the Agency's business practices. As in previous audits, the Internal Audit team has again demonstrated their professionalism and desire to identify best practices and ensure that Agency contracts and procurements adhere to the highest standards within the Department's area of responsibility.

In response to the items identified within the report CFS staff offer the following comments.

The Master Contract Program increases efficiencies in our business processes and minimizes risk to the Agency by having terms, conditions and insurances in place for the respective master contracts. Due to the different types of master contracts and the resulting scopes of work, the anticipated Agency spend is used to establish the contract's dollar threshold. As the trade/craft master contracts have multiple contracts associated with each trade, the spending threshold is spread across the group of contracts rather than an individual set amount per contract. This creates a limitation within the SAP system for capture of total spend for each type of trade/craft. Tracking without an automated tool would have to be a manual tracking utilizing a spreadsheet software like Excel. This could be inefficient for staff as there have been no instances of contracts exceeding the threshold under CFS control. However, CFS will work with the BIS to identify the possibility of developing an automated tracking and total spend capture across contracts. This would include an automated internal control to flag the accumulated contracts spend when nearing the Board authorized threshold for a specific group of trade contracts.

Exhibit G – page 2: Response from Contracts and Facilities Services

As discussed, CFS will develop a cover sheet to summarize the term and authorized spend of each contract, to easily compare against the Board letter for the customer department preparing the Board letter. This should assist to ensure there is consistency between the Board letter and the contract terms.

The ECMS project currently underway (Laserfiche) will address the centralized capture of contract information, including solicitation and evaluation documentation in one central repository. This will reduce redundant information as well as provide for efficient retrieval of information when needed.

As CFS management and staff along with IA have a common interest and concern to ensure that the Agency and its staff are fulfilling its fiduciary responsibilities, maintaining the integrity of spending public funds, as well as mitigating any perception of conflicts of interest or unethical behavior, CFS will enhance the Agency's communication to both vendors and staff about ethical practices when conducting business with the Agency. Additionally, CFS staff will participate in ethics training specific to the contracts and procurement arena.

Lastly, CFS will evaluate and implement a cross-training and job rotation protocol among the CFS staff for best practice and greater efficiencies for succession planning and work coverage.

**INFORMATION
ITEM**

3G

Date: September 21, 2016
To: The Honorable Board of Directors
Through: Audit Committee (09/14/2016)
From: Teresa V. Velarde *T. Velarde*
Manager of Internal Audit
Subject: Internal Audit Department Status Report for September 2016

RECOMMENDATION

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

BACKGROUND

The Audit Committee Charter requires that a written status report be prepared and submitted each quarter. The Internal Audit Department Status Report includes a summary of significant internal and external audit activities for the reporting period. Attached is the Status Report for September 2016.

The Status Report is consistent with the Agency's Business Goals of Fiscal Responsibility, Workplace Environment and Business Practices by describing IA's progress in providing independent evaluations of Agency financial and operational activities and suggesting recommendations for improvements.

PRIOR BOARD ACTION

On December 16, 2015, the Board of Directors reconfirmed the approved Audit Committee and Internal Audit Department Charters.

On June 15, 2016 the Board of Directors approved the Annual Audit Plan for Fiscal Year 2016/17.

IMPACT ON BUDGET

None

**Internal Audit Department
Status Report for September 2016**

Projects Completed This Period

Audit: Master Trade Contracts Audit & Qualification Process for not-to-exceed Contracts subject to Task Orders

Scope:

To evaluate the Agency's Master Trade Contracts and the qualification process used to establish not-to-exceed contracts subject to task orders for groups of trade contractors and to ensure these follow the required Agency policies and procedures and ensure controls exist that enforce proper contracting and procurement for transactions.

Status: COMPLETE

The audit evaluated the processes and controls in place to qualify Agency Contractors for minor repairs and maintenance in various "trades" used by IEUA for corrosion assessment, roofing, fencing, painting and asphalt services. The audit examined how work is distributed under the contracts and finally, the audit examined the amount of work issued under master trade contracts in FYS 2013/14, 2014/15 and through December 31, 2015 of FY 2015/16.

Overall, Contracts and Facilities Services Department and the Maintenance Department provide effective oversight over the evaluation process of potential contractors and over the establishment and use of Master Trade Contracts. The final report is included under a separate cover and provides full details of IAs observations and recommendations.

On-going Projects

Project: Regional Contract Review – Follow up: Communication, Collections & Centralization

Scope:

To continue to report the results of the Regional Contract review and pursue region-wide agreement and settlement of findings in conjunction with the renegotiation of the Regional Contract. IA continues to assist Management, analyze data, attend meetings upon request related to the implementation of recommendations and moving forward with the renegotiation of the contract. IA will continue to stay involved as requested and required.

Status: IN PROGRESS

Internal Audit stands ready to assist in moving forward with implementation of the recommendations and/or resolution of the unpaid fees identified.

Internal Audit Department Status Report for September 2016

Project: Management Requests

Scope:

Assist Agency Management with requests for analysis, evaluations and verification of information, assist with the interpretation of policies and procedures, and/or providing review and feedback on new policies or procedures. These services are provided according to the IA Charter, the Annual Audit Plan, and best practices.

The management request projects are short-term projects, typically lasting no more than 60 – 75 hours each where IAD determines it has the necessary staff, skills and resources to provide assistance without having to delay/defer scheduled audits and priority projects. The scope of each review is agreed upon between the department manager requesting the evaluation/review/analysis/assistance and the Manager of IA and when deemed appropriate by Executive Management.

During this quarter, IA was working on the following “Management Requests”:

- Continue to be involved with possible collection of the identified uncollected Connection Fees.
- Participate in implementation of Enterprise Content Management System.
- Assist departments with interpretation of Agency’s Policies.

Audit: Follow up Review: Information Technology Equipment – FAD

Scope:

IA is in the process of performing a follow-up evaluation to determine the status of 7 outstanding recommendations provided in the Information Technology (IT) Equipment audit reports dated August 21, 2012 and November 14, 2012. The 7 recommendations are the primary responsibility of the Finance and Accounting Department (FAD).

Status:

IN PROGRESS

There are 7 recommendations that will require follow-up evaluation. IA has met with FAD to discuss the outstanding recommendations with the assigned representatives. The 7 recommendations require follow-up procedures be performed to verify if corrective actions have been implemented.

IA has begun reviewing the process in place and the supporting documentation for the capitalization of IT equipment. FAD is in the process of establishing a Standard Operating Procedure (SOP) to address the functions for the capitalization of IT Equipment and timely closing of capital/construction projects. FAD is also currently reviewing the intent of the policy related to the capitalization of IT assets, especially for IT equipment purchases on the Procurement Card (P-card), whether or not acquired as part of a capital project. IA will be discussing with FAD the feasibility of reconciling IT assets in ISS records to the Agency’s financial system (SAP). IEUA has invested in a significant amount of IT equipment to support the Agency’s day-to-day operations and currently there are no reconciliation processes in place to validate existence and completeness of these assets.

IA will report on the status of these outstanding recommendations in December 2016.

Internal Audit Department Status Report for September 2016

Internal Audit Department

Internal Audit Department Staffing:

The Internal Audit Department is staffed as follows:

- 1 Manager of Internal Audit
- 1 Full-time Senior Internal Auditor
- 1 Full-time Senior Internal Auditor (currently on FMLA leave)

Internal Audit Staff Professional Development Activities:

As required by the *International Standards for the Professional Practice of Internal Auditing*, auditors should continue to enhance their knowledge, skills, and other competencies through continuing professional development.

In June, 2016 the Manager of Internal Audit and one Senior Internal Auditor attended the annual 1-day Southern California Conference of the Institute of Internal Auditors. During the past quarter, IA staff has also continued to stay abreast of industry developments through review of industry periodicals.

All three IA members are preparing for the third exam of the 3-part Certified Internal Auditor (CIA) certification examination. The CIA is the only globally-recognized certification for internal audit professionals and is the highest certification that can be attained by an internal auditor. One Senior Auditor is a Certified Public Accountant (CPA). One Senior Auditor is a Certified Government Audit Professional (CGAP).

Future Audit Committee Meetings:

- Wednesday, December 14, 2016 – Regularly Scheduled Audit Committee Meeting
- Wednesday, March 15, 2017 – Regularly Scheduled Audit Committee Meeting

**INFORMATION
ITEM**

3H

Date: September 21, 2016

To: The Honorable Board of Directors

Through: Public, Legislative Affairs and Water Resources Committee (9/14/16)

From: P. Joseph Grindstaff
General Manager

Submitted by: Kathy Besser
Manager of External Affairs

Subject: Public Outreach and Communication

RECOMMENDATION

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

BACKGROUND

September

- September 14, Chino Day at the LA County Fair
- September 16, Fontana and Ontario Day at the LA County Fair
- September 22, Upland and Montclair Day at the LA County Fair
- September 23, Chino Hills and Rancho Cucamonga Day at the LA County Fair

October

- October 20, Battery Storage Project Dedication, RP-5, 11 a.m.
- October 29, Landscape and Water Conservation Festival, Chino Basin Water Conservation District - 4594 San Bernardino St, Montclair, CA 91763, 9 a.m. – 2 p.m.

December

- December 21, IEUA Holiday Luncheon, Los Serranos Country Club, 15656 Yorba Avenue, Chino Hills, 11:30 a.m.

Outreach/Education - Civic Publications Newspaper Campaign

- IEUA is working with Civic Publications to update the KickWaterWaste.com micro-site.

Media and Outreach

- IEUA was awarded the H₂O Collaboration Award at the BIA San Bernardino County Water Conference for the *Kick the Habit* campaign.
- Staff will be distributing a new fall message during the upcoming season. The message will align with the *Kick the Habit* brand and will include a fall theme. The tips focus on the State Water Resources Control Board's permanent restrictions following the Governor's Executive Order.
- Staff will be updating the movie trailer to tie into fall messaging. The *Kick the Habit* movie trailer will continue to show in local theaters.
- A *Kick the Habit* ad ran in the *Champion Newspaper's* High School Football section on August 20.
- A *Kick the Habit* ad will run in the *Champion Newspaper's* L.A. County Fair section on September 24.
- *Kick the Habit* bus advertisements in English and Spanish began on October 5, 2015 for an initial six month run and will continue to run for another six months. The ads are updated to include the summer messaging tips. These advertisements will end on September 22.
- In August, 32 items were posted to Facebook and 28 tweets were sent under the @IEUAwater Twitter handle.
- Staff is working on developing/updating all facility brochures.

Education and Outreach Updates

- Staff has begun working on marketing and scheduling Water Discovery field trips for program year 2016/17. To date, staff has scheduled four field trips and one educator's field trip with teachers from Fontana Unified School District.
- Staff has begun scheduling outreach/program meetings with principals within the service area for school year 2016/17. To date, staff has schedule a principal meeting at Etiwanda School District on August 30 to communicate IUEA's free education programs.
- Staff has submitted to MWD the 2017 Solar Cup Interest to Participate form to sponsor three teams. Teams will need to be identified by Thursday, September 7, 2016. Staff has received interest from five schools within the service area including: Chino High School (Chino), Chino Hills High School (Chino Hills), Los Osos High School (Rancho), Henry J. Kaiser High School (Fontana), and Jurupa Hills High School (Fontana). Schools will be entered in a lottery drawing to determine team slots as staff as received more interest than allotment provided by MWD.
- Staff is working in cooperation with Chino Basin Water Conservation District and member agency representatives to plan the Landscape Water Conservation Festival held annually in October. The Water Conservation Fair will be held Saturday, October 29, 2016.
- Staff has awarded four schools the Garden in Every School® water-wise grant for program year 2016/17. Schools awarded include: Arroyo Elementary in Ontario, Rolling Ridge Elementary in Chino Hills, Townsend Junior High School in Chino Hills, and Montclair High School in Montclair. Staff has begun conducting site inspections to determine prep-work, establish a design and schedule an installation timeline.

PRIOR BOARD ACTION

Public Outreach and Communication
September 21, 2016
Page 3

None.

IMPACT ON BUDGET

The above-mentioned activities are budgeted in the FY 2016/17 Administrative Service Fund, External Affairs Services budget.

**INFORMATION
ITEM**

31

Innovative Federal Strategies LLC

Comprehensive Government Relations

MEMORANDUM

To: Joe Grindstaff and Kathy Besser, IEUA

From: Letitia White, Jean Denton, and Drew Tatum

Date: August 31, 2016

Re: August Monthly Legislative Update

Appropriations Update

Even as public momentum continues to build for a 6-month continuing resolution (CR), there is a strong push behind the scenes for a funding measure that only runs through mid-December. Senior Members on the House Appropriations and Armed Services Committees, in concert with several of their colleagues, are drafting a letter to House Leadership advocating strongly for a 3-month CR with the intent of ending the year with some combination of stand-alone, “minibus” and/or omnibus bills to complete annual appropriations and other key legislation. The prevailing wisdom is that leadership on both sides will want to hold the CR until the very end of September to keep pressure on the process to move as much legislation as possible right up to the end of the fiscal year.

To that end, we are hearing that the Senate intends to make another attempt at bringing Defense Appropriations to the floor in September. As you may recall, Senate Republicans attempted to advance the legislation multiple times before the break, but were unable to garner the 60 votes necessary to invoke cloture. The planned Senate action on an individual appropriations bill means that little progress has been made on mediating out appropriations conference positions during the recess. Regardless of the outcome, we expect staff will start conferencing appropriations positions either after the legislation passes, or barring that, when Members return to the campaign trail in October.

During the recess, the Office of Management and Budget dealt a major blow to the individual appropriations bills advanced by the House Appropriations Committee. In its mid-year assessment, the OMB reported that the 12 annual spending bills in the House would violate the discretionary spending caps set by law and require a new round of sequestration if enacted. The report noted that based on the spending levels contained in the legislation, defense programs would need to be cut by \$17 million and non-defense programs would face \$775 million in cuts. The Senate bills, by contrast, would fall under the discretionary spending limit by \$2.2 billion.

Administration Calls for Supplemental Appropriations Bill for Zika, Flooding, Troops

The Administration has crafted a supplemental appropriations request totaling between \$6 and \$7 billion that is expected to be transmitted to Congress in early September. As you will remember, the Zika supplemental previously submitted to Congress was not approved as part of an

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appropriations package before Congress left town over objections to how Republicans offset nearly half of the spending. The new supplemental request is likely to be split roughly in half between both domestic spending—for Zika response and Louisiana flood relief—and defense—to cover the additional costs for the troop levels in Afghanistan. Committees hope to take action before the end of September, with the package possibly serving as the legislative vehicle for a continuing resolution to fund the government beyond September 30.

In addition to calling for supplemental funding to address the Zika virus in the United States, the Food and Drug Administration has issued a new advisory recommending all U.S. blood banks screen donated blood for the Zika virus. Announced on Friday, August 26, this is a major expansion of the screening procedures. Previously, the requirement was limited to areas with active Zika transmissions.

