

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

WEDNESDAY, JULY 8, 2020 9:45 A.M.

INLAND EMPIRE UTILITIES AGENCY* Telecon: (415) 856-9169/Conference ID: 785 915 772#

PURSUANT TO THE PROVISIONS OF EXECUTIVE ORDER N-25-20 ISSUED BY GOVERNOR GAVIN NEWSOM ON MARCH 12, 2020, AND EXECUTIVE ORDER N-29-20 ISSUED BY GOVERNOR GAVIN NEWSOM ON MARCH 17, 2020 ANY BOARD MEMBER MAY CALL INTO THE BOARD MEETING WITHOUT OTHERWISE COMPLYING WITH ALL BROWN ACT'S TELECONFERENCE REQUIREMENTS.

TELECONFERENCE ACCESSIBILITY FOR THE GENERAL PUBLIC: In all efforts to prevent the spread of COVID-19, until further notice, the Inland Empire Utilities Agency will be holding all Board and Committee meetings by teleconferencing. The meeting will be accessible at: (415) 856-9169 / Conf Code: 785 915 772#

This meeting is being conducted virtually by video and audio conferencing. There will be no public location available to attend the meeting; however, the public may participate and provide public comment during the meeting by calling into the number provided above. The public may also view the meeting live through the Agency's website. Alternatively, you may email your public comments to the Interim Board Secretary/Office Manager Laura Mantilla at Imantilla@ieua.org no later than 24 hours prior to the scheduled meeting time. Your comments will then be read into the record during the meeting.

CALL TO ORDER

PUBLIC COMMENT

Members of the public may address the Board on any item that is within the jurisdiction of the Board; however, no action may be taken on any item not appearing on the agenda unless the action is otherwise authorized by Subdivision (b) of Section 54954.2 of the Government Code. Those persons wishing to address the Board on any matter, whether or not it appears on the agenda, are requested to email the Board Secretary no later than 24 hours prior to the scheduled meeting time or address the Board during the public comments section of the meeting. <u>Comments will be limited to three minutes per speaker.</u> 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. <u>CONSENT ITEMS</u>

A. <u>MINUTES</u>

The Committee will be asked to approve the Engineering, Operations, and Water Resources Committee meeting minutes of June 10, 2020.

B. <u>SALE OF ETIWANDA WASTE LINE CAPACITY UNITS</u>

Staff recommends that the Committee/Board:

- 1. Approve the sale of seven (7) Etiwanda Waste Line capacity units to MVWD Plant 30 for \$1,505,000; and
- 2. Authorize the General Manager to execute the Capacity Right Agreement, subject to non-substantive changes.

C. <u>CONTRACT AWARD FOR AGENCY-WIDE HAZARDOUS MATERIAL</u> <u>HANDLING SERVICES</u>

Staff recommends that the Committee/Board:

- 1. Approve the award of contract No. 4600002925 to Radar Environmental to provide Hazardous Material Handling Services for a total not-to-exceed amount of \$300,000 over two-year period with three 1-year option to extend with CPI increases; and
- 2. Authorize the General Manager to execute the service contract, subject to non-substantive changes.

D. 2020 LAND USE DEMAND MODEL

Staff recommends that the Committee/Board:

- 1. Approve Task Order No. 6 with Chino Basin Watermaster for the 2020 Land Use Demand Model by Wildermuth Environmental, Inc., for the notto-exceed amount of \$232,277; and
- 2. Authorize the General Manager to finalize and execute the Task Order, subject to non-substantive changes.

Engineering, Operations, & Water Resources Committee July 8, 2020 Page 3

E. <u>RP-5 SOLIDS HANDLING FACILITY EVALUATION CONSULTANT</u> <u>CONTRACT AWARD</u>

Staff recommends that the Committee/Board:

- Award a consultant contract for the RP-5 SHF Future Uses Evaluation, Project No. EN20034.03, to GHD Inc., for a not-to-exceed amount of \$148,864.50; and
- 2. Authorize the General Manager to execute the consultant contract, subject to non-substantive changes.

2. ACTION ITEMS

- A. <u>RP-5 EXPANSION PROJECT CONSTRUCTION CONTRACT AWARD</u> Staff recommends that the Committee/Board:
 - 1. Award a construction contract for the RP-5 Expansion, Project Nos. EN19001 and EN19006, to W.M. Lyles Co., in the amount of \$329,982,900; and
 - 2. Authorize the General Manager to execute the contract and budget augmentation, subject to non-substantive changes.
- B. <u>RP-4 AERATION BASIN DIFFUSER REPLACEMENT AND WALL</u> <u>REINFORCEMENT CONSTRUCTION CONTRACT AWARD</u> Staff recommends that the Committee/Board:
 - 1. Award a construction contract for the Aeration Basin Diffuser Replacement and Wall Reinforcement, Project No. EN17110 to Genesis Construction, in the amount of \$4,102,444;
 - 2. Approve a contract amendment to Carollo Engineers Inc., for engineering services during construction for a not-to-exceed amount of \$176,156; and
 - 3. Authorize the General Manager to execute the contract and contract amendment, subject to non-substantive changes.

3. INFORMATION ITEMS

- A. <u>2020 OBMP UPDATE SUBSEQUENT ENVIRONMENTAL IMPACT</u> <u>REPORT</u>
- B. OPERATIONS DIVISION QUARTERLY UPDATE (POWERPOINT)
- C. WATER USE EFFICIENCY PROGRAM UPDATE (POWERPOINT)
- D. PLANNING & ENVIRONMENTAL RESOURCES UPDATE (ORAL)

RECEIVE AND FILE INFORMATION ITEM

Engineering, Operations, & Water Resources Committee July 8, 2020 Page 4

E. <u>ENGINEERING AND CONSTRUCTION MANAGEMENT PROJECT</u> <u>UPDATES (POWERPOINT)</u>

4. <u>GENERAL MANAGER'S COMMENTS</u>

5. <u>COMMITTEE MEMBER COMMENTS</u>

6. COMMITTEE MEMBER REQUESTED FUTURE AGENDA ITEMS

7. 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 (909-993-1944), 48 hours prior to the scheduled meeting so that the Agency can make reasonable arrangements.

th Proofed by:

DECLARATION OF POSTING

I, Laura Mantilla, Interim 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, July 2, 2020.

AMC matille

Laura Mantilla

Engineering, Operations, and Water Resources Committee

CONSENT ITEM **1A**



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

WEDNESDAY, JUNE 10, 2020 9:45 A.M.

COMMITTEE MEMBERS PRESENT via Teleconference

Michael Camacho, Chair Kati Parker

COMMITTEE MEMBERS ABSENT

None

STAFF PRESENT

Shivaji Deshmukh, General Manager Kathy Besser, Executive Manager of External Affairs & Policy Development/AGM Christina Valencia, Executive Manager of Finance & Administration/AGM Daniel Solorzano, Technology Specialist I Wilson To, Technology Specialist II April Woodruff, Board Secretary/Office Manager

STAFF PRESENT via Teleconference

Christiana Daisy, Executive Manager of Engineering/AGM Randy Lee, Executive Manager of Operations/AGM Adham Almasri, Senior Engineer Jerry Burke, Manager of Engineering Pietro Cambiaso, Deputy Manager of Planning & Environmental Resources Andrea Carruthers, Manager of External Affairs Elizabeth Hurst, Senior Environmental Resources Planner Sally Lee, Executive Assistant Sylvie Lee, Manager of Planning & Environmental Resources Jason Marseilles, Deputy Manager of Engineering & Construction Management Scott Oakden, Manager of Operations and Maintenance Matt Poeske, Senior Engineer Craig Proctor, Deputy Manager of Planning & Environmental Resources Sushmitha Reddy, Manager of Laboratories Teresa Velarde, Manager of Internal Audit Brian Wilson, Senior Engineer Jamal Zughbi, Senior Engineer, Project Manager Jeff Ziegenbein, Manager of Regional Compost Operations

OTHERS PRESENT

None

Engineering, Operations, and Water Resources Committee June 10, 2020 Page 2

Committee Chair Michael Camacho called the meeting to order at 9:51 a.m. He stated that the meeting is being conducted virtually by video and audio conferencing. He added that there will be no public location available to attend the meeting; however, the public may participate and provide comments during the meeting by calling into the number provided on the agenda. He further added that the public may also view the meeting live through the Agency's website and gave instructions for emailing comments to be read into the record during the meeting. He then gave the public the opportunity to comment and provided instructions for unmuting the conference line.

There were no public comments received or additions to the agenda.

CONSENT ITEMS

The Committee:

- Approved the Engineering, Operations, and Water Resources Committee meeting minutes of May 13, 2020.
- Recommended that the Board:
 - 1. Approve a contract with P&RO Solutions to include installation, training, and licensing for five years for a not-to-exceed value of \$218,000; and
 - 2. Authorize the General Manager to finalize and execute the contract;

as a Consent Calendar Item on the June 17, 2020 Board meeting agenda.

 Recommended that the Board adopt the Fiscal Year 2020/21 – 2029/30 Ten-Year Forecast;

as a Consent Calendar Item on the June 17, 2020 Board meeting agenda.

- Recommended that the Board:
 - 1. Award a five-year contract, with two one-year time extensions, to UtiliQuest, LLC., for utility marking services, for a not-to-exceed amount of \$900,000; and
 - 2. Authorize the General Manager to execute the contract, subject to nonsubstantive changes;

as a Consent Calendar Item on the June 17, 2020 Board meeting agenda.

ACTION ITEMS

The Committee:

- Recommended that the Board:
 - 1. Award the Water Quality Laboratory Testing contract to Eurofins Eaton Analytical for a total not-to-exceed value of \$6,500,000 over a three-year period, with two one-year options to extend; and
 - 2. Authorize the General Manager to execute the contract, subject to nonsubstantive changes;

as a Consent Calendar Item on the June 17, 2020 Board meeting agenda.

- Recommended that the Board:
 - 1. Award a construction contract for the RP-1 Flare System Improvements, Project No. EN18006, to W.M. Lyles Co., in the amount of \$5,540,000; and
 - 2. Approve a contract amendment to Lee & Ro, Inc. for engineering services during construction for a not-to-exceed amount of \$182,550;
 - 3. Approve a total project budget amendment in the amount of \$1,968,000 in the Regional Capital (RC) Fund; and
 - 4. Authorize the General Manager to execute the contract, contract amendment, and budget augmentation, subject to non-substantive changes;

as a Consent Calendar Item on the June 17, 2020 Board meeting agenda.

- Recommended that the Board:
 - Award a construction contract for the Regional Force Main Improvements, Project No. EN19025, to Ferreira Construction Company, Inc., in the amount of \$3,786,070;
 - 2. Approve a contract amendment to GHD for engineering services during construction for a not-to-exceed amount of \$125,428;
 - 3. Approve a total project budget amendment in the amount of \$627,000 in the Regional Capital (RC) fund; and
 - 4. Authorize the General Manager to execute the contract, contract amendment, and budget augmentation, subject to non-substantive changes;

as a Consent Calendar Item on the June 17, 2020 Board meeting agenda.

INFORMATION ITEMS

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

- 2019 Annual Report of the Prado Basin Habitat Sustainability Committee
- RP-5 Expansion Bid Update
- Planning & Environmental Resources Update
- Engineering and Construction Management Project Updates

GENERAL MANAGER'S COMMENTS

General Manager Shivaji Deshmukh stated that S&P has upgraded the Agency's Water Infrastructure Finance and Innovation Act (WIFIA) loan from AA to AA+ in alignment with the Agency's long-term credit rating. Some of the key factors cited by S&P for the credit enhancement include: 1) the proposed 2020A Refunding which will leave the 2017A Revenue Bonds as the only debt on the Agency's most senior lien, 2) diversified financing plan for the RP-5 Expansion project which is a good balance of low interest debt and pay-go, and 3) the proposed issuance of the 2020B Notes to further reduce the borrowing costs for the Project.

Engineering, Operations, and Water Resources Committee June 10, 2020 Page 4

<u>COMMITTEE MEMBER COMMENTS</u> 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 10:35 a.m.

Respectfully submitted,

April Woodruff Board Secretary/Office Manager

*A Municipal Water District

APPROVED: JULY 8, 2020

Engineering, Operations, and Water Resources Committee

CONSENT ITEM **1B**



Date: July 15, 2020

To: The Honorable Board of Directors	From: Shivaji Deshmukh, Gene	eral Manager
Committee: Engineering, Operations & Water	Resources	07/08/20
Finance & Administration		07/08/20
Executive Contact: Christiana Daisy, Executiv	e Manager of Engineering/AGM	
Subject: Sale of Etiwanda Waste Line Capacity	/ Units	

NN

Executive Summary:

The Monte Vista Water District (MVWD) is constructing an ion exchange water treatment plant known as Plant 30 located at 5616 San Bernardino St. in Montclair as identified on the (Attachment A) San Bernardino County Assessor Parcel Map. The facility is designed to pump and treat groundwater containing high levels of Nitrate and 1,2,3 Trichloropropane (TCP). The MVWD has submitted a capacity right application requesting to purchase seven (7) Etiwanda Waste Line Capacity Units and a check in the amount of \$1,505,000 for the 7 capacity units, to discharge brine wastewater at a rate not to exceed 105 gallons per minute from regeneration of its ion exchange and water softening systems.

The IEUA Ordinance No. 99 defines the manner in which MVWD may obtain and utilize Capacity Rights through Agreement with IEUA and sets forth the provisions governing disposal of wastewater into the Etiwanda Waste Line. Staff has verified there is available pipeline capacity for this brine discharge and the requested amount will meet the site's needs. The Capacity Right Agreement has been reviewed by the IEUA's General Counsel.

Staff's Recommendation:

1. Approve the sale of seven (7) Etiwanda Waste Line capacity units to MVWD Plant 30 for \$1,505,000; and

2. Authorize the General Manager to execute the Capacity Right Agreement, subject to non-substantive changes.

Budget Impact Budgeted (Y/N): Y Amendment (Y/N): N Amount for Requested Approval: Account/Project Name:

Fiscal Impact (explain if not budgeted):

If approved, the Agency's Non-Reclaimable Wastewater (NC) Fund will be increased by \$1,505,000 from the sale of seven capacity units in FY 2019/20.

Prior Board Action:

None

Environmental Determination: Not Applicable

Business Goal:

The sale of seven capacity units to MVWD Plant 30 is consistent with IEUA's Business Goal of Environmental Stewardship by meeting federal, state and local pretreatment regulations, helping to ensure protection of the water recycling plants, and safeguarding public health and the environment.

Attachments:

Attachment 1 - Capacity Right Agreement No. 4600002894

CAPACITY RIGHT AGREEMENT Agreement No. 4600002894

THIS AGREEMENT is made and entered into this _____ day of _____, 2020, between Inland Empire Utilities Agency, a Municipal Water District, hereinafter called "the Agency", and the Monte Vista Water District, hereinafter referred to as "User".

WHEREAS, the Agency owns and operates a system of pipelines for disposal of non-reclaimable and industrial wastewater, hereinafter called "Disposal System"; and

WHEREAS, the Agency's Board of Directors has adopted Ordinance No. 99, which ordains the manner in which a person may obtain and utilize Capacity Rights through Agreement with the Agency and sets forth provisions governing disposal of wastewater into the Disposal System. As used herein, Ordinance No. 99 includes any amendments or successor ordinances thereto; and

WHEREAS, User owns and operates an ion exchange water treatment facility to treat groundwater located in the City of Montclair, CA, identified on the attached (Exhibit A) Assessor Parcel Map APN: 1010-081-04-0000 of the County of San Bernardino, State of California; and

WHEREAS, User has reviewed Ordinance No. 99 and, pursuant to its terms and conditions, desires to purchase seven (7) capacity units to secure the right to dispose of ion exchange regeneration and water softener backwash to the Disposal System.

NOW, THEREFORE, IT IS AGREED between the Agency and User as follows:

- 1. INCORPORATION OF ORDINANCE. Ordinance No. 99, adopted by the Agency on June 18, 2014, and amended from time to time thereafter, is incorporated as part of this Agreement as set forth in full.
- 2. COMPLIANCE WITH ORDINANCE. User agrees to discharge only such wastes that are acceptable to the Agency and shall comply with all provisions of Ordinance No. 99 and any amendments thereto.
- 3. APPLICABLE REAL PROPERTY. The Capacity Right herein agreed upon applies to the real property described in Exhibit "A" attached and made a part hereof. User shall not convey title to said Capacity Right, sublet or rent the use of said Capacity Right or, in any manner, permit the use of said Capacity Right by others.
- 4. INITIAL CAPACITY CHARGE AND CAPACITY RIGHT. User, in consideration of this Agreement, agrees to pay the Agency the sum of One Million Five Hundred Five Thousand dollars (\$1,505,000) for the seven (7) Capacity Units. The Agency, in

consideration of User's request, agrees to provide User seven (7) Capacity Units and the qualified right to discharge a quantitative maximum discharge limit not to exceed one hundred five (105) gallons per minute.

5. SERVICE CHARGE. User, in consideration of this Agreement, agrees to pay the Agency the applicable monthly wastewater service charge including, but not limited to, the volumetric, capacity and strength charge, capital improvement program charge, and operation and maintenance charge, if applicable, as established and required by the Agency's resolution or amendment to Ordinance No. 99, which is adopted from time to time by the Agency's Board of Directors. The Agency shall invoice User directly for this charge.

IN WITNESS THEREOF, the Agency and User have executed this Agreement on the date first above written.

Inland Empire Utilities Agency ("the Agency")

By/Signature:

Name: Shivaji Deshmukh

Title: General Manager

Monte Vista Water District ("User")		
By/Signature:		By/Si
Name:	Justin M. Scott-Coe	Name
Title:	General Manager	Title:

By/Signature:	Sandra S. Rose
Name:	Sandra S. Rose
Title:	President, Board of Directors

Attachment A

Property Information Management System

San Bernardino County Office of the Assessor



PROPERTY INFORMATION REPORT FOR PARCEL 1010-081-04-0000



Property Information

Property Address (Main Situs) Protected per CA. Govt. Code Sect. 6254.21 Protected per CA. Govt. Code Sect. 6254.21

Owner and Mailing Address MONTE VISTA COUNTY WATER DISTRICT Protected per CA. Govt. Code Sect. 6254.21 Protected per CA. Govt. Code Sect. 6254.21

Effective Date 02/28/1973

Parcel 1010081040000

Parcel Status ACTIVE

Parcel Type REAL PROPERTY

Property ID

Tax Status EXEMPT FROM ASSESSMENT

Use Code VACANT

Land Access

Size 0 TO 4,999 SQ. FEET

Land Type PUBLIC FACILITIES

District ONTARIO

Resp Group SPECIAL PROPERTY

Resp Unit COMMERCIAL ZONE OR USE

Current Owners

Name MONTE VISTA COU	JNTY WATER DISTRICT	Document Numbers
R/I SOLE OWNER	-	
% Int 0.000000		
Type BILLED OWNER		
Acquisition Date NONE		
Document Date NONE		
Inactive Date NONE		
	Legal Parcel Map	

Parcel Map Parcel Nbr Unit Book Page

1010081040000

Legal Description

MONTE VISTA TRACT N 165 FT W 264 FT LOT 1 BLK 9 MEAS TO ST C/L .84 AC

No Legal Reason for Change Found

No Active Homeowner's Exemptions Found





Engineering, Operations, and Water Resources Committee

consent item **1C**



Date: July 15, 2020AsoTo: The Honorable Board of DirectorsFrom: Shivaji Deshmukh, General ManagerCommittee: Engineering, Operations & Water Resources07/08/20

Executive Contact: Randy Lee, Executive Manager of Operations/AGM **Subject:** Contract Award for Agency-Wide Hazardous Material Handling Services

Executive Summary:

The Inland Empire Utilities Agency (Agency) has four locations within the service area that require periodic hazardous material handling services. IEUA generates spent oil, used batteries, aerosol cans, oily rags, and other universal waste that must be handled using industry-accepted practices in accordance with Resource Conservation and Recovery (RCRA) laws and regulations as well as meeting Federal environmental health standards.

To maintain the appropriate level of hazardous material handling services, a Request for Proposal (RFP) RFP-HD-20-008 was posted publicly on PlanetBids on May 22, 2020 for a new service contract and staff received three RFP bid responses. Bid responses were evaluated and scored based on pre-determined weighted criteria.

Based on the thorough committee evaluation, it is recommended that Radar Environmental be awarded the contract for the Agency Wide Hazardous Material Handling Services for a fixed pricing period of two-years with a three 1-year option to extend with CPI increases.

Staff's Recommendation:

1. Approve the award of contract No. 4600002925 to Radar Environmental to provide Hazardous Material Handling Services for a total not-to-exceed amount of \$300,000 over two year period with three 1-year option to extend with CPI increases; and

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

Budget Impact Budgeted (Y/N): Y Amendment (Y/N): N Amount for Requested Approval: Account/Project Name:

Fiscal Impact (explain if not budgeted):

If approved, sufficient funds are available in Fiscal Year 2020/21 under Regional Operations and Maintenance (RO) fund under Biosolids Recycling. For future Fiscal Years, Operations Division will include funds in its budget requests to cover the contract requirements.

Prior Board Action:

None.

Environmental Determination:

Statutory Exemption

The project is statutorily exempt based on the CEQA common sense 15061(b)(3) of the State CEQA Guidelines.

Business Goal:

The Hazardous Material Handling Services Contract is consistent with IEUA's Business Goal of Environmental Stewardship to enhance and promote environmental sustainability and preservation of the region's heritage. The key objective of regulatory compliance to comply with all federal, state, and environmental laws and regulations.

Attachments:

Attachment 1 - PowerPoint Presentation Attachment 2 - Hazardous Material Handling Services Contract 4600002925

Hazardous Material Handling Services Contract









Lucia Diaz, Deputy Manager of Maintenance July 2020

DocuSign Envelope ID: 2CAFA0E1-B8B1-4F93-A8BD-BB93E82234D6 Hazardous Materials

Waste Types

- Spent Lubrication/Hydraulic Oil
- Oily Rags
- Spent Aerosol Cans
- Spent Paint
- Electronics (e-waste)
- Batteries
- Lab Generated
 Chemicals







Waste Collection Sites

- RP-1
- RP-2
- RP-5
- IERCF







Hazardous Material Handling Requirements

Resource Conservation and Recovery Act (RCRA)		
Permit	Requirements	
Small Generator	 < 1,000 kg per month (2,205 lbs) 	
Storage Retention Limit	180 days from start of accumulation	
Inspections	 Weekly inspections by Agency staff Monthly inspections by service contractor 	

• IEUA removes all Hazardous Waste from sites every 90 days to ensure generation limits are not exceeded.



RP-5 Hazardous Waste Storage Container



Award/Selection Criteria

Three proposals were received on June 5, 2020 and were scored based on pre-determined weighted criteria.

Selection Criteria

- Level of experience and knowledge of scope of work
- Record of performance (work history)
- Methodology to maintain a high standard of service
- Availability of staff to meet Agency's deadlines
- References
- Fees
- Exceptions taken to the specifications

Bidders Ranked using Selection Criteria

- 1. Radar Environmental
- 2. Clean Earth
- 3. NRC Environmental



Radar Environmental

- Recommendation:
 - Radar Environmental
 - Best Value: Best overall pricing for the Agency, past performance, experience.







- Approve the award of contract No. 4600002925 to Radar Environmental to provide Hazardous Material Handling Services for a total not-to-exceed amount of \$300,000 over two year period with three 1-year option to extend with CPI increases; and
- Authorize the General Manager to execute the service contract, subject to nonsubstantive changes.

The Hazardous Material Handling Services Contract is consistent *with IEUA's Business Goal of Environmental Stewardship* to enhance and promote environmental sustainability and preservation of the region's heritage. The key objective of regulatory compliance to comply with all federal, state, and environmental laws and regulations.





Draft CONTRACT NUMBER: 4600002925 FOR HAZARDOUS MATERIAL HANDLING SERVICES AT INLAND EMPIRE UTILITIES AGENCY

THIS CONTRACT (the "Contract"), is made and entered into this ______ day of ______, 2020, by and between the Inland Empire Utilities Agency, a Municipal Water District, organized and existing in the County of San Bernardino under and by virtue of the laws of the State of California (hereinafter referred to as "Agency" or "IEUA"), and Radar Environmental Services, Inc., of Anaheim, California (hereinafter referred to as "Contractor"), for the provision of Hazardous Material Handling Service(s), including transportation and disposal, as needed to support the on-going operation of IEUA's Wastewater Treatment Facilities, Recycles Water Distribution Facilities, and Non-Reclaimable Wastewater Facilities.

