



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

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

**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 or not 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 January 9, 2019.

**B. BASELINE RECYCLED WATER PIPELINE EXTENSION CONSTRUCTION CONTRACT AWARD**

Staff recommends that the Committee/Board:

1. Award the construction contract for the Baseline Recycled Water Pipeline Extension, Project No. EN17049, to Trautwein Construction, Inc. in the amount of \$4,896,641;
2. Approve a contract amendment to Carollo Engineering for engineering services during construction for the not-to-exceed amount of \$150,826; and

3. Authorize the Interim General Manager to execute the contract and contract amendment subject to non-substantive changes.

**C. RP-1 FILTER DRAIN VALVE REPLACEMENT CONTRACT AWARD**

Staff recommends that the Committee/Board:

1. Award a construction contract for the RP-1 Filter Drain Valve Replacement, Project No. EN17045, to Schuler Constructors Inc., in the amount of \$650,551; and
2. Authorize the Interim General Manager to execute the construction contract, subject to non-substantive changes.

**D. PURCHASE OF LABORATORY INSTRUMENTS, SINGLE-SOURCE AWARDS**

Staff recommends that the Committee/Board:

1. Authorize the purchase of one Perkin Elmer Inductively Coupled Plasma (ICP) Spectrometer for a not-to-exceed amount of \$122,104 (including tax and delivery);
2. Authorize the purchase of one Agilent Gas Chromatograph (GC), and two Gas Chromatograph-Mass Spectrometers (GCMS) for a not-to-exceed amount of \$363,500 (including tax and delivery); and
3. Authorize the Interim General Manager to execute the purchases.

**E. CHINO BASIN PROGRAM PROFESSIONAL CONSULTING SERVICE CONTRACT AMENDMENT**

Staff recommends that the Committee/Board:

1. Award a professional consulting services contract amendment to Means Consulting, LLC for the not-to-exceed amount of \$189,514; and
2. Authorize the Interim General Manager to execute the contract, subject to non-substantive changes.

**F. ADOPTION OF RESOLUTION 2019-2-5, CERTIFYING THE FINAL SARCCUP ENVIRONMENTAL IMPACT REPORT**

Staff recommends that the Committee/Board:

1. Adopt Resolution No. 2019-2-5, certifying the Final Environmental Impact Report for the Santa Ana River Conservation and Conjunctive Use Project (SARCUUP) Joint Projects, adopting the Mitigation Monitoring and Report Plan, and adopting the Finding of Fact; and
2. Authorize the Filing of Notice of Determination with the County Clerk and State Clearinghouse, Governor's Office of Planning and Research.

2. INFORMATION ITEM

A. PLANNING & ENVIRONMENTAL RESOURCES UPDATE (ORAL)

B. UPPER SANTA ANA RIVER MULTIPLE SPECIES HABITAT  
CONSERVATION PLAN UPDATE

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: NR

**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 on Thursday, February 7, 2019.

  
April Woodruff

**ACTION  
ITEM  
1A**



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

**WEDNESDAY, JANUARY 9, 2019  
9:45 A.M.**

**COMMITTEE MEMBERS PRESENT**

Michael Camacho, Chair  
Kati Parker

**COMMITTEE MEMBERS ABSENT**

None

**STAFF PRESENT**

Kirby Brill, Interim General Manager  
Chris Berch, Executive Manager of Engineering/AGM  
Kathy Besser, Executive Manager of External Affairs & Policy Development/AGM  
Randy Lee, Executive Manager of Operations/AGM  
Shaun Stone, Acting Executive Manager of Engineering/AGM  
Christina Valencia, Executive Manager of Finance & Administration/AGM  
Joshua Aguilar, Senior Engineer  
Josh Biesiada, Project Manager I  
Jerry Burke, Deputy Manager of Engineering  
Andy Campbell, Groundwater Recharge Coordinator/Hydrogeologist  
Pietro Cambiaso, Deputy Manager of Planning & Environmental Resources  
Nel Groenveld, Manager of Laboratories  
James McQueen, Manager of Human Resources  
Cathleen Peroni, Manager of Government Relations  
Teresa Velarde, Manager of Internal Audit  
April Woodruff, Board Secretary/Office Manager

**OTHERS PRESENT**

None

The meeting was called to order at 9:47 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 December 12, 2018.

◆ Recommended that the Board:

1. Approve a total project and Fiscal Year 2018/19 budget augmentation for the Emergency, Safety, and Small Project Budgets, Project Nos. EN19019, EN19022, and EN19032 in the amount of \$250,000 for each project for a total aggregate amount of \$750,000; and
2. Authorize the Interim General Manager to execute the budget augmentation.

as a Consent Calendar Item on the January 16, 2019 Board meeting agenda.

◆ Recommended that the Board:

1. Award a construction contract for the Collection System Upgrades, Project No. EN19015, to Ferreira Construction, in the amount of \$507,235; and
2. Authorize the Interim General Manager to execute the contract, subject to non-substantive changes;

as a Consent Calendar Item on the January 16, 2019 Board meeting agenda.

◆ Recommended that the Board:

1. Award a one-year Laboratory Services Sole Source Contract to Eurofins Eaton Analytical, LLC for the not-to-exceed amount of \$250,000; and
2. Authorize the Interim General Manager to execute the contract, subject to non-substantive changes;

as a Consent Calendar Item on the January 16, 2019 Board meeting agenda.

◆ Recommended that the Board:

1. Approve a five-year contract with Pest Options, Inc. for the Weed Control Services for the GWR Program to be renewed annually based on a year-one rate of \$99,297.84 with subsequent years adjusted by the CPI, with a not-to-exceed contract value of \$518,821; and
2. Authorize the Interim General Manager to execute the contract;

as a Consent Calendar Item on the January 16, 2019 Board meeting agenda.

◆ Recommended that the Board reject the proposals for RFP-RW-18-003 Aeration Basin Air Diffusers System for the RP-5 Liquids Treatment Expansion;

as a Consent Calendar Item on the January 16, 2019 Board meeting agenda.

### **INFORMATION ITEMS**

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

- ◆ 2<sup>nd</sup> Quarter Planning Environmental Resources Update
- ◆ Engineering and Construction Management Project Updates

**GENERAL MANAGER'S COMMENTS**

There were no General Manager comments.

**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 10:05 a.m.

Respectfully submitted,

April Woodruff  
Board Secretary/Office Manager

\*A Municipal Water District

**APPROVED: FEBRUARY 13, 2019**

**ACTION  
ITEM  
1B**





**Prior Board Action:**

On December 20, 2017 the board awarded a consultant contract award to Carollo Engineers, Inc., for the not to exceeded amount of \$394,766.

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**Environmental Determination:**

Addendum to

IEUA prepared an Addendum to the original Program Environmental Impact Report for this project.

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**Business Goal:**

The Baseline Recycled Water Pipeline Extension Project is consistent with IEUA's Business Goal of Water Reliability, specifically the Recycled Water objective that IEUA will maximize the use of recycled water to enhance regional water reliability.

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**Attachments:**

Attachment 1 - PowerPoint

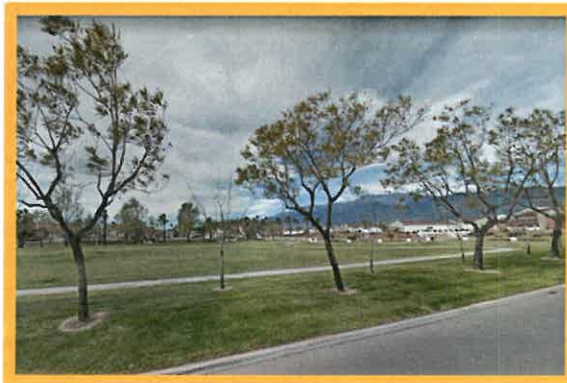
Attachment 2 - Construction Contract

Attachment 3 - Consultant Contract Amendment

# **Attachment 1**

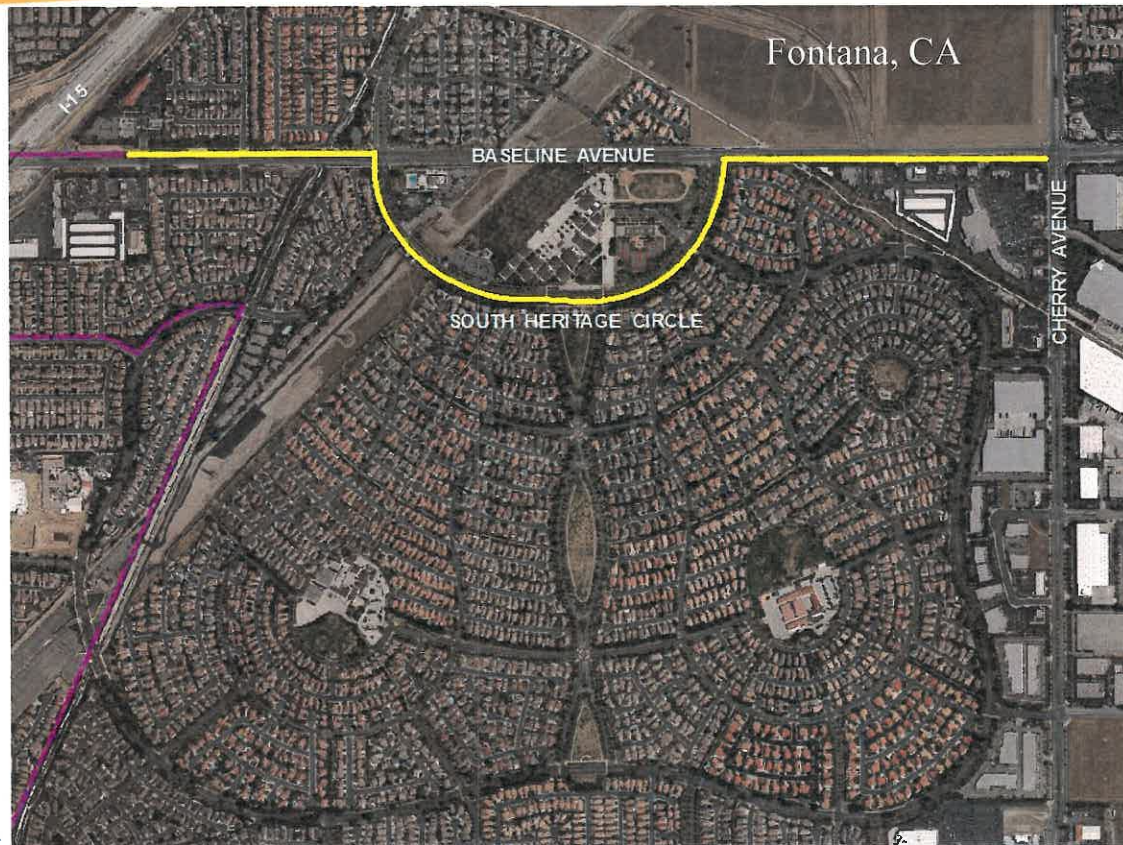
# Baseline Recycled Water Pipeline Extension Construction Contract Award

Project No. EN17049



Josh Biesiada  
February 2019

# Project Location



# The Project

- Scope includes:
  - Installation of 8,200 feet of 24-inch recycled water pipeline along Baseline Avenue and South Heritage Circle
- Add additional 105 acre-feet per year of new recycled water use in the City of Fontana



Park Landscaping



Median and Parkway Landscaping

# Contractor Selection

On December 20, 2018, seven bids were received:

Contractor	Amount
Trautwein Construction, Inc.	\$4,896,641
E.J Meyer	\$5,222,222
Norstar	\$5,430,000
WEKA, Inc.	\$5,795,881
W.A. Rasic	\$5,619,988
J.R. Filanc	\$7,240,000
Vido Artukovich	\$8,856,000
<b>Engineer's Estimate</b>	<b>\$5,500,000</b>

# Project Budget and Schedule

Description	Estimated Cost
<b>Design Services</b>	<b>\$521,046</b>
Design Consultant Contract (actuals)	\$404,753
IEUA Design Services (actuals)	\$116,293
<b>Construction Services</b>	<b>\$787,326</b>
Engineering Services During Construction (This Action)	\$150,826
IEUA Construction Services (~13%)	\$636,500
<b>Construction</b>	<b>\$5,385,641</b>
Construction (This Action)	\$4,896,641
Contingency (~10%)	\$489,000
<b>Total Project Cost:</b>	<b>\$6,694,013</b>
<b>Total Project Budget:</b>	<b>\$6,702,000</b>

Project Milestone	Date
<b>Construction</b>	
Construction Contract Award	February 2019
Construction Completion	February 2020



# Recommendation

- Award a construction contract for the Baseline Recycled Water Pipeline Extension, Project No. EN17049, to Trautwein Construction, Inc. in the amount of \$4,896,641;
- Approve a contract amendment to Carollo Engineering for engineering services during construction for the not-to-exceed amount of \$150,826; and
- Authorize the Interim General Manager to execute the contract and contract amendment subject to non-substantive changes.

The Baseline Recycled Water Pipeline Extension Project is consistent with *IEUA's Business Goal of Water Reliability*, specifically the Recycled Water objective that IEUA will maximize the use of recycled water to enhance regional water reliability.

# **Attachment 2**



**CONTRACT AMENDMENT NUMBER: 4600002451-002  
CONSULTING ENGINEERING SERVICES  
FOR THE**

**BASELINE RECYCLED WATER PIPELINE EXTENSION PROJECT NO. EN17049**

THIS CONTRACT AMENDMENT TWO 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 "IEUA", and "Agency") and Carollo Engineers, Inc., with offices located in Riverside, Irvine, and Los Angeles, California (hereinafter referred to as "Consultant"), for professional design services for the Baseline Recycled Water Pipeline Extension Project EN17049, shall revise the contract as follows:

**SECTION FOUR, SCOPE OF WORK AND SERVICES, IS REVISED TO ADD THE FOLLOWING PARAGRAPH:** Additional Consultant services and responsibilities shall include and be in accordance with Consultant's Proposal, dated November 13, 2018, **Exhibit A**, which is attached hereto, referenced herein, and made a part hereof.

**SECTION SIX, COMPENSATION, IS REVISED TO ADD THE FOLLOWING:** As compensation for the additional work to be performed under this Contract Amendment One, Agency shall pay Consultant a ***not-to-exceed maximum \$555,453.00*** for all work satisfactorily provided hereunder. This includes an additional **\$150,826.00** in accordance with **Exhibit A**, referenced herein, attached hereto, and made a part hereof as approved by SAP Purchase Requisition 10047702.

**ALL OTHER PROVISIONS OF THIS CONTRACT REMAIN UNCHANGED.**

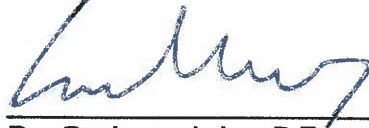
The parties hereto have mutually covenanted and agreed as per the above amendment item, and in doing so have caused this document to become incorporated into the Contract Documents.

**INLAND EMPIRE UTILITIES AGENCY:**  
*\*A MUNICIPAL WATER DISTRICT*

**CAROLLO ENGINEERS, INC.:**

\_\_\_\_\_  
Kirby Brill  
General Manager

(Date)

  
\_\_\_\_\_  
Dr. Graham Juby, P.E.  
Principal-in-Charge / Vice President

1/23/2019  
(Date)

  
\_\_\_\_\_  
Eric M. Mills  
Senior Vice President

1/24/2019  
(Date)

# **Exhibit A**

November 13, 2018

Mrs. Liza Munoz, Senior Engineer  
Inland Empire Utilities Agency  
6075 Kimball Avenue  
Chino, CA 91708

**Subject: Baseline Recycled Water Pipeline Project  
Proposal to Provide Engineering Services During Construction (ESDC) for Baseline Recycled  
Water Pipeline Project (Contract No. EN17049)**

Dear Mrs. Munoz:

The Inland Empire Utilities Agency (IEUA) will be sending out for construction bids the Baseline Recycled Water Pipeline Project. At your request, Carollo Engineers, Inc. (Carollo) is submitting this proposal to provide Engineering Services During Construction (ESDC) for the subject project. This project is currently being designed by Carollo and is in the final stages of design. Based on the construction bid documents, we understand that the construction is scheduled to begin in February of 2019 and complete by January of 2020. These dates are important in that they were used to estimate the duration of some of the tasks listed below and that we are submitting our proposal to cover the duration of the construction (12 months). The following is a summary of the proposed Scope of Work and Fee for ESDC services:

## **TASK 1 – PRE-CONSTRUCTION MEETING**

### **A. Attend Pre-Construction Meeting**

The purpose of this meeting is to go over, with the contractor, IEUA's expectations of their work, IEUA's procedures for submittals, Request for Information (RFIs), Request for Deviations (RFDs), as well as timely submission of work. This meeting will also give the contractor the opportunity to present their schedule for completing the work within the timeframe of the construction contract.

## **TASK 2 – REVIEW SHOP DRAWINGS**

### **A. Submittal Reviews**

Carollo will review each shop drawing and working drawings of manufacturers and contractors for substantial conformity with the contract documents. We will coordinate the submittal reviews closely with IEUA throughout the construction to ensure the conformance with bid documents. For estimating purposes, we have included a total of thirty (30) submittals and resubmittals for this project.

## **TASK 3 – REVIEW/RESPOND TO REQUESTS FOR INFORMATION (RFIs)**

### **A. RFI Responses**

We will review each RFI for completeness and for contract conformance. Those documents that do not satisfy the specifications will be returned with a copy to IEUA.

Carollo's Project Manager, Miko Aivazian, will check the response from our engineering support staff and with the design engineer to make certain that the answer to the RFI is complete and that it avoids a potential change to the contract. If it appears that a change is required, it will be discussed with IEUA to determine the most appropriate course of action.

We will perform these reviews in a timely fashion and ensure that the design team also responds within the time allowed by contract in order to stay on schedule and on budget. For estimating purposes, we have included a total of fifteen (15) RFI's to be responded for this project.

## **TASK 4 – REQUESTS FOR DEVIATION (RFDs)**

### **A. RFDs Reviews and Responses**

Carollo will attend meetings and negotiations with the contractor involving change orders. We will provide cost estimating expertise to help evaluate change order costs. For estimating purposes, we have included a total of five (5) RFDs to be responded for this project. Our scope of work does not include any time for owner initiated changes.

## **TASK 5 – AS-BUILT PLANS**

### **A. Prepare AS-Built Plans**

At the completion of construction, Carollo will prepare a set of as-Built plans. The as-Built plans will include changes made to the original plans and specifications during construction including RFIs and RFDs changes. IEUA will provide a set of contractor's marked up plans to Carollo prior to beginning of this task. Our proposal assumes the as-built plans will be prepared immediately and no later than two months after the completion of construction.

## **TASK 6 – MEETINGS AND SITE VISITS**

### **A. Attend Meetings**

Carollo will attend the following meeting during the construction phase of the project:

- One 2 hour construction kickoff meeting (PM, PE, and Inspector)
- Bi-weekly conference call meetings (assume 20 calls, one hour each)
- Site visits by design team and project manager/engineer (assumed 4 half-day site visits)

Carollo's scope of work does not include preparation of construction meeting agendas and meeting minutes.

## **TASK 7 – PROJECT MANAGEMENT AND QA/QC**

### **A. Project Management**

This task addresses the management responsibilities associated with proper scheduling, budget control, invoice preparation and coordination with IEUA. Carollo's project manager will review the status of budget, schedule and relevant project issues together on a weekly basis. Our project manager will provide project status updates via email to IEUA's designated project manager on a bi-weekly basis. These bi-weekly status updates will be used to confirm work progress, identify critical information needs, and where appropriate alert IEUA to any potential issues which may impact the project scope, schedule or budget. These bi-weekly project status updates will be supplemented with monthly project status reports that will be prepared and distributed along with Carollo's invoices.

Mrs. Liza Munoz  
November 13, 2018

Page 3

## B. Technical Review and QA/QC

Carollo will provide quality control (QC) reviews through the course of the project consistent with IEUA's policies. Our QC and quality management procedures establish and maintain a structure for providing reviews of all work products and adherence to industry design standards.

All work product deliverables, including detailed checking of work by in-house staff will be reviewed prior to submittal to IEUA.

Table 1 – Fee Estimate, on the following page, presents our estimated fee for the services described above. The requested fee for the above listed scope of work, amount is \$150,826.

Carollo appreciates the opportunity to work with IEUA on this important project. Should you have any questions, please contact Miko Aivazian at (213) 279-3319.

Sincerely,

CAROLLO ENGINEERS, INC.



Miko Aivazian, PE  
Senior Project Manager  
Vice President



Eric Mills, PE PMP  
Senior Vice President  
Client Services Director

cc: Raphael Bui, PE

**Table 1 - Fee Estimate**

Inland Empire Utilities Agency												
Carollo Fee Estimate												
ESDC Services for the Baseline Recycled Water Pipeline Project												
Task No.	TASK DESCRIPTION	Hourly Billing Rate	\$252	\$230	\$159	\$105	TOTAL HOURS	LABOR COST	Project Equipment and Communication Expense (PECE) (\$11.70 per labor hour)	OTHER DIRECT COSTS	Markup on ODCs and Subconsultants	TOTAL PROJECT FEE
		Project Manager	Senior Professional	Professional	Clerical							
1.0	Pre-Construction Meeting	4	8	8	1	13	\$ 2,953	\$ 192	\$ 200	\$ 20	\$ 3,325	
A	Attend a Pre-Construction Meeting	4	8	8	1	13	\$ 2,953	\$ 192	\$ 200	\$ 20	\$ 3,325	
2.0	Review Shop Drawings	40	80	80	24	224	\$ 43,720	\$ 2,621	\$ 500	\$ 50	\$ 46,891	
A	Review Submittals (assume 30 submittals and resubmittals)	40	80	80	24	224	\$ 43,720	\$ 2,621	\$ 500	\$ 50	\$ 46,891	
3.0	Review and Respond to RFIs	16	40	24	2	82	\$ 17,258	\$ 959	\$ 200	\$ 20	\$ 18,437	
A	Review and Respond to RFIs (assume 15 RFIs)	16	40	24	2	82	\$ 17,258	\$ 959	\$ 200	\$ 20	\$ 18,437	
4.0	Request for Deviations (RFDs)	12	32	8	1	53	\$ 11,761	\$ 620	\$ -	\$ -	\$ 12,381	
A	Review and Respond to RFDs	12	32	8	1	53	\$ 11,761	\$ 620	\$ -	\$ -	\$ 12,381	
5.0	As-Built Plans	4	12	60	4	80	\$ 13,728	\$ 936	\$ 500	\$ 50	\$ 15,214	
A	Prepare as-built Plans	4	12	60	4	80	\$ 13,728	\$ 936	\$ 500	\$ 50	\$ 15,214	
6.0	Meetings and Site Visits	24	24	0	8	56	\$ 12,408	\$ 655	\$ 1,500	\$ 150	\$ 14,713	
A	Meetings and Site Visits (assume 20 total calls and 2, 4 hour site visits)	24	24	0	8	56	\$ 12,408	\$ 655	\$ 1,500	\$ 150	\$ 14,713	
7.0	Project Management and QA/QC	75	64	0	28	166	\$ 36,602	\$ 1,942	\$ 1,200	\$ 120	\$ 39,864	
A	Project Management	60	48	0	24	132	\$ 28,680	\$ 1,544	\$ 1,000	\$ 100	\$ 31,324	
B	Technical Review and QA/QC	16	16	0	2	34	\$ 7,922	\$ 398	\$ 200	\$ 20	\$ 8,540	
<b>TOTAL</b>		<b>176</b>	<b>260</b>	<b>172</b>	<b>68</b>	<b>674</b>	<b>\$ 138,430</b>	<b>\$ 7,866</b>	<b>\$ 4,100</b>	<b>\$ 410</b>	<b>\$ 150,826</b>	



# **Attachment 3**

**SECTION D - CONTRACT AND RELEVANT DOCUMENTS**

**1.0 CONTRACT**

THIS CONTRACT, made and entered into this 20 day of February, 2019, by and between Trautwein Construction Inc, hereinafter referred to as "Contractor," and Inland Empire Utilities Agency, a Municipal Water District, located in San Bernardino County, California, hereinafter referred to as "IEUA".