Outlook for September

With only 4 weeks remaining until the end of the current fiscal year, Congress will have to decide how long to enact a continuing resolution to avoid a government shutdown. The House is scheduled to recess through the election by September 30, leaving 17 scheduled days in session for the month. The Senate is scheduled to be in session during the first week of October, but all spending decisions will have to be made before the House leaves Washington.

Aside from passing a continuing resolution, the House has set forth an ambitious agenda for September. In an email to his colleagues on August 31, House Majority Leader Kevin McCarthy (R-CA) put forth the following items:

- **Better Way Agenda:**
While largely a legislative blueprint for the next Congress, the House will likely consider legislation under the theme of rebalancing the separation of powers. Specifically, the House is scheduled to consider the Regulatory Integrity Act that requires agencies to publish information about proposed regulations on their website, a bill to allow Congress to disapprove of “Midnight Regulations” issued in an administration’s lame duck term, and legislation that would prohibit major rulemaking that cost more than \$1 billion from going into effect until pending legislation against the rule is finalized.
- **Innovation:**
The House will consider legislation to accelerate private sector innovation and encourage the same within government.
- **Iran:**
The House is expected to consider a number of measures related to anti-terrorism and Iran. Specifically, the House will hold multiple hearings on the \$400 million in cash paid to Iran as part of a settlement agreement. During August, the administration admitted to withholding it as leverage until hostages were released, leading many to criticize it as a ransom payment. Additionally, the House will consider legislation that would require reporting on the financial assets acquired by Iranian leaders.
- **Appropriations:**
In addition to finalizing a continuing resolution, the House may also consider a new supplemental appropriations request that would provide emergency funding for additional defense spending required to maintain troop levels in Afghanistan, money to help with the Louisiana flooding, and funding to address the Zika virus.

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The Senate has not announced a detailed schedule for September, but we expect to see possible action during the first week on the Zika supplemental package and a move to pass the Defense Appropriations bill. Both bills were blocked in July when Democrats filibustered the measures.

**INFORMATION
ITEM**

3J



August 31, 2016

To: Inland Empire Utilities Agency
From: Michael Boccadoro
President
RE: August Legislative Report

Overview:

The 2015-2016 Legislative Session is officially over. The final flurry of bills were passed and are onto the Governor's desk. The end of the session was full of the usual last minute amendments and "gut and amends" as members tried to sneak in items pretty much under the cover of darkness. Extension of the state's greenhouse gas reduction targets and other climate change measures were some of the hottest issues in the final weeks, days and hours of the session. Ultimately, the Legislature passed SB 32 (Pavley) to extend the state's greenhouse gas reduction targets to 40 percent below 1990 levels by 2030. The Governor has until the end of October to sign legislation and barring the call of a special session, the Legislature will not reconvene until December, when a new crop of members will be seated. Democrats are expected to pick up a number of seats that could significantly change the direction of the Legislature as moderate Democrats decline in power.

Expansion of the California Independent System Operator (CAISO), did not make it to the legislative finish line. There was an attempt in early August to craft a measure that would authorize California to enter into an expanded western regional grid that was ultimately tabled until next year. The Governor's office and proponents of the concept realized there were too many concerns and not enough time to craft a measure that could garner wide support.

Amid criticism from environmental groups, such as the Natural Resources Defense Council (NRDC), the State Water Resources Control Board (SWRCB) is defending their new program allowing local water agencies to self-certify their water supply needs in the coming years and weakening or removing customer conservation requirements.

SB 970 (Leyva), IEUA's sponsored bill to promote the use of existing digester capacity at wastewater treatment plants for food waste diversion is on the Governor's desk awaiting signature.

The water supply picture in California remains the same with Northern California reservoirs declining, but not yet reaching critically low levels. In a repeat from last year, regulators are holding water behind Shasta Dam and releasing more water from Folsom and Oroville Reservoirs in order to release cold water from Shasta later in the year for salmon spawning. Southern California reservoirs remain critically low, the result of surplus winter and spring flows not moving to south of Delta reservoirs. Environmental requirements resulted in the loss of nearly one million acre-feet of water supply.

The Little Hoover Commission met on August 25 to hear testimony from a number of stakeholders regarding special districts. While their primary focus was on fire and hospital districts, water district stakeholders were on guard because of past Little Hoover Commission Reports that criticized special district reserves and property tax allocations.

The Joint Legislative Audit Committee met to consider audit requests in mid-August. Senator Lois Wolk (D-Davis) and Assemblymember Susan Eggman (D-Stockton) requested an audit of the California WaterFix. The audit request was very similar to Public Records Act requests to Metropolitan Water District of Southern California, and other State Water Contractors made by "Restore the Delta." The Department of Water Resources testified that they are very willing to comply with the audit. Several Southern California members questioned if the audit was a ploy to discredit the WaterFix. Wolk and Eggman, both staunch opponents of conveyance, assured them it was not. Ultimately, the audit request was granted.

An ongoing battle over predation of endangered native salmon, smelt and steelhead by non-native striped and black bass is back. A coalition of water, farming and business groups have been successful in getting the Fish and Game Commission to commit to holding an extended hearing to consider the benefits of predation controls.

Inland Empire Utilities Agency Status Report – August 2016

CAISO Expansion

The movement to authorize the expansion of the California Independent System Operation (CAISO) has been delayed until next year. As reported last month, CAISO has been in talks with other western states to create a broad western governance structure for the operation of the electric grid.

After significant review, many stakeholders were concerned at the pace at which this very important policy decision was being discussed. Beyond stakeholder concern, legislative staff and policy leaders also voiced concern about the rush to judgment and the potential policy implications for California's clean energy and climate change programs.

There are still significant concerns that need to be addressed, including if the claim that regionalization will create broad benefits within the state will actually matriculate.

Parties such as labor unions, ratepayer advocates and some environmental groups are concerned that the proposal will lead to increased imported renewable power from places such as Wyoming, not create in-state renewable energy projects that will bring jobs and revenue to California. Other parties such as the State Water Contractors Association remain concerned about significantly increased costs and limited or no real benefits.

Many parties procure adequate renewable energy already and do not need to rely on imported renewable energy, and are therefore concerned about the portion of regionalization costs they would be responsible for as participants in of the regional grid.

Ultimately, the move to secure legislative authorization to expand the CAISO was tabled until next year. Legislative leaders have asked stakeholders to craft language and submit to the Assembly Utilities and Commerce Committee. A working draft will be compiled and discussions will continue through the fall and winter to try to address the remaining issues.

“Self-Certification” Update

Amid criticism from environmental groups, such as the Natural Resources Defense Council (NRDC), the State Water Resources Control Board (SWRCB) is defending their new program allowing local water agencies to self-certify their water supply needs in the coming years and weakening or removing statewide customer conservation requirements.

Of the 411 water suppliers required to submit data, only 32 indicated that they intend to retain the conservation standards set by the SWRCB.

SWRCB Chair Felicia Marcus noted that while it is unfortunate that some water agencies have recently “telegraphed the wrong message,” California is still in a drought, but improved water supplies this year justify relaxing the conservation standards. Marcus also noticed that winter hydrology will be key in reevaluating whether mandatory conservation standards should be implemented again in 2017.

NRDC has strongly criticized the SWRCB’s move away from mandatory conservation. In a recent press release, they criticized the ‘stress test’ results, highlighting the 379 agencies that self-certified their water supplies.

Specifically, NRDC called out Metropolitan Water District of Southern California (MWD) for having “overly optimistic and unprecedented supply projections without sufficient documentation to get the supplies it was reporting.” They also noted that some of the supplies MWD is claiming are also claimed by Coachella Valley Water District and Desert Water Agency. They claim that the SWRCB is allowing water suppliers to double-dip, which will lead to further water supply shortages.

MWD has vigorously rebuffed those allegations saying that NRDC is interpreting the data incorrectly. There is a rumor that NRDC will pursue legislation next year to reinstate mandatory conservation.

Reservoir Levels Update

The water supply picture in California remains the same with most Northern California reservoirs declining, but not reaching critically low levels. The exceptions are Folsom and San Luis which are well below normal levels. San Luis was at an all-time low in early August before making some minor gains in recent weeks. In a repeat from last year, regulators are holding water behind Shasta Dam and releasing more water from Folsom and Oroville Reservoirs in order to release cold water from Shasta later in the year for salmon spawning. Southern California reservoirs remain critically low, the result low Southern California precipitation this past winter and limited surface water supplies moving through the Delta.

Reservoir	Percent of Capacity		Percent of Historical Average	
	Jun. 30	Aug. 26	Jun. 30	Aug. 26
Lake Shasta	86%	71%	107%	109%
Lake Oroville	84%	54%	103%	81%
Folsom Lake	74%	36%	89%	57%
San Luis Reservoir	18%	13%	29%	31%
Lake Perris	37%	37%	46%	48%
Castaic Lake	75%	76%	86%	93%

SB 970 (Leyva) Update

IEUA’s sponsored legislation, SB 970 (Leyva) not only passed both houses with an overwhelming majority and is on the Governor’s desk awaiting signature, but the language from the bill is also included in SB 859, the Budget Committee’s Resources Trailer Bill. While it is very unlikely the Governor will veto SB 970, even if he does, the same language is in SB 859, which is backed by the administration.

The next step is to work with CalRecycle as they allocate the Greenhouse Gas Reduction Funds allocated to organic waste diversion (see below).

Little Hoover Commission Hearing on Special Districts

The Little Hoover Commission (LHC) met on August 25 to hear testimony from a number of stakeholders regarding special districts. While their primary focus was on fire and hospital districts, water district stakeholders were on guard because of past Little Hoover Commission Reports that have been critical of special district reserves and property tax allocations.

Just three of the 13 members of the LHC were present (the four members of the Legislature on the Commission were in session):

- Pedro Nava, Chair: Nava represented the Santa Barbara area in the State Assembly from 2004-2010 and has been the Chair of the Little Hoover Commission Since 2014.
- Helen Torres: Appointed to the LHC in 2016. She is the Executive Director of a women’s leadership and advocacy organization.
- Sean Varner: Appointed to the LHC in 2016. He is a real estate attorney from San Bernardino.

Testimony was requested by the LHC from the California Special Districts Association (CSDA), the Local Agency Formation Commission (LAFCO), representatives from both hospital and fire districts, Howard Jarvis taxpayers Association, and a representative from CaliforniaCityFinance.com. This report will omit highlights from the hospital and fire representatives, as their testimony was not relevant to water agency issues.

Kyle Packham, California Special Districts Association:

Packham did a thorough job of giving an overview of what services special districts provide, how they operate and what steps they have taken since the last 2010 Little Hoover Commission report on special districts. He talked about increased transparency, noted that CSDA, while neutral on

consolidation, supports a LAFCO process that is open, transparent and provides local stakeholders a lead role in the process.

On the subject of property taxes, Packham highlighted that voters approved the creation of specific special districts as well as their property tax increments and voters want their taxes to stay local. Testifying parties shared written testimony prior to the hearing. As a result, Packham spent his time addressing issues raised in the written testimony of Michael Coleman of CaliforniaCityFinance.com (originally listed to be testifying on behalf of the CA League of Cities. The League sent a letter, and Coleman also stated, that he was only representing his own views and the views of CaliforniaCityFinance.com, not the League's) and Jon Coupal of The Howard Jarvis Tax Payers Association.

In response to Michael Coleman's written testimony that special district property taxes should be returned to cities and/or counties Packham noted:

- Past experience notes that there were problems the last time when special district funds were transferred to counties.
- The irony of cities and counties taking special district funds when they get outraged when the state takes their funds.
- That special district boundaries often cross political borders, potentially resulting in different levels of funding for critical areas.
- Local voters approved the tax for specific functions of a local agency, not to a city or county for other purposes.

In response to Howard Jarvis Taxpayers Association's, written testimony highlighting districts that have significant reserves Packham noted:

- The calculations are fundamentally flawed. Funds were lumped many different categories and does not necessarily mean unallocated cash in the bank.
- 76% of the reserves Howard Jarvis says are "hoarded" are not cash reserves, but are funds in reserve for pending infrastructure upgrades.
- The Little Hoover Commission should be focusing on why special districts are able to manage property taxes and reserves so prudently.

After public testimony, the time for reactions from the Commissioners came and went without any indication about the direction the Commission might take in the future regarding special districts. Both ACWA and CSDA are convening workgroups to debrief the hearing and discuss next steps. Conversations with LHC staff seem necessary to determine what direction the Commission is pushing for the report to follow. Once the focus is known, a more specific strategy can be formed. It is still unclear what the focus of the LHC recommendations are. The next LHC meeting is Oct. 27.

Joint Legislative Audit Committee Approves Request to Audit WaterFix

The Joint Legislative Audit committee voted earlier in August to approve Senator Lois Wolk's (D-Davis) and Assemblywoman Susan Talamantes Eggman's (D-Stockton) request to audit the California WaterFix project. The two anti-WaterFix members argued that there is no oversight over how state agencies have spent \$248 million in taxpayer's money during design and planning.

Members of the committee expressed concern that this audit request was just an attempt to derail the project. Wolk and Eggman assured that it was merely in the interest of public transparency and the Howard Jarvis Taxpayers' Association testified in support of that goal. Several Southern California members questioned if the audit was a ploy to discredit the WaterFix. Wolk and Eggman, both staunch opponents of conveyance, assured them it was not. After the Department of Water Resources testified that the audit would not hold up the development and review of the project and did not raise any objections to complying with the effort, the committee approved the audit request.

Delta Predation Petition

A broad statewide group of supporters recently submitted a petition to the California Fish and Game Commission. The petitioners include Metropolitan Water District of Southern California, San Luis Delta Mendota Water Authority, San Joaquin Tributaries Authority, California Chamber of Commerce, State Water Contractors, Southern California Water Committee, Western Growers Association, Northern California Water Association, California Farm Bureau Federation, and Kern County Water Agency.

The petition sought to increase the bag limits and decrease the size limits for black bass and striped bass in the Sacramento-San Joaquin Delta and rivers tributary to the Delta. Specifically, the petition called for decreased size limit for black bass from 12 inches to 8 inches and increased daily bag limit from 5 fish to 10 fish; and increased bag limit for striped bass from 2 fish to 6 fish and decreased size limit from 18 inches to 12 inches.

Unfortunately, days before the petition was scheduled to be heard before the Commission, staff released a recommendation to the Commissioners to deny the petition. In addition, staff had only allocated the petitioners 10 minutes to present the petition and address the overwhelming amount of misleading public comment that was submitted before the hearing. Despite the petitioners' best efforts to have a fair and thoughtful discussion with Commission staff prior to the hearing, staff was not as open minded as the petitioners had hoped. As a result, the petitioners felt it best to withdraw the petition with the Commission.

