



**ENGINEERING, OPERATIONS, AND  
WATER RESOURCES  
COMMITTEE MEETING  
OF THE BOARD OF DIRECTORS  
INLAND EMPIRE UTILITIES AGENCY\*  
AGENCY HEADQUARTERS, CHINO, CALIFORNIA**

**WEDNESDAY, DECEMBER 11, 2019  
9:45 A.M.**

***Or immediately following the  
Community & Legislative Affairs  
Committee Meeting***

**CALL TO ORDER**

**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 it appears on the agenda, are requested to complete and submit to the Board Secretary a "Request to Speak" form which is available on the table in the Board Room. Comments will be limited to three minutes per speaker. Thank you.

**ADDITIONS TO THE AGENDA**

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

**1. ACTION ITEMS**

**A. MINUTES**

The Committee will be asked to approve the Engineering, Operations, and Water Resources Committee meeting minutes of November 13, 2019.

**B. PROJECT MANAGEMENT, INSPECTION, AND ADMINISTRATIVE SERVICES CONTRACT AWARD**

Staff recommends that the Committee/Board:

1. Award an aggregate consultant contract for Project Management, Inspection, and Administrative Services to Butier Engineering, Carollo Engineers, GK & Associates, Michael Baker International,

MWH Contractors, Project Partners, Wallace & Associates, and Wood Environmental for a total aggregate not-to-exceed amount of \$10,000,000 over a five-year period, with two, one-year options to extend; and

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

**C. RP-5 EXPANSION FINDING OF CONSISTENCY WITH THE PROGRAM ENVIRONMENTAL IMPACT REPORT**

Staff recommends that the Committee/Board:

1. Find the RP-5 Expansion falls within the scope of the Facilities Master Plan programs included in the 2017 PEIR; and
2. Find the PEIR adequately describes the activity for the purposes of CEQA.

**D. MOTOR CONTROL CENTER, ELECTRICAL DRIVE, AND CONTROL SYSTEM HARDWARE SOLE SOURCE**

Staff recommends that the Committee/Board:

1. Adopt a finding pursuant to Public Contract Code 3400(c) that the use of Rockwell Allen Bradley motor control centers, electric drives, and control system hardware: 1) match existing components in use at IEUA facilities; 2) the components are only available from Rockwell;
2. Authorize their procurement as a sole source for future O&M and capital projects for a duration of five years; and
3. Authorize the General Manager to execute the standardization contract with Rockwell and Royal Industrial Solutions, subject to non-substantive changes.

**E. CLIMATE CHANGE ACTION PLAN UPDATE**

Staff recommends that the Committee/Board adopt the proposed 2019 Climate Change Action Plan.

**F. CONTRACT AMENDMENT FOR JANITORIAL SERVICES**

Staff recommends that the Committee/Board:

1. Approve the janitorial services contract amendment with Priority Building Services, LLC, in the amount of \$200,000; and
2. Authorize the General Manager to execute the contract amendment.

2. **INFORMATION ITEM**

A. **OPERATIONS DIVISION SEMI-ANNUAL UPDATE (POWERPOINT)**

B. **PLANNING AND ENVIRONMENTAL RESOURCES UPDATE (ORAL)**

**RECEIVE AND FILE INFORMATION ITEM**

C. **ENGINEERING AND CONSTRUCTION MANAGEMENT PROJECT UPDATES (POWERPOINT)**

3. **GENERAL MANAGER'S COMMENTS**

4. **COMMITTEE MEMBER COMMENTS**

5. **COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS**

6. **ADJOURN**


\*A Municipal Water District

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

Proofed by: 

**DECLARATION OF POSTING**

I, April Woodruff, Board Secretary/Office Manager of the Inland Empire Utilities Agency, A Municipal Water District, hereby certify that a copy of the agenda has been posted by 5:30 p.m. in the foyer at the Agency's main office, 6075 Kimball Ave., Building A, Chino, CA and to the IEUA Website at [www.ieua.org](http://www.ieua.org) on Thursday, December 5, 2019.

  
April Woodruff

**ACTION  
ITEM  
1A**



**MINUTES  
ENGINEERING, OPERATIONS, AND WATER RESOURCES  
COMMITTEE MEETING  
INLAND EMPIRE UTILITIES AGENCY\*  
AGENCY HEADQUARTERS, CHINO, CA**

**WEDNESDAY, NOVEMBER 13, 2019  
9:45 A.M.**

**COMMITTEE MEMBERS PRESENT**

Michael Camacho, Chair  
Kati Parker

**COMMITTEE MEMBERS ABSENT**

None

**STAFF PRESENT**

Shivaji Deshmukh, General Manager  
Kathy Besser, Executive Manager of External Affairs & Policy Development/AGM  
Christiana Daisy, Executive Manager of Engineering/AGM  
Randy Lee, Executive Manager of Operations/AGM  
Christina Valencia, Executive Manager of Finance & Administration/AGM  
Jerry Burke, Acting Manager of Engineering  
Pietro Cambiaso, Deputy Manager of Planning & Environmental Resources  
Michael Dias, Associate Engineer  
Elizabeth Hurst, Senior Environmental Resource Planner  
Joel Ignacio, Senior Engineer  
Jason Marseilles, Senior Engineer  
Sylvie Lee, Manager of Planning & Environmental Resources  
Craig Proctor, Source Control/Environmental Resources Supervisor  
Michelle Reed, Associate Engineer  
John Scherck, Senior Project Manager  
Daniel Solorzano, Technology Specialist I  
James Spears, Associate Engineer  
Travis Sprague, Senior Associate Engineer  
Wilson To, Technology Specialist II  
Teresa Velarde, Manager of Internal Audit  
April Woodruff, Board Secretary/Office Manager

**OTHERS PRESENT**

None

The meeting was called to order at 9:53 a.m. There were no public comments received or additions to the agenda.

**ACTION ITEMS**

The Committee:

- ◆ Approved the Engineering, Operations, and Water Resources Committee meeting minutes of October 9, 2019.
- ◆ Recommended that the Board:
  1. Approve the Santa Ana River Agency Flows Memorandum of Understanding (MOU); and
  2. Authorize the General Manager to execute the MOU;as a Consent Calendar Item on the November 20, 2019 Board meeting agenda.
- ◆ Recommended that the Board:
  1. Approve Project Agreement 25 for the OWOW and Project Agreement 26 for the Roundtables/Task Forces; and
  2. Authorize the General Manager to execute the Agreements;as a Consent Calendar Item on the November 20, 2019 Board meeting agenda.
- ◆ Recommended that the Board:
  1. Authorize the purchase of a construction management office trailer complex for the RP-5 Expansion, Project Nos. EN19001 and EN19006, from Willscot in the amount of \$453,468; and
  2. Authorize the General Manager to execute the purchase, subject to non-substantive changes;as a Consent Calendar Item on the November 20, 2019 Board meeting agenda.

Director Camacho inquired about the number of office trailers in the purchase. Acting Manager of Engineering Jerry Burke stated the complex purchase is a total of ten office trailers. Director Parker inquired about the price and if it included infrastructure. Mr. Burke stated that they were not, however, a contractor is working to install permanent utilities.

- ◆ Recommended that the Board:
  1. Award a construction management services consultant contract for the RP-5 Expansion, Project Nos. EN19001 and EN19006, to Arcadis for the not-to-exceed amount of \$21,125,523; and
  2. Authorize the General Manager to execute the construction management services consultant contract, subject to non-substantive changes;as an Action Item on the November 20, 2019 Board meeting agenda.

◆ Recommended that the Board:

1. Approve a consultant contract amendment for engineering design services during construction for the RP-5 Expansion, Project Nos. EN19001 and EN19006, to Parsons Water and Infrastructure Inc., for a not-to-exceed amount of \$12,589,469; and
2. Authorize the General Manager to execute the consultant contract amendment, subject to non-substantive changes;

as an Action Item on the November 20, 2019 Board meeting agenda.

◆ Recommended that the Board:

1. Award a construction contract for the Lower Day Basin Improvements, Project No. RW15004, to Ferreira Coastal Construction Co., in the amount of \$2,998,000; and
2. Authorize the General Manager to execute the construction contract, subject to non-substantive changes;

as a Consent Calendar Item on the November 20, 2019 Board meeting agenda.

◆ Recommended that the Board:

1. Award a construction contract for the rehabilitation of the 1158 East and West Reservoirs, Project Nos. EN21004 and EN22004, to Spiess Construction Company, Inc., in the amount of \$2,715,800;
2. Award a consultant contract to Harper & Associates Engineering, Inc., for coating inspection services during construction in the amount of \$105,600; and
3. Authorize the General Manager to execute the contracts, subject to non-substantive changes;

as a Consent Calendar Item on the November 20, 2019 Board meeting agenda.

◆ Recommended that the Board:

1. Award a consultant contract for the Haven Avenue RSS Repairs, Project No. EN20056, to GHD for the not-to-exceed amount of \$211,458; and
2. Authorize the General Manager to execute the consultant contract, subject to non-substantive changes;

as a Consent Calendar Item on the November 20, 2019 Board meeting agenda.

◆ Recommended that the Board:

1. Award a professional consulting service contract to Trussell Technologies, Inc., for the not-to-exceed amount of \$163,460; and

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

as a Consent Calendar Item on the November 20, 2019 Board meeting agenda.

◆ Recommended that the Board:

1. Ratify a construction contract for the RP-4 Chlorine Contact Basin Instrumentation Relocation, Project no. EN20035.01, to W.A. Rasic Construction, Inc., in the amount of \$117,787; and
2. Authorize the General Manager to execute the contract, subject to non-substantive changes;

as a Consent Calendar Item on the November 20, 2019 Board meeting agenda.

Director Parker inquired about the General Manager's approval limit for emergency projects. General Manager Shivaji Deshmukh stated there is no limit for emergency projects but for other projects there is a \$100,000 limit. Director Parker asked how long the limit has been set to \$100,000. General Manager Deshmukh stated staff will find out and provide the information.

#### **INFORMATION ITEMS**

The following information items were presented or received and filed by the Committee:

- ◆ Regional Water Use Efficiency Programs Annual Report – FY 2018/19
- ◆ Planning & Environmental Resources Updates
- ◆ Engineering and Construction Management Project Updates

#### **GENERAL MANAGER'S COMMENTS**

General Manager Shivaji Deshmukh stated that he and the Executive Manager of External Affairs & Policy Development/AGM Kathy Besser will travel to Washington D.C. on November 18-19 to meet with congressional staff and discuss federal funding opportunities.

#### **COMMITTEE MEMBER COMMENTS**

There were no Committee member comments.

#### **COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS**

There were no Committee member requests for future agenda items.

With no further business, Director Camacho adjourned the meeting at 11:01 a.m.

Respectfully submitted,

April Woodruff  
Board Secretary/Office Manager

\*A Municipal Water District

**APPROVED: DECEMBER 11, 2019**



**ACTION  
ITEM  
1B**



**Date:** December 18, 2019

**To:** The Honorable Board of Directors

**From:** Shivaji Deshmukh, General Manager

**Committee:** Engineering, Operations & Water Resources

12/11/19

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

**Subject:** Project Management, Inspection, and Administrative Services Contract Award

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**Executive Summary:**

The Engineering and Construction Management Department manages the design and construction of capital improvement projects, rehabilitation projects, and emergency construction activities for Inland Empire Utilities Agency (IEUA). The current Ten Year Capital Improvements Plan (TYCIP) budget is approximately \$800,000,000. To meet the demands of the TYCIP, IEUA solicited proposals for project management, inspection, and administrative services support for all phases of a project.

On October 29, 2019, staff received 23 proposals through PlanetBids. A panel of IEUA staff reviewed each proposal and rated in accordance with the categories established in the Request for Proposal. The panel determined that eight firms could meet IEUA's need for project management, inspection, and administrative services based on the evaluation of fee schedule rates, qualifications, and experience. Staff is recommending the award of an aggregate contract in the amount of \$10,000,000 over a five-year period, with two, one-year options to extend. The eight firms include Butier Engineering, Carollo Engineers, GK & Associates, Michael Baker International, MWH Contractors, Project Partners, Wallace & Associates, and Wood Environmental.

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**Staff's Recommendation:**

1. Award an aggregate consultant contract for Project Management, Inspection, and Administrative Services to Butier Engineering, Carollo Engineers, GK & Associates, Michael Baker International, MWH Contractors, Project Partners, Wallace & Associates, and Wood Environmental for a total aggregate not-to-exceed amount of \$10,000,000 over a five-year period, with two, one-year options to extend; and
2. Authorize the General Manager to execute the single aggregate consultant contract, subject to non-substantive changes.

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

Account/Project Name:

Multiple capital projects and department operation and maintenance (O&M) budgets under various program funds.

*Fiscal Impact (explain if not budgeted):*

There is no direct impact on IEUA's Fiscal Year Budget as a result of this action. These contracts are for work, which will be required on various projects at various times. The funding for this work is included in each individual project and department O&M budget under various program funds. No separate funding source is required for these contracts.

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

**Prior Board Action:**

None.

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**Environmental Determination:**

Not Applicable

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**Business Goal:**

The Project Management, Inspection, and Administrative Services Master Contract is part of IEUA's Wastewater Management Business Goal that IEUA is committed to meeting regional demands in an environmentally responsible and cost-effective manner.

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**Attachments:**

Attachment 1 - PowerPoint

Attachment 2 - Contracts ([Click to Download](#))

# **Attachment 1**

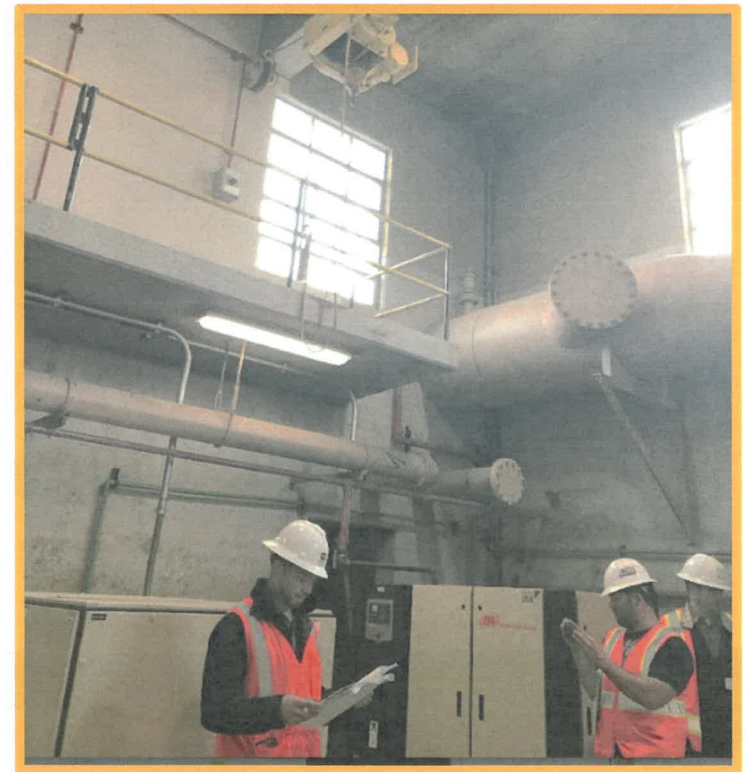
# Project Management, Inspection, and Administrative Services Contract Award



# Background/Scope

December 2019  
10/15/2019

- Consultant proposal solicitation to meet demands of the Ten-Year Capital Improvement Plan
  - TYCIP Approximately - \$800,000,000
- Master contract awards
  - Five-year term, with two, one-year extensions
  - Aggregate amount of \$10,000,000
- No direct impact on the Agency's Fiscal Year Budgets
  - The funding for this work is included in each individual project budget and department O&M budget



# RFP Summary

- RFP posted on October 1, 2019
- Received 23 Proposals
  - Proposals reviewed by Engineering Panel:
    - Fee Schedule
    - Qualifications of presented staff
    - Experience
  - Eight consultants recommended for contract award

Company Names		
Butier Engineering	Michael Baker International	Wallace & Associates
Carollo Engineers	MWH Contractors	Wood Environmental
GK & Associates	Project Partners	

# Staff Augmentation

- Request issued for staffing on project by project basis
- Consultants will submit qualifications
- IEUA reviews, interviews then selects staff
- Process repeats with consultants who have not been utilized
- Engineering will ensure parity among consultants

Company Names		
Butier Engineering	Michael Baker International	Wallace & Associates
Carollo Engineers	MWH Contractors	Wood Environmental
GK & Associates	Project Partners	



# Recommendation

- Award an aggregate consultant contract for Project Management, Inspection, and Administrative Services to Butier Engineering, Carollo Engineers, GK & Associates, Michael Baker International, MWH Contractors, Project Partners, Wallace & Associates, and Wood Environmental for a total aggregate not-to-exceed amount of \$10,000,000 over a five-year period, with two, one-year options to extend; and
- Authorize the General Manager to execute the single aggregate consultant contract, subject to non-substantive changes.

The Project Management, Engineering, and Construction Staff Augmentation Support Services Contract Award is consistent with ***Inland Empire Utilities Agency's (IEUA's) Business Goal of Wastewater Management*** specifically that IEUA is committed to meeting regional demands in an environmentally responsible and cost-effective manner.

**ACTION  
ITEM  
1C**

**Date:** December 18, 2019

**To:** The Honorable Board of Directors

**From:** Shivaji Deshmukh, General Manager

**Committee:** Engineering, Operations & Water Resources

12/11/19

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

**Subject:** RP-5 Expansion Finding of Consistency with the Program Environmental Impact Report

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**Executive Summary:**

In March 2017, IEUA certified the Facilities Master Plan Program Environmental Impact Report (PEIR). This document evaluated the potential environmental impacts associated with all of IEUA's Master Plans. Among the identified projects for consideration was a major upgrade for Regional Water Recycling Plant No. 5 (RP-5). The Preliminary Design Report (PDR) completed for the RP-5 Expansion provided the basic information used to evaluate the RP-5 upgrades in the PEIR. In accordance with State California Environmental Quality Act (CEQA) Guidelines Section 15168, IEUA must perform an evaluation following the completion of the project design to determine whether it is still appropriate to rely upon the PEIR for CEQA compliance or if a secondary second-tier environmental determination is required.

Tom Dodson & Associates was contracted to complete this evaluation, and they concluded the environmental circumstances at the RP-5 site have not substantially changed since the March 2017 PEIR was certified. The additional technical studies prepared for the State Revolving Fund CEQA Plus package verified PEIR findings for air quality, biology, cultural resources, and flood hazards. Therefore, the RP-5 Expansion will not have any new effects that were not addressed in the PEIR, and a second-tier environmental determination is not required.

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**Staff's Recommendation:**

1. Find the RP-5 Expansion falls within the scope of the Facilities Master Plan programs included in the 2017 PEIR; and
2. Find the PEIR adequately describes the activity for the purposes of CEQA.

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

*Account/Project Name:*

EN19001.00 - RP-5 Expansion to 30 MGD

EN19006.00 - RP-5 Biosolids Facility

*Fiscal Impact (explain if not budgeted):*

None.

**Prior Board Action:**

On March 15, 2017, the Board of Directors adopted Resolution No. 2017-3-1, certifying the Program Environmental Impact Report.

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**Environmental Determination:**

Program Environmental Impact Report (Finding of Consistency)

A Finding of Consistency with IEUA's Program Environmental Impact Report and a CEQA Plus evaluation for SRF Loan Funding have been completed.

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**Business Goal:**

The RP-5 Expansion Project is consistent with the Agency's Business Goal of Wastewater Management, specifically the Water Quality objective that IEUA will ensure that Agency systems are planned, constructed, and managed to protect public health, the environment, and meet anticipated regulatory requirements.