**WITNESSETH:**

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

1. Contractor agrees to perform and complete in a workmanlike manner, all work required under the bidding schedule of said IEUA's specifications entitled **SPECIFICATIONS FOR BASELINE RECYCLED WATER PIPELINE EXTENSION, PROJECT NO. EN17049**, in accordance with the specifications and drawings, and to furnish at their own expense, all labor, materials, equipment, tools, and services necessary, except such materials, equipment, and services as may be stipulated in said specifications to be furnished by said IEUA, and to do everything required by this Contract and the said specifications and drawings.
2. For furnishing all said labor, materials, equipment, tools, and services, furnishing and removing all plant, temporary structures, tools and equipment, and doing everything required by this Contract and said specifications and drawings; also for all loss and damage arising out of the nature of the work aforesaid, or from the action of the elements, or from any unforeseen difficulties which may arise during the prosecution of the work until its acceptance by IEUA, and for all risks of every description connected with the work; also for all expenses resulting from the suspension or discontinuance of work, except as in the said specifications are expressly stipulated to be borne by IEUA; and for completing the work in accordance with the requirements of said specifications and drawings, IEUA will pay and said Contractor shall receive, in full compensation therefore, the price(s) set forth in this Contract.
3. That IEUA will pay the Contractor progress payments and the final payment, in accordance with the provisions of the contract documents, with warrants drawn on the appropriate fund or funds as required, at the prices bid in the Bidding and Contract Requirements, Section C - Bid Forms and accepted by IEUA, and set forth in this below.

Total Bid Price \$ Four million, eight hundred ninety-six thousand, six-hundred forty-one Dollars  
and Zero Cents.

If this is not a lump sum bid and the contract price is dependent upon the quantities constructed, IEUA will pay and said Contractor shall receive, in full compensation

for the work the prices named in the Bidding and Contract Requirements, Section C - Bid Forms.

4. IEUA hereby employs the Contractor to perform the work according to the terms of this Contract for the above-mentioned price(s), and agrees to pay the same at the time, in the manner, and upon the conditions stipulated in the said specifications; and the said parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to the full performance of the covenants herein contained.
5. The Notice Inviting Bids, Instructions to Bidders, Bid Forms, Information Required of Bidder, Performance Bond, Payment Bond, Contractors License Declaration, Specifications, Drawings, all General Conditions and all Special Conditions, and all addenda issued by IEUA with respect to the foregoing prior to the opening of bids, are hereby incorporated in and made part of this Contract, as if fully set forth.
6. The Contractor agrees to commence work under this Contract on or before the date to be specified in a written "Notice To Proceed" and to complete said work to the satisfaction of IEUA three hundred sixty-five (365) calendar days after award of the Contract. All work shall be completed before final payment is made.
7. Time is of the essence on this Contract.
8. Contractor agrees that in case the work is not completed before or upon the expiration of the contract time, damage will be sustained by IEUA, and that it is and will be impracticable to determine the actual damage which IEUA will sustain in the event and by reason of such delay, and it is therefore agreed that the Contractor shall pay to IEUA the amount of four thousand (\$4,000) dollars for each day of delay, which shall be the period between the expiration of the contract time and the date of final acceptance by IEUA, as liquidated damages and not as a penalty. It is further agreed that the amount stipulated for liquidated damages per day of delay is a reasonable estimate of the damages that would be sustained by IEUA, and the Contractor agrees to pay such liquidated damages as herein provided. In case the liquidated damages are not paid, the Contractor agrees that IEUA may deduct the amount thereof from any money due or that may become due to the Contractor by progress payments or otherwise under the Contract, or if said amount is not sufficient, recover the total amount.

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

**General Conditions Section H – Legal Responsibilities, Part 8.0, "Disturbance of the Peace".**

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


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

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

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

By \_\_\_\_\_  
General Manager

Contractor

By   
Title: President

\*Municipal Water District

**ACTION  
ITEM  
1C**



---

**Date:** February 20, 2019

**To:** The Honorable Board of Directors

**From:** Kirby Brill, Interim General Manager 

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

02/13/19

**Executive Contact:** Shaun Stone, Acting Executive Manager of Engineering/AGM

**Subject:** RP-1 Filter Drain Valve Replacement Construction Contract Award

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**Executive Summary:**

The existing filter drain valves and backwash valves in the tertiary filter galleries at Regional Water Recycling Plant No. 1 (RP-1) are over 30 years old and have begun to leak excessively. These valves are responsible for transferring water during the filter backwash process. The leaks are over loading the backwash system and causing inefficiencies in the treatment process. To maintain operational performance, this project will replace twenty-six, 20-inch butterfly valves and actuators in the galleries. The project will also replace eight backwash valves and actuators, and perform various coating and painting repairs to address leaks and corrosion issues. In addition to the valves, leaks in the influent channel have developed. To eliminate the leaks in the influent channels, the channel will be coated with a polyurethane coating, and the corroded piping in the filter gallery below will be cleaned and repainted. The coating and replacement efforts within the tertiary filter process will maximize asset performance and reliability.

On January 15, 2019, IEUA received seven construction bids. The lowest, responsive and responsible was Schuler Constructors Inc., with a bid of \$650,551.

---

**Staff's Recommendation:**

1. Award a construction contract for the RP-1 Filter Drain Valve Replacement, Project No. EN17045, to Schuler Constructors Inc., in the amount of \$650,551; and
2. Authorize the Interim General Manager to execute the construction contract, subject to non-substantive changes.

---

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

*Account/Project Name:*

EN17045/RP-1 Filter Drain Valve Replacement

*Fiscal Impact (explain if not budgeted):*

None.

**Prior Board Action:**

None.

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**Environmental Determination:**

Categorical Exemption

CEQA identifies certain categories of projects as exempt from more detailed environmental review because these categories have been deemed to have no potential for significant impact on the environment. This project qualifies for a Categorical Exemption Class 1 as defined in Section 15301 of the State CEQA Guidelines.”

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**Business Goal:**

The RP-1 Filter Drain Valve Replacement Project is consistent with IEUA’s Business Goal of Wastewater Management, specifically the Asset Management and Water Quality objectives that IEUA will ensure that systems are well maintained, upgraded to meet evolving requirements, sustainably managed, and can accommodate changes in regional water use to protect public health, the environment, and meet anticipated regulatory requirements.

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**Attachments:**

Attachment 1 - PowerPoint

Attachment 2 - Construction Contract

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# **Attachment 1**

# RP-1 Filter Drain Valve Replacement Construction Contract Award

Project No. EN17045



James Spears, P.E.  
February 2019

# Regional Water Recycling Plant No. 1 Project Location

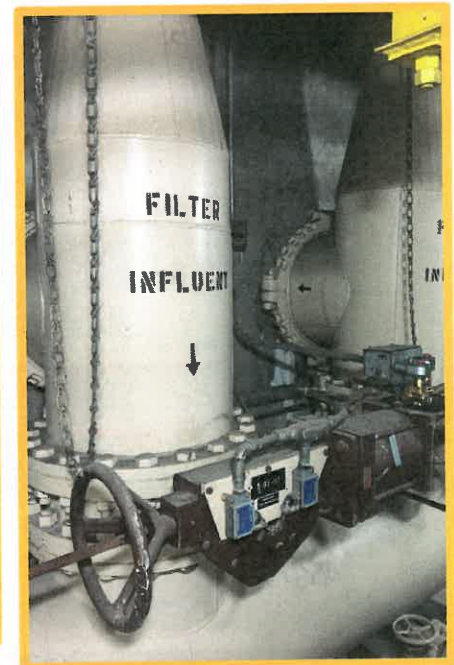


# The Project

- Replace all 26, 20-inch filter drain valves
- Replace eight, 4-inch backwash valves
- Coat filter influent channel Bank No. 1
- Paint piping in gallery of Bank No. 1



20-Inch Valve and  
Calcium Deposits



20-Inch Valve

# Contractor Selection

Seven bids were received on January 15, 2019:

Bidder's Name	Total
Schuler Constructors Inc.	\$650,551
J.R. Filanc Construction Co., Inc.	\$695,045
AToM Engineering Construction, Inc.	\$782,398
Genesis Construction	\$787,575
SCW Contracting Corporation	\$824,118
W. A. Rasic Construction, Inc.	\$978,288
Ferreira Construction Co., Inc.	\$1,275,600
<b>Engineer's Estimate</b>	<b>\$ 600,000</b>

# Project Budget and Schedule

Description	Estimated Cost
<b>Design Services</b>	<b>\$56,000</b>
Design	\$56,000
<b>Construction Services</b>	<b>\$95,000</b>
IEUA Construction Services (~15%)	\$95,000
<b>Construction</b>	<b>\$715,551</b>
Construction Contract (this action)	\$650,551
Contingency (~10%)	\$65,000
<b>Total Project Cost:</b>	<b>\$866,551</b>
<b>Total Project Budget:</b>	<b>\$890,000</b>

Project Milestone	Date
<b>Construction</b>	
Construction Contract Award	February 2019
Construction Completion	October 2019

# Recommendation

- Award a construction contract for the RP-1 Filter Drain Valve Replacement, Project No. EN17045, to Schuler Constructors, Inc., in the amount of \$650,551; and
- Authorize the Interim General Manager to execute the construction contract, subject to non-substantive changes.

The RP-1 Filter Drain Valve Replacement Project is consistent with the *IEUA's Business Goal of Wastewater Management*, specifically the Asset Management and Water Quality objectives that IEUA will ensure that systems are well maintained, upgraded to meet evolving requirements, sustainably managed, and can accommodate changes in regional water use to protect public health, the environment, and meet anticipated regulatory requirements.

# **Attachment 2**



**RP-1 FILTER DRAIN VALVE REPLACEMENT  
PROJECT NO. EN17045**

**CONTRACT**

THIS CONTRACT made and entered into this \_\_\_\_ day of February 2019, by and between Schuler Constructors Inc., hereinafter referred to as "CONTRACTOR," and The Inland Empire Utilities Agency, a Municipal Water District, located in San Bernardino County, California, hereinafter referred to as "IEUA".

**WITNESSETH:**

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

- A. CONTRACTOR agrees to perform and complete in a workmanlike manner, all Work required under these Bid Documents (IFB-RW-18-022) FOR RP-1 FILTER DRAIN VAVLE REPLACEMENT, in accordance with the Bid Documents, and to furnish at their own expense, all labor, materials, equipment, tools, and services necessary, except such materials, equipment, and services as may be stipulated in said Bid Documents to be furnished by IEUA, and to do everything required by this Contract and the said Bid Documents.
- B. For furnishing all said labor, materials, equipment, tools, and services, furnishing and removing all plant, temporary structures, tools and equipment, and doing everything required by this Contract and said Bid Documents; also for all loss and damage arising out of the nature of the Work aforesaid, or from the action of the elements, or from any unforeseen difficulties which may arise during the prosecution of the Work until its acceptance by IEUA, and for all risks of every description connected with the Work; also for all expenses resulting from the suspension or discontinuance of Work, except as in the said Bid Documents are expressly stipulated to be borne by IEUA; and for completing the Work in accordance with the requirements of said Bid Documents, IEUA will pay and said CONTRACTOR shall receive, in full compensation therefore, the price(s) set forth in this Contract.
- C. That IEUA will pay the CONTRACTOR progress payments and the final payment, in accordance with the provisions of the Contract Documents, with warrants drawn on the appropriate fund or funds as required, at the prices bid in IFB-RW-18-022, Section 4 - Forms and accepted by IEUA, and set forth in this below.

Total Bid Price \$650,551.00

SIX HUNDRED FIFTY THOUSAND FIVE HUNDRED FIFTY-ONE Dollars  
and ZERO Cents.

- D. IEUA hereby employs the CONTRACTOR to perform the Work according to the terms of this Contract for the above-mentioned price(s), and agrees to pay the same at the time, in the manner, and upon the conditions stipulated in the said Bid Documents; and the said parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to the full performance of the covenants herein contained.
- E. The Sections from IFB-RW-18-022, (Section 1 - Submittal Information, Section 2 - General Information, Section 3 - Scope of Work, Section 4 - Forms, and Section 5 - Attachments), Performance Bond, Payment Bond, Specifications, Drawings, most recent edition of the GREENBOOK Standard Specifications for Public Works Construction (SSPWC) as the Standard Specifications to be utilized for this project, the noted exceptions from the Contractor's Bid received January 15, 2019 and all Addenda issued by IEUA with respect to the foregoing prior to the opening of bids, are hereby incorporated in and made part of this Contract, as if fully set forth.
- F. The CONTRACTOR agrees to commence Work under this Contract on or before the date to be specified in a written "Notice to Proceed" and to complete said Work to the satisfaction of IEUA two hundred twenty (220) calendar days after award of the Contract. All Work shall be completed before final payment is made.
- G. Time is of the essence on this Contract.
- H. CONTRACTOR agrees that in case the Work is not completed before or upon the expiration of the Contract Time, damage will be sustained by IEUA, and that it is and will be impracticable to determine the actual damage which IEUA will sustain in the event and by reason of such delay, and it is therefore agreed that the CONTRACTOR shall pay to IEUA the amounts as set forth in Section 2 General Information, Item S Liquidated Damages for each day of delay, which shall be the period between the expiration of the Contract Time and the date of final acceptance by IEUA, as liquidated damages and not as a penalty. It is further agreed that the amount stipulated for liquidated damages per day of delay is a reasonable estimate of the damages that would be sustained by IEUA, and the CONTRACTOR agrees to pay such liquidated damages as herein provided. In case the liquidated damages are not paid, the CONTRACTOR agrees that IEUA may deduct the amount thereof from any money due or that may become due to the CONTRACTOR by progress payments or otherwise under the Contract, or if said amount is not sufficient, recover the total amount.
- I. In addition to the liquidated damages, which may be imposed if the CONTRACTOR fails to complete the Work within the time agreed upon, IEUA may also deduct from any sums due or to become due to the CONTRACTOR, penalties and fines for violations of applicable local, state, and federal law.
- J. That the CONTRACTOR shall carry Workers' Compensation Insurance and require all subcontractors to carry Workers' Compensation Insurance as required by the California Labor Code.

- K. That the CONTRACTOR shall have furnished, prior to execution of the Contract, two bonds approved by IEUA, one in the amount of one hundred (100) percent of the Contract Price, to guarantee the faithful performance of the Work, and one in the amount of one hundred (100) percent of the Contract Price to guarantee payment of all claims for labor and materials furnished.
- L. The CONTRACTOR hereby agrees to protect, defend, indemnify and hold IEUA and its employees, agents, officers, directors, servants and volunteers free and harmless from any and all liability, claims, judgments, costs and demands, including demands arising from injuries or death of persons (including employees of IEUA and the CONTRACTOR) and damage to property, arising directly or indirectly out of the obligation herein undertaken or out of the operations conducted by the CONTRACTOR, its employees agents, representatives or subcontractors under or in connection with this Contract to the extent permitted by law.

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


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

- M. The CONTRACTOR, by signing the contract does swear under penalty of perjury that no more than one final unappeasable finding of contempt of court by a Federal court has been issued against the CONTRACTOR within the immediately preceding two year period because of the CONTRACTOR's failure to comply with an order of a Federal court which orders the CONTRACTOR to comply with an order of the National Labor Relations Board (Public Contract Code 10296).

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

By \_\_\_\_\_  
*General Manager*

CONTRACTOR

By  \_\_\_\_\_  
*PRESIDENT*  
Title

\* A Municipal Water District



**ACTION  
ITEM  
1D**



**Date:** February 20, 2019

**To:** The Honorable Board of Directors

**From:** Kirby Brill, Interim General Manager

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

02/13/19

**Executive Contact:** Shaun Stone, Acting Executive Manager of Engineering/AGM

**Subject:** Purchase of Laboratory Instruments, Single-Source Awards

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**Executive Summary:**

The Laboratory performs compliance testing for National Pollution Discharge Elimination System (NPDES), Groundwater Recharge (GWR), and Pretreatment and Source Control (PTSC) permits. The Inductively Coupled Plasma (ICP) Spectrometer, Gas Chromatograph (GC), and Gas Chromatograph-Mass Spectrometer (GCMS) instruments are used to perform metal, pesticide, volatile, and semi-volatile analyses respectively. With advancements in technology, the new ICP instrument significantly decreases sample analysis time and increases reproducibility, reducing staff time and cost of lab supplies used. The GC and GCMSs currently in use in the Lab are 20+ years old. New technology for these instruments has greatly increased the sensitivity of the analyses, which is vital to meet new regulatory requirements. Currently, the Laboratory uses Perkin and Elmer ICPs and Agilent GC and GCMSs; both are industry standard for their respective instruments with proven histories of reliability. Staff is familiar with the operation of the instruments, with some supplies and parts being interchangeable with the other instruments in the laboratory allowing the lab to maintain fewer lab supplies. Perkin Elmer also offers reduced pricing for a trade-in of the old ICP instrument. Therefore, single sourcing for these instruments is the best value choice to maintain consistency with existing equipment and ensures a smooth transition for the analyses and lab operations.

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**Staff's Recommendation:**

1. Authorize the purchase of one Perkin Elmer Inductively Coupled Plasma (ICP) Spectrometer for a not-to-exceed amount of \$122,104 (including tax and delivery);
2. Authorize the purchase of one Agilent Gas Chromatograph (GC), and two Gas Chromatograph-Mass Spectrometers (GCMS) for a not-to-exceed amount of \$363,500 including tax and delivery); and
3. Authorize the Interim General Manager to execute the purchases.

---

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

*Account/Project Name:*

EN15008 - Water Quality Laboratory

*Fiscal Impact (explain if not budgeted):*

None.

**Prior Board Action:**

None.

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**Environmental Determination:**

Not Applicable

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**Business Goal:**

The purchase of the Laboratory instruments aligns with IEUA's Environmental Stewardship goal, specifically the regulatory compliance objective that IEUA will comply with all federal, state, local, and environmental laws and regulations.

The purchase of the Laboratory instruments also aligns with the Agency's Business Practices goal to apply the best industry practices to maintain or improve the quality and value of services.

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**Attachments:**

None.

**ACTION  
ITEM  
1E**





**Date:** February 20, 2019

**To:** The Honorable Board of Directors

**From:** Kirby Brill, Interim General Manager <sup>KB</sup>

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

02/13/19

**Executive Contact:** Chris Berch, Executive Manager of Engineering/AGM

**Subject:** Chino Basin Program Professional Consulting Service Contract Amendment

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**Executive Summary:**

In November 2018, the IEUA Board established a planning budget of \$6.3M for the Chino Basin Program (CBP), subsequent to the conditional funding award from the California Water Commission (CWC) in the amount of \$206.9M. In order to secure the funding agreement, a report consisting of a refined project scope, environmental determination and institutional agreements need to be submitted to the CWC by 2020. To reach this milestone, a professional service contract to facilitate the planning, engagement of the parties, policy support from local agencies, and strategic coordination with Metropolitan Water District (MWD) and State Water Contractors (SWCs) is required.

Means Consulting was involved in the CBP initially by providing support services with strategic engagement with MWD and has facilitated a workshop with local agencies. Their continued service will provide the best value to IEUA in support of the CBP to gain local agency support and finalize the institutional agreements.

The proposed Means Consulting contract amendment in the amount of \$189,514 is for professional services through 2020.

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**Staff's Recommendation:**

1. Award a professional consulting services contract amendment to Means Consulting, LLC for the not-to-exceed amount of \$189,514; and
2. Authorize the Interim General Manager to execute the contract, subject to non-substantive changes.

---

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

**Account/Project Name:**

The contract amendment in the amount of \$189,514 will be funded by Project No. PL19005 in the Water Resources (WW) fund.

**Fiscal Impact** (explain if not budgeted):

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

**Prior Board Action:**

On December 19, 2018, IEUA's Board of Directors awarded professional services contracts to GEI Consultants, Inc., for a not-to-exceed amount of \$1,953,680 and to Water Systems Consulting, Inc., for a not-to-exceed amount of \$833,415.

On November 7, 2018, IEUA's Board of Directors established a project budget of \$6.3M for the Chino Basin Program.

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**Environmental Determination:**

Not Applicable

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**Business Goal:**

The CBP supports IEUA's business goal of Water Reliability, of implementing an integrated water resources management plan providing a reliable and cost-effective water supply and promoting sustainable water use throughout the region.

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**Attachments:**

Attachment 1 - Consultant Contract Amendment

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**CONTRACT AMENDMENT NUMBER: 4600002502-002  
FOR  
PROPOSITION 1 CONSULTING SUPPORT SERVICES**

AMENDMENT NUMBER TWO 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 "IEUA" and "Agency") and Means Consulting, LLC with offices located in Newport Beach, California (hereinafter referred to as "Consultant"), to provide professional consulting environmental engineering services.

**REVISE SECTION 4, SCOPE OF WORK AND SERVICES, ADDING A PARAGRAPH TO READ:** Additional Consultant services and responsibilities shall include and be in accordance with Consultant's Proposal, dated January 7, 2019, **Exhibit A**, which is attached hereto, referenced herein, and made a part hereof.

**SECTION 6, COMPENSATION, IS HEREBY AMENDED TO ADD THE FOLLOWING:** in compensation for the work represented by this Contract Amendment, Agency shall pay Consultant a **NOT-TO-EXCEED MAXIMUM of \$239,514.00** for all services provided. This represents an increase of **\$189,514.00** in accordance with **Exhibit A** which is attached hereto, referenced herein, and made a part hereof.

**ALL OTHER PROVISIONS OF THIS CONTRACT REMAIN UNCHANGED**

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

**INLAND EMPIRE UTILITIES AGENCY:**  
\*A MUNICIPAL WATER DISTRICT

**MEANS CONSULTING, LLC:**

\_\_\_\_\_  
Kirby Brill  
Interim General Manager

(Date)

*Edward G. Means III* 2/7/19  
\_\_\_\_\_  
Edward G. Means III  
President

(Date)

# Exhibit A



January 7, 2019

Sylvie Lee P.E.  
Inland Empire Utilities Agency  
6075 Kimball Ave / Chino, California 91708

**Support Services for Proposition 1**

Means Consulting LLC is pleased to present this proposal for Proposition 1 Support Services to the Inland Empire Utilities Agency (IEUA) for a total of \$189,514.

I am available and committed to helping IEUA deliver a successful Chino Basin Project to the region.

I can be contacted at (949) 439-9120 should you have any questions regarding this proposal.

Best regards,

A handwritten signature in cursive script that reads 'Ed Means'.

Ed Means  
President  
Means Consulting LLC  
2100 Serrano Avenue  
Newport Beach, CA 92661

## Scope of Work for Means Consulting LLC

### OBJECTIVES

The objective of the proposal is to:

- Provide support to Inland Empire Utilities Agency (IEUA) in gaining Metropolitan, State Water Contractor (SWC), and Member Agency support for operations/facilities to implement the Proposition 1 application (Chino Basin Program).
- Engage and support Mr. Bill Pecsí (as an independent subcontractor) to define and advocate for the value of the Proposition 1 concept to Metropolitan and the SWCs.

### TASK 1. PROJECT MANAGEMENT

This task consists of managing and reporting on project budgets, holding required project management coordination calls with IEUA, billing, and invoicing.

Deliverable: A smooth running project that meets project objectives on time and within budget.

### TASK 2: DEVELOP AND REFINE CONTENT TO SUPPORT A BRIEFING DOCUMENT

Means Consulting LLC (working with Bill Pecsí as an independent subcontractor) will:

- Hold conference calls to brainstorm content
- Prepare briefing points and PowerPoint content to convey the value proposition of the Proposition 1 proposal to Metropolitan and the State Water Contractors
- Provide technical and policy support on MWD and SWC issues
- Arrange and attend meetings as required

Deliverable: Briefing points and PowerPoint content articulating the value of the Proposition 1 proposal to Metropolitan and SWC

### TASK 3. PARTICIPATE IN PLANNING/STRATEGY MEETINGS

- Provide technical and policy support on MWD and SWC issues
- Means Consulting LLC will participate in up to four (4) strategy sessions to coordinate content development and communication approach.
- Means Consulting LLC will participate in up to eight (8) 2-hr conference calls.

- Means Consulting LLC will prepare for and participate in up to four (4) meetings with Metropolitan Water District staff.
- Means Consulting LLC will prepare for and participate in up to (2) meetings with State Water Contractor or DWR representatives (and/or individual contractors).

Deliverable: Develop and Implement Strategy

#### TASK 4. FACILITATION

- Means Consulting LLC will be available to organize and facilitate five meetings of a member agency workgroup to deliberate, refine, and adopt a consensus document related to support for the Prop 1 application and continued negotiations in furtherance of the application. IEUA will handle meeting invitations and logistics. Each CBP Workgroup meeting will require 28 hours including:
  - Preparation for meeting (including conference calls/emails on agenda refinement, attendance at preparation meetings)
  - Packet preparation support (it is envisioned that IEUA staff will prepare most of the meeting support materials, e.g. FAQs, financial analysis). Assistance in development of PowerPoint materials is envisioned
  - Attendance at the meeting and follow-up
- Means Consulting LLC will assist in drafting the document.

Deliverable: Engaged Member Agencies and Captured Viewpoints and, Assuming Consensus, a Supporting Document

#### TASK 5. AS REQUIRED SERVICES

- Means Consulting LLC will be available to provide support services as required by IEUA. This could include interfacing between the Chino Basin Water Bank effort and the Prop 1 effort to ensure compatibility of terms, etc. 245 hours of time for Ed Means, and 144 hours of time for Bill Pecsí is allocated to this as-needed task and it is anticipated to run through April of 2020.