In addition to delivering a letter from more than 20 legislators expressing their concern with the issue and their interest in finding a solution as soon as possible, supporters of the petition still attended the hearing to explain the petitioners' frustration with the Commission's process and procedures along with a firm commitment to continue to address the issue of predation. The Commissioners were receptive and committed to scheduling an in-depth informational workshop for interested parties to present their points of view in an attempt to robust discussion about how best to address the issue. A hearing before the Commission's Wildlife Resources Committee is expected in the coming months.

Climate Change Legislation

SB 32 (Pavley): SB 32 (Pavley) is sitting on the Governor's desk awaiting signature. The measure establishes the goal of reducing greenhouse gasses (GHGs) at least 40 percent below 1990 levels by 2030. The bill, along with its companion measure, AB 197 (E. Garcia) passed each legislative house with relative ease. SB 32 was diluted from its original version, to only include the 2030 goal with no mention of the cap and trade program.

AB 197 adds a number of transparency and accountability measures to provide greater scrutiny and oversight of California Air Resources Board (CARB) including adding two non-voting legislative members to the board, and creating a Joint Legislative Oversight Committee.

Passage of SB 32 is certainly an important step in advancing California's climate change goals, there is still significant uncertainty in the market mechanism CARB is using to achieve GHG reductions. The legality of the cap-and-trade program is still under review by the state appellate court. If the state loses the case, a two-thirds vote of the legislature would be needed to re-authorize the program as a tax, or the state would need to find other ways to reduce GHGs.

The last two auctions of GHG allowances have been dismal, only selling a fraction of the allowances expected and raising a total of just over \$19 million of the \$1.2 billion expected. It is very clear that those needing allowances and carbon marketers are only purchasing what they need for the current compliance period, not buying future allowances, amidst speculation that the program could be invalidated.

This is a major blow to the Greenhouse Gas Reduction Fund (GGRF). Allowance sales were predicted to add several billion dollars annually to the GGRF for the Governor and the Legislature to expend on projects that would help reduce GHGs. The GGRF currently has \$1.4 billion dollars available that was not appropriated with the 2015-16 budget and was not appropriated when the 2016-17 budget passed in June. At the end of session the Legislature appropriated about \$900 million, leaving \$462 million in the fund. Specifically, CalRecycle received \$40 million for organic diversion.

SB 1383 (Lara) regarding short-lived climate pollutants (SLCPs) is another significant component of the state's climate change agenda. The bill would authorize CARB to implement their SLCP strategy to reduce methane and hydrofluorocarbon by 40 percent and anthropogenic black carbon by 50 percent below 2013 levels by 2030.

SB 1383 turned out to be one of the most contentious bills at the end of session. Senator Lara came to an agreement with both the solid waste and dairy industries, and both groups of stakeholders removed their opposition. For the solid waste sector, the final bill:

- Establishes a target of 50 percent reduction in the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction goal by 2025 and requires CalRecycle and CARB to adopt regulations to achieve the organic waste reduction targets.
- The bill prohibits CalRecycle and CARB from establishing numeric organic waste disposal limits for individual landfills.
- Authorizes CalRecycle and CARB to:
 - Require local jurisdictions to impose requirements on generators, and penalties for noncompliance.
 - Include different levels of requirements for local jurisdictions and phased timelines for meeting 2020 and 2050 goals.

Legislative Update

The legislature officially gaveled closed on August 31. Below is the recap of results after the final frenzy.

SB 1298 (Hertzberg): The California Water Foundation has been working with Senator Hertzberg on a Proposition 218 fix to allow water agencies to adopt lifeline rates and adopt conservation-based rates without amending the California Constitution. The author took amendments that removed all the lifeline and conservation based rates provisions from the bill, so the bill only addresses stormwater.

Most of the opposition ultimately dropped off, but many remain concerned that the bill is unconstitutional. Concern also is aimed at the term “indispensable” water use, which the measure utilizes to try to work around the Constitutional issues.

The bill was not taken up on the Assembly Floor and is dead for the year.

AB 2909 (Levine): Assemblyman Marc Levine recently gutted a bill in the Senate and inserted language similar to his AB 2304, which did not make it out of Assembly appropriations committee earlier this year. His new bill was a paired down version of AB 2304 and only addresses reoccurring transfers and transfers that are environmentally beneficial. The bill requires the Department of Water Resources (DWR) to develop a 30-day review process for reoccurring transfers, exchange of water rights, point of diversion changes, and place of use changes if the transfer is reoccurring or for an environmentally beneficially use. Additionally, the bill would require DWR to set up a 30-day review process for reoccurring water transfers between contractors for State Water Project water and for reoccurring transfers that utilize the State Water Project facilities.

The bill did not pass out of the Senate Appropriations Committee.

SB 552 (Wolk): Would authorize the State Water Resources Control Board to order consolidation where a public water system or a state small water system is serving, rather than within, a disadvantaged community, and would limit the authority of the state board to order consolidation or extension of service to provide that authority only with regard to a disadvantaged community. This bill would define disadvantaged community for these purposes, to mean if the community is in a mobile home park even if it is not in an unincorporated area or served by a mutual water company. This bill contains other related provisions and other existing laws.

The bill was passed and is awaiting signature by the Governor.

SB 554 (Wolk): The measure extends a delta levee maintenance program which allows a local agency to request reimbursement for costs incurred in connection with the maintenance or improvement of project or nonproject levees in the Sacramento-San Joaquin Delta.

There is still opposition to the bill. MWD has asked the author to request an audit of the program, for the sake of transparency. The author has refused to do so.

The bill was passed and is awaiting signature by the Governor. The Governor has until September 30th to act.

Below are bills IEUA is tracking.

**INFORMATION
ITEM**

3K

Agricultural Resources

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

August 31, 2016

Legislative Report

TO: Joe Grindstaff
General Manager, Inland Empire Utility Agency

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

SU: Legislative Report, August 2016

Congress was out of session all of August. The House and Senate return to Washington on September 6 – and resume work with 24 calendar days remaining in the fiscal year, none of the annual funding bills enacted and, as Washington is accustomed to expect, renewed threats of a government shut down.

No legislative business was conducted by the House or Senate during August.

And overwhelming everything, the pending national election.

According to media accounts, new polls published almost daily and endless pundit speculation, not only is the presidency at stake, but control of the Senate and House are both “in play” as are several Governorships.

And, without a doubt, this is an election cycle that defies prediction, traditional political logic or insider’s knowledge. Outcomes are unknown.

This election cycle brings something new: threat of e-interference (hacking) by Russians, Chinese, Iranian or others. That, combined with open discussion of an October surprise (of unknown elements) make this one of the least certain and most volatile elections in decades.

WaterSense Authorization – Water Softener Language. During August, a ever-enlarging group of local and national water agencies held a series of conference call meetings to (a) establish a legislative strategy to deal with the pending authorization of EPA’s WaterSense program in two different bills (WRDA and the Energy Bill); (b) modify objectives (request statutory language, not just report language); and (c) work with conferees on a bi-partisan basis to secure inclusion of statutory language in both/either bill.

IEUA is working with CASA, LA Sanitation, ACWA, NACWA and WateReuse.

As previously reported, this authorization was not the subject of hearings, or any kind of public review by the Senate before general language authorizing the EPA’s WaterSense program was included in the Senate version of WRDA. When these groups learned of it, they collectively went to Senator Boxer and sought statutory language clarifying WaterSense priorities.

Given IEUA, LA Sanitation and ACWA’s experience with WaterSense in 2011 (IEUA played a lead role blocking the WaterSense effort to review water softeners without regard to salt sensitive regions) . At the time, and given the rush to finalize the WRDA bill, Boxer and her staff recommended report language, not statutory or bill language. Collectively, the groups involved drafted, recommended “report” language which was accepted on a bi-partisan basis and included in the Senate version of the bill (no companion language in the House version of the WRDA bill..

The Report language is strong and clear, but statutory language, if included, would provide greater clarity and more certainty. So, these same groups decided to ask conferees to include “statutory” language. Language was prepared, approved by each of the groups referenced above, and during August was circulated to the House-Senate conferees. When the House and Senate reconvene, IEUA will participate in outreach of those members.

Rep. Latta (R-OH) and Rep. Jerry McNerney (R-CA) are leading a bi-partisan effort to secure statutory language. Latta is a conferee, but McNerney is not. McNerney, however, has offered to communicate his concerns to the House Democratic conferees, including Rep. Lois Capps, a California House Conferee from Southern California (Santa Barbara).

A larger question looms: will the House and Senate be able to conclude work on either WRDA or the Energy bill. As the recess ends and the Congress is about to reconvene, nothing is certain (more on this below). Drew Tatum, Martha Davis and I have been directly involved with all of these developments.

Drought Bills. Throughout August, periodic reports surfaced indicating that House Majority Leader, Rep. Kevin McCarthy (R-Bakersfield) was “in talks” with Senator Dianne Feinstein over the highly controversial drought (Valadao) bill. But, if there was progress, nothing was publicly acknowledged or reported.

Conclusion of the Fiscal Year, Pending New Fiscal Year – and Funding (Annual Appropriations). Much is known and little is certain. None of the twelve annual funding (appropriations) bills have been enacted. When Congress returns on the 6th, they will have 24 calendar days to complete action on “something.” Typically, in such situations, Congress passes a short-term funding bill – or – a CR (Continuing Resolution) for anywhere from a few days to a few weeks. Other options are to enact individual spending bills or enact some kind of Omnibus spending bill, frequently pre-agreed to with the Administration.

What will occur – and how it will happen – is not known at this time. Why? Speaker Ryan has a deeply divided House R Caucus. His ability to lead is severely limited by divisions within his own ranks.

Shortly before the recess began, back in July, the Freedom Caucus began circulating the idea that a CR should be advanced that will extend past the first of the year and into the new Congress (180 days). House R Appropriators do not agree, but the Freedom Caucus has “signaled” that they will not vote to support any other option. Their motivation is political. They want to remove President Obama from further involvement in funding or policy issues. That leaves Speaker Ryan potentially paralyzed OR asking Minority Leader Pelosi to round up sufficient votes to pass a short-term CR. If Ryan forms an alliance with Pelosi (which is what Boehner did on a number of critical bills), the political consequences are potentially severe. What can – or will – pass the House, is just not known.

Senate Minority Leader, Sen. Harry Reid (D-NV) has publicly stated that the 180-day CR is a non-starter and the Administration has said the same.

As Congress sets to return, no one is blinking – and that has given rise to speculation that this could cause or lead to another government shut-down. Media speculation is already underway even though few believe it will actually occur, the possibility remains.

Underlying everything – election issues: whether or not the House will remain in R control or will shift to D control, and if Rs retain control, whether or not Ryan will be reelected by his Caucus to serve as Speaker in the next Congress. Another scenario – Ryan will NOT want to serve as Speaker if Trump loses and Ryan decides to run for President in 2020. And still another factor – if the House Rs lose seats, but retain control of the House, the Freedom Caucus will likely become disproportionately more powerful and actually gain influence in the new Congress inside the House R Caucus. If the House Rs lose 30 seats (unlikely but still subject to daily speculation), then the Ds would control the House and Minority Leader Pelosi would almost assuredly be elected Speaker. New scenarios emerge almost on a daily basis.

Appropriations, Lame Duck, and Pending Legislation. In addition to the stand-off on annual funding bills, some of the Freedom Caucus members have publicly stated that there should be NO Lame Duck (post-election) session.

As noted, after Congress reconvenes, there will be 24 calendar days – and approximately 14-16

legislative days to sort out all of the above. It is widely assumed that many of the major bills – Energy, WRDA, individual appropriations, emergency Zika funding, drought, cyber-security and others – may not be finalized until the *Lame Duck*.

If there's no *Lame Duck*, then the session will end "sine die" (final adjournment) and all of these bills would die as well. In the next Congress, they would have to be reintroduced and considered, even if fast-tracked.

As you might imagine, the leadership, authorizers and appropriators have every interest to complete action on their bills – and a very real legislative/political confrontation will be unfolding beginning the moment Congress returns.

In effect, there are three separate, and distinctly different, legislative battles underway – each at the same time. First, House Rs are fighting between and among themselves over priorities, programs, policy and politics. Second, Republicans and Democrats will be fighting over the same issues, but with an emphasis on different funding and policy priorities. Third, institutionally, the House and Senate will be engaged in their own tug-of-war. Once all that's sorted out, then the President and his Administration get to weigh in. Vetos have already been threatened.

If the Freedom Caucus ties Speaker Ryan's hands (as they did to Speaker Boehner) – that stand-off (at the extreme) could result in a government shut-down. Again, open speculation is already underway.

A *Lame Duck* session – like everything else – unclear and unknown at this time.

Almost everyone here in Washington anticipates that little will be decided before the last week of the month if not the night of September 30th.

Fate of other major bills (cited above). Also unclear and unknown.

In my July report, I stated that "*Congress became more and more mired in internal caucus conflicts.*" It remains an accurate assessment.

**INFORMATION
ITEM**

3L



CALIFORNIA STRATEGIES, LLC

Date: August 31, 2016
To: Inland Empire Utilities Agency
From: John Withers, Jim Brulte
Re: August 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 August that Executive Staff wanted accomplished
- Discussed Ontario Plume/Title XVI Funding
- Reviewed Chino Basin Water Bank project concept
- Support and advise 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 agreement
- Respond to requests for information from IEUA Directors.