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

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

Project Manager:	Lucia Diaz
Company Name:	Inland Empire Utilities Agency, Building "B"
Address:	6075 Kimball Avenue
	Chino, CA 91708
Telephone:	909-993-1631
Facsimile:	909-993-1987
Email:	ldiaz@ieua.org

2. <u>CONTRACTOR ASSIGNMENT</u>: Special inquiries related to this Contract and the effects of this Contract shall be referred to the following:

Contractor:	Colleen Donovan
Company Name:	Radar Environmental Services, Inc.
Address:	751 Weir Canyon Road, Suite #157
	Anaheim, CA 92808
Telephone:	(714) 749-1177
Email:	cdonovan@radarenvironmental.com
Cell:	(909) 360-3615

- 3. <u>ORDER OF PRECEDENCE</u>: The documents referenced below represent the Contract Documents. Where any conflicts exist between the General Terms and Conditions the governing order of precedence shall be as follows:
 - 1. Amendments to Contract Number 4600002925.
 - 2. Contract Number 4600002925 General Terms and Conditions.
 - 3. Agency's RFP-HD-20-008, see Exhibit A
 - 4. Contractor's Proposal, see Exhibit B
- 4. <u>SCOPE OF WORK AND SERVICES</u>: Contractor services and responsibilities shall include and be in accordance with the following:
 - A. Contractor will provide monthly (or more often, if needed) inspections to assist IEUA staff with the identification of hazardous wastes and waste disposal needs.
 - B. Following inspections, Contractor shall follow professional workflow processes, to complete the documentation, assure proper container(s) and packing protocols have been completed.
 - C. Contractor shall provide an estimate of the total cost to load, haul, and dispose of the hazardous material, for the designated Project Manager to review and approve.
 - D. Following approval, Contractor shall prepare waste material profiles, the manifest, and the proposed schedule for transportation to an appropriate disposal facility.
 - E. Contractor shall coordinate, with the Project Manager, at least one day in advance of the intended "pick-up date" planned for the hazardous waste transport, to assure Agency staff will be available to provide the required authorization and paperwork signatures.
 - F. In the event of unforeseen hazardous material events (leakage, spill, etc.) Emergency Response actions will be made available immediately, upon request (telephone or text message notification).
 - G. Contractor shall prepare and provide Agency with a proposed initial Routine Schedule of Services, documenting the anticipated schedule. The proposed Routine Schedule of Services shall be submitted to the Project Manager, for review and approval.
 - H. Method of Inspection:
 - 1. Work performed under this Contract shall be subject routine inspections.
 - 2. The Project Manager will be responsible for performance of the inspections.

- 3. If Contractor fails an inspection, the Project Manager will be responsible for providing a written notice to the Contractor explaining the error and a determination of the urgency for the correction of the error (herein referred to as a "Cure Notice").
- I. Cure Procedure:
 - 1. For a Cure Notice deemed by the Agency to be <u>urgent</u>, Contractor shall correct any error of the Work or Services within three (3) calendar days after Contractor's receipt of a Cure Notice, as directed by the Project Manager.
 - 2. For a Cure Notice deemed by the Agency to be <u>important</u>, Contractor shall correct any error of the Work within seven (7) calendar days after Contractor's receipt of a Cure Notice, as directed by the Project Manager.
 - 3. If the Project Manager rejects all, or any part of, the Work as unacceptable and agreement to correct such Work cannot be reached without modification to the Contract, Contractor shall notify the Project Manager, in writing, detailing the dispute and the reason(s) for the Contractor's position. Any dispute that cannot be resolved between the Project Manager and Contractor shall be resolved in accordance with the provisions of this Contract.
- J. The Agency may, at any time, make changes to this Contract's Scope of Work; including additions, reductions, and other alterations to any or all of the Work. However, such changes shall only be made via written amendment to this Contract. The Contract compensation and Schedule of Work and Services shall be equitably adjusted, if required, to account for such changes and shall be set forth within the mutually approved Contract Amendment.
- K. Deliverables:

SITE	FREQUENCY	ITEMS
RP-1 Waste oil Tank	Monthly	Waste Oil/Fluids
RP-1 Hazmat Coll. Ctr.	Monthly	E-waste, misc.
RP-1 Maint/PRB Building	Annually	Oil/Water Separators
RP-2 Waste Oil Tank	Monthly	Waste oil/fluids
RP-2 Cogen	Quarterly	Oily rags, e-waste, misc.
CCWRF	Quarterly	Oily rags, e-waste, misc.
CDA	Quarterly	Oily rags, e-waste, misc.
RP-5 New Regional Lab	Quarterly	Misc. lab waste

1. SCHEDULED SITE INSPECTIONS OF DESIGNATED COLLECTION POINTS, AND OTHER DESIGNATED AGENCY SITES/FACILITIES.

- PACKAGING AND LABELING Ensure all items, collected for disposal, are properly packaged and labeled as required by all applicable regulations. Contractor should be able to provide appropriate packaging material for types of items to be disposed; e.g. drums, overpacks, gaylords, etc. Contractor shall also provide and ensure proper labels and information are filled out on all items staged for disposal.
- TRANSPORT AND DISPOSAL Scheduling and dispatching of qualified transporters and equipment for disposal of accumulated items at collection sites. Contractor shall coordinate with designated collection site points of contacts to ensure access and availability of items scheduled for disposal.
- DOCUMENTATION Contractor shall ensure that all required forms are in order for all items scheduled for disposal, including, but not limited to; manifests, bills of lading, chain-of-custody, etc. as required by regulation, and provide copies of the same.
- 5. OTHER SERVICES as required.
 - Hazmat profile analysis
 - Emergency Spill response
 - Training and review for RCRA manifest, PPE, spill mitigation, hazmat labeling.
 - Periodic site inspection reports.
 - Material support for packaging, labeling, etc.
- L. The Agency may, at any time, make changes to this Contract's Scope of Work; including additions, reductions, and other alterations to any or all of the Work. However, such changes shall only be made via written amendment to this Contract. The Contract compensation and Schedule of Work and Services shall be equitably adjusted, if required, to account for such changes and shall be set forth within the mutually approved Contract Amendment.
- 5. <u>TERM</u>: The term of this Contract shall extend from the date of the Notice to Proceed, and terminate upon completion on July 15, 2025, unless agreed upon by both parties, reduced to writing, and amended to this Contract. Upon Project Manager recommendation two optional one-year extensions may be implemented by mutually agreed-upon contract amendments.

6. <u>PAYMENT, INVOICING, AND COMPENSATION</u>:

- A. The Contractor may submit an invoice not more than once per month during the term of this Contract to the Agency's Accounts Payable Department. Agency shall pay Contractor's properly executed invoice, approved by the Project Manager, within thirty (30) days following receipt of the invoice.
- B. As compensation for the Work performed under this Contract, Agency shall pay Contractor's monthly invoice, up to a total contract price NOT-TO-EXCEED \$300,000 for all services satisfactorily provided during the term of this Contract.

- C. Additionally, to qualify for payment, the Contractor shall prominently display, on the first page of the invoice, both:
 - 1. The Contract Number 4600002925, and;
 - 2. The Contract Release Purchase Order Number 45000_____

If Contractor submits invoice by email, such invoice shall be submitted as follows:

<u>APGroup@ieua.org</u> Scan the invoice as a PDF file. Attach the scanned file to an email.

If Contractor submits invoice by mail, such invoice shall be submitted as follows: Inland Empire Utilities Agency Re: Contract Number: 4600002925 P.O. Box 9020 Chino Hills, CA 91709

- D. Concurrent with the submittal of the original invoice to the Agency's Accounts Payable Department, the Contractor shall forward (mail, fax, or email) a copy of the invoice to the designated Project Manager, identified in Section 1, on Page 1 of this Contract.
- E. No Additional Compensation: Nothing set forth in this Contract shall be interpreted to require payment by Agency to Contractor of any compensation specifically for the assignments and assurances required by the Contract, other than the payment of expenses as may be actually incurred by Contractor in complying with this Contract, as approved by the Project Manager.
- F. Commencing on March 1, 2022, and continuing each March 1st, thereafter, the Contractor may propose modifications to the prices provided in the Price Schedule of this contract. The Price Schedule may be adjusted, plus or minus, by a sum equal to the percentage change in the Consumer Price Index for All Urban Consumers (CPI-U), within the Los Angeles-Anaheim-Riverside, California index area. The basis for computing the adjustment to the contract prices shall reflect the percentage change for the twelve-month period from February to February, starting with the period of February, 2021, to February, 2022, and continuing every twelve months thereafter. Despite any changes in the CPI-U for any given twelve-month adjustment period, adjustments to the prices provided in the Proposed Price Schedule shall not increase or decrease more than five (5) percent during any single twelve-month adjustment period.

In the event the CPI-U is changed so that the base period differs from 1982-84=100, then the index applied, as provided for above, shall be corrected in accordance with the conversion factor published by the United States Department of Labor, Bureau of Labor Statistics, or their successor. If the CPI-U is discontinued or revised, such other government index or computation with which it is replaced shall be used to obtain, substantially, the same results as would have been obtained if the CPI-U had not been discontinued or revised.

- G. Contractor may request taking advantage of the Agency's practice of offering an expedited payment protocol to a Contractor who has proposed accepting an invoice amount reduction in exchange for early payment; (CONTRACTOR) has proposed, and the Agency has accepted, applying a (1%, 2%, or 5%) discount (invoice amount reduction) to monthly invoices in exchange for payment of all invoices within (20, 15, or 10) days, respectively, of the date the invoice is received at the Agency's <u>APGroup@ieua.org</u> email address.
- 7. <u>CONTROL OF THE WORK</u>: The Contractor shall perform the Work in compliance with the Schedule of Work and Services. If performance of the Work falls behind schedule, the Contractor shall accelerate the performance of the Work to comply with the Schedule of Work and Services as directed by the Project Manager. If the nature of the Work is such that Contractor is unable to accelerate the Work, Contractor shall promptly notify the Project Manager of the delay, the causes of the delay, and submit a proposed revised Schedule of Work and Services.
- 8. <u>INSURANCE</u>: During the term of this Contract, the Contractor shall maintain, at Contractor's sole expense, the following insurance.
 - A. <u>Minimum Scope of Insurance</u>: Coverage shall be at least as broad as:
 - Commercial General Liability ("CGL"): Insurance Services Office ("ISO") Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than \$1,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
 - Automobile Liability: ISO Form Number CA 00 01 covering any auto (Code 1), or if Contractor has no owned autos, covering hired, (Code 8) and non-owned autos (Code 9), with limit no less than \$1,000,000 per accident for bodily injury and property damage.
 - 3. Workers' Compensation and Employers Liability: Workers' compensation limits as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
 - B. <u>Deductibles and Self-Insured Retention</u>: Any deductibles or self-insured retention must be declared to and approved by the Agency. At the option of the Agency, either: the insurer shall reduce or eliminate such deductibles or self-insured retention as respects the Agency, its officers, officials, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.

- C. <u>Other Insurance Provisions</u>: The insurance policies are to <u>contain</u>, or be <u>endorsed to contain</u>, the following provisions:
 - 1. Commercial General Liability and Automobile Liability Coverage
 - a. Additional Insured Status: The Agency, its officers, officials, employees, and volunteers are to be covered as additional insureds on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts or equipment supplied in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance (at least as broad as ISO Form CG 20 10 11 85; or **by either** CG 20 10, CG 20 26, CG 20 33, or CG 20 38 **and** CG 20 37 forms if later revisions are used).
 - b. Primary Coverage: The Contractor's insurance coverage shall be primary insurance coverage at least as broad as ISO CG 20 01 04 13 as respects the Agency, its officer, officials, employees and volunteers. Any insurance or self-insurance maintained by the Agency, its officers, officials, employees, volunteers, property owners or engineers under contract with the Agency shall be excess of the Contractor's insurance and shall not contribute with it.
 - c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Agency, its officers, officials, employees or volunteers.
 - d. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
 - e. The Contractor may satisfy the limit requirements in a single policy or multiple policies. Any additional policies written as excess insurance shall not provide any less coverage than that provided by the first or primary policy.
 - 2. Workers' Compensation and Employers Liability Coverage

Contractor hereby grants to Agency a waiver of any right to subrogation which any insurer of the Contractor may acquire against the Agency by virtue of the payment of any loss under such insurance. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the Agency has received a waiver of subrogation endorsement from the insurer. 3. All Coverages

Each insurance policy required by this Contract shall be <u>endorsed</u> to state that coverage shall not be suspended, voided, canceled by either party, or reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the Agency pursuant to Section 14, page 12 of this Contract.

- 4. Professional Liability (Errors and Omissions): Insurance appropriates to the Contractor's profession, with limit no less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate.
- D. <u>Acceptability of Insurers</u>: Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A minus:VII, and who are admitted insurers in the State of California.
- E. <u>Verification of Coverage</u>: Contractor shall provide the Agency with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the Agency before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Contractor's obligation to provide them. The Agency reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.
- F. <u>Submittal of Certificates</u>: Contractor shall submit all required certificates and endorsements to the following:

Inland Empire Utilities Agency Attn: Angela Witte P.O. Box 9020 Chino Hills, CA 91709

- 9. <u>FITNESS FOR DUTY</u>:
 - A. <u>Fitness</u>: Contractor and its Subcontractor personnel on the Jobsite:
 - 1. Shall report to work in a manner fit to do their job;
 - Shall not be under the influence of or in possession of any alcoholic beverages or of any controlled substance (except a controlled substance as prescribed by a physician so long as the performance or safety of the Work is not affected thereby); and
 - 3. Shall not have been convicted of any serious criminal offense which, by its nature, may have a discernible adverse impact on the business or reputation of the Agency.

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

10. LEGAL RELATIONS AND RESPONSIBILITIES:

- A. <u>Professional Responsibility</u>: The Contractor shall be responsible, to the level of competency presently maintained by other practicing professionals performing the same or similar type of work.
- B. <u>Status of Contractor</u>: The Contractor is retained as an independent Contractor only, for the sole purpose of providing the services described herein, and is not an employee of the Agency.
- C. <u>Observing Laws and Ordinances</u>: The Contractor shall keep itself fully informed of all existing and future state and federal laws and all county and city ordinances and regulations which in any manner affect the conduct of any services or tasks performed under this Contract, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. The Contractor shall at all times observe and comply with all such existing and future laws, ordinances, regulations, orders and decrees, and shall protect and indemnify, as required herein, the Agency, its officers, employees and agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by the Contractor, its employees, or subcontractors.
- D. Work Safety: Contract work requiring confine space entry must follow CalOSHA Regulation 8 CCR, Sections 5157 – 5158. This regulation requires the following to be submitted to IEUA for approval prior to the Contractor's mobilization to the work site:
 - 1. Proof of training on confined space procedures, as defined in Cal-OSHA Regulation 8 CCR, Section 5157; and, 2. A written plan that includes; identification of confined spaces within the work site, alternate procedures where appropriate, contractor provisions and specific procedures for permit-required and non-permit required spaces and a rescue plan.
- E. <u>Hours of Labor</u>: The Contractor shall comply with all applicable provisions of California Labor Code Sections 1810 to 1815 relating to working hours. The Contractor shall, as a penalty to the Agency, forfeit \$25.00 for each worker employed in the completion of the Contract by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight hours in any one calendar day and forty (40) hours in any one calendar week in violation of the provisions of the Labor Code.
- F. <u>Liens</u>: Contractor shall pay all sums of money that become due from any labor, services, materials or equipment provided to Contractor on account of said services to be rendered or said materials to be provided under this Contract and that may be secured by any lien against the Agency. Contractor shall fully discharge each such lien at the time performance of the obligation secured matures and becomes due.
- G. <u>Indemnification</u>: Contractor shall indemnify the Agency, its directors, employees, and assigns, and shall defend and hold them harmless from all liabilities, demands, actions, claims, losses and expenses, including reasonable attorneys' fees, which arise out of, or are related to, the negligence, recklessness or willful misconduct of the Contractor, its directors, employees, agents, and assigns, in the performance of work under this contract.
- H. <u>Conflict of Interest</u>: No official of the Agency, who is authorized in such capacity and on behalf of the Agency to negotiate, make, accept or approve, or to take part in negotiating, making, accepting or approving this Contract, or any subcontract relating to services or tasks to be performed pursuant to this Contract, shall become directly or indirectly personally interested in this Contract.
- I. <u>Equal Opportunity</u>: During the performance of this Contract, the Contractor shall not unlawfully discriminate against any employee or employment applicant because of race, color, religion, sex, age, marital status, ancestry, physical or mental disability, sexual orientation, veteran status or national origin. The Agency is committed to creating and maintaining an environment free from harassment and discrimination.
- J. <u>Disputes</u>:
 - 1. All disputes arising out of or in relation to this Contract shall be resolved in accordance with this section. The Contractor shall pursue the work to completion in accordance with the instruction of the Agency's Project Manager notwithstanding the existence of a dispute. By entering into this Contract, both parties are obligated, and hereby agree, to submit all disputes arising under or relating to the Contract which remain unresolved after the exhaustion of the procedures provided herein, to independent arbitration. Except as otherwise provided herein, arbitration shall be conducted under California Code of Civil Procedure Sections 1280, et seq., or their successor.
 - 2. Any and all disputes prior to the work starting shall be subject to resolution by the Agency's Project Manager; and the Contractor shall comply, with the Agency Project Manager instructions. If the Contractor is not satisfied with the resolution directed by the Agency Project Manager, they may file a written protest with the Agency Project Manager within seven (7) calendar days after receiving written directive of the Project Manager's decision. Failure by Contractor to file a written protest within seven (7) calendar days shall constitute waiver of protest,

and acceptance of the Project Manager's resolution. The Project Manager shall submit the Contractor's written protests to the General Manager, together with a copy of the Project Manager's written decision, for his or her consideration within seven (7) calendar days after receipt of the protest-related documents. The General Manager shall make his or her determination with respect to each protest filed with the Project Manager within ten (10) calendar days after receipt of the protest-related documents. If Contractor is not satisfied with any such resolution by the General Manager, they may file a written request for arbitration with the Project Manager within seven (7) calendar days after receiving written notice of the General Manager's decision.

- 3. In the event of arbitration, the parties to this contract agree that there shall be a single neutral Arbitrator who shall be selected in the following manner:
 - a. The Demand for Arbitration shall include a list of five names of persons acceptable to the Contractor to be appointed as Arbitrator. The Agency shall determine if any of the names submitted by Contractor are acceptable and, if so, such person will be designated as Arbitrator.
 - b. In the event that none of the names submitted by Contractor are acceptable to Agency, or if for any reason the Arbitrator selected in Step (a) is unable to serve, the Agency shall submit to Contractor a list of five names of persons acceptable to Agency for appointment as Arbitrator. The Contractor shall, in turn, have seven (7) calendar days in which to determine if one such person is acceptable.
 - c. If after Steps (a) and (b), the parties are unable to mutually agree upon a neutral Arbitrator, the matter of selection of an Arbitrator shall be submitted to the San Bernardino County Superior Court pursuant to Code of Civil Procedure Section 1281.6, or its successor. The costs of arbitration, including but not limited to reasonable attorneys' fees, shall be recoverable by the party prevailing in the arbitration. If this arbitration is appealed to a court pursuant to the procedure under California Code of Civil Procedure Section 1294, et seq., or their successor, the costs of arbitration shall also include court costs associated with such appeals, including but not limited to reasonable attorneys' fees which shall be recoverable by the prevailing party.
- 4. Association in Mediation/Arbitration: The Agency may join the Contractor in mediation or arbitration commenced by a contractor on the Project pursuant to Public Contracts Code Sections 20104 et seq. Such association shall be initiated by written notice from the Agency's representative to the Contractor.

- K. <u>Workers' Legal Status</u>: For performance against this Contract, Contractor shall only utilize employees and/or subcontractors that are authorized to work in the United States pursuant to the Immigration Reform and Control Act of 1986.
- 11. <u>OWNERSHIP OF MATERIALS AND DOCUMENTS/CONFIDENTIALITY</u>: The Agency retains ownership of any, and all, partial or complete reports, drawings, plans, notes, computations, lists, and/or other materials, documents, information, or data prepared by the Contractor and/or the Contractor's subcontractor(s) pertaining to this Contract. Said materials and documents are confidential and shall be available to the Agency from the moment of their preparation, and the Contractor shall deliver them to the Agency whenever requested to do so by the Project Manager and/or Agency representative. The Contractor agrees that all documents shall not be made available to any individual or organization, private or public, without the prior written consent of an Agency representative.

12. <u>TITLE AND RISK OF LOSS:</u>

- A. <u>Documentation:</u> Title to the Documentation shall pass to the Agency when prepared; however, a copy may be retained by Contractor for its records and internal use. Contractor shall retain such Documentation in a controlled access file, and shall not reveal, display, or disclose the contents of the Documentation to others without the prior written authorization of the Agency or for the performance of Work related to the Scope of Work described in this Contract.
- B. <u>Material:</u> Title to all Material, field or research equipment, and laboratory models, procured or fabricated under the Contract shall pass to the Agency when procured or fabricated, and such title shall be free and clear of any and all encumbrances. Contractor shall have risk of loss of any Material or Agency-owned equipment of which it has custody.
- C. <u>Disposition:</u> Contractor shall dispose of items to which the Agency has title as directed, in writing, by the Project Manager and/or an Agency representative.

13. <u>PROPRIETARY RIGHTS:</u>

- A. <u>Rights and Ownership:</u> Agency's rights to inventions, discoveries, trade secrets, patents, copyrights, and other intellectual property, including the Information and Documentation, and revisions thereto (hereinafter collectively referred to as "Proprietary Rights"), used or developed by Contractor in the performance of the Work, shall be governed by the following provisions:
 - 1. Proprietary Rights conceived, developed, or reduced to practice by Contractor in the performance of the Work shall be the property of Agency, and Contractor shall cooperate with all appropriate requests to assign and transfer same to Agency.
 - 2. If Proprietary Rights conceived, developed, or reduced to practice by Contractor prior to the performance of the Work are used in and become integral with the Work, or are necessary for Agency to have complete control of the Work, Contractor shall grant to Agency a non-exclusive,

irrevocable, royalty-free license, as may be required by Agency for the complete control of the Work, including the right to reproduce, correct, repair, replace, maintain, translate, publish, use, modify, copy or dispose of any or all of the Work and grant sublicenses to others with respect to the Work.

- 3. If the Work includes the Proprietary Rights of others, Contractor shall procure, at no additional cost to Agency, all necessary licenses regarding such Proprietary Rights so as to allow Agency the complete control of the Work, including the right to reproduce, correct, repair, replace, maintain, translate, publish, use, modify, copy, or dispose of any or all of the Work; and to grant sublicenses to others with respect to the Work. All such licenses shall be in writing and shall be irrevocable and royalty-free to Agency.
- 14. <u>NOTICES</u>: Any notice may be served upon either party by delivering it in person, or by depositing it in a United States Mail deposit box with the postage thereon fully prepaid, and addressed to the party at the address set forth below:

Agency:	Warren T. Green		
Manager of Contracts and Procur			
	Inland Empire Utilities Agency		
	P.O. Box 9020		
	Chino Hills, CA 91709		

Contractor: Colleen Donovan Radar Environmental Services, Inc. 751 Weir Canyon Road, Suite #157 Anaheim, CA 92808

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

- 15. <u>SUCCESSORS AND ASSIGNS</u>: All of the terms, conditions and provisions of this Contract shall take effect to the benefit of and be binding upon the Agency, the Contractor, and their respective successors and assigns. No assignment of the duties or benefits of the Contractor under this Contract may be assigned, transferred, or otherwise disposed of, without the prior written consent of the Agency; and any such purported or attempted assignment, transfer, or disposal without the prior written consent of the Agency shall be null, void, and of no legal effect whatsoever.
- 16. <u>PUBLIC RECORDS POLICY</u>: Information made available to the Agency may be subject to the California Public Records Act (Government Code Section 6250 et seq.) The Agency's use and disclosure of its records are governed by this Act. The Agency shall use its best efforts to notify Contractor of any requests for disclosure of any documents pertaining to this work. In the event of litigation concerning disclosure of information Contractor considers exempt from disclosure; (e.g., Trade Secret, Confidential, or Proprietary) Agency shall act as a stakeholder only, holding the

information until otherwise ordered by a court or other legal process. If Agency is required to defend an action arising out of a Public Records Act request for any of the information Contractor has marked "Confidential," "Proprietary," or "Trade Secret," Contractor shall defend and indemnify Agency from all liability, damages, costs, and expenses, in any action or proceeding arising under the Public Records Act.