#### SCHEDULE

- The work is anticipated to occur through April of 2020. CBP Workgroup meetings are anticipated in January, February, March, April, and May of 2019.

**BUDGET**

The project can be completed at a not-to-exceed amount of \$189,514 including \$6,124 of direct costs (see Table 1 below). Mr. Bill Pecsí will work as independent subcontractors to Means Consulting LLC. Their fees, plus a 10% administrative charge, will be included in invoices billed under the Means Consulting LLC contract. Direct costs are a not-to-exceed amount and will be billed at actual costs.

**Table 1: Proposed Budget**

Prop 1 Support Activities						
Task	Description	Bill Pecsí	Sub total	Ed Means	Sub total	Task Total
		\$ 150.00		\$ 270.00		
		Hrs	(\$)	Hrs	(\$)	
1	Project management	0	\$ -	40	\$ 10,800	\$ 10,800
2	Develop and refine content to support a briefing document	8	\$ 1,200	32	\$ 8,640	\$ 9,840
3	Participate in planning/strategy meetings	48	\$ 7,200	100	\$ 27,000	\$ 34,200
4	Facilitate up to five CBP Workgroup meetings			140	\$ 37,800	\$ 37,800
5	As-needed services Jan 2019 through April 2020	144	\$21,600	245	\$ 66,150	\$ 87,750
Subtotal		200	\$30,000	557	\$ 150,390	\$ 180,390
Means Consulting LLC Administrative Subcontractor Surcharge			\$ 3,000			\$ 3,000
Direct Costs						\$ 6,124
Grand Total						\$ 189,514

Direct Costs	\$
3 2-day trips for Ed Means (\$1,000/trip including transportation, lodging, meals, and parking)	\$ 3,000
2 2-day trips Bill Pecsí including transportation, lodging, meals, and parking	\$ 2,000
Personal vehicle mileage @ \$0.58/mile - 1938 mi	\$ 1,124
	\$ 6,124



**ACTION  
ITEM  
1F**

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**Date:** February 20, 2019

**To:** The Honorable Board of Directors

**From:** Kirby Brill, General Manager 

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

02/13/19

**Executive Contact:** Chris Berch, Executive Manager of Engineering/AGM

**Subject:** Adoption of Resolution No. 2019-2-5, Certifying the Final SARCCUP Environmental Impact Report

---

**Executive Summary:**

Santa Ana River Conservation & Conjunctive Use Program (SARCCUP) is a watershed-wide collaboration between the five Santa Ana Watershed Project Authority (SAWPA) member agencies for the development of water supply reliability, water use efficiency, and habitat enhancements projects. SARCCUP member agencies may utilize existing and new facilities to convey additional surface water supplies to groundwater banking facilities, recharging the underlying groundwater basins throughout the watershed.

Tom Dodson & Associates and Environmental Science Associates (ESA) have prepared a Joint Environmental Impact Report (EIR) for IEUA, Western Municipal Water District (WMWD) and Orange County Water District (OCWD). The Draft EIR was published for public review in November 2018. Comments were received and responses are included in the Final EIR. IEUA, as the Lead Agency, will review and consider the information presented in the Final EIR for Board certification. Pursuant to the California Environmental Quality (CEQA) Guidelines, OCWD and WMWD as Responsible Agencies will consider the Final EIR prior to approving and implementing their respective SARCCUP projects covered in this EIR.

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**Staff's Recommendation:**

1. Adopt Resolution No. 2019-2-5, certifying the Final Environmental Impact Report for the Santa Ana River Conservation and Conjunctive Use Project (SARCCUP) Joint Projects, adopting the Mitigation Monitoring and Reporting Plan, and adopting the Findings of Fact; and
2. Authorize the Filing of Notice of Determination with the County Clerk and State Clearinghouse, Governor's Office of Planning and Research.

---

**Budget Impact** Budgeted (Y/N): N Amendment (Y/N): N Amount for Requested Approval: \$ 0

Account/Project Name:

WR16024, SARCCUP

*Fiscal Impact (explain if not budgeted):*

There is no fiscal impact for adoption/certification of the EIR.

**Prior Board Action:**

In May 2014, the Board of Directors (BOD) approved an MOU between the five SAWPA member agencies. In May 2015, the BOD approved an amendment to the 2014 Action Team MOU. In June 2016, the BOD approved an MOU for collaboration with SAWPA member agencies, approved PA23 for SARCCUP governance, appointed IEUA's General Manager as IEUA's representative on PA23, and approved a contract award to TDA for CEQA services. In June 2017, the BOD approved the cost share agreement for conservation measures.

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**Environmental Determination:**

**Project Environmental Impact Report**

The EIR package includes: Final Environmental Impact Report (EIR) for the Joint Projects, Responses to Comments, the Mitigation Monitoring and Reporting Program, Findings of Fact, and all other material in the administrative record. The EIR identified no significant unavoidable impacts.

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**Business Goal:**

The adoption of the resolution and certification of the Final Environmental Impact Report is consistent with IEUA's business goal of Environmental Stewardship and Regulatory Compliance.

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**Attachments:**

Attachment 1 - Resolution No. 2019-2-5

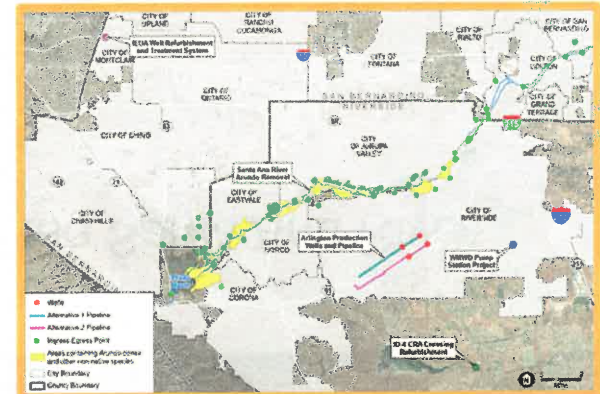
Attachment 2 - Adoption Presentation 2019-02-20

Attachment 3 - Final SARCCUP Environmental Report -

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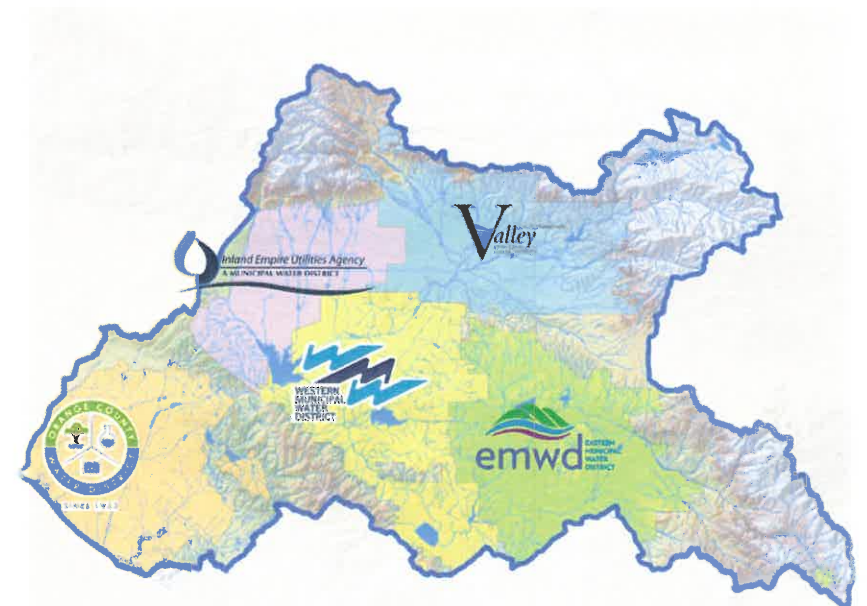
Attachment 4 - Findings of Fact

# Adoption of Resolution No. 2019-2-5, Certifying the Final SARCCUP Environmental Impact Report



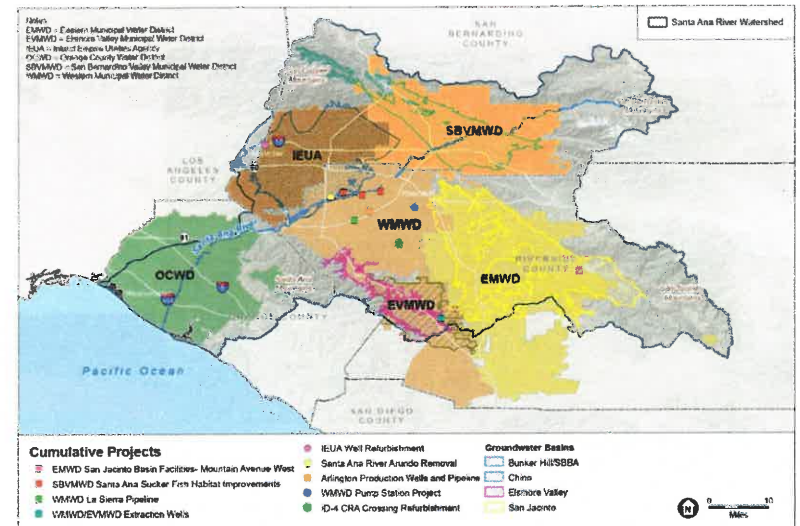
# Santa Ana River Conservation & Conjunctive Use Project SARCCUP

- Watershed-wide conservation and conjunctive use for the Santa Ana River
- Partial funding through Prop 84
- Multiple Environmental Impact Reports (EIR):
  - Joint EIR: IEUA, WMWD, and OCWD
  - EMWD EIR
  - SBVMWD EIR



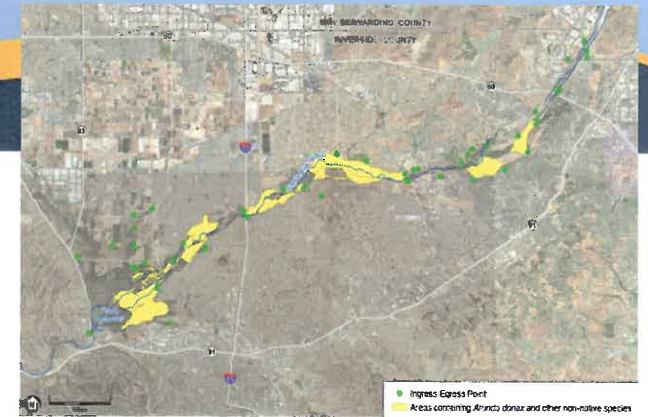
# Joint Environmental Impact Report

- Provides project-level coverage
- Evaluated potential environmental impacts of the projects:
  - Chino Basin Production Wells, Refurbishment and Treatment System
  - Arlington Production Wells and Pipeline
  - Cannon Pump Station
  - ID-4 Colorado River Aqueduct Crossing Refurbishment
  - Santa Ana River Arundo Removal
- IEUA is the lead agency



# Joint Environmental Impact Report

- Published on November 6, 2018
- Public review period ended on December 21, 2018
- Received and responded to comments
- No significant and unavoidable environmental impacts
- Less than significant potential adverse environmental impacts with mitigation
- Base document for Responsible Agencies



OCWD Arundo Removal Project

# Recommendation

1. Adopt Resolution No. 2019-2-5, certifying the Final Environmental Impact Report for the Santa Ana River Conservation and Conjunctive Use Project (SARCCUP) Joint Projects, adopting the Mitigation Monitoring and Reporting Plan, and adopting the Findings of Fact; and
2. Authorize Filing of Notice of Determination with the County Clerk and State Clearinghouse, Governor's Office of Planning and Research.

The certification of the Final Environmental Impact Report is consistent with IEUA's business goal of *Environmental Stewardship and Regulatory Compliance*.



**RESOLUTION NO.2019-2-5**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE INLAND EMPIRE UTILITIES AGENCY CERTIFYING THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE SANTA ANA RIVER CONSERVATION AND CONJUNCTIVE USE PROJECT JOINT PROJECTS; ADOPTING A MITIGATION MONITORING AND REPORTING PLAN; AND ADOPTING FINDINGS OF FACT**

Whereas, the California Environmental Quality Act (CEQA) of 1970, as amended, requires that prior to approval of any project, the Lead Agency shall consider the potential impacts and effects of said project, consider alternatives to the project, and identify mitigation measures necessary to reduce or eliminate the impact of the project on the environment; and

Whereas, the Inland Empire Utilities Agency (IEUA) is the Lead Agency for the Santa Ana River Conservation and Conjunctive Use Project (SARCCUP) Joint Projects and has caused to be prepared an Environmental Impact Report (EIR) for the Joint Projects in accordance with CEQA and its implementing guidelines; and

Whereas, IEUA prepared and circulated a Notice of Preparation (NOP) to the public, responsible agencies and other interested parties for their review and comment, pursuant to CEQA Guidelines Section 15082 on October 28, 2016; and

Whereas, IEUA held a public meeting on December 7, 2016 to receive comments on the NOP; and

Whereas, pursuant to comments received on the scope and content of the EIR in response to the NOP document, IEUA prepared and circulated for public review the SARCCUP Joint Projects Draft EIR (Draft EIR) assessing the project's environmental impact; and

Whereas, the SARCCUP Joint Projects Draft EIR evaluated potential environmental impacts associated with implementing five distinct projects designed to facilitate SARCCUP including the Chino Basin Production Wells, Refurbishment and Treatment System, Arlington Production Wells and Pipeline, Cannon Pump Station, ID-4 Colorado River Aqueduct Crossing Refurbishment, and Santa Ana River Arundo Removal; and

Whereas, IEUA is the implementing agency for the Chino Basin Production Wells, Refurbishment and Treatment System; and

Whereas, Western Municipal Water District is the implementing agency for the Arlington Production Wells and Pipeline, Cannon Pump Station, and ID-4 Colorado River Aqueduct Crossing Refurbishment; and

Whereas, Orange County Water District is the implementing agency for Santa Ana River Arundo Removal; and

Whereas, IEUA issued the Notice of Completion for the Draft EIR on November 6,

2018 and the Draft EIR was available for public review and comment from November 6, 2018 through December 21, 2018; and

Whereas, IEUA received nine letters with comments and concerns regarding the content of the Draft EIR; and

Whereas, the Draft EIR determined that all potential adverse environmental impacts are less than significant with or without mitigation; and

Whereas, the Draft EIR identified no significant and unavoidable environmental impacts; and

Whereas, IEUA provided a copy of the Responses to Comments to all Responsible Agencies on February 7, 2019, in accordance with CEQA Section 15087; and

Whereas, the Final EIR will be available for use as the base environmental document by any Responsible Agency proceeding to implement the projects covered in the EIR in accordance with State CEQA Guidelines Sections 15096; and

Whereas, the IEUA Board has received and has reviewed the Final EIR, consisting of the Draft EIR, all Responses to Comments, the Mitigation Monitoring and Reporting Program, Findings of Fact, and all other material in the administrative record; and

Whereas, pursuant to duly given public notice, the IEUA Board has held a full and fair public hearing on February 20, 2019 concerning the SARCCUP Joint Projects and the EIR and has considered all written and oral comments and testimony relating thereto and is fully advised thereon.

NOW, THEREFORE, BE IT RESOLVED, DETERMINED AND ORDERED BY THE INLAND EMPIRE UTILITIES AGENCY AS FOLLOWS:

Section 1. A full and fair public hearing having been held on the EIR prepared in connection with the SARCCUP Joint Projects, as stated in the recitals herein, the IEUA hereby approves and certifies the EIR for SARCCUP Joint Projects before the IEUA Board at this time which incorporates the written comments incorporated herein by reference, and all as more fully described in the Final EIR, which is comprised of the following:

- a. Draft Environmental Impact Report and Appendices
- b. Public Comments and Responses Thereto
- c. Mitigation Monitoring and Reporting Program

As the lead agency for the Joint Projects, IEUA hereby certifies pursuant to Section 15090 of the State CEQA Guidelines as follows:

- a. The Final EIR has been completed in compliance with CEQA.
- b. The Final EIR was presented to the IEUA Board, as the decisionmaking body of the lead agency and the IEUA Board reviewed and considered the information in the Final EIR prior to approving the Project.

c. The Final EIR reflects the lead agency's independent judgment and analysis.

Section 2. The Final EIR identifies certain significant effects that would result if the Joint Projects were approved. However, changes or alterations have been required in, or incorporated into, the Joint Project which avoid or substantially lessen the significant environmental effects as identified in the Final EIR. The IEUA Board, as the governing body of the lead agency, hereby adopts the Mitigation Monitoring and Reporting Program and Facts, and Findings. IEUA hereby adopts the mitigation measures recommended in the Mitigation Monitoring and Reporting Program prepared for the purpose of monitoring the implementation of mitigation measures and conditions of approval which have been adopted or made a condition of project approval.

Section 3. Pursuant to Public Resources Code Section 21081 (b), IEUA further finds that where the responsibility for implementation of mitigation measures has been assigned to participating agencies, such mitigation measures are within the responsibility and jurisdiction of such other agencies and such changes can and should be adopted by such agencies when they carry out future site-specific projects under the SARCCUP Joint Projects.

Section 4. IEUA hereby approves the Chino Basin Production Wells, Refurbishment and Treatment System Project, but does not authorize implementation until subsequent notice.

Section 5. IEUA hereby authorizes and directs the filing and posting of a Notice of Determination as required by Section 21152 of the Public Resources Code, and that filing required pursuant to Section 21089 (b) of the Public Resources Code by the General Manager with the Clerk of the Board of Supervisors of San Bernardino County, Orange County, and Riverside County, and the State Clearinghouse, Governor's Office of Planning and Research, as soon as possible after the adoption of this Resolution.

ADOPTED this 20<sup>th</sup> day of February 2019.

---

Paul Hofer, President of the Inland Empire Utilities Agency\* and the Board of Directors thereof

ATTEST:

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Kati Parker, Secretary/Treasurer of the Inland Empire Utilities Agency\* and of the Board of Directors thereof

STATE OF CALIFORNIA )

COUNTY OF )  
SAN BERNARDINO )

)SS  
)

I, Kati Parker, Secretary of the Inland Empire Utilities Agency\*;

DO HEREBY CERTIFY that the foregoing Resolution being No. 2019-2-5,  
was adopted at a regular Board Meeting on February 20, 2019, of said Agency by the  
following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

---

Kati Parker, Secretary/Treasurer of the  
Inland Empire Utilities Agency\* and of  
the Board of Directors thereof

(Seal)

\*A Municipal Water District

Final

**SANTA ANA RIVER CONSERVATION AND  
CONJUNCTIVE USE PROJECT (SARCCUP) JOINT  
PROJECTS ENVIRONMENTAL IMPACT REPORT (EIR)**

**Environmental Findings of Fact  
State Clearinghouse Number 2016101079**

**Prepared for  
Inland Empire Utilities Agency**

**February 2019**



Final

**SANTA ANA RIVER CONSERVATION AND  
CONJUNCTIVE USE PROJECT (SARCCUP) JOINT  
PROJECTS ENVIRONMENTAL IMPACT REPORT (EIR)  
Environmental Findings of Fact  
State Clearinghouse Number 2016101079**

**Prepared for  
Inland Empire Utilities Agency**

**February 2019**

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# TABLE OF CONTENTS

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## SARCCUP Joint Projects

### Environmental Findings of Fact

	<u>Page</u>
<b>1. Background and Introduction .....</b>	<b>2</b>
1.1 Project Overview .....	2
1.2 Public Involvement and EIR Scoping .....	2
1.3 EIR Certification and Project Approval Process.....	3
1.3.1 Findings Required Under CEQA.....	3
1.3.2 Significant Effects and Mitigation Measures.....	4
1.3.3 Mitigation Monitoring and Reporting Program.....	4
1.3.4 Certification of the EIR and Adoption of Findings.....	5
<b>2. Project Summary .....</b>	<b>5</b>
2.1 Project Background .....	5
2.2 Project Location.....	7
2.3 Project Description .....	7
2.3.1 Chino Basin Production Wells, Refurbishment and Treatment System .....	8
2.3.2 Arlington Production Wells and Pipeline.....	8
2.3.3 Cannon Pump Station.....	9
2.3.4 ID-4 Colorado River Aqueduct Crossing Refurbishment.....	9
2.3.5 Santa Ana River Arundo Removal.....	10
2.4 Project Objectives.....	10
2.5 Record of Proceedings.....	11
2.6 Custodian and Location of Records .....	12
<b>3. Environmental Findings.....</b>	<b>12</b>
3.1 Findings Regarding Environmental Impacts Which Can Be Mitigated to Less than Significant.....	12
3.1.1 Project Impacts .....	12
3.1.2 Cumulative Impacts .....	52

#### List of Tables

Table 1 SARCCUP DYY.....	6
Table 2 Maximum Unmitigated Regional Construction Emissions (pounds per day) .....	13
Table 3 Maximum Mitigated Regional Construction Emissions (pounds per day) .....	14
Table 4 Construction Equipment and Estimated Noise Levels (L <sub>eq</sub> ).....	43
Table 5 Estimated Construction Noise Levels (L <sub>eq</sub> ) .....	46



# SANTA ANA RIVER CONSERVATION AND CONJUNCTIVE USE PROJECT (SARCCUP) JOINT PROJECTS EIR

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## Environmental Findings of Fact

### 1. Background and Introduction

#### 1.1 Project Overview

The Inland Empire Utilities Agency (IEUA) has completed an Environmental Impact Report (EIR) (State Clearinghouse Number 2016101079) for the Santa Ana River Conservation and Conjunctive Use Project (SARCCUP) Joint Projects (collectively, the “proposed Project”). The IEUA is the Lead Agency for the purposes of preparing and certifying the EIR pursuant to Sections 15050 and 15367 of the State CEQA Guidelines (California Code of Regulations, Section 15000 et seq.)

The purpose of the EIR is to evaluate the potential environmental impacts of the proposed Project. In compliance with Section 21002.1 of CEQA and Section 15002 of the State CEQA Guidelines, the IEUA, as Lead Agency, has prepared the EIR in order to (1) inform the general public, the local community, responsible and interested public agencies and the Agency’s decision-making bodies and other organizations, entities, and interested persons of the potential environmental effects of the proposed Project, feasible measures to reduce potentially significant environmental effects, and alternatives that could reduce or avoid the significant effects of the proposed Project, (2) enable the Agency to consider environmental consequences when deciding whether to approve the proposed Project and (3) to satisfy the substantive and procedural requirements of CEQA.

#### 1.2 Public Involvement and EIR Scoping

The EIR complies with the provisions of CEQA (California Public Resources Code, Sections 21000 et seq.), the State CEQA Guidelines (California Code of Regulations, Section 15000 et seq.) and the Agency’s Procedures for Implementing the State CEQA Guidelines. In compliance with CEQA, IEUA has solicited and considered comments from Responsible and Trustee Agencies, members of the public, and other interested parties during the proposed Project’s various environmental review processes:

- In accordance with CEQA Guidelines Sections 15063 and 15082, IEUA prepared and distributed a Notice of Preparation (NOP) of a PEIR. The NOP was distributed on

October 28, 2016 to governmental agencies, organizations, and persons who may be interested in the project. Since the NOP release, SARCCUP partnering agencies agreed to prepare separate environmental impact assessments for construction of SARCCUP-related facilities that are occurring within their service areas. Consistent with partnering agencies' decision to prepare separate environmental impact assessments, three partnering agencies, IEUA, Western Municipal Water District (WMWD), and Orange County Water District (OCWD), prepared a project-specific Draft EIR, and not a PEIR, to assess project-, not program-, level impacts related to implementing five specific projects that are part of SARCCUP Joint Projects (proposed Project).

- In compliance with Section 21083.9 of CEQA and Section 15082 (c)(1) of the State CEQA Guidelines, IEUA held a public scoping meeting on December 7, 2016, to receive public and agency comments.
- Comments received from the public and agencies during the public review period for the NOP and the public scoping meeting were considered in the preparation of the Draft EIR prepared for the proposed Project.
- In November 2018, a Draft EIR was prepared for the proposed Project in accordance with current CEQA regulations and guidelines. The Draft EIR was circulated for a 45-day public review period on November 6, 2018. Notification was provided to the State Clearinghouse (SCH), to local, state, and federal agencies, and to all interested parties and jurisdictions pursuant to the requirements of Section 15087 of the State CEQA Guidelines. There were nine letters/correspondence received by IEUA during the 45-day review period. Comments within each letter/correspondence were evaluated and responded to in accordance with Section 15088 of the State CEQA Guidelines.