**INFORMATION
ITEM**

3M

State Legislation Matrix

Bill Number	Sponsor	Title and/or Summary	Summary/Status	IEUA Position
AB 1704	Dodd	Water Rights	The Water Rights Permitting Reform Act of 1988 provides that the State Water Resources Control Board is not required to adopt general conditions for small irrigation use until the board determines that funds are available for that purpose and that a registration for small irrigation use pursuant to the act is not authorized until the board establishes general conditions for small irrigation use to protect instream beneficial uses, as specified. This bill would require the board, on or before January 1, 2018, to adopt general conditions that would permit a registrant to construct a facility that would store water for small irrigation use during times of high streamflow in exchange for the registrant reducing diversions during periods of low streamflow, as specified.	6/20 Gut and Amend Failed Assembly Appropriations Committee
AB 1713	Eggman	Sacramento-San Joaquin Delta: peripheral canal	Current law requires various state agencies to administer programs relating to water supply, water quality, and flood management in the Sacramento-San Joaquin Delta. The bill would prohibit the construction of a peripheral canal, as defined, unless expressly authorized by an initiative voted on by the voters of California on or after January 1, 2017, and would require the Legislative Analyst's Office to complete a prescribed economic feasibility analysis prior to a vote authorizing the construction of a peripheral canal.	OPPOSE DEAD Failed Assembly Appropriations Committee
AB 1738	McCarty	Building Standards: Dark Graywater	Would define "dark graywater" as a specified wastewater that comes from kitchen sinks and dishwashers. This bill would require the Department of Housing and Community Development, at the next triennial building standards rulemaking cycle, to adopt and submit for approval building standards for the construction, installation, and alteration of dark graywater systems for indoor and outdoor uses. This bill contains other existing laws.	DEAD Senate Environmental Quality Committee
AB 1749	Mathis	California Environmental Quality Act: exemption: City of Porterville	Would, until January 1, 2021, exempt from the California Environmental Quality Act's requirements a water treatment project determined by the City of Porterville as the best option based on a certain feasibility study, as provided. This bill contains other related provisions.	6/15 Gut and Amend DEAD Senate Environmental Quality Committee

AB 1755	Dodd	The Open and Transparent Water Data Act	Would enact the Open and Transparent Water Data Act. The act would require the Department of Water Resources to establish a public benefit corporation that would create and manage (1) a statewide water information system to improve the ability of the state to meet the growing demand for water supply reliability and healthy ecosystems, that, among things, would integrate existing water data information from multiple databases and (2) an online water transfer information clearinghouse for water transfer information that would include a database of historic water transfers and transfers pending responsible agency approval and a public forum to exchange information on water market issues.	SUPPORT Governor's Desk
AB 1842	Levine	Water Pollution: Fines	Current law imposes a maximum civil penalty of \$25,000 on a person who discharges various pollutants or other designated materials into the waters of the state. This bill would impose an additional civil penalty of not more than \$10 for each gallon or pound of polluting material discharged. The bill would require that the civil penalty be reduced for every gallon or pound of the illegally discharged material that is recovered and properly disposed of by the responsible party.	Governor's Desk
AB 1925	Chang	Desalination: Statewide Goal	The Cobey-Porter Saline Water Conversion Law, states the policy of this state that desalination projects developed by or for public water entities be given the same opportunities for state assistance and funding as other water supply and reliability projects, and that desalination be consistent with all applicable environmental protection policies in the state. This bill would establish a goal to desalinate 300,000 acre-feet of drinking water per year by the year 2025 and 500,000 acre-feet of drinking water per year by the year 2030.	DEAD
AB 2206	Williams	Renewable Gas	Would require the State Air Resources Board , in coordination with the Public Utilities Commission and State Energy Resources and Conservation Development Commission, to consider and, as appropriate, adopt a policy or programs to increase the production and use of renewable gas, as specified, generated by either an eligible renewable energy resource that meets the requirements of the California Renewables Portfolio Standard Program or direct solar energy, as specified.	6/25 Gut and Amend DEAD Senate Environmental Quality Committee

AB 2304	Levine	California Market Water Exchange	Would establish the California Water Market Exchange, governed by a 5-member board, in the Natural Resources Agency. This bill would require the market exchange, on or before December 31, 2017, to create a centralized water market platform on its Internet Web site that provides ready access to information about water available for transfer or exchange.	DEAD Failed Passage Assembly Appropriations Committee
AB 2313	Williams	Renewable Natural Gas	The California Global Warming Solutions Act of 2006 establishes the State Air Resources Board as the state agency responsible for monitoring and regulating sources emitting greenhouse gases. This bill would require the state board to study and evaluate a strategy or strategies to increase the instate production and use of renewable natural gas, as defined, to further specified goals.	Governor's Desk
AB 2488	Dababneh	Protected species: unarmored threespine stickleback: taking or possession.	Would permit the Department of Fish and Wildlife to authorize, under the California Endangered Species Act, the take of the unarmored threespine stickleback (<i>Gasterosteus aculeatus williamsoni</i>) attributable to the periodic dewatering, inspection, maintenance, or repair of the Metropolitan Water District of Southern California's Foothill Feeder water supply facility from Castaic Dam to the Joseph Jensen Treatment Plant in the County of Los Angeles, as specified, if certain conditions are satisfied.	SUPPORT Governor's Desk
AB 2583	Frazier	Sacramento-San Joaquin Delta Reform Act of 2009	Would add a definition of the California Water Fix to the Sacramento-San Joaquin Delta Reform Act of 2009. This bill would eliminate certain provisions applicable to the BDCP and would revise other provisions to instead refer to a new Delta water conveyance project for the purpose of exporting water. This bill would require new Delta water conveyance infrastructure to be considered as interdependent parts of a system and to be operated in a way that maximizes benefits for each of the coequal goals. This bill contains other related provisions and other existing laws.	OPPOSE DEAD- Did not pass Water, Parks and Wildlife Committee
AB 2702	Atkins	Climate Change	Would state the intent of the Legislature to enact legislation that would continue the work with local governments, state agencies, and others to meet the goals set forth in Governor Brown's Under 2 MOU, which brings together subnational governments willing to commit to either reducing the emissions of greenhouse gases 80% to 95% below 1990 levels by 2050 or achieving a per capita annual emissions target of less than 2 metric tons of carbon dioxide equivalent by 2050.	DEAD Failed Assembly Appropriations Suspense

ACA-8	Bloom	Local government financing: water facilities and infrastructure: voter approval	Would create an additional exception to the 1% limit for a rate imposed by a city, county, city and county, or special district to service bonded indebtedness incurred to fund the construction, reconstruction, rehabilitation, or replacement of wastewater treatment facilities and related infrastructure, potable water producing facilities and related infrastructure, nonpotable water producing facilities and related infrastructure, and stormwater treatment facilities and related infrastructure, that is approved by 55% of the voters of the city, county, city and county, or special district, as applicable, if the proposition meets specified requirements, and would authorize a city, county, city and county, or special district to levy a 55% vote ad valorem tax. This bill contains other related provisions and other existing laws.	Assembly Rules Committee
SB 163	Hertzberg	Wastewater treatment: recycled water	Would declare that the discharge of treated wastewater from ocean outfalls, except in compliance with the bill's provisions, is a waste and unreasonable use of water in light of the cost-effective opportunities to recycle this water for further beneficial use. This bill, on or before January 1, 2026, would require a wastewater treatment facility discharging through an ocean outfall to achieve at least 50% reuse of the facility's actual annual flow, as defined, for beneficial purposes.	Oppose Unless Amended DEAD Withdrawn from committee
SB 885	Wolk	Construction Contracts: Indemnity	Would specify, with certain exceptions, for construction contracts entered into on or after January 1, 2017, that a design professional, as defined, only has the duty to defend himself or herself from claims or lawsuits that arise out of, or pertain or relate to, negligence, recklessness, or willful misconduct of the design professional. Under the bill, a design professional would not have a duty to defend claims or lawsuits against any other person or entity arising from a construction project, except that person's or entity's reasonable defense costs arising out of the design professional's degree of fault, as specified.	OPPOSE DEAD Withdrawn from committee
SB 1043	Allen	Renewable gas: biogas and biomethane	Would require the State Air Resources Board to consider and adopt policies to significantly increase the sustainable production and use of renewable gas, as defined, and, in so doing, would require the state board, among other things, to ensure the production and use of renewable gas provides direct environmental benefits and identify barriers to the	DEAD Failed Senate Appropriations Suspende

			rapid development and use of renewable gas and potential sources of funding.	
SB 1318	Wolk	Local government: drinking water infrastructure or services: wastewater infrastructure or services	Would prohibit a local agency formation commission from authorizing a city or a district to extend drinking water infrastructure or services or wastewater infrastructure or services until it has extended those services to all disadvantaged communities within or adjacent to its sphere of influence, as specified, or has entered into an agreement to extend those services to those disadvantaged communities, unless specified conditions are met. This bill contains other related provisions and other existing laws.	DEAD Dropped by author

**AGENCY
REPRESENTATIVES'
REPORTS**

4A



S A W P A

SANTA ANA WATERSHED PROJECT AUTHORITY

11615 Sterling Avenue, Riverside, California 92503 • (951) 354-4220

REGULAR COMMISSION MEETING TUESDAY, SEPTEMBER 20, 2016 – 9:30 A.M.

AGENDA

1. CALL TO ORDER/PLEDGE OF ALLEGIANCE (Ed Killgore, Vice Chair)

2. ROLL CALL

3. PUBLIC COMMENTS

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

4. CONSENT CALENDAR

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

A. APPROVAL OF MEETING MINUTES: SEPTEMBER 6, 2016

Recommendation: Approve as posted.

B. TREASURER'S REPORT – AUGUST 2016

Recommendation: Approve as posted.

C. REACH V REHABILITATION AND IMPROVEMENT PROJECT – PHASE I
(CM#2016.83)

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.

5. NEW BUSINESS

A. AUTHORIZATION TO SUBMIT PROPOSITION 1 IRWM GRANTS (PLANNING GRANT)
(CM#2016.78)

Presenter: Mike Antos

Recommendation: Authorize submission of an IRWM Planning Grant Proposal on September 23, 2016; and, adopt Resolution No. 2016-4 approving submission of the Planning Grant application and authorizing the General Manager to execute the grant agreement with the State of California, Department of Water Resources.

B. MIDDLE SANTA ANA RIVER PATHOGEN TMDL – 2016 TRIENNIAL REPORT (CDM SMITH) (CM#2016.79)

Presenters: Rick Whetsel

Recommendation: The Middle Santa Ana River TMDL Task Force recommends that the SAWPA Commission authorize a change order to Task Order No. CDM384-14 with CDM Smith for an amount not-to-exceed \$9,870 to revise the 2016 Triennial Report for the Middle Santa Ana River (MSAR) Bacterial Indicator Total Maximum Daily Load (TMDL).

C. INLAND EMPIRE BRINE LINE REACH V REHABILITATION AND IMPROVEMENT PROJECT – PHASE 2 (NICHOLS ROAD, CITY OF LAKE ELSINORE) – NOTICE OF COMPLETION (CM#2016.80)

Presenters: David Ruhl

Recommendation: Authorize the General Manager to accept the Weka Inc., work as complete and direct staff to file a Notice of Completion with the Riverside County Clerk upon the following: (a) Contractor has delivered all documents required by the Contract Documents; (b) Notice from Engineer accepting the work; (c) Receipt of Final Application for Payment from the Contractor; and (d) Notice from Construction Manager recommending final payment.

D. LAKE ELSINORE AND SAN JACINTO WATERSHEDS AUTHORITY (LESJWA) – CANYON LAKE ALUM APPLICATION AND ALGAE TOXINS (CM#2016.81)

Presenters: Mark Norton

Recommendation: Receive and file.

E. DROUGHT RELATED COMPLIANCE STUDY – SO CAL SALINITY COALITION AND BASIN MONITORING PROGRAM TASK FORCE (CM#2016.82)

Presenters: Mark R. Norton

Recommendation: Receive and file.

6. INFORMATIONAL REPORTS

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

A. CASH TRANSACTIONS REPORT – JULY 2016

Presenter: Karen Williams

B. INTER-FUND BORROWING – JULY 2016 (CM#2016.75)

Presenter: Karen Williams

C. PERFORMANCE INDICATORS/FINANCIAL REPORTING – JULY 2016 (CM#2016.76)

Presenter: Karen Williams

D. FOURTH QUARTER FYE 2016 EXPENSE REPORTS

- Staff
 - General Manager
- Presenter:** Karen Williams

E. FINANCIAL REPORT FOR THE FOURTH QUARTER ENDING JUNE 30, 2016

- Inland Empire Brine Line (IEBL)
- SAWPA

Presenter: Karen Williams

**F. BUDGET VS. ACTUAL VARIANCE REPORT – FYE 2016 FOURTH QUARTER –
JUNE 30, 2016 (CM#2016.77)**

Presenter: Karen Williams

G. GENERAL MANAGER'S REPORT

H. STATE LEGISLATIVE REPORT

Presenter: Celeste Cantú

I. CHAIR'S COMMENTS/REPORT

J. COMMISSIONERS' COMMENTS

K. COMMISSIONERS' REQUEST FOR FUTURE AGENDA ITEMS

7. 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)

8. 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. 48-hour notification prior to the meeting will enable staff to make reasonable arrangements to ensure accessibility for this meeting. Requests should specify the nature of the disability and the type of accommodation requested.

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

Declaration of Posting

I, Kelly Berry, Clerk of the Board of the Santa Ana Watershed Project Authority declare that on Wednesday, September 14, 2016, a copy of this agenda has been uploaded to the SAWPA website at 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.)

January 1/5/16 Commission Workshop 1/19/16 Regular Commission Meeting	February 2/2/16 Commission Workshop–OCSD Facilities Tour 2/16/16 Regular Commission Meeting
March 3/1/16 Commission Workshop 3/15/16 Regular Commission Meeting	April 4/5/16 Commission Workshop 4/19/16 Regular Commission Meeting 4/28/16 Special Commission Workshop [10:00 a.m.]
May 5/3/16 Commission Workshop [cancelled] 5/3 – 5/6/16 ACWA Spring Conference, Monterey 5/10/16 Special Commission Workshop [9:00 a.m.] 5/17/16 Regular Commission Meeting	June 6/7/16 Commission Workshop 6/21/16 Regular Commission Meeting
July 7/5/16 Commission Workshop 7/19/16 Regular Commission Meeting	August 8/2/16 Commission Workshop 8/16/16 Regular Commission Meeting
September 9/6/16 Commission Workshop 9/20/16 Regular Commission Meeting	October 10/4/16 Commission Workshop 10/18/16 Regular Commission Meeting
November 11/1/16 Commission Workshop 11/29 – 12/2/16 ACWA Fall Conference, Anaheim 11/15/16 Regular Commission Meeting	December 12/6/16 Commission Workshop 12/20/16 Regular Commission Meeting

**AGENCY
REPRESENTATIVES'
REPORTS**

4B



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

MWD MEETING AGENDA

Board Meeting - Revised Agenda Meeting with Board of Directors

September 13, 2016

12:00 p.m. -- Board Room

MWD Headquarters Building

700 N. Alameda Street

Los Angeles, CA 90012

1. Call to Order

(a) Invocation: Jeannette Correa, Administrative Analyst, Business Technology Group

(b) Pledge of Allegiance: Director Michael Hogan

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 August 16, 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 August

C. Induction of new Director Gloria Cordero, from City of Long Beach

(a) Receive credentials

(b) Report on credentials by General Counsel

(c) File credentials

(d) Administer Oath of Office

(e) File Oath

D. Approve 30-day leave of absence for Director Russell Lefevre, commencing September 23, 2016

E. Approve committee assignments

F. Chairman's Monthly Activity Report

6. DEPARTMENT HEADS' REPORTS

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

6A Report

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

6B Report

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

6C Report

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

6D Report

7. CONSENT CALENDAR ITEMS — ACTION

- 7-1 Adopt CEQA determination and appropriate \$550,000; and authorize design of electrical upgrades to 14 structures within the Orange County operating region (Approp. 15480). (E&O)

7-1 Board Letter and Attachments

7-1 Presentation

- 7-2 Adopt CEQA determination and appropriate \$290,000; and authorize design of lining repairs for yard piping at the Hiram W. Wadsworth Pumping Plant (Approp. 15480). (E&O)