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**Attachments:**

Attachment 1 - RP-5 Expansion Finding of Consistency

# **Attachment 1**

# TOM DODSON & ASSOCIATES

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*Mailing Address:* PO Box 2307, San Bernardino, CA 92406

*Physical Address:* 2150 N. Arrowhead Avenue, San Bernardino, CA 92405

Tel: (909) 882-3612 ♦ Fax: (909) 882-7015 ♦ Email: [tda@tdaenv.com](mailto:tda@tdaenv.com)



November 4, 2019

Pietro Cambiaso, P.E.  
Deputy Manager of Planning  
& Environmental Resources  
Inland Empire Utilities Agency  
6075 Kimball Avenue  
Chino, CA 91708

Dear Pietro:

In March 2017, the Inland Empire Utilities Agency (IEUA) certified the Facilities Master Plan Program Environmental Impact Report (PEIR). This document evaluated the potential environmental impacts associated with IEUA's implementation of six Master Plans that encompass the full scope of this Agency's services and responsibilities as defined by the IEUA Board of Directors. As part of these Master Plans, IEUA also provided a Ten-Year Capital Improvement Plan that identified specific projects IEUA proposed to implement through 2027. Among the identified projects for consideration was a major upgrade for Regional Water Recycling Plant (WRP) No. 5 (RP-5), located in the City of Chino just east of the Intersection of Kimball Avenue and El Prado Road. A Preliminary Design Report (PDR) had been completed for the RP-5 facility upgrades, and this document provided the basic information used to evaluate the RP-5 upgrades in the PEIR. Please refer to the attached aerial photo of the proposed layout for the RP-5 upgrades (Attachment 1, Figure 2-8 of the PEIR) and the information summarizing the proposed improvements from Table 2-7 of the PEIR (provided as Attachment 2).

Since certification of the PEIR, IEUA proceeded to complete the engineering for the RP-5 facility upgrades and it recently received a 100% engineering submittal from the project engineer, Parsons. IEUA requested that Tom Dodson & Associates (TDA) review the 100% engineering submittal in the context of the certified PEIR and make a recommendation for a second-tier environmental determination under the California Environmental Quality Act (CEQA). Thus, the purpose of this evaluation is to determine whether it is appropriate to rely upon the PEIR for CEQA compliance in accordance with State CEQA Guidelines Section 15168 ("Program EIR, (c) Use With Later Activities." This Section states "Later activities in the program must be examined in light of the program EIR to determine whether an additional environmental document must be prepared." The required examination process is carried out below.

However, before assessing whether an additional environmental evaluation needs to be prepared, the first step in this review process is to determine whether the 100% engineered project is consistent or different than the project identified and evaluated in the PEIR. First and most important, the review of the 100% RP-5 engineering submittal verified that the overall footprint of the new facilities remains the same. All new facilities will be installed within the existing RP-5 WRP campus. During the development of the 100% design, the locations of facilities and types of processes underwent the following minor changes. The following text discusses these changes (with minor non-substantive edits) for each primary component of the proposed new treatment facilities as shown on Attachment 3, the General Layout Plan for the 100% submittal provided by Parsons.

## **Comparison of the PEIR and 100% Proposed Projects**

### Primary Treatment

**Primary Clarifiers:** The two new units in the 100% submittal have been relocated to the northwest of the location shown on Figure 2-8, east of the headworks. This was done to efficiently use the available space and plant hydraulics. The capacity, function, and treatment process did not change.

**Fine Screens:** This facility was relocated to the northwest of the locations shown on Figure 2-8, north of the headworks near the east end. This was done to efficiently use the available space and to utilize the plant hydraulics to eliminate the need for a new large pump station. The capacity, function, and treatment process did not change.

**Existing Biofilter:** The Main Odor Control Facility will be constructed at the location of the existing biofilter. The Main Odor Control Facility will utilize a different process than envisioned in the 2017 PEIR that will provide higher treatment capacity than the existing biofilter in a smaller footprint.

### Secondary Treatment

**Membrane Bioreactor:** The membrane bioreactor (MBR) will be located to the southwest of the location shown on Figure 2-8. The MBR replaces the function of the secondary clarifiers and as a result will be located in the footprint of two of the four existing secondary clarifiers to utilize the available space. The capacity, function, and treatment process of the MBR did not change.

### Tertiary Treatment

**Chlorine Contact Basin:** During design, it was determined that the MBR effluent quality will allow a higher capacity rating of the existing chlorine contact basins. As a result, the added chlorine contact basin shown on Figure 2-18 is not required, and it was deleted from the project.

### Solids Treatment Facility

**Gravity Thickener and Dissolved Air Flotation Thickener:** These two facilities have been replaced by the Thickening Building that is located to the north of the location of these two facilities on Figure 2-8. The whole solids treatment facility was rearranged to allow efficient routing of semi-trucks through the dewatering building and the plant. The Thickening Building will house rotary drum thickeners that will dewater both primary sludge and waste active sludge prior to digestion with the same capacity and function.

**Acid-Phase Digestion:** This digester was relocated to the north of the location shown on Figure 2-8. The whole solids treatment facility was rearranged to allow efficient routing of semi-trucks through the dewatering building and the plant. The capacity, function, and treatment process did not change.

**Methane Phase Digesters and Sludge Holding Tank:** These digesters and the sludge storage tank were relocated to the north of the location shown on Figure 2-8. The whole solids treatment facility was rearranged to allow efficient routing of semi-trucks through the dewatering building and the plant. The Methane Phase Digesters are now called Gas Phase Digesters but the capacity, function, and treatment process did not change.

**High-Pressure Gas Storage:** The head space and pressures in the gas phase digesters and sludge storage tank do not require the high-pressure storage. As a result, it was deleted from the project.

Dewatering Building: The design relocated this building to the northeast of the location shown on Figure 2-8. The whole solids treatment facility was rearranged to allow efficient routing of semi-trucks through the dewatering building and the plant. The capacity, function, and treatment process did not change.

Biofilter: The biofilter that was shown on Figure 2-8 at the south end plant was for the dewatering building odor control which is replaced by a smaller system that more effectively treats the odors from the dewatering process. It was relocated to the north and east of the location shown on Figure 2-8. The whole solids treatment facility was rearranged to allow efficient routing of semi-trucks through the dewatering building and the plant.

In summary, some of the facilities evaluated in the PEIR have been relocated to enhance the wastewater treatment process and a few of the original facilities envisioned in the PEIR have been eliminated, which is forecast to reduce the overall effects of implementing the proposed project.

### **Section 15168 Examination**

As indicated above, a program EIR can be used with later activities under certain circumstances. Section 15168 (c) "Use With Later Activities" states "Later activities in the program must be examined in light of the program EIR to determine whether an additional environmental document must be prepared." The FMP PEIR was a comprehensive document that examined the potential adverse environmental impacts from "Treatment Facility Upgrades," including RP-5. The environmental circumstances at the RP-5 site have not substantially changed since March 2017 PEIR was certified; the facilities that are proposed to be installed will be reduced relative to the facilities identified on Figure 2-8 and Table 2-7; and the additional technical studies prepared for the State Revolving Fund CEQA-Plus package verified PEIR findings for air quality, biology, cultural resources and flood hazards. Based on these factors, I recommend that the IEUA Board find that implementation of the 100% design RP-5 facility upgrades will not have any new effects that were not addressed in the PEIR.

### **Recommendation**

Pursuant to the above recommended finding, I recommend that the IEUA Board make the following findings when it approves the 100% design drawing for constructing the RP-5 Facility Upgrades:

- The RP-5 Facility Upgrades falls within the scope of the Master Plan programs included in the 2017 FMP PEIR
- The program EIR adequately describes the activity for the purposes of CEQA.

I am available to answer any questions and/or to attend a Board meeting when this item is considered for a decision.

Sincerely,



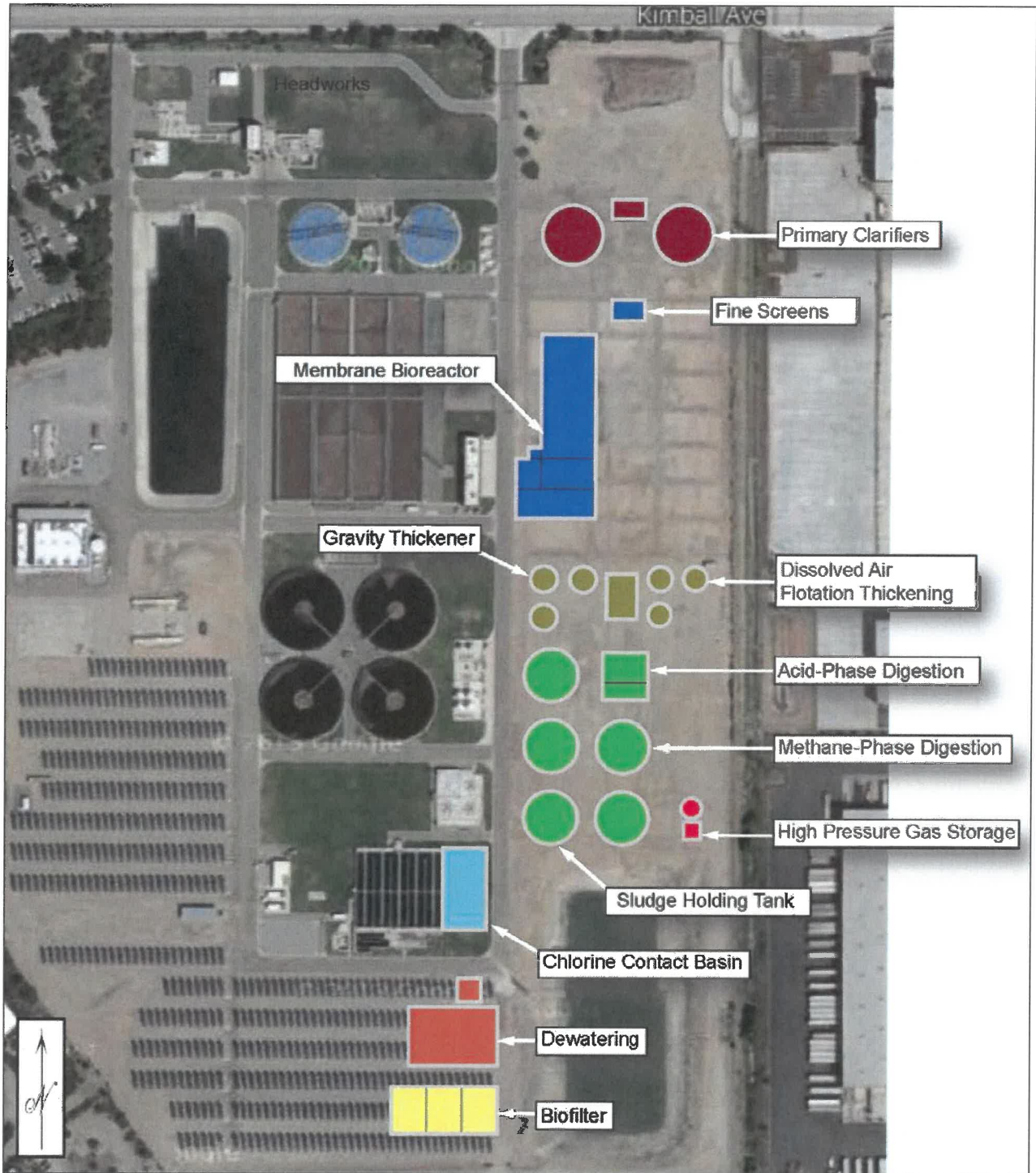
Tom Dodson

Attachments

cc: Jason Marseilles  
Jesse Pompa  
Brian Wilson



# ATTACHMENT 1



SOURCE: IEUA, Recharge Master Plan Update, 2013

IEUA Facilities Master Plan PEIR . 150283.07

**Figure 2-8**  
RP-5 Facilities Site Plan, Planning Year 2035

## ATTACHMENT 2

### 2. Project Description

The RP-5 Solids Handling Facilities Project would relocate solids handling facilities from RP-2 to RP-5, demolish RP-2 facilities, and relocate the RP-2 Lift Station to a location above the floodplain. This project would include the construction of thickening, digestion, dewatering, and ancillary facilities at RP-5. The RP-5 Expansion Project would expand the RP-5 liquid treatment capacity from a 15 MGD to 22.5 MGD, and would include construction of primary treatment, MBR, disinfection, and ancillary facilities.

**TABLE 2-7  
RP-5 FACILITY EXPANSION REQUIREMENTS FOR PLANNING YEAR 2035**

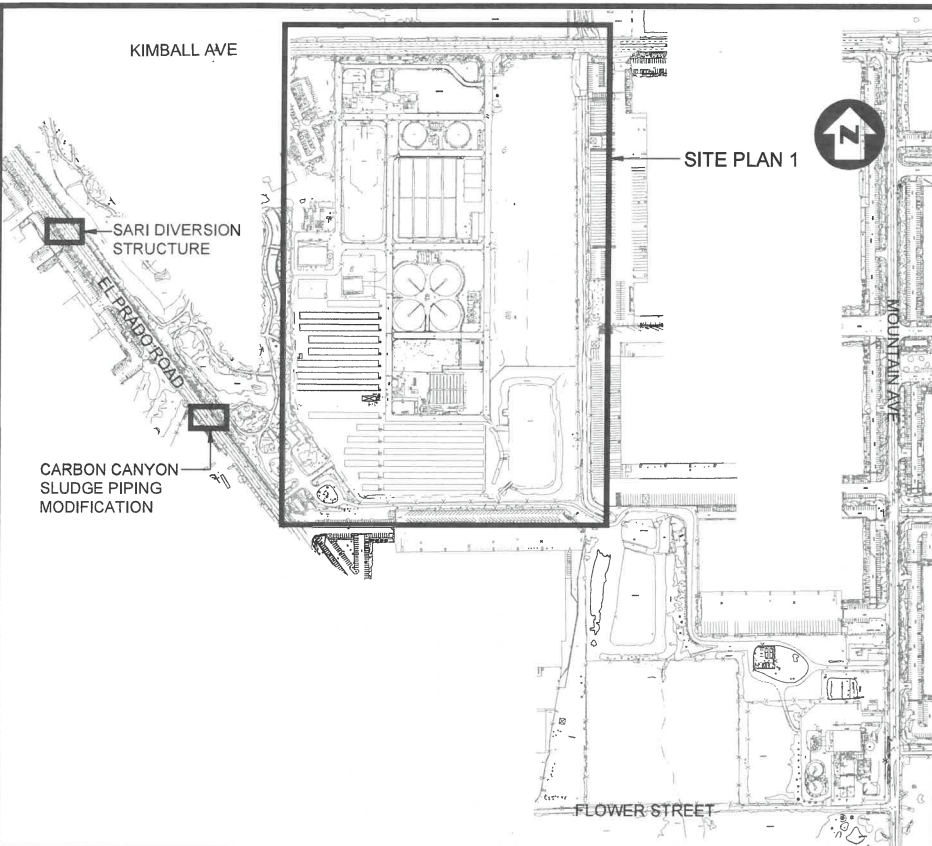
Facility	Number of Units	Size of Units
<b>Liquid Treatment</b>		
Primary Clarifier	2	100-foot diameter
Membrane Bioreactor	1 <sup>a</sup>	7.5 MGD
Chlorine Contact Basin	1	0.8 MG
<b>Solids Treatment</b>		
Gravity Thickener	3	45-foot diameter
DAFT	3	40-foot diameter
Acid-Phase Anaerobic Digestion	6 cells	20-ft <sup>2</sup> 30-foot SWD per cell
Methane-Phase Anaerobic Digestion	4	90-foot diameter 35-foot DWD
Sludge Holding Tank	1	90-foot diameter 35-foot SWD
High-Pressure Gas Storage	1	35-foot diameter w/ 30-ft <sup>2</sup> equipment pad
Dewatering Building	1	100-foot x 150-foot Building
Biofilter	3 cells	60-foot x 80-foot per cell
RP-2 Lift Station	1	10 MGD

NOTE: Includes fine screens, bioreactor, blowers, membrane tanks, RAS/WAS pump station, and associated equipment.

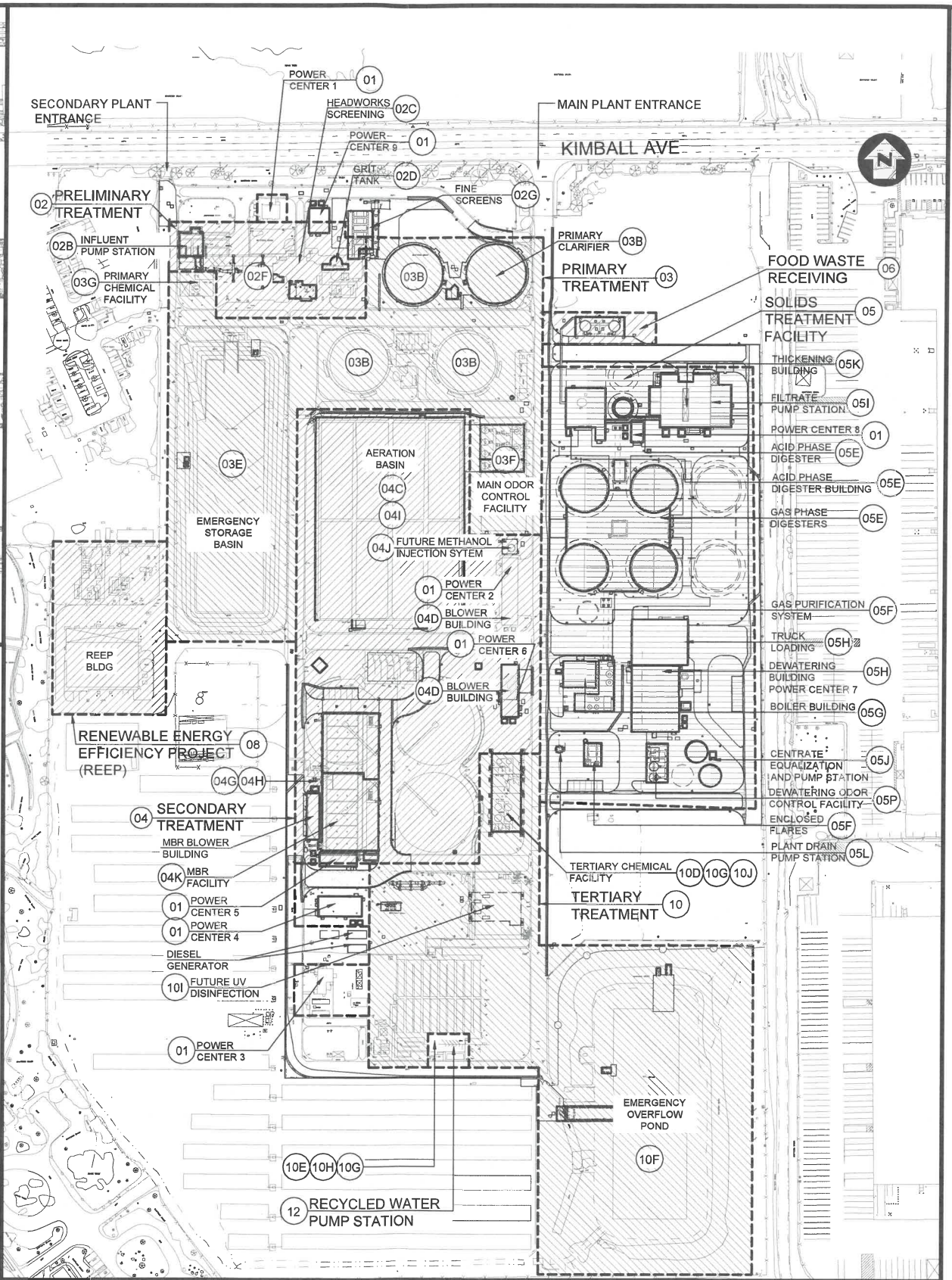
MG – million gallons // ft<sup>2</sup> – square feet // SWD – sidewater depth

Appendix B contains a table outlining all potential projects from each of the six Management Plans that would occur at RP-5.