## 1.3 EIR Certification and Project Approval Process

### 1.3.1 Findings Required Under CEQA

The IEUA will determine whether to certify the EIR for the proposed Project. The EIR, as required by State CEQA Guidelines Sections 15089 and 15132, consists of the Draft EIR (SCH No. 2016101079), the Final EIR Document, and any other information added by IEUA prior to certification of the Final EIR. The Final EIR Document includes an Introduction to Response to Comments; comments received on the Draft EIR, a list of persons, organizations, and public agencies commenting on the Draft EIR; the responses of the IEUA as "Lead Agency" to significant environmental points raised in the review and consultation process; and the Mitigation Monitoring and Reporting Program (MMRP). Because the Draft EIR identified potentially significant environmental impacts, the IEUA must also make certain "findings" as part of its action to certify that the EIR has been completed in compliance with CEQA and to approve the proposed Project. Pursuant to CEQA Section 21081 and State CEQA Guidelines Section 15091, no public agency shall approve or carry out a project for which an environmental impact report has been certified, which identifies one or more significant effects on the environment that would occur if the Project is approved or carried out, unless the public agency makes one or more findings for each of those significant effects, accompanied by a brief explanation of the rationale

of each finding. The possible findings, which must be supported by substantial evidence in the record, are:

- (1) Changes or alterations have been required in or incorporated into the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or Project alternatives identified in the Final EIR.

### **1.3.2 Significant Effects and Mitigation Measures**

The Draft EIR identified several significant environmental effects (or “impacts”) resulting from implementation of the proposed Project. Some of these significant effects can be fully avoided/mitigated through the adoption of feasible mitigation measures. For those significant impacts that cannot be mitigated to less than significant, IEUA is required to balance, as applicable, the economic, legal, social, technological, or other benefits of the proposed Project against its unavoidable environmental risks when determining whether to approve the proposed Project. The State CEQA Guidelines at Section 15093(a) provide that if specific economic, legal, social, technological, or other benefits of the proposed Project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable” and IEUA may adopt a Statement of Overriding Considerations to that effect. The Draft EIR identified several significant environmental effects (or “impacts”) resulting from implementation of the proposed Project. All of these significant effects can be reduced to less than significant through the adoption of feasible mitigation measures. The Draft EIR found that the proposed Project would not result in any significant and unavoidable impacts, and therefore, a Statement of Overriding Considerations would not need to be adopted. Section 3 describes the Project and cumulative effects and outlines IEUA’s findings with respect to each of these environmental effects of the proposed Project.

### **1.3.3 Mitigation Monitoring and Reporting Program**

A Mitigation Monitoring and Reporting Program (MMRP) has been prepared to monitor and report the implementation of the mitigation measures identified for the proposed Project. The MMRP will be adopted by IEUA concurrently with these findings, and will be implemented by IEUA during the proposed Projects’ planning horizon and through the project review, construction, and post-construction periods of individual development projects. To the extent that these findings conclude that all mitigation measures outlined in the EIR are feasible and have not been modified, superseded, or withdrawn, IEUA hereby binds itself to implement these measures and the additional measures included in response to comments. These findings, in other words, are not merely informational, but rather constitute a binding set of obligations that will come into effect when IEUA formally approves the proposed Project.

### 1.3.4 Certification of the EIR and Adoption of Findings

IEUA will review and consider the information contained in the EIR, as well as submissions from public officials, public agencies, and the general public. Prior to Project approval, the IEUA shall certify that the EIR reflects the Agency's independent judgment and analysis. Having considered the foregoing information, as well as any and all other information in the record, IEUA shall make findings pursuant to CEQA Section 21081. In accordance with the provisions of CEQA and the State CEQA Guidelines, IEUA shall adopt the Findings as part of its certification of the EIR for the proposed Project.

## 2. Project Summary

### 2.1 Project Background

SARCCUP is a watershed-scale collaborative program designed to improve the Santa Ana River watershed's water supply resiliency and reliability by implementing various watershed-wide projects (**Table 1**) that would increase available dry-year yield (DYY) from local groundwater basins. As a watershed-wide cooperative venture, SARCCUP will allow the regional water managers to combine groundwater resources and water conveyance infrastructure for the benefit of the watershed as a whole. SARCCUP consists of the following main program elements:

1. Conjunctive Use Program<sup>1</sup> for the Santa Ana Watershed;
2. Invasive weed removal and habitat creation/restoration for the Santa Ana sucker (*Catostomus santaanae*), a native fish species listed as threatened under the federal Endangered Species Act; and
3. Water use efficiency and water conservation measures.

Regional water managers would utilize existing and new facilities to convey additional surface water supplies to groundwater banking facilities, recharging the underlying groundwater basins throughout the watershed. Conjunctive use of the banked groundwater would occur collaboratively between SARCCUP members.

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<sup>1</sup> Conjunctive Use Program refers to the management of groundwater resources to enhance storage and water supplies through enhanced recharge and extraction management.

**TABLE 1  
 SARCCUP DYY**

Project Name	Program Element	Location	Water Supply or Storage (AF)	Capacity (AFY)	Dry Year Supply or Yield ** (AFY)	Annual Demand Reduction (AFY)
Santa Ana Sucker Habitat Restoration and Creation	Habitat; Water Conservation	Santa Ana River, Riverside County	Not Applicable	Not Applicable	Not Applicable	800***
Arundo Removal	Habitat; Water Conservation	Prado Basin and Santa Ana River, Riverside County	Not Applicable	Not Applicable	Not Applicable	12,800***
Water Use Efficiency and Conservation	Water Conservation	Santa Ana River Watershed	Not Applicable	Not Applicable	Not Applicable	2,400***
Chino Basin Bank	Conjunctive Use Program	Chino Groundwater Basin and Cucamonga Sub-basin; San Bernardino County	0-50,000	Up to 32,000	Up to 16,667	Not Applicable
San Bernardino Basin Bank	Conjunctive Use Program	Bunker Hill Groundwater Basin; San Bernardino County	64,000	25,000	21,333	Not Applicable
Elsinore Basin Bank	Conjunctive Use Program	Bedford-Coldwater Sub-basin within Elsinore Groundwater Basin; Riverside County	0-4,500	Up to 1,500*	Up to 1,500	Not Applicable
Riverside-Arlington Basin Bank	Conjunctive Use Program	Riverside-Arlington Groundwater Basin; Riverside County	6,000-25,000	Up to 8,500	Up to 8,500	Not Applicable
Orange County Basin Bank	Conjunctive Use Program	Orange County Groundwater Basin	36,000-50,000	Up to 12,500*	Up to 16,667	Not Applicable
San Jacinto Basin Bank	Conjunctive Use Program	San Jacinto Groundwater Basin; Riverside County	19,500	6,500	6,500	Not Applicable
Central Valley Basin Bank(1)	Conjunctive Use Program	Central Valley	0-15,000	Up to 15,000	Up to 15,000	Not Applicable
<b>TOTAL</b>			<b>144,000-180,000</b>	<b>Up to 101,000</b>	<b>43,000-60,000</b>	<b>16,000</b>

Source: SAWPA 2018; DSM Table 4

\* Elsinore, Riverside Arlington, and Orange County DYY supply shown here is assumed.

\*\* SARCCUP will be operated to produce approximately 60,000 AFY of dry-year supply. The annual quantity of water actually produced under SARCCUP will be managed to drain the groundwater bank in three years, but operational and capacity limitations could extend the time needed to drain the bank.

\*\*\* Santa Ana Sucker Habitat Restoration and Creation, Arundo Removal, and Water Use Efficiency reduce existing consumption resulting in availability of this water supply for other uses.

- (1) SARCCUP would secure a groundwater storage and recovery agreement with an existing Central Valley Basin Bank to supplement DYY supply within the Santa Ana River Watershed. If pursued, the water would be conveyed into the Watershed by existing facilities similar to those used to transport water to State Water Project Contractors along the California Aqueduct. The groundwater storage, capacity and DYY supply shown here is assumed. If deemed necessary, a separate CEQA process will be completed at such time prior to implementing this program element.

The program was created to ensure sustainability of the region's groundwater supplies. Partnering agencies would create a network of conveyance facilities designed to support a cooperative, inter-agency water management program. Partnering agencies include: Eastern Municipal Water District (EMWD), IEUA, OCWD, San Bernardino Valley Municipal Water District (SBVMWD),

WMWD and the Santa Ana Watershed Project Authority (SAWPA), a joint-powers agency comprised of partner agencies EMWD, IEUA, OCWD, SBVMWD, and WMWD (see Figure 2-1). Additionally, SARCCUP partners with Orange County Coastkeeper (OCCK), a 501(c)(3) nonprofit organization.

After program implementation, SARCCUP would provide approximately 60,000 AFY (Table 1) in DYY during wet years, estimated to occur three out of every 10 years. Water purchased for storage in the SARCCUP facilities would include water purchased by the partner agencies collectively and individually, as well as transfers between the agencies. Additionally, SARCCUP would remove up to 640 acres of the invasive plant species *Arundo donax*, to create 3.5 miles (18,250 linear feet) of restored in-stream habitat and 40.5 acres of restored riparian habitat along the Santa Ana River for Santa Ana sucker (*Catostomus santaanae*), a federally protected species under the Endangered Species Act (ESA).

SARCCUP would initiate additional water conservation measures throughout the Santa Ana Watershed such as conservation-based rate structures and Smartscape; an educational, outreach, training and communication service that provides support in the design, installation and maintenance of drought tolerant landscapes. It is estimated that up to 2,400 AFY of water supply can be provided by implementing these programs.

## 2.2 Project Location

The proposed Project would be implemented within the service areas of IEUA (Chino Basin) and WMWD (Riverside-Arlington Basin) and along 16 miles of the Santa Ana River and tributaries. These proposed Project areas are located in San Bernardino and Riverside counties.

## 2.3 Project Description

The proposed Project includes the implementation of five specific projects that are located within the Santa Ana River Watershed which would assist in achieving the objectives of the SARCCUP. The five individual projects (collectively, proposed Project) include the following:

- Chino Basin Production Wells, Refurbishment and Treatment System
- Arlington Production Wells and Pipeline
- Cannon Pump Station
- ID-4 Colorado River Aqueduct (CRA) Crossing Refurbishment
- Santa Ana River *Arundo* Removal

Proposed Project activities include construction of new groundwater production wells, well refurbishment and installation of groundwater treatment systems in the City of Montclair; the construction of extraction wells, pipelines, pump stations, and ancillary facilities in the City of Riverside; pipeline refurbishment in unincorporated Riverside County; and invasive weed and

non-native species removal in the Santa Ana River. These projects would be implemented by three of the five partner agencies: IEUA, WMWD, and OCWD. These five projects are summarized below.

### **2.3.1 Chino Basin Production Wells, Refurbishment and Treatment System**

IEUA-member agency Monte Vista Water District (MVWD) will design and construct a new treatment system for an existing groundwater well, number 34, to extract approximately 3,000 AFY from the Chino Basin. Well 34 is located within the City of Montclair, in the County of San Bernardino. This project supports the SARCCUP conjunctive use between the partnering agencies.

In addition, the Jurupa Community Services District (JCSD) is proposing to construct an Ion Exchange Treatment Plant (IXTP) at the Well 13 site to remove nitrate from extracted groundwater. The facility would be designed to maintain acceptable nitrate levels in extracted groundwater. This project has the potential to increase JCSD's production from these sources by 4,700 AF annually from its current level. The Well 13 site is located at the intersection of Etiwanda and Philadelphia in City of Jurupa Valley

### **2.3.2 Arlington Production Wells and Pipeline**

WMWD would construct two additional production wells and extend the conveyance pipeline in connection with the existing Arlington Desalter facility. This project supports the SARCCUP conjunctive use between the partnering agencies within the Riverside-Arlington Basin. There are two alternatives for the location of the wells and the conveyance pipeline.

#### **2.3.2.1 Alternative 1**

For one alternative location, Well AD-6 would be located at the intersection of Magnolia Avenue and Jackson Street in the City of Riverside. AD-6 would be implemented within a grass field adjacent to the Sherman Indian Museum. Well AD-7 would be located at the intersection of Magnolia Avenue and Adams Street in the City of Riverside within a grassy area adjacent to CVS Pharmacy. The new pipeline would start at Well AD-7 and run underground west along Magnolia Avenue, connect to Well AD-6 and continue to a point just beyond La Sierra Avenue within the public right-of-way (ROW) to the existing Arlington Desalter facility.

#### **2.3.2.2 Alternative 2**

For the other alternative location, Well AD-6 would be located off Jackson Street in the City of Riverside along a drainage area. The well site is surrounded by residential development. Well AD-7 would be located at the intersection of Auto Center Drive and Motor Circle within an automobile park. The new pipeline would start at Well AD-7 and run underground along Auto Center Drive, connect to Well AD-6 and continue north on Adams Street, west on Indiana Avenue to Fillmore Street within the public ROW to the existing Arlington Desalter facility.

### **2.3.3 Cannon Pump Station**

WMWD will design and construct a new interconnection pipeline and corresponding pump station to deliver potable water from Riverside-Bunker Hill basin to the WMWD service area. The new pump station, Cannon Pump Station will be designed to move approximately 10 cfs from the Riverside and/or Bunker Hill groundwater basins into the WMWD service area. This project supports the SARCCUP conjunctive use between the partnering agencies within the Riverside-Bunker Hill Basin.

Additionally, WMWD will relocate the existing Crest Booster Station and associated pipelines in the City of Riverside. Both the Cannon Pump Station and the relocated Crest Booster Station and associated facilities will be located near the intersection of Alessandro Boulevard and Overlook Parkway within an undeveloped vegetated area. Access to the two proposed facilities would be provided by a shared driveway located off of Caulfield Court cul-de-sac.

### **2.3.4 ID-4 Colorado River Aqueduct Crossing Refurbishment**

WMWD owns and operates service connection ID-4, a non-potable water supply, supplying approximately 1,000 AFY of water to agricultural and irrigation customers within the Gavilan Plateau east of Lake Mathews. The pipeline connecting to ID-4 crosses over the CRA and is prone to deterioration. WMWD would implement one of two refurbishment alternatives to ensure the ID-4 Crossing pipe, located at the existing CRA intake facility is protected. The existing ID-4 Crossing pipe/CRA intake facility is located in unincorporated Riverside County at the foot of the CRA, stemming from Lake Mathews, approximately 600 feet north of the intersection of Kirkpatrick Road and Cajalco Road.

#### **2.3.4.1 Alternative 1**

Protect the existing ID-4 pipe crossing by adding a split casing and sump tank – WMWD would implement a lightweight split casing that covers the ID-4 crossing over the CRA to direct minor or moderate leaks to the proposed sump, a fiberglass-reinforced plastic (FRP) tank located at the existing facility.

#### **2.3.4.2 Alternative 2**

Reinforce the existing ID-4 pipe crossing with fiberglass wrapping and HDPE, or CIPP lining – WMWD would reinforce the crossing pipe with fiberglass material outside and with flexible high-density polyethylene (HDPE) or Cured-in-Place Pipe (CIPP) inside. The pipe would be triple layered including its original steel pipe.



### 2.3.5 Santa Ana River Arundo Removal

Approximately 640 acres of arundo would be removed along the Santa Ana River and its tributaries. The arundo removal project would occur at locations along the Santa Ana River between Prado Basin and the Interstate 10 crossing in San Bernardino. General locations of removal areas and ingress-egress points. Other smaller areas of Arundo to be removed, generally 5 acres or less, could be located along the Santa Ana River or its tributaries. Arundo removal includes eradication of arundo and other invasive exotic plants, including tamarisk (*Tamarix spp.*); perennial pepperweed (*Lepidium latifolium*); tree of heaven (*Ailanthus altissima*); castor bean (*Ricinus communis*); various palms, (*Phoenix canariensis*) and (*Washingtonia robusta*); pampasgrass (*Cortaderia selloana*); and others.

Arundo removal on the Santa Ana River would start with biomass reduction and removal. The canes would be chipped in place, where possible, to pieces smaller than 3 inches. The chips make good mulch and are too small to sprout. The roots would be left in place to avoid the major excavation that would be required to remove them. A monitoring and maintenance program would be developed by the partnering agencies post removal to ensure continued eradication. New growth would be treated with a U.S. Environmental Protection Agency (EPA) aquatically approved herbicide. Over years of re-treatments, the huge root masses would eventually dry out and be rendered unable to support new plant growth. As re-sprouting of invasives diminishes and giant reed eradication is approached in an area, the need for riparian re-vegetation would be assessed. It is recommended that only local and limited re-vegetation efforts be implemented as dictated by special needs, such as erosion control and native riparian establishment. Monitoring criteria would be established in order to quantify the recovery of the riparian habitat. GIS mapping would be utilized to display target restoration and recovery areas. In areas where natural succession is not establishing native vegetation, restoration activities would occur, such as active planting and seeding to establish a fully functional native riparian habitat.

The river dynamics have led to the expansion of the riparian forest into areas released from competition with invasives. For example, along San Timoteo Creek, removal efforts began in 1997 and eventually 230 acres of giant reed were removed. Today, more than 70 percent of those acres support riparian growth without re-vegetation efforts. On the Santa Ana River main stem where areas greater than 5 acres are covered 100 percent in giant reed, it may be beneficial to replant thickets of native riparian trees to aid in faster natural colonization. However, care must be taken as to the location and timing of such efforts or the re-vegetation and eradication efforts could conflict.

## 2.4 Project Objectives

Section 15124(b) of the CEQA Guidelines states that the project description shall contain; “a statement of the objectives sought by the proposed project.” As set forth by the CEQA Guidelines, the list of objectives that IEUA and other SARCCUP member agencies seek to achieve for the proposed Project is provided below.

The partner agencies currently rely on water imported from the Sacramento-San Joaquin Bay Delta (Delta) and the Colorado River Aqueduct (CRA) to meet demands within their service

areas. Currently, the agencies rely on imported water at approximately the following percentages: IEUA – 25 percent; EMWD – up to 75 percent; SBVMWD – 25 percent; WMWD – 25 percent; OCWD – 15 to 30 percent. The curtailment of imported supplies from the Delta due to natural or manmade interruptions has the potential to impact water supply reliability in the Santa Ana River watershed. The snowpack in the Sierra Mountains, water levels in Lake Mead, and groundwater storage levels throughout California have recently experienced historic lows.

*SARCCUP would increase DYY from local groundwater basins in the watershed to offset future reductions in water supply, whether due to climate change or natural or manmade supply cutbacks.*

*SARCCUP activities support the goals of the One Water One Watershed 2.0 Plan (2014), which is the Santa Ana River Watershed's Integrated Regional Watershed Management Plan (IRWMP).*

For a resilient water supply and use in the watershed, a balance is also needed to improve native species' population and habitat in the Santa Ana River. Invasive plants such as *Arundo donax* use significantly more water than native plant species and have aggressively altered the habitat for endemic fish species, such as the Santa Ana Sucker, by choking out conditions for spawning, foraging, and refugia. Through SARCCUP's habitat improvements element, the Santa Ana sucker's habitat will more than double and the remaining *Arundo donax* in the Santa Ana River will be removed.

*SARCCUP would reduce water demand through removal of *Arundo donax*, a water-intensive, non-native plant within the Santa Ana River Watershed.*

*SARCCUP would enhance the watershed environment through restoration of existing riparian habitat and creating new habitat for a federally listed native freshwater fish species, the Santa Ana sucker (*Catostomus santaanae*). This will also support and facilitate obtaining permits from the state and federal wildlife agencies for water supply projects along the Santa Ana River.*

## 2.5 Record of Proceedings

For purposes of CEQA and these findings, the Record of Proceedings for the proposed Project consists of the following documents and other evidence, at a minimum:

- The NOPs and all other public notices issued by IEUA in conjunction with the proposed Project.
- The Final EIR document for the proposed Project which consists of an Introduction to Response to Comments, a Comment Letters listing, Response to Comments, and the MMRP.
- The Draft EIR, and all appendices thereto.
- The documents, reports, and technical memoranda included or referenced in the technical appendices of the Draft EIR.
- All documents, studies, Environmental Impact Reports (EIRs), or other materials incorporated by reference in the Draft EIR and Response to Comments.
- IEUA, SARCCUP Staff Reports for the Project.

- Any documents expressly cited in these findings.
- Any other relevant materials required to be in the record of proceedings by Public Resources Code Section 21167.6(e) (excluding privileged materials).

## 2.6 Custodian and Location of Records

The documents and other materials that constitute the administrative record for the Agency's actions related to the Project are located at the Inland Empire Utility Agency Headquarters, 6075 Kimball Avenue, Chino, CA 91708. The Agency is the custodian of the record of proceedings for the Project. Copies of these documents, which constitute the record of proceedings, are, and at all relevant times, have been and will be available upon request at the Agency's headquarters. This information is provided in compliance with Public Resources Code Section 21081.6(a)(2) and CEQA Guideline Section 15091(e).

## 3. Environmental Findings

### 3.1 Findings Regarding Environmental Impacts Which Can Be Mitigated to Less than Significant

Environmental impacts identified in the EIR as potentially significant, but which the IEUA finds can be mitigated to less than significant through the imposition of feasible mitigation measures identified in the EIR and set forth herein, are described in this section.

#### 3.1.1. Project Impacts

##### 3.1.1.1 Air Quality

- a. **Potentially Significant Impact:** The proposed Project could violate an air quality standard or contribute substantially to an existing or projected air quality violation.

**Facts in Support of the Finding:** Construction activities associated with the proposed Project would generate pollutant emissions during construction activities. The worst-case daily construction emissions were calculated to determine maximum daily construction emissions (pounds per day) for the Project. Results of the criteria pollutant calculations are presented in **Table 2**. The Project includes five components occurring within the same time period at five different locations within the basin. Therefore, as a worst case analysis, it is assumed that various phases of construction could overlap. As shown in **Table 2**, construction-related daily emissions for the criteria and precursor pollutants (VOC, CO, SO<sub>x</sub>, PM10, and PM2.5) would be below SCAQMD significance thresholds. However, without mitigation, NO<sub>x</sub> emissions would exceed the SCAQMD's threshold. These calculations include appropriate dust control measures required to be implemented during each phase of development, as required by SCAQMD Rule 403 (Control of Fugitive Dust). Therefore, with respect to regional emissions from construction activities, impacts would be potentially significant.

**TABLE 2**  
**MAXIMUM UNMITIGATED REGIONAL CONSTRUCTION EMISSIONS (POUNDS PER DAY) <sup>a</sup>**

Source	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM10 <sup>b</sup>	PM2.5 <sup>b</sup>
<b>Individual Project Components</b>						
Arlington Production Wells (2019)	1.07	10.63	8.51	0.02	1.46	0.61
Arlington Production Wells (2020)	0.99	9.88	8.35	0.02	1.42	0.56
Arlington Production Wells (2020)	3.70	36.36	32.00	0.06	2.41	1.84
Arlington Production Wells (2021)	3.35	32.69	31.48	0.06	2.16	1.61
Arlington Production Wells (2022)	3.02	28.75	31.05	0.06	1.92	1.38
Arlington Production Wells (2023)	2.80	25.97	30.78	0.06	1.76	1.23
Cannon Pump Station (2020)	4.74	47.07	41.39	0.08	2.82	2.28
Cannon Pump Station (2021)	4.29	42.23	40.72	0.08	2.51	1.99
Cannon Pump Station (2022)	3.85	36.95	40.16	0.08	2.20	1.70
Cannon Pump Station (2023)	3.75	35.05	42.20	0.08	2.09	1.60
ID-4 CRA Crossing (2019)	1.34	12.77	9.21	0.02	1.39	0.72
ID-4 CRA Crossing (2020)	1.20	11.55	8.84	0.02	1.30	0.64
Chino Basin Production Wells, Refurbishment and Treatment System (2019)	3.28	32.46	26.20	0.06	1.99	1.64
Chino Basin Production Wells, Refurbishment and Treatment System (2020)	3.03	30.15	25.97	0.06	1.80	1.47
Arundo Removal (2019)	5.20	50.43	31.09	0.05	15.06	9.32
Arundo Removal (2020)	4.93	47.27	30.65	0.05	14.87	9.14
Arundo Removal (2021)	4.69	44.80	30.32	0.05	14.68	8.96
Arundo Maintenance (2021)	0.00	0.00	0.04	0.00	0.01	0.00
Arundo Maintenance (2022)	0.00	0.00	0.03	0.00	0.01	0.00
Arundo Maintenance (2023)	0.00	0.00	0.03	0.00	0.01	0.00
<b>Overlapping Phases</b>						
Arlington Wells + ID-4 + Chino Basin (2019)	5.69	55.85	43.92	0.11	4.83	2.97
Arlington Wells + ID-4 + Chino Basin + Arundo (2019)	10.89	106.28	75.00	0.16	19.90	12.28
Arlington Wells + ID-4 + Chino Basin + Arundo (2020)	10.16	98.86	73.81	0.16	19.39	11.80
Arlington Facilities + Cannon PS + Chino Basin + Arundo (2020)	16.40	160.85	130.01	0.25	21.90	14.72
Arlington Facilities + Cannon PS + Arundo (2020)	13.37	130.70	104.04	0.19	20.09	13.25
Arlington Facilities + Cannon PS + Arundo (2021)	12.32	119.72	102.52	0.18	19.34	12.56
Arlington Facilities + Cannon PS + Arundo M (2021)	7.64	74.92	72.24	0.13	4.68	3.60
Arlington Facilities + Cannon PS + Arundo M (2022)	6.87	65.70	71.24	0.13	4.13	3.09
Arlington Facilities + Cannon PS + Arundo M (2023)	6.55	61.03	73.02	0.14	3.86	2.83
<b>Maximum Daily Construction Emissions</b>	<b>16.40</b>	<b>160.85</b>	<b>130.01</b>	<b>0.25</b>	<b>21.90</b>	<b>14.72</b>
SCAQMD Significance Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	Yes	No	No	No	No

NOTES:

<sup>a</sup> Totals may not add up exactly due to rounding in the modeling calculations. Combined rows account for overlapping emissions from the listed activities. Detailed emissions calculations are provided in Appendix B.