7-2 Board Letter and Attachments

7-2 Presentation

(END OF CONSENT CALENDAR)

8. OTHER BOARD ITEMS — ACTION

- 8-1 Adopt CEQA determination and resolution authorizing the reimbursement from bond proceeds of capital expenditures for the purchase of the Delta Islands and acquisition costs and costs of issuance of debt. (F&I)

8-1 Board Letter and Attachment

8-1 Presentation

- 8-2 Adopt CEQA determination and appropriate \$2.43 million; award \$1,171,293 contract to Compro Companies, Inc. for cathodic protection of the Allen-McColloch Pipeline; and authorize design of cathodic protection for the Orange County Feeder (Approp. 15441). (E&O)

8-2 Board Letter and Attachments

8-2 Presentation

- 8-3 Adopt CEQA determination and Policy Principle on Watershed Management. (C&L) (WITHDRAWN)

- 8-4 Adopt CEQA determination and authorize renewal of leases for HayDay Farms and River Valley Ranches. (RP&AM) [Conference with real property negotiators; agency negotiators: Lilly Shraibati and Tim Blair; negotiating party: HayDay Farms, Inc., for the real property identified as Imperial County Assessor's Parcel Nos. 006-020-048, -049, 006-210-008, -009, -021, -026, 006-220-012, -013, -018, -019, -020, -021, -022, and -027, and Riverside County Assessor's Parcel Nos. 878-081-001, -002, -004, -005, -006, -012, 878-082-001, -007, 878-111-016, -017, 878-112-010, -014, -015, 878-120-013, -015, 878-130-010, -011, 878-161-014, -015, 878-162-002, -003, 878-191-004, 878-192-001, -002, 878-193-004, -007, -011, -013, -014, 878-201-001, 878-220-005, -014, -015, 878-230-001, -006, -007, -008, -009, 878-240-021, 879-210-026, 879-240-007, -029, -032, -033, 879-261-004, 879-262-005, -011, and -014; and River Valley Ranches, for the real property identified as Imperial County Assessor's Parcel Nos. 006-090-008, -009, -010, -011, -012, -013, -029, 006-120-089, 006-150-065, 006-220-015, and -016; under negotiation: price and terms of payment; to be heard in closed session pursuant to Gov. Code Section 54956.8]

9. BOARD INFORMATION ITEMS

None

10. FUTURE AGENDA ITEMS

11. ADJOURNMENT

REVISED: Date of Notice: September 6, 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**

4C



Regional Sewerage Program Policy Committee Meeting

AGENDA

Thursday, September 1, 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 Update*)**
- 2. Action Item**
 - A. Approval of the June 2, 2016 Meeting Minutes**
 - B. Construction Contract Award for RP-1 Mixed Liquor Return Pumps and Aeration Basin Panel Repairs**
- 3. Informational Items**
 - A. Regional Contract (*Oral Update*)**
 - B. Salinity Update**
- 4. Receive and File**
 - A. Building Activity Update**
 - B. Recycled Water Distribution – Operations Summary**
 - C. Semi-Annual Recycled Water Update**
- 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 – October 6, 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, August 29, 2016.



Laura Mantilla

**AGENCY
REPRESENTATIVES'
REPORTS**

4D

**CHINO BASIN WATERMASTER
WATERMASTER BOARD MEETING**

11:00 a.m. – August 25, 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 July 28, 2016

B. FINANCIAL REPORTS

1. Cash Disbursements for the month of June 2016
2. Watermaster VISA Check Detail for the month of June 2016
3. Combining Schedule for the Period July 1, 2015 through June 30, 2016
4. Treasurer's Report of Financial Affairs for the Period June 1, 2016 through June 30, 2016
5. Budget vs. Actual Report for the Period July 1, 2015 through June 30, 2016

C. GENERAL MANAGER CONTRACT AMENDMENT

Approve the Amendment #2 as written, authorize the Board Chair to execute on behalf of the Board, and approve the Pay Schedule effective July 1, 2016 as attached.

D. OBMP SEMI-ANNUAL STATUS REPORTS 2014-2 AND 2015-1

Adopt the Semi-Annual OBMP Status Reports 2014-2 and 2015-1, along with filing a copy with the Court, subject to any necessary non-substantive changes.

E. WATER TRANSACTIONS

1. Notice of Sale or Transfer - The purchase of 725,000 acre-feet of water from West End Consolidated Water Company by the City of Upland. This purchase is made from West End Consolidated Water Company's Excess Carryover Account, effective for the Fiscal Year 2015-2016. The City of Upland is utilizing this transaction to produce its West End Consolidated Water Company shares. Date of application: June 6, 2016.
2. Notice of Sale or Transfer - The purchase of 67,941 acre-feet of water from West End Consolidated Water Company by Golden State Water Company. This purchase is made from West End Consolidated Water Company's Excess Carryover Account, effective for the Fiscal Year 2015-2016. Golden State Water Company is utilizing this transaction to produce its West End Consolidated Water Company shares. Date of application: June 6, 2016.
3. Notice of Sale or Transfer - The purchase of 6,500 acre-feet of water from The Nicholson Trust by Fontana Water Company. This purchase is made from The Nicholson Trust's Annual Production Right (Appropriative Pool) or Operating Safe Yield (Non-Agricultural Pool), effective for the Fiscal Year 2015-2016. Date of application: June 10, 2016.

II. BUSINESS ITEMS**A. BUDGET TRANSFER FORM T-16-06-01**

Approve Budget Transfer Form T-16-06-01 for FY 2015/16 as presented.

B. PRADO BASIN HABITAT SUSTAINABILITY PROGRAM COST-SHARING AGREEMENT AMENDMENT

Approve the amendment to the Prado Basin Habitat Sustainability Program cost-sharing agreement with IEUA, subject to any necessary non-substantive changes, and authorize the General Manager to execute the amendment on behalf of Watermaster.

C. ADAPTIVE MANAGEMENT PLAN FOR THE PRADO BASIN HABITAT SUSTAINABILITY PROGRAM

Adopt the Adaptive Management Plan for the Prado Basin Habitat Sustainability Program, subject to any necessary non-substantive changes and direct staff to bring annual reports and future recommendations to the Pool and Advisory Committees in draft form before they are finalized.

III. REPORTS/UPDATES**A. LEGAL COUNSEL REPORT**

1. Alvarez CalPERS Appeal

B. ENGINEER REPORT

1. Model Update and Required Demonstrations
2. RMPU Projects Support
3. Compliance with SB 88
4. Watermaster 38th Annual Report

C. CFO REPORT

1. Desalter Replenishment Obligation Update

D. GM REPORT

1. Supplemental Water Recharge Procedure
2. Replenishment Water Order With IEUA
3. Water Activity Reports
4. Water Quality Sampling
5. September 13, 2016 CBWM Committees and Board Roles and Responsibilities Workshop
6. Other

IV. INFORMATION

1. Cash Disbursements for July 2016

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.

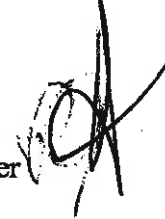
VIII. FUTURE MEETINGS AT WATERMASTER

- | | | | |
|---------|-----|------------|---|
| 8/25/16 | Thu | 11:00 a.m. | Watermaster Board |
| 9/08/16 | Thu | 9:00 a.m. | Appropriative Pool Meeting |
| 9/08/16 | Thu | 11:00 a.m. | Non-Agricultural Pool Meeting |
| 9/08/16 | Thu | 1:30 p.m. | Agricultural Pool Meeting |
| 9/13/16 | Tue | 8:30 a.m. | CBWM Committees and Board Roles Workshop (at Frontier Project – CVWD) |
| 9/15/16 | Thu | 8:00 a.m. | Appropriative Pool Strategic Planning (Confidential Session Only) |
| 9/15/16 | Thu | 9:00 a.m. | Advisory Committee Meeting |
| 9/15/16 | Thu | 9:30 a.m. | Recharge Investigations and Projects Committee (RIPCom) |
| 9/22/16 | Thu | 11:00 a.m. | Watermaster Board |

ADJOURNMENT

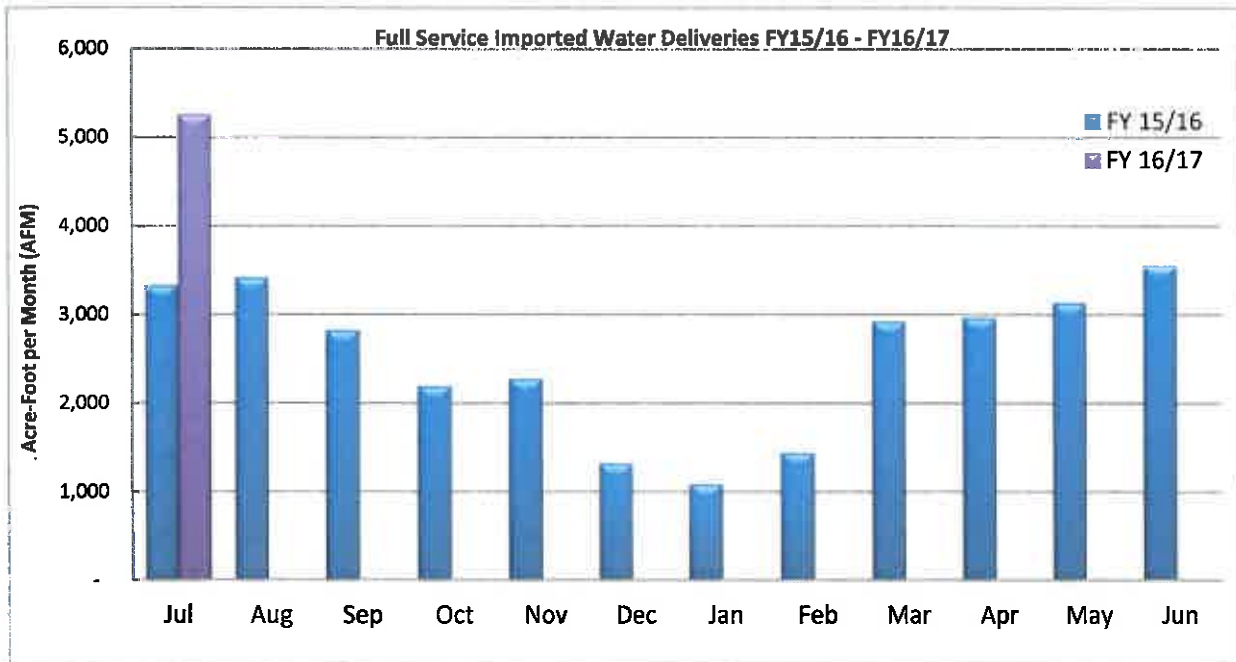
**GENERAL
MANAGER'S
REPORT**



Date: September 21, 2016
To: The Honorable Board of Directors
From: P. Joseph Grindstaff, General Manager 
Subject: General Manager's Report Regarding Agency Activities

PLANNING & ENVIRONMENTAL RESOURCES

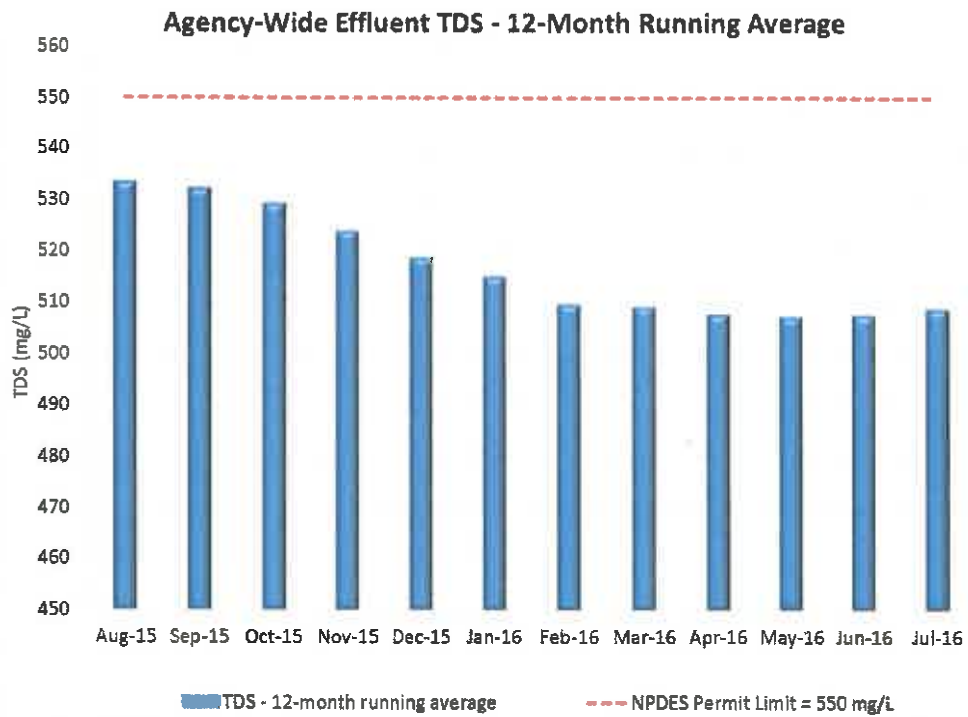
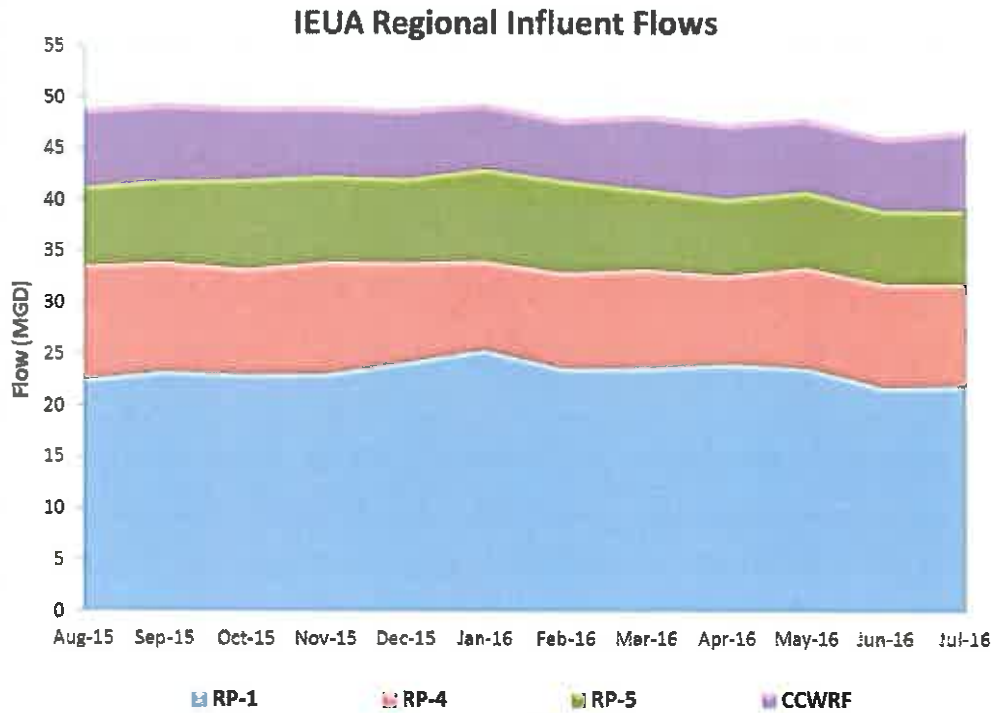
For fiscal year 2016/17, the full service imported water deliveries for the month of July were at its highest compared to fiscal year 2015/16.