- 17. <u>RIGHT TO AUDIT</u>: The Agency reserves the right to review and/or audit all Contractor's records related to the Work. The option to review and/or audit may be exercised during the term of the Contract, upon termination, upon completion of the Contract, or at any time thereafter up to twelve (12) months after final payment has been made to the Contractor. The Contractor shall make all records and related documentation available within three (3) working days after said records are requested by the Agency.
- 18. <u>INTEGRATION</u>: The Contract Documents represent the entire Contract made and entered into by and between the Agency and the Contractor as to those matters contained in this contract. No prior oral or written understanding shall be of any force or effect with respect to those matters covered by the Contract Documents. This Contract may not be modified, altered, or amended except by written mutual agreement by the Agency and the Contractor.
- 19. <u>GOVERNING LAW</u>: This Contract is to be governed by and constructed in accordance with the laws of the State of California, in the County of San Bernardino.
- 20. <u>TERMINATION FOR CONVENIENCE</u>: The Agency reserves and has the right to immediately suspend, cancel or terminate this Contract at any time upon written notice to the Contractor. In the event of such termination, the Agency shall pay Contractor for all authorized and Contractor-invoiced services up to the date of such termination, as approved by the Project Manager.
- 21. <u>FORCE MAJEURE</u>: Neither party shall hold the other responsible for the effects of acts occurring beyond their control; e.g., war, riots, strikes, natural disasters, etcetera.
- 22. <u>LIQUIDATED DAMAGES</u>: Liquidated Damages, in the amount of \$100 per day, may be assessed by the Agency for each calendar day that the Contractor fails to complete the services in accordance with the Work Schedule. Any and all Liquidated Damages assessed by the Agency will be taken as a direct credit against the Contractor's invoice for the missed services. The Contractor's acceptance of this contract, shall serve to indicate acceptance of this Liquidated Damages clause, and the daily assessment of damages expressed in this section.
- 23. <u>NOTICE TO PROCEED</u>: No services shall be performed or provided under this Contract unless and until this document has been properly signed by all responsible parties and a notice to proceed has been issued to the Contractor by the Project Manager.
- 24. <u>AUTHORITY TO EXECUTE CONTRACT</u>: The Signatories, below, each represent, warrant, and covenant that they have the full authority and right to enter into this Contract on behalf of the separate entities shown below.

25. <u>DELIVERY OF DOCUMENTS</u>: The Parties to this Contract and the individuals named to facilitate the realization of its intent, with the execution of the Contract, authorize the delivery of documents via facsimile, via email, and via portable document format (PDF) and covenant agreement to be bound by such electronic versions.

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

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

RADAR ENVIRONMENT SERVICES, INC.:

Shivaji Deshmukh General Manager	(Date)	Colleen Donovan President	(Date)

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Engineering, Operations, and Water Resources Committee

CONSENT ITEM **1D**



Date: July 15, 2020

SSD From: Shivaji Deshmukh, General Manager **To:** The Honorable Board of Directors 07/08/20 **Committee:** Engineering, Operations & Water Resources

Executive Contact: Christiana Daisy, Executive Manager of Engineering/AGM Subject: 2020 Land Use Demand Model

Executive Summary:

In 2015, a land use demand model (Model), based on General Plan land use data, was developed as part of the 2015 IEUA Urban Water Management Plan (UWMP). The Model is capable of forecasting water demands in the IEUA service area. The development of the Model was supported by city/retail agencies and used for their UWMPs. IEUA intends to update the Model based on current General Plans and also develop unit use factors to project demands for water, recycled water, and wastewater in 5-year increments to the furthest build-out date.

On February 2020, a Request for Proposal (RFP), with a scope of work developed with input from the Regional Technical Committee, was issued. Two proposals were received in April 2020 and evaluated by staff. During discussions with Chino Basin Watermaster (Watermaster), it was identified that efficiencies would be gained by having the Model update performed by Watermaster's consulting engineer, Wildermuth Environmental, Inc. (WEI). As a result, the RFP was canceled with no further action taken. The effort is proposed to be funded at a 50/50 cost between IEUA and Watermaster. The Regional Technical Committee recommended approval during its June 25, 2020 meeting.

Staff's Recommendation:

1. Approve Task Order No. 6 with Chino Basin Watermaster for the 2020 Land Use Demand Model by Wildermuth Environmental, Inc. for the not-to-exceed amount of \$232,277.00; and

2. Authorize the General Manager to finalize and execute the Task Order, subject to non-substantive changes.

Budget Impact Budgeted (Y/N): Y Amendment (Y/N): N Amount for Requested Approval: \$232,277

Account/Project Name:

2020 Land Use-Based Demand Model Update, Project PL20002 - \$116,138.50 (water fund) RO Planning Documents, Project PL17001 - \$116,138.50 (wastewater fund)

Fiscal Impact (explain if not budgeted):

Prior Board Action: N/A

Environmental Determination: Not Applicable

Business Goal:

The Land Use Demand Model update aligns with IEUA's Business Goals of Water Reliability, Wastewater Management, and Fiscal Responsibility by supporting regional water and wastewater forecasting and planning efforts.

Attachments:

Attachment 1 - Land Use Demand Model Task Order No. 6

MASTER AGREEMENT BETWEEN CHINO BASIN WATERMASTER AND INLAND EMPIRE UTILITIES AGENCY REGARDING THE MANAGEMENT OF COLLABORATIVE PROJECTS

TASK ORDER NO. 6 2020 LAND USE DEMAND MODEL

This Task Order is made and entered into as of the _____ day of July, 2020 by and between the Chino Basin Watermaster, hereinafter referred to as "Watermaster" and the Inland Empire Utilities Agency, hereinafter referred to as "IEUA" (each a "Party" and collectively, the "Parties").

In consideration of the mutual promises, covenants, and conditions as addressed in the Master Agreement between Chino Basin Watermaster and Inland Empire Utilities Agency Regarding Management of Collaborative Projects dated September 28, 2017 ("Master Agreement") and as specifically hereinafter set forth, the Parties do hereby agree as follows:

1. <u>PURPOSE</u>

The purpose of this Task Order is to govern the update of the Land Use Demand Model for IEUA. In 2015, a land use-based water demand model (Model) was developed as part of the 2015 IEUA Urban Water Management Plan (UWMP). The Model was based on General Plan land use data of existing and future development in each city and retail agency boundaries within the IEUA service area. The various land use categories were grouped into 13 main categories that were utilized for the development of corresponding water unit use factors and demands. This Model was capable of forecasting water demands for each city and retail agency in order to be totaled as a regional demand for the IEUA service area.

In anticipation of developing the 2020 IEUA UWMP, IEUA intends to update the 2015 Model to reflect existing and future Developments based on current General Plans with added unit use factors for water, recycled water, and wastewater demands in 5-year increments to the furthest build-out date. In communication between IEUA and Watermaster, it was recommended that the services of Watermaster's engineer, Wildermuth Environmental, Inc. (WEI) to update the Model would minimize duplication of efforts by both IEUA and Watermaster.

2. <u>SCOPE</u>

WEI will serve as the consultant to update the Model with oversight and input from IEUA and Watermaster. WEI and their subconsultant Karen Johnson will coordinate with each City and Retail agency to collect the relevant General Plan information to update the Model. All work will be completed in a timely manner and will meet the proposed schedule within reasonable circumstance. The request for proposal and planned scope of

work encompassed by this Task Order is attached hereto as **Exhibit A**.

3. <u>IEUA RESPONSIBILITIES</u>

IEUA agrees to provide project management and contract administration services that include, but are not limited to:

- Engagement and management of consulting services as needed;
- Coordination and communication with the project team;
- Providing access to associated available information and data; and,
- Payment of consultant invoices.

4. WATERMASTER RESPONSIBILITIES

Watermaster agrees that it and its employees and consultants will cooperate with IEUA and its contractors in the performance of services under this Task Order and will provide any necessary documentation and information in Watermaster's possession.

5. TOTAL BUDGET AND COST ALLOCATION

Unless the scope of work is changed, and an increase is authorized by the Parties, the total projected cost for the activities to be undertaken pursuant to this Task Order is Two hundred and thirty two thousand two hundred seventy seven dollars (\$232,277) ("Budget"). The Parties agree that the Budget will be shared 50/50.

6. MAXIMUM COSTS TO WATERMASTER

The costs to be required of Watermaster under this Agreement shall not exceed its share of the Total Budgeted Cost, as shown in Section 5 above, or \$116,138.50.

7. MAXIMUM COSTS TO IEUA

The costs to be required of IEUA under this Agreement shall not exceed its share of the Total Budgeted Cost, as shown in Section 5 above, or \$116,138.50.

8. <u>TERM</u>

Work to be undertaken pursuant to this Task Order shall be initiated upon the Effective Date, as described in Section 10, below. The terms of this Task Order shall remain effective until Watermaster's receipt of IEUA's share of costs expended, so that IEUA may close out the activities.

9. <u>REIMBURSEMENT</u>

IEUA's reimbursement of Watermaster for work performed under this Task Order shall be as provided in Article 3 of the September 2017 Master Agreement.

10. <u>EFFECTIVE DATE</u>

This Task Order No. 6 will become effective upon execution by both Parties.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the day and year and at the place first above written.

CHINO BASIN WATERMASTER

Ву _____

PETER KAVOUNAS General Manager

INLAND EMPIRE UTILITIES AGENCY

Ву_____

SHIVAJI DESHMUKH General Manager



REQUEST FOR PROPOSALS

RFP-JV-20-003

FOR

CONSULTING SERVICES FOR THE

2020 LAND USE-BASED DEMAND MODEL UPDATE

PROJECT NO. PL20002

FEBRUARY 2020

PROPOSALS DUE MARCH 26, 2020 BY 3:00 PM (PST)

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REQUEST FOR PROPOSALS For Consulting Services For The 2020 LAND USE-BASED DEMAND MODEL UPDATE PROJECT NO. PL20002

FEBRUARY 2020

1. REQUEST FOR PROPOSALS

Proposals are being accepted by Inland Empire Utilities Agency (hereinafter referred to as "IEUA"), a Municipal Water District, for Consulting Services (hereinafter referred to as "Consultant") required for the 2020 Land Use-Based Demand Model Update (hereinafter referred to as "Model").

2. PROCESSING OF PROPOSALS

A non-mandatory pre-proposal meeting will be held on Tuesday, March 10, 2020 at 2:00 PM with prospective Consultants at IEUA Headquarters, located on 6075 Kimball Ave, Building B, Chino, California, 91708.

Any relevant questions concerning the Request For Proposals (RFP) for the Scope of Work other than those asked at the pre-proposal meeting shall be directed in writing to IEUA:

Liza Muñoz Inland Empire Utilities Agency P.O. Box 9020 Chino Hills, California 91708 Email: <u>Imunoz@ieua.org</u>

All questions must be received prior to 5:00 PM on March 16, 2020. The answers to these questions will be sent to all prospective Consultants. No answers will be given on an individual basis.

To receive consideration, 5 (five) copies of the proposal, one complete electronic copy of the proposal (provided on USB drive), and one separately sealed fee proposal envelope must be received at IEUA's Headquarters located on 6075 Kimball Ave, Building A, Chino, California, 91708 by **3:00 pm on March 26**, **2020** and addressed to the <u>attention of Liza Muñoz</u>. The package of the five proposals and one electronic copy shall be clearly marked *"Consulting Services for the 2020 Land Use-Based Demand Model Update – DO NOT OPEN"* and the fee proposal envelope marked **"FEE PROPOSAL -** *Consulting Services for the 2020 Land Use-Based Demand Model Update – DO NOT OPEN"* and the fee proposal envelope marked **"FEE PROPOSAL -** *Consulting Services for the 2020 Land Use-Based Demand Model Update – DO NOT OPEN"*. All proposals will be held in confidence prior to the opening date of all proposals. IEUA reserves the right, after opening the proposals, to reject any or all proposals, or, to accept proposal(s) that in its sole judgment, are in the best interest of IEUA.

Prospective Consultants assume the risk of any delay in mail or handling of mail by IEUA's employees. Applicants are therefore responsible for ensuring that proposals are received on time <u>at the specified</u>

<u>location by the specified time</u> whether they are sent by mail or delivered in person. Oral, telegraphic, or telephonic proposals or modifications will not be considered. More than one proposal from an individual, firm, partnership, corporation or association under the same or different names shall not be considered.

3. IEUA DESCRIPTION

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

Five regional water recycling plants are used to treat wastewater from IEUA's service area. They are: Regional Water Recycling Plant No. 1 (RP-1), located in the City of Ontario; Regional Water Recycling Plant No. 2 (RP-2), located in the City of Chino; Regional Water Recycling Plant No. 4 (RP-4), located in the City of Rancho Cucamonga; and Carbon Canyon Water Recycling Facility (CCWRF), located in the City of Chino and Regional Water Recycling Plant No. 5 (RP-5), located in the City of Chino. In conjunction to these facilities, IEUA maintains and operates a desalter facility, Chino I Desalter, in the City of Chino and biosolids composting facility, Inland Empire Composting Facility, in the City of Rancho Cucamonga on behalf of the Chino Basin Desalter Authority and Inland Empire Regional Composting Authority, respectively. IEUA is also the Metropolitan Water District of Southern California (MWD) representative for the contracting agencies.

The water resource inventory for the IEUA service area is made up of Stormwater, Recycled Water, Local Surface Water, Groundwater, and Imported Water.

- Stormwater comes primarily from rain and snow starting in the San Gabriel Mountains and moving down through the Santa Ana watershed and diverted into groundwater recharge basins.
- Recycled water is generated from IEUA's four recycling plants.
- Local surface water is similar to stormwater, but the water is diverted and treated at a water treatment facility within the service area.
- Groundwater makes up for the majority of the area's annual water supply and comes primarily from the Chino basin and from basins adjacent to the Chino Basin. These basins include Cucamonga, Rialto, Lytle Creek, Colton, and the Six Basins groundwater basins.
- Imported water is purchased from MWD. The focus of this effort will primarily deal with recycled water and groundwater. The following provides a brief overview of these water supply sources.

4. PROJECT DESCRIPTION

IEUA is seeking professional services from a qualified consultant to update the comprehensive land usebased water demand model developed in 2015. The model will be based on the latest General Plan land use data and will incorporate existing and future development in the region for the next 25+ years. The model scenarios and corresponding results will support updates of the Urban Water Management Plan, Recycled Water Program Strategy, wastewater flow projections, Integrated Resources Plan and others. The model boundary shall be IEUA's sphere of influence which includes the cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Rancho Cucamonga, Rialto, and Upland. See Figure 1.





5. SCOPE OF WORK

The consultant shall perform the following tasks, including but not limited to:

- Review available information to familiarize with the extent and quality of existing information.
 - Land Use Based Demand Model Development Technical Memorandum May 2016
 - Land Use Based Demand Model in Excel format 2015
 - Land Use Based Demand Model in Access format 2015
- Review General Plans for each agency to identify existing and future development in land use. The consultant shall evaluate all relevant General Plans within the IEUA sphere of influence until a build-out date as specified in general plans.
- Coordinate with each City and Retail agency to collect the following information at a minimum:
 - Shapefiles that include General Plan land use category (existing, future, development/build out year) and acreage
 - Factors associated with each of the land use categories for: water, recycled water, and wastewater

- The land use data shall be formatted in a way that aligns with each City and Retail Agency boundary.
- The land use data shall also roll up to align with the IEUA sphere of influence boundary.
- Based on the updated City and Retail Agency's information, develop the following:
 - Consolidate the City and Retail Agency's land use categories into IEUA's land use categories, as developed during the 2015 Land Use-Based Demand Model, and provided below:

Table 1: 2015 LAND USE CATEGORIES
Residential Very Low (1 – 2 AF/AC/YR)
Residential Low (3 – 7 AF/AC/YR)
Residential Medium (8 – 14 AF/AC/YR)
Residential High (15 – 24 AF/AC/YR)
Residential Very High (25+ AF/AC/YR)
Commercial
Industrial
Public/Institutional
Parks, Schools, Irrigation
Agriculture
Vacant
Non-Irrigated
Unique Water Users

- Develop/update unit factors for water, recycled water, and wastewater demands for each land category. Coordinate with each City and Retail agency on the unit factor development for their service area.
- These factors shall be applied to each land use category from Table 1 on a per-acre basis. The calculated demand per land use area shall be in acre-foot per acre (AF/AC) and incorporated into the overall demand forecast.
- The Model shall have a summary page indicating statistics for each City and Retail Agency, including but not limited to land use categories as shown in Table 1, corresponding unit factors; and water, recycled water and wastewater demands in 5-year increments beginning in 2020 through 2050.
- The Model and corresponding data shall be standardized in such a manner that will allow for streamlined data collecting, processing and updating from General Plans.
- Update adjustment factors based on socio-economic conditions, climate change, densification of existing lands, conservation, and unbilled consumption. Provide supporting narratives on how the adjustments were developed.
- Provide recommendations for Model improvements or efficiencies (i.e. user-friendly updates, scenario development, web-based model for consolidation of inputs, updates, scenarios, results) for IEUA's consideration.

- Meetings/Workshops Provide resources to lead meetings as described:
 - Kickoff meeting Attend a meeting with IEUA to discuss scope of work and schedule of completion. Duration of two hours.
 - As needed conference calls with IEUA for tracking progress and status updates. Duration of one hour per week.
 - Monthly meetings Once a month, a meeting to be held at IEUA headquarters to discuss progress and review interim model update demonstrations. Duration of two hours.
 - Agency meetings Coordinate and conduct at least four (4) meetings with each City and Retail Agency to obtain the data, develop unit factors and finalize the model update. Duration of two hours for each meeting to be held at City/Retail Agency offices.
 - Modeling Workshops Conduct two (2) workshops with IEUA and City/retail agencies: 1) a kickoff workshop to provide an overview of the data needs, collection process, Model update and schedule and 2) before the completion of the final deliverables, demonstrate demand forecasting for each City/Retail Agency and for the regional demand in the IEUA sphere of influence. Duration of four (4) hours for each workshop to be held at IEUA headquarters.

6. DELINEATION OF RESPONSIBILITIES

A. Responsibilities of the Consultant

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

- 1) The Consultant shall keep IEUA informed at all times, on regular basis, the status of the project and inform IEUA of decisions regarding the project as they are made. The Consultant may be called upon to attend meetings during any phase of the work as required by IEUA to give technical advice or to inform various groups on the status or nature of the project.
- 2) Insurance: The Consultant shall provide insurance while executing the work required under any contract which may result from submittal of his/her proposal. The insurance shall be provided by a firm acceptable to IEUA and the firm shall insure the Consultant and any one directly or indirectly employed by the Consultant. The firm shall also provide additional insurance for the Agency, and its officers, agents, and employees under the policy or policies outlined in specific endorsement. Specific insurance requirements shall be as specified in the negotiated contract. A sample contract is attached to this Request for Proposal as Attachment H.
- 3) FEDERAL, STATE, AND LOCAL LAWS: The Bidder and all sub-Bidders shall comply with all applicable federal, state, and local laws, rules, and regulations including any permitting requirements and their related costs:
 - No contractor or subcontractor may be listed on a bid proposal for a public works project (Submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

- No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.
- This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.
- 4) Invoices: The Consultant shall submit invoices on a monthly basis in accordance with the IEUA's invoice format.
- 5) Extra Work: If at any time during the project, the Consultant receives instructions outside the scope of work, he shall immediately notify IEUA and confirm the verbal statement in writing. No compensation will be made to the Consultant without a fully executed amendment prior initiating the extra work. If the nature of the instruction is such that an investigation is required to determine whether the work is outside the Consultant's contracted scope, the Consultant must notify IEUA within seven (7) calendar days of receiving the instruction. If IEUA does not receive the request for extra compensation within the seven days, no extra compensation will be paid for the work even if it is determined to be outside the Engineer's contracted scope.

B. Responsibilities of IEUA

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

C. Termination of Contract

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

7. CONTRACT DOCUMENT PREPARATION

A. Preliminary and Interim Documents

All preliminary and interim documents shall be submitted electronically in both Microsoft Word and PDF formats.

B. Final Documents

The Technical Memorandum and User Guide shall be processed using Microsoft Word and will be $8\frac{1}{2}x11^{"}$ in size and bound. The updated Land Use-based Demand Model and GIS shapefiles shall be submitted on a USB drive.

8. SUBMITTALS

The Consultant shall keep IEUA informed of the basic decisions as they are made and shall seek IEUA's input. The Consultant shall document all decisions in the evaluations as described under the Project Description. The contract documents shall be submitted to IEUA for a 14-day review period.

- A Technical Memorandum (TM) summarizing the process used to develop/update the recycled water and water demands, and wastewater flow projections which include the following, not limited to: assumptions, land use unit factor development/methodologies, model input summaries, demand projections by member agency in 5-year increments through 2050
- Updated Land Use-based Demand Model and GIS shapefiles
- A written User Guide for updating data and running the model.

9. PROJECT SCHEDULE

It is the goal of IEUA to complete the 2020 Land Use-Based Demand Model Update by the end of January 2021. The overall project schedule is included in Attachment A. Each proposing Consultant shall review the time allotted to complete the work. The Consultant shall develop sub-schedules to meet the desired completion date.

10. PAYMENT TO CONSULTANT

Payments to Consultant for services provided will be made by IEUA based on monthly invoices upon verification and approval by IEUA's Project Manager. The Consultant shall be responsible for the submission of invoices in accordance with IEUA's invoice format and include the following:

- Summary of work completed for the period
- Itemized labor rates and hours for each consultant's staff member
- Subconsultant charges
- Direct expenses

11. PROPOSAL FORMAT

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

- A detailed proposed scope of work and technical approach based upon the information contained in the "Project Description" section of this Request for Proposal.
- Descriptions of the specific experience and capabilities relative to the scope of work of the designated Project Manager, Project Engineer, and support staff. Key personnel assigned to the project shall not be reassigned without prior written approval from IEUA.

- A description of the project team's past record of performance on similar projects, with references. This will include a discussion of such factors as control of costs, innovations, quality of work and ability to meet schedules.
- Information about projects, which the interested firm has completed within the past five years. This information shall include, for each project, a brief description of the project and recommendations from the project owner with contact information.
- A description of the proposed management approach for the project, including the method of keeping IEUA informed on the progress of the project.
- A description of any joint venture and/or proposed subcontract arrangements which would be utilized during the project.
- An organizational chart of Consultant's proposed team.
- Proposed time schedule for completion of each phase of the Work. A minimum of 14 working days shall be included for IEUA staff review period. The schedule as listed in the Project Schedule section is the maximum desirable. Commitment, by Consultant, to a shorter schedule will be considered to be a positive item in the selection process.
- Work Effort: The Consultant shall provide, in the body of the proposal, fully itemized schedule of estimated effort for each task for the entire project, expressed in work hours, for each employee classification required to complete each phase of the work.
- Fee Schedule: The Consultant shall provide, <u>in a separate sealed envelope</u>, a fully itemized proposed fee to perform all scope items listed above broken down by phase and task. The Fee Schedule should be based on a Work Breakdown Structure showing major project elements and associated level of efforts (i.e., labor hours) for each key project staff plus expenses.
- A list of current and past projects with IEUA: The Consultant shall list all contracts with IEUA in the last five (5) years. Include project name, contract value, IEUA Project Manager, and Consultant key staff involved.
- The Consultant should consider presenting to IEUA "Optional" tasks which go above and beyond those items listed in the proposal scope of work that improve and/or enhance the project. These Optional tasks should have a separate line item with their associated fees.
- If a sub-consultant is to be used, work hours for each sub-consultant shall be listed separately for each Work element. The fees to be paid to sub-consultants shall be shown separately for each phase and for each sub-consultant.
- After all other parameters have been evaluated, the fee envelope of the most qualified Consultant will be opened and the estimated fee will be negotiated.
- Exceptions to this Request for Proposals: Any changes from the provisions of this Request for Proposals and Sample of Standard Contract, which are desired by the Consultant, shall be specifically noted in the attached Exception Form (Attachment C).

- Documentation that personal or organization conflicts of interest prohibited by law do not exist. (The Consultant is subject to State and Federal conflict of interest)
- Firms shall complete and return with their proposal the Workers' Compensation Certificate form provided (Attachment D).
- The Consultant shall include 2-page résumés for the project key team members. The résumés shall provide specific information about the team member's experience with similar type projects.
- The Consultant shall complete and return with their proposal the Business Ownership Information form provided (Attachment G).

12. SELECTION OF CONSULTANT

A. Qualifications

The Consultant may be a single firm or a joint venture and must show evidence of technical capability and experience in the key areas identified in the Scope of Work. The experience presented should be for a period covering the last five (5) years. The Consultant shall also be familiar with the regulatory constraints, which will govern this project. The consulting firm cannot submit a proposal as both a prime and a sub-consultant or a joint venture.