W:\Pasadena Sector\Projects\IEUA\RP-1&RP-5\_Treatment\_Systems\3\_Detailed Design\_Phase\3.1\_CAD\_4\_GE\WORK\G-06\_GENERAL LAYOUT AND PROCESS AREA INDEX last saved by P06540D on 10/25/19 9:21:17 AM

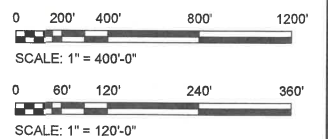


**OVERALL SITE PLAN**  
SCALE: 1" = 400'-0"



**SITE PLAN 1**  
SCALE: 1" = 120'-0"

### PROCESS AREA DESIGNATION	
01	POWER CENTER
02	PRELIMINARY TREATMENT
02B	INFLUENT PUMPING
02C	SCREENING
02D	GRIT REMOVAL
02F	HEADWORKS MODIFICATIONS
02G	FINE SCREEN
03	PRIMARY TREATMENT
03B	CLARIFIER DRIVE
03C	SLUDGE
03D	SCUM
03E	EMERGENCY STORAGE BASIN
03F	MAIN ODOR CONTROL FACILITY
03G	AUXILIARY
04	SECONDARY TREATMENT
04C	AERATION BASIN
04D	BLOWER AND AIR
04F	SCUM
04G	RAS PUMP STATION
04H	WAS PUMP STATION
04I	MLR PUMPS
04J	FUTURE METHANOL INJECTION SYSTEM
04K	MBR FACILITY
05	SOLIDS TREATMENT FACILITY
05D	POLYMER INJECTION
05E	DIGESTION
05F	DIGESTER GAS PURIFICATION AND FLARE
05G	BOILER BUILDING
05H	DEWATERING BUILDING
05I	FILTRATE
05J	CENTRATE EQUALIZATION
05K	THICKENING BUILDING
05L	PLANT DRAIN PUMP STATION
05P	DEWATERING ODOR CONTROL FACILITY
06	FOOD WASTE RECEIVING
08	RENEWABLE ENERGY EFFICIENCY PROJECT (REEP)
10	TERTIARY TREATMENT AND CHEMICAL FEED SYSTEMS
10D	CHLORINATION
10E	UTILITY WATER PUMP STATION
10F	EMERGENCY OVERFLOW POND
10G	DE-CHLORINATION
10H	EFFLUENT METERING
10I	FUTURE UV DISINFECTION
10J	CIP SYSTEM
12	RECYCLED WATER PUMP STATION



**PARSONS**  
100 WEST WALNUT STREET  
PASADENA, CALIFORNIA 91124  
(626) 440-2000



Designed	HS	07/2018				
Drawn	JD	07/2018				
Checked	SS	07/2018				
		Date	REV. NO.	DATE	BY	APRVD
						DESCRIPTION

RECOMMENDED BY: *[Signature]*  
PROJECT MANAGER: *[Signature]* DATE: 10/31/19

SCALE: AS SHOWN  
Bar Scale shown below is one inch on original drawing. If NOT one inch on this sheet, adjust scales accordingly.



OFFICE ADDRESS:  
6075 Kimball Avenue  
Chino, California 91708  
Telephone: (909) 995-1600

MAILING ADDRESS:  
Post Office Box 9020  
Chino Hills, California 91709

ISSUED FOR BID - 10/31/2019	SHEET G-06
REGIONAL WATER RECYCLING PLANT NO. 5 (RP-5) PROJECT NO. EN19001 & EN19006	SHEET NO. X OF 1659
GENERAL LAYOUT AND PROCESS AREA INDEX	PROJECT NO.
	DRAWING NO.

**ACTION  
ITEM  
1D**



**Date:** December 18, 2019

**To:** The Honorable Board of Directors

**From:** Shivaji Deshmukh, General Manager ASD

**Committee:** Engineering, Operations & Water Resources

12/11/19

Finance & Administration

12/11/19

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

**Subject:** Motor Control Center, Electrical Drive, and Control System Hardware Sole Source

---

**Executive Summary:**

On July 18, 2012, the Board of Directors adopted the Facilities Supervisory Control and Data Acquisition (SCADA) Master Plan, which prepared a road map for the migration from the existing Foxboro Invensys Distributed Control System (DCS) to a Rockwell Automation Enterprise SCADA system (PlantPax). To date, Carbon Canyon Water Reclamation Facility (CCWRF), Regional Water Recycling Plant No. 1 and No. 5 (RP-1/RP-5) have migrated to PlantPax. The Regional Water Recycling Plant No. 1 (RP-1) is currently in the design phase. During the migration of CCWRF, RP-4, and RP-5 it was determined the Rockwell PlantPax SCADA system had improved compatibility with Rockwell Allen Bradley motor control centers, electrical drives, and control system hardware resulting in more efficient operations and maintenance of the facilities and simplified designs. To ensure costs for the components are competitive, a standardization agreement between Inland Empire Utilities Agency (IEUA), Rockwell, and Royal Industrial Solutions (Rockwell's local distributor) has been drafted to provide IEUA discounts from Rockwell's list price of each component.

As such, staff is requesting a finding per Public Contract Code 3400(c; 2 & 3), which allows public agencies to specify a specific product for use if the awarding authority makes a finding that one or more conditions exist.

---

**Staff's Recommendation:**

1. Adopt a finding pursuant to Public Contract Code 3400(c) that the use of Rockwell Allen Bradley motor control centers, electric drives, and control system hardware: 1) match existing components in use at IEUA facilities; 2) the components are only available from Rockwell;
2. Authorize their procurement as a sole source for future O&M and capital projects for a duration of five years; and
3. Authorize the General Manager to execute the standardization contract with Rockwell and Royal Industrial Solutions, subject to non-substantive changes.

---

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

*Account/Project Name:*

None.

*Fiscal Impact (explain if not budgeted):*

None.

**Prior Board Action:**

On July 18, 2012, the Board of Directors adopted the Facilities SCADA Master Plan.

---

**Environmental Determination:**

Not Applicable

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**Business Goal:**

The use of Rockwell Allen Bradley motor control centers, electrical drives, and control system hardware is consistent with IEUA's business goal of Business Practices, specifically the efficiency and effectiveness objective that IEUA will apply best industry practices in all processes to maintain or improve the quality and value of the services we provide to our member agencies and the public.

---

**Attachments:**

Attachment 1 - Background

Attachment 2 - PowerPoint

Attachment 3 - Rockwell Standardization Agreement

# **Attachment 1**

## Background

---

Subject: Motor Control Center, Electrical Drives, and Control System Hardware Sole Source

---

The Facilities Supervisory Control and Data Acquisition (SCADA) Master Plan is based on the concept of an Enterprise SCADA system with seamless and transparent access from any of Inland Empire Utilities Agency (IEUA's) SCADA systems, including the wastewater treatment facilities, recycled water, and groundwater recharge systems. The master plan prepared a road map for the migration from the existing Foxboro Invensys Distributed Control System (DCS) to a Rockwell Automation Enterprise SCADA system (PlantPax). Additionally, the master plan identified a need for the following:

- Enterprise SCADA System
- Programming standards for cost effective implementation
- Long-term SCADA maintenance and technical support agreement
- Cost-effective solutions for end-of-life assets
- Integration with IEUA's Business System

On July 18, 2012, the Board of Directors adopted the Facilities SCADA Master Plan. The primary goal of the Facilities SCADA Master Plan is to define and document a road map for the implementation of the technology, practices, and organization required to meet IEUA's long-term vision for SCADA. IEUA's long-term vision of its SCADA system is to build a fully integrated and uniform system that provides enterprise-wide control and the tools necessary to maintain compliance and optimize operations. To date, Carbon Canyon Water Reclamation Facility (CCWRF), Regional Water Recycling Plant No. 1 (RP-1) and the Regional Water Recycling Plant No. 5 (RP-5) have migrated to PlantPax. The Regional Water Recycling Plant No. 1 (RP-1) migration is currently in the design phase.

During the migration of CCWRF, RP-4, and RP-5 it was determined the Rockwell PlantPax SCADA system had improved compatibility with Rockwell Allen Bradley motor control centers, electrical drives, and control system hardware resulting in improved operations and maintenance of the facilities and simplified designs. The success of these components can be attributed to their unique design as noted below:

1. Built-in single ethernet network.
2. Preconfigured device connections, IP addresses and subnet masks.
3. IntelliCENTER Software provides real time diagnostics and electronic documentation (i.e. schematics)
4. Studio 5000 software add-on profiles, predefined Logix tags and pre-engineered FactoryTalk View Human Machine Interface (HMI) Diagnostic faceplates.
5. Integration Assistant uses existing add-on profiles to automatically create controller tags eliminating errors and reducing integration time of intelligent devices in Studio 5000 software



These unique features result in overall efficiencies for Operations, Maintenance, and Engineering and reduces overall cost for these systems. Some of the benefits of the Rockwell Allen Bradley motor control centers, electrical drives, and control system hardware include:

1. Standardization of electrical components:
  - Reduction in design time including submittal review and factory acceptance testing.
  - Reduction and minimization of rework during or after initial startup due to overlooked requirements during design.
  - Reduction and minimization change orders.
2. Standardization of spare parts and local availability.
3. Improved reliability through the reduction of 3<sup>rd</sup> party add-on devices. (3<sup>rd</sup> party gateways, power monitoring, etc.).
4. Reduced programming time - availability of device drivers, power data from each device.
  - Non-Rockwell Allen-Bradley components result in extra programming for each electrical drive, digital overload, and power monitor.
5. Reduced Configuration Time - The use of Rockwell Allen Bradley motor control centers makes the installation of equipment simpler and reduces the need for much of the discreet wiring for status reporting to SCADA. The motor control centers can be configured and allow changes to be made faster and more efficiently.
6. Ease of expandability.
7. Improved maintenance troubleshooting due to additional availability of data.

To ensure costs for the Rockwell Allen Bradley motor control centers, electrical drives, and control system hardware are competitive, a standardization agreement between IEUA, Rockwell, and Royal Industrial Solutions (Rockwell's local distributor) has been drafted to provide IEUA discounts from Rockwell's list price of each component. Details of the discount pricing is provided in the table below:

Table 1: Rockwell Automation Discount Pricing

<b>Product Categories</b>	<b>Description</b>	<b>% Discount</b>	<b>Warranty</b>
<b>MCCs</b>	Low Voltage— Assembled	68% off List	3 Yr. Parts Warranty Included at No Cost (5 year parts warranty pending)
<b>MCCs</b>	Low Voltage— Unassembled Units/ Buckets	40% off List	3 Yr. Parts Warranty Included at No Cost (5 year parts warranty pending)
<b>Drives</b>	Engineered/ Configured to order, SSB	10% off Market Level	3 Yr. Parts Warranty Included at No Cost (5 year parts warranty pending)
<b>Software</b>	FactoryTalk	15 % off List	N/A
<b>Software</b>	ViewPoint	15 % off List	N/A
<b>Software</b>	VantagePoint	15 % off List	N/A
<b>Software</b>	FT Historian (Server Only)	20 % off List	N/A
<b>PLC</b>	Hardware	20 % off List	1 year Warranty
<b>HMI</b>	Hardware	20 % off List	1 year Warranty
<b>Services</b>	RA callout services	15 % off Rate	N/A

The duration of the agreement will be three years with the option of two one-year extensions for a total of five years.

Pursuant to the Public Contract Code 3400(b) provided below, Public Agencies are allowed to make a finding to sole source a product if any one of the findings below are valid. This board action is a request for the Board to make such a finding on two accounts and authorize the sole source of Rockwell Allen Bradley motor control centers, electrical drives, and control system hardware O&M and capital projects for a duration of five years.

***PUBLIC CONTRACT CODE - PCC***

***DIVISION 2. GENERAL PROVISIONS [1100 - 22355]***

*(Division 2 enacted by Stats. 1981, Ch. 306.)*

***PART 1. ADMINISTRATIVE PROVISIONS [1100 - 9203]***

*(Heading of Part 1 added by Stats. 1982, Ch. 1120, Sec. 2.)*

***CHAPTER 3. Formation [3000 - 3505]***

*(Chapter 3 added by Stats. 1983, Ch. 256, Sec. 81.)*

**ARTICLE 4. Preference for Materials [3400 - 3410]**

*(Heading of Article 4 renumbered from Article 5 by Stats. 2017, Ch. 816, Sec. 2.)*

**3400.**

(a) The Legislature finds and declares that it is the intent of this section to encourage contractors and manufacturers to develop and implement new and ingenious materials,

products, and services that function as well, in all essential respects, as materials, products, and services that are required by a contract, but at a lower cost to taxpayers.

(b) No agency of the state, nor any political subdivision, municipal corporation, or district, nor any public officer or person charged with the letting of contracts for the construction, alteration, or repair of public works, shall draft or cause to be drafted specifications for bids, in connection with the construction, alteration, or repair of public works, (1) in a manner that limits the bidding, directly or indirectly, to any one specific concern, or (2) calling for a designated material, product, thing, or service by specific brand or trade name unless the specification is followed by the words "or equal" so that bidders may furnish any equal material, product, thing, or service. In applying this section, the specifying agency shall, if aware of an equal product manufactured in this state, name that product in the specification. Specifications shall provide a period of time prior to or after, or prior to and after, the award of the contract for submission of data substantiating a request for a substitution of "an equal" item. If no time period is specified, data may be submitted any time within 35 days after the award of the contract.

(c) Subdivision (b) is not applicable if the awarding authority, or its designee, makes a finding that is described in the invitation for bids or request for proposals that a particular material, product, thing, or service is designated by specific brand or trade name for any of the following purposes:

(1) In order that a field test or experiment may be made to determine the product's suitability for future use.

***(2) In order to match other products in use on a particular public improvement either completed or in the course of completion.***

***(3) In order to obtain a necessary item that is only available from one source.***

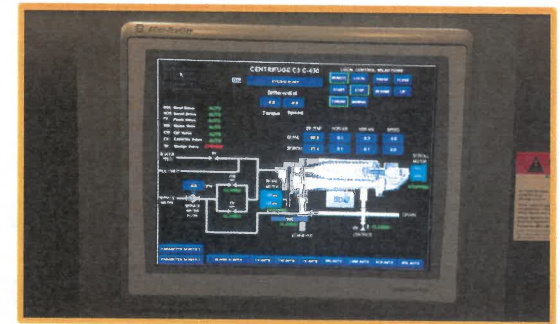
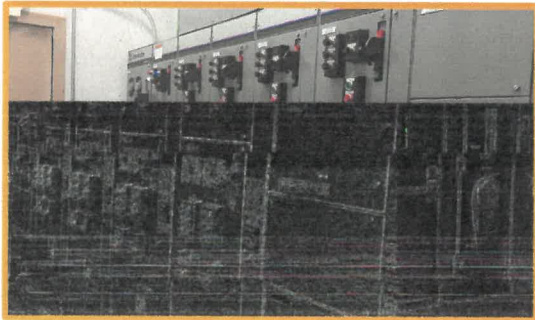
(4) (A) In order to respond to an emergency declared by a local agency, but only if the declaration is approved by a four-fifths vote of the governing board of the local agency issuing the invitation for bid or request for proposals.

(B) In order to respond to an emergency declared by the state, a state agency, or political subdivision of the state, but only if the facts setting forth the reasons for the finding of the emergency are contained in the public records of the authority issuing the invitation for bid or request for proposals.

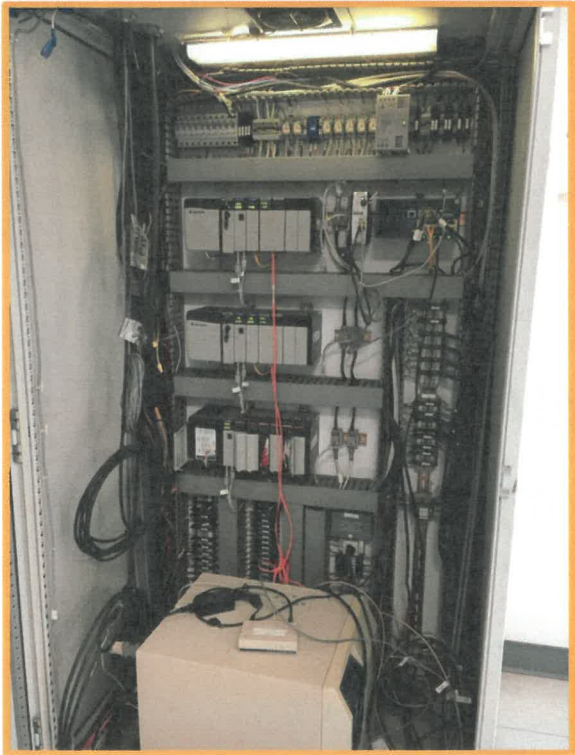
Staff recommends the Board of Directors adopt a finding pursuant to Public Contract Code 3400(c) that the use of Rockwell Allen Bradley motor control centers, electric drives, and control system hardware: 1) match existing components in use at IEUA facilities; 2) the components with improved compatibility are only available from Rockwell Automation.

# **Attachment 2**

# Motor Control Center, Electrical Drives, and Control System Hardware Sole Source



## Purpose and History



Rockwell Automation Motor Control Center

- Motor Control Center (MCC)'s, Electrical Drives, and Control System Hardware are located in all IEUA facilities
- Board of Directors adopted Facilities SCADA Master Plan to Transition to Rockwell Automation PlantPax SCADA System
- CCWRF, RP-4, and RP-5 have migrated to PlantPax. RP-1 is in design
- Rockwell MCC's, Electrical Drives, and Control System Hardware have improved compatibility with PlantPax
- This action will result in improved efficiency and lower costs

# Rockwell Allen Bradley Devices



**PlantPAX**



- Built-in single ethernet network reduces complex cabling
- Preconfigured device connections, IP addresses and subnet masks to reduce commissioning time and network troubleshooting
- IntelliCENTER Software provides real time diagnostics and electronic documentation
- Studio 5000 software add-on profiles, predefined Logix tags and pre-engineered FactoryTalk View HMI Diagnostic faceplates reduces programming time
- Integration Assistant uses existing add-on profiles to automatically create controller tags eliminating errors and reducing integration time of intelligent devices in Studio 5000 software
- Standardization of electrical components, spare parts, and training

# Standardization Agreement

- Standardization Agreement between IEUA, Rockwell Automation, and Royal Industrial Solutions
- Provides IEUA a discount from list price for parts and service
- Three-year term with two one-year extensions for a total duration of five years

Product Categories	Description	% Discount	Warranty
MCCs	Low Voltage—Assembled	68% off List	3 Yr. Parts Warranty Included at No Cost (5 year parts warranty pending)
MCCs	Low Voltage—Unassembled Units/Buckets	40% off List	3 Yr. Parts Warranty Included at No Cost (5 year parts warranty pending)
Drives	Engineered/Configured to order, SSB	10% off Market Level	3 Yr. Parts Warranty Included at No Cost (5 year parts warranty pending)
Software	FactoryTalk	15 % off List	N/A
Software	ViewPoint	15 % off List	N/A
Software	VantagePoint	15 % off List	N/A
Software	FT Historian (Server Only)	20 % off List	N/A
PLC	Hardware	20 % off List	1 year Warranty
HMI	Hardware	20 % off List	1 year Warranty
Services	RA callout services	15 % off Rate	N/A

IEUA Discount for Parts and Service



# Recommendation

- Adopt a finding pursuant to Public Contract Code 3400(c) that the use of Rockwell Allen Bradley motor control centers, electric drives, and control system hardware: 1) match existing components in use at IEUA facilities; 2) the components are only available from Rockwell;
- Authorize their procurement as a sole source for future O&M and capital projects for a duration of five years; and
- Authorize the General Manager to execute the standardization contract with Rockwell and Royal Industrial Solutions.

The use of Rockwell Allen Bradley motor control centers, electrical drives, and control system hardware is consistent with ***Inland Empire Utilities Agency (IEUA's) Business Goal of Business Practices***, specifically the efficiency objective that IEUA will apply best industry practices in all processes to maintain or improve the quality and value of the services we provide to our member agencies and the public.

# **Attachment 3**

# Standardization Agreement

between

## IEUA\_RA\_Royal



*Inland Empire Utilities Agency*

**A MUNICIPAL WATER DISTRICT**



**Rockwell  
Automation**



INDUSTRIAL SOLUTIONS  
**INLAND EMPIRE**

**October 10, 2019**

Version 3.0

**CONFIDENTIAL**

1.0	PURPOSE: .....	3
2.0	GOALS.....	3
3.0	PRODUCT SCOPE .....	4
4.0	DURATION OF AGREEMENT AND SITES INVOLVED .....	4
5.0	DISCOUNT PRICING .....	5
6.0	CONTRACTOR STANDARDIZATION PROGRAM .....	5
7.0	REQUIRED CONTRACTS AND CONDITIONS .....	6
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	Appendix B: Authorized Distributor Letter.....	9
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## 1.0 PURPOSE:

The purpose of this document is to capture and communicate the understanding of a collaborative relationship between IEUA, Royal and Rockwell Automation (RA) referred to as, the Standardization Agreement, hereafter known as the Agreement.