<sup>b</sup> Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

Source	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM10 <sup>b</sup>	PM2.5 <sup>b</sup>
SOURCE: ESA, 2018						

With incorporation of Mitigation Measure AIR-1 (below), emissions of NO<sub>x</sub> would be reduced to below significance thresholds. Results of the mitigated criteria pollutant concentrations are presented in **Table 3**. As shown, with incorporation of mitigation measure AIR-1, impacts from regional emissions of NO<sub>x</sub> during construction activities would be reduced to less than significant levels.

**TABLE 3**  
**MAXIMUM MITIGATED REGIONAL CONSTRUCTION EMISSIONS (POUNDS PER DAY)<sup>a</sup>**

Source	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM10 <sup>b</sup>	PM2.5 <sup>b</sup>
<b>Individual Project Components</b>						
Arlington Production Wells (2019)	0.59	10.12	11.81	0.02	1.46	0.62
Arlington Production Wells (2020)	0.58	9.97	11.67	0.02	1.46	0.62
Arlington Pipeline/Facilities (2020)	1.59	27.26	36.36	0.06	2.02	1.56
Arlington Pipeline/Facilities (2021)	1.55	27.07	36.21	0.06	2.00	1.55
Arlington Pipeline/Facilities (2022)	1.53	26.96	36.11	0.06	2.00	1.54
Arlington Pipeline/Facilities (2023)	1.50	26.57	36.00	0.06	1.99	1.54
Cannon Pump Station (2020)	2.10	35.55	47.67	0.08	2.33	1.95
Cannon Pump Station (2021)	2.05	35.29	47.49	0.08	2.31	1.93
Cannon Pump Station (2022)	2.01	35.13	47.37	0.08	2.30	1.92
Cannon Pump Station (2023)	2.06	36.49	50.01	0.08	2.40	2.01
ID-4 CRA Crossing (2019)	1.34	12.77	9.21	0.02	1.39	0.72
ID-4 CRA Crossing (2020)	1.20	11.55	8.84	0.02	1.30	0.64
Chino Basin Production Wells, Refurbishment and Treatment System (2019)	0.75	12.98	15.48	0.03	1.02	0.75
Chino Basin Production Wells, Refurbishment and Treatment System (2020)	0.73	12.83	15.40	0.03	1.02	0.74
Arundo Removal (2019)	1.20	23.68	31.50	0.05	13.46	7.93
Arundo Removal (2020)	1.19	23.66	31.45	0.05	13.46	7.93
Arundo Removal (2021)	1.18	23.63	31.41	0.05	13.45	7.93
Arundo Maintenance (2021)	0.00	0.00	0.04	0.00	0.01	0.00
Arundo Maintenance (2022)	0.00	0.00	0.03	0.00	0.01	0.00
Arundo Maintenance (2023)	0.00	0.00	0.03	0.00	0.01	0.00
<b>Overlapping Phases</b>						
Arlington Wells + ID-4 + Chino Basin (2019)	2.68	35.86	36.50	0.07	3.87	2.09
Arlington Wells + ID-4 + Chino Basin+ Arundo (2019)	3.88	59.54	68.00	0.12	17.32	10.02
Arlington Wells + ID-4 +Chino Basin+ Arundo (2020)	3.70	58.01	67.36	0.12	17.24	9.94
Arlington Facilities + Cannon PS+ Chino Basin + Arundo (2020)	5.62	99.30	130.88	0.21	18.82	12.18
Arlington Facilities + Cannon PS+ Arundo (2020)	4.88	86.47	115.48	0.19	17.80	11.44

Source	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM10 <sup>b</sup>	PM2.5 <sup>b</sup>
Arlington Facilities + Cannon PS + Arundo (2021)	4.78	85.99	115.12	0.18	17.77	11.41
Arlington Facilities + Cannon PS + Arundo M (2021)	3.60	62.36	83.74	0.13	4.33	3.48
Arlington Facilities + Cannon PS + Arundo M (2022)	3.54	62.10	83.52	0.13	4.31	3.46
Arlington Facilities + Cannon PS + Arundo M (2023)	3.56	63.06	86.04	0.14	4.40	3.55
<b>Maximum Daily Construction Emissions</b>	<b>5.62</b>	<b>99.30</b>	<b>130.88</b>	<b>0.21</b>	<b>18.82</b>	<b>12.18</b>
SCAQMD Significance Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

NOTES:

<sup>a</sup> Totals may not add up exactly due to rounding in the modeling calculations. Combined rows account for overlapping emissions from the listed activities. Detailed emissions calculations are provided in Appendix B.

<sup>b</sup> Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA, 2018

**AIR-1:** For each project during construction, off-road diesel-powered construction equipment greater than 50 horsepower shall meet Tier 3 emissions standards at a minimum and Tier 4 where available. A copy of each unit's certified tier specification or model year specification shall be available upon request at the time of mobilization of each applicable unit of equipment. The mitigation applies to off-road equipment and does not apply to on-road vehicles.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

**b. Potentially Significant Impact:** The proposed Project could result in a cumulatively considerable net increase of a criteria pollutant.

**Facts in Support of Finding:** The SCAQMD neither recommends quantified analyses of cumulative construction or operational emissions nor provides methodologies or thresholds of significance to be used to assess cumulative construction or operational impacts. Individual cumulative projects that exceed the SCAQMD recommended daily thresholds for an individual project would cause a cumulatively considerable impact.

The Project area is located within the SoCAB, which is considered the cumulative study area for air quality. The SoCAB is currently classified as a state nonattainment area for ozone, PM10, and PM<sub>2.5</sub>, and is a federal nonattainment area for ozone and PM<sub>2.5</sub>. Based on SCAQMD's cumulative air quality impact methodology, SCAQMD recommends that if an individual project results in air emissions of criteria pollutants (ROG, CO, NO<sub>x</sub>, SO<sub>x</sub>, PM10, and PM<sub>2.5</sub>) that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then it would also result in a cumulatively considerable net

increase of these criteria pollutants for which the Project region is in nonattainment under an applicable federal or state ambient air quality standard.

Regional construction emissions of NO<sub>x</sub> would exceed the SCAQMD's daily thresholds prior to implementation of mitigation. Therefore, the proposed Project's contribution to cumulative NO<sub>x</sub> for regional construction emissions would be cumulatively considerable.

The emissions from construction of the Project are not predicted to exceed any applicable SCAQMD regional or local impact threshold with implementation of Mitigation Measure AIR-1 (above) and therefore, are not expected to result in ground level concentrations that exceed the NAAQS or CAAQS. Therefore, the Project would not result in a cumulatively considerable net increase for non-attainment pollutants or ozone precursors with implementation of Mitigation Measure AIR-1 (above).

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

### 3.1.1.2 Biological Resources

- a. **Potentially Significant Impact:** The proposed Project could have significant effects on plant species because the Project could have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status plant species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

#### **Facts in Support of the Finding:**

##### *Cannon Pump Station*

The project involves the construction of a pump station, associated pipelines, a new driveway, and removal of an existing booster station. Permanent and temporary impacts to native habitats consisting of brittlebush scrub and black willow thicket would occur. The following special-status plants have a moderate or higher potential to occur on the project site: Plummer's mariposa lily, intermediate mariposa lily, southern tarplant, smooth tarplant, paniculate tarplant, Robinson's pepper-grass, Pringle's monardella, Fish's milkwort, and white rabbit-tobacco. If these plant species occur within the project construction area, potential project impacts could occur during construction activities, which would be considered a significant impact.

Implementation of Mitigation Measure BIO-1 (below) would require focused surveys within the project impact footprint prior to construction, avoidance where feasible, and appropriate compensation for unavoidable impacts to special-status plants through consultation with the CDFW and USFWS. Implementation of Mitigation Measure BIO-2

would require worker environmental awareness training for the construction crew to assist workers with identifying and avoiding impacts to sensitive biological resources.

#### *ID-4 CRA Crossing Refurbishment*

The project would implement one of two refurbishment alternatives to ensure the existing pipe crossing is protected. The two options include the following: 1) implementing a split casing that covers the crossing to direct leaks to a proposed sump fiberglass-reinforced plastic tank, or 2) reinforcing the existing pipe with fiberglass material and with flexible HDPE or Cured-In-Place Pipe inside. Temporary impacts to native habitats consisting of California sagebrush scrub, elderberry scrub, and black willow thicket could occur as a result of access and/or staging areas, while open water habitat would be avoided. The following special-status plants have a moderate or higher potential to occur on the project site: San Jacinto Valley crownscale, Catalina mariposa lily, intermediate mariposa lily, paniculate tarplant, Robinson's pepper-grass Pringle's monardella, Fish's milkwort, and white rabbit-tobacco. If these plant species occur within the project construction area, potential project impacts could occur during construction activities, which would be considered a significant impact.

Implementation of Mitigation Measure BIO-1(below) would require focused surveys within the project impact footprint prior to construction, avoidance where feasible, and appropriate compensation for unavoidable impacts to special-status plants through consultation with the CDFW and USFWS. Implementation of Mitigation Measure BIO-2 (below) would require worker environmental awareness training for the construction crew to assist workers with identifying and avoiding impacts to sensitive biological resources.

- BIO-1:**        **Special-Status Plants.** The following measures will reduce potential project-related impacts to special-status plant species that may occur on or adjacent to the Cannon Pump Station project and the ID-4 CRA Crossing sites.
- a. Prior to the start of construction, a focused botanical survey will be conducted during the appropriate blooming periods to determine the presence/absence of any of the special-status species with a moderate or high potential to occur. The focused botanical survey will be conducted by a botanist or qualified biologist knowledgeable in the identification of local special-status plant species, and according to accepted protocol outlined by the CDFW. Special-status plants detected during the botanical survey will be flagged for avoidance to the extent feasible.
  - b. If impact avoidance is not feasible, the impacted acreage supporting the special-status plant species and the number of individual plants impacted within the construction area will be quantified. If a special-status plant species is discovered in a project impact area,



consultation with CDFW and/or USFWS will be required prior to the impact occurring to develop an appropriate mitigation strategy. Depending on the sensitivity of the species, relocation or seed collection may be an acceptable option to avoid significant impacts, as determined through consultation with the resource agencies. The number of individual plants impacted will be replaced at a minimum of 1:1.

**BIO-2: Worker Environmental Awareness Program.** Prior to construction at the Cannon Pump Station project and the ID-4 CRA Crossing sites, a Worker Environmental Awareness Program (WEAP) shall be implemented for work crews by a qualified biologist(s) prior to the commencement of construction activities and prior to site access by workers. Training materials and briefings shall include but not be limited to, discussion of the federal and state Endangered Species Acts, the consequences of noncompliance with project permitting requirements, identification and values of special-status plant and wildlife species and sensitive natural plant community habitats, fire protection measures, hazardous substance spill prevention and containment measures.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

- b. **Potentially Significant Impact:** The proposed Project could have significant effects on wildlife species because the Projects could have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status wildlife species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

**Facts in Support of Finding:**

*Chino Basin Production Wells, Refurbishment and Treatment System*

Based on the lack of trees and limited vegetation on the project site, there is limited foraging and no suitable roosting habitat for bats on the Well 34 site. However, potential foraging and roosting habitat occurs adjacent to the site. The Interstate 10 freeway overpass north of the site, and the large trees in the Wilderness Basin Park to the east of the site provide potential roost sites. Additionally, the San Antonio Channel and Wilderness Basin Park adjacent to the site provide open water and riverine habitats that are important to bats because they offer a permanent water source and are important habitats for foraging.

It is possible that breeding or nonbreeding bats may be present adjacent to the Well 34 site and could be subject to disturbance during construction activities. The appropriately

timed disturbance of a nonbreeding roost would not be considered significant; however, the loss of an active maternity roost, even of relatively common species such as the Mexican free-tailed bat would be significant. Based on their known range and available habitat in the project area, bat species that could be impacted by the project include western mastiff bat and pocket free-tailed bat. However, disturbance on the site would be similar to activities routinely occurring in the area including traffic on the neighboring streets and the constant noise of the Interstate 10 freeway. Since construction activities would be temporary and would not significantly increase noise generation at the site or directly affect any roosting sites, impacts to bats would be less than significant.

One special-status mammal, northwestern San Diego pocket mouse, has the potential to occur on the Well 34 site. This species can be found in sandy, herbaceous areas, usually in association with rocks or coarse gravel. Site preparation or construction of the new groundwater treatment system could result in injury or mortality of this species if it is present on site. Therefore, the Project could result in significant impacts to the San Diego pocket mouse. Implementation of Mitigation Measure BIO-3 (below) would reduce potential direct impacts to San Diego pocket mouse to less than significant.

#### *Arlington Production Wells and Pipeline*

The construction footprint of the two extraction wells and associated pipelines would be located within existing road right-of-ways. The Arlington Production wells and Pipeline alternative sites support ornamental vegetation and developed uses. Street trees align the existing roads that could support special-status avian species such as Cooper's hawk. Any tree disturbance or removal associated with the well or pipeline construction could disturb Cooper's hawk or other birds/raptors that may nest in the trees, possibly resulting in inadvertent removal of an active nest or nest abandonment. Therefore, the project could result in a potential significant impact on birds/raptors nesting in trees in the area. Implementation of Mitigation Measure BIO-4 (below) would avoid and minimize potential impacts to Cooper's hawk and other avian species that could nest in the area.

#### *Cannon Pump Station*

The project site supports ornamental, barren, brittlebush scrub, and black willow thicket habitats that could potentially support the following special-status wildlife species: silvery legless lizard, California glossy snake, orange-throated whiptail, coastal whiptail, red-diamond rattlesnake, coast horned lizard, Cooper's hawk, Southern California rufous-crowned sparrow, merlin, loggerhead shrike, least Bell's vireo, western yellow bat, San Diego desert woodrat, and Los Angeles pocket mouse.

Construction of a pump station, booster station, associated pipelines, and a new driveway would result in permanent and temporary impacts to native habitats that may support special-status wildlife. An estimated 0.11 acre and 0.46 acre of brittlebush scrub would be permanently and temporarily impacted, respectively. Permanent impacts to black willow thicket can be avoided, but approximately 0.23 acre of this habitat, which is capable of supporting least Bell's vireo, would be temporarily impacted, which would be

considered significant. Implementation of Mitigation Measures BIO-2 (above) through BIO-5 (below) would avoid or minimize potential impacts to special-status wildlife, nesting birds, and least Bell's vireo to reduce potentially significant impacts to less than significant.

#### *ID-4 CRA Crossing Refurbishment*

The ID-4 CRA Crossing Refurbishment site supports California sagebrush scrub, elderberry scrub, black willow thicket, barren/developed, and open water habitats that could potentially support the following special-status wildlife species: orange-throated whiptail, coastal whiptail, red-diamond rattlesnake, Cooper's hawk, Bell's sage sparrow, white-tailed kite, merlin, loggerhead shrike, coastal California gnatcatcher, least Bell's vireo, northwestern San Diego pocket mouse, pallid San Diego pocket mouse, Stephen's kangaroo rat, hoary bat, western yellow bat, San Diego black-tailed jackrabbit, and Los Angeles pocket mouse.

Refurbishment of the ID-4 CRA Crossing could result in temporary impacts to 0.13 acre of California sagebrush scrub, 0.02 acre of elderberry scrub, and 0.01 acre of black willow thicket as a result of access and/or staging areas, while open water habitat would be avoided. Implementation of Mitigation Measures BIO-2 (above) through BIO-5 (below) would be required to avoid or minimize potential impacts to the special-status wildlife species listed above except for coastal California gnatcatcher and Stephen's kangaroo rat. Mitigation Measures BIO-6 (below) and BIO-7 (below) would require focused surveys for coastal California gnatcatcher and Stephen's kangaroo rat, respectively, to determine species presence/absence and appropriate avoidance and impact minimization measures.

#### *Santa Ana River Arundo Removal*

The Santa Ana River Arundo Removal project would remove giant reed within approximately 640 acres along the Santa Ana River between Prado Basin and the State Route 60 crossing in Riverside. The arundo removal site supports various open water, wetland, floodplain, and riparian habitats that are occupied or potentially occupied by a number of special-status wildlife species. The following special-status wildlife species are known to be present within the proposed arundo removal locations: Santa Ana sucker, arroyo chub, south coast garter snake, yellow-breasted chat, yellow warbler, and least Bell's vireo. Focused surveys for southwestern willow flycatcher most recently conducted in 2017 were negative; therefore, there is a low potential for this species to occur, and this species is not further addressed in this document.

The following special-status wildlife species have the potential to occupy the site: greenest tiger beetle, Santa Ana speckled dace, western spadefoot, coast range newt, California glossy snake, orange-throated whiptail, coastal whiptail, red-diamond rattlesnake, western pond turtle, two-striped garter snake, Cooper's hawk, tricolored blackbird, long-eared owl, Swainson's hawk, western yellow-billed cuckoo, white-tailed kite, merlin, loggerhead shrike, white-faced ibis, yellow-headed blackbird, northwestern

San Diego pocket mouse, pallid San Diego pocket mouse, Stephen's kangaroo rat, western mastiff bat, hoary bat, western yellow bat, San Diego black-tailed jackrabbit, yuma myotis, San Diego desert woodrat, pocketed free-tailed bat, and Los Angeles pocket mouse. Implementation of Mitigation Measures BIO-2 (above) through BIO-6 (below) would be required to avoid or minimize potential impacts to most of the special-status wildlife species listed above.

Arundo removal and monitoring and maintenance activities post removal would be conducted outside of all wetted areas. No equipment or personnel would be allowed to enter the water to perform arundo removal activities. The Santa Ana River in this area is known to support Santa Ana sucker, arroyo chub, south coast garter snake, as well as other sensitive aquatic wildlife species. Hand power tools and tractor-mounted mulching mowers from the river banks would be utilized to remove the invasive plants. Large, mechanized equipment would not be used in the stream. Nevertheless, stream channel substrate consisting of a mosaic of loose sand, gravel, cobble, and boulder substrates necessary to maintain various life stages of Santa Ana sucker as well as other special-status fish, may be temporarily modified or moved when workers are hand cutting the invasive plants or when arundo stands are being mowed. Mitigation Measure BIO-8 (below) would require avoidance of the Santa Ana sucker spawning season, which would minimize potential impacts to Santa Ana suckers as well as other native fish that may occupy the area.

The *Arundo donax* removal activities would occur along the Santa Ana River, within designated critical habitat for Santa Ana sucker, least Bell's vireo, southwestern willow flycatcher, and proposed critical habitat for yellow-billed cuckoo. The removal of giant reed and other invasive plant species along this segment of the Santa Ana River would enhance existing riparian vegetation and allow for native recruitment of additional riparian habitat. This project would improve the riparian function and quality of the existing habitat for these listed species as well as other wildlife, and would not result in adverse modification of designated or proposed critical habitat. Impacts to critical habitat would be less than significant.

**BIO-3: Preconstruction Wildlife Surveys.** Project construction at the Chino Basin Production Wells, Refurbishment and Treatment System site, Cannon Pump Station, and ID-4 CRA Crossings sites should avoid, where possible, special status natural communities and other vegetation communities that provide suitable habitat for a special-status species known to occur within the project area. Prior to construction activities, if construction occurs within a special status natural community or other vegetation community that provides suitable habitat for a special status species, a presence/absence survey of any special-status wildlife species must be conducted to determine if the habitat supports any special-status species. If special-status species are determined to occupy any portion of a project site, avoidance and minimization measures shall be implemented such as temporary fencing, inspection of trenches and holes

for entrapped wildlife each morning prior to the onset of project construction, inspection of pipes, culverts, and similar construction material for entrapped wildlife, to avoid direct impacts to wildlife to the greatest extent feasible.

**BIO-4: Nesting Avian Species.** If removal of on-site trees and vegetation associated with the proposed project occurs during the non-nesting season (September 1 to January 31 for songbirds; September 1 to January 14 for raptors), no nesting survey or biological monitor are required.

If the removal of on-site trees and vegetation associated with construction at the Chino Basin Production Wells, Refurbishment and Treatment System site, Arlington Pipelines and Wells, Cannon Pump Station, ID-4 CRA Crossings, and Arundo Removal sites occurs during the nesting season (February 1 to August 31 for songbirds; January 15 to August 31 for raptors), a qualified biologist shall conduct a survey prior to vegetation removal activities to determine if there are active nests within the on-site trees and vegetation proposed for removal. If an active nest is not found, no biological monitor is required. If active nests are detected, a minimum buffer (e.g., 300 feet for songbirds or 500 feet for raptors) around the nest shall be delineated and flagged, and no construction activity shall occur within the buffer area until a qualified biologist determines the nesting species have fledged and are no longer active or the nest has failed. The buffer may be modified (i.e., increased or decreased) and/or other recommendations proposed (e.g., a temporary soundwall) as determined appropriate by the qualified biologist to minimize impacts. The qualified biologist shall monitor the removal of on-site trees and vegetation. Nest buffer distance will be based on species, specific location of the nest, the intensity of construction activities, existing disturbances unrelated to the proposed Project present in the Project area, and other factors.

**BIO-5: Least Bell's Vireo.** If suitable nesting least Bell's vireo habitat is proposed to be removed at the ID-4 CRA Crossing site or Arundo Removal sites during the non-nesting season (September 16 to March 14), no nesting survey or biological monitor is required.

If suitable nesting least Bell's vireo habitat is proposed to be removed during the nesting season (March 15 to September 15), a qualified biologist shall conduct a USFWS protocol survey for least Bell's vireo within suitable nesting habitat the season prior to initiation of work activities to determine their presence or absence within 500 feet of proposed work limits. In accordance with the USFWS survey protocol, surveys shall consist of eight site visits conducted 10 days apart during

the period of April 10 to July 31. The results shall be submitted in a report to the USFWS.

If the focused surveys do not indicate the presence of least Bell's vireo, no further mitigation is required. If occupied habitat and/or nesting individuals are determined to be present based on the focused survey, work shall be delayed until the non-nesting season.

**BIO-6: Coastal California Gnatcatcher.** If suitable nesting coastal California gnatcatcher habitat is proposed to be removed at the ID-4 CRA Crossing site during the non-nesting season (July 1 to March 14), no nesting survey or biological monitor is required.

If suitable nesting coastal California gnatcatcher habitat is proposed to be removed during the nesting season (March 15 to June 30), a qualified biologist shall conduct a USFWS protocol survey for coastal California gnatcatcher within suitable nesting habitat the season prior to initiation of work activities to determine their presence or absence within 500 feet of proposed work limits. In accordance with the USFWS protocol for the coastal California gnatcatcher (USFWS 1997), focused surveys shall be conducted by a permitted biologist a minimum of: a) six (6) surveys at least on week apart between March 15-June 30; or b) nine (9) surveys conducted at least two weeks apart between July 1 to March 14. The results shall be submitted in a report to the Corps, USFWS, and CDFW. If an active nest is not found, no biological monitor is required. If active nests are detected, the work shall be delayed until after the nesting season is finished.

**BIO-7: Stephen's Kangaroo Rat.** Prior to the start of construction within potential Stephen's kangaroo rat habitat, a qualified biologist holding a valid section 10(a)(1)(A) permit from USFWS shall inspect the ID-4 CRA Crossing site work area, including stockpiles, for Stephen's kangaroo rat and evidence of activity (i.e., scat, sign, burrows, dust baths). If the species is discovered, project designs will be modified if possible to avoid the occupied areas. If avoidance is infeasible, WMWD will consult with the SKRHCP to initiate coverage under the SKRHCP that will include pre-construction trapping and relocation as well as habitat compensation pursuant to the SKRHCP requirements.