B. Criteria for Selection

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

- The firm's organization, history, reputation, location and capability to perform all aspects of the work.
- The firm's ability to provide innovative, creative, cost reducing alternatives to meet IEUA's needs.
- Qualifications and experience of the personnel and project team to be assigned to the project including appropriate professional registrations.
- Ability to commence work immediately after execution of the contract and complete the required work within the desired time and allotted budget including any project funding requirements.
- Thoroughness of the Consultant's scope of the proposed work and realistic plan for completion of the project.
- Proposed staffing work effort.
- Exceptions to the request for proposals taken by the Consultant.
- Past experience on IEUA projects.

C. Interviews

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

D. Notification of Unsuccessful Consultants

Unsuccessful potential Consultants shall be notified as soon as possible by IEUA following determination at whatever point in the selection process such determination is made.

E. Negotiation of Contract

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

F. Conflict of Interest Information

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

G. Public Records Policy

Responses to this Request for Proposal (RFP) and the documents constituting any Contract entered into thereafter becomes the exclusive property of IEUA and shall be subject to the California Public Records Act (Government Code Section 6250 et seq.). IEUA's use and disclosure of its records are governed by this Act.

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

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

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

13. OTHER GOVERNMENTAL AGENCIES

The pricing, terms and conditions in the awarded contract are available for use by any other public agency (i.e. city, county, district, public agency, municipality or state agency) wishing to utilize the services of the selected consultant. The participating public agency will work directly with the consultant to establish its own contract, scope of work and payment terms, holding IEUA harmless from all liability.

14. AVAILABLE REFERENCE MATERIAL

The following is a list of available reference materials:

1. 2015 Land Use-Based Water Demand Model Technical Memorandum

15. ATTACHMENTS

See following pages.

ATTACHMENT A – PROJECT SCHEDULE

DATE	DESCRIPTION
February 24, 2020	Issue RFP
March 26, 2020	Proposals due
April 13, 2020	Notify selected consultant
May 20, 2020	Award consulting services contract
January 31, 2021	Complete scope of work

ATTACHMENT B – CONSULTING SERVICES INVOICE

11	
	Inland Empire Utilities Agency
-	A MUNICIPAL WATER DISTRICT

INLAND E UPIRE UTILITIES AGENCY Consulting Services Invoice

Company	:			Pay Estimate No.:		Contract Date:		Invoice Date		
Address:				Contract No.:		IEUA Project	Uanager:	This Period:	From:	
Proj Nam	e:							Invoice No /(Consult Ref	
ORIGINA	. CONTI	RACT:	~		2 P					
PO No.	SAP Line Item	WBS Element No.	Item Description	Original Contract Value	Total Th From : To:	is Period	Total From: To:	to Date	Progress to Date	Remaining Contract Value
	No.			Amount (\$)	% Complete	Amount (\$)	% Complete	Amount (\$)	% Complete	Amount (\$)
			Subtotal Original Contract:							
CONTRA	TANF	NDWENTS							<u>.</u>	
PO No.	SAP Line Item	WBS Element No.	Amendment Description	Amended Contract Value	Total Th From : To:	is Period	Total From: To:	to Date	Progress to Date	Remaining Contract Value
	No.			Amount (\$)	% Complete	Amount (\$)	% Complete	Amount (\$)	% Complete	Amount (\$)
										-
		DAYNI	Subtotal Contract Amendments: Total Contract with Amendments:				T SUMMARY.		1 1	
		FALM	ENT SUMMART FOR THIS PERIOD.	From : To:	F		11 SUMMART.	From To		2
			Amount Earned Original Contract Amount Earned Amendments Back Charges			Am c	ount Earned Or Amount Earned	iginal Contract d Amendments Back Charges		2
			Amount Due This Period] P	ior Payments			
			TOTAL PAYMENT SUMMARY:	-		-	CONTRACT	SCHEDULE SI	UUUARY:	
				Total Co	ntract	Contr Cor Contract Co	act Start Date: itract Duration: mpletion Date:			
			Total Original Contract Total Contract Amendments Total Payments to Date			Authorized Ti Revised Co	me Extension : mpletion Date : PROJECT CO	DUPLETIONS	UUUARY:	
			Back Charges Payment this period Balance of Contract			Contract Contract W	Time Expired: /ork Complete:			
Consultar Teles	nt Appro	eval:	Ciencel uno -			Dete				
		40	_ olgnatufe		ŝ.			2	ak.	_
inland En	pire Uti	lities Agency Approva	ls:	5.1					200000	
Project Er	ngineer:	-		_Late:	B	xec Mgr/CFO:	3 <u></u>		Date:	1 1 1
Dept. M	anager:			_Date:	Ger	neral Manager:	8		Date:	

ATTACHMENT C – EXCEPTION FORM

EXCEPTION FORM

"NONE" for the first item	n. Make additional copies of this form if necessary.
Page Number:	Section Title:
Paragraph Number:	Exception Taken:
Page Number:	Section Title:
Paragraph Number:	Exception Taken:
Page Number:	Section Title:
Paragraph Number:	Exception Taken:
Page Number:	Section Title:
Paragraph Number:	Exception Taken:

ATTACHMENT D – WORKERS' COMPENSATION INSURANCE CERTIFICATE

WORKERS' COMPENSATION CERTIFICATE

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

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

Signature	Company Name
Printed Name	Business License Number

Title

Date

ATTACHMENT E – CONSULTANT IDENTIFICATION

1.	Legal name of Consultant:					
2.	Street Address:					
3.	Mailing Address:					
4.	Business Telephone:					
5.	Facsimile Telephone:					
6.	Email Address:					
7.	Type of Business:					
	□ Sole Proprietor □ Partnership □ Corporation					
	Other:					
	If corporation, indicate State where incorporated:					
8.	Business License number issued by the City where the Consultant's principal place of business is located.					
	Number: Issuing City:					
9.	Federal Tax Identification Number:					
10.	Consultant's Project Manager:					

ATTACHMENT F - NON-COLLUSION AFFIDAVIT

NON-COLLUSION AFFIDAVIT

State of California)	
)	SS.
County of)		

___, being first duly sworn, deposes and says

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

Signature

Company Name

Printed Name

Consultant License Number

Title

Date

ATTACHMENT G – BUSINESS OWNERSHIP INFORMATION

Business Ownership Information

Are you a WMDVBE* certified business? Yes No *(Women, Minority, Disabled, Veteran Business Enterprise)

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

Women-Owned Business	African-American-Owned Business
Disabled-Owned Business	Veteran-Owned Business
Native-American-Owned Business	Hispanic-Owned Business
Caucasian-American-Owned Business	Underrepresented Asian-Owned Business

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

ATTACHMENT H – SAMPLE OF STANDARD CONTRACT



CONTRACT NUMBER: 460000XXXX FOR CONSTRUCTION TRAILER UTILITY CONNECTION PROJECT NO. EN19001/19006

THIS CONTRACT (the "Contract"), is made and entered into this _____ day of _____, ___, by and between the Inland Empire Utilities Agency, a Municipal Water District, organized and existing in the County of San Bernardino under and by virtue of the laws of the State of California (hereinafter interchangeably referred to as "IEUA" and "Agency") and [Consultant] with offices located in [location] (hereinafter referred to as "Consultant"), for professional design services in support of XXXXXXXXXX, Project No. XXXXX.

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

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

Project Manager:	[Name], P.E., Senior Engineer
Address:	6075 Kimball Avenue
	Chino, California 91708
Telephone:	(909) 993-
Facsimile:	(909) 993-1982
Email:	

2. <u>CONSULTANT ASSIGNMENT</u>: Special inquiries related to this Contract and the effects of this Contract shall be referred to the following:

Consultant: Address:

Telephone: Email:

- 3. <u>ORDER OF PRECEDENCE</u>: The documents referenced below represent the Contract Documents. Where any conflicts exist between the General Terms and Conditions, or addenda attached, then the governing order of precedence shall be as follows:
 - A. Amendments to Contract Number 460000XXXX
 - B. Contract Number 460000XXXX General Terms and Conditions.
 - C. Project Manager's Request for Proposal (**Exhibit A**)
 - D. Consultant's Proposal dated XXXXXXXX
- 4. <u>SCOPE OF WORK AND SERVICES</u>: Consultant's services and responsibilities shall be in accordance with Project Manager's Request for Proposal, as outlined in **Exhibit A** which is referenced herein, attached hereto, and made a part hereof (hereinafter "Work").
- 5. FAMILIARITY WITH SCOPE OF WORK: By execution of this Agreement, Consultant warrants that:
 - (1) It has thoroughly investigated and considered the scope of the Work under this Agreement to be performed, based on all available information; and
 - (2) It carefully considered how the Work should be performed; and
 - (3) It fully understands the difficulties and restrictions attending the performance of the Work under this Agreement; and
 - (4) It has the professional and technical competency to perform the Work and the production capacity to complete the Work in a timely manner with respect to the Scope of Work.
- 5. <u>TERM</u>: The term of this Contract shall extend from the date of the Notice to Proceed and terminate on [date] unless agreed to by both parties, reduced to writing, and amended to this Contract.
- 6. <u>COMPENSATION</u>: Agency shall pay Consultant's once-monthly, properly-executed invoice, approved by the Project Manager, within thirty (30) days following receipt of the invoice by IEUA. Invoices shall include the name of assigned personnel, fully-burdened hourly billing rate, dates worked, a brief description of work, as well as the Contract Number 460000XXXX for payment. Payment shall be withheld for any service which does not meet Agency requirements or have proven unacceptable until such service is revised, the invoice resubmitted and accepted by the Project Manager. Consultant's original invoice shall be submitted electronically to <u>apgroup@ieua.org</u>. Should Consultant engage in any public works activity covered under California prevailing wage laws (California Labor Code §1720 et seq.) in excess of \$1,000.00 in billing value, Consultant shall provide with all public works invoicing certified payroll verifying that Consultant has paid prevailing wage in accordance with the Department of Industrial Relations requirements as stipulated in SB-854 [http://www.dir.ca.gov/Public-Works/Certified-Payroll-Reporting.html].
In compensation for the Work represented by this Contract, Agency shall pay Consultant NOT-TO-EXCEED a maximum total of **\$XXXXX.00** for all services provided in accordance with **Exhibit A**, referenced herein, attached hereto, and made a part hereof.

Agency may, at any time, make changes to the Scope of Work, including additions, reductions, and changes to any or all of the Work, as directed in writing by the Agency. Such changes shall be made by an Amendment to the Contract. Any changes shall be made by a written Amendment to the Contract. Consultant's invoice must be submitted according to milestones achieved by Consultant and accepted by the Agency's Project Manager, and shall include a breakdown by items completed, all associated labor provided, labor hours supplied and associated hourly rates, dates worked, the current monthly amount due, and the cumulative amount invoiced to-date against this Contract, using the Agency's standard Excel-based invoicing template **Exhibit B**. Invoice shall not be submitted in advance and shall not be dated earlier than the actual date of submittal. A copy of subject Excel invoicing template shall be furnished by the Agency's Project Manager.

- 7. <u>CONTROL OF THE WORK</u>: The Consultant shall perform the Work in compliance with the Work Schedule. If performance of the Work falls behind schedule, the Consultant shall accelerate the performance of the Work to comply with the Work Schedule as directed by the Project Manager. If the nature of the Work is such that Consultant is unable to accelerate the Work, Consultant shall promptly notify the Project Manager of the delay, the causes of the delay, and submit a proposed revised Work Schedule.
- 8. <u>FITNESS FOR DUTY:</u>
 - A. <u>Fitness:</u> Consultant on the Jobsite:
 - 1. shall report for work in a manner fit to do their job;
 - 2. shall not be under the influence of or in possession of any alcoholic beverages or of any controlled substance (except a controlled substance as prescribed by a physician so long as the performance or safety of the Work is not affected thereby); and
 - 3. shall not have been convicted of any serious criminal offense which, by its nature, may have a discernible adverse impact on the business or reputation of Agency.
 - 4. <u>Compliance:</u> Consultant shall advise all Consultant and subcontractor personnel and associated third parties of the requirements of this Contract ("Fitness for Duty Requirements") before they enter on the Jobsite and shall immediately remove from the Jobsite any employee determined to be in violation of these requirements. Consultant shall impose these requirements on its Subcontractors. Agency may cancel the Contract if Consultant violates these Fitness for Duty Requirements.

B. California Department of Industrial Relations: For all public works performed in excess of \$1,000.00, SB854 is applicable:

Effective January 1, 2015: The call for bids and contract documents must include the following information:

- 1. No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].
- 2. No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.
- 3. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations. As such, a PWC-100 shall be generated under the direction of the IEUA Project Manager or their designee.
- C. Confined Space Work:
 - 1. Precautions and Programs:
 - a. The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work or the activities of subcontractors, suppliers, and others at the work site.
 - b. The Contractors and subcontractors shall comply with the provisions of the Safety and Health Regulations for Construction, promulgated by the Secretary of Labor under Section 107 of the "Contract Work Hours and Safety Standards Act," as set forth in Title 29 C.F.R. If the Agency is notified of an alleged violation of the Occupational Safety and Health Standards referred to in this Section and it is established that there is a violation, the Contractor shall be subject to liquidated damages as provided in the Contract.
 - c. The Contractor and all subcontractors shall comply with the provisions of the Occupational Safety and Health Standards, promulgated by the United States Secretary of Labor under the "Occupational Safety and Health Act of 1970," as set forth in Title 29, C.F.R. Where an individual State act on occupational safety and health standards has been approved by federal authority, then the provisions of said state act shall control.

d. The Contractor shall take all necessary precautions for the safety of, and shall provide the necessary supervision, control, and direction to prevent damage, injury, or loss to:

1) All employees on the work or work site and other persons and organizations who may be affected thereby;

2) All the work and materials and equipment to be incorporated therein, whether in storage or on or off the work site; and

3) All other property at the site.

e. Contract work requiring confined space entry must follow Cal-OSHA Regulation 8 CCR, Sections 5157 - 5158. This regulation requires the following to be submitted to IEUA for approval prior to the start of the project:

- 1) Proof of training on confined space procedures, as defined in Cal-OSHA Regulation 8 CCR, Section 5157. This regulation also requires the following to be submitted to IEUA for approval prior to the entry of a confined space:
- 2) A written plan that includes identification of confined spaces within the construction site, alternate procedures where appropriate, contractor provisions, specific procedures for permitrequired and non-permit required spaces, and a rescue plan.

f. The Contractor must also submit a copy of their Safety Program or IIPP prior to the start of the project for approval by the IEUA Safety Department.

- 9. <u>INSURANCE</u>: During the term of this Contract, the Consultant shall maintain at Consultant's sole expense, the following insurance.
 - A. <u>Minimum Scope of Insurance</u>: Coverage shall be at least as broad as:
 - 1. Commercial General Liability (CGL): Insurance Services Office (ISO) Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than \$1,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required claim limit.
 - 2. Automobile Liability: ISO Form Number CA 00 01 covering any auto (Code 1), or if Consultant has no owned autos, covering hired, (Code 8) and non-

owned autos (Code 9), with limit no less than \$1,000,000 per accident for bodily injury and property damage.

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

- d. The Consultant's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- e. The Consultant may satisfy the limit requirements in a single policy or multiple policies. Any such additional policies written as excess insurance shall not provide any less coverage than that provided by the first or primary policy.
- 2. Workers' Compensation and Employers Liability Coverage

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

3. All Coverages

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

- D. <u>Acceptability of Insurers</u>: All insurance is to be placed with insurers with a current A.M. Best's rating of no less than A-:VII, and who are admitted insurers in the State of California.
- E. <u>Verification of Coverage</u>: Consultant shall furnish the Agency with original certificates and amendatory endorsements or copies of the applicable policy language effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the Agency before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Consultant's obligation to provide them. The Agency reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.
- F. <u>Submittal of Certificates</u>: Consultant shall submit all required certificates and endorsements to the following:

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

10. LEGAL RELATIONS AND RESPONSIBILITIES

- A. <u>Professional Responsibility</u>: The Consultant shall be responsible, to the level of competency presently maintained by other practicing professionals performing the same or similar type of work.
- B. <u>Status of Consultant</u>: The Consultant is retained as an independent Consultant only, for the sole purpose of rendering the services described herein and is not an employee of the Agency.
- C. <u>Observing Laws and Ordinances</u>: The Consultant shall keep itself fully informed of all existing and future state and federal laws and all county and city ordinances and regulations which in any manner affect the conduct of any services or tasks performed under this Contract, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. The Consultant shall at all times observe and comply with all such existing and future laws, ordinances, regulations, orders and decrees, and shall protect and indemnify, as required herein, the Agency, its officers, employees and agents against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by the Consultant or its employees.
- D. <u>Subcontract Services</u>: Any subcontracts for the performance of any services under this Contract shall be subject to the written approval of the Project Manager. For this project subcontractor list law shall apply.
- E. <u>Grant-Funded Projects:</u> This project is / is not grant-funded. [*For Federal/State grant/loan-funded projects, the Consultant shall be responsible to comply with all grant requirements related to the Project. These may include, but shall not be limited to: Davis-Bacon Act, Endangered Species Act, Executive Order 11246 (Affirmative Action Requirements), Equal Opportunity, Disadvantaged Business Enterprise (DBE) Requirements, Competitive Solicitation, Record Retention and Public Access to Records, and Labor Compliance and Compliance Review. Federal funds have additional requirements. Please reference the flow-down requirements attached hereto and made a part hereof as Exhibit C.]*
- F. <u>Conflict of Interest</u>: No official of the Agency who is authorized in such capacity and on behalf of the Agency to negotiate, make, accept or approve, or to take part in negotiating, making, accepting or approving this Contract, or any subcontract relating to services or tasks to be performed pursuant to this Contract, shall become directly or indirectly personally interested in this Contract.

Consultant understands and acknowledges that executing this Agreement may inhibit the Consultant from engaging in future contracts, jobs, or agreements with the Agency that is, or can be considered, related to the Scope of Work due to a potential conflict of interest.

G. <u>Equal Opportunity and Unlawful Discrimination</u>: During the performance of this Contract, the Consultant shall not unlawfully discriminate against any employee or

employment applicant because of race, color, religion, sex, age, marital status, ancestry, physical or mental disability, sexual orientation, veteran status or national origin. The Agency is committed to creating and maintaining an environment free from harassment and discrimination. To accomplish these goals the Agency has established procedures regarding the implementation and enforcement of the Agency's Harassment Prohibition and Equal Employment Opportunity commitments. Please refer to IEUA Policies A-29 (Equal Employment Opportunity) and A-30 Harassment Prohibition for detailed information or contact the Agency's Human Resources Administrator. A copy of either of these Policies can be obtained by contacting the Project Manager for your respective Contract. Please advise any of your staff that believes they might have been harassed or discriminated against while on Agency's Human Resources Administrator. Please be assured that any possible infraction shall be thoroughly investigated by the Agency.

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

I. <u>Disputes</u>:

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

otherwise provided herein, arbitration shall be conducted under California Code of Civil Procedure Sections 1280, et. seq, or their successor.

- 2. Any and all disputes during the pendency of the work shall be subject to resolution by the Agency Project Manager and the Consultant shall comply, pursuant to the Agency Project Manager instructions. If the Consultant is not satisfied with any such resolution by the Agency Project Manager, they may file a written protest with the Agency Project Manager within seven (7) calendar days after receiving written notice of the Agency's decision. Failure by Consultant to file a written protest within seven (7) calendar days shall constitute waiver of protest, and acceptance of the Agency Project Manager's resolution. The Agency's Project Manager shall submit the Consultant's written protests to the General Manager, together with a copy of the Agency Project Manager's written decision, for his or her consideration within seven (7) calendar days after receipt of said protest(s). The General Manager shall make his or her determination with respect to each protest filed with the Agency Project Manager within ten (10) calendar days after receipt of said protest(s). If Consultant is not satisfied with any such resolution by the General Manager, they may file a written request for arbitration with the Project Manager within seven (7) calendar days after receiving written notice of the General Manager's decision.
- 3. In the event of arbitration, the parties hereto agree that there shall be a single neutral Arbitrator who shall be selected in the following manner:
 - a. The Demand for Arbitration shall include a list of five names of persons acceptable to the Consultant to be appointed as Arbitrator. The Agency shall determine if any of the names submitted by Consultant are acceptable and, if so, such person shall be designated as Arbitrator.
 - b. In the event that none of the names submitted by Consultant are acceptable to Agency, or if for any reason the Arbitrator selected in Step (a) is unable to serve, the Agency shall submit to Consultant a list of five names of persons acceptable to Agency for appointment as Arbitrator. The Consultant shall, in turn, have seven (7) calendar days in which to determine if one such person is acceptable.
 - c. If after Steps (a) and (b), the parties are unable to mutually agree upon a neutral Arbitrator, the matter of selection of an Arbitrator shall be submitted to the San Bernardino County Superior Court pursuant to Code of Civil Procedure Section 1281.6, or its successor. The costs of arbitration, including but not limited to reasonable attorneys' fees, shall be recoverable by the party prevailing in the arbitration. If this arbitration is appealed to a court pursuant to the procedure under California Code of Civil Procedure Section 1294, et. seq., or their successor, the costs of arbitration shall also include court costs associated

with such appeals, including but not limited to reasonable attorneys' fees which shall be recoverable by the prevailing party.

- 4. Joinder in Mediation/Arbitration: The Agency may join the Consultant in mediation or arbitration commenced by a subcontractor on the Project pursuant to Public Contracts Code Sections 20104 <u>et seq</u>. Such joinder shall be initiated by written notice from the Agency's representative to the Consultant.
- 11. <u>INDEMNIFICATION:</u> Consultant shall indemnify the Agency, its directors, employees and assigns, and shall defend and hold them harmless from all liabilities, demands, actions, claims, losses and expenses, including reasonable attorneys' fees, which arise out of or are related to the negligence, recklessness or willful misconduct of the Consultant, its directors, employees, agents and assigns, in the performance of work under this Contract, to the extent caused by Consultant's negligence or willful misconduct. Notwithstanding the foregoing, to the extent that this Contract includes design professional services under Civil Code Section 2782.8, as may be amended from time to time, such duties of Consultant to defend and to indemnify Agency shall only be to the full extent permitted by Civil Code Section 2782.8.
- 12. <u>OWNERSHIP OF MATERIALS AND DOCUMENTS/CONFIDENTIALITY</u>: The Agency retains ownership of any and all partial or complete reports, drawings, plans, notes, computations, lists, and/or other materials, documents, information, or data prepared by the Consultant and/or the Consultant's subcontractor(s) pertaining to this Contract. Any modifications or reuse of such materials for purposes other than those intended by the Contract shall be at the Agency's sole risk and without liability to Consultant. Said materials and documents are confidential and shall be available to the Agency from the moment of their preparation, and the Consultant shall deliver same to the Agency whenever requested to do so by the Project Manager and/or Agency. The Consultant agrees that same shall not be made available to any individual or organization, private or public, without the prior written consent of the Agency.

13. <u>TITLE AND RISK OF LOSS</u>:

- A. <u>Documentation:</u> Title to the Documentation shall pass to Agency when prepared; however, a copy may be retained by Consultant for its records and internal use. Consultant shall retain such Documentation in a controlled access file, and shall not reveal, display or disclose the contents of the Documentation to others without the prior written authorization of Agency or for the performance of Work related to the Project.
- B. <u>Material:</u> Title to all Material, field or research equipment, and laboratory models, procured or fabricated under the Contract shall pass to Agency when procured or fabricated, and such title shall be free and clear of any and all encumbrances. Consultant shall have risk of loss of any Material or Agency-owned equipment of which it has custody.