IEUA intends to standardize on the use of RA products and services within its facilities. RA and Royal have committed to an enhanced discount structure and package of values to support that.

IEUA is renewing and expanding their relationship with RA to continue to pursue its their agency goals and cost-reduction programs. Through this relationship, RA and Royal will proactively help IEUA to continue to reduce the total life cycle costs for factory products as defined in Section 3 of this Agreement and enhance service support capability to IEUA

## 2.0 GOALS

The focus of this Agreement is to ensure that IEUA, Royal and RA continue to work together in a spirit of cooperation to meet mutually defined and agreed upon goals that:

- 1) Reduce IEUA total life cycle costs (including purchase price, engineering, installation, commissioning, training, maintenance, parts, and services) for factory solutions, and help IEUA to quantify these elements of cost reduction.
- 2) Increase RA's position as the standard for factory automation products and services to IEUA by increasing the percentage of RA products purchased in relation to total purchases of the product groups identified in Section 3.
- 3) Continuously improve the quality of the relationship by developing more opportunities for both companies to meet their business goals.

### 3.0 PRODUCT SCOPE

IEUA identifies RA as standard for the products specified in the product scope in Appendix A for all of their facilities.

IEUA will use these products on all appropriate applications unless in the opinion of IEUA they are not economically or technologically justified. In the event IEUA determines that the products are not economically or technologically justified, RA will be given a reasonable opportunity to comment or respond.

RA and Royal will continue to provide the resources described in this Agreement to support its products at all IEUA sites.

In the spirit of this relationship, instances of RA products not meeting IEUA's requirements will be brought to RA's attention. At that point, RA will be given an opportunity to make modifications or additions to their product line in order to meet IEUA's requirements.

### 4.0 DURATION OF AGREEMENT AND SITES INVOLVED

This Agreement will commence on October 10, 2019 and continue until December 30, 2022. At that point, we will review with the intention to renew the agreement.

This Agreement will be subject to review a minimum of once per quarter by management representatives from IEUA, Royal and RA.

Either party may terminate this agreement, or at its option suspend performance of its obligations hereunder, after a default by the other party upon written notice to the defaulting party (hereafter the "Default Notice") specifying the Default, unless the other party cures the Default within 30 days after receipt of the Default notice. Either party may terminate this Agreement at any time by providing thirty (30) days' prior written notice to the other party. RA and Royal will not impose a cancellation fee.

## 5.0 DISCOUNT PRICING

In consideration for IEUA's increased purchases of RA products, RA and Royal have developed a discount structure to assist IEUA in meeting IEUA's project time line and cost-reduction goals, and to encourage the transition to RA products. The product discount structure for this Agreement will be both time and volume based. See Appendix A for discount structure.

This volume-based product pricing applies to all IEUA sites for the duration of the agreement. It is based upon the total site purchases for all supplied RA products. These products shall include hardware and software. Discounts have been selected to encourage the use of all RA products.

Royal will measure purchases on an annual basis and presents the savings to IEUA.

## 6.0 CONTRACTOR STANDARDIZATION PROGRAM

An important element in helping IEUA reach their cost-reduction goals is to minimize the life cycle costs of IEUA's investments made with contractor installed equipment.

The list of current and potential contractors and systems integrators will be reviewed by IEUA, RA, and Royal for this Agreement. IEUA agrees to specify at the time of request to its contractors that RA is the IEUA standard for products within the scope of this Agreement and buys the equipment through Royal Industrial Solutions (IEUA's local distributor). All RA hardware & software products, as stated in Appendix A, will be included in IEUA's total available savings dollars. Savings dollars will be calculated based upon Bill of Material (BOM) received by Royal.

RA and Royal agree to work with IEUA's contractors to provide the best solution using RA products in a way that is transparent to IEUA. RA will use its contractor standardization program that enables the parties to focus their collective resources on standardizing process and applications around specific contractors.

Pre-approved 3rd party contractors and systems integrators will purchase Rockwell hardware & software from an authorized Rockwell distributor in San Bernardino County- the same county as IEUA's headquarters located at 6075 Kimball Ave., Chino, CA in order to ensure local technical support and inventory.

RA and Royal will work to establish a separate commercial and technical relationship with each of IEUA's key 3<sup>rd</sup> party contractors. If IEUA evaluates the opportunity and decides to purchase equipment and ship that to the 3<sup>rd</sup> party contractor, Royal will accept orders from IEUA for shipment to IEUA contractor suppliers.

#### 7.0 REQUIRED CONTRACTS AND CONDITIONS

RA, Royal and IEUA agree to negotiate in good faith the purchase order terms and conditions to either adopt or revise these terms and conditions. Under no circumstances will either party insist upon terms and conditions that are in conflict with this agreement.



**Signatures**

**IEUA APPROVED BY:**

---

Shivaji Deshmukh  
General Manager, IEUA

**RA APPROVED BY:**

---

Polo Paredes  
Industry Manager, Rockwell Automation

---

MyAn Bourdon  
Account Manager, Rockwell Automation

**ROYAL APPROVED BY:**

---

Tom Thuerbach  
General Manager, Royal Industrial Solutions

---

Tyler Brubaker  
Sales Manager, Royal Industrial Solutions

**APPENDIX A: Rockwell Automation Pricing**

**Effective October 10, 2019 - December 30, 2022**

<b>Product Categories</b>	<b>Description</b>	<b>% Discount</b>	<b>Warranty</b>
<b>MCCs</b>	Low Voltage— Assembled	68% off List	3 Yr. Parts Warranty Included at No Cost (5 year parts warranty pending)
<b>MCCs</b>	Low Voltage— Unassembled Units/ Buckets	40% off List	3 Yr. Parts Warranty Included at No Cost (5 year parts warranty pending)
<b>Drives</b>	Engineered/ Configured to order, SSB	10% off Market Level	3 Yr. Parts Warranty Included at No Cost (5 year parts warranty pending)
<b>Software</b>	FactoryTalk	15 % off List	N/A
<b>Software</b>	ViewPoint	15 % off List	N/A
<b>Software</b>	VantagePoint	15 % off List	N/A
<b>Software</b>	FT Historian (Server Only)	20 % off List	N/A
<b>PLC</b>	Hardware	20 % off List	1 year Warranty
<b>HMI</b>	Hardware	20 % off List	1 year Warranty
<b>Services</b>	RA callout services	15 % off Rate	N/A

## **Appendix B: Authorized Distributor Letter**

September 16, 2019

Mr. Shaun Stone  
Inland Empire Utilities Agency 6075 Kimball Ave.  
Chino, CA 91708

Re: Rockwell Automation Authorized Distributors/Royal Industrial Solutions

Dear Mr. Stone:

Rockwell Automation extends and enhances its own significant automation capabilities by partnering with a network of authorized distributors in order to ensure we are able to meet our customers technical and logistics requirements. Just a few of the many benefits that customers enjoy working with their local authorized Allen-Bradley distributor include:

- Access to local distributor inventory (including for spares and replacement parts)
- Technical assistance from local distributor product specialists
- A knowledgeable staff that has access to factory training
- Rockwell Automation provided factory support of local distributor activities

This is to confirm that Royal Industrial Solutions currently is the only distributor appointed and authorized to sell Allen-Bradley Standard Controls, Drives, PLC/MMI, Rockwell Software products and all services offerings in the geographic area in which your facilities in the Inland Empire are located. As a matter of Company policy, full factory product and sales support is made available only to the local authorized distributor, and it is Rockwell Automation's practice and policy to always promote and recommend the use of that distributor to customers in that geographic area.

Should you have any questions, please do not hesitate to contact Royal Industrial Solutions at (951) 683- 6625 or our local Rockwell Automation sales office at (714) 938-9000.

Respectfully, Keith Hornberger  
Rockwell Automation Channel Account Manager  
714-306-2372 cell  
[kahornberger@ra.rockwell.com](mailto:kahornberger@ra.rockwell.com)

cc: Tyler Brubaker – Royal Industrial Solutions



## **APPENDIX C: Agreement Terms**

Effective OCT. 10, 2019 - December 30, 2022

### **Terms of Agreement:**

- This agreement is based on the commitment that IEUA will standardize on Rockwell Automation Hardware & Software where applicable.
- IEUA will be required to provide Rockwell Automation all Contractor Bills of Materials where applicable.
- Savings are calculated on total IEUA spend using IEUA project agreement pricing, for Hardware, Software, and Field Labor/Support. This includes purchases made through contractors.
- Should contractors supplying IEUA with equipment have agreements with RA that allow contractors to get lower prices than the IEUA prices, then the lower prices will apply where applicable and all other provisions of this contract will be unaffected.
- This agreement can be extended for an additional 1 or 2 years beyond the expiration date should IEUA request it.

**ACTION  
ITEM  
1E**



**Date:** December 18, 2019

**To:** The Honorable Board of Directors

**From:** Shivaji Deshmukh, General Manager

**Committee:** Engineering, Operations & Water Resources

12/11/19

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

**Subject:** Climate Change Action Plan Update

---

**Executive Summary:**

In 2018, IEUA staff developed a Climate Change Action Plan (CCAP) that described the vision and direction needed to bolster IEUA's water management system and minimize its carbon footprint. The CCAP established four main objectives that IEUA will pursue to develop an adaptable water management system that positively impacts climate change: maximize local water supplies; maintain the health of the groundwater aquifer; maximize system efficiencies; and measure performance.

The CCAP was adopted by the IEUA Board of Directors on November 21, 2018 and was then presented to the California State Water Resources Control Board (SWRCB). SWRCB requested additional information be added to the plan. IEUA staff has taken SWRCB's requests and updated the CCAP accordingly by adding clear, quantifiable greenhouse gas (GHG) reduction goals, a list of projects that will help IEUA meet this goal, and estimated GHG reductions associated with each project.

SWRCB's approval of the CCAP will strengthen IEUA's ability to pursue grant funds through the Clean Water State Revolving Fund Program.

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**Staff's Recommendation:**

Adopt the proposed 2019 Climate Change Action Plan.

---

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

*Account/Project Name:*

*Fiscal Impact (explain if not budgeted):*

Full account coding (internal AP purposes only):

- - -  
- - -

Project No.:

**Prior Board Action:**

On November 21, 2018, IEUA's Board of Directors approved the 2018 Climate Change Action Plan.

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**Environmental Determination:**

Statutory Exemption

CEQA exempts a variety of projects from compliance with the statute. This project qualifies for a Statutory Exemption as defined in Section 15262 of the State CEQA Guidelines. When the project is implemented, it will be subject to future environmental evaluation.

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**Business Goal:**

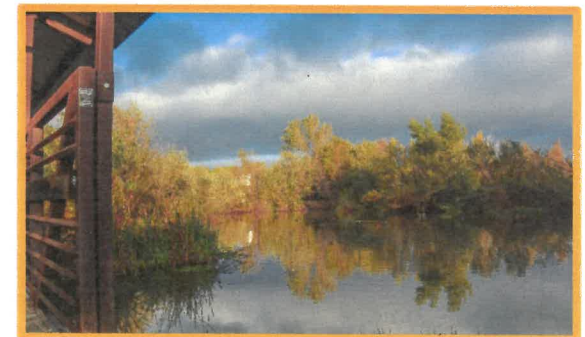
The CCAP provides a framework for project development that directly aligns with several Agency Business Goals, including Water Reliability, Wastewater Management, and Environmental Stewardship.

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**Attachments:**

- Attachment 1 - PowerPoint
- Attachment 2 - 2019 Climate Change Action Plan

# IEUA Climate Change Action Plan Update



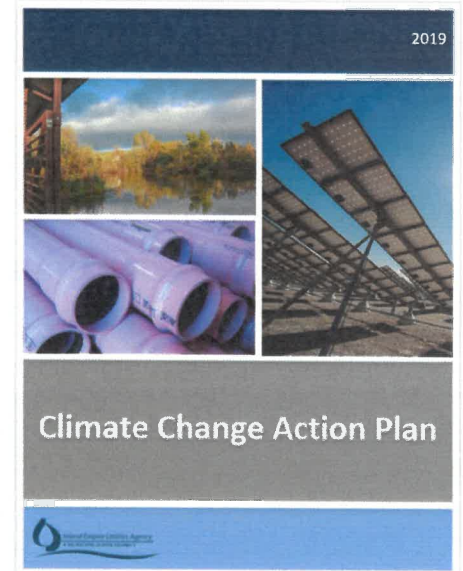


# Background

- “Go Gridless by 2020” Resolution (2012)
  - Energy independence from the grid, during the peak energy usage hours
- IEUA Business Goal (2013, 2016)
  - Energy Management Objective:  
*“IEUA will effectively manage energy resources including renewable energy initiatives and programs to achieve statewide environmental and renewable energy goals, and stabilize future costs”*
  - Environmental stewardship goal:  
*“IEUA is committed to enhancing and promoting environmental sustainability and the preservation of the region’s heritage.”*

# Climate Change Action Plan

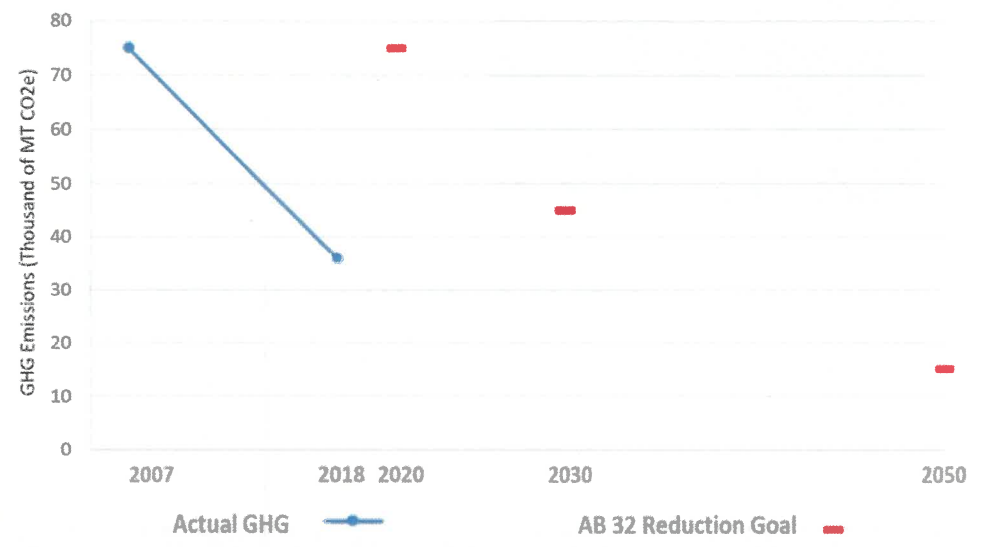
- IEUA Board adoption (2018)
- California State Water Resources Control Board review (2019)
  - Clear and quantifiable goals
  - List of specific potential projects
  - Greenhouse gas (GHG) reductions estimate
- Improve eligibility to receive funding



# Greenhouse Gas Reductions Goals

- California Global Warming Solutions Act of 2006 (AB 32)
  - 1990 levels by 2020
  - 40% below 1990 levels by 2030
  - 80% below 1990 levels by 2050
- IEUA Proposed Goals
  - 2007 levels by 2020
  - 40% below 2007 levels by 2030
  - 80% below 2007 levels by 2050

IEUA Greenhouse Gas Emissions



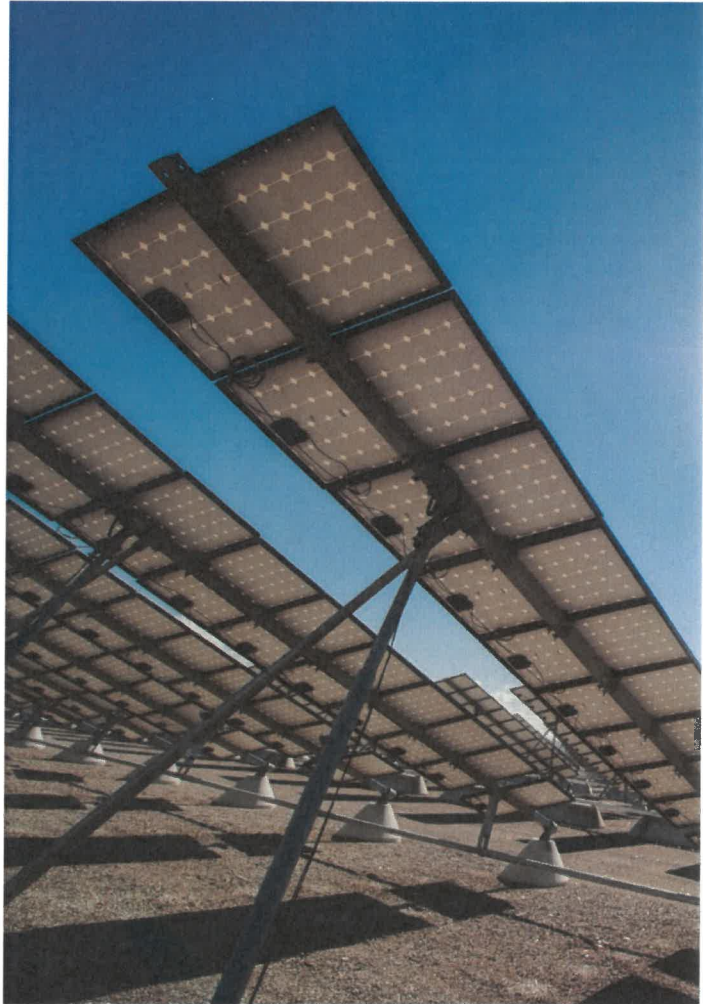
# Potential Projects and Greenhouse Gas Reduction

Project Type	Description	Estimated GHG Reduction (M Tons CO <sub>2</sub> e)
Energy Efficiency	Blowers and pumps rehab, operational optimization	3,695
Biogas	Beneficial use of biogas at RP-1 and RP-5	12,900
Solar	Installation 1.5 MW panels at IERCF	1,581
	Installation 0.07 MW panels at Water Quality Lab	61
	Replacement existing 3.5 MW panels with more efficient ones	490
	Installation new solar carports at various locations	563
	Installation new solar panels at RP-1	1,181
Hydropower	Installation in-conduit turbine	364
Fleet Vehicle	Replacement current fleet with electric vehicles	274
* Projects will be implemented if cost effective, following a business case evaluation		<b>21,110</b>

# Recommendation

- Adopt the 2019 Climate Change Action Plan.

The Climate Change Action Plan provides a framework for project development that directly aligns with several Agency Business Goals, including ***Water Reliability***, ***Wastewater Management***, and ***Environmental Stewardship***.



# Climate Change Action Plan



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# Executive Summary

While climate change is a global concern with far-reaching impacts, regional and state agencies must assess their own ability to adapt to future changes. The State of California has responded to the anticipated environmental and economic effects of climate change by implementing statewide regulations that target reductions of Greenhouse Gas (GHG) emissions.

The Inland Empire Utilities Agency (IEUA) is a regional wastewater treatment agency and wholesale distributor of imported water in western San Bernardino County. IEUA is responsible for providing service to approximately 875,000 people over a 242-square mile area. This Climate Change Action Plan (CCAP) seeks to identify the local impacts of climate change and lay the groundwork for developing projects and management practices that will allow IEUA to continue providing reliable services to the region while remaining a steward to the environment.

IEUA has voluntarily reported and verified its GHG emissions since 2013. IEUA has also become a leader among public agencies nationwide by pursuing innovative renewable energy projects that promote sustainability and reduce demands on a strained electrical grid.

This CCAP expands on these initial steps to integrate studies that IEUA has conducted which focus on the potential impacts climate change will have on IEUA's water management system. These studies evaluated the anticipated water supply and demand in the IEUA service area over the next 20 years and identified components within IEUA's portfolio that can be improved to create a resilient system that is adaptable to climate change.

In conjunction with changes to IEUA's water management system, the CCAP also establishes measures that can steer IEUA toward a net-zero impact with regard to GHG emissions. Using this information, the CCAP establishes goals and objectives that will be used to develop future projects. These goals satisfy four main areas of need to achieve a flexible, effective water management system:

- Maximize recycled water production and usage;
- Maintain health of the groundwater aquifer
- Maximize system efficiencies; and
- Measure performance.