The Agency-wide average influent flow for the month of July 2016 was approximately 46.7 million gallons per day (mgd), which is a 0.6 mgd increase from the June 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 July 2016 was 5.7 mg/L.

The discharge permit effluent limit for total dissolved solids (TDS) is 550 mg/L. The 12-month running average TDS value for July 2016 was 509 mg/L.



During the month of August, two incidents at RP-5 SHF were reported to AQMD. The first incident occurred on August 12, in which ambient hydrogen sulfide monitored at the fenceline exceeded the standard. The cause of the incident was unknown as operations at the facility were normal during the

incident. The second incident occurred on August 28, in which digester gas vented from one of the two digesters as a result of a failed compressor and tripped flare.

On August 25, AQMD issued the permits for RP-1 to allow for the construction and operation of two iron sponges. The permits also allow for more time to operate three emergency engines for maintenance and testing purposes.

Prado Basin Vegetation Monitoring

In coordination with CBWM, IEUA moved forward to authorize the next vegetation monitoring survey to be performed by the United States Bureau of Reclamation. This activity is part of the Prado Basin Adaptive Management Plan (AMP). Cost associated with this effort will be shared 50/50 between CBWM and IEUA. Work is scheduled to be complete by December 2016 in accordance with the Prado Basin AMP.

IERCF UPDATE

Operational Comments – Facility throughput for August averaged approximately 98% of permitted capacity at an average of 413 tons per day of biosolids and 145 tons per day of amendments (based on a 31 day month). The facility is operating well with no violations or lost time incidents.

Facility Throughput

POTW	WET TONS MONTH	WET TONS YEAR TO DATE
LACSD	7,244.54	56,618.96
IEUA	4,946.85	41,497.65
OCSD	617.20	617.20
TOTAL	12,808.59	98,733.81

Compost Sales – IERCA sales in August were less than last year, displaying a decrease in summer compost demand. We predict September to be greater than the previous year due to increased growth in the AG customer segment. Compost inventory in the storage facility is 13,450 cubic yards of finished material and 1,350 cubic yards of overs material.

Monthly Sales Summary

PRODUCT	CUBIC YARD	AVERAGE PRICE PER CUBIC YARD	TOTAL REVENUE
Premium	11,070.47	\$2.81	\$31,117.87
Base	1,488.84	\$0.72	\$1,067.49
Mulch (Overs)	1,414.42	\$0.00	\$0.00
TOTAL	13,973.73	\$2.30	\$32,185.36

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
TOTAL	28,872.55	38,308.29	\$59,739.41	\$65,118.23

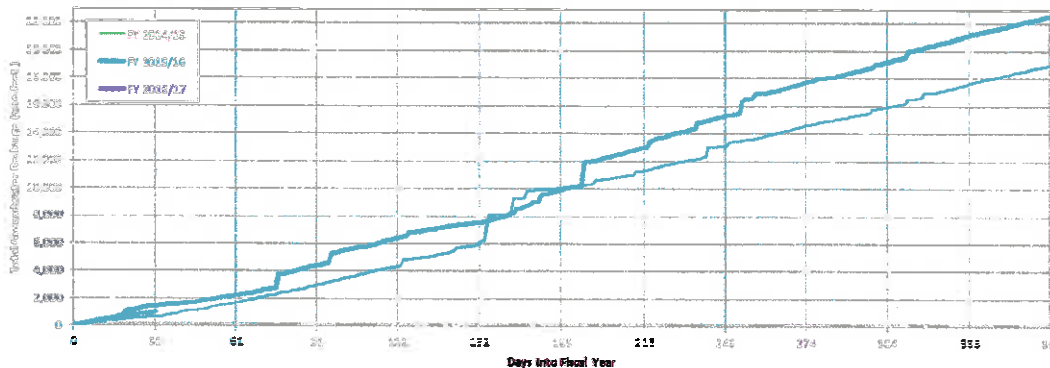
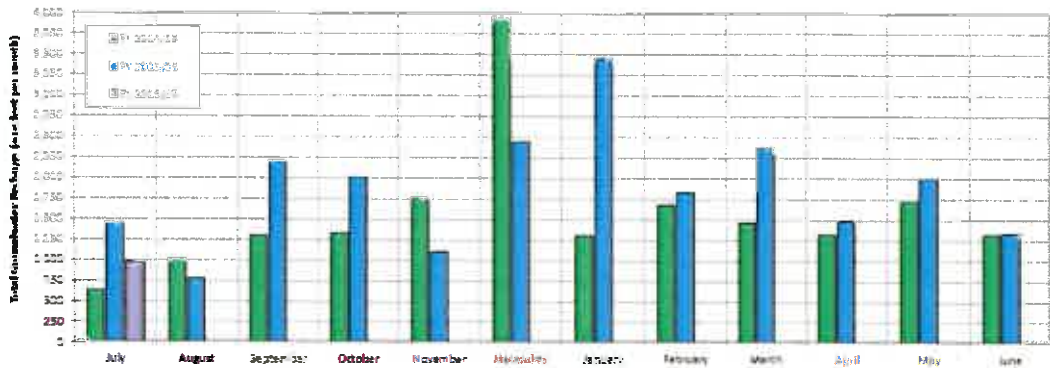
Groundwater Recharge – July 2016

During July 2016, recycled water recharge totaled 940 acre-feet. There was no imported water delivered. The capture of dry weather creek flows totaled 43 acre-feet. There were no rain events during this period. A detailed summary of the Chino Basin Groundwater Recharge Operations can be found at <http://www.ieua.org/category/reports/groundwater-recharge-reports>.

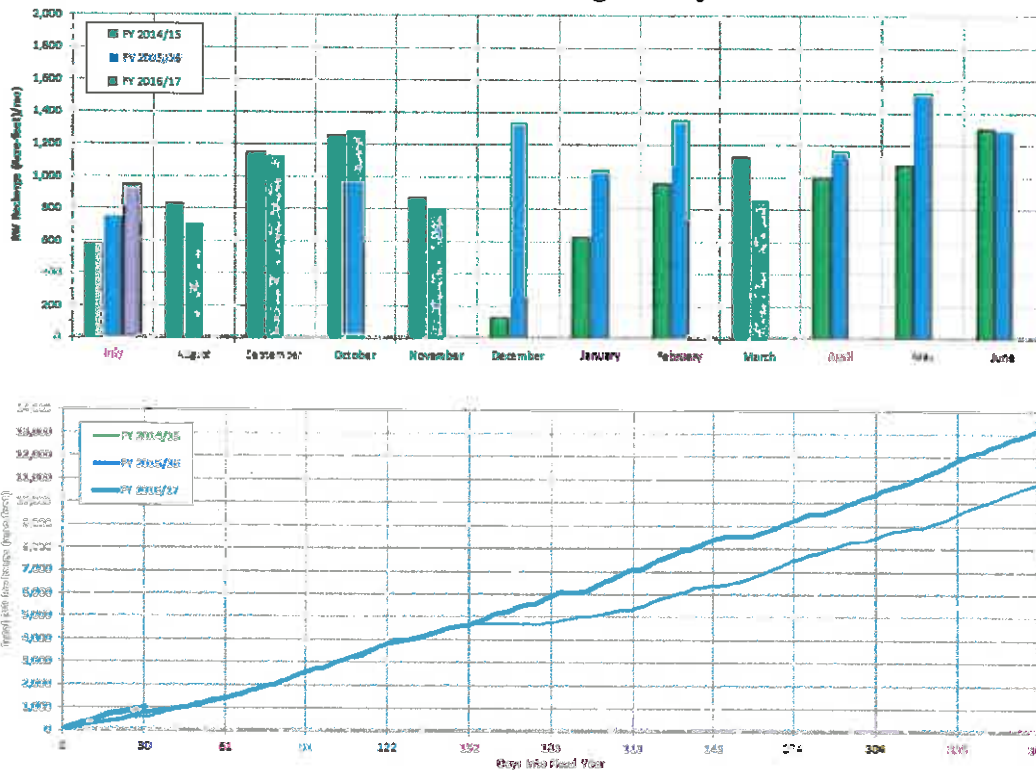
Groundwater Recharge – August 2016 (Preliminary)

During August 2016, recycled water recharge totaled 1,057 acre-feet. There was no imported water delivered. The capture of dry weather creek flows totaled 67 acre-feet. There were no rain events during this period. A detailed summary of the Chino Basin Groundwater Recharge Operations can be found at <http://www.ieua.org/category/reports/groundwater-recharge-reports>.