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

14. PROPRIETARY RIGHTS:

- A. <u>Rights and Ownership:</u> Agency's rights to inventions, discoveries, trade secrets, patents, copyrights, and other intellectual property, including the Information and Documentation, and revisions thereto (hereinafter collectively referred to as "Proprietary Rights"), used or developed by Consultant in the performance of the Work, shall be governed by the following provisions:
 - 1. Proprietary Rights conceived, developed, or reduced to practice by Consultant in the performance of the Work shall be the property of Agency, and Consultant shall cooperate with all appropriate requests to assign and transfer same to Agency.
 - 2. If Proprietary Rights conceived, developed, or reduced to practice by Consultant prior to the performance of the Work are used in and become integral with the Work or Documentation, or are necessary for Agency to have complete enjoyment of the Work or Documentation, Consultant shall grant to Agency a non-exclusive, irrevocable, royalty-free license, as may be required by Agency for the complete enjoyment of the Work and Documentation, including the right to reproduce, correct, repair, replace, maintain, translate, publish, use, modify, copy or dispose of any or all of the Work and Documentation and grant sublicenses to others with respect to the Work and Documentation.
 - 3. If the Work or Documentation includes the Proprietary Rights of others, Consultant shall procure, at no additional cost to Agency, all necessary licenses regarding such Proprietary Rights so as to allow Agency the complete enjoyment of the Work and Documentation, including the right to reproduce, correct, repair, replace, maintain, translate, publish, use, modify, copy or dispose of any or all of the Work and Documentation and grant sublicenses to others with respect to the Work and Documentation. All such licenses shall be in writing and shall be irrevocable and royalty-free to Agency.
- B. <u>No Additional Compensation:</u> Nothing Set forth in this Contract shall be deemed to require payment by Agency to Consultant of any compensation specifically for the assignments and assurances required hereby, other than the payment of expenses as may be actually incurred by Consultant in complying with this Contract.
- 15. <u>INFRINGEMENT:</u> Consultant represents and warrants that the Work and Documentation shall be free of any claim of trade secret, trade mark, trade name, copyright, or patent infringement or other violations of any Proprietary Rights of any person. Consultant shall defend, indemnify and hold harmless, Agency, its officers, directors, agents, employees, successors, assigns, servants, and volunteers free and harmless from any and all liability, damages, losses, claims, demands, actions, causes of action, and costs

including reasonable attorney's fees and expenses arising out of any claim that use of the Work or Documentation infringes upon any trade secret, trade mark, trade name, copyright, patent, or other Proprietary Rights.

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

- 16. <u>NOTICES</u>: Any notice may be served upon either party by delivering it in person, or by depositing it in a United States Mail deposit box with the postage thereon fully prepaid, and addressed to the party at the address set forth below:
 - Agency: Warren T. Green Manager of Contracts Inland Empire Utilities Agency, a Municipal Water District P.O. Box 9020 Chino Hills, California 91709

Consultant:

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

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

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

- 19. <u>CERTIFICATION UNDER LABOR CODE SECTION 1861 BY CONSULTANT</u>: I, the undersigned Consultant, am aware of the provisions of Section 3700 et seq. of the Labor Code which requires every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of the Code, and I, the undersigned Consultant, agree to and will comply with such provisions before commencing the performance of the work of this Agreement.
- 20. <u>RIGHT TO AUDIT</u>: The Agency reserves the right to review and/or audit all Consultant's records related to the Work. The option to review and/or audit may be exercised during the term of the Contract, upon termination, upon completion of the Contract, or at any time thereafter up to twelve (12) months after termination of the Contract. The Consultant shall make all records and related documentation available within three (3) working days after said records are requested by the Agency.
- 21. <u>LIQUIDATED DAMAGES</u>: Liquidated Damages, in the amount of \$500 per day, may be assessed by the Agency for each calendar day that the Contractor fails to complete the services in accordance with the Work Schedule. Any and all Liquidated Damages assessed by the Agency will be taken as a direct credit against the Contractor's invoice for the missed services. The Contractor's acceptance of this contract, shall serve to indicate acceptance of this Liquidated Damages clause, and the daily assessment of damages expressed in this section
- 22. <u>INTEGRATION</u>: The Contract Documents represent the entire Contract of the Agency and the Consultant as to those matters contained herein. No prior oral or written understanding shall be of any force or effect with respect to those matters covered by the Contract Documents. This Contract may not be modified, altered or amended except by written mutual agreement by the Agency and the Consultant.
- 22. <u>GOVERNING LAW</u>: This Contract is to be governed by and constructed in accordance with the laws of the State of California, County of San Bernardino.
- 23. <u>TERMINATION FOR CONVENIENCE</u>: The Agency reserves and has the right to immediately suspend, cancel or terminate this Contract at any time upon written notice to the Consultant. In the event of such termination, the Agency shall pay Consultant for all authorized and Consultant-invoiced services up to the date of such termination.
- 24. <u>FORCE MAJEURE</u>: Neither party shall hold the other responsible for the effects of acts occurring beyond their control; e.g., war, riots, strikes, natural disasters, etcetera.
- 25. <u>NOTICE TO PROCEED</u>: No services shall be performed or furnished under this Contract unless and until this document has been properly signed by all responsible parties and a Notice to Proceed order has been issued to the Consultant.
- 26. <u>AGENCY-PROVIDED INFORMATION AND SERVICES</u>: The Agency shall furnish Consultant available studies, reports and other data pertinent to Consultant's services; obtain or authorize Consultant to obtain or provide additional reports and data as required;

furnish to Consultant services of others required for the performance of Consultant's services hereunder, all subject to Agency's prior approval, and Consultant shall be entitled to use and rely upon all such information and services provided by the Agency or others in performing Consultant's services under this Agreement.

27. THIRD PARTIES: The services to be performed by Consultant are intended solely for the benefit of the Agency. No person or entity not a signatory to this Agreement shall be entitled to rely on Consultant's performance of its services hereunder, and no right to assert a claim against Consultant by assignment of indemnify rights or otherwise shall accrue to a third party as a result of this Agreement of the performance of Consultant's services hereunder.

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

INLAND EMPIRE UTI (A Municipal Water Di	LITIES AGENCY: strict)	[Company]:	
[Signatory] [Title]	(Date)	[Signatory] [Title]	(Date)

Table 1Work Breakdown Structure and Line-Item Fee Estimate2020 Land Use Based Water Demand Model Update

					L	.abor (r	person	hours)			Other Direct Charges					
Description			WEI	Staff		Ę									Total Proje	ct Costs
		=	_		or	osuu	Ault		Total Labor			Popro	Total ODCs			
		ncipal	enior l	enior I taff II	h Edit	en Jo	Rep	Person	Co	st	Travel	duction	Subtask	Task	Subtask	Task
	Note: Pri	Pri	Ň	0)	Tec	Kar	Task	Hours	Subtask	Task			Cublusk	TUSK	Oublusk	rusk
Task 1 - Define objectives and fine-tune scope of work										\$10,294				\$220	· · ·	\$10,514
1.1 Prepare for and attend kick-off meeting		4	8			4	1	16	\$3,376		\$110		\$110		\$3 <i>,</i> 486	
1.2 Develop list of data needs based on kick-off meeting			6			2	1	8	\$1,568						\$1,568	
1.3 Review list with IEUA and Watermaster and update per discussion			4				1	4	\$812						\$812	
1.4 Draft document summarizing schedule, data needs, collection process, methodology		4	4			2	1	10	\$2,214						\$2,214	
1.5 Prepare for and attend Workshop #1 with IEUA staff and its agencies	а		8			4	1	12	\$2,324		\$110		\$110		\$2,434	
Task 2 - Collect and compile data										\$18,826				\$0		\$18,826
2.1 Collect and compile GIS shapefiles developed in 2015 of existing and future land use, boundary files, and available aerial photography from IEUA			1	3			1	4	\$695						\$695	
 Collect and compile available GIS shapefiles of existing (2019/2020), general plan land uses, boundary files, and aerial photography 																
2.2.1 Cities (7) and county (1) within IEUA's sphere of influence (SOI)			2	6		2	1	10	\$1,740						\$1,740	
2.2.2 Additional Watermaster agencies (JCSD and Pomona) cities (3) and counties (1)			8	16		4	1	28	\$4,948						\$4,948	
2.3 Collect and compile water billing data for previous 5 years, and any water demand unit factors from water agencies and cities																
2.3.1 IEUA agencies (8)						24	1	24	\$4,200						\$4,200	
2.3.2 Additional Watermaster agencies (JCSD and Pomona)						6	1	6	\$1,050						\$1,050	
 Collect and compile sewer flow data, sewer master plans, and any flow factors from sewer collection agencies (7) 			4	4		27	1	35	\$6,193						\$6,193	
Task 3 - Update land use data into categories						-	-	-		\$81,168				\$2,335		\$83,503
3.1 Develop list of land use categories based on IEUA and Watermaster's needs		2	4			2	1	8	\$1,688						\$1,688	
3.2 Review list with IEUA and Watermaster and update per discussion			2			2	1	4	\$756						\$756	
3.3 Develop the existing (2020) land use shapefiles modifying existing land use datasets																
3.3.1 for IEUA agencies, update 2015 shapefiles based on comparison of 2014 data and 2019 aerials; land uses may need to be modified for new categories		4	12	36		16	1	68	\$12,192						\$12,192	
3.3.2 for additional Watermaster agencies (JCSD and Pomona) using Watermaster's land use database, any other data provided by the agencies, or generate from aerials		4	16	24		8	1	52	\$9,636						\$9,636	
3.4 Prepare draft maps of existing land uses for each land use agency																
3.4.1 IEUA agencies (7 cities)			8	16			1	24	\$4,248			\$140	\$140		\$4,388	
3.4.2 Additional Watermaster agencies (cities of Eastvale, Jurupa Valley and Pomona)			4	8			1	12	\$2,124			\$60	\$60		\$2,184	
3.5 Develop draft future land use shapefiles based on vacant lands and changed land uses		4	30	70		16	1	120	\$21,422						\$21,422	



Table 1Work Breakdown Structure and Line-Item Fee Estimate2020 Land Use Based Water Demand Model Update

			Labor (person hours) Other Direct C							ect Charges				
		WEI		Staff	u no		-		Total Labor			Total ODCs	Total Proje	ct Costs
Description		al II	=	=	litor	ohns	Mul			Traval	Repro-			
u de la constante de		incip	enior	Staff	sh Ed	ren J	< Rep	Person	Cost	Traver	duction	Subtask Task	Subtask	Task
		Pri	S		Tec	Kai	Tasł	Hours	Subtask Task					
3.6 Prepare draft maps of future land uses for each land use agency														
3.6.1 IEUA agencies (7 cities)			8	24			1	32	\$5,560		\$840	\$840	\$6,400	
3.6.2 Additional Watermaster agencies (cities of Eastvale, Jurupa Valley and Pomona)			4	12			1	16	\$2,780		\$360	\$360	\$3,140	
 Review the existing and future land use maps with each land use agency for review and determine development year 														
3.7.1 IEUA agencies (7 cities plus San Antonio Water Company or County)			40			15	1	55	\$10,745	\$605		\$605	\$11,350	
3.7.2 Additional Watermaster agencies (cities of Eastvale, Jurupa Valley and Pomona)			15			10	1	25	\$4,795	\$330		\$330	\$5,125	
3.8 Update existing and future land use shapefiles per comets received		4	6	18			1	28	\$5,222				\$5,222	
Task 4 - Update water demands and wastewater unit factors									\$44,346	5		\$2,200		\$46,546
Analyze water consumption data to disaggregate into land use categories and identify unique water users for each agency		4	8			40	1	52	\$9,676				\$9,676	
4.2 Develop assumptions for wastewater unit factors for appropriate land use types		4	4	8		24	1	40	\$7,376				\$7,376	
4.3 Review data and resulting unit factors with IEUA and its agencies							*							
4.3.1 Water demand factors with IEUA agencies (8)			32			32	1	64	\$12,096	\$880		\$880	\$12,976	
4.3.2 Water demand factors with additional Watermaster agencies (JCSD and Pomona)			8			8	1	16	\$3,024	\$440		\$440	\$3,464	
4.3.3 Wastewater factors with sewer agencies (Regional Contracting Agencies are 6 IEUA cities CVWD)			12			24	1	36	\$6,636	\$880		\$880	\$7,516	
4.4 Review data and water demand and wastewater unit factors with IEUA and Watermaster			2			8	1	10	\$1,806				\$1,806	
4.5 Update information based on input and additional data from each agency		2	2			16	1	20	\$3,732				\$3,732	
Task 5 - Develop adjustment factors									\$9,088	3		\$0		\$9,088
 Review documentation, where available, on the impacts of socio-economic conditions, climate change, densification of existing lands, conservation, etc. on water demands 			6			16	1	22	\$4,018				\$4,018	
5.2 Update adjustment factors, as needed, for existing and future conditions based on socio-economic conditions, climate change, densification of existing lands, conservation, and unbilled consumption	b	4	6			16	1	26	\$5,070				\$5,070	
Task 6 - Prepare water demand and wastewater generation forecast model									\$14,086	5		\$0		\$14,086
6.1 Prepare spreadsheet model that estimates water demands and wastewater projections for each agency based on land use and unit factors in 5-year increments from 2020-2050		2	8			6	1	16	\$3,200				\$3,200	
6.2 Draft tables and graphics summarizing model results		2	6	10		4	1	22	\$4,084				\$4,084	
6.3 Prepare for and attend Workshop #2 with IEUA staff and its agencies on model results	с		6			6	1	12	\$2,268				\$2,268	
6.4 Update model based on comments received at workshop		2	8	6		8	1	24	\$4,534				\$4,534	
Task 7 - Prepare Technical Memorandum and Final Deliverables									\$30,330			\$700		\$31,030
7.1 Draft technical memorandum		8	32	12	8	36	1	96	\$17,908				\$17,908	



Table 1Work Breakdown Structure and Line-Item Fee Estimate2020 Land Use Based Water Demand Model Update

Description		Labor (person hours) Other Direct									ect Charges					
		WEI Staf		Staff		uo		Total Labo)r			Total ODCs		Total Project Costs	
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		Icipa	nior	taff I	h Edi	en Jo	Rep	Person	Cost		Travel		Subtask	Taek	Subtask	Taek
	Notes Dri	Prin	Se	S S	S Tec	Kar	Task	Hours	Subtask	Task			Sublask	Task	Sublask	Task
7.2 Review technical memorandum with IEUA and Watermaster staff			6			4	1	10	\$1,918						\$1,918	
7.3 Finalize technical memorandum	d 4	4	8	6	4	8	1	30	\$5,580			\$600	\$600		\$6,180	
 Prepare deliverable of final data/document including the shapefiles of existing and future land uses with metadata and the model with instructions on how to use and update 			12	12	4		1	28	\$4,924			\$100	\$100		\$5,024	
Task 8 - Project management, monthly meetings and as-needed conference calls										\$18,024				\$660		\$18,684
8.1 Prepare for and participate in monthly meetings with IEUA and Watermaster staff	e		24			12	1	36	\$6,972		\$660		\$660		\$7,632	
8.2 Prepare for and participate in up to four conference calls with IEUA and Watermaster staff			2			2	4	16	\$3,024						\$3,024	
8.3 Project management	e Z	2	4				6	36	\$8,028						\$8,028	
Total Project excluding Watermaster Agencies	6	54	355	231	16	380		1046		\$195,361	\$3,245	\$1,680		\$4,925		\$200,286
Total Project including Watermaster Agencies	7	70	416	291	16	420		1213		\$226,162	\$4,015	\$2,100		\$6,115		\$232,277

a -- Workshop #1 will consist of an overview of the data needs, collection process, model update and schedule

b -- The water demands projections and adjustment factors will be reviewed in Workship #2 (Task 6.5)

c -- Workshop #2 will consist of an overview of the demand forecasting model for each agency and IEUA

d - Assumes 5 hard copies of the technical memorandum will be prepared

e - Assumes a project duration of six months



Engineering, Operations, and Water Resources Committee

CONSENT ITEM **1E**



Date: July 15, 2020

To: The Honorable Board of DirectorsFrom: Shivaji Deshmukh, General ManagerCommittee: Engineering, Operations & Water Resources07/08/20

SSD

Executive Contact: Christiana Daisy, Executive Manager of Engineering/AGM **Subject:** RP-5 Solids Handling Facility Evaluation Consultant Contract Award

Executive Summary:

In early 2001, Inland Empire Utilities Agency (IEUA) developed an Organics Management Strategy Business Plan followed by the construction of the Regional Water Recycling Plant No. 5 (RP-5) Solids Handling Facility (SHF) and the Renewable Energy Efficiency Project (REEP) cogeneration facility. The SHF produced biogas from cow manure and food waste for power generation at the REEP from 2006 to 2007; however, over this time frame, these facilities were operated inconsistently due to a lack of gas production and excessive maintenance at the SHF. In early 2010, IEUA leased the SHF and REEP to a third party, Inland BioEnergy (lead by Burrtec, Inc.), which operated the system as a food waste digestion facility while surplus power was sold to IEUA as part of the lease agreement. At the end of March 2019, the lease agreement with Burrtec came to an end. As a result, IEUA would like to evaluate viable alternatives and plans for future use of the RP-5 SHF. On March 26, 2020, IEUA advertised a request for proposals for a consultant to evaluate the future uses of the RP-5 SHF. On April 23, 2020, IEUA received three proposals. A selection committee determined that GHD was the most qualified and provided the best value for this project with a proposal price of \$148,864.50. GHD has the technical experience to make this project a success and has worked well with IEUA on past projects. GHD's fee proposal is within the project budget and was determined to be comprehensive and reasonable.

Staff's Recommendation:

1. Award a consultant contract for the RP-5 SHF Future Uses Evaluation, Project No. EN20034.03, to GHD Inc., for a not-to-exceed amount of \$148,864.50; and

2. Authorize the 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:

EN20034.03/RP-5 SHF Future Uses Evaluation

Fiscal Impact (*explain if not budgeted*): None.

Prior Board Action:

None.

Environmental Determination:

Statutory Exemption

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

Business Goal:

The RP-5 SHF Future Uses Evaluation 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.

Attachments:

Attachment 1 - PowerPoint Attachment 2 - Consultant Contract (Click for Attachment)

Attachment 1

RP-5 SHF Future Uses Evaluation Consultant Contract Award Project No. EN20034.03









Jamal Zughbi, PE July 2020

Regional Water Recycling Plant No. 5 Project Location





Project Background

- Constructed and operated from 2002 to 2007
- Inconsistently produced sufficient biogas to generate power
- SHF and REEP operation was suspended in 2008
- In 2010, IEUA leased the facility to Inland BioEngergy
- Surplus power was sold to IEUA
- Inland BioEnergy Lease Agreement ended 2019



Existing Solids Handling Building



Project Scope

- RP-5 SHF is currently inactive
- REEP will be utilized after RP-5 Expansion Project
- Evaluate alternatives for RP-5 SHF future use
- Consultant /scope evaluation includes:
 - Meeting, Site Visits, Condition Assessment
 - Business Case Evaluation
 - Commercial Real Estate Evaluation
 - Final Evaluation Report



Existing Steel Digesters



Consultant Selection

• Evaluation and Selection Committee

- Engineering, Construction Management, Operations, Maintenance, and Planning
- On April 23, 2020, IEUA received three proposals

Proposals Received
GHD, Inc.
Carollo
Biogas

- Justification for selecting GHD
 - Experience, qualifications, and staff-hour allocation



Project Budget and Schedule

Description	Estimated Cost	Project Milestone	Date
Design Services - Evaluation	\$198,865	Evaluation	
Design Consultant Contract (this action)	\$148,865	Consultant Contract Award	July 2020
IEUA Services	\$50,000	Evaluation Completion	December 2020
Construction	N/A		
Contingency (~15%)	\$30,000		
Total Project Cost:	\$228,865		
Total Project Budget (parent):	\$500,000*		
Remaining Budget (parent):	\$291,329*		

* This is a re-occurring yearly project that is set-up for small projects that are requested during the Fiscal Year. There were six projects requested utilizing this budget for FY 2019/20.





- Award a consultant contract for the RP-5 SHF Future Uses Evaluation, Project No. EN20034.03, to GHD Inc., for a not-toexceed amount of \$148,864.50; and
- Authorize the General Manager to execute the contract, subject to non-substantive changes.

The RP-5 SHF Future Uses Evaluation 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.

Engineering, Operations, and Water Resources Committee

ACTION ITEM **2A**



Date: July 15, 2020

2	<u>go</u>	γD				
To: The Honorable Board of Directors	From: Shivaji Deshmukh, G	eneral Manager				
Committee: Engineering, Operations & Water	Resources	07/08/20				
Finance & Administration		07/08/20				
Executive Contact: Christiana Daisy, Executive Manager of Engineering/AGM						
Subject: RP-5 Expansion Construction Contrac	et Award					

1 NA

Executive Summary:

The Regional Water Recycling Plant No. 5 (RP-5) Expansion will expand the RP-5 Liquids Treatment to 22.5 MGD (mechanical systems) and 30 MGD (structural systems) to meet the growing demands of Inland Empire Utilities Agency (IEUA's) service area and will relocate treatment capacity from Regional Water Recycling Plant No. 2 (RP-2) to RP-5 by constructing the new RP-5 Solids Treatment Facility to treat up to 30 MGD of solids from both Carbon Canyon Water Reclamation Facility (CCWRF) and RP-5. The project design was completed in October 2019, and the project was released for bid on October 31, 2019. On May 21, 2020, IEUA received four construction bids from four pre-qualified contractors. W.M. Lyles Co. was the lowest responsive, responsible bidder, with a bid price of \$329,982,900 (revised engineer's estimate of \$340,128,000). An update of the RP-5 Expansion Project bid phase was provided to the Board in June 2020 to detail the bid phase process. The construction contract award was unanimously recommended for IEUA Board approval by the Regional Technical and Policy Committees. Due to additions during the bid phase and further defined site conditions relating to soils conditions, ground water, and site parking, IEUA will be requesting an augmentation of the total project budget from \$398,609,289 to \$450,000,000 (13% increase) in the Regional Capital (RC) Fund at a later date.

Staff's Recommendation:

1. Award a construction contract for the RP-5 Expansion, Project Nos. EN19001 and EN19006, to W.M. Lyles Co., in the amount of \$329,982,900; and

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

Budget Impact Budgeted (Y/N): Y Amendment (Y/N): Y Amount for Requested Approval: \$ 51,390,711

Account/Project Name:

EN19001/RP-5 Liquids Treatment Expansion EN19006/RP-5 Solids Treatment Facility

Fiscal Impact (explain if not budgeted):

The total project budget for the RP-5 Expansion, Project Nos. EN19001 and EN19006, will increase from \$398,609,289 to \$450,000,000 (13% increase), respectively, in the Regional Capital (RC) Fund through a future request.

Prior Board Action:

On November 20, 2019, the Board of Directors awarded a contract to Arcadis, for construction management services for a not-to-exceed amount of \$21,125,523.

On November 20, 2019, the Board of Directors awarded a contract amendment to Parsons, for engineering services during construction for a not-to-exceed amount of \$12,589,469.

Environmental Determination:

Program Environmental Impact Report (Finding of Consistency)

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

Business Goal:

The RP-5 Expansion 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.

Attachments:

Attachment 1 - PowerPoint Attachment 2 - Construction Contract

Attachment 1

RP-5 Expansion Construction Contract Award Project Nos. EN19001 and EN19006





Jason Marseilles, P.E. July 2020

Project Location – RP-5 Expansion



RP-5 Facility



Liquid Expansion





Biosolids Facility

The Project

- Expand RP-5 Liquids Treatment to 22.5 MGD (mechanical systems) and 30 MGD (structural systems)
- Relocate RP-2 to RP-5
- Construct RP-5 Solids Treatment Facility to treat 30 MGD of solids from both CCWRF and RP-5



RP-5 Expansion New Facilities



Project Scope

RP-5 Liquid Expansion

- Influent pump station expansion
- Headworks improvements
- Two new primary clarifiers
- Existing aeration basin improvements
- New Membrane Bioreactor (MBR) system
- Rerating of the chlorine contact basin



New MBR Basin Model

RP-5 Biosolids Facility

- Rotary drum thickening building
- Digester facilities
- Centrifuge dewatering building
- Boiler building
- Digester gas treatment and flaring
- REEP Energy Improvements



Digester Facilities Model



• Four bids received on May 21, 2020 from the Prequalified Contractors:

Bids Received	Bid Amount
W.M. Lyles	\$329,982,900
J.F. Shea	\$339,726,750
Kiewit	\$375,707,000
PCL	\$425,939,779
Revised Engineer's Estimate:	\$340,128,000


Project Budget and Schedule EN19001 and EN19006

Description	Estimated Cost
Design Phase Services	\$26,406,753
Construction Services	\$43,361,716
Construction Management	\$22,625,523
Engineering Services During Construction	\$11,346,349
Other Construction Services	\$7,325,000
Contingency (5%)	\$2,064,844
Construction	\$376,181,190
RP-5 Expansion Bid (This Action)	\$329,982,900
Offsite Facilities Bid (estimate)	\$12,000,000
Contingency (~10%)	\$34,198,290
Total Project Cost:	\$445,949,659
Total Requested Project Budget:	\$450,000,000*

Project Milestone	Date
Construction	
IEUA Board Construction Contract Award	July 15, 2020
Solids Facility Completion	January 2024
Liquids Construction Completion	January 2025

* Total future project budget amendment request.



6



nland Empire Utilities Agency

- 1. Award a construction contract for the RP-5 Expansion, Project Nos. EN19001 and EN19006, to W.M. Lyles Co., in the amount of \$329,982,900; and
- 2. Authorize the General Manager to execute the contract and budget augmentation, subject to non-substantive changes.