# Introduction

Global climate change has contributed to intense heat, rising sea levels and loss of sea ice. Although the sum of potential impacts due to climate change comes with some uncertainty, there is no doubt this change is expected to disturb the pattern for water demand as well as the availability for supplies. There are many ways a warmer climate is likely to affect water management. Conditions in much of the western United States range from abnormally dry to extreme drought. The area is also experiencing a trend for reduced mountain snowpack with earlier melting runoff peaks in the spring. Temperatures are expected to rise, reducing soil moisture which will intensify summer heat waves. Due to increasing evapotranspiration through the warmer seasons, additional water resources may be needed to maintain proper irrigation and prevent the damaging effects of dry soil for the vegetation.

## Regional Water Supply and Demand

Coupled with a projected steady population growth, the effects of climate change will greatly impact IEUA’s ability to meet regional water demands. To accommodate the expected increase in urban demand, agricultural land has been converted for urban usages to meet the needs of the region. This shift will cause the percentage of water pumped for urban demand to increase over the next twenty-five years as the agricultural demand for water in these areas will diminish. As the regional economy continues to evolve, the demand for water and wastewater treatment will continue to increase; raising significant challenges and concerns to meet basic needs.

Strategic planning efforts are underway to shape the regional water management system in a way that can adapt to fluctuations in both demand

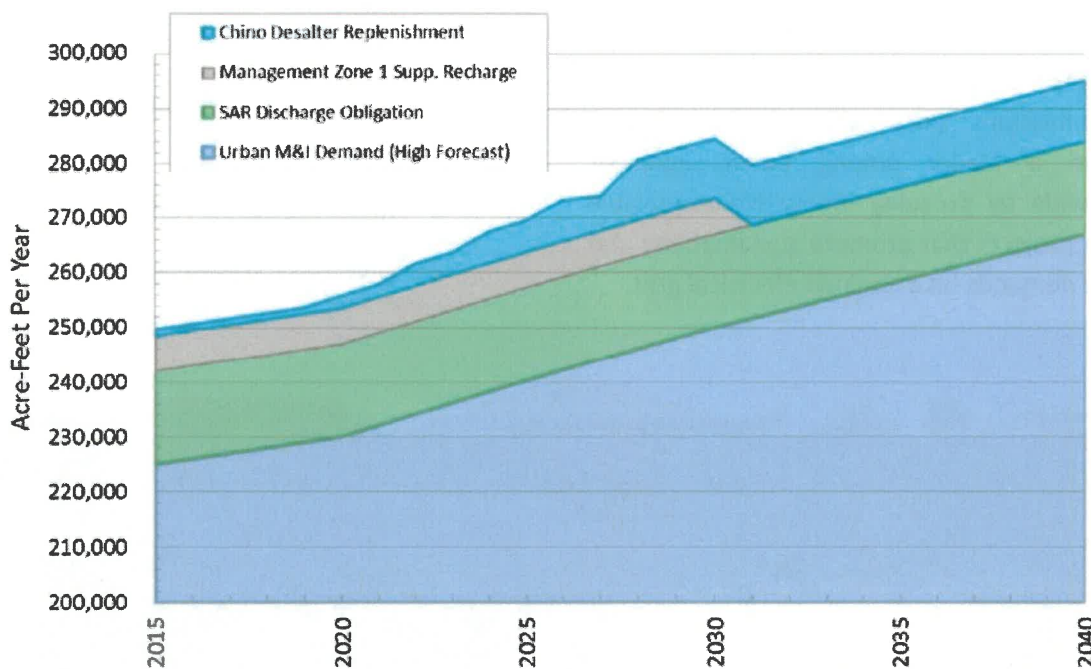


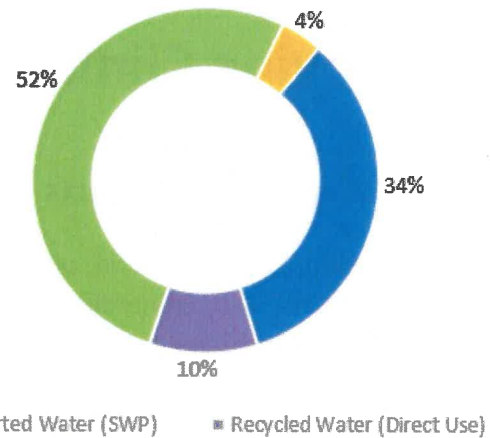
FIGURE 1. PROJECTED REGIONAL DEMANDS WITHIN IEUA SERVICE AREA THROUGH 2040

and supply as a result of climate change. IEUA’s 2016 Integrated Water Resources Plan (IRP) evaluated the anticipated regional water demand through 2040, shown in Figure 1. The IRP is the first time that the region’s planning has gone beyond a regional Urban Water Management Plan (UWMP) and the cities and water agencies have worked collaboratively to develop a comprehensive water resources plan. These IRP projections anticipate a continual increase in demand and include the total municipal and industrial demands as well as the amount of water needed to ensure regional sustainability by replenishing the groundwater aquifer and the Santa Ana River. The complete IRP is included as Appendix 1.

Both the IRP and the UWMP, which provide the foundation for the CCAP, were developed through public processes that engaged IEUA’s member agencies. IEUA incorporated comments from regional stakeholders that formed the final versions of each plan and evolved into the CCAP.

IEUA meets regional demand with supply from several sources, shown in Figure 2. These sources are all expected to be impacted by climate change, and each brings unique challenges to maintain their efficacy as a sustainable resource for meeting water needs.

Primary among these challenges will be IEUA’s ability to increase the amount of local resources used to meet local needs. Reducing the region’s



reliance on imported water from the State Water Project (SWP), which is pumped from Northern California, will not only reduce GHG emissions from the energy-intensive water conveyance process, but it will also enhance the flexibility of IEUA’s water management system in preparation for an uncertain climate future.

It should be noted that increasing production from local resources should not be done without also balancing with equivalent groundwater replenishment. This CCAP provides a framework for developing a water management portfolio that is resilient enough to meet continually

**FIGURE 2. IEUA WATER SUPPLY SOURCES FOR FISCAL YEAR 2017/2018**

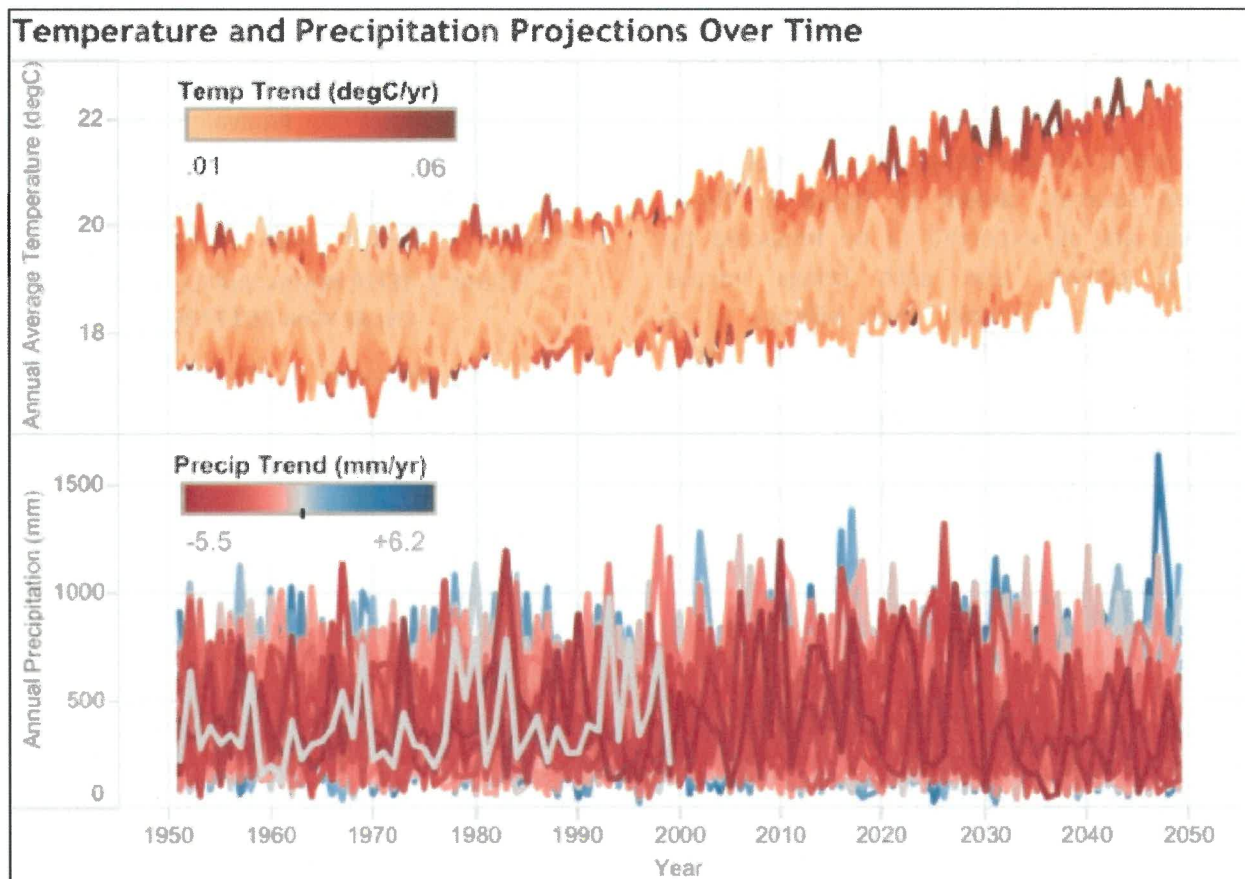
increasing demands in the face of unknown climate change impacts.

# Improving Climate Resilience

## Forecasting Climate Impacts

IEUA's location in the semi-arid, populous area of southwestern San Bernardino County has raised concerns regarding its ability to continue meeting regional water demands. These concerns were recently brought to the forefront when the region encountered extreme drought conditions. Although this drought appears to be consistent with long-term patterns of climate variability, its effects may be exacerbated by ongoing climate change. These effects may have a strong impact on the region's water supply and the length and magnitude of droughts, timing of

precipitation, and temperature-driven demand. IEUA partnered with the RAND Corporation (RAND), a multi-disciplinary, non-partisan research organization and educational institution headquartered in Santa Monica, California, to evaluate how adaptive, integrative water management portfolios could improve IEUA's abilities to meet customer needs under a wide range of futures. The complete RAND Memorandum is included as Appendix 2 and was an integral part of the IRP that helped shape this CCAP.



**FIGURE 3. HISTORICAL AND FUTURE ESTIMATED ANNUAL AVERAGE TEMPERATURE AND PRECIPITATION FOR THE IEUA SERVICE AREA**

RAND utilized a suite of general circulation models to generate a range of future climate projections for the IEUA service area. A total of 106 projections were downscaled and analyzed to forecast the anticipated climate scenarios that IEUA's planning efforts will need to address.

The analysis suggests that temperatures within the IEUA service area will rise over the coming decades and that annual precipitation will continue to be highly variable, with no consensus on trends towards wetter or drier conditions. Using data from the 106 projections, RAND compiled and displayed the annual average temperature and total precipitation estimates from 1950 to 2050 for the IEUA service area, shown in Figure 3. The figure stresses the unpredictability of these variables, as temperatures began to steadily increase in the region beginning around the 1980s while precipitation followed an uncertain pattern over the same period. This information underscores the importance of identifying IEUA's water management options and portfolios to ensure that future demand can be met under a variety of different hydrologic circumstances that appear to point toward higher temperatures and unreliable rainfall.

## Modeling Water Management

To determine how IEUA's water management portfolio would perform in the future, RAND conducted a study that used a mass balance model with estimated supply and demand values across the range of anticipated climate conditions.

The study consisted of a four-step process:

1. Compile information on a wide range of plausible water demand and supply futures reflecting climate change;
2. Develop a simple water management mass balance model to evaluate the performance of the IEUA system under a wide range of futures;
3. Create a portfolio development tool (PDT) to help IEUA planners and stakeholders compare attributes of different management options and develop portfolios for evaluation; and
4. Evaluate and compare how each proposed water management portfolio would enhance IEUA's ability to deliver urban water supplies in the future under different futures of climate and demand.

The 106 future climate projections allowed RAND to stress test the IEUA water management system in its ability to meet future demand. While it is impossible to predict, with certainty, what type of climatic change the region will encounter, having a diverse set of projections benefits planning efforts in the development of a robust, adaptable water supply system.

RAND developed the PDT used in the study with the input of IEUA and its member agencies. The PDT allowed users to review individual project attributes and determine the impact that these projects, in various combinations, would have on the regional water supply and demand.

Following collaborative discussions among the regional stakeholders, a list of eight portfolios was finalized and incorporated into the study, as shown in Table 1. These portfolios were then evaluated for their ability to meet regional demand under various conditions.

Portfolio Name	Portfolio Description
Portfolio #1	Maximize the Use of Prior Stored Groundwater
Portfolio #2	Maximize Recycled Water (Including External Supplies) and Local Supply Projects and Implement Minimal Water Efficiency
Portfolio #3	Portfolio 2 Plus Secure Supplemental Imported Water from MWD and Non-MWD Sources
Portfolio #4	Maximize Recycled Water (Including External Supplies) and Implement Moderate Water Efficiency
Portfolio #5	Portfolio 4 Plus Implement High Water Efficiency
Portfolio #6	Maximize Supplemental Water Supplies and Recycled Water Supplies
Portfolio #7	Maximize the Purchase of Imported Water from MWD and Implement Minimal-Moderate Level of Water Efficiency
Portfolio #8	Portfolio 7 Plus Maximize Recycled Water

**TABLE 1. WATER MANAGEMENT PORTFOLIOS USED TO DETERMINE FUTURE CLIMATE RESILIENCY**

### Climate Resiliency Study Results

Despite uncertainty over the specific effect of climate change on IEUA’s water supply, the various projections showed an overall tendency of future decreases in IEUA’s supply sources. The largest potential impact on supply is the imported water that IEUA receives from the SWP through the Metropolitan Water District (MWD), which indicates a need to improve regional sustainability and reduced dependence on the SWP supply.

Figure 4 shows the performance of each portfolio and their ability to meet the varying demands set forth in the model. Portfolios 4, 5, 6, and 8 all met demands in over 90 percent of the demand scenarios. Based on these results, IEUA can develop a water management system that is resilient against climate change by focusing planning efforts on projects that

maximize recycled water production and usage, implement water efficiency, and optimize supplemental water supplies.

Recycled water supplies, in particular, will prove to be a critical asset in bolstering a flexible management portfolio, as these supplies are:

- Not impacted by climate, making recycled water the region’s most climate resilient water supply;
- Needed to maximize supplemental water for groundwater recharge;
- Generated locally and can be beneficially used by all agencies; and
- A supplemental water source for the entire region with infrastructure that can be intertied with that of neighboring agencies to optimize availability and use.

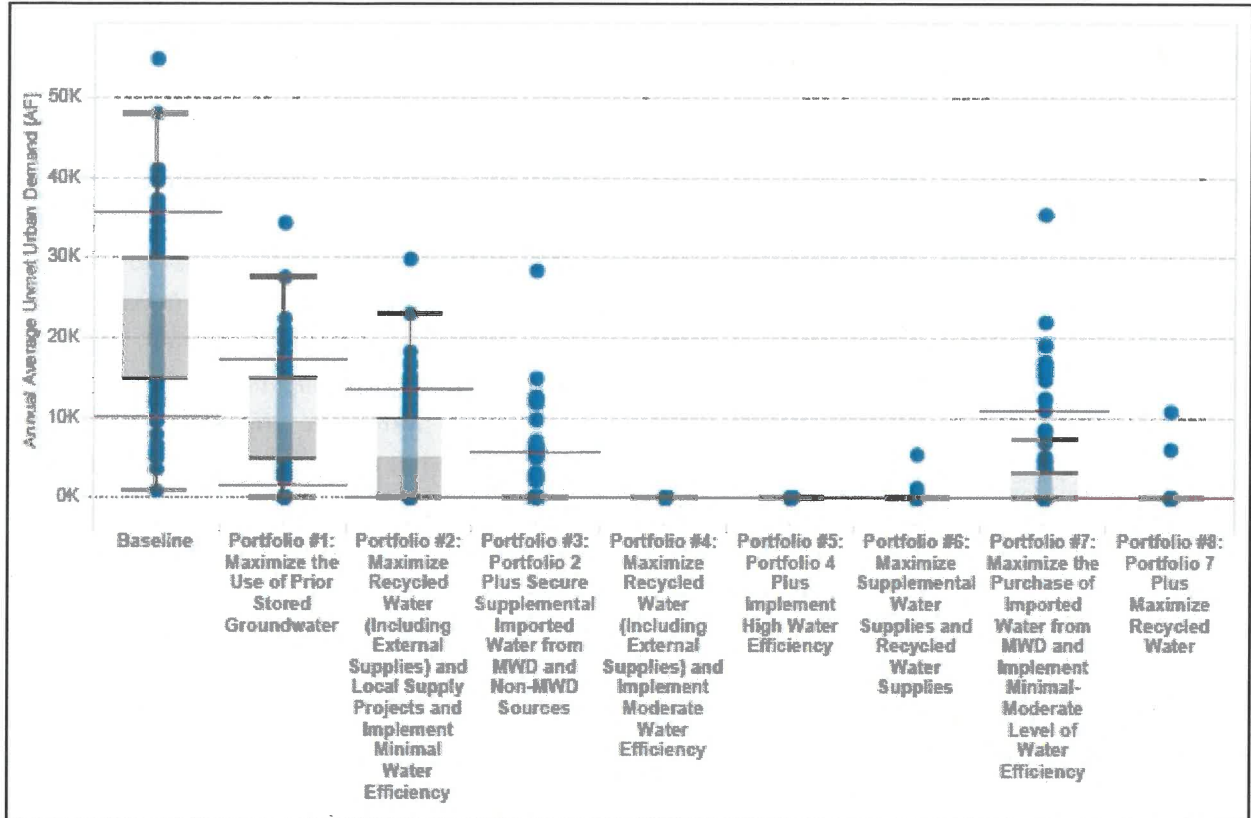


FIGURE 4. AVERAGE UNMET DEMAND (2036 - 2040) FOR IEUA PORTFOLIOS ACROSS CLIMATE PROJECTIONS FOR HIGH DEMAND SCENARIOS

# Greenhouse Gas Emissions Impacts

## Background

The California Global Warming Solutions Act of 2006 – also known as AB 32 – marked the beginning of an integrated climate change program. AB 32 set California’s first GHG emissions target, which called on the state to reduce emissions to 1990 levels by 2020, 40 percent below the 1990 levels by 2030, and 80 percent below 1990 levels by 2050. These targets represent benchmarks, consistent with prevailing climate science, charting an appropriate trajectory forward that is in line with California’s role in stabilizing global warming below dangerous thresholds. California is on track to exceed its 2020 climate target while the economy continues to grow.

Greenhouse Gases emitted in the state are regulated by the California Air Resources Board (CARB). CARB has also developed the Climate Change Scoping plan, most recently updated in November 2017, which targets industries and large facilities with high global warming potential and mandates reduction measures to steadily decrease GHG emission levels. Wastewater treatment plants and composting facilities are not subject to the reduction measures addressed in the Scoping Plan. In addition, no IEUA facility emits GHGs at a high enough level for mandatory reporting.

## The Connection between Water and Energy

According to the Public Policy Institute of California (PPIC), California’s water system

accounts for nearly 10 percent of the state’s GHG emissions and approximately 20 percent of statewide electricity use goes to pumping, treating, and heating water. The inextricable link between water and energy, termed, “the water-energy nexus,” highlights the importance of enhancing water-use efficiency and drought resilience while at the same time focusing efforts on lowering energy usage. As the population grows and we adapt to climate change, the adoption of policies and technologies that enhance water and energy management will be essential.