**BIO-8: Santa Ana Sucker.** Arundo and other invasive plant species removal activities that may affect wetted stream substrate is not allowed during the Santa Ana sucker spawning season (March 1 to July 31).

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the

potentially significant environmental effect as identified in the EIR to a less than significant impact level.

- c. **Potentially Significant Impact:** The proposed Project could have significant effects on habitat because the projects could have a substantial adverse effect on riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFG or USFWS.

**Facts in Support of Finding:**

*Cannon Pump Station*

The project site supports 0.63 acre of black willow thicket, a sensitive natural community. No permanent impacts to black willow thicket are expected, but approximately 0.23 acre could be temporarily disturbed from pipeline installation. Implementation of Mitigation Measure BIO-9 (below) would require revegetation of this sensitive habitat.

*ID-4 CRA Crossing Refurbishment*

The ID-4 CRA Crossing Refurbishment site supports two sensitive natural communities: elderberry scrub and black willow thicket. Refurbishment of the ID-4 CRA Crossing could result in temporary impacts to 0.02 acre of elderberry scrub and 0.01 acre of black willow thicket as a result of access and/or staging areas. Open water habitat would be avoided. Implementation of Mitigation Measure BIO-9 (below) would require revegetation of elderberry scrub and black willow thicket if impacts are unavoidable.

**BIO-9:            **Revegetation Plan.**** During construction at the Cannon Pump Station site and ID-4 CRA Crossing site, sensitive natural communities and native habitats shall be avoided to the extent feasible. If impacts to sensitive natural communities are unavoidable, prior to vegetation removal or disturbance, a qualified biologist shall be on site to establish and mark limits of sensitive habitats to be avoided to the extent feasible. The biological monitor shall document and quantify any impacts to sensitive habitats to determine the extent and type of habitats required for restoration. Restoration of sensitive habitat vegetation shall occur on the project sites if feasible.

Prior to any ground disturbances, a site-specific revegetation plan shall be prepared by a qualified restoration ecologist that includes a description of existing conditions for each area, disturbances, compensation mitigation, site preparation, revegetation methods, maintenance and monitoring criteria, performance standards, and adaptive management practices. Appropriate restoration measures shall be prescribed based on site location, slope, and remoteness. The plan shall identify cover standards that shall be developed for each plant

community target, and cover values established for each layer (i.e., herb, shrub, and/or tree layers). The plan shall identify the quantity and quality of habitats to be restored on site.

The project proponent shall implement the revegetation plan following construction activities to ensure no permanent net loss of sensitive habitats would occur.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

- d. **Potentially Significant Impact:** The proposed Project could have significant effects on wetlands because the projects could have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

**Facts in Support of Finding:**

*Cannon Pump Station*

The project site does not appear to support any wetlands or drainage features. However, based on review of the National Wetlands Inventory, a blue-line stream is mapped on the site. Pursuant to Mitigation Measure BIO-10 (below), prior to construction, a jurisdictional delineation would be required to determine whether the drainage is a water of the United States. If the drainages are federally jurisdictional a 404 Permit from the USACE would be required. If the drainages are determined to be state jurisdictional features, a Streambed Alteration Agreement would be required from the CDFW. However, BMPs would be incorporated into the design and construction phase of the project to ensure that no pollutants or silt drain into a federal or state protected jurisdictional habitat would occur pursuant to the General Construction Permit SWPPP. Implementation of BMPs to comply with the construction SWPPP and compliance with required permit conditions would ensure that impacts to wetlands and riparian habitats during construction would be less than significant. Impacts would be reduced to less than significant.

*ID-4 CRA Crossing Refurbishment*

Based on the biological reconnaissance survey, the ID-4 CRA Crossing Refurbishment site does support open water habitat and riparian vegetation that could be considered jurisdictional resources. Specifically, habitats mapped as Elderberry Scrub, Black Willow Thicket, and Open Water within the ID-4 CRA Crossing Refurbishment site may be subject to the jurisdiction of the USACE, Santa Ana RWQCB, and/or CDFW. However, refurbishment of the existing pipeline would avoid open water habitat;



therefore, a permit from the USACE or Santa Ana RWQCB would not be required. Any habitat disturbance would be limited to those located along the embankments, on each side of the crossing. This project could result in temporary impacts to 0.02 acre of elderberry scrub and 0.01 acre of black willow thicket, which are sensitive natural communities that are also subject to Section 1602 of the California Fish and Game Code. Impacts to these habitats would require a streambed alteration agreement from CDFW prior to disturbance. Mitigation Measure BIO-10 would ensure that federally jurisdictional features obtain a 404 Permit from the USACE and any state jurisdictional features would obtain a Streambed Alteration Agreement from the CDFW. Implementation of Mitigation Measure BIO-10 (below) would ensure that impacts would be less than significant.

#### *Santa Ana River Arundo Removal*

The Santa Ana River is a known water of the U.S. because it flows into the Pacific Ocean, and all of the creeks and drainages that are tributary to the Santa Ana River fall under the jurisdiction of the USACE, RWQCB, and/or CDFW. Although a formal wetland delineation has not been conducted for the arundo removal project area, many areas within the arundo removal site along the Santa Ana River and Prado Basin would be subject to the jurisdiction of the USACE, Santa Ana RWQCB, and/or CDFW, including the areas mapped as Wetland and Woody Riparian Mix. However, giant reed would be cut and the root balls would be left intact to avoid uprooting vegetation. Further, hand tools or mowers would be used to cut the giant reed such that heavy equipment in the stream would be avoided. Therefore, based on these methods of Arundo removal, water quality impacts (i.e., increased sedimentation) are minimized, and there would be no discharge of dredged or fill material into waters of the U.S. As such, a Section 404/401 permit from the USACE and Santa Ana RWQCB would not be required. However, a Streambed Alteration Agreement from CDFW would be required for arundo removal activities.

Implementation of Mitigation Measure BIO-2 (above) would train construction workers to be able to distinguish between native riparian plants and invasive plants, which would avoid or minimize impacts to sensitive wetland/riparian vegetation. Implementation of BMPs to comply with the construction SWPPP and compliance with required permit conditions would ensure that impacts to wetlands and riparian habitats during construction would be less than significant. The SARCCUP arundo removal project would improve wetland and riparian habitat within the watershed by removing invasive plant species to allow for native recruitment. Impacts would be less than significant.

**BIO-10:**        **Jurisdictional Wetlands and Waters.** Prior to implementation of the Cannon Pump Station Project, a jurisdictional delineation of wetlands and water courses shall be conducted for the purposes of identifying features or habitats that would be subject to the jurisdiction of the USACE, Santa Ana RWQCB, and CDFW. The findings shall be included in a jurisdictional delineation report suitable for submittal to

these agencies for obtaining a Section 404 Clean Water Act permit (CWA), Section 401 Water Quality Certification (WQC), Waste Discharge Requirements (WDR), and/or streambed alteration agreement (SAA).

Prior to activities that would result in the discharge of fill or dredged material within waters of the U.S., a Section 404 CWA permit shall be obtained from the USACE and a Section 401 WQC shall be obtained from the Santa Ana RWQCB. Prior to activities within streams, ponds, seeps or riparian habitat, or use of material from a streambed, the project applicant shall obtain a WDR for impacts to waters not subject to the CWA, provide written notification to CDFW pursuant to Section 1602 of the Fish and Game Code, ensure the notification is complete as provided in Section 1602, and comply with the terms of conditions of any agreement CDFW may issue in response to the notification.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

- e. **Potentially Significant Impact:** The proposed Project could have significant effects on the movement of species because the projects could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

**Facts in Support of Finding:**

*Chino Basin Production Wells, Refurbishment and Treatment System*

Implementation of the proposed project would occur within the boundaries of the existing treatment facility. Based on the lack of trees and limited non-native vegetation on the Well 34 site, there is limited suitable nesting habitat for birds covered under the Migratory Bird Treaty Act (MBTA) that may be moving through the project area. However, ground-nesting birds such as killdeer (*Charadrius vociferous*) could nest on site. Implementation of BIO-4 (above) would require a preconstruction nesting bird survey to avoid and minimize impacts to nesting birds.

In addition, because the facility is fenced and there are no streams or channels on the project site, the proposed project would not impact the movement of native resident or migratory fish.

*Arlington Production Wells and Pipeline*

The proposed pipeline alternatives would be located underground and within existing roadway rights-of-way. However, pipeline construction activities such as trenching could impact nesting birds or raptors protected under the MBTA or their active nests through indirect noise impacts, or if tree disturbance/removal is required for pipeline installation. Implementation of BIO-4 (above) would require a preconstruction nesting bird survey to avoid and minimize impacts to nesting birds.

There are no streams or channels on the Arlington site; therefore, this project would not impact the movement of native resident or migratory fish.

#### *Cannon Pump Station*

The project site supports large trees and vegetation that may be utilized by nesting birds and raptors protected under the MBTA. Potential impacts would be similar to those described for the Arlington project. Implementation of BIO-4 (above) would require a preconstruction nesting bird survey to avoid and minimize impacts to nesting birds.

There is no suitable fish habitat on the project site; therefore, this project would not impact the movement of native resident or migratory fish.

#### *ID-4 CRA Crossing Refurbishment*

The project site supports large trees and vegetation that may be utilized by nesting birds and raptors protected under the MBTA. Potential impacts would be similar to those described for the Arlington project. Implementation of BIO-4 (above) would require a preconstruction nesting bird survey to avoid and minimize impacts to nesting birds.

While fish may occupy the open water habitat, open water habitat would be avoided. Therefore, this project would not impact the movement of native resident or migratory fish.

#### *Santa Ana River Arundo Removal*

As previously discussed, the Santa Ana River, including the Prado Basin Reservoir, provides an important wildlife linkage between the San Bernardino Mountains and all open space between there and the Pacific Ocean. Therefore, the arundo removal site is an important corridor for aquatic wildlife movement, migratory birds, as well as numerous terrestrial wildlife species. The site can also be considered a wildlife nursery site since wildlife species such as least Bell's vireo and Santa Ana sucker are known to breed or spawn. Potential impacts would be similar to those discussed above.

Implementation of Mitigation Measure BIO-4 (above) would avoid or minimize impacts to migratory birds. Implementation of Mitigation Measure BIO-8 (above) would require avoidance of the Santa Ana sucker spawning season, which would minimize potential impacts to Santa Ana suckers as well as other native fish that may occupy or move through the area.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

### 3.1.1.3 Cultural Resources

- a. **Potentially Significant Impact:** The proposed Project could cause a substantial adverse change in the significance of a historical resource.

#### **Facts in Support of Finding:**

##### *Arlington Production Wells and Pipeline*

The EIC records search identified 17 previously recorded cultural resources within and immediately adjacent to (within 100 feet of) the Arlington project area. Of these 17 previously recorded resources, 1 is a prehistoric archaeological site (P-33-000496) that overlaps the Alternative 2 pipeline alignment on Indiana Avenue, and 16 are historic architectural resources (P-33-004495, -004791, -007899, -007900, -008407, -009518, -010974, -011251, -011632, -017542, -024194, -025594, -025595, -025596, -025597, and -028079) that occur within a 100-foot corridor along the alternative pipeline alignments, but do not overlap the alignments.

Of the 16 historic architectural resources, 9 (P-33-004495, -008407, -009518, -011251, -024194, -025594, -025596, -025597, and -028079) were relocated as a result of the cultural resources survey, and 7 (P-33-004791, -007899, -007900, -010974, -011632, -017542, and -025595) were not relocated and have likely been destroyed by recent development. Of the nine architectural resources that were relocated, three (P-33-004495 [Upper Riverside Canal], -008407 [Sherman Indian School Administration Building], and -009518 [Arlington Branch Library]) are recommended eligible for listing in the CRHR and qualify as historical resources, and six (P-33-011251, -024194, -025594, -025596, -025597, and -028079) have been recommended ineligible and therefore do not qualify as historical resources.

The Arlington project would include the installation of an underground pipeline within existing road right-of-ways, and as such would not directly impact the three resources that qualify or have the potential to qualify as historical resources (P-33-004495 [Upper Riverside Canal], -008407 [Sherman Indian School Administration Building], and -009518 [Arlington Branch Library]). However, the Arlington project's above-ground components, which include the installation of wells, do have the potential to result in indirect visual impacts to the three resources.

Well AD-6 of the Alternative 2 pipeline would be located within 175 feet of an above ground segment of the Upper Riverside Canal (P-33-004495) and the construction of the well could result in indirect visual impacts to the resource's integrity of setting and feeling. However, the resource is surrounded to the north, east, and south by modern

residential development, which has already introduced visual elements affecting the integrity of setting and feeling of the resource. The proposed Alternative-2, Well AD-6 would simply add to the existing setting. Therefore, no new visual impacts affecting the integrity of the Upper Riverside Canal will be introduced by implementation of the Arlington project.

Well AD-6 of the Arlington project's Alternative 1 pipeline would be located approximately 475 feet southwest of the Sherman Indian School Administration Building (P-33-008407), but direct views of the resource from the well location would be obscured by an existing building located immediately southeast of the administration building. Therefore, no visual impacts to the resource are anticipated as a result of the implementation of the Arlington project.

The Arlington Branch Library (P-33-009518) is not located in the vicinity of a proposed well location, and therefore would not be subject to visual impacts.

The EIC records search identified one previously recorded archaeological resource (P-33-000496) within the Arlington project area. As part of the cultural resources survey, the mapped location of the site was inspected, but the site's surface manifestation has been destroyed by residential development. Although no surface evidence of the site could be detected during the survey, there exists the potential that subsurface prehistoric archaeological deposits associated with the site may underlie the Arlington project area. Additionally, the historic map and aerial review indicates the Arlington project area was an agricultural community as early as 1900. Given the presence of one previously recorded prehistoric archeological site and the long-period of historic-period land use within the area, there is a possibility that prehistoric and/or historic-period subsurface archaeological deposits underlie the Arlington project area. Should subsurface prehistoric and/or historic-period archaeological deposits be present, they may qualify as historical resources pursuant to CEQA. Therefore, implementation of the Arlington project could impact potential subsurface archaeological deposits that may qualify as historical resources. Implementation of Mitigation Measures CUL-1, -2, -3, and -4 (all listed below), which require retention of a qualified archaeologist, cultural resources sensitivity training for construction personnel, archaeological monitoring of ground-disturbing activity, and provisions for the treatment of inadvertent discoveries, would reduce impacts to potential prehistoric and/or historic-period subsurface archaeological deposits that may underlie the Arlington project area to less than significant.

#### *Cannon Pump Station Project*

The EIC records search and cultural resources survey did not identify any cultural resources within the Cannon Pump Station project area. Therefore, implementation of the Cannon Pump Station project would not impact known historical resources. However, thick vegetation associated with a drainage in the center of the Cannon Pump Station project area obscured ground surface visibility, and much of the project area's central portion appears to be largely undisturbed and may be underlain by unknown

archaeological deposits. Should unknown archaeological deposits underlie the Cannon Pump Station project area, they may qualify as historical resources. Therefore, ground-disturbing activities associated with the Cannon Pump Station project could impact unknown archaeological deposits that may qualify historical resources. Implementation of Mitigation Measures CUL-1, -2, and -4 (below), which require retention of a qualified archaeologist, cultural resources sensitivity training for construction personal, and provisions for the treatment of inadvertent discoveries, would reduce impacts to potential subsurface archaeological deposits that may underlie the Cannon Pump Station project area to less than significant.

#### *Santa Ana River Arundo Removal*

The EIC records search identified 17 previously recorded cultural resources within the Arundo Removal project area. These 17 resources include three prehistoric archaeological sites (P-33-000621, -000622, and -000652), four historic-period archaeological sites (P-33-002802, -003354, -003357, and -003694), two multicomponent archaeological sites (P-33-000127 and -001451), six historic architectural resources (P-33-003361 [Union Pacific RR bridge], -006524 [Good Samaritan Boys Home], -016848 [Santa Ana River Trunk Sewer], -017221 [LynnBar Ranch], -024052 [Paradise Knolls Golf Course], and -024146 [storage shed]), and two historic-period isolates (P-33-012736 and -017220).

Of the six historic architectural resources, two (P-33-003361 [Union Pacific RR bridge] and -006524 [Good Samaritan Boys Home]) have been previously recommended eligible for listing in the CRHR and qualify as historical resources pursuant to CEQA, one (P-33-024146 [storage shed]) has not been previously evaluated and therefore has the potential to qualify as a historical resource, and three (P-33-016848 [Santa Ana River Trunk Sewer], -017221 [LynnBar Ranch], and -024052 [Paradise Knolls Golf Course]) are recommended ineligible for listing in the CRHR and do not qualify as historical resources. The totals three resources (P-33-003361 [Union Pacific RR bridge], -006524 [Good Samaritan Boys Home], and -024146 [storage shed]) that are eligible or potentially eligible for listing in the CRHR. The Arundo Removal project would include the removal of invasive plant species from within the Santa Ana River channel using hand tools and tractor-mounted mulchers. These activities would not demolish, destroy, or otherwise alter the three historic architectural resources that qualify as historical resources.

Of the 11 archaeological resources, 3 (P-33-000127, -003354, and -003694) have been recommended eligible for listing in the CRHR and qualify as historical resources, 6 (P-33-000621, -000622, -000652, -001451, -003357, and -002802) have not been evaluated for listing in the CRHR and therefore have the potential to qualify as historical resource, and 2 (P-33-012736 and -017220) are historic-period isolates, which, based on their lack of cultural context, are not eligible for listing in the CRHR and do not qualify as historical resources. Therefore, nine archaeological resources are either eligible

for listing in the CRHR and are historical resources, or are being treated as historical resources for this project.

The Arundo Removal project would include the removal of invasive plant species from within the Santa Ana River channel using hand tools and tractor-mounted mulchers. Given the ground-disturbing nature of these activities, the Arundo Removal project could impact the nine archaeological resources that qualify or have the potential to qualify as historical resources pursuant to CEQA.

In addition to the nine known archaeological resources, there may be unknown archaeological resources within the Arundo Removal project area. Should unknown archaeological resources exist within the Arundo Removal project area, they may qualify as historical resources, and ground-disturbing activities associated with the Arundo Removal project could impact these resources. However, the Arundo Removal activities would be conducted within the river channel that is periodically subject to high flow events that move sediment and remove vegetation. The constantly changing sediment load may transport resources from upstream, disrupting the context of the resources. Furthermore, conducting pre-activity surveys of the treatment areas is impractical due to the density of the vegetation. Ground surfaces are generally not visible within the stands of arundo.

Implementation of Mitigation Measure CUL-1, -2, and -4 (below), which require the retention of a qualified archaeologist, cultural resources sensitivity training for construction personnel, and provisions for the treatment of inadvertent discoveries, would reduce potential Arundo Removal project impacts to known and unknown archaeological resources that qualify or have the potential to qualify as historical resources to less than significant.

**CUL-1: Retention of Qualified Archaeologist.** Prior to the start of ground-disturbing activities associated with the Arlington Production Wells and Pipeline project, the Cannon Pump Station project, and the Santa Ana River Arundo Removal project, the respective project lead agencies shall retain a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (U.S. Department of the Interior, 2008) to carry out all mitigation related to cultural resources.

**CUL-2: Cultural Resources Sensitivity Training.** Prior to start of ground-disturbing activities associated with the Arlington Production Wells and Pipeline project, the Cannon Pump Station project, and the Santa Ana River Arundo Removal project, the qualified archaeologist shall conduct cultural resources sensitivity training for all construction personnel associated with the four projects. Construction personnel will be informed of the types of archaeological resources that may be encountered, and of the proper procedures to be enacted in the event of

an inadvertent discovery of archaeological resources or human remains. The respective project lead agencies shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

**CUL-3: Arlington Production Wells and Pipeline Project Construction Monitoring.** Prior to the start of ground-disturbing activities associated with the Arlington Production Wells and Pipeline project, an archaeological monitor working under the supervision of the qualified archaeologist shall be retained to conduct monitoring of all project-related ground-disturbing activities within 100 feet of the mapped location of previously recorded prehistoric archaeological resource, P-33-000496. Based on observations of subsurface soil stratigraphy or other factors during initial ground-disturbing activities, the qualified archaeologist may reduce monitoring, as warranted. Archaeological monitors shall maintain daily logs documenting their observations. Monitoring activities shall be documented in a Monitoring Report to be prepared by the qualified archaeologist. A draft monitoring report shall be submitted to WMWD for review and comment. A final monitoring report shall be submitted to WMWD for their records and a copy will be filed with the Eastern Information Center.

**CUL-4: Inadvertent Discoveries.** In the event of the unanticipated discovery of archaeological materials during implementation of the Chino Basin Production Wells, Refurbishment and Treatment System project, the Arlington Production Wells and Pipeline project, the Cannon Pump Station project, and the Santa Ana River Arundo Removal project, all work shall immediately cease within 100 feet of the discovery until it can be evaluated by the qualified archaeologist. Construction shall not resume until the qualified archaeologist has conferred with the respective project lead agency on the significance of the resource. If it is determined that the discovered archaeological resource constitutes a historical resource or a unique archaeological resource pursuant to CEQA, avoidance and preservation in place is the preferred manner of mitigation. Preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. If preservation in place is demonstrated to be infeasible and data recovery through excavation is the only feasible mitigation available, a Cultural Resources Treatment Plan shall be prepared and implemented by the qualified archaeologist in consultation with the respective project lead agency that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource. The qualified archaeologist and County shall consult with appropriate Native American representatives in determining treatment for prehistoric or



Native American resources to ensure cultural values ascribed to the resource, beyond that which is scientifically important, are considered.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

- b. **Potentially Significant Impact:** The proposed Project could cause a substantial change in the significance of a unique archeological resource.

**Facts in Support of Finding:**

*Chino Basin Production Wells, Refurbishment and Treatment System*

As noted above, the SCCIC records search and cultural resources survey did not identify archaeological resources within the Chino Basin Production Wells, Refurbishment and Treatment System project area. Furthermore, the project would not involve substantial excavation of soils. Therefore, implementation of Chino Basin Production Wells, Refurbishment and Treatment System project would not significantly impact known archaeological resources that qualify as unique archaeological resources. Although no known archaeological resources were identified within the Chino Basin Production Wells, Refurbishment and Treatment System project area, there is a possibility that historic-period subsurface archaeological deposits associated with the project area's past agricultural uses underlie the project. Drilling activities may encounter subsurface resources. Should historic-period archaeological deposits underlie the Chino Basin Production Wells, Refurbishment and Treatment System project area, they may qualify as unique archaeological resources. Therefore, implementation of the Chino Basin Production Wells, Refurbishment and Treatment System project could impact these potential archaeological deposits. Implementation of Mitigation Measure CUL-4 (above) would reduce impacts to subsurface archaeological deposits that qualify as unique archaeological resources to less than significant.

*Arlington Production Wells and Pipeline*

As noted above, the EIC records identified one previously recorded archaeological resource (P-33-000496) within the Arlington project area. As part of the cultural resources survey, the mapped location of the site was inspected, but the site's surface manifestation has been destroyed by residential development. Although no surface evidence of the site could be detected during the survey, there is a possibility that the subsurface portion of the site underlies the Arlington project area. Additionally, the historic map and aerial review indicates the Arlington project area was an agricultural community as early as 1900. Given the presence of one previously recorded prehistoric archeological site and the long span of historic-period land use within the area, there is a potential that prehistoric and/or historic-period subsurface archaeological deposits underlie the Arlington project area. Should subsurface archaeological deposits be present,

they may qualify as unique archaeological resources pursuant to CEQA. Therefore, implementation of the Arlington project could impact subsurface archaeological deposits that may qualify as unique archaeological resources. Implementation of Mitigation Measures CUL-1, -2, -3, and -4 (above), which require the retention of a qualified archaeologist, cultural resources sensitivity training for construction personnel, archaeological monitoring of ground-disturbing activity, and provisions for the treatment of inadvertent discoveries, would reduce impacts to unique archaeological deposits that may underlie the Arlington project area to less than significant.

#### *Cannon Pump Station Project*

As noted above, the EIC records search and cultural resources survey did not identify the presence of archaeological resources within the Cannon Pump Station project area. Therefore, implementation of the Cannon Pump Station project would not impact known archaeological resources. However, thick vegetation associated with a drainage in the center of the Cannon Pump Station project area obscured ground surface visibility, and much of the project area's central portion appears to be largely undisturbed and may be underlain by unknown archaeological deposits. Should unknown archaeological deposits underlie the Cannon Pump Station project area, they may qualify as unique archaeological resources. Therefore, ground-disturbing activities associated with the Cannon Pump Station project could impact unknown archaeological deposits that qualify as unique archaeological resources. Implementation of Mitigation Measures CUL-1, -2, and -4 (above), which require the retention of a qualified archaeologist, cultural resources sensitivity training for construction personnel, and provisions for the treatment of inadvertent discoveries, would reduce impacts to potential subsurface archaeological deposits that may underlie the Cannon Pump Station project area to less than significant.