The RP-5 Expansion 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.

7

Attachment 2

SECTION D - CONTRACT AND RELEVANT DOCUMENTS

1.0 CONTRACT

THIS CONTRACT, made and entered into this ____day of _____, 20_, by and between <u>W.M. Lyles Co.</u>, 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".

WITNESSED:

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 for <u>REGIONAL WATER RECYCLING</u> <u>PLANT NO. 5 (RP-5) LIQUIDS TREATMENT EXPANSION TO 22.5 MGD AND SOLIDS</u> <u>TREATMENT FACILITY PROJECT NOS. EN19001 & EN1900 (IFVB-JV-19-018)</u>, 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 the Bidding and Contract Requirements, Section C Bid Forms and accepted by IEUA, and set forth in this below.

Total Bid Price <u>Three Hundred Twenty-Nine Million Nine Hundred Eighty-Two</u>

Thousand Nine Hundred 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 Notice Inviting Bids, Instructions to Bidders, Bid Forms, Information Required of Bidder, Performance Bond, Payment Bond, CONTRACTOR's License Declaration, Specifications, Drawings, all General Conditions, Special Conditions and all Project Requirements, 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 as follows:
 - i. SOLIDS TREATMENT FACILITY SUBSTANTIAL COMPLETION shall be <u>One Thousand Two Hundred and Seventy-Five (1275)</u> calendar days after the Notice of Award by IEUA.
 - ii. FINAL COMPLETION shall be <u>One Thousand Six Hundred and Forty</u> (1640) calendar days after the Notice of Award by IEUA.
 - iii. 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 General Conditions, Section C – Changes to the Contract 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 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, representatives, 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.

CONTRACTOR

Ву ____

Ву _____

Title

General Manager

* A Municipal Water District

Bond Number

2.0 PERFORMANCE BOND

WHEREAS, the Inland Empire Utilities Agency ("IEUA") has awarded <u>W.M. Lyles Co.</u> designated as the "Principal" herein, a contract for the WORK described as follows:

REGIONAL WATER RECYCLING PLANT NO. 5 (RP-5) LIQUIDS TREATMENT EXPANSION TO 22.5 MGD AND SOLIDS TREATMENT FACILITY PROJECT NOS. EN19001 & EN1900 (IFVB-JV-19-018)

WHEREAS, on or about ______, 20_, the Principal entered into a Contract with the IEUA for the construction of the work of improvement, which Contract and all Contract Documents set forth therein are incorporated herein and made a part hereof by this reference; and

WHEREAS, Principal is required to furnish a bond guaranteeing the faithful performance of its obligations under the Contract Documents concurrently with delivery to IEUA of the executed Contract.

NOW, THEREFORE, Principal and

("Surety"), a duly admitted surety in the State of California, are held and firmly bound to IEUA for payment of the penal sum of <u>\$329,982,900.00</u> ("the Bonded Sum"), in lawful money of the United States, for payment of which sum Principal and Surety jointly and severally bind themselves and their heirs, executors, administrators, successors and assigns.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT if Principal shall promptly and faithfully perform all of its obligations under the Contract Documents, including any and all amendments and supplements thereto, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

The following terms and conditions shall apply with respect to this Bond:

- **A** The Principal and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to IEUA for the complete and proper performance of the Contract, which is incorporated herein by reference.
- **B.** If the Principal completely and properly performs all of its obligations under the Contract, the Surety and the Principal shall have no obligation under this Bond.
- **C.** If there is no IEUA Default, the Surety's obligation under this Bond shall arise after:
 - 1. IEUA has declared a Principal Default under the Contract pursuant to the terms of the Contract; and
 - 2. IEUA has agreed to pay the Balance of the Contract Sum to:
 - a. The Surety in accordance with the terms of this Bond and the Contract; or
 - b. The CONTRACTOR selected to perform the Contract in accordance with the terms of this Bond and the Contract.

- c. If the Surety waives the right to perform Work under Paragraph D.4 below, IEUA shall not be obligated to pay the Balance of the Contract Sum.
- **D.** When IEUA has satisfied the conditions of Paragraph C, the Surety shall promptly (within thirty (30) calendar days) and at the Surety's expense elect to take one of the following actions (provided, that unless and until IEUA has actually terminated Principal for default, the Surety need only respond to IEUA and commence a diligent investigation, not make an election):
 - 1. Arrange for the Principal, with consent of IEUA, to perform and complete the Contract (but IEUA may withhold consent, in its sole discretion, in which case the Surety must elect an option described in Paragraphs D.2, D.3 or D.4, below); or
 - 2. Undertake to perform and complete the Contract itself, through its agents or through independent CONTRACTORs, but IEUA may reject use of the CONTRACTOR as an agent or independent CONTRACTOR; or
 - **3.** Obtain bids from qualified CONTRACTORs acceptable to IEUA for a contract for performance and completion of the Contract (other than the original Principal), and, upon determination by IEUA of the lowest responsible bidder, arrange for a contract to be prepared for execution by IEUA and the CONTRACTOR selected with IEUA's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract; and, if the Surety's obligations defined in Paragraph F, below, exceed the Balance of the Contract Sum, then the Surety shall pay to IEUA the amount of such excess; or
 - **4.** Waive its right to perform and complete, arrange for completion, or obtain a new CONTRACTOR and with reasonable promptness under the circumstances, and, after investigation and consultation with IEUA, determine in good faith its monetary obligation for which it may then be liable to IEUA under Paragraph F, below, for the performance and completion of the Contract and, as soon as practicable after the amount is determined, tender payment therefor to IEUA with full explanation of the payment's calculation. If IEUA accepts the Surety's tender under this Paragraph 4.4, IEUA may still hold Surety liable for future damages then unknown or unliquidated resulting from the Principal Default. If IEUA disputes the amount of Surety's tender under this Paragraph 4.4, IEUA may exercise all remedies available to it at law to enforce the Surety's liability under Paragraph F below.
- **E** If the Surety does not proceed as provided in Paragraph D, above, then the Surety shall be deemed to be in default on this Bond ten (10) calendar days after receipt of an additional written notice from IEUA to the Surety demanding that the Surety perform its obligations under this Bond. At all times IEUA shall be entitled to enforce any remedy available to IEUA by law or under the Contract including, without limitation, and by way of example only, rights to perform WORK, protect WORK, mitigate damages, or coordinate WORK with other consultants or CONTRACTORs.
- **F.** The Surety's monetary obligation under this Bond is limited to the amount of this Bond. Subject to these limits, the Surety's obligations under this Bond are commensurate with the obligations of the Principal under the Contract. The Surety's obligations shall

include, but are not limited to:

- **1.** The responsibilities of the Principal under the Contract for completion of the Contract and correction of defective WORK;
- 2. The responsibilities of the Principal under the Contract to pay liquidated damages, and for damages for which no liquidated damages are specified in the Contract, actual damages caused by non-performance of the Contract, including but not limited to, all valid and proper back charges, offsets, payments, indemnities, or other damages;
- **3.** Additional legal, design professional and delay costs resulting from the Principal Default or resulting from the actions or failure to act of the Surety under Paragraph D, above.
- **G.** No right of action shall accrue on this Bond to any person or entity other than IEUA or its heirs, executors, administrators, or successors.
- H. The Surety hereby waives notice of any change, alteration or addition to the Contract or to related subcontracts, purchase orders and other obligations, including changes of time. The Surety consents to all terms of the Contract, including provisions on changes to the Contract. No extension of time, change, alteration, modification, deletion, or addition to the Contract Documents, or of the WORK required thereunder, shall release or exonerate Surety on this Bond or in any way affect the obligations of Surety on this Bond.
- L Any proceeding, legal or equitable, under this Bond shall be instituted in any court of competent jurisdiction where a proceeding is pending between IEUA and the Principal regarding the Contract, or in the courts of the County of San Bernardino, or in a court of competent jurisdiction in the location in which the WORK is located.
- **J.** Notice to the Surety, IEUA or the Principal shall be mailed or delivered to the address shown on the signature page.
- **K** Any provision in this Bond conflicting with any statutory or regulatory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein.
- L Definitions.
 - 1. Balance of the Contract Sum: The total amount payable by IEUA to the Principal pursuant to the terms of the Contract after all proper adjustments have been made under the Contract, for example, deductions for progress payments made, and increases/decreases for approved modifications to the Contract.
 - **2.** Contract: The agreement between IEUA and the Principal identified on the signature page, including all Contract Documents and changes thereto.
 - **3.** Principal Default: Material failure of the Principal, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.
 - **4.** IEUA Default: Material failure of IEUA, which has neither been remedied nor waived, to pay the Principal progress payments due under the Contract or to perform other material terms of the Contract, if such failure is the cause of the

asserted Principal Default and is sufficient to justify Principal termination of the Contract.

M Qualification Regarding Extended Warranties. The Surety's liability for extended warranties for subcontractors and suppliers shall not apply to a breach of any such extended warranty under the Contract that occurs more than one year after the applicable warranty commencement date under the Contract.

IN WITNESS WHEREOF, three (3) identical counterparts of this instrument, each of which shall for all purposes be deemed an original hereof, have been duly executed by Principal and Surety of the date set forth below, the name of each corporate party being hereto affixed and these presents duly signed by its undersigned representative(s) pursuant to authority of its governing body. Principal and Surety have caused this Bond to be duly executed and delivered as of this

day of	, 20
--------	------

SURETY:	PRINCIPAL:
Name	Name
Principal Place of Business	Address
By:	Ву:
Signature	Signature
Attorney-In-Fact	Printed Name
By:	_ Its:
	l itle

NOTARIAL CERTIFICATION OF ATTORNEY IN FACT, CORPORATION SEAL AND SURETY SEAL MUST BE ATTACHED

	ACKNOWLEDGMENT OF PERFORMANCE BOND			
	A Notary Public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.			
State of Calif	fornia			
County of)			
On				
WITNESS my hand and official seal.				
Jighature	(36a)			

Bond Number

<u>3.0</u> PAYMENT BOND (Labor and Material Bond)

WHEREAS, the Inland Empire Utilities Agency ("IEUA") has awarded [Insert Name of CONTRACTOR] designated as the "Principal" herein, a contract for the WORK described as follows:

REGIONAL WATER RECYCLING PLANT NO. 5 (RP-5) LIQUIDS TREATMENT EXPANSION TO 22.5 MGD AND SOLIDS TREATMENT FACILITY PROJECT NOS. EN19001 & EN1900 (IFVB-JV-19-018)

WHEREAS, on or about______, 20__, the Principal entered into a Contract with the IEUA for the construction of the WORK of improvement, which Contract and all Contract Documents set forth therein are incorporated herein and made a part hereof by this reference; and

WHEREAS, by terms of the Contract, as well as California Civil Code § 9550 et seq. and Public Contract Code § 22165(a), Principal is required to furnish a bond guaranteeing payment of claims.

NOW, THEREFORE, Principal and

("Surety"), a duly admitted surety in the State of California, are held and firmly bound to the IEUA for payment of the penal sum of <u>\$329,982,900.00</u> ("the Bonded Sum"), in lawful money of the United States, for payment of which sum Principal and Surety jointly and severally bind themselves and their heirs, executors, administrators, successors and assigns.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT if Principal shall fail to pay any of the persons named in California Civil Code § 9100 for all labor, materials, equipment or services used or reasonably required for use in performance of the WORK of the Project, then Surety shall pay for the same in an amount not-to-exceed the Bonded Sum, otherwise this obligation shall be null and void.

The following terms and conditions shall apply with respect to this Bond:

- **A** The Principal and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to IEUA and to Claimants, to pay for labor, materials and equipment furnished for use in the performance of the Contract, which is incorporated herein by reference.
- **B.** With respect to IEUA, this obligation shall be null and void if the Principal:
 - **1.** Promptly makes payment, directly or indirectly, for all sums due Claimants, and
 - 2. Defends, indemnifies and holds harmless IEUA from all claims, demands, liens or suits by any person or entity who furnished labor, materials or equipment for use in the performance of the Contract, provided IEUA has promptly notified the Principal and the Surety (at the address described in Paragraph J) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the Principal and the Surety, and provided there is no IEUA Default.

- **C.** With respect to Claimants, this obligation shall be null and void if the Principal promptly makes payment, directly or indirectly through its subcontractors, for all sums due Claimants. However, if Principal or its subcontractors fail to pay any of the persons named in California Civil Code §9100, or amounts due under the Unemployment Insurance Code with respect to work or labor performed under the Contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of Principal or subcontractors pursuant to the Unemployment Insurance Code § 13020, with respect to such work and labor, then Surety will pay for the same, and also, in case suit is brought upon this bond, a reasonable attorney's fee, to be fixed by the Court.
- **D.** The Surety shall have no obligation to Claimants under this Bond unless the Claimant has satisfied all applicable notice requirements under Civil Code § 9560.
- **E.** The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety under this Bond.
- **F.** Amounts due the Principal under the Contract shall be applied first to satisfy claims, if any, under any Construction Performance Bond and second, to satisfy obligations of the Principal and the Surety under this Bond.
- **G.** IEUA shall not be liable for payment of any costs, expenses, or attorney's fees of any Claimant under this bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
- **H.** The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.
- I. Suit against Surety on this Payment Bond may be brought by any Claimant, or its assigns, at any time after the Claimant has furnished the last of the labor or materials, or both, but, pursuant to California Civil Code § 9558, must be commenced before the expiration of six months after the period in which stop payment notices may be filed as provided in Civil Code § 9356.
- **J.** Notice to the Surety, IEUA or the Principal shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, IEUA or the Principal, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.
- **K.** This Bond has been furnished to comply with Civil Code § 9000 et seq. Any provision in this Bond conflicting with said statutory requirements shall be deemed deleted and provisions conforming to such statutory or other legal requirements shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

L. Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Principal shall promptly furnish a copy of this Bond or shall permit a copy to be made.

M. DEFINITIONS

- 1. Claimant: An individual or entity having a direct contract with the Principal or with a subcontractor of the Principal to furnish labor, materials or equipment for use in the performance of the Contract, as further defined in California Civil Code § 9100. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Contract, architectural and engineering services required for performance of the WORK of the Principal and the Principal's subcontractors, and all other items for which a stop payment notice might be asserted.
- **2.** Contract: The agreement between IEUA and the Principal identified on the signature page, including all Contract Documents and changes thereto
- **3.** IEUA Default: Material failure of IEUA, which has neither been remedied nor waived, to pay the Principal as required by the Contract, provided that failure is the cause of the failure of Principal to pay the Claimants and is sufficient to justify termination of the Contract

IN WITNESS WHEREOF, three (3) identical counterparts of this instrument, each of which shall for all purposes be deemed an original hereof, have been duly executed by Principal and Surety of the date set forth below, the name of each corporate party being hereto affixed and these presents duly signed by its undersigned representative(s) pursuant to authority of its governing body. Principal and Surety have caused this Bond to be duly executed and delivered as of this ________ day of _______, 20_.

SURETY:	PRINCIPAL:
Name	Name
Principal Place of Business	Address
By:	Ву:
Signature	Signature
BIDDING AND CONTRACT REQUIREMENTS	51 May 2020 (Conformed Set)
SECTION D - CONTRACT AND RELEVANT DOCUMENTS	Project No. EN19001 & EN19006

	Attorney-In-Fact	F	Printed Name
By:		Its:	
			Title
N	OTARIAL CERTIFICATION OF AND SURETY S	ATTORNEY IN FACT, CORPO EAL MUST BE ATTACHED	DRATION SEAL
	ACKNOWLED	GMENT OF PAYMENT BOND	
	A Notary Public or other officer comp individual who signed the doo the truthfulness, accuracy, or	eting this certificate verifies only the ument to which this certificate is at validity of that document.	e identity of the tached, and not
tate of Ca	lifornia		
ounty of)		
n pe ex	before me, erson(s) whose name(s) is/are subscribed recuted the same in his/her/their authorized erson(s), or the entity upon behalf of which th	_, who proved to me on the basis of s to the within instrument and acknowle apacity(ies) and that by his/her/their sig person(s) acted, executed the instrume	personally appeared atisfactory evidence to be th dged to me that he/she/the nature(s) on the instrument th ent.
n pe ex pe	before me, erson(s) whose name(s) is/are subscribed ecuted the same in his/her/their authorized erson(s), or the entity upon behalf of which the ler PENALTY OF PERJURY under the laws of	_, who proved to me on the basis of s to the within instrument and acknowle apacity(ies) and that by his/her/their sig person(s) acted, executed the instrume the State of California that the foregoing	personally appeared atisfactory evidence to be th dged to me that he/she/the nature(s) on the instrument th ent. g paragraph is true and correct
n pe ex pe certify und	before me, erson(s) whose name(s) is/are subscribed eccuted the same in his/her/their authorized erson(s), or the entity upon behalf of which the ler PENALTY OF PERJURY under the laws of my hand and official seal.	_, who proved to me on the basis of s to the within instrument and acknowle apacity(ies) and that by his/her/their sig e person(s) acted, executed the instrume f the State of California that the foregoing	personally appeared atisfactory evidence to be th dged to me that he/she/the nature(s) on the instrument th ent. paragraph is true and correct

4.0 WAIVER/RELEASE OF LIABILITY

I, the undersigned, on behalf of W.M. Lyles Co. (hereinafter called Firm) fully understand that the storage or leaving of _____at IEUA's_____facilities,

located at

RP-5: 6063 Kimball Ave, Chino, CA 91708 RP-5 Solids Handling Facility: 16090 Mountain Ave, Chino, CA 91708 RP-2 16400 El Prado Road Chino, California 91710

, during the period of July 2020 to January 2025 exposes Firm to the risk of, but not limited to, theft, fire damage, vandalism, water damage, wind damage, and possible personal injury to Firm's employees. For the privilege of storing/leaving at said location, Firm agrees to assume any and all such risk.

In consideration of being able to store/leave said item(s) at said location, Firm hereby releases, agrees not to sue, or bring any action against, the Inland Empire Utilities Agency, its officers, employees, agents, representatives, and volunteers for any and all liability, claims, or actions for injury or death to Firm' s employees, or damage or theft of said property arising out of, or in connection with, the storage or leaving of said item(s) at Inland Empire Utilities Agency's facility for whatever cause, excluding the purposeful actions or active negligence of the Inland Empire Utilities Agency, its officers, employees, agents, representatives, and volunteers.

I have carefully read this Waiver/Release of Liability and covenant not to sue, and fully understand its contents, and the possible exposures that Firm is agreeing to assume. I am aware that this Waiver/Release of Liability is a full release of any and all liability. I am signing such as the authorized agent of Firm, and of my own free will.

Name of Firm

By:

Representative's signature

Print Name

Approved: _____

for IEUA

BIDDING AND CONTRACT REQUIREMENTS SECTION D - CONTRACT AND RELEVANT DOCUMENTS

May 2020 (Conformed Set) Project No. EN19001 & EN19006

Date

Title

Date

Engineering, Operations, and Water Resources Committee

астіон ітем **2В**



 Date: July 15, 2020
 JM

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

 Committee: Engineering, Operations & Water Resources
 07/08/20

 Finance & Administration
 07/08/20

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

 Subject: PP 4 Aeration Basin, Diffuser Penlacement and Wall Reinforcement Construction

Subject: RP-4 Aeration Basin Diffuser Replacement and Wall Reinforcement Construction Contract Award

Executive Summary:

In the 2005 expansion of the Regional Water Recycling Plant No. 4 (RP-4), the three oxidation ditches were modified into six aeration basins by extending the center dividing walls of each basin in the north and south directions. Recently, staff discovered the added walls could not support the differential pressure created by operating one side of the basin. This project will construct concrete counterforts on the center walls of all three basin to strengthen these walls. In addition, the existing aeration panel diffusers are nearing the end of useful life and are no longer being supported by the diffuser manufacturer; therefore, this project will replace the diffusers with new SSI aeration disc style diffusers.

On May 5, 2020, bids were advertised to a group of eleven prequalified contractors. On June 9, 2020, Inland Empire Utilities Agency (IEUA) received eight construction bids. Genesis Construction, was the lowest responsive, responsible bidder with a bid price of \$4,102,444; engineer's estimate was \$4,620,000. The construction contract award was unanimously recommended for IEUA Board approval by the Regional Technical and Policy Committees. For continuity, staff requests the existing contract with Carollo Engineers Inc., be amended by \$176,156 to include engineering services during construction, increasing the contract value from \$3,006,870 to \$3,183,026 (5% increase).

Staff's Recommendation:

1. Award a construction contract for the Aeration Basin Diffuser Replacement and Wall Reinforcement, Project No. EN17110, to Genesis Construction, in the amount of \$4,102,444;

2. Approve a contract amendment to Carollo Engineers Inc., for engineering services during construction for a not-to-exceed amount of \$176,156; and

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

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

Account/Project Name:

EN17110.03/Aeration Basin Diffuser Replacement and Wall Reinforcement Project

Fiscal Impact (explain if not budgeted): None.

-

Prior Board Action:

The Board of Directors awarded several amendments to Carollo's contract for consultant engineering services for the RP-4 Primary Clarifier and Process Rehabilitation since the original contract award for additional scope and construction management services.

Environmental Determination:

Categorical Exemption

CEQA exempts a variety of projects from compliance with the statue. This project qualifies for a Categorical Exemption as defined in Section 15301 of the State CEQA Guidelines.

Business Goal:

The Aeration Basin Diffuser Replacement and Wall Reinforcement Project is consistent with IEUA's Business Goal of Wastewater Management specifically the Asset Management objective that IEUA will ensure the treatment facilities are well maintained, upgraded to meet evolving requirements, sustainably managed, and can accommodate changes in regional water use.

Attachments:

Attachment 1 - PowerPoint Attachment 2 - Construction Contract Attachment 3 - Consultant Amendment

Attachment 1

RP-4 Aeration Basin Diffuser Replacement and Wall Reinforcement Construction Contract Award Project No. EN17110.03









Jerry Burke, PE June 2020







The Project

- Replace panel diffusers with SSI disc diffusers
- Install new sprayers and RW piping
- Coat the ductile iron piping
- Install counterforts to strengthen aeration basin's center walls
- Install drainage sumps



Existing Panel Diffusers



Proposed Disc Diffuser System



Contractor Selection

Eight bids were received on June 9, 2020, from prequalified contractors:

Bidder's Name	Final Bid Amount
Genesis Construction	\$4,102,444
Innovative Construction Solutions	\$4,380,400
Stanek Constructors	\$4,427,000
J.R. Filanc Construction Co., Inc.	\$4,455,982
Kiewit Infrastructure West Co.	\$4,667,000
J.F. Shea Construction, Inc.	\$4,860,000
PCL Construction, Inc.	\$5,190,000
W.A. Rasic Construction Company	\$5,588,855
Engineer's Estimate	\$4,620,000



Project Budget and Schedule

Description	Estimated Cost
Design Services	\$138,598
Design Consultant Contract	\$105,720
IEUA Design Services (actuals)	\$32,878
Construction Services	\$401,156
Engineering Services During Construction	\$176,156
IEUA Construction Services (~5%)	\$225,000
Construction	\$4,512,694
Construction Contract (this action)	\$4,102,444
Contingency (~10%)	\$410,250
Total Project Cost (This project):	\$5,052,448
Total Project Cost (Process Improvements):	\$16,015,162
Total Project Cost (Trident Filter):	\$5,000,000
Total Project Costs (All)	\$26,067,610
Total Project Budget:	\$28,643,938

	Project Milestone	Date
t	Construction	
98	Construction Contract Award	July 2020
	Construction Completion	September 2021





- Award a construction contract for the Aeration Basin Diffuser Replacement and Wall Reinforcement, Project No. EN17110, to Genesis Construction, in the amount of \$4,102,444;
- Approve a contract amendment to Carollo Engineers Inc., for engineering services during construction for a not-to-exceed amount of \$176,156; and
- Authorize the General Manager to execute the contract and contract amendment, subject to non-substantive changes.

The RP-4 Aeration Basin Diffuser Replacement and Wall Reinforcement Project is consistent with *IEUA's business goal of Wastewater Management*, specifically the Asset Management objective that IEUA will ensure the treatment facilities are well maintained, upgraded to meet evolving requirements, sustainability managed, and can accommodate changes in regional water use.



Attachment 2

RP-4 AERATION BASIN DIFFUSER REPLACEMENT AND WALL REINFORCEMENT CONTRACT

1.0 CONTRACT

THIS CONTRACT, made and entered into this _____ day of _____, 2020, by and between <u>Genesis Construction</u>, 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 FOR <u>EN17110.03 RP-4 Aeration</u> <u>Basin Diffusers Replacement and Wall Reinforcement</u>, 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 the Bidding and Contract Requirements, Section C Bid Forms and accepted by IEUA, and set forth in this below.