## IEUA GHG Emissions

In February 2014, IEUA became a member of The Climate Registry (TCR). TCR is a non-profit organization governed by the U.S. states and Canadian provinces and territories. TCR designs and operates voluntary and compliance GHG reporting programs globally and assists organizations in measuring, verifying and reporting their carbon footprints for benchmarking and management purposes. It is the only voluntary greenhouse gas (GHG) registry supported by this level of government collaboration. TCR’s reporting protocols align with international standards and provide a nexus between business, government and non-governmental organizations to share policy information and exchange best practices. Membership in TCR is voluntary and is a result of the Agency’s aim to practice environmental stewardship as a regional leader. As a member of TCR, IEUA has committed to publicly report annual GHG emissions despite not being subject to mandatory reporting. IEUA has reported GHG

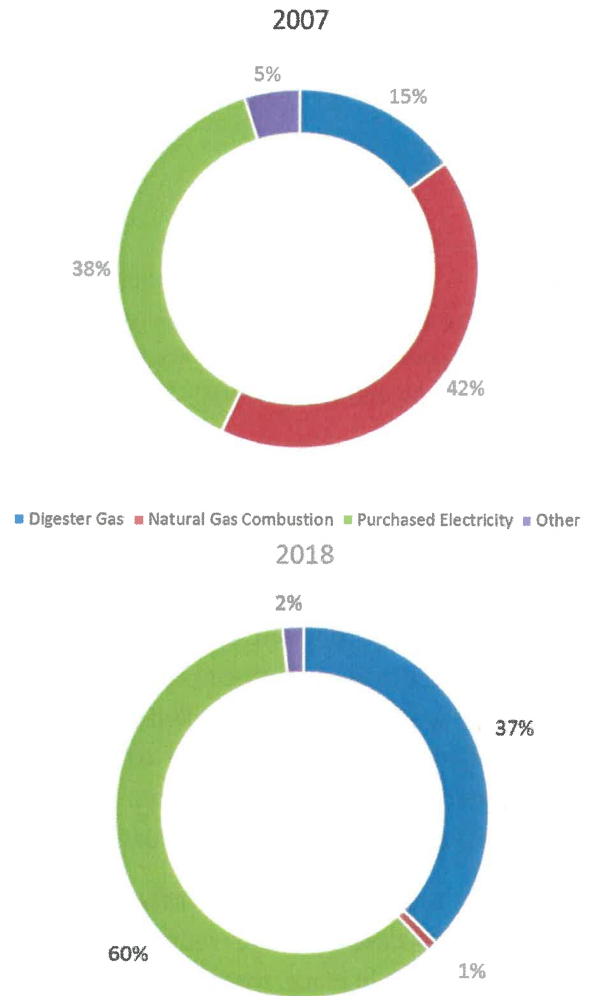
emissions, as carbon dioxide equivalency, from its facilities to TCR each year since 2013. The reported emissions use TCR protocols to calculate the metric tons of carbon dioxide equivalents (MT CO<sub>2</sub>e) emitted by IEUA facilities.

Prior to joining TCR in 2014, IEUA kept internal records of emissions. IEUA’s emissions baseline data is from 2007, the oldest emission data currently available, which was calculated using TCR protocols. AB 32 requires the state to reduce GHG emissions to 1990 levels by 2020. With no 1990 data available, IEUA set an emissions baseline using 2007 data. With 2020 approaching, IEUA has compared 2018 emissions data against the 2007 baseline to check the current track towards AB 32’s 2020 requirement.

Both direct (emissions from equipment operated within IEUA facilities) and indirect (emissions associated with services procured by IEUA, such as purchased electricity) emissions were included in the calculated values. As seen in Figure 5, the greatest source of GHG emissions in 2007 was from natural gas combustion. A large portion of the natural gas usage was from the cogeneration engines located at RP-1, RP-2, and CCWRF. The engines at RP-1 and RP-2 ran on both natural gas and digester gas, while the engine at CCWRF was powered solely by natural gas.

In comparison, the IEUA’s 2018 GHG emission sources had significant differences in distribution. Natural gas fell from 42 percent of the total GHG emitted down to 1 percent while digester gas emissions increased from 15 percent to 37 percent. This is due to the decommissioning of the cogeneration engines throughout the years due to the implementation of stricter air quality regulations. Climate change

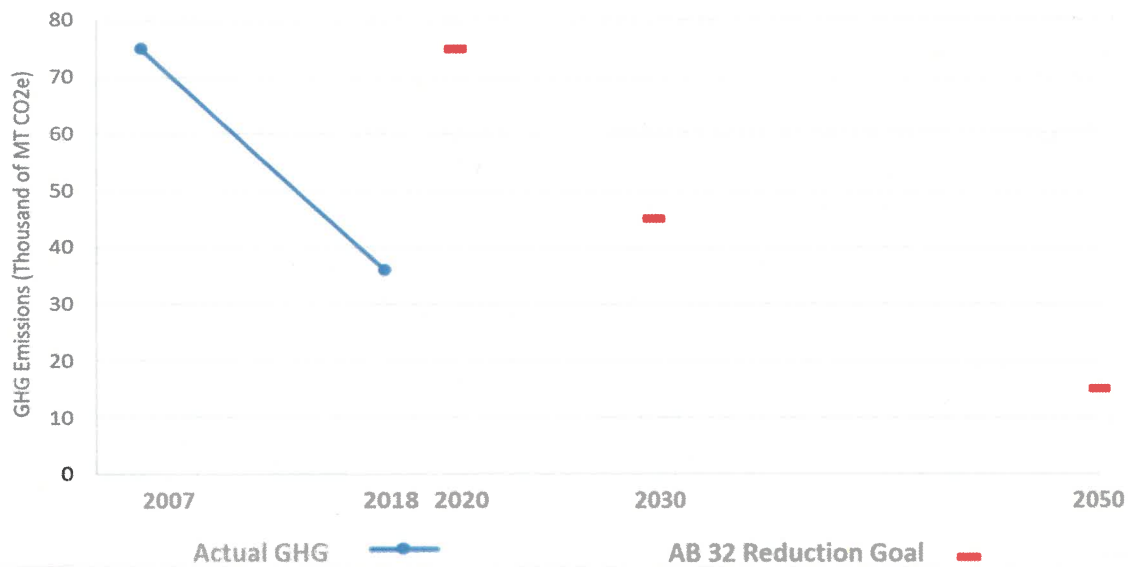
is a global concern, and IEUA’s reduction efforts must also be viewed through a global lens. While digester gas combustion results in more GHG emissions from IEUA facilities, it also lessens global GHG emissions. That is because the digester gas combustion emissions come from biogenic sources (GHGs that were recently contained in living organisms) and are therefore considered carbon neutral.



**FIGURE 5. PROPORTIONAL COMPARISON OF 2007 AND 2018 IEUA GHG EMISSIONS BY SOURCE**

*Note: The “Other” category is made up of emissions from heavy duty vehicles, IEUA fleet vehicles, biosolids hauling from treatment plants, emergency generators, and liquified petroleum gas combustion.*





**FIGURE 5. OVERALL IEUA GHG EMISSIONS FROM 2007 - 2018**

*Note: CO<sub>2</sub>e is a way of measuring the global warming potential (GWP) of various greenhouse gases by using carbon dioxide (CO<sub>2</sub>) as the reference so they can easily be compared. For example, one ton of methane is equal to 25 tons of CO<sub>2</sub>e because it's GWP is 25 times that of CO<sub>2</sub>*

TCR requires digester gas emissions to be reported, though they are distinguished from anthropogenic (human-made) source emissions.

Purchased electricity also increased from 2007 to 2018 from 38 percent to 60 percent. The increase in purchased electricity can be traced to the increased demand for recycled water. On a global scale, more recycled water usage means less water is being conveyed from the SWP, which is a net reduction in GHG emissions.

Although, the purchased electricity is likely to decline over time as more renewable energy projects are put in place, the percentage of GHG emissions from biogas will continue to increase due to the inevitable growing population. To help lower global GHG emissions, IEUA plans to implement projects that will beneficially utilize biogas.

The overall GHG emissions, as seen in Figure 6, include carbon neutral digester gas usage in addition to non-carbon neutral emission

sources. Even with the inclusion of digester gas, IEUA has reduced GHG levels by 52% since 2007. This accomplishment is due to the implementation of clean air projects including 5 MW of new solar panels across all facilities and the addition of a 1 MW wind turbine at the RP-4 facility. The generation capacity of these two projects is about 60% of the average load of all IEUA facilities combined (8 MW – 11MW). IEUA also saw GHG reductions from shorter biosolids hauling distances to the regional indoor composting facility instead of much further disposal sites. It should be noted that when biogas is flared, instead of used to offset alternate fuel sources, it is not carbon neutral. In 2018, IEUA flared 65% of its digester gas, leaving an opportunity to more effectively utilize this resource for greater global GHG reductions. Effective use of existing biogas is a key strategy to lower global GHG to AB 32 levels in 2050.

AB 32 requires that state reduce GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. IEUA has already surpassed the AB 32 40 percent

reduction by 2030 goal based on the only baseline available, 2007 GHG emissions. IEUA is targeting an 80 percent GHG emission reduction by 2050 based on the 2007 usage baseline. Implementation of more renewable projects, including beneficial utilization of available digester gas, will allow for larger reductions in global GHG emissions.

When the recent GHG emissions profiles are analyzed by facility over the same period, from 2013 to 2016, emissions have remained relatively steady or decreased, with the exception of recycled water pumping (RW) and two treatment facilities: RP-1 and RP-5. Each of these three facilities were subject to specific energy projects between 2013 and 2016 that impacted the energy usage and GHG emissions of the facility.

*RP-1:* Due to digester gas cleaning challenges, the RP-1 fuel cell was shut down temporarily in the fourth quarter of 2013 and permanently removed from service in early 2014. This resulted in increases from two GHG emissions sources: 1) purchased electricity and 2) the biogas flare. Beneficial use of the biogas produced on site is vital in achieving future global GHG reductions at the RP-1 facility.

*RP-5:* The food waste digestion process is located at the RP-5 SHF and began power generation in 2015. Total GHG emissions increased as a result of the biogas consumption in the new process. The GHG produced was from a carbon neutral digester gas usage that offset landfill GHG emissions, where it would have resulted in higher global GHG emissions from long-distance hauling followed by years of methane generation. The food waste digestion facility has since been shut down. A proposed RP-5 expansion project includes upgrading the emissions equipment on the currently inactive

cogeneration units, allowing for the increased use of digester gas for carbon neutral energy production instead of purchasing electricity.

*Recycled Water Pumping:* Each year, IEUA has increased the amount of recycled water that is pumped to regional end users or groundwater replenishment basins. Pumping this water is an energy-intensive process, which requires more purchased electricity or demand from renewable processes. On a global scale, more recycled water usage means less water is being pumped from the SWP, which is a net reduction in statewide GHG emissions. Improved regional sustainability in response to climate change will necessarily increase the amount of recycled water pumping at IEUA.

## GHG Reduction Goals

IEUA will continue to balance regional sustainability efforts with environmentally conscious energy management strategies to identify projects and objectives that holistically and cost-effectively address climate change efforts. IEUA will pursue the following strategies to minimize its facilities' climate change impacts.

*Reduce GHGs to AB 32 Levels:* IEUA will follow AB 32 standards using the oldest emission baseline data available to reduce GHG levels to 2007 levels by 2020, 40 percent below 2007 levels by 2030, and 80 percent below 2007 levels by 2050. Progress towards meeting these goals will be tracked yearly using TCR's reporting protocol and be made available to the public and IEUA's stakeholders through the TCR and regular board updates. AB 32 implemented Scoping Plan updates every five years. IEUA will use these milestone years to reassess GHG reduction progress and reevaluate GHG reduction projects as necessary. The next Scoping Plan update will

be in 2023 and will give IEUA enough time to plan for the 2030 milestone.

*Strive toward carbon neutrality:* IEUA's current renewable portfolio is capable of meeting approximately 50 percent of the agency-wide power needs.

*Report GHG Emissions:* IEUA will continue to report GHG emissions across all facilities to TCR. Tracking emissions will allow for performance measurement. Rather than focusing on lowering IEUA's direct GHG emissions, potential projects will be evaluated on their potential to reduce global GHG emissions. IEUA will also make this Climate Change Action Plan available to the public through its Board approval process and website.

*Increase energy efficiency:* Optimizing facility processes and retrofitting equipment can result in less power demand on the electrical grid. To date, IEUA has completed energy efficiency

projects saving 2,690 MWh per year resulting in 1,902 MT CO<sub>2</sub>e of GHG emissions saved per year.

*Reduce methane emissions:* Short-lived climate pollutants (SLCPs) are powerful compounds that remain in the atmosphere for a much shorter period than longer-lived climate pollutants, such as CO<sub>2</sub>. Methane (CH<sub>4</sub>) has been identified as a SLCP and is a common byproduct of the wastewater treatment process. IEUA will strive toward optimizing resource recovery by pursuing projects that beneficially use the methane generated in the digestion process as a renewable source of heat and/or power generation.

*Renewable Energy Credits:* In the event where meeting an 80 percent reduction by 2050 is not possible from the utilization of renewable resources, IEUA plans to purchase renewable energy credits (REC). The RECs will ensure that IEUA's GHG impact is aligned with the reduction standards set by AB 32.

# Project Goals and Objectives

## Project Development

Each year, pursuant to terms within its Regional Sewage Services Contract, the IEUA submits a ten-year forecast of system capacity demands and capital projects called the Ten-Year Capital Improvement Plan (TYCIP). The TYCIP identifies projects that are needed for the rehabilitation, replacement, or expansion of facilities owned or operated by IEUA.

The TYCIP also serves as a roadmap to achieve IEUA’s vision and goals based on the condition of facility assets and forecasted projections of water and wastewater needs.

Several planning documents, such as the Asset Management Plan, the Integrated Water Resources Plan, the Wastewater Facilities Master Plan, and the Urban Water Management Plan, have been developed with the intent of formulating the vision and projected needs of IEUA’s facilities and the region it serves. This CCAP serves as an additional planning document that will establish goals and objectives for IEUA’s future planning efforts.

Based on the information presented in this CCAP, IEUA has identified key areas that should be addressed to create a resilient water and

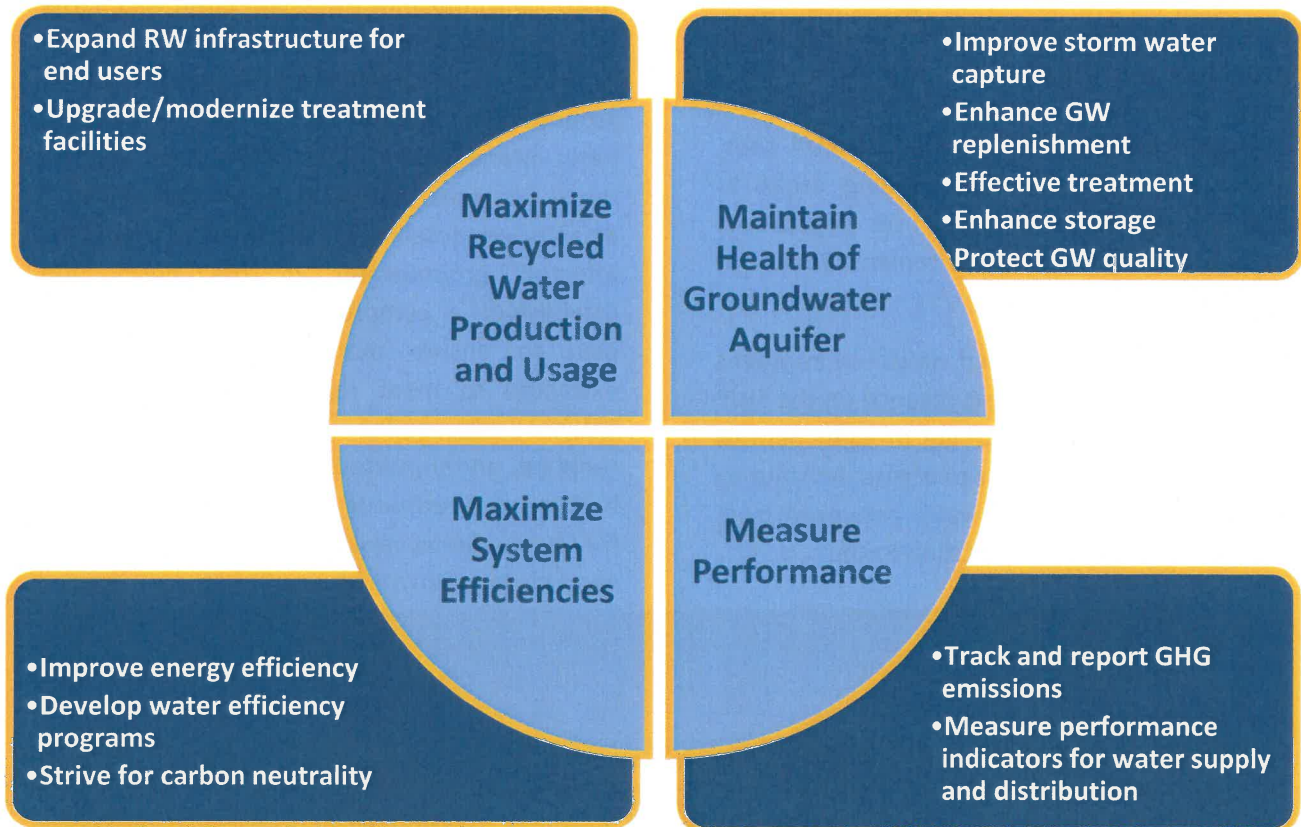


FIGURE 7. IEUA PROJECT GOALS TO MITIGATE THE EFFECTS OF CLIMATE CHANGE

wastewater management system that also contributes to GHG emission reductions. Specific objectives within these areas will be established and used to develop projects that will prepare IEUA's system for the effects of climate change while also minimizing the system's impact on the environment. The goals and objectives are described in greater detail below.

### Maximize Recycled Water Production and Usage

IEUA's wastewater treatment facilities currently produce Title 22-compliant recycled water that can be used by end users for irrigation purposes or conveyed to groundwater replenishment basins to recharge the Chino Basin aquifer. Increased recycled water production and usage within the Chino Basin will ensure less reliance on the SWP, thereby reducing the significant power needs associated with pumping water from Northern California.

**Objective:** Expand infrastructure at IEUA sites, within the region, or surrounding areas to enhance capabilities for end user application, storage, or groundwater replenishment of recycled water.

**Benefit:** Enhancing recycled water use improves regional sustainability. Less reliance on the SWP supply offers flexibility during drought periods and reduces electricity usage across the state by reducing the amount of water conveyed from Northern California to the Chino Basin.

**Objective:** Upgrade and/or modernize facilities to ensure effective water treatment and continued compliance with all regulatory requirements.

**Benefit:** Compliance with environmental regulations is paramount to meeting IEUA's business goals and avoiding service interruptions for all end users. As assets age concurrently with increasingly stringent regulatory requirements, improvements must be made to the wastewater treatment plants to ensure effective treatment. Maintaining modern facilities reduces the risk of non-compliance and enhances the reliability of recycled water for end use and groundwater replenishment.

### Maintain Health of Groundwater Aquifer

Historically, much of the Chino Basin was home to agricultural use and dairy farms, which resulted in high levels of salts and nitrates in the groundwater aquifer. As part of an Optimum Basin Management Plan (OBMP) to address these concerns, the Chino Basin Watermaster established desalination facilities to treat the affected groundwater in the basin and established a comprehensive basin recharge plan to ensure that groundwater that is extracted to meet regional demand is also balanced with aquifer replenishment with storm, recycled, and imported water. Maintaining this balance and ensuring that the basin's water meets regulatory requirements is imperative in securing long term sustainability.



**Objective:** Improve storm water capture through improvements to the groundwater replenishment system infrastructure.

**Benefit:** Because precipitation within the Chino Basin is highly variable and often scarce, storm water capture is a valuable commodity. Replenishment of the groundwater aquifer with storm water reduces the need and associated electricity used to convey recycled and/or imported water to the recharge basins.

**Objective:** Enhance groundwater replenishment capabilities within the Chino Basin through infrastructure upgrades.

**Benefit:** Increasing groundwater replenishment improves regional sustainability and facilitates hydraulic control of the basin. Upgrading the replenishment system infrastructure can improve flexibility in the type or amount of water conveyed to the recharge basins. Increased flexibility is a key component to establishing an adaptable water distribution system that can meet demands of an uncertain climate.

**Objective:** Treat groundwater effectively to remove harmful contaminants and ensure a healthy aquifer.

**Benefit:** Effective pollutant removal ensures continued environmental compliance and uninterrupted service to end users.

**Objective:** Protect the groundwater quality by properly maintaining and upgrading infrastructure to prevent system failures that may contaminate the groundwater.