#### *Santa Ana River Arundo Removal*

As noted above, the EIC records search identified 11 previously recorded archaeological resources within the Arundo Removal project area, including three prehistoric archaeological sites (P-33-000621, -000622, and -000652), four historic-period archaeological sites (P-33-002802, -003354, -003357, and -003694), two multicomponent archaeological sites (P-33-000127 and -001451), and two historic-period isolates (P-33-012736 and -017220). Of the 11 previously recorded archaeological resources, 3 (P-33-000127, -003354, and -003694) have been recommended eligible for listing in the CRHR and qualify as historical resources. Archaeological resources that qualify as historical resources are not considered unique archaeological resources. Therefore, resources P-33-000127, -003354, and -003694 do not qualify as unique archaeological resources.

Of the 11 archaeological resources, 6 (P-33-000621, -000622, -000652, -001451, -003357, and -002802) have not been evaluated for listing in the CRHR and so have the potential to qualify as unique archaeological resources. The remaining two archaeological

resources (P-33-012736 and -017220) are historic-period isolates, which, based on their lack of cultural context, do not qualify as unique archaeological resources.

The six archaeological resources (P-33-000621, -000622, -000652, -001451, -003357, and -002802) that have the potential to qualify as unique archaeological resources are located within the Arundo Removal project area. The Arundo Removal project would include the removal of invasive plant species from within the Santa Ana River channel using hand tools and tractor-mounted mulchers. Given the ground-disturbing nature of these activities, the Arundo Removal project could impact the six previously documented archaeological resources that may qualify as unique archaeological resources.

In addition to these six known resources, there may be previously undocumented archaeological resources within the Arundo Removal project area. Should unknown archaeological resources exist within the Arundo Removal project area, they may qualify as unique archaeological resources, and ground-disturbing activities associated with the Arundo Removal project could impact these resources. However, the Arundo Removal activities would be conducted within the river channel that is periodically subject to high flow events that move sediment and remove vegetation. The constantly changing sediment load may transport resources from upstream, disrupting the context of the resources. Furthermore, conducting pre-activity surveys of the treatment areas is impractical due to the density of the vegetation. Ground surfaces are generally not visible within the stands of arundo.

Implementation of Mitigation Measures CUL-1, -2, and -4 (above), which require the retention of a qualified archaeologist, cultural resources sensitivity training for construction personnel, and provisions for the treatment of inadvertent discoveries, would reduce potential Arundo Removal project impacts to archaeological resources that have the potential to qualify as unique archaeological resources to less than significant.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

- c. **Potentially Significant Impact:** The proposed Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

**Facts in Support of Finding:**

*Chino Basin Production Wells, Refurbishment and Treatment System*

The LACM paleontological database records search indicates that surface deposits within the proposed Chino Basin Production Wells, Refurbishment and Treatment System project area consist of younger Quaternary gravels, which are unlikely to contain significant vertebrate fossils in the uppermost layers. However, these deposits may be underlain at unknown depths by older Quaternary Alluvium, which may contain

significant fossil vertebrate remains. Previously record fossil localities in the vicinity of the Chino Basin Production Wells, Refurbishment and Treatment System project area occur in older Quaternary Alluvium similar to that underlying the project area at depths of 15–20 feet below the ground surface. The Chino Basin Production Wells, Refurbishment and Treatment System project would include the installation of a conveyance pipe from Well 34 and connected to eight concrete slabs. Anticipated depths of pipeline excavation range from 5–15-10 feet deep. As a result, encountering paleontological resources is not likely. Implementation of Mitigation Measure CUL-8 (below) would ensure potential impacts to unique paleontological resources or unique geologic features resulting from the construction of the Chino Basin Production Wells, Refurbishment and Treatment System project are less than significant.

#### *Arlington Production Wells and Pipeline*

The LACM paleontological database records search indicates that many of the surface deposits within the Arlington project area consist of younger Quaternary Alluvium, which are unlikely to contain significant vertebrate fossils in the uppermost layers, but may be underlain by Older Quaternary deposits, which have the potential to contain significant fossil vertebrate remains. Surface exposures of Older Quaternary deposits are located in the northeastern and southwestern portion of the Arlington project. The Arlington project would construct two production wells and a conveyance pipeline. These activities would likely intrude into Older Quaternary deposits, and have the potential to significantly impact paleontological resources and/or unique geologic features. Implementation of Mitigation Measures CUL-5 through CUL-8 (below) is required to ensure potential impacts to unique paleontological resources or unique geologic features resulting from the construction of the Arlington project are less than significant.

**CUL-5: Retention of a Qualified Paleontologist:** Prior to the start of ground-disturbing activities associated with the Arlington Production Wells and Pipeline project, the respective lead agencies shall retain a qualified paleontologist meeting the Society for Vertebrate Paleontology’s professional standards (2010) to carry out all mitigation measures related to paleontological resources.

**CUL-6: Paleontological Resources Sensitivity Training:** Prior to the start of ground-disturbing activities associated with the Arlington Production Wells and Pipeline project, the qualified paleontologist shall conduct a paleontological resources sensitivity training for all construction personnel working on the project. This may be conducted in conjunction with the archaeological resources training required by Mitigation Measure CUL-2. The training shall include an overview of potential paleontological resources that could be encountered during ground-disturbing activities to facilitate worker recognition, protocols for avoidance and subsequent immediate notification of the qualified paleontologist for further evaluation and action, as appropriate, and

penalties for unauthorized artifact collecting or intentional disturbance of paleontological resources. The respective project lead agencies shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

**CUL-7: Paleontological Resources Construction Monitoring.** The qualified paleontologist, or a paleontological monitor working under the direct supervision of the qualified paleontologist, shall conduct periodic spot checks during excavation greater than 10 feet deep associated with the Arlington Production Wells and Pipeline project. In the event that sensitive Quaternary older alluvial deposits are observed during spot check monitoring, the qualified paleontologist may make recommendations to modify the spot check protocols, which could include implementation of monitoring of a greater duration. Likewise, if monitoring observations suggest no potential for paleontological materials, the paleontologist may recommend to reduce or to discontinue the spot checks. The paleontological monitor shall prepare daily logs. After construction has been completed, a report that details the results of the spot check monitoring will be prepared and submitted to the lead agency.

**CUL-8: Inadvertent Discovery of Paleontological Resources:** In the event of the unanticipated discovery of paleontological resources during implementation of the Chino Basin Production Wells, Refurbishment and Treatment System project and the Arlington Production Wells and Pipeline project, all work shall immediately cease in the area (within approximately 100 feet) of the discovery until it can be evaluated by a qualified paleontologist. The qualified paleontologist shall evaluate the significance of the resources and recommend appropriate treatment measures. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis. Any fossils encountered and recovered shall be catalogued and donated to a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County. Accompanying notes, maps, and photographs shall also be filed at the repository. Construction shall not resume until the qualified paleontologist has conferred with the lead agency on the significance of the resource.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

- d. **Potentially Significant Impact:** The proposed Project could disturb human remains.

**Facts in Support of Finding:** No known human remains exist within the five proposed project areas. However, ground-disturbing activities associated with the five projects have the potential, albeit small, to unearth, expose, or disturb previously unknown human remains. Implementation of Mitigation Measure CUL-9 (below) would reduce potential impacts to human remains to less than significant.

**CUL-9: Inadvertent Discovery of Human Remains:** If human remains are uncovered during implementation of the Chino Basin Production Wells, Refurbishment and Treatment System project, the Arlington Production Wells and Pipeline project, the Cannon Pump Station project, the ID-4 CRA Crossing Refurbishment project, and the Santa Ana River Arundo Removal project, all work within 100 feet of the find shall be immediately halted, and the County coroner shall be contacted to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 (e)(1) of the *CEQA Guidelines*. If the County Coroner determines that the remains are Native American, the City shall contact the California Native America Heritage Commission (NAHC), in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC 5097.98 (as amended by AB 2641). The NAHC shall then identify a Most Likely Descendant (MLD) of the deceased Native American, who shall then help determine what course of action should be taken in the disposition of the remains.

Per PRC 5097.98, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this section (PRC 5097.98), with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

#### **3.1.1.4 Hazards and Hazardous Materials**

- a. **Potentially Significant Impact:** The proposed Project could result in a significant impact if it would be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and would create a significant hazard to the public or the environment.

**Facts in Support of the Finding:** The records search on the SWRCB GeoTracker and the DTSC EnviroStor databases, revealed hazardous waste sites near the proposed projects. The proposed projects would include construction of wells, pipelines and ancillary facilities such as pump stations. During project construction, it is possible that contaminated soil and/or groundwater could be encountered during excavation, thereby posing a health threat to construction workers, the public, and the environment. Implementation of Mitigation Measure HAZ-1 (below) would ensure that hazardous soils are identified prior to construction activities. Impacts would be less than significant after mitigation.

**HAZ-1:** Prior to the initiation of any construction requiring ground-disturbing activities, a Phase I Environmental Site Assessments (ESA) for soil and groundwater contamination shall be conducted at the project areas. If the site has the potential for contaminated soil and/or groundwater, a Soil and Groundwater Management Plan that specifies the method for handling and disposing of contaminated soil and groundwater prior to demolition, excavation, and construction activities shall be prepared and implemented. The plan shall include all necessary procedures to ensure that excavated materials and fluids generated during construction are stored, managed, and disposed of in a manner that is protective of human health and in accordance with applicable laws and regulations.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

- b. **Potentially Significant Impact:** The proposed Project could expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

**Facts in Support of the Finding:** The groundwater wells and treatment facilities associated with the Chino Basin Production Wells, Refurbishment and Treatment System and Arlington Production Wells and Pipeline projects would not be located within zones that are designated as Very High Fire Hazard Severity Zone. Construction of the ID-4 CRA Crossing and the Cannon Pump Station would be located in areas with overgrown vegetation that could increase fire hazards. In addition, *Arundo donax* and other non-native species removal activities could affect areas of dried vegetation in staging areas, access routes and treatment areas. Implementation of Mitigation Measure HAZ-2 (below) would ensure that fire hazards are minimized. Impacts would be less than significant.

**HAZ-2:** Prior to construction of the ID-4 CRA Crossing and the Cannon Pump Station, and prior to imitation of Arundo Removal activities, fire hazard

reduction measures shall be identified and incorporated into a fire management plan. These measures shall address all staging areas, welding areas, or areas slated for development that are planned to use spark-producing equipment. These areas shall be cleared of dried vegetation or other material that could ignite. Any construction equipment that includes a spark arrestor shall be equipped with a spark arrestor in good working order. During the construction of the project facilities, all vehicles and crews working at the project site to have access to functional fire extinguishers at all times. In addition, construction crews shall have a spotter during welding activities to look out for potentially dangerous situations, including accidental sparks.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

### **3.1.1.5 Hydrology and Water Quality**

- a. **Potentially Significant Impact:** The proposed Project could result in water quality impacts and could violate water quality standards or substantially otherwise degrade water quality.

#### **Facts in Support of the Finding:**

##### *Arundo Removal*

The Arundo removal activities would be conducted along the banks of and within the Santa Ana River. As described in the Project Description, the removal would be accomplished using by hand using loppers, chainsaws, brush cutters, tractor-mounted mulching mowers, arm-mounted tractor/cutter and other approved power equipment. Spraying with an herbicide approved for use in the vicinity of aquatic environments may also be used. The removal activities have the potential to release pollutants such as sediment, fuels and lubricants, and herbicides into the river, adversely affecting water quality.

Although the Arundo removal activities would avoid water contact, disturbance on the banks of the low-flow channel could promote erosion that could adversely affect local water quality. The removal activities may not be subject to the state CGP. Implementation of Mitigation Measure HYDRO-1 (below) would require that OCWD implement BMPs specifically designed to prevent erosion and water quality impacts during Arundo removal activities in the stream channel.

Upon completion of the Arundo removal, the areas would be monitored for new growth of Arundo and other invasive species. As described in the Project Description, the root balls of the Arundo would be left in place to avoid destabilizing the banks and causing



erosion. If the remaining root balls sprout new growth, the new growth and root balls would be treated with a USEPA-approved herbicide. Use of the herbicide would be subject to RWQCB herbicide application regulations and manufacturer recommendations. Appropriate use of the chemicals would not adversely affect water quality.

**HYDRO-1:** Prior to implementing *Arundo donax* removal activities, OCWD shall prepare a Storm Water Pollution Prevention Plan that addresses each phase of the activities including site preparation, access, stockpiling, vegetation removal, and disposal activities. At a minimum, the plan shall include the following required Best Management Practices or equivalent measures:

- Erosion prevention BMPs within the application areas.
- Surface water protection BMPs to ensure equipment, personnel and vegetation avoids contact with water to the extent feasible.
- Site access protocols to minimize tracking and erosion.
- Temporary sediment fences or straw waddles when necessary to protect surface water.
- Herbicide storage and application protocols.
- Spill prevention kits near equipment stockpiling areas.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

### 3.1.1.6 Noise

- a. **Potentially Significant Impact:** The proposed Project could result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

**Facts in Support of the Finding:** Noise from construction activities associated with each of the proposed projects would be generated by vehicles and equipment involved during various stages of construction: grading/drilling, excavation, building construction, and street restoration. The noise levels created by construction equipment would vary depending on factors such as, the type of equipment, the specific model, the operation being performed and the condition of the equipment. Construction noise associated with the proposed Project was analyzed using a mix of typical construction equipment, estimated durations and construction phasing. **Table 4**, Construction Equipment and Estimated Noise Levels (Leq) presents the list of construction equipment and approximate quantities per construction phase with reference noise levels.

**TABLE 4  
CONSTRUCTION EQUIPMENT AND ESTIMATED NOISE LEVELS (L<sub>Eq</sub>)**

Construction Equipment	Noise Level at 50 ft (dBA)	Usage Factor (%)	Hourly Quantity
<b>Arlington Production Wells and Pipeline</b>			
<b>Well Drilling</b>			
Drill Rig Truck	79	29	1
Generator Sets	81	50	1
Forklift	75	10	1
Water Trucks	80	10	4
<b>Well Building Construction</b>			
Concrete Mixer Trucks	79	40	1
Rubber Tired Loader	79	50	1
Forklift	75	10	1
<b>Excavation and Shoring</b>			
Water Trucks	80	10	3
Excavator	81	40	2
Backhoe	80	40	1
Rubber Tired Loader	79	50	1
Cranes	81	40	1
Compactor (Ground)	83	20	1
Other Equipment	85	50	1
<b>Pipe Installation</b>			
Water Trucks	80	10	3
Other Equipment	85	50	1
Welders	74	40	1
Cranes	81	40	1
Generator Sets	81	50	1
<b>Street Restoration</b>			
Paver	77	50	1
Roller	80	20	1
<b>Cannon Pump Station</b>			
<b>Decommissioning</b>			
Water Trucks	80	10	1
Excavator	81	40	1
Backhoe	80	40	1
Rubber Tired Loader	79	50	1
Other Equipment	85	50	1
<b>Street Restoration</b>			
Paver	77	50	1
Roller	80	20	1
<b>New Western Pump Station</b>			

Construction Equipment	Noise Level at 50 ft (dBA)	Usage Factor (%)	Hourly Quantity
Water Trucks	80	10	3
Excavator	81	40	1
Backhoe	80	40	1
Welders	74	40	1
Cranes	81	40	1
<b>Excavation and Shoring</b>			
Water Trucks	80	10	3
Excavator	81	40	2
Backhoe	80	40	1
Rubber Tired Loader	79	50	1
Cranes	81	40	1
Compactor (Ground)	83	20	1
Other Equipment	85	50	1
<b>Pipe Installation</b>			
Water Trucks	80	10	3
Other Equipment	85	50	1
Welders	74	40	1
Cranes	81	40	1
Generator Sets	81	50	1
<b>Street Restoration</b>			
Paver	77	50	1
Roller	80	20	1
<b>ID-4 CRA Crossing Refurbishment</b>			
<b>Refurbishment</b>			
Backhoe	80	40	1
Rubber Tired Loader	79	50	1
Cranes	81	40	1
Welders	74	40	1
<b>Chino Basin Production Wells, Refurbishment And Treatment System</b>			
<b>Well Drilling</b>			
Drill Rig Truck	79	29	1
Generator Sets	81	50	1
Forklift	75	10	1
Water Trucks	80	10	4
<b>Well Building Construction</b>			
Concrete Mixer Trucks	79	40	1
Rubber Tired Loader	79	50	1
Forklift	75	10	1
<b>Santa Ana River Arundo Removal</b>			
<b>Mowing/Clearing/Grubbing</b>			

Construction Equipment	Noise Level at 50 ft (dBA)	Usage Factor (%)	Hourly Quantity
Other Equipment	85	50	6
Dozer	82	40	2
Excavator	81	40	2
Dump/Haul Trucks	76	20	7
Rubber Tired Loader	79	50	1
Water Trucks	80	10	1
Pickup Truck	75	40	2
<b>Maintenance</b>			
Pickup Truck	75	40	2

NOTE: Noise Levels at 50 ft and Usage Factor are derived from Federal Highways Administration's Roadway Construction Noise Model User's Guide.

SOURCE: FHWA Roadway Construction Noise Model User's Guide, 2006; ESA, 2018

These noise levels account for the construction equipment that would be properly operating and maintained, consistent with manufacturers' standards. For purposes of this analysis, all construction equipment during each sub-phase was assumed to operate simultaneously at the construction area nearest to potentially affected sensitive receptors (at the building facade) as a conservative scenario. However, equipment used on construction sites, especially those with limited space, usually operate intermittently over the course of a construction day. It is assumed that sub-phases at each site would overlap to provide a conservative analysis. **Table 5**, Estimated Construction Noise Levels, summarizes the distance of sensitive receptors measured from the approximate project area to the nearest residential building façade and average hourly noise levels at nearby sensitive receptors.

**TABLE 5  
 ESTIMATED CONSTRUCTION NOISE LEVELS (L<sub>EQ</sub>)**

Project Site	Construction Phase	Distance to Nearest Receptor (Feet)	Hourly Noise Level at Nearest Receptor
Arlington Production Wells and Pipeline	Well Drilling	30	85
	Well Building Construction		83
	Excavation and Shoring		92
	Pipe Installation		89
	Street Restoration		81
	<i>Combined Noise Level</i>		<b>94</b>
Cannon Pump Station	Decommissioning	30	89
	Street Restoration		81
	New Western Pump Station		87
	Excavation and Shoring		91
	Pipe Installation		89
	Street Restoration		81
	<i>Combined Noise Level</i>		<b>96</b>
ID-4 CRA Crossing Refurbishment	Refurbishment	1,700	51
	<i>Combined Noise Level</i>		<b>51</b>
Chino Basin Production Wells, Refurbishment And Treatment System	Well Drilling	30	85
	Well Building Construction		83
	<i>Combined Noise Level</i>		<b>87</b>
Santa Ana River Arundo Removal	Mowing/Clearing/Grubbing	50	91
	Maintenance		74
	<i>Maximum Noise Level</i>		<b>91</b>

ESA, 2018

The FTA developed reasonable criteria for assessing construction noise impacts related to adverse community reaction. According to the FTA, daytime hourly noise levels exceeding 90 dBA Leq would result in adverse community reactions at residential land uses. For purposes of this analysis, although the County of Riverside, City of Montclair, and City of Riverside exempt construction noise that occurs within allowable hours, the 90 dBA Leq threshold has also been applied to nearby receptors. As shown in Table 5, hourly noise levels would exceed 90 dBA Leq at the nearest sensitive receptor during the combined construction activities for the Arlington Production Wells and Pipeline, Cannon Pump Station project, and Santa Ana River Arundo Removal. However, these noise levels would be temporary, would only occur during the day time, and would be compliant with local noise ordinances. To ensure that noise impacts would not result in

nuisance to local receptors, Mitigation Measure NOISE-1 (below) would require that contractors minimize noise levels. Mitigation Measure NOISE-2 (below) would require that contractors establish a construction relations officer to ensure that any nuisance noises are minimized. With incorporation of Mitigation Measure NOISE-1 (below) temporary construction noise levels would reach a maximum of 86 dBA Leq, 88 dBA Leq, and 83 dBA Leq for the Arlington Production Wells and Pipeline, Cannon Pump Station project, and Santa Ana River Arundo Removal, respectively, at the nearest sensitive receptors. These noise levels would not exceed the 90 dBA Leq thresholds. Therefore, impacts would be reduced to less-than-significant levels with incorporation of mitigation. Therefore, with implementation of mitigation, construction impacts would be less than significant.

**NOISE-1:** Contractors shall ensure that all construction equipment, fixed or mobile, are equipped with properly operating and maintained noise mufflers, consistent with manufacturers' standards. For example, absorptive mufflers are generally considered commercially available, state-of-the-art noise reduction for heavy duty equipment.<sup>2</sup> Most of the noise from construction equipment originates from the intake and exhaust portions of the engine cycle. According to Federal Highway Administration, use of adequate mufflers systems can achieve reductions in noise levels of up to 10 dBA.<sup>3</sup>

**NOISE-2:** The responsible agency shall designate a construction relations officer to serve as a liaison with surrounding residents and property owners; the construction relations officer shall be responsible for responding to any concerns regarding construction noise and vibration. The liaison's telephone number(s) shall be prominently displayed at the project site. Signs that include permitted construction days and hours shall also be posted at the project site.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

- b. **Potentially Significant Impact:** The proposed Project would not result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above existing levels without the project.

**Facts in Support of the Finding:** A project would normally have a significant impact on noise levels from construction if project construction activities would expose residents to

<sup>2</sup> United Muffler Corp: <https://www.unitedmuffler.com/>; Auto-jet Muffler Corp: [http://mandrelbending-tubefabrication.com/OEM/catalogpages/construction\\_off\\_road.php](http://mandrelbending-tubefabrication.com/OEM/catalogpages/construction_off_road.php). Accessed January 2018.

<sup>3</sup> Federal Highway Administration. Special Report – Measurement, Prediction, and Mitigation: Chapter 4 Mitigation. [https://www.fhwa.dot.gov/Environment/noise/construction\\_noise/special\\_report/hcn04.cfm](https://www.fhwa.dot.gov/Environment/noise/construction_noise/special_report/hcn04.cfm). Accessed January 2018

greater than 90 dBA Leq. Based on the estimated construction noise levels at the studied sensitive receptors, it was determined that construction noise levels could increase ambient noise levels that exceed 90 dBA Leq. Therefore, there could be a potentially significant impact resulting from temporary increases in ambient noise levels. Implementation of Mitigation Measures NOISE-1 and NOISE-2 (above) is required to reduce potential impacts to less than significant levels.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

### 3.1.1.7 Transportation and Traffic

- a. **Potentially Significant Impact:** Implementation of the proposed Project could have a significant impact on an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

**Facts in Support of the Finding:** Construction of the proposed Projects would involve construction worker and construction vehicles traveling to and from the construction sites using existing rights-of-way in the Project area. Construction of the Arlington Production Wells and Pipeline would occur directly within rights-of-way requiring temporary lane closures. In addition, the Cannon Pump Station may require lane closures as well during pipeline connection construction. Therefore, the proposed Project may potentially affect circulation during construction periods. Implementation of Mitigation Measure TT-1 (below) would ensure that impacts to traffic and circulation would be minimized. With implementation of mitigation, impacts would be less than significant.

The proposed Santa Ana River Arundo Removal Project would occur at locations along the Santa Ana River between Prado Basin and the Interstate 10 freeway crossing in Riverside, many of which are along existing rights-of-way. The use of existing rights-of-way by vehicles associated with the transport of construction materials and removal of cleared *Arundo donax* and other non-native species material could affect existing circulation in the Project area. Furthermore, accessing removal areas would require vehicles crossing parts of the Santa Ana River Trail, which is both a pedestrian and bicycle path. Implementation of Mitigation Measure TT-1 (below) would minimize impacts to bike facilities. With mitigation, impacts would be less than significant.

**TT-1:** Prior to construction of pipelines within streets, such as for the Arlington Production Wells and Pipeline and Cannon Pump Station projects, a construction traffic control plan shall be prepared and implemented. Elements of the plan should include, but are not necessarily limited to, the following:

- Develop circulation and detour plans if necessary to minimize impacts to local street circulation and existing public transit, bikeways, and pedestrian facilities, including the Santa Ana River Trail. Use haul routes minimizing truck traffic on local roadways to the extent possible.
- To the extent feasible, and as needed to avoid adverse impacts on traffic flow, schedule truck trips outside of peak morning and evening commute hours.
- Install traffic control devices as specified in Caltrans' Manual of Traffic Controls for Construction and Maintenance Work Zones where needed to maintain safe driving conditions. Use flaggers and/or signage to safely direct traffic through construction work zones.
- For roadways requiring lane closures that would result in a single open lane, maintain alternate one-way traffic flow and utilize flagger-controls.
- Provide advance notification to the owners or operators of facilities adjacent to proposed construction activities on rights-of-way regarding planned timing, location and duration of construction. This also includes notification of affected public transit companies and the applicable city where streets are being impacted. Notify police and fire stations within a 5-mile radius about construction details along rights-of-way.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

- b. **Potentially Significant Impact:** Implementation of the proposed Project could conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards and travel demand measures, or other standards established by the county congestion management agency for designated road or highways.