- 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 Notice Inviting Bids, Instructions to Bidders, Bid Forms, Information Required of Bidder, Performance Bond, Payment Bond, Contractor's License Declaration, Specifications, Drawings, all General Conditions, Special Conditions and all Project Requirements, 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 <u>Four-Hundred Twenty-five (425)</u> 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 General Conditions, Section C Changes to the Contract 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	
Hemet Manufacturing Company,	Inc
dba Genesis Construction	
By Canalace D. Cerry	
Candace D. Perry 🧳	
President	

Title

* A Municipal Water District

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the idecument, to which this certificate is attached, and not the truthfulness, accuracy or validity of that document. STATE OF CALIFORNIA County of Riverside On	CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT Civil Code § 1189		
document, to which this certificate is attached, and not the truthfulness, accuracy or validity of that document. STATE OF CALIFORNIA County of Riverside On 6-17-2020 Data before me,Tia M. Clark. Image: Name of Notery exactly as it appears on the official seal personally appeared Candace D. Perry Name(a) of Sgner(a) who proved to me on the basis of satisfactory evidence 4 who proved to me on the basis of satisfactory evidence 4 who proved to me on the basis of satisfactory evidence 4 who proved to me on the basis of satisfactory evidence 4 who proved to me on the basis of satisfactory evidence 4 who proved to me on the basis of satisfactory evidence 4 who proved to me on the basis of satisfactory evidence 4 who proved to me on the basis of satisfactory evidence 4 who proved to me on the basis of satisfactory evidence 4 who proved to me on the basis of satisfactory evidence 4 who proved to me on the basis of satisfactory evidence 4 who proved to me on the basis of satisfactory evidence 4 who proved to me on the basis of satisfactory evidence 4 who proved to me on the basis of satisfactory evidence 4 who proved to me on the basis of satisfactory evidence 4 to catt	A notary public or other officer completing this certificate verifies only the identity of the individual who signed the		
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On 6-17-2020 before me,	County of Riverside	\$	
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who proved to me on the basis of satisfactory evidence f be the person(e) whose name(e) is/are subscribed to th within instrument and acknowledged to me that he/she/the executed the same in His/her/their signature(s) on the instrument in the person(e), or the entity upon behalf of which the person(e), or the entity upon behalf of which the person(e), or the entity upon behalf of which the person(e), or the entity upon behalf of which the person(e), or the entity upon behalf of which the person(e), or the entity upon behalf of which the person(e), or the entity upon behalf of which the person(e), or the entity upon behalf of which the person(e), or the entity upon behalf of which the person(e), or the entity upon behalf of which the person(e), or the entity upon behalf of which the person(e), or the entity upon behalf of which the person(e), or the entity upon behalf of which the person(e), or the entity upon behalf of which the person(e), or the entity upon behalf of which the person(e) acted, executed the instrument. Place Notary Seal Above Place Tru	personally appeared Candace D. Perry	Name(s) of Signer(s)	
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. Witness my hand and official seal. Signature of Notary Public Place Notary Seal Above I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. Witness my hand and official seal. Signature of Notary Public OPTIONAL Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of the form to another document. Description of Attached Document Title or Type of Document: <u>Contract Document</u> Document Date: <u>Number of Pages:</u> Signer's Name: <u>Individual</u> Corporate Officer — Title(s): <u>Pres, Secy, Treasurer</u> Individual Corporate Officer — Title(s): <u>Pres, Secy, Treasurer</u> Attorney in Fact RIGHT THUMBPRINT Trustee Guardian or Conservator Other: <u>Contract Document</u> Top of thumb here		who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.	
Witness my hand and official seal. Signature Place Notary Seal Above Place Notary Seal Above OPTIONAL Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of the form to another document. Description of Attached Document Title or Type of Document: <u>Contract Document</u> Document Date: <u></u>	TIA M. CLARK Notary Public – California Riverside County Commission # 2197500	I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.	
Place Notary Seal Above Signature of Notary Public OPTIONAL OPTIONAL Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of the form to another document. Description of Attached Document Title or Type of Document: Contract Document Document Date:	ivy comm. Expires Jun 13, 2021	Witness my hand and official seal.	
Place Notary Seal Above Signature of Notary Public OPTIONAL Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of the form to another document. Description of Attached Document Title or Type of Document: Number of Pages: Document Date: Number of Pages: Signer(s) Other Than Named Above: Signer's Name: Signer's Name: Individual Corporate OfficerTitle(s): Pres, Secy.Treasurer Partner LimitedGeneral Attorney in Fact Or of thumb here Guardian or Conservator Top of thumb here Dignature of Notary Public Signative of Notary Public OPTIONAL Signature of Notary Public OPTIONAL Signature of Notary Public OPTIONAL Signature of Notary Public OPTIONAL Description of Attached Document Description of Attached Document Description of Attached Document Title or Type of Document: Number of Pages: Number of Pages: Signer's Name:		Signature	
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Document Date:	Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of the form to another document. Description of Attached Document Title or Type of Document: <u>Contract Document</u>		
Signer(s) Other Than Named Above: Capacity(ies) Claimed by Signer(s) Signer's Name:	Document Date:	Number of Pages:	
Capacity(ies) Claimed by Signer(s) Signer's Name: Individual Individual Individual Image: Corporate Officer — Title(s): Partner Limited [General] Attorney in Fact Trustee Guardian or Conservator Other: Signer's Name: Other:	Signer(s) Other Than Named Above:		
Signer's Name: Signer's Name: Individual Individual Individual Individual Image: Corporate Officer — Title(s): Pres, Secy.Treasurer Partner Limited General Attorney in Fact RIGHT THUMBPRINT Trustee OF SIGNER Guardian or Conservator Top of thumb here Other: Other:	Capacity(ies) Claimed by Signer(s)		
Signer is Representing: Signer is Representing: Hemet Mfg. Co., Inc. dba	Signer's Name: Individual Individual Image: Construction Partner Limited General Attorney in Fact Trustee Guardian or Conservator Other: Signer is Representing: Hemet Mfg. Co., Inc. dba Genesis Construction	Signer's Name: Individual Corporate Officer — Title(s): Partner Limited Partner Limited General Attorney in Fact Trustee Guardian or Conservator Other: Signer is Representing:	

Attachment 3



CONTRACT AMENDMENT NUMBER: 4600002243-010 FOR PROJECT MANAGEMENT AND DESIGN SERVICES FOR THE RP-4 PRIMARY CLARIFIER REHABILITATION PROJECT NO. EN17043 AND RP-4 PROCESS REHABILITATION PROJECT Nos. EN17110, EN17110.01, & EN17110.03

THIS CONTRACT AMENDMENT TEN is made and entered into this _____ day of ______, 2020, 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 interchangeably as "IEUA" and "Agency") and Carollo Engineers, Inc. with offices located in Riverside, Irvine, and Los Angeles, California (hereinafter referred to as "Consultant") for Project Management and Design Services for the RP-4 Primary Clarifier Rehabilitation, Project No. EN17043, and RP-4 Process Rehabilitation, Project Nos. EN17110, EN17110.01, and EN17110.03, and shall revise the Contract as herein amended:

SECTION THREE, SCOPE OF WORK AND SERVICES, IS REVISED TO ADD THE FOLLOWING PARAGRAPH: Additional services and responsibilities shall include and be in accordance with Consultant's proposal dated June 5, 2020 which is incorporated herein, attached hereto, and made a part hereof as **Exhibit L**.

SECTION FIVE, COMPENSATION, ADDS THE FOLLOWING PARAGRAPH AS FOLLOWS: As compensation for additional work performed under this Contract Amendment Ten, Agency shall pay Consultant a **NOT-TO EXCEED maximum of \$3,202,503.00**, which represents an increase of \$176,156.00 to the Contract as proposed by **Exhibit L**.

ALL OTHER PROVISIONS OF THIS CONTRACT REMAIN UNCHANGED.

[Signature Page Immediately Follows]

Witnesseth, that the parties hereto have mutually covenanted and agreed as per the above Amendment items, and in doing so have caused this document to become incorporated into the contract documents.

INLAND EMPIRE UTILITIES AGENCY:

(A Municipal Water District)

Shivaji Deshmukh General Manager (Date)

CAROLLO ENGINEERS, INC .:

120 Graham Juby, P.E. (Date)

Principal-in-Charge / Vice President

<u>h://r</u> J<u>une 24, 20</u>20 (Date)

Eric M. Mills Senior Vice President

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Exhibit L



3400 Central Avenue, Suite 205, Riverside, California 92506 P. 951.776.3955 F. 951.776.4207

June 5, 2020

Mr. Jerry Burke Deputy Manager of Engineering Inland Empire Utilities Agency 6075 Kimball Avenue Chino, CA 91708

Subject: RP-4 Aeration Basin Diffuser Replacement & Wall Reinforcement Project (EN17110.03) -Engineering Services During Construction Amendment Letter Proposal (Amendment 10)

Dear Mr. Burke:

As requested, Carollo Engineers, Inc. (Carollo), has prepared this letter proposal for engineering services during construction for IEUA project EN17110.03 for your review and consideration.

Engineering Services During Construction (ESDC)

The ESDC scope of work to be performed by Carollo is summarized as follows:

- Prepare conformed plans and specifications.
- Review submittals and shop drawings.
- Provide change order technical support.
- Prepare responses to Contractor requests for information (RFIs).
- Prepare design document clarification.
- Update standard operating procedures (SOPs).
- Prepare record drawings.
- Attend construction meetings and site visits during construction.

The scope of work does not include construction management or inspection services at this time.

ESDC Estimate

Carollo identified necessary ESDC services for EN17110.03. We developed estimates using a bottoms-up approach. This approach includes identification of project elements and tasks necessary to complete ESDC for the project followed by level-of-effort hours estimate for each project task. As an example, Carollo developed a comprehensive anticipated project submittal list for IEUA's review and consideration. General ESDC project elements for the bottoms-up level-of-effort estimation approach include:

- Project engineer to visit site 10 times during the course of construction, and project engineer will call in to 10 weekly construction meetings.
- Prepare 27 conformed drawings.


Mr. Jerry Burke Inland Empire Utilities Agency June 5, 2020

Page 2

- Review of 43 submittals and 15 re-submittals.
- Respond to 50 Contractor RFIs/RFCs.
- Provide change order technical support for two change orders.
- Provide one design document clarification.
- Prepare 27 record drawings.

Our proposed fee of \$176,156 for the above noted ESDC for EN17110.03 is described in detail in the attached fee estimate and basis of fee estimate.

Closing

Based on our review of the scope of work to be included with the **\$176,156** ESDC effort for EN17110.03, Carollo requests that IEUA review the attached documents and scope of work for discussion. Once the final scope of work for ESDC has been agreed upon, we will initiate the ESDC effort for EN17110.03.

Please let the undersigned know if you have any questions, information requests, or if you would like to sit down and review the ESDC scope of work and associated engineering effort.

Sincerely,

CAROLLO EN/GINEERS, INC. Graham Juby, Ph.D., P.E. Vice President

GJ/RPI:jrb

1 PM

Roland Pilemalm, P.E. Associate Vice President

Project Management and Design Services for RP-4 Aeration Basin Diffuser Replacement & Wall Reinforcement Project, Project No. EN17110.03

Carollo Engineers

Basis of Fee Estimate for Engineering Services during Construction -Amendment No. 10

Fee estimate and associated level-of-effort is based upon the Request for Proposal (RFP-RW-16-021) scope of work and the letter proposal Scope of Work, and the following assumptions and considerations:

- Consultant services will be performed on a time and materials (T&M) basis using 2020 billing rates. 2020 billing rates are shown in the attached fee estimate.
- Construction schedule will be the listed 12 months and will occur continuously.
- Construction Management and Inspection services are not included at this time.
- Project engineer to visit site 10 times during course of construction (6 hours per site visit) and project engineer will call in to 10 weekly construction meetings (1 hour per call).
- Prepare 27 conformed drawings incorporating bid phase revisions (24 hours total)
- Review of 43 submittals and 15 re-submittals. (8 hours per submittal and 4 hours per resubmittal)
- Respond to 50 Contractor RFIs/RFCs. (4 hours per RFI)
- Provide change order technical support for two change orders (16 hours per change order)
- Provide one design document clarification (24 hours per design document clarification)
- Prepare 27 record drawings (1.5 hours per record drawing)
- 2nd paragraph of Section I (Control philosophy \ programming) from the scope of work is either not required for this project or IEUA will perform this work.
- The Contractor will hire the DCS system integrator under the Construction Contract for this project. Therefore, the 3rd paragraph of Section I (Control philosophy \ programming) from the scope of work does not apply to this project and the IEUA/Carollo Agreement for this project.
- Construction Management and Inspection services are not included at this time. Therefore the following sections from the RFP/Agreement scope of work are not included for the construction phase of the project J.i., J.iii., J.iv., J.vi., J.xi., and J.xii.
- Section L (Training) from the RFP/Agreement scope of work is not required for this project.

Project Management and Design Services for RP-4 Aeration Basin Diffuser Replacement & Wall Reinforcement Project, Project No. EN17110.03 Work Breakdown Structure and Fee Estimate for Amendment No. 10 (Engineering Services during Construction)

		ESTIMATED LABOR HOURS				TOTAL COSTS											
Task Description	Senior	Lead Project Professional	Project Professional	Professional	Assistant Professional	Senior Technician	Technician (CAD)	Construction Manager	General Inspector	Scheduler	Electrical Inspector	Document Processing	Total Hours (incl sub hours)	Labor Cost	PECE	Other Direct Costs	Total Costs
Hourly F	Rate \$28	1 \$267	\$244	\$206	\$169	\$177	\$126	\$170	\$154	\$186	\$154	\$117					
Engineering Services During Const.													0	\$0	\$0	\$0	\$0
Construction Meetings and Project Management		16			80								96	\$17,772	\$1,123	\$500	\$19,395
Prepare Conformed Set of Drawings					20							4	24	\$3,840	\$281	\$50	\$4,171
Submittal Review	6	24	54	80	240								404	\$78,229	\$4,727	\$50	\$83,005
Respond to RFIs/RFCs	2	10	36	52	100								200	\$39,591	\$2,340	\$50	\$41,981
Change Order Technical Support	2	3	3	6	18								32	\$6,368	\$374	\$50	\$6,792
Prepare Document Clarifications		2	2	2	18								24	\$4,471	\$281	\$50	\$4,801
Record Drawings			3		38								41	\$7,142	\$480	\$50	\$7,672
Update SOP's			4		40								44	\$7,723	\$515	\$100	\$8,338
TOTAL	10	55	102	140	554	0	0	0	0	0	0	4	865	\$165,135	\$10,121	\$900	\$176,156

Aeration Basin Diffuser Replacement and Wall Rehabilitation Project Engineering Services During Construction



Submittal Review Estimate

Section No.	Titlo	Submittal	Discipling	Anticipated No.
Section No.	nue	Required?	Discipline	of Submittals ⁽¹⁾
01116	Contract Document Language	NO	General	0
01140	Work Restrictions	YES	General	0
01312	Project Meetings	NO	General	0
01322	Web Based Construction Document Management	NO	General	0
01329	Safety Plan	YES	General	0
01410	Regulatory Requirements	NO	General	0
01450	Quality Control	NO	General	0
01455	Special Tests and Inspections	NO	General	0
01600	Product Requirements	NO	General	0
01610	Project Design Criteria	NO	General	0
01612	Seismic Design Criteria	YES	General	0
01614	Wind Design Criteria	YES	General	0
01738	Selective Alterations and Demolition	NO	General	0
01756	Commissioning	YES	General	0
01770	Closeout Procedures	YES	General	0
01783	Warranties and Bonds	NO	General	0
02050	Soils and Aggregates for Earthwork	YES	Civil	0
02300	Earthwork	YES	Civil	0
02055	Adhesive-Bonded Reinforcing Bars and All Thread Rods in	VEC	Structural	1
05055	Concrete	TES	Structural	T
03071	Epoxies	YES	Structural	1
03072	Epoxy Resin/Portland Cement Bonding Agent	YES	Structural	1
03102	Concrete Formwork	YES	Structural	2
03150	Concrete Accessories	YES	Structural	2
03200	Concrete Reinforcing	YES	Structural	2
03300	Cast-In-Place Concrete	YES	Structural	2
03366	Tooled Concrete Finishing	NO	Structural	0
03600	Grouting	YES	Structural	0
03925	Concrete Coatings	YES	Structural	0
03926	Structural Concrete Repair	YES	Structural	1
03931	Epoxy Injection System	YES	Structural	1
05120	Structural Steel	YES	Structural	2
05190	Mechanical Anchoring And Fastening To Concrete And	VES	Structural	2
05150	Masonry	TES	Structural	۷
09960	High-Performance Coatings	YES	Process	0
11378A	Fine Bubble Diffused Aeration System - Disk	YES	Process	4
13446	Manual Actuators	YES	Process	1
15050	Common Work Results for Mechanical Equipment	NO	Process	0
15052	Common Work Results for General Piping	YES	Process	3
15061	Pipe Supports	YES	Process	3
15062	Preformed Channel Pipe Support System	YES	Process	2
15075	Equipment Identification	YES	Process	0
15076	Pipe Identification	YES	Process	0

Aeration Basin Diffuser Replacement and Wall Rehabilitation Project Engineering Services During Construction



Submittal Review Estimate

Section No.	Title	Submittal Required?	Discipline	Anticipated No. of Submittals ⁽¹⁾
15110	Common Work Results for Valves	NO	Process	0
15111	Ball Valves	YES	Process	1
15112	Butterfly Valves	YES	Process	1
15115	Gate, Globe, and Angle Valves	YES	Process	1
15119	Air and Vacuum Relief Valves	YES	Process	1
15121	Pipe Couplings	YES	Process	2
15250	Chloringtod Bolywinyl Chlorido (CDVC) Bino: ASTM E441	VEC	Process &	2
13239	Chlorinated Polyvinyr Chloride (CPVC) Pipe. ASTM F441	TE5	Structural	Z
15278	Steel Pipe	YES	Process	1
15286	Stainless Steel Pipe and Tubing	YES	Process	2
15956	Piping Systems Testing	YES	Process	2
15958	Mechanical Equipment Testing	NO	Process	0

TOTAL UNIQUE SUBMITTALS: 43

Notes:

(1) Anticipated number of submittals includes unique submittals only; number of resubmittals were not included.

Engineering, Operations, and Water Resources Committee

INFORMATION ITEM **3A**



Date: July 15, 2020

To: The Honorable Board of DirectorsFrom: Shivaji Deshmukh, General ManagerCommittee: Engineering, Operations & Water Resources07/08/20

SSD

Executive Contact: Christiana Daisy, Executive Manager of Engineering/AGM **Subject:** 2020 OBMP Update Subsequent Environmental Impact Report

Executive Summary:

Chino Basin Watermaster (CBWM) developed the 2000 Optimum Basin Management Program (OBMP) to establish a groundwater management program that enhances safe yield and water quality of the Chino Basin, enabling users to cost-effectively utilize groundwater. IEUA serving as lead agency adopted the Program Environmental Impact Report (PEIR) in July 2000. CBWM initiated the 2020 OBMP Update report to update and incorporate an improved understanding of basin characteristics and address new challenges. Tom Dodson & Associates (TDA) has prepared a Subsequent Environmental Impact Report (SEIR) for the 2020 OBMP Update, with IEUA again serving as lead agency.

The SEIR determined that most potential adverse environmental impacts can be mitigated to a less than significant level and identified potential unavoidable significant impacts relating to Biological Resources, Greenhouse Gases, and Utilities and Service Systems. The Statement of Overriding Considerations show that program benefits outweigh these unavoidable significant impacts. Certification of the SEIR will allow it to function as a foundational environmental document for the Region for the next 20 to 30 years to help address basin challenges and enable future funding opportunities.

Staff's Recommendation:

1. Adopt Resolution No. 2020-7-13, certifying the Final Subsequent Environmental Impact Report, including the Mitigation Monitoring and Reporting Program, and the Findings of Fact and Statement of Overriding Considerations for the 2020 Optimum Basin Management Program Update; 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:

Account/Project Name: Not applicable.

Fiscal Impact (explain if not budgeted):

Costs are borne by Chino Basin Watermaster. There is no fiscal impact to IEUA for adoption/certification of the SEIR.

Prior Board Action:

On July 12, 2000, the IEUA Board approved the OBMP PEIR. On May 21, 2008, the IEUA Board approved the Addendum to the OBMP PEIR and the Facilities Master Plan PEIR. On June 19, 2019, the IEUA Board adopted Resolution No. 2019-6-12, supporting the timely completion of the 2020 OBMP Update.

Environmental Determination:

Subsequent Environmental Impact Report

The SEIR package includes: Final Subsequent Environmental Impact Report (SEIR) for the OBMP Update, Responses to Comments, Mitigation Monitoring and Reporting Program, Findings of Fact and Statement of Overriding Considerations, and all other materials in the administrative record.

Business Goal:

The adoption of the Resolution is consistent with IEUA's Business Goals of Water Reliability by ensuring the sustainable production of groundwater in the region and Environmental Stewardship by ensuring projects will be implemented in accordance with federal, state, and local environmental laws.

Attachments:

- Attachment 1 SEIR Adoption Presentation 2020-07-15
- Attachment 2 Resolution No. 2020-7-13
- Attachment 3 Final OBMP Update Subsequent Environmental Impact Report
- (https://www.ieua.org/obmpu-ceqa/)
- Attachment 4 Mitigation Monitoring and Reporting Program
- Attachment 5 Findings of Fact and Statement of Overriding Considerations

2020 OBMP Update Final Subsequent Environmental Impact Report







Sylvie Lee

July 2020





Background

and Empire Utilities Agency

2000 Optimum Basin Management Program (OBMP)

- Led by Chino Basin Watermaster, in collaboration with Basin stakeholders
- Goals include enhancing basin water supplies, water quality, basin management, and equitably financing the OBMP
- Improved reliability and long-term sustainability of the Chino Basin

OBMP Program Environmental Impact Report (PEIR)

- IEUA Board adopted the OBMP Program Environmental Impact Report as the lead agency in July 2000
- Enabled implementation of water resources programs with significant grant funding and low interest loans



Program Update

land Empire Utilities Agency

2020 Optimum Basin Management Program Update (OBMPU)

- Many of the programs from the 2000 OBMP have been implemented
- Understanding of Chino Basin hydrology has improved and new challenges in water management have been identified
- OBMPU addresses the new challenges, protects stakeholders' collective interests, and maintains water supply reliability

OBMPU Subsequent Environmental Impact Report (SEIR)

- Prepared by Tom Dodson & Associates with IEUA as lead agency
- Evaluates impacts of the activities covered by OBMPU
- Positions the Region to pursue new grant funding opportunities





OBMPU CEQA Process



The Draft SEIR impact analysis found three CEQA topics with the potential for significant impacts:

- Biological Resources: Individual OBMPU facilities may be developed and have operations within an area containing biological resources that cannot be avoided, even at the design level
- Greenhouse Gas (GHG): Despite implementation of mitigation measures designed to reduce greenhouse gas emissions, the combined envisioned projects of the OBMPU would still exceed the South Coast Air Quality Management District (SCAQMD) screening thresholds
- Utilities and Service Systems: Significant GHG emissions may result from the potential construction of water-related infrastructure
- Mitigation measures reduce impacts to a less than significant level for the remaining topics





Draft SEIR Comments

- IEUA received seven written comment letters during the 45-day Draft SEIR public review period:
 - 1. City of Ontario
 - 2. California Department of Fish and Wildlife
 - 3. Monte Vista Water District
 - 4. San Bernardino County Department of Public Works
 - 5. Orange County Water District
 - 6. Riverside County Flood Control and Water Conservation District
 - 7. State of California Department of Justice



- Substantial comments were received on the following issues:
 - Verification of the hydrology model used for the Hydrology and Water Quality analysis
 - Consideration of a Storage Management Program Only Alternative to feasibly meet the objectives of the OBMPU while minimizing significant impacts
 - Clarification on the impacts of surface water diversions, including recycled water







- Final SEIR is a comprehensive document that fully addresses all comment letters received and meets CEQA requirements
 - Responses to Comments were provided to all commenting parties 10 days prior to this Public Hearing pursuant to CEQA
- CEQA Findings of Fact, and Statement of Overriding Considerations demonstrate that the benefits of adopting the OBMPU acceptably override potential unavoidable significant impacts
- Certification of the <u>OBMPU Final SEIR</u>, and Adoption of the <u>Mitigation Monitoring and</u> <u>Reporting Program</u>, <u>CEQA Findings of Fact</u>, and <u>Statement of Overriding</u> <u>Considerations</u> reflects the Board's approval of the potential OBMPU activities as presented in the environmental review process







- Adopt Resolution No. 2020-7-13, certifying the Final Subsequent Environmental Impact Report, including the Mitigation Monitoring and Reporting Plan, and the Findings of Fact and Statement of Overriding Considerations, for the 2020 Optimum Basin Management Program Update; and
- 2. Authorize the Filing of Notice of Determination with the County Clerk and State Clearinghouse, Governor's Office of Planning and Research.