**Benefit:** Preventing future contamination ensures a healthy aquifer, continued environmental compliance, and uninterrupted service to customers. In addition, preventative maintenance is more cost-effective than corrective maintenance.

**Objective:** Enhance storage capabilities of storm, recycled, or imported water through expansion of existing infrastructure or collaboration with surrounding water systems.

**Benefit:** Increasing water storage during years of high precipitation will bring the flexibility needed to withstand periods of drought. Working with other water systems in the area can benefit the entire region, optimizing the use of assets and minimizing the need for energy-intensive water imports.

## Maximize System Efficiencies

The concept of the water-energy nexus highlights the inextricable relationship between water and energy. Simply put, generating power requires significant amounts of water, and treating and conveying water requires a significant amount of power. As a water agency taking a leadership role in environmental stewardship, IEUA identifies the need to optimize its management and both water and power.

**Objective:** Improve energy efficiencies at IEUA facilities.

**Benefit:** Wastewater treatment and recycled water conveyance are very energy-intensive processes. Strategic management and regular performance assessments of these systems can identify opportunities to save on energy usage. Less demand on the energy utilities will result in fewer GHG emissions into the atmosphere.

**Objective:** Develop water efficiency and/or conservation programs within the region.

**Benefit:** Reducing reliance on supplemental water supplies can not only be achieved through infrastructure improvements, but also through decreasing the water demand within the region.

Development and implementation of regional water conservation programs that educate on the importance of water efficiency or incentivize reduced usage can be an effective way to optimize the water supply and progress toward regional sustainability.

**Objective:** Strive for carbon neutrality through implementation of renewable power generation and beneficial use of resources.

**Benefit:** IEUA has a diverse renewable energy portfolio across its treatment plants, including 5.0 MW of solar, a 1 MW wind turbine, and a 1.5 MW cogeneration engine fueled by biogas generated. The clean power generated from these processes can combine to account for 50 percent of IEUA's electricity needs, which results



in a significant demand reduction from the electrical grid. IEUA plans on taking advantage of renewable power by phasing out fleet for electric vehicles over time. IEUA's portfolio also integrates battery storage systems that can displace up to 4 MW of demand from the grid during peak periods. Expansion of this portfolio with additional renewable generations will reduce GHG emissions associated with combustion of fossil fuels that are associated with power generation at large-scale utility power plants. Future portfolio expansion may not be limited to on-site resources. For instance, diversion of regional organic waste for anaerobic digestion introduces a new renewable stream into IEUA facilities and results in a reduction of global GHG emissions.

### Measure Performance

Improvements in overall system management can only be verified if key performance indicators are effectively tracked. Increasing water and energy efficiency requires comparison against baselines or previous periods, and the efficacy of these project goals will not be proven until sufficient performance data has been collected and analyzed.

**Objective:** Report GHG emissions annually through The Climate Registry.

**Benefit:** Annual tracking of IEUA's GHG emissions profile will allow the Agency to determine the effectiveness of implemented reduction measures. Using this information, planning efforts can focus on projects that will have the greatest impact on emissions reductions.

**Objective:** Track key performance indicators for recycled, storm, and imported water usage within IEUA's management system.

**Benefit:** Using this performance data, IEUA can identify potential improvements to the system to optimize water usage and supply with the goal

of reducing the energy needed to convey water into and within the region.



# Potential Projects

## Potential Projects Background

IEUA maintains a list of implementable future capital projects that will allow the agency to continue to prepare its system for the effects of climate change. These projects will also minimize IEUA's system's impact on the environment, including the reduction of greenhouse gas emissions. The majority of the projects being explored fall into four categories, solar, hydropower, biogas (renewable methane), and energy efficiency. All four categories focus on increasing the use of zero-carbon energy sources while reducing the total amount of energy the agency requires. The implementation of zero-carbon and energy efficiency projects will result in GHG reductions both locally and regionally. IEUA's goal is to implement these projects while continuing to maximize recycled water production and usage, maintaining the health of the groundwater aquifer, maximizing system efficiencies, and measuring performance.

## Potential Project List

The current list of projects being explored by IEUA are in varying degrees of planning and review with some being feasible for installation as soon as 2020 while others are still 10 or more years out. With IEUA already meeting the GHG reductions goal set for 2030, the focus is on long-term carbon-based energy reductions that will reduce GHG emissions and ultimately empower the agency to meet its 2050 GHG reduction goal. The list is in a constant state of adjustment and is updated as new technologies become commercially feasible, current technologies become outdated, new funding and grant sources emerge, and state or federal policies change. While in no way comprehensive, the list outlines a potential path for IEUA to meet its 2050 GHG reduction goals.

To date, IEUA has identified projects that have the potential to reduce GHG emissions at all

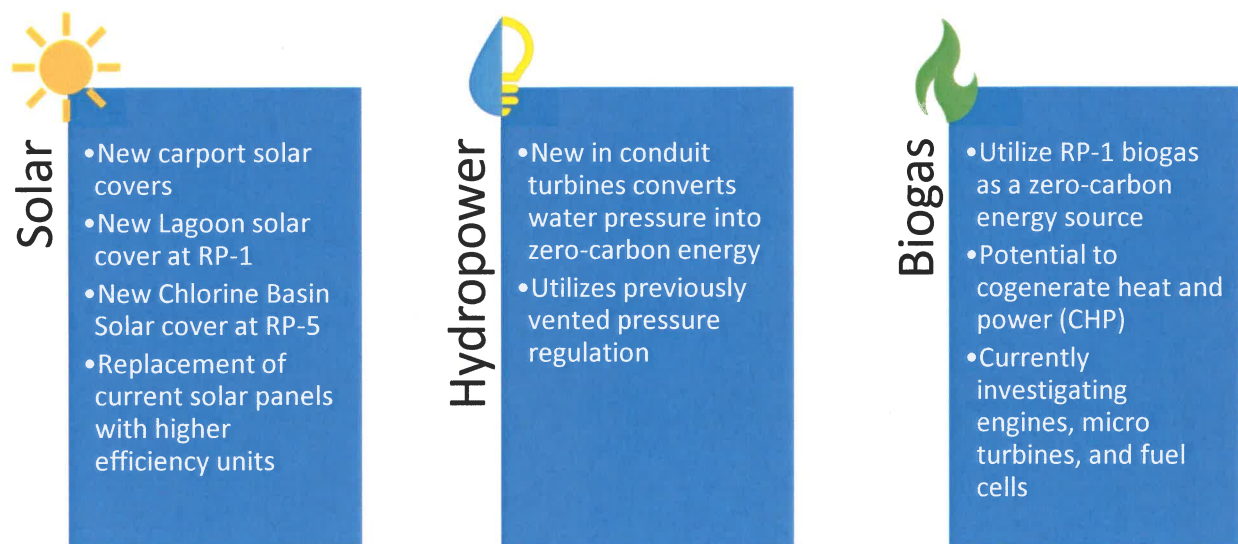


FIGURE 8. IEUA POTENTIAL PROJECT HIGHLIGHTS

Project Type	Description	Estimated GHG Reduction (MT CO2e)	Feasible Start Date	Estimated Cost	Potential Funding
Solar	Replacement of existing 3.5 MW SunPower solar across 4 facilities. Current 20 year PPA will end in 2028, and the panels will be replaced with higher efficiency units under a new 20 year PPA	490	2029 when current PPA will expire	\$0 with new PPA	
	Operation of 1.5 MW AMS solar at IERCF started in 2019. Current 20 year energy management service agreement (EMSA) will end in 2039, and the panels will be replaced with higher efficiency units under a new PPA	1,581	2039 when current ESMA will expire	\$0 with new EMSA	
	Addition of 70 kW of solar panels on the rooftop of the Water Quality Lab was completed in 2018 and will start operation in 2020.	61	2020	\$275K	SRF Loan
	Addition of carport solar panels at various locations under a new PPA.	563	2030	\$0 with new PPA	
	Addition of a solar panel cover to RP-1 Lagoon Number 3 under a new PPA.	1,181	2030	\$0 with new PPA	
Hydropower	In conduit turbine that converts previously wasted vented pressure into zero-carbon energy.	364	2021	\$0 with new PPA	CEC CalSEED Grant, CPUC SGIP, USBR WaterSMART
Biogas	Utilize existing renewable methane at RP-1 to cogenerate heat and power (CHP) through engines, micro turbine, or fuel cell	12,900	2022	\$0 with new PPA; Up to \$23M without PPA	CPUC SGIP
Energy Efficiency	Combination of many individual upgrades to the various plants. Including blower and pump replacement or rehab and the addition of evaporative coolers	3,695	Ongoing	\$3.5M	SCE
Fleet Vehicle Replacement	Replace current fleet with EVs, including on site charging infrastructure	274	2022-2030, depending on release date of EV trucks	\$3.2M	CARB CVRP Rebate

FIGURE 9. IEUA POTENTIAL PROJECT LIST

facilities by a total of 21,110 metric MT CO<sub>2</sub>e of GHG. This reduction is more than the total MT CO<sub>2</sub>e of GHG required to reduce GHG levels 80 percent below 2007 levels by 2050.

Advancements in zero carbon technologies have progressed exponentially over the last decade. IEUA believes that this progress will continue and that currently undiscovered, GHG reducing projects will come to fruition within the next 30 years allowing for even greater GHG reductions.

### Project Implementation

These projects will be considered for inclusion in IEUA's TYCIP, which is informed by several of IEUA's planning documents to generate the capital improvement program for the Agency. The TYCIP is intended to identify projects that are needed to: 1) properly maintain, rehabilitate, or replace aging infrastructure at the Agency's facilities; and 2) achieve the planning needs of the regional system to meet future growth.

Development of the TYCIP is a collaborative Agency-wide effort that requires input from all departments, including Planning, Engineering, Operations, Maintenance, and Finance. The projects contained in this plan will be evaluated during this TYCIP development process, and the Planning Department will take the lead on seeking their inclusion in the capital program.

### Clean Electric Infrastructure

In addition to the individual efforts being made by IEUA to reduce GHG emissions, the State of California has made its own strides towards reducing emissions and increasing the use of renewable energy sources. In September of 2018, Governor Jerry Brown signed SB 100 into law. SB 100 pledged to transfer 100 percent the state's electricity to zero-carbon and renewable

resources by 2045. SB 100 defines zero carbon energy sources as solar, wind, small hydro, renewable methane, geothermal, biomass, ocean wave, or fuel cells using renewable fuels. As California starts to maximize the use of zero-carbon energy sources to produce electricity, energy users in the state will see GHG emissions from energy usage continue to drop.

IEUA's goal to reduce GHG levels 80 percent below 2007 levels by 2050 will be achieved through the implementation of local zero-carbon energy projects combined with statewide efforts to capitalize on zero-carbon energy sources for electricity production. IEUA and the State of California are aligned in their support of alternative carbon free energy sources including solar, wind, small hydro, and renewable methane.

While the list of currently identified projects are enough to bring IEUA to its 2050 reduction goal, IEUA understands the need to combine future, not yet identified, local projects and the State's cleaner, carbon-free electrical grid in order to maximize GHG reductions. In the event currently identified projects are not implementable, future projects are not identified, and California fails to meet its zero-carbon goals, IEUA plans to purchase renewable energy credits (REC). The RECs will ensure that IEUA's GHG impact is aligned with the reduction standards set by AB 32.

# Appendices

**Appendix 1 – Integrated Water Resources Plan: Water Supply & Climate Change Impacts 2015-2040**

Link -

<https://www.dropbox.com/s/4tng6azu0blabyr/19287%20D.%20Appendix%201%20IRP%202015-2040.pdf?dl=0>

**Appendix 2 – RAND Memorandum: “Evaluating Options for Improving the Climate Resilience of the Inland Empire Utilities Agency in Southern California”**

Link –

<https://www.dropbox.com/s/tvy06l5pyx89um2/19287%20E.%20Appendix%202%20RAND%20MEMO.pdf?dl=0>

**ACTION  
ITEM  
1F**

**Date:** December 18, 2019

**To:** The Honorable Board of Directors

**From:** Shivaji Deshmukh, General Manager

**Committee:** Engineering, Operations & Water Resources

ASW  
12/11/19

**Executive Contact:** Randy Lee, Executive Manager of Operations/AGM

**Subject:** Contract Amendment for Janitorial Services

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**Executive Summary:**

One of the responsibilities of Facilities Management is to provide a safe, clean, and healthy work environment for staff and visitors. In order to consistently meet this task, the Agency contracts with a janitorial service provider to perform the needed services. The scope consists of the daily cleaning of 28 buildings throughout Agency-owned facilities. This janitorial contract was established through a competitive bid process in 2015. The term of the contract was for five-years at \$166,593 per year and a total contract value of \$832,965. However, due to unforeseen circumstances and additional services required, the current contract is expected to exhaust the total contract amount by January 2020.

The unforeseen circumstances in this case involved the annual escalation of California's minimum wage started in 2017. This increase will continue annually until the minimum wage reaches \$15/hour in 2022. In addition, the newly constructed water quality laboratory, RP-1 training room, and office trailer require janitorial services. Further, street sweeping was added for the treatment facilities due to increased construction activities and facility tours.

Due to reasons stated above, the original annual service amount of \$166,593 has grown to \$251,400. The original contract value of \$832,965 is to be increased by \$200,000 to complete the service term in 2021 to a total of \$1,032,965.

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**Staff's Recommendation:**

1. Approve the janitorial services contract amendment with Priority Building Services, LLC, in the amount of \$200,000; and
2. Authorize the General Manager to execute the contract amendment.

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**Budget Impact** *Budgeted* (Y/N): Y *Amendment* (Y/N): Y *Amount for Requested Approval:* \$ 200,000

*Account/Project Name:*

*Fiscal Impact (explain if not budgeted):*

**Prior Board Action:**

December 16, 2015 - Janitorial Maintenance Service Contract Award

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**Environmental Determination:**

Not Applicable

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**Business Goal:**

Fiscal Responsibility - IEUA is committed to safeguarding the Agency's fiscal health to effectively support short term and long term needs, while providing the best value for our customers.

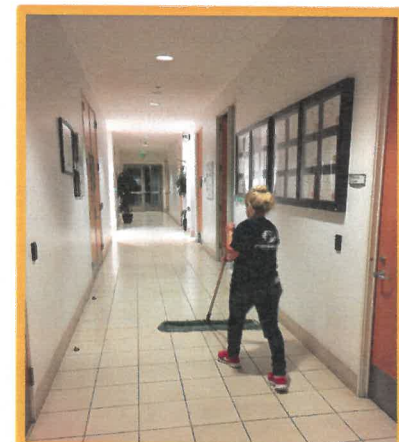
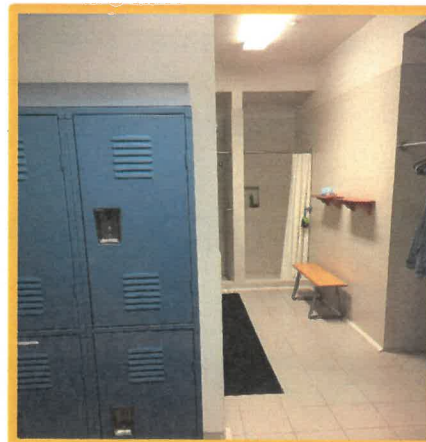
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**Attachments:**

Attachment 1 - PowerPoint

Attachment 2 - Janitorial Services Contract Amendment 460002020-009

# Contract Amendment for Janitorial Services





# Janitorial Services

- Priority Building Services contract started December 2015
  - Contract Services for 28 buildings (156,292 sq. ft) include:
    - Daily cleaning offices, restrooms, showers, and glass doors; vacuuming carpeted areas; and mopping and sanitizing floors
    - Monthly & quarterly cleaning includes street sweeping, stripping and waxing floors, cleaning kitchen ovens, refrigerators, carpets, chair fabric and furniture, and pressure washing headquarter buildings
- Original contract \$166,593/year or total value of \$832,965
- Janitorial contract scope of work has increased over the past four years.



# Contract Amendments

- CPI Increases (2017, 2018, 2019)
- Minimum Wage Increase (2019)
- Added Services:
  - 2016: Street Sweeping (RP-1, RP-4, CCWRF)
  - 2018: Water Quality Lab
  - 2019: New RP-1 Training Room, CBP Trailer, & Street Sweeping (as needed)



# Janitorial Services

Date	Contract Amendments	New Monthly Service Fees	Monthly Difference	Annual Service Amount	Contract Balance
12/16/15	Contract Agreement	\$13,879.00	0	\$166,548.00	\$832,965.00
4/13/16	001 - RP-1, RP-4 & CCWRF Street Sweeping added	\$14,646.00	\$767.00	\$175,752.00	
9/28/16	002 - Price revision to RP-1, RP-4 & CCWRF street sweeping (larger street sweeper unit)	\$14,999.00	\$353.00	\$179,988.00	
4/10/17	003 - CPI Increase of 2.5%	\$15,373.98	\$374.98	\$184,487.76	
7/18/18	004 – CPI Increase of 3.1%	\$15,850.57	\$476.59	\$190,206.84	
10/12/18	005 – Added Water Quality Lab building services	\$19,112.11	\$3,261.54	\$229,345.32	
2/14/19	006 – Added RP-1 Training Room services	\$19,477.11	\$365.00	\$233,725.32	
3/26/19	007 – CPI and Minimum wage increases of 5%	\$20,450.96	\$973.85	\$245,411.52	
6/30/2019	<b>End of FY 2019 Balance</b>				<b>\$188,712.93</b>
11/14/19	008 – Chino Basin Project Trailer Service & as needed event street sweeping services	\$20,950.96	\$500.00	\$251,411.52	
12/31/2019	<b>End of Calendar Year Projected Balance</b>				<b>\$64,007</b>
2020	Projected CPI Increase of 5%	\$21,998.50	\$1047.54	\$264,007.00	
1/3/2021	<b>Projected Deficit to Reach End of Contract</b>				<b>(\$200,000)</b>

# Recommendation

- Approve the janitorial services contract amendment with Priority Building Services, LLC, in the amount of \$200,000; and
- Authorize the General Manager to execute the contract amendment.

The Agency Wide Janitorial Service Contract, is consistent with ***IEUA's Business Goal of Fiscal Responsibility*** that IEUA is committed to safeguarding the Agency's fiscal health to effectively support short term and long-term needs, while providing the best value for our customers.



**CONTRACT AMENDMENT NUMBER 4600002020-009  
FOR  
JANITORIAL MAINTENANCE SERVICES**

THIS AMENDMENT NUMBER 4600002020-009, is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2019, 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"), Priority Building Services, LLC, of Brea, California (hereinafter referred to as "Contractor"), for continuing Janitorial Maintenance Services. The effective result of this adding additional funding to the contract. The contract will be revised as follows:

**SECTION SIX, COMPENSATION, IS CHANGED TO ADD THE FOLLOWING PARAGRAPH:**

As compensation for additional work performed under this Contract Amendment Nine, Agency shall pay Contractor a NOT – TO – EXCEED maximum of \$1,032,965.00, which represents an increase of \$200,000.00 to the Contract as approved by SAP Purchase Requisition 10051697.

**All other terms and conditions of Contract 4600002020 shall remain in full force and effect.**

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.

The parties hereto have caused the Contract to be amended as of the day and year written above.