Total Groundwater Recharge – July 2016



Recycled Water Delivered to Groundwater Recharge – July 2016

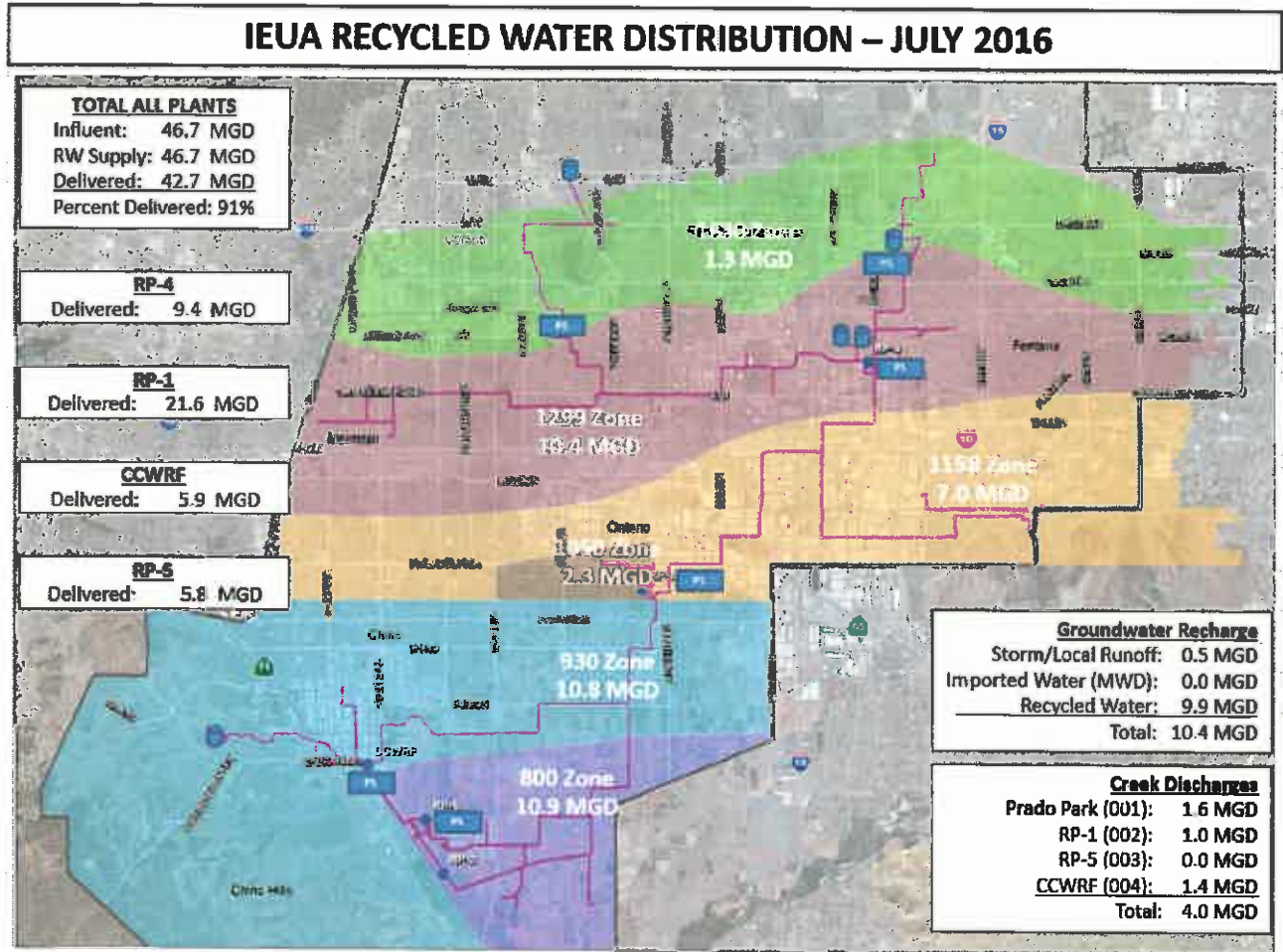


RW Distribution – July 2016

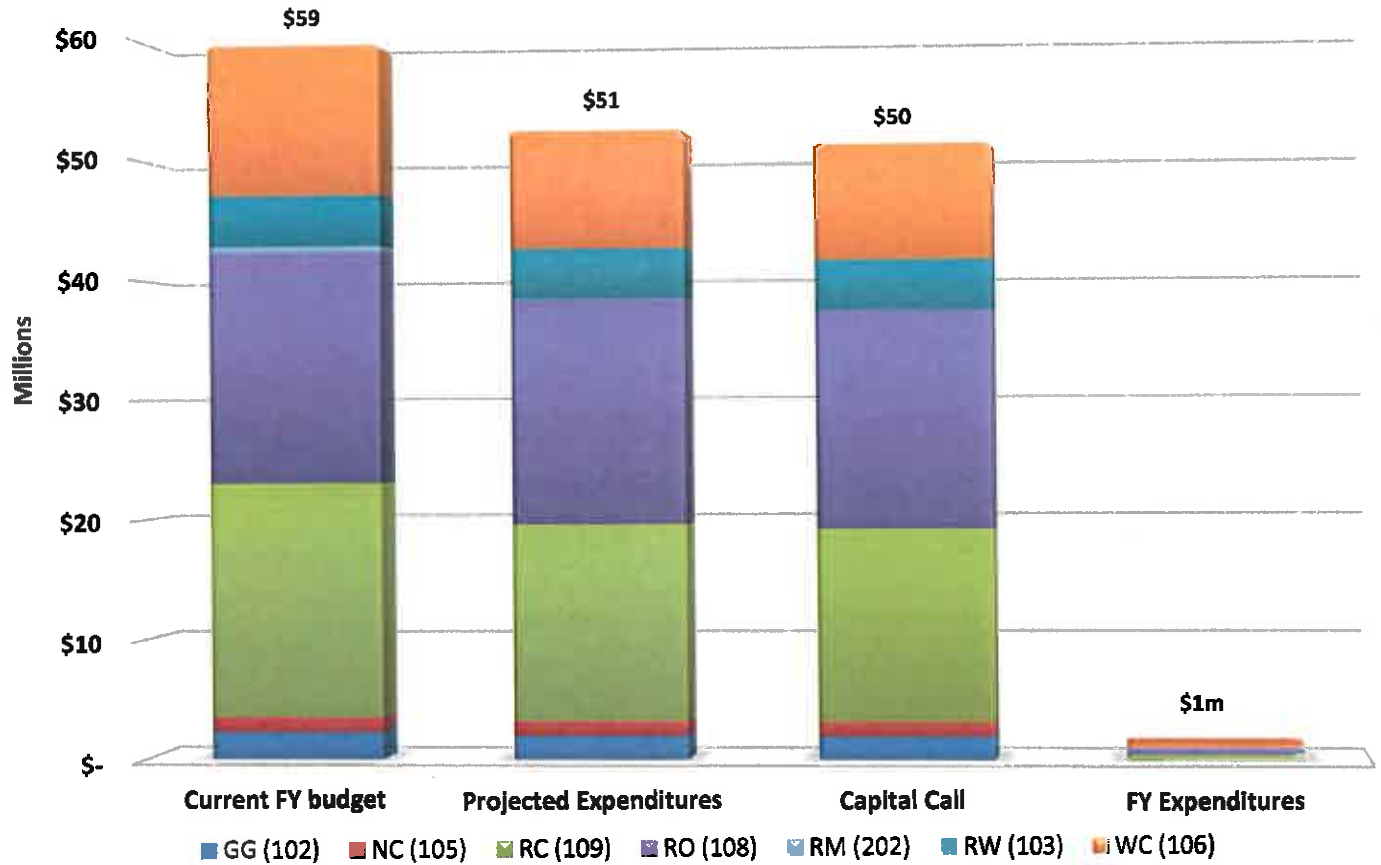
During July 2016, 91% (42.7 MGD) of IEUA recycled water supply (46.7 MGD) was delivered into the distribution system for both direct use customers (32.8 MGD) and groundwater recharge (9.9 MGD). Plant discharge to creeks feeding the Santa Ana River averaged 4.0 MGD.

RW Distribution – August 2016 (Preliminary)

During August 2016, 93% (44.4 MGD) of IEUA recycled water supply (48.0 MGD) was delivered into the distribution system for both direct use customers (33.3 MGD) and groundwater recharge (11.1 MGD). Plant discharge to creeks feeding the Santa Ana River averaged 3.6 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	913,861	1,465,000	551,139	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	892,790	1,504,652	611,862	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	EN15002	1158 Reservoir Site Cleanup	101,905	650,000	548,096	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.
4	EN15055	1630 W. Recycled Water Pump Station - Surge Tank Installation	897,401	1,340,000	642,599	The contractor's contract amount is considerably lower than the engineer's estimate. It is also anticipated that a small portion of the contingency fund will be used.
5	EN16021	TCE Plume Cleanup	1,847,956	3,300,000	1,152,044	Project work was delayed because the Agency's agreement with CDA is contingent upon final project approval from the Regional Board. The Regional Board recently issued a draft Cleanup and Abatement Order (CAO), which is expected to be approved in September 2016. Design and construction work on the project is expected to begin immediately upon Regional Board approval. This project is also unique in that the Agency's agreement with CDA stipulates that IEUA must transfer the full amount for any contract prior to execution. As a result of the initial delays, larger contract work was pushed out to FY 17/18.
6	EN19006	RP-5 SHF - RO	99,000	3,126,000	3,026,000	The schedule for the RP-4 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 March 2017 with design beginning in April 2017 reducing the number of months of design in FY 16/17 from five months to three months.
			4,552,913	11,084,652	6,531,739	

General Manager's Report Regarding Agency Activities
 September 21, 2016
 Page 8 of 15

Bid and Award One Year Look Ahead Schedule			
	Project Name	Projected Bid Opening Date	Projected Bid Award Date
	Sep-16		
1	EN16024.00 RP-1 Mixed Liquor Return Pumps	8/15/2016	9/21/2016
2	EN15008.00 Water Quality Laboratory- Roof Mounted Solar System	8/15/2016	9/21/2016
3	EN16071.00 San Bernardino Avenue Gravity Sewer	8/15/2016	9/21/2016
4	EN17040.00 RP-1 Aeration Basin Panel Repairs	8/15/2016	9/21/2016
	Oct-16		
5	EN14018.00 RP-4 Disinfection Facility Improvements	9/07/2016	10/19/2016
	Nov-16		
6	EN16049.00 Conference Rooms Audio Visual Upgrades	10/15/2016	11/16/2016
	Dec-16		
7	EN11031.00 RP-5 Flow Equalization and Effluent Monitoring	11/15/2016	12/21/2016
8	EN18047.00 HQ Parking Lot FY15/16	11/15/2016	12/21/2016
9	WR15021.00 Napa Lateral	11/15/2016	12/21/2016
	Jan-17		
10	EN17015.00 Collection System Upgrades 16/17	12/15/2016	1/18/2017
11	EN17014.00 NRWS Manhole Upgrades - 16/17	12/15/2016	1/18/2017
	Feb-17		
12	EN13016.03 SCADA Enterprise System - Phase 3 (Regional Water Recycling Plant No. 4)	1/15/2017	2/15/2017
13	EN17052.00 RP-1 and RP-4 Safety Improvements	1/15/2017	2/15/2017
14	EN13016.04 SCADA Enterprise System - Phase 4 (Regional Water Recycling Plant No. 5)	1/15/2017	2/15/2017
	Mar-17		
15	EN13001.00 San Sevaive Basin Improvements	2/15/2016	3/15/2017
16	EN17047.00 RP-1 Dewatering Silo/Conveyor Safety Improvement Repairs	2/15/2016	3/15/2017
17	EN17048.00 RP-1 Dewatering Vertical Conveyor Repairs	2/15/2016	3/15/2017
18	EN17051.00 CCWRF Valve Replacement	2/15/2016	3/15/2017
	Apr-17		
19	EN14019.00 RP-1 Headworks Primary and Secondary Upgrades	3/19/2017	04/19/2017
	May-17		
20	EN15013.00 RP-1 TWAS and Primary Effluent Piping Replacement	4/17/2017	5/17/2017
	Jun-17		
21	EN16034.00 RW Pressure Sustaining Valve Installation	5/15/2017	6/21/2017
	Jul-17		
22	EN17041.00 Orchard Recycled Water Turnout Improvements	6/15/2017	7/19/2017
23	EN17046.00 1630 East Pump Station Upgrades	6/15/2017	7/19/2017
24	RW15004.00 Lower Day Basin RMPU Improvements	6/15/2017	7/19/2017
	Aug-17		
25	EN14043.00 RP-5 RW Pipeline Bottleneck	7/15/2017	8/16/2017
26	EN17044.00 RP-1 Power Reliability Building Controls Upgrades	7/15/2017	8/16/2017
	Sep-17		
27	EN11039.00 TP-1 Disinfection Pump Improvements	8/15/2017	9/20/2017
28	EN17007.00 930 To 800 West CCWRF PRV	8/15/2017	9/20/2017

Fiscal Year 15/16 Capital Improvement Program

Agency-Wide

No	Project ID	Project Title	Budget					Contract						
			(a) Prior FY Expenditures thru 8/30/16 (\$)	(b) FY Budget 2016/17 (\$)	(c) FY 2016/17 Expenditures 7/1/16-8/29/16 (\$)	(d) Total Expenditures to Date thru 8/29/16 (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	67,790	5,126,121	10,407,046	Evaluation	1,926,650	71,271	3.70%	6/30/2020	6/30/2020	0
2	EN17052	RP-1 and RP-4 Safety Improvements	-	760,000	8,101	8,101	760,000	Evaluation	57,430	-	0.00%	6/30/2017	6/30/2017	0
3	EN16070	Agency-Wide Pumps Efficiencies Improvements	-	1,260,000	5,537	5,537	100,000	Bld and Award	142,060	-	0.00%	4/30/2017	2/22/2017	67
4	EN16013	Agency-Wide Lighting Improvements	186,129	213,945	108,079	294,208	300,000	Construction	293,000	-	0.00%	6/2/2017	2/22/2017	100
5	EN17034	Agency-Wide Lighting Improvements	-	1,385,000	151	151	1,400,000	Construction	1,107,320	-	0.00%	6/2/2017	2/22/2017	100
6	EN17053	Agency-Wide Recycled Water Pumps Overhaul	-	610,000	-	-	-	Construction	466,319	-	0.00%	4/28/2017	4/28/2017	0
7	EN15032	Agency-Wide HVAC Improvements- Pckg No. 3	742,334	26,750	831	743,265	1,180,000	Project Acceptance	431,216	22,909	5.31%	5/10/2016	5/10/2016	0
8	EN17004	Agency-Wide Energy Efficiency Study	91,500	5,540	1,879	93,380	1,600,000	Warranty	17,780	-	0.00%	5/31/2016	6/28/2016	-28
9	EN13056	Agency-Wide HVAC Improvements- Pckg No. 2	885,445	192,968	11,145	896,590	1,106,500	Warranty	188,000	10,693	5.69%	9/24/2016	10/21/2016	-27
10	EN16018	RC Emergency O&M Projects FY 15/16	17,685	60,000	21,398	39,082	500,000	N/A	Various Emergency Projects					
11	EN16019	RO Emergency O&M Projects FY 15/16	344,200	85,000	3,906	348,106	600,000	N/A	Various Emergency Projects					
12	EN16017	WC Emergency O&M Projects FY 15/16	397,778	30,000	227	398,004	500,000	N/A	Various Emergency Projects					
13	EN17018	RC Emergency O&M Projects FY 16/17	-	600,000	748	748	800,000	N/A	Various Emergency Projects					
14	EN17019	RO Emergency O&M Projects FY 16/17	-	600,000	-	-	800,000	N/A	Various Emergency Projects					
15	EN17017	WC Emergency O&M Projects FY 16/17	-	500,000	7,880	7,880	500,000	N/A	Various Emergency Projects					
16	EN17016	NRWS Emergency O&M Projects FY 16/17	-	200,000	-	-	200,000	N/A	Various Emergency Projects					
17	EN17021	RC On-Call Operations and Maintenance	-	250,000	-	-	250,000	N/A	Various Maintenance Projects					
18	EN17022	RO On-Call Operations and Maintenance	-	250,000	-	-	250,000	N/A	Various Maintenance Projects					
19	EN17020	WC On-Call Operations and Maintenance	-	250,000	-	-	250,000	N/A	Various Maintenance Projects					
20	EN17027	RC Safety Operations and Maintenance	-	250,000	-	-	250,000	N/A	Various Safety Projects					
21	EN17026	RO Safety Operations and Maintenance	-	250,000	-	-	250,000	N/A	Various Safety Projects					
22	EN17025	WC Projects Operations and Maintenance	-	250,000	-	-	250,000	N/A	Various Safety Projects					
23	CW17003	RC OF Projects FY 16/17	-	50,000	1,637	1,637	50,000	N/A	Various Permit Projects					
24	CW17101	NRWS OE Projects FY 16/17	-	10,000	955	955	10,000	N/A	Various Permit Projects					
25	CW17002	WC OE Projects FY 16/17	-	50,000	593	593	595	N/A	Various Permit Projects					
			7,723,402	9,643,854	240,956	7,964,358	21,914,141		4,629,775	104,873				

Carbon Canyon Wastewater Regional Facility (CCWRF)

No	Project ID	Project Title	Budget				(f) Phase	Contract					
			(a) Prior FY Expenditures thru 6/30/16 (\$)	(b) FY Budget 2016/17 (\$)	(c) FY 2016/17 Expenditures 7/1/16-8/29/16 (\$)	(d) Total Expenditures to Date thru 8/29/16 (A + C) (\$)		(e) Total Project Budget (\$)	(g) Original Contract (\$)	(h) CO's/ Amendments (\$)	(i) CO's/ Amendments (H/G) (%)	(j) Contract Completion Date	(k) Projected/ Contract Completion Date (NOC)
26	EN17006	CCWRF Odor Control and Headworks	6,951	610,000	9,063	16,014	7,000,000	Evaluation	Contract Has Not Been Awarded				
27	EN17051	CCWRF Valve Replacement	-	250,000	-	-	250,000	Evaluation	In-House Design				
			6,951	860,000	9,063	16,014	7,250,000						

Chino Desalter Authority (CDA)

No	Project ID	Project Title	Budget				(f) Phase	Contract					
			(a) Prior FY Expenditures thru 6/30/16 (\$)	(b) FY Budget 2016/17 (\$)	(c) FY 2016/17 Expenditures 7/1/16-8/29/16 (\$)	(d) Total Expenditures to Date thru 8/29/16 (A + C) (\$)		(e) Total Project Budget (\$)	(g) Original Contract (\$)	(h) CO's/ Amendments (\$)	(i) CO's/ Amendments (H/G) (%)	(j) Contract Completion Date	(k) Projected/ Contract Completion Date (NOC)
28	EN16021	TCE Plume Cleanup	1,089,754	3,000,000	302,956	1,392,710	12,000,000	Design	CDA Managed Project				
			1,089,754	3,000,000	302,956	1,392,710	12,000,000						

Collections

No	Project ID	Project Title	Budget				(f) Phase	Contract						
			(a) Prior FY Expenditures thru 6/30/16 (\$)	(b) FY Budget 2016/17 (\$)	(c) FY 2016/17 Expenditures 7/1/16-8/29/16 (\$)	(d) Total Expenditures to Date thru 8/29/16 (A + C) (\$)		(e) Total Project Budget (\$)	(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					
30	EN11039	TP-1 Disinfection Pump Improvements	95,367	225,000	4,242	99,609	487,794	Evaluation	Contract Has Not Been Awarded					
31	EN17014	NRWS Manhole Upgrades - 16/17	-	350,000	-	-	350,000	Evaluation	In-House Design					
32	EN17015	Collection System Upgrades 16/17	-	500,000	-	-	500,000	Evaluation	In-House Design					
33	EN22002	NRW East End Flowmeter Replacement	3,325	175,000	2,094	5,419	300,000	Evaluation	Contract Has Not Been Awarded					
34	EN13028	Preserve Lift Station	19,774	100,000	3,360	23,134	100,000	Design	Contract Managed by Developer					
35	EN15042	SBCFCD Sewer Easement	415	275,000	-	415	275,000	Easement	Not Applicable					
36	EN15044	SBCFCD NRW Easement	338	515,000	-	338	515,000	Easement	Not Applicable					
37	EN16071	San Bernardino Avenue Gravity Sewer	203,227	1,300,000	21,640	224,867	1,500,000	Bid and Award	Contract Has Not Been Awarded					
38	EN13018	Montclair Diversion Structure Retrofit	1,068,186	180,000	110,119	1,178,305	3,030,095	Project Acceptance	557,565	(14,665)	-2.63%	7/17/2016	7/15/2016	2
			1,390,632	3,820,000	141,455	1,532,087	8,057,889		557,565	(14,665)				