**Facts in Support of the Finding:** Proposed Project construction would involve construction worker and construction vehicles traveling to and from the construction sites using existing rights-of-way in the Project area. In some cases, construction would occur directly within rights-of-way. Furthermore, construction could require land closures or bike paths and trails. Therefore, the proposed Project may potentially result in increased traffic and affect congestion management programs during construction periods.



Implementation of Mitigation Measure TT-1 (above) is required to reduce potentially significant impacts to less than significant levels.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

- c. **Potentially Significant Impact:** Implementation of the proposed Project could result in inadequate emergency access.

**Facts in Support of the Finding:** Some construction of the proposed projects would occur within local roadways. Although construction vehicles would be required to yield to emergency vehicles, the presence of large construction vehicles, lane closures, and/or laydown areas in existing roadways could slow emergency vehicle flow and impede emergency access to various areas. No permanent impacts to roadways or driveways would result following installation of groundwater wells. Implementation of Mitigation Measure TT-1 (above) would provide for emergency access at all times through the construction areas. With mitigation, impacts would be less than significant.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

- d. **Potentially Significant Impact:** Implementation of the proposed Project could conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

**Facts in Support of the Finding:** Construction of the proposed Project could affect existing public transit, bicycle, and pedestrian facilities through direct construction or the presence of construction vehicles on roadways supporting these alternative transportation facilities.

Operation of the proposed Project facilities would not directly or indirectly eliminate existing or planned alternative transportation corridors or facilities (bicycle paths, lanes, bus turnouts, etc.) or include changes in policies or programs that support alternative transportation. The proposed Project facilities would not be located in areas where future alternative transportation facilities are planned. Implementation of Mitigation Measure TT-1 (above) would ensure that appropriate safety measures and signage would be implemented prior to the temporary closure of bikeways, bus stops and pedestrian facilities. With mitigation, impacts would be less than significant.

The implementation of Mitigation Measure TT-1 (above) would reduce the Project's potential impacts to public transit, bicycle, and pedestrian facilities to less than significant. Mitigation Measure TT-1 (above) would require all construction activities to be conducted in accordance with an approved construction traffic control plan, which

would reduce construction-related impacts to alternative transportation facilities to the maximum extent feasible. Mitigation Measure TT-1 (above) requires development of any necessary detour plans to minimize impacts to existing public transit, bikeways, and pedestrian facilities and notification of public transit companies and applicable jurisdictions regarding construction activities. Thus, through the environmental review and development permit process, subsequent project-specific analysis would be needed to determine specific required elements of the traffic control plans.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

### **3.2.1.8 Tribal Cultural Resources**

- a. **Potentially Significant Impact:** The project could cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC section 5020.1(l), or determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1.

**Facts in Support of the Finding:** Consultation with Native American groups has been initiated pursuant to AB-52 requirements. No specific tribal cultural resources have been identified within the project sites. During the initial consultations, the Native American groups requested continued discussions as SARCCUP project locations are identified in more detail. The project locations are described in the Draft EIR. Mitigation Measure TRIBAL-1 (below) commits IEUA or other implementing agencies to continuing tribal consultations pursuant to AB-52. Continuation of consultations for each project evaluated in the Draft EIR ensures that AB-52 will be completed and adverse impacts to potential tribal cultural resource can be avoided.

**TRIBAL-1: Continued Tribal Resources Consultation.** Prior to the start of ground-disturbing activities associated with the Chino Basin Production Wells, Refurbishment and Treatment System project, the Arlington Production Wells and Pipeline project, the Cannon Pump Station project, and the Santa Ana River Arundo Removal project, IEUA shall notify and consult with Native American groups that have requested notification and further consultation under AB-52 regarding the project locations and construction methods.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant environmental effect as identified in the EIR to a less than significant impact level.

## 3.1.2 Cumulative Impacts

### 3.1.2.1 Biological Resources

- a. **Potentially Significant Impact:** Concurrent construction and operation of the SARCCUP projects combined with other planned regional projects in the geographic scope could result in cumulative long-term impacts to biological resources

**Facts in Support of the Finding:** The geographic scope for potential cumulative impacts to biological resources includes the open-space areas within the cities of Montclair and Riverside, and portions of unincorporated Riverside County, and surrounding environs that support native habitats and plant and wildlife species. Development in the proposed Project area has substantially altered native habitats and adversely affected native plant and wildlife. Historic agricultural use and the expansion of urban areas in the region have resulted in the loss of open space and the degradation of natural areas that historically supported populations of unique or rare species and habitats. However, as described in Section 4.4, *Biological Resources* of the Draft EIR, a number of special-status plants and wildlife species have potential to occur in the proposed Project areas. In addition, native plant communities, riparian and wetland habitats that would support special-status species and other wildlife are present in the proposed Project areas. The Santa Ana River, also a jurisdictional resource, supports critical habitat for the federally listed Santa Ana Sucker and least Bell's vireo.

Development in Riverside and San Bernardino counties could potentially result in the loss of natural habitat and could directly and indirectly impact plant and wildlife species. The proposed Project would benefit local biological resources through the habitat restoration components of the overall program. The Arundo Removal project would increase the amount of habitat available for special-status species and wildlife linkages in the Santa Ana River Watershed which would be a cumulative benefit to the region. The Santa Ana sucker improvement component of SARCCUP lead by SBVMWD would benefit the endangered fish.

The proposed Project's contribution to impacts to biological resources would be minimal. Mitigation Measures BIO-1 through BIO 11 (listed above) would reduce the proposed Project's contribution to biological resource impacts through focused surveys, implementation of avoidance measures, preconstruction surveys, worker awareness training and BMPs. The majority of projects are located in areas that are already substantially developed, or the sites have previously been altered due to grading or agricultural practices, and would not contribute significantly to direct impacts to biological resources.

Impacts from cumulative groundwater extraction could lower groundwater levels in areas with groundwater-dependent ecosystems, such as the Prado Basin and lower reaches of the Santa Ana River. Groundwater upwelling and areas of shallow groundwater support riparian vegetation throughout the region. Lowering of groundwater levels could adversely affect these resources. However, the primary objective of the proposed Project

is to store up to 180,000 acre-feet within the existing groundwater basins, adding water to the existing storage that will raise groundwater levels during wet years. Groundwater extraction during dry years could lower groundwater levels to current levels or lower. Each partner agency would be responsible for ensuring that increased extraction capacities would not affect groundwater-dependent ecosystems. Within adjudicated basins, groundwater levels will be managed through the court-ordered watermasters to operate groundwater extraction within the parameters of the adjudications. Furthermore, the Sustainable Groundwater Management Act (SGMA) will require that groundwater basins subject to SGMA be managed to avoid undesirable effects including adverse impacts to groundwater dependent ecosystems.

In recognition of the regional scope of SARCCUP, the program includes two habitat improvement projects in an effort to contribute to the advancement of other beneficial uses identified in the Basin Plan. The *Arundo donax* removal program would serve to improve habitat values and functions within the Santa Ana River channel while simultaneously increasing water supply availability by up to an estimated 12,500 AFY. In addition, the Santa Ana sucker habitat improvement projects would restore habitat values and functions in specific local waterways consistent with the proposed Upper Santa Ana Habitat Conservation Plan currently under preparation. SARCCUP allows for funding of these programs that benefit the cumulative condition of biological resources in the region. As a result of these habitat improvement projects, when considered in addition to the anticipated impacts of other SARCCUP projects and county General Plan growth projections in the cumulative scenario, the SARCCUP projects' incremental contribution to biological resources impacts would not be cumulatively considerable with implementation of mitigation.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant contribution to cumulatively considerable environmental effect as identified in the EIR to a less than significant level.

### 3.1.2.2 Cultural Resources

- a. **Potentially Significant Impact:** Concurrent construction and operation of the SARCCUP projects, combined with other planned regional projects in the geographic scope could result in cumulative long-term impacts to cultural resources.

**Facts in Support of Finding:** The geographic scope for potential cumulative impacts to cultural resources comprises the cities of Montclair and Riverside, as well as unincorporated portions of Riverside County. As described in Section 4.5, *Cultural Resources* of the Draft EIR, cultural resources were identified near the proposed Projects. In addition, there exists the potential for previously unknown archeological and paleontological resources to underlie the proposed Project components. Mitigation Measures CUL-1 through CUL-9 (listed above) have been developed to ensure less than significant impacts to cultural resources.

Each of the local jurisdictions within the SARCCUP area have identified policies and objectives within their General Plans that provide objectives for protecting significant resources. The General Plans acknowledge that continued development in the region will result in impacts to cultural and tribal resources through ground disturbing activities. As described in each of the local General Plans' policies require careful planning, monitoring, and curation of sensitive materials. The SARCCUP projects would be consistent with these policies and would not add considerably to the impact.

Similarly, excavation has the potential to impact paleontological resources and/or unique geologic features. Mitigation imposed for the SARCCUP projects would be consistent with local General Plan goals and policies and impacts would not be cumulatively considerable with implementation of mitigation.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant contribution to cumulatively considerable environmental effect as identified in the EIR to a less than significant level.

### **3.1.2.3 Hazards and Hazardous Materials**

- a. **Potentially Significant Impact:** Concurrent construction of the SARCCUP projects, combined with other planned regional projects in the geographic scope could result in cumulative short-term impacts to hazards and hazardous materials.

**Facts in Support of the Finding:** The geographic scope for potential hazard and hazardous material-related impacts includes the proposed Project facility locations, the immediate area surrounding these locations and project locations within 0.25 mile of a school. Three airports and ten schools are located within 0.25 mile of proposed Project locations. As described in Section 4.8, *Hazards and Hazardous Materials*, construction of the proposed facilities would occur within or adjacent to roadways, which could affect ingress and egress such that an emergency response plans would be impacted. The records search indicates there are hazardous waste sites near the projects. During project construction, it is possible that contaminated soil and groundwater could be encountered during excavation, thereby posing a health threat to construction workers, the public, and the environment.

Construction of SARCCUP projects listed in Table 6-1, combined with other construction projects in the geographic scope, would temporarily require the transport, use, and disposal of hazardous materials including gasoline, diesel fuel, hydraulic fluids, paint, and other similarly related materials. The minimal risk of hazards and hazardous materials imposed by the project would not add substantially to the cumulative condition. All SARCCUP projects would be required to comply with applicable federal, state, and local regulations regarding the handling, storage, transportation, and disposal of hazardous materials. Compliance with regulations concerning hazardous materials minimizes the cumulative impact. Therefore, when considered in addition to the anticipated impacts of other projects in the cumulative scenario, SARCCUP's

incremental contribution to hazards and hazardous materials related impacts would not be cumulatively considerable with implementation of Mitigation Measures HAZ-1 (above).

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant contribution to cumulatively considerable environmental effect as identified in the EIR to a less than significant level.

### 3.1.2.4 Noise

- a. **Potentially Significant Impact:** Concurrent construction of SARCCUP projects, combined with other planned regional projects in the geographic scope could result in cumulative short-term and long-term impacts related to noise.

**Facts in Support of the Finding:** The geographic scope for potential cumulative impacts related to noise includes sensitive receptors in the vicinity of proposed Project sites. The proposed Project sites are located within the Cities of Montclair and Riverside, and portions of unincorporated Riverside County. As described in Section 4.11, *Noise* of the Draft EIR, the construction of monitoring and extraction wells would require drilling for 1 to 2 weeks each, potentially in close proximity to residential areas. Noise from construction activities would be generated by vehicles and equipment involved during various stages of construction: grading/drilling, excavation, building construction, and street restoration. Except for the Arundo Removal project, construction of the proposed facilities would occur in highly urbanized environment that includes major roadways. Additionally, operation of new facilities would generate permanent new noises at the pump station and extraction wells.

Cumulative Projects could generate noise that would temporarily increase existing ambient noise conditions. Construction noise would be localized, affecting areas in the immediate vicinity of construction sites. For some SARCCUP projects in the future, these temporary construction impacts could be significant and unavoidable for the local area of affect. However, the five projects evaluated in the EIR would not result in direct significant noise impacts, nor would these five projects contribute significantly to the combined noise impacts of the other SARCCUP projects. Similarly, although other development projects in the region may result in significant localized noise impacts, the five projects analyzed in this EIR would not contribute significantly to these effects.

To ensure that noise impacts would not result in cumulatively significant nuisances or violations of local General Plans and noise ordinances, Mitigation Measure NOISE-1 (above) would require that contractors minimize noise levels. Mitigation Measure NOISE-2 (above) would require that contractors establish a construction relations officer to ensure that any nuisance noises are minimized. With incorporation of Mitigation Measure NOISE-1 (above) temporary construction noise levels would not exceed the 90 dBA Leq thresholds. Once in operation, all equipment would be enclosed within concrete block buildings and would be designed to meet acoustic performance criteria that would comply with the local ambient noise standards at the facility fence-line. With

implementation of mitigation, construction noise impacts would be reduced to less than significant. Therefore, construction and operational noise level increases associated with the five projects analyzed in this EIR would not contribute significantly to cumulative noise impacts with implementation of mitigation.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant contribution to cumulatively considerable environmental effect as identified in the EIR to a less than significant level.

### **3.1.2.5 Transportation and Traffic**

- a. **Potentially Significant Impact:** Concurrent construction of the SARCCUP projects, combined with other planned regional projects in the geographic scope could result in cumulative short-term impacts to traffic and transportation.

**Facts in Support of the Finding:** The geographic scope for potential cumulative impacts to traffic and transportation is the regional and local roadways within the cities of Montclair and Riverside, and portions of unincorporated Riverside County. This includes public rights-of-way and bike paths. As discussed in Section 4.15, *Traffic and Transportation* of the Draft EIR, construction activities would temporarily generate additional truck and vehicle trips on the regional and local roadways, which could result in slightly increased delay times on roadways. Construction of the proposed Projects would also involve temporary lane closures which could delay emergency vehicle response times or otherwise disrupt delivery of emergency services that use the regional and local roadways. Mitigation Measure TT-1 (above) requires the preparation and implementation of a Traffic Control Plan, which would reduce all effects to the regional and local circulation system, including existing transit routes, bicycle lanes, and emergency response access, during lane closures to a less than significant level.

**Finding:** Pursuant to CEQA Guidelines Section 15091 (a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the potentially significant contribution to cumulatively considerable environmental effect as identified in the EIR to a less than significant level.

**INFORMATION**  
**ITEM**  
**2B**



# Upper Santa Ana River Multiple Species Habitat Conservation Plan Update



# Upper Santa Ana River Multiple Species Habitat Conservation Plan Overview

- Collaborative Regional Project
  - Water Agencies within the watershed
  - Regulatory Agencies
  - 20+ stakeholder agencies
- Benefits
  - Builds on existing efforts
  - Efficient and cost-effective
  - Greater biological success
  - Mitigation banks
- IEUA Projects
  - Groundwater Recharge Basin expansions and diversions
  - 30-year O&M permits for all existing operations
  - 24 Basins and structures



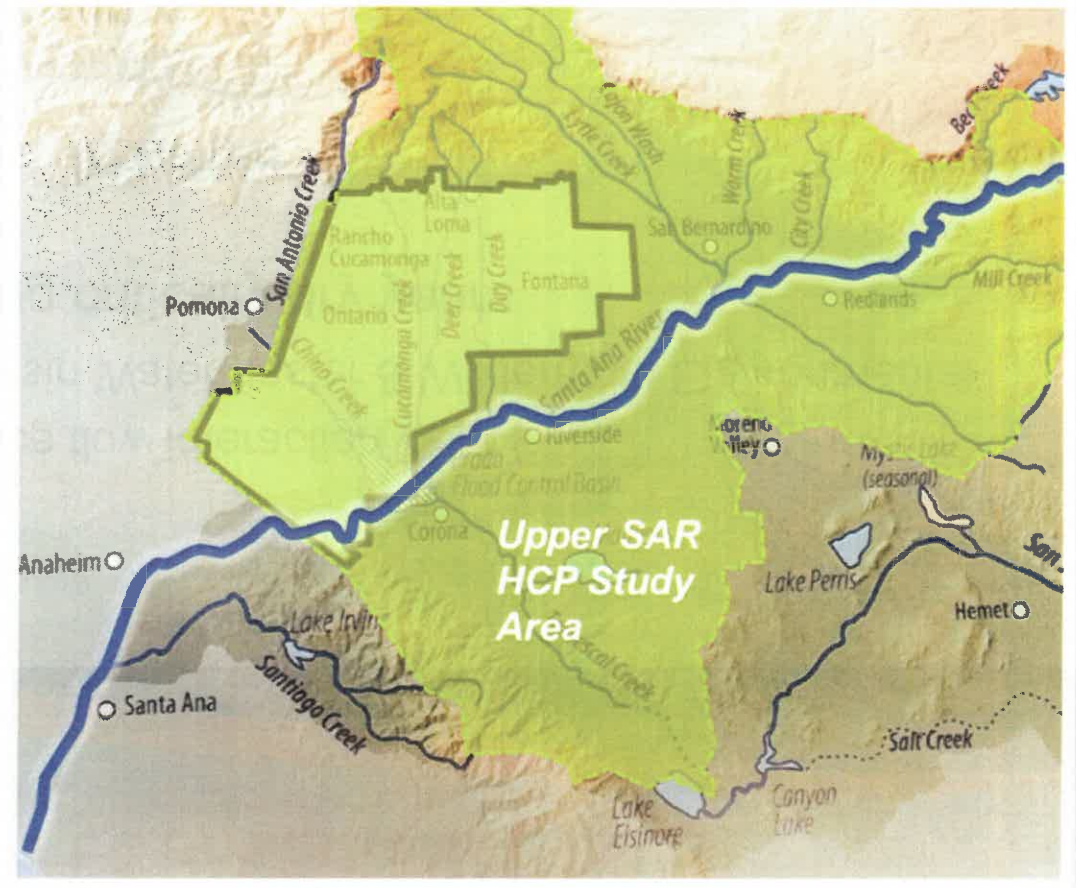
Least Bell's Vireo



San Bernardino Kangaroo Rat

# Upper Santa Ana River Habitat Conservation Plan Study Area

- Includes Areas with:
  - Covered Activities
  - Covered Species
  - Conservation Activities
- 863,000 Acres
  - 35,000 = Riparian
  - 22,000 = Water
  - 425,000 = Upland
  - 336,000 = Developed



# Upper Santa Ana River Habitat Conservation Plan Components

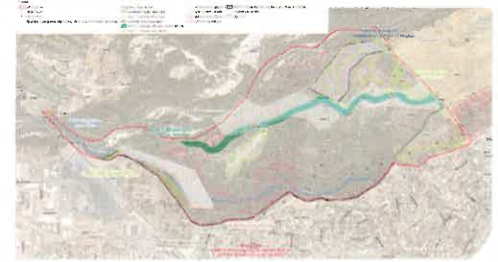
- Integrated Model
  - Establish groundwater and surface flow interaction
  - Closely monitoring with Chino Basin Watermaster & Wildermuth Environmental
- Minimum flow discharges during critically dry years
  - RIX Treatment Plant
  - Opportunity to purchase upstream discharges?
- Conservation restoration work
  - Along tributary streams near the Narrows
  - Mitigation land areas formerly owned by

# Upper Santa Ana River Habitat Conservation Plan Schedule

WINTER 2018	SPRING 2019	FALL 2019
<ul style="list-style-type: none"><li>• Public Scoping Meeting</li><li>• Draft Plan &amp; Environmental Impact Report</li></ul>	<ul style="list-style-type: none"><li>• Ongoing discussion about JPA Establishment</li><li>• Agency Commitments &amp; Agreements</li><li>• Begin Negotiations with Permitting Agencies</li></ul>	<ul style="list-style-type: none"><li>• Finalize Plan</li><li>• Environmental Impact Report Adoption</li><li>• Establish JPA</li><li>• Cost-Share Agreements</li><li>• Restoration &amp; Monitoring Plan</li></ul>

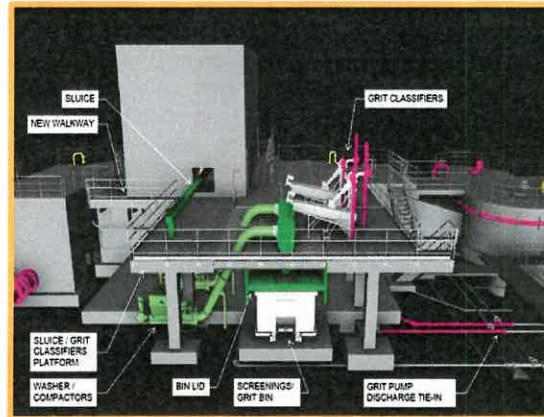


Anza Drain and Old Farm Road, Restoration Opportunities



**INFORMATION  
ITEM  
2C**

# Engineering and Construction Management Project Updates



Jerry Burke, P.E.  
February 2019

# NRW East End Flowmeter Replacement

Project Goal: Improve Access Safety and Meter Accuracy

**Total Project Budget: \$1.9 M**  
**Project Completion: March 2020**  
**Design Percent Complete: 70%**

Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Design (Current)	Civiltec Engineering, Inc.	\$227 K	6.4%
Construction	TBD	\$0	0.0%





# RP-5 Recycled Water Pipeline Bottleneck

Project Goal: Increase Asset Life and Improve Efficiency



**Total Project Budget: \$3.1 M**  
**Project Completion: September 2019**  
**Construction Percent Complete: 10%**

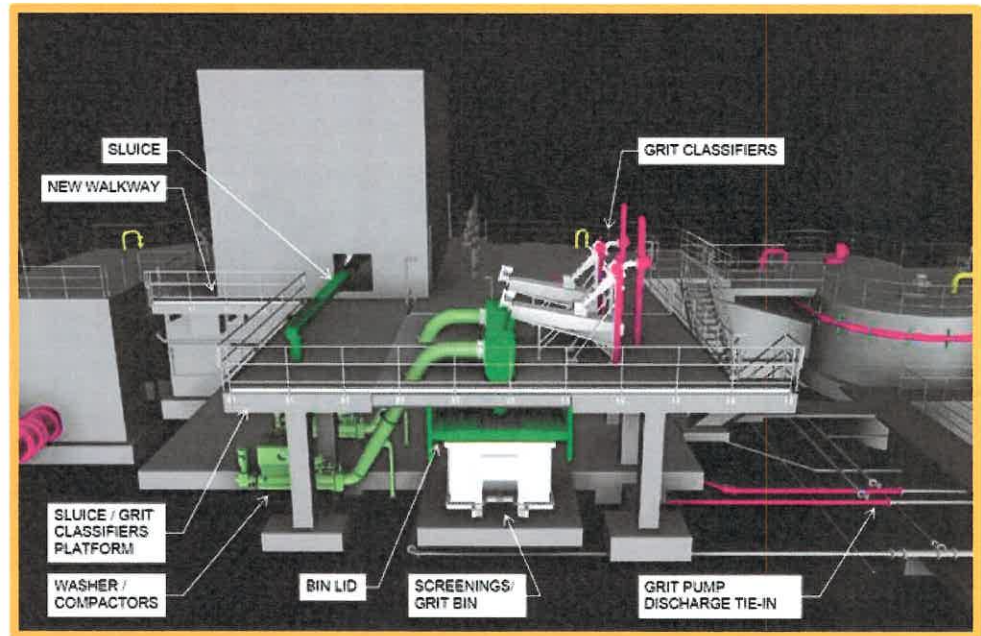
Phase	Consultant/Contractor	Current Contract	Amendments/Change Orders
Design	Stantec Consulting, Inc.	\$201 K	35.88%
Construction (Current)	T.E. Roberts	\$2.0 M	0.00%

# RP-5 Expansion

**Project Goal:** Expand Treatment Capacity

**Total Project Budget: \$325 M**  
**Project Completion: December 2024**  
**Design Percent Complete: 75%**

Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Design (Current)	Parsons	\$18 M	3.1%
Construction	TBD	\$0	0.0%



# RP-4 Influent Screen Replacement

**Project Goal:** Improve Plant Influent Solids Capture



**Total Project Budget: \$3.0 M**  
**Project Completion: June 2020**  
**Design Percent Complete: 15%**

Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Design (Current)	TBD	\$0	0.0%
Construction	TBD	\$0	0.0%