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

**PRIORITY BUILDING SERVICES, LLC:**

\_\_\_\_\_  
Shivaji Deshmukh P. E. (Date)  
General Manager

\_\_\_\_\_  
Scott Nankervis (Date)  
Vice President

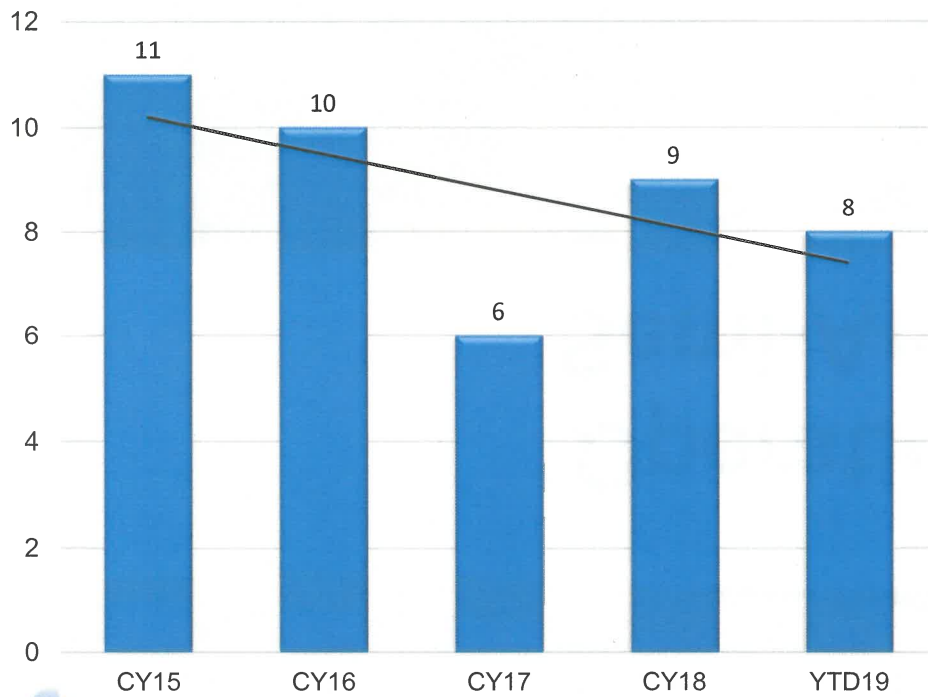
**INFORMATION**  
**ITEM**  
**2A**

# Operations Division Semi-Annual Update

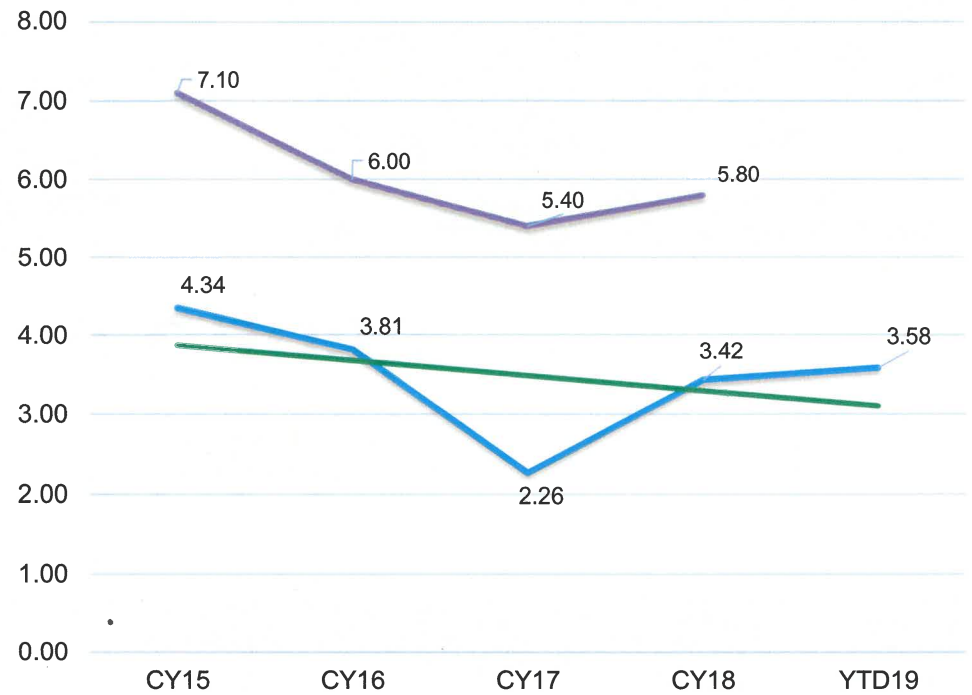


# Safety: Total Recordable Incidents

### IEUA Recordable Incidents



### IEUA Recordable Incident Rate vs. Industry



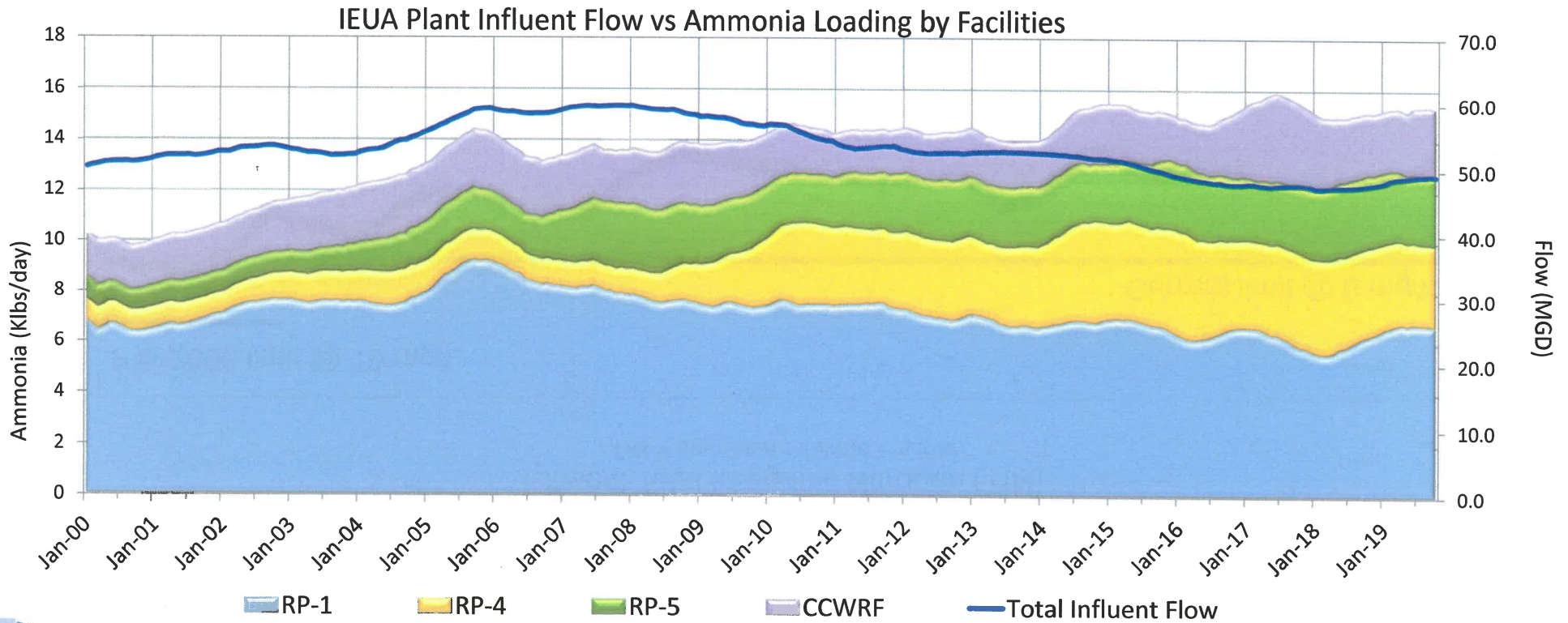
— BLS Incident Rate for Utilities Water/Sewage — IEUA Incident Rate — IEUA Incident Trend

Incident Rate= Recordable Incidents X 200,000 / Number of hours worked



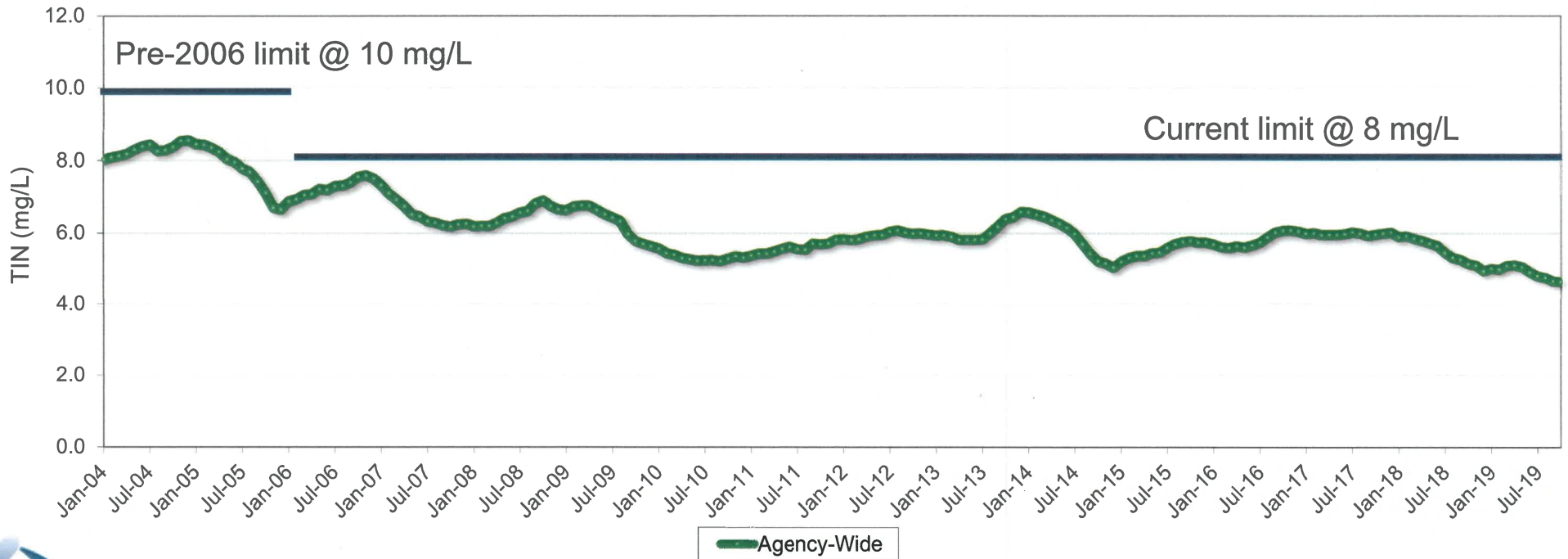
# Solids Loading to Treatment Plants

## Ammonia



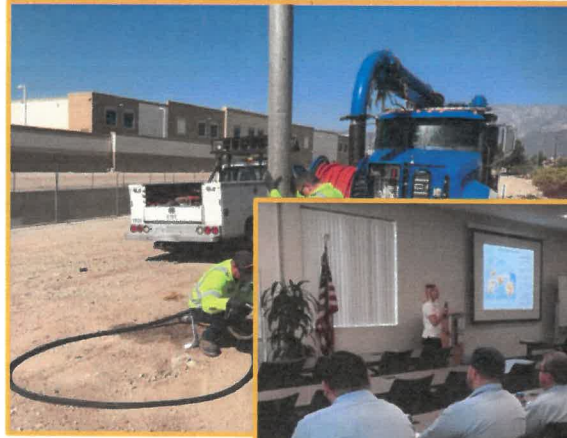
# Plant Effluent Total Inorganic Nitrogen

Effluent Total Inorganic Nitrogen (TIN)  
TIN = ammonia + nitrate + nitrite



# Collections

- Sanitary Sewer System
  - One Incident 11/2019
    - NRW System
- Odor Complaint
  - Ontario 10/2019
    - NRW System
- Mutual Aid Support
  - City of Chino (8/2019)
    - Private Lift Station
  - City of Ontario (10/2019)
    - CASA Wipe Study
  - Semi-Annual Meeting (10/2019)



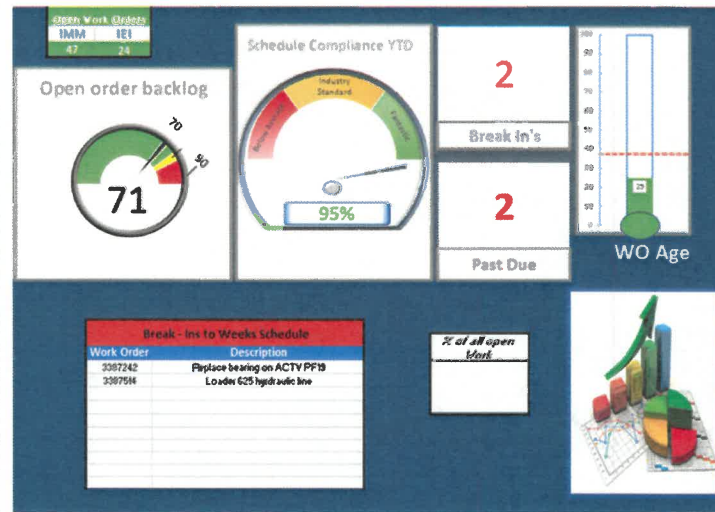
# Inland Empire Regional Composting Facility

## Compost Sales



- 110 Active customers
  - 65% Landscape markets
  - 30% Agriculture
  - 5% Give back (local cities)

## Maintenance



- All work – Work Orders
- Ops & Maintenance
- Manual scheduling
- Manual KPIs
- Defect elimination

## Capital Projects



- Trommel screen replacement
- Baghouse ducting optimization
- Wash pad cover
- Transition air duct
- Facility painting
- Asphalt recoating

# Staff Development and Continued Education



Wastewater Review  
August



Certified Reliability Leaders Workshop  
September



ISA Certified Control Systems Technician  
September



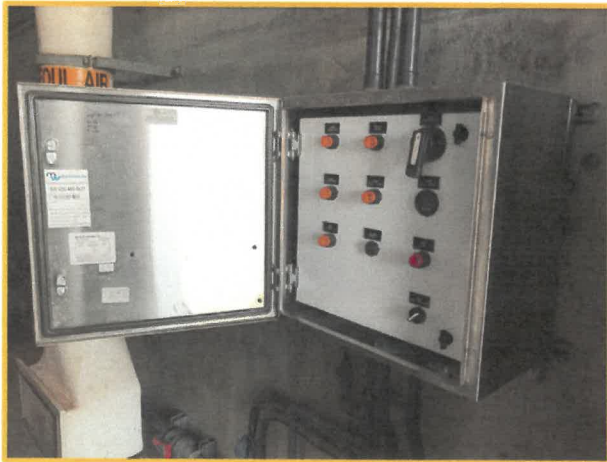
Ultrasonic Lube Training  
October



Advance Water Treatment Operator Workshop  
October

**INFORMATION  
ITEM  
2C**

# Engineering and Construction Management Project Updates



# RP-1 Plant No. 2 Effluent Conveyance Improvements

Project Goal: Increase Utilization and Capacity



Completed Potholing

**Total Project Budget: \$2.4 M**  
**Project Completion: May 2020**  
**Construction Percent Complete: 10%**

Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Design	Stantec	\$232 K	0%
Construction (Current)	J.R. Filanc	\$1.8 M	0%

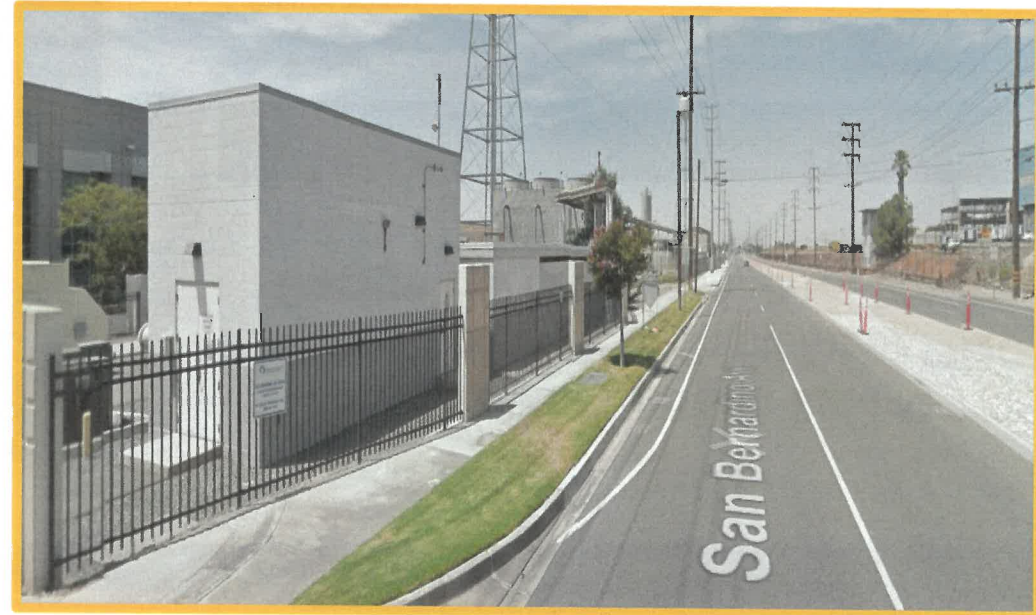


# Force Main Improvements

Project Goal: Increase Asset Life

**Total Project Budget: \$4.2 M**  
**Project Completion: June 2021**  
**Design Percent Complete : 99%**

Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Design (Current)	GHD	\$324 K	0.0%
Construction	-	\$0	0.0%



San Bernardino Lift Station

# NRW Pipeline Relining Along Cucamonga Creek

Project Goal: Extend Useful Life



NRW Pipeline

**Total Project Budget: \$2.4 M**  
**Project Completion: September 2020**  
**Design Percent Complete: 95%**

Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Design	Michael Baker International	\$49 K	58.1%
Construction	-	\$0	0.0%

# HQ Driveway Improvements

Project Goal: Improve Accessibility

**Total Project Budget: \$400 K**  
**Project Completion: November 2020**  
**Percent Design Complete: 5%**

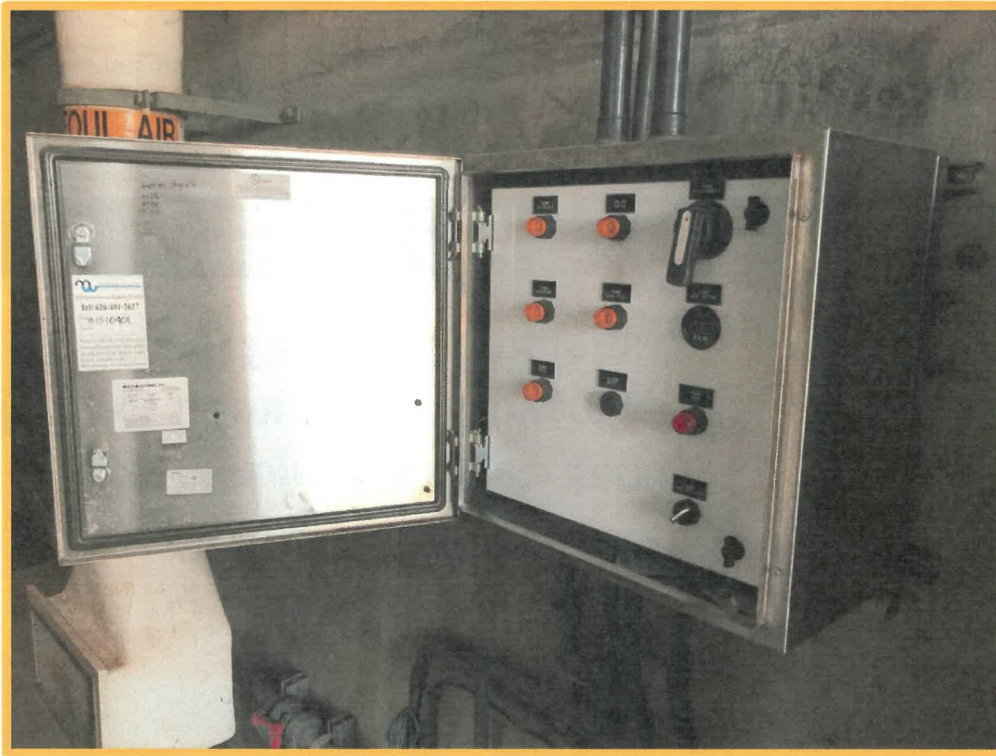
Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Project Development (Current)	Valued Engineering	\$40 K	0%
Construction	TBD	\$0	0%



Current East Entrance

# RP-1 Headworks Sump Pump Redundancy

Project Goal: Improve efficiency and reliability



Pump Control Panel

**Total Project Budget: \$150 K**  
**Project Completion: June 2020**  
**Design Percent Complete: 90%**

Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Design	In-House	N/A	N/A
Construction	TBD	\$0	0%

# RP-1 MCB and Old Lab Building Rehab

Project Goal: Improve Efficiency

**Total Project Budget: \$1.6 M**  
**Project Completion: June 2021**  
**Design Percent Complete: 0%**

Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Design (Current)	TBD	\$0	0%
Construction	TBD	\$0	0%



Existing Lab