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- 8/29/16 (\$)	(d) Total Expenditures to Date thru 8/29/16 (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	622,207	3,100,000	3,115	625,323	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	8,186	213,879	2,480,000	Pre-Design	38,720	28,985	74.86%	6/30/2018	6/30/2018	0	
42	EN13001	San Sevaline Basin Improvements	535,568	3,250,000	17,406	552,974	6,460,000	Design	358,828	4,734	1.32%	5/20/2016	9/26/2016	-129	
43	EN14047	GWR and RW SCADA Control Upgrades	233,626	455,263	21,950	255,575	932,000	Construction	250,989	-	0.00%	1/23/2017	2/14/2017	-22	
			1,597,094	8,160,263	50,657	1,647,751	17,562,500		1,417,487	43,153					

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- 8/29/16 (\$)	(d) Total Expenditures to Date thru 8/29/16 (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	-	-	91,000	Not Started	Project Has Not Started						
45	EN17023	HQ Drainage Investigations	-	50,000	-	-	50,000	Not Started	Ongoing Monitoring Requirements						
46	EN16049	Conference Rooms Audio Visual Upgrades	72,777	626,453	17,281	90,059	700,000	Evaluation	85,102	-	0.00%	12/30/2016	2/17/2017	-49	
47	EN16048	As-Built Database Upgrades	24,599	150,000	3,911	28,510	200,000	Pre-Design	In House Database						
48	EN16047	HQ Parking Lot FY15/16	50,765	415,000	4,017	54,781	300,000	Bid and Award	In house Design						
49	EN15052	Primavera Enhancements	116,435	72,447	-	116,435	200,000	Construction	80,000	-	0.00%	12/30/2016	12/30/2016	0	
50	EN16055	Headquarters Back Up Generator	48,950	400,000	13,161	62,111	200,000	Construction	178,777	-	0.00%	2/13/2017	4/28/2017	-74	
51	EN16068	Main Office Permit Office	18,068	293,000	10,055	28,122	84,000	Construction	52,890	-	0.00%	11/23/2016	11/7/2016	16	
			334,594	2,191,900	48,425	380,019	1,825,000		396,769	-					

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- 8/29/16 (\$)	(d) Total Expenditures to Date thru 8/29/16 (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)	
52	EN17007	930 To 800 West CCWRF PRV	5,481	100,000	263	5,744	600,000	Not Started	Project Has Not Started						
53	EN17039	8th St. Basin RW Turnout Discharge Retrofit	-	25,000	-	-	275,000	Not Started	Project Has Not Started						
54	EN17041	Orchard Recycled Water Turnout Improvements	-	25,000	-	-	125,000	Not Started	Project Has Not Started						
55	EN17049	Baseline RWPL Extension	-	300,000	-	-	5,000,000	Not Started	Project Has Not Started						

General Manager's Report Regarding Agency Activities
 September 21, 2016
 Page 12 of 15

56	EN12016	North CIM Lateral	14,631	450,000	-	14,631	233,282	Evaluation	Contract Has Not Been Awarded						
57	EN15002	1158 Reservoir Site Cleanup	3,805	650,000	905	4,710	500,000	Evaluation	Contract Has Not Been Awarded						
58	EN16034	RW Pressure Sustaining Valve Installation	18,098	341,300	602	18,700	850,000	Evaluation	Contract Has Not Been Awarded						
59	EN17046	1630 East Pump Station Upgrades	-	100,000	155	155	300,000	Evaluation	Contract Has Not Been Awarded						
60	WR15021	Napa Lateral	60,019	500,000	6,684	66,703	6,000,000	Evaluation	Contract Has Not Been Awarded						
61	EN17011	RW Hydraulic Modeling FY 16/17	-	100,000	2,096	2,096	100,000	Design	Not Applicable						
62	EN15043	SBCFCD Recycled Water Easement	534,759	570,000	-	534,759	1,100,000	Easement	Not Applicable						
63	EN15055	1630 W. RW Pump Station Surge Tank Install	546,124	1,340,000	140,401	686,525	1,590,000	Construction	729,000	5,154	0.71%	10/14/2016	10/13/2016	1	
64	EN12014	East Avenue 1630 E RWP Relocation	504,666	388,148	1,723	506,389	890,108	Construction	384,950	10,733	2.79%	City of Rancho Cucamonga Project			
65	EN13045	Wineville RW Extension Segment B	10,786,069	100,000	23,710	10,809,779	11,880,300	Warranty	8,900,000	241,113	2.71%	7/25/2015	12/3/2015	-131	
			12,473,652	4,989,448	176,530	12,650,181	29,443,690		10,013,950	257,000					

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

No	Project ID	Project Title	Budget					Contract							
			(a) Prior FY Expenditures thru 8/30/16 (\$)	(b) FY Budget 2016/17 (\$)	(c) FY 2016/17 Expenditures 7/1/16-8/29/16 (\$)	(d) Total Expenditures to Date thru 8/29/16 (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 (NOG)	(l) Float (J-K)	
66	EN14042	RP-1 1158 RWPS Upgrades	75,543	475,000	8,263	83,806	4,000,000	Evaluation	Contract Has Not Been Awarded						
67	EN15012	RP-1 East Primary Effluent Pipe Rehab	13,547	500,000	15,582	29,129	1,885,000	Evaluation	Contract Has Not Been Awarded						
68	EN15013	RP-1 TWAS and Primary Effluent Piping	19,700	120,000	8,163	27,862	500,000	Evaluation	Contract Has Not Been Awarded						
69	EN17042	Digester 6 and 7 Roof Repairs	-	400,000	-	-	3,800,000	Evaluation	Contract Has Not Been Awarded						
70	EN17044	RP-1 Power Reliability Building Controls	-	350,000	2,895	2,895	1,500,000	Evaluation	Contract Has Not Been Awarded						
71	EN17047	RP-1 Dewatering Silo/Conveyor Safety Repairs	-	231,000	-	-	231,000	Evaluation	Contract Has Not Been Awarded						
72	EN17048	RP-1 Dewatering Vertical Conveyor Repairs	-	375,000	-	-	375,000	Evaluation	Contract Has Not Been Awarded						
73	EN18006	RP-1 Flare Improvements	-	600,000	3,233	3,233	4,000,000	Evaluation	Contract Has Not Been Awarded						
74	EN19003	RP-1 Parallel Outfall Pipeline	7,031	200,000	-	7,031	5,700,000	Evaluation	Contract Has Not Been Awarded						
75	EN13048	RP-1 930-Zone RW Pump Station Load Analysis	292,963	200,000	15,816	308,780	1,599,000	Pre-Design	269,380	-	0.00%	12/31/2016	1/18/2017	-18	
76	EN16025	RP-1 Expansion PDR	220,836	450,000	23,701	244,537	1,500,000	Pre-Design	451,288	-	0.00%	3/20/2017	3/31/2017	-11	
77	EN14019	RP-1 Headworks Gate Replacement	243,916	1,500,000	3,245	247,160	10,500,000	Design	Contract Has Not Been Awarded						
78	EN16024	RP-1 Mixed Liquor Return Pumps	567,463	2,850,000	65,404	632,867	4,000,000	Bid and Award	Contract Has Not Been Awarded						
79	EN17040	RP-1 Aeration Basin Panel Repairs	-	-	-	-	2,000,000	Bld and Award	Contract Combined w/EN16024						
80	EN16051	RP-1 Utility Water Flow Meter	71,330	260,000	9,475	80,804	300,000	Construction	127,584	-	0.00%	11/23/2016	2/13/2017	-82	
			1,512,328	8,511,000	155,777	1,668,105	41,890,000		1,571,573	28,000					

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 7/1/16-8/29/16 (\$)	(d) Total Expenditures to Date thru 8/29/16 (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)
81	EN14012	RP-2 Drying Beds Rehabilitation	1,231,986	350,000	8,328	1,240,315	1,818,400	Construction	193,961	-	0.00%	12/15/2016	12/30/2016	-15
			1,231,986	350,000	8,328	1,240,315	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 7/1/16-8/29/16 (\$)	(d) Total Expenditures to Date thru 8/29/16 (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)
82	EN17032	RP-4 Outfall Repair from Mission Blvd to RP-1	-	50,000	-	-	5,300,000	Not Started	Project Has Not Started					
83	EN17110	RP-4 Process Improvements	63	180,000	-	63	5,200,000	Not Started	Project Has Not Started					
84	EN17043	RP4 Primary Clarifier Rehab	-	400,000	-	-	1,900,000	Evaluation	Contract Has Not Been Awarded					
85	EN14018	RP-4 Disinfection System Retrofit	391,899	1,000,000	17,122	409,021	2,391,345	Bid and Award	98,970	155,751	157.37%	12/31/2017	12/31/2017	0
			391,962	1,230,000	17,122	409,085	12,891,345		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 7/1/16-8/29/16 (\$)	(d) Total Expenditures to Date thru 8/29/16 (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)
86	EN19001	RP-5 Expansion to 30 mgd	-	1,250,000	-	-	125,000,000	Not Started	Project Has Not Started					
87	EN19006	RP-5 SHF - RO	-	3,125,000	-	-	136,000,000	Not Started	Project Has Not Started					
88	EN14043	RP-5 RW Pipeline Bottleneck	56,637	600,000	11,524	68,160	1,300,000	Evaluation	Contract Has Not Been Awarded					
89	EN16028	RP-5 Expansion PDR	712,311	2,111,088	55,938	768,249	1,500,000	Pre-Design	1,980,310	-	0.00%	3/20/2017	3/31/2017	-11
90	EN11031	RP-5 Flow Equalization and Effluent Monitoring	422,173	1,465,000	43,861	466,034	1,536,949	Design	159,986	197,635	123.53%	2/28/2018	2/16/2018	12
91	EN13012	Magnolia Channel Monitoring Maintenance	87,611	10,000	-	87,611	192,242	Monitoring	Ongoing Monitoring Requirements					
92	EN15008	Water Quality Laboratory	1,502,545	7,000,000	38,009	1,540,555	20,900,000	Construction	17,460,000	-	0.00%	8/6/2018	8/6/2018	0
93	EN16132	Magnolia Channel Spillway Improvements	162,787	427,904	6,299	169,086	350,000	Construction	280,891	-	0.00%	11/23/2016	11/28/2016	-5
			2,944,063	15,988,980	155,631	3,099,695	286,779,191		17,900,877	197,635				

Total			30,693,419	58,735,454	1,306,910	32,000,329	441,432,156		36,780,927	771,747				
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GRANTS UPDATE

Grants Administration Significant Events

On August 16, 2016, a grant application project site-visit with State Water Control Board (SWRCB) representatives was conducted for two Proposition 1 grant applications submitted to the SWRCB for the Storm Water Grant Program and the Groundwater Quality Grant Program. IEUA, CDA, CBWM, City of Ontario, consultants and staff from the Regional Water Board participated in the visit.

The visit started with the tanked drinking water system area in the City of Ontario, where the groundwater wells are so contaminated by the South Archibald TCE Plume that tanked water has to be delivered for residents and farmers.

The tour went on to well sites at the TCE Plume "hot spot", pipeline locations, CDA I, and CDA II, where the contaminated groundwater will be treated. The site-visit ended at the CBWM's Wineville, Jurupa and RP-3 Basin Project, 23a of the 2013 RMPU Project site, where additional storm water will be captured and recycled water will be delivered for groundwater recharge to support the TCE Plume Cleanup effort.

With IEUA's assistance, the SWRCB representatives also visited the Cucamonga Valley Water District's project sites for the Cucamonga Basin Groundwater Remediation Project Prop 1 grant application.

Grant/Loan Opportunities and Applications

The Agency's Grants Department is continuing to pursue additional federal and state grant opportunities as they become available to supplement the Agency CIP budgets.

State Water Resources Control Board

Grants and Loan Applications:

1. Proposition 1 Storm Water Grant application submitted in July 2016 for the RMPU Wineville, Jurupa, RP-3 Basins project seeking \$10M grant with \$21M total project cost.
2. Proposition 1 Groundwater Quality Grant Pre-Application for the TCE Plume Cleanup project submitted in May 2016 staff is working with the SWRCB on the full application.
3. Proposition 1 Groundwater Quality Grant Pre-Application submitted in July on behalf of the Cucamonga Valley Water District.
4. Grants Staff are working the following SRF loan applications:
 - a. RMPU Lower Day Basin Improvement Project
 - b. RP-1 Flare System Improvements Project
 - c. MVWD RW Distribution System Expansion Project
 - d. CCWRF Asset Management and Improvements Project
5. Proposition 1 Water Recycling Grant/SRF loan application was submitted in December 2015:

General Manager's Report Regarding Agency Activities
 September 21, 2016
 Page 15 of 15

Project #	Project Name	Cost	AFY	ContractDate	Prop 1 Grant	SRF loan
8105-110	Napa Lateral	\$ 5,824,770	500	Dec-16	\$ 2,038,670	\$ 3,786,101
8105-120	San Sevaine Basin Improvements	\$ 7,525,603	1,500	Dec-16	\$ 2,633,961	\$ 4,891,642
8105-130	RP-1-1158 Recycled Water Pump Station Upgrades	\$ 4,659,816	2,361	Feb-17	\$ 1,630,936	\$ 3,028,881
8105-140	RP-5 Recycled Water Pipeline Bottleneck	\$ 1,514,440	-	Feb-17	\$ 530,054	\$ 984,386
8105-150	Recycled Water Pressure Sustaining Valve Installation	\$ 990,211	-	Feb-17	\$ 346,574	\$ 643,637
8105-160	RP-1 Parallel Outfall Pipeline	\$ 6,640,238	500	Feb-17	\$ 2,324,083	\$ 4,316,155
8105-170	Baseline Extension Project (Village of Heritage)	\$ 4,077,339	105	Feb-17	\$ 1,427,069	\$ 2,650,271
8105-180	City of Ontario Euclid/Riverside RW Distribution System Project	\$ 22,639,081	476	Mar-17	\$ 7,923,678	\$ 14,715,403
8105	IEUA - Ontario Sub Total	\$ 53,871,500	5,442		\$ 18,855,025	\$ 35,016,475
8167	IEUA - JCSD	\$ 52,460,000	3,000	Mar-17	\$ 15,000,000	\$ 37,460,000
8170	IEUA-Pomona-MVWD	\$ 51,896,000	1,100	May-17	\$ 15,000,000	\$ 36,896,000
	Total	\$158,227,500	9,542		\$ 48,855,025	\$ 109,372,475