The adoption of the Resolution is consistent with *IEUA's Business Goals* of *Water Reliability* by ensuring the sustainable production of groundwater in the region and *Environmental Stewardship* by ensuring projects will be implemented in accordance with all federal, state, and local environmental laws.





RESOLUTION NO. 2020-7-13

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE INLAND EMPIRE UTILITIES AGENCY*, SAN BERNARDINO COUNTY, CALIFORNIA, CERTIFYING THE FINAL SUBSEQUENT ENVIRONMENTAL IMPACT REPORT FOR THE 2020 UPDATE OF THE CHINO BASIN OPTIMUM BASIN MANAGEMENT PROGRAM AND ADOPTING A MITIGATION MONITORING AND REPORTING PROGRAM, CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) FINDINGS OF FACT, AND A STATEMENT OF OVERRIDING CONSIDERATIONS

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) served as the Lead Agency for the 2000 Optimum Basin Management Program (OBMP) and had caused to be prepared a Program Environmental Impact Report (PEIR) for the OBMP that was certified and adopted on July 12, 2000, in accordance with CEQA and its implementing guidelines; and

WHEREAS, the IEUA serves as the Lead Agency for the 2020 Optimum Basin Management Program Update (OBMPU) and has caused to be prepared a Subsequent Environmental Impact Report (SEIR), for the evaluation of possible future program activities as envisioned in the OBMPU, in accordance with CEQA and its implementing guidelines; and

WHEREAS, the IEUA prepared and circulated a Notice of Preparation (NOP) to the public, responsible agencies and other interested parties for their review and comment on February 10, 2020, pursuant to CEQA Guidelines Section 15082; and

WHEREAS, pursuant to comments received on the scope and content of the SEIR in response to the NOP document, IEUA prepared and circulated a Draft SEIR assessing the project's environmental impact for public review; and

WHEREAS, IEUA issued the Notice of Completion (NOC) for the Draft SEIR on March 27, 2020 and the Draft SEIR was available for public review and comment from March 27, 2020 through May 11, 2020; and

WHEREAS, IEUA received seven (7) letters with comments and concerns regarding the content of the Draft SEIR for the OBMPU;

Resolution No. 2020-7-13 Page 2

WHEREAS, the Draft SEIR determined that the majority of potential adverse environmental impacts are either less than significant without mitigation or can be reduced to a level of less than significant with mitigation, including the following: Aesthetics, Agriculture and Forestry Resources, Air Quality, Cultural Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, and Wildfire; and

WHEREAS, the Draft SEIR for the OBMPU identified potentially significant adverse environmental impacts relating to Biological Resources, Greenhouse Gas, and Utilities and Service Systems that have been assessed in the Statement of Overriding Considerations; and

WHEREAS, IEUA has identified, considered, and disclosed project alternatives that could feasibly accomplish most of the basic objectives of the project, pursuant to CEQA Guidelines Section 15126.6; and

WHEREAS, pursuant to comments received on the Draft SEIR, IEUA has revised mitigation measures in the Final OBMPU SEIR that have been deemed equivalent or more effective in mitigating potentially significant environmental impacts that in itself will not cause any potentially significant environmental impacts; and

WHEREAS, IEUA provided a copy of the Responses to Comments to all Responsible Agencies on July 2, 2020, in accordance with CEQA Guidelines Section 15088; and

WHEREAS, the Final OBMPU SEIR will be available for use as the base environmental document by any Responsible Agency proceeding to implement future site-specific projects under the OBMPU in accordance with programmatic procedures outlined in the State CEQA Guidelines Sections 15162, 15163, and 15168; and

WHEREAS, the IEUA Board has received and has reviewed the Final OBMPU SEIR, consisting of the Draft SEIR, all Responses to Comments, and the Mitigation Monitoring and Reporting Program, the CEQA Findings of Fact and Statement of Overriding Considerations, and all other material in the administrative record; and

WHEREAS, the Final OBMPU SEIR was prepared, published, circulated, reviewed, and completed in accordance with the requirements of CEQA and the CEQA Guidelines and constitutes an adequate, accurate, objective, and complete Final OBMPU SEIR in accordance with the requirements of CEQA and the CEQA Guidelines; and

WHEREAS, the Final OBMPU SEIR reflects the independent judgment and analysis of the IEUA Board; and

WHEREAS, the Final OBMPU SEIR reflects the best efforts of the IEUA Board to undertake all reasonably feasible and prudent actions to discover, analyze, disclose, and mitigate all potentially significant environmental impacts of the specific structures and facilities identified in the Final OBMPU SEIR; and

WHEREAS, pursuant to duly given public notice, the IEUA Board has held a full and fair public hearing on July 15, 2020 concerning the Final OBMPU SEIR and has considered all written and oral comments and testimony relating thereto and is fully advised thereon.

NOW, THEREFORE, LET 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 Final SEIR prepared in connection with the OBMPU and completed in compliance with CEQA, as stated in the recitals herein, the IEUA hereby approves and certifies the Final SEIR for the OBMPU as 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 SEIR, and adopts the Mitigation Monitoring and Reporting Program (Exhibit A), and CEQA Findings of Fact and Statement of Overriding Considerations (Exhibit B).

The Final SEIR's evaluation of the OBMPU reflects the Board of Directors' independent judgment and analysis based on the Board of Directors' review of the entirety of the administrative record, which record provides the information upon which this resolution is based and which the Board of Directors reviewed and considered prior to approving the project.

Section 2. IEUA hereby authorizes and directs the filing and posting of a Notice of Determination (NOD) as required by Section 21152 of the Public Resources Code, and that filing required pursuant to Section 21092 of the Public Resources Code by the IEUA General Manager with the Clerk of the Board of San Bernardino County, Los Angeles County Clerk, Riverside County Clerk, and the State Clearinghouse, Governor's Office of Planning and Research, as soon as possible following the adoption of this Resolution.

Section 3. IEUA hereby adopts the mitigation measures recommended as conditions of project approval in Sections 1 and 4 of the Final OBMPU SEIR, and the Mitigation Monitoring and Reporting Program prepared for the purpose of monitoring the changes which have been adopted or made a condition of project approval as described in Section 1 of this Resolution and all as more fully described in the Mitigation Monitoring and Reporting Program.

Section 4. This Resolution shall take effect upon adoption.

Resolution No. 2020-7-13 Page 4

ADOPTED this 15th day of July 2020.

Kati Parker President of the Inland Empire Utilities Agency* and of the Board of Directors thereof

ATTEST:

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

*A Municipal Water District

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STATE OF CALIFORNIA)) SS COUNTY OF SAN BERNARDINO)

I, Steven J. Elie, Secretary/Treasurer of the Inland Empire Utilities Agency*, DO HEREBY CERTIFY that the foregoing Resolution being No. 2020-7-13, was adopted at a regular Board Meeting on July 15, 2020, of said Agency* by the following vote:

AYES: NOES: ABSTAIN: ABSENT:

:

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

(SEAL)

*A Municipal Water District

OBMPU MITIGATION MONITORING AND REPORTING PROGRAM

INITIAL STUDY MITIGATION MEASURES

	Mitigation Measure	Implementation Schedule	Verification
Aesthetic AES-1:	<i>cs</i> Proposed facilities shall be designed in accordance with local design standards and integrated with local surroundings. Landscaping shall be installed in conformance with local landscaping design guidelines as appropriate to screen views of new facilities and to integrate facilities with surrounding areas.	The measure shall be incorporated into individual project design specifications, which shall be included in the construction contract as a contract specification and implemented by the contractor during construction.	A copy of the construction contract including this aesthetic mitigation measure shall be retained in the project file(s). Verification of implementation shall be based on field inspections by the Implementing Agency. ¹ Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Aesthetic AES-2:	The Mills Wetland Storage Basin Project shall be designed to include landscaping commensurate with the existing pastoral setting that exists at this site at present. <u>The Implementing Agency shall utilize</u> <u>existing photos of the Mills Wetlands prior to construction to</u> <u>develop a landscape plan that the Implementing Agency and/or</u> <u>Watermaster deem acceptable as "commensurate with the</u> <u>existing pastoral setting."</u>	The measure shall be incorporated into individual project design specifications, which shall be included in the construction contract as a contract specification and implemented by the contractor during construction.	A copy of the construction contract including this aesthetic mitigation measure shall be retained in the project file(s). The landscape plan shall also be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

¹ "Implementing Agency" as used throughout this Mitigation Monitoring and Reporting Program refers to the lead agency implementing a project under the Optimum Basin Management Program Update (e.g., the Inland Empire Utilities Agency (IEUA), Chino Basin Watermaster (Watermaster), or Watermaster Stakeholders).

	Mitigation Measure	Implementation Schedule	Verification
Aesthetic	cs		
AES-3:	Future regional groundwater treatment facilities and other proposed facilities defined within the OBMPU at unknown locations shall either (1) Be located outside of scenic viewsheds identified in the General Plan or Municipal Code corresponding to a proposed location for a future facility, or (2) Undergo subsequent CEQA documentation to assess potential impacts from locating a future facility in an area that may contain scenic resources.	When groundwater treatment facilities and other proposed facilities defined within the OBMPU are being considered, the agency implementing the facility shall conduct the required evaluation of interference with locally identified scenic viewsheds prior to final site selection. Where scenic viewsheds cannot be avoided, any subsequent CEQA evaluation shall be prepared and processed prior to final site selection by the Implementing Agency.	The scenic viewshed evaluation shall be retained in the project file. Where a CEQA document is prepared and processed, a copy of the environmental document shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Aesthetic	CS		
AES-4:	Should the removal of trees be required for a specific project, the Implementing Agency shall comply with the local jurisdiction's tree ordinance, municipal code, or other local regulations. If no tree ordinance exists within the local jurisdiction, and a project will remove healthy trees as defined by a qualified arborist, (1) the Implementing Agency shall replace all trees removed at a 1:1 ratio, and (2) The specific location selected for a well shall avoid rock outcroppings and other scenic resources <u>as defined in CEQA Guidelines Appendix</u> <u>G.</u> If this cannot be accomplished a second tier CEQA evaluation shall be completed.	The measure shall be incorporated into individual project design specifications, which shall be included in the construction contract as a contract specification and implemented by the contractor during construction. Where required, the subsequent CEQA documentation shall be prepared prior to initiation of construction.	Where a CEQA document is prepared and processed, a copy of the environmental document shall be retained in the project file. A copy of the construction contract including this aesthetic mitigation measure shall be retained in the project file(s). Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Aesthetic	cs		
AES-5:	Future proposed facilities defined within the OBMPU at unknown locations shall either (1) Be located within sites that avoid rock outcroppings and other scenic resources <u>as defined in CEQA</u> <u>Guidelines Appendix G</u> , or (2) Undergo subsequent CEQA documentation to assess potential impacts from locating a future facility in an area that may contain scenic resources.	When sites for OBMPU facilities are being considered, the agency implementing the facility shall conduct the required evaluation of conflict with locally identified scenic resources prior to final site selection. Where scenic resources cannot be avoided, any subsequent CEQA evaluation shall be prepared and processed prior to final site selection by the Implementing Agency.	The scenic resources evaluation shall be retained in the project file. Where a CEQA document is prepared and processed, a copy of the environmental document shall be retained in the project file. Field notes documenting the scenic resources evaluation shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Aesthetic AES-6:	<i>cs</i> OBMPU facility implementation will conform with design requirements established in the local jurisdiction planning documents, including but not limited to the applicable zoning code, except where such requirements conflict with the purpose or function of such facilities compliance is not required by California law.	The measure shall be incorporated into individual project design specifications, which shall be included in the construction contract as a contract specification and implemented by the contractor during construction.	A copy of the construction contract including locally consistent design requirements shall be retained in the project file(s). Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Aesthetic AES-7:	When OBMPU aboveground facilities are constructed in the future, the local agency design guidelines for the project site shall be followed to the extent that they do not conflict with the engineering and budget constraints established for the facility <u>and except where</u> <u>such compliance is not required by California law</u> .	When future OBMPU aboveground facilities are being considered, the agency implement- ing the facility shall conduct the required evaluation of local design guidelines prior to approval of final design. The local design guidelines shall be incorporated into individual project design specifications, which shall be included in the construction contract as a contract specification and implemented by the	The local design guideline evaluation shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

Mitigatio	n Measure	Implementation Schedule	Verification
 Aesthetics AES-8: Future OBMPU projects shat measures, unless they correquirements, in which cas requirements shall be enfored. Use of low-pressure soor such lighting to minimize mile radius of the Mount Riverside County must a County of Riverside relatights. The height of lighting fix consistent with the purp illumination. Directing light and shield illumination. No light shall be allowed areas. 	Il implement <u>at least</u> the following <u>inflict with the local jurisdiction's light</u> <u>ise the local jurisdiction's</u> <u>orced</u> : dium lights where security needs require e impacts of glare; Projects within a 45- t Palomar Observatory and located within adhere to special standards set by the ating to the use of low-pressure sodium etures shall be lowered to the lowest level ose of the lighting to reduce unwanted ding shall be used to minimize off-site d to intrude into sensitive light receptor	The measure shall be incorporated into individual project design specifications, which shall be included in the construction contract as a contract specification and implemented by the contractor during construction.	A copy of the construction contract including this aesthetic mitigation measure shall be retained in the project file(s). Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
	Ire and Forestry Resources		
AGF-1	For all proposed facilities in the southern portion of the Chino Basin (south of SH 60), the potential for impact to Important Farmlands (Prime Farmland, Farmland of Statewide Importance, or Unique Farmland) shall be determined prior to final site selection. If important farmland cannot be avoided and individually exceeds 5 acres or cumulatively exceeds 10 acres of important farmland lost to agricultural production over the life of the program, the agency implementing the project shall purchase-provide compensatory mitigation in the form of comparable important farmland permanently conserved in either a local or State- approved important farmland mitigation bank at a mitigation ratio of 1:1. The acquisition of this compensatory mitigation shall be completed within one year of initiating construction of the proposed facility and verification shall be documented with the Chino Basin Watermaster.	The measure shall be incorporated into individual project design specifications. Where applicable, compensatory mitigation shall be acquired within one year of initiating construction of the proposed facility.	Ine agency proposing a new OBMPU facility in the southern Chino Basin shall submit important farmland documentation to the Watermaster prior to initiating construction. If mitigation is required, a copy of the compen- satory mitigation certification shall be retained in the project file(s) and made available to the Watermaster.
<u> </u>		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Agricultu AGF-2	Ire and Forestry Resources For all proposed facilities in the southern portion of the Chino Basin (south of SH 60), the potential for impact to Important Farmlands (Prime Farmland, Farmland of Statewide Importance, or Unique Farmland) shall be determined prior to final site selection. If Important Farmland cannot be avoided and individually exceeds 5 acres or cumulatively exceeds 10 acres of Important Farmland lost to agricultural production over the life of the program, the agency implementing the project shall relocate and avoid the site, or alternatively the agency shall conduct a California Land Evaluation and Assessment (LESA) model evaluation. If the evaluation determines the loss of Important Farmland will occur, the agency shall purchase provide compensatory mitigation in the form of comparable Important Farmland permanently conserved in either a local or State-approved Important Farmland mitigation bank at a mitigation ratio of 1:1. The acquisition of this compensatory mitigation shall be completed within one year of initiating construction of the proposed facility and verification shall be documented with the Chino Basin Watermaster.	Potential impacts to important farmlands shall be determined prior to final site selection. The measure shall be incorporated into individual project design specifications. The LESA shall be prepared prior to construction. Where applicable, compensatory mitigation shall be acquired within one year of initiating construction of the proposed facility.	The agency proposing a new OBMPU facility in the southern Chino Basin shall submit important farmland documentation to the Watermaster prior to initiating construction. If mitigation is required, a copy of both the LESA and the compensatory mitigation certification shall be retained in the project file(s).
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Agricultu AGF-3	For all proposed facilities that may impact riparian woodland/forest land in the portion of the Chino Basin (SH 60), the potential for impacts to riparian woodland/forest land shall be determined prior to final site election. If important forest land cannot be avoided and permanently will exceed 5 acres in area, the agency implementing the project shall relocate and avoid the site, or alternatively the agency shall conduct an evaluation to determine if it qualifies with the State definition of "forest land." If the evaluation determines the permanent loss of important forest land will occur, the agency shall purchase-provide compensatory mitigation in the form of comparable forest land permanently conserved in either a local or State-approved important forest land mitigation bank at a mitigation ratio of 1:1. Alternatively, the agency may carry out a forest land creation program at a 1:1 ratio for comparable woodland. The acquisition or creation of this compensatory mitigation shall be completed/initiated within one year of initiating construction of the proposed facility and verification shall be documented with the Chino Basin Watermaster.	The potential for impacts to riparian woodland/forest land shall be determined prior to final site selection. The measure shall be incorporated into individual project design specifications. Where applicable, compensatory mitigation shall be acquired, in accordance with the measures schedule.	The agency proposing a new OBMPU facility in the southern Chino Basin shall submit important farmland documentation to the Watermaster prior to initiating construction. If mitigation is required, a copy of the compen- satory mitigation certification shall be retained in the project file(s).
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Geology	and Soils		
GEO-1	If a specific project is proposed within a designated Alquist-Priolo Fault Zone, the facility shall be relocated, if possible. If relocation is not possible, the project shall be designed in accordance with the <u>California Building Code</u> (CBC) and according to the recommendations generated by a project specific geotechnical study. If the project specific geotechnical study cannot mitigate potential seismic related impacts, then a second tier CEQA evaluation shall be completed.	Where applicable, the geotechnical study shall be completed prior to completion of final design, as should the subsequent CEQA documentation, if required. The measures generated in the geotechnical investigation shall be incorporated into individual project design specifications, which shall be included in the construction contract as a contract specification and implemented by the contractor during construction.	A copy of the geotechnical investigation shall be retained in the project file. Where applic- able, a copy of the subsequent CEQA documentation for the individual project shall be retained in the project file. A copy of the construction contract including this geology/soils mitigation measure shall be retained in the project file(s). Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Geology	and Soils		
GEO-2	Prior to construction of each improvement, a design-level geotechnical investigation, including collection of site-specific subsurface data, if appropriate, shall be completed. The geotechnical evaluation shall identify all potential seismic hazards including fault rupture, and characterize the soil profiles, including liquefaction potential, expansive soil potential, subsidence, and landslide potential. The geotechnical investigation shall recommend site- specific design criteria to mitigate for seismic and non-seismic hazards, such as special foundations and structural setbacks, and these recommendations shall be incorporated into the design of individual proposed projects.	The geotechnical study shall be completed prior to completion of facility design. The measures generated in the geotechnical investigation shall be incorporated into individual project design specifications, which shall be included in the construction contract as a contract specification and implemented by the contractor during construction.	A copy of the geotechnical investigation shall be retained in the project file(s). A copy of the construction contract including this geology/soils mitigation measure shall be retained in the project file(s). Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Geology	and Soils		
GEO-3:	For each well development or other OBMPU project that is less than one acre in size requiring ground disturbing activities such as grading, the Implementing Agency shall identify best management practices (BMPs, such as hay bales, wattles, detention basins, silt fences, coir rolls, etc.) to ensure that the discharge of the storm runoff from the construction site does not cause erosion downstream of the discharge point. If any substantial erosion or sedimentation occurs as a result of discharging storm water from a project construction site, any erosion or sedimentation damage shall be restored to pre-discharge conditions.	The BMPs identified pursuant to this measure, and the requirement that substantial erosion or sedimentation be restored to pre-discharge conditions shall be included in the construction contract as a contract specifi- cation and implemented by the contractor during construction.	A copy of the construction contract including this geology/soils mitigation measure shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Geology	and Soils		
GEO-4:	For project-level development involving ground disturbance, a qualified paleontologist shall be retained to determine the necessity of conducting a study of the project area(s) based on the potential sensitivity of the project site for paleontological resources. If deemed necessary, the paleontologist shall conduct a paleontological resources inventory designed to identify potentially significant resources. The paleontological resources inventory would consist of: a paleontological resource records search to be conducted at the San Bernardino County Museum and/or other appropriate facilities; a field survey or monitoring where deemed appropriate by the paleontologist; and recordation of all identified paleontological resources shall follow the Phasing and corresponding actions identified under MM CUL-2.	The paleontologist shall be retained and the recommendation to conduct a study shall be completed prior to site selection and any study shall be completed prior to initiating construction. Any recordation of identified paleontological resources shall occur during construction. Any reports documenting management and findings for accidentally exposed resources shall be completed within one year of the discovery.	A copy of the site paleontological evaluation shall be retained in the project file. A copy of initial findings shall be provided to the Watermaster or Watermaster Stakeholders/Implementing Agencies and retained in the project file(s). A copy of the final report shall be retained in the project file(s).
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hazards	and Hazardous Materials		
HAZ-1:	For OBMPU facilities that handle hazardous materials or generate hazardous waste, the <u>Hazardous Materials</u> Business Plan prepared and submitted to the <u>Certified Unified Program Agency</u> shall incorporate best management practices designed to minimize the potential for accidental release of such chemicals <u>and will meet the standards required by California law for Hazardous Materials</u> <u>Business Plans.</u> The facility managers shall implement these measures to reduce the potential for accidental releases of hazardous materials or wastes. <u>The Hazardous Materials Business</u> <u>Plan shall be approved prior to operation of the given facility.</u>	The Business Plan shall be completed prior to operation of an individual facility.	A copy of the Business Plan shall be retained in the project file and shall be submitted to the City or County for their records. This Plan shall be retained at the Project site and made available to employees working at the facility. Site inspections shall be performed to ensure compliance with the best management practices outlined in the Business Plan.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hazards	and Hazardous Materials		
HAZ-2:	The <u>Hazardous Materials</u> Business Plan shall assess the potential accidental release scenarios and identify the equipment and response capabilities required to provide immediate containment, control and collection of any released <u>hazardous</u> material. Adequate funding shall be provided to acquire the Prior to issuance of the certificate of occupancy, each facility shall satisfy the Implementing Agency that necessary equipment, has been installed and training of personnel has occurred in responses and to obtain sufficient resources to control and prevent the spread of any accidentally released hazardous or toxic materials.	The Business Plan shall be completed prior to operation of an individual facility.	A copy of the Business Plan shall be retained in the project file. This Plan shall be retained at the Project site and made available to employees working at the facility. Site inspections shall be performed to ensure adequate equipment has been provided and personnel have been adequately trained in accordance with the Business Plan.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hazards HAZ-3:	and Hazardous Materials For the Prior to issuing the certificate of occupancy for any storage of any acutely hazardous material at an OBMPU facility, such as chlorine gas, modeling of pathways of release and potential exposure of the public to any released material shall be completed and specific measures, such as secondary containment, shall be implemented to the satisfaction of the Implementing Agency to ensure that sensitive receptors will not be exposed to significant health threats based on the twice substance involved	The modeling shall be completed prior to operation of a given proposed facility and measures to protect sensitive receptors implemented during construction.	A copy of the results of the modeling and any measures developed to minimize accidental exposure to hazardous materials shall be retained in the Project file. Site inspections shall be performed to ensure the proper procedures pertaining to storage and handling of acutely hazard waste are adhered to.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hazards	and Hazardous Materials		
HAZ-4:	All hazardous contaminated material shall be delivered to a licensed treatment, disposal or recycling facility that has the appropriate systems to manage the contaminated material without significant impact on the environment and be disposed of in accordance with California and federal law.	This measure shall be included in the construction contract as a contract specifi- cation and implemented by the contractor during construction. Additionally, this measure shall be implemented ongoing during operation.	A copy of the construction contract including this hazards mitigation measure shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file. During operations, records shall be kept documenting all hazardous waste disposal and site inspections by the Implementing Agency shall be performed to ensure adherence to this measure.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hazards and Hazardous Materials			
HAZ-5:	Before determining that an area contaminated as a result of an accidental release is fully remediated, specific thresholds of acceptable clean-up shall be established and sufficient samples shall be taken within the contaminated area to verify that these clean-up thresholds have been met in compliance with state and federal law.	This measure shall be implemented following an accidental spill of any hazardous material at an OBMPU facility.	A copy of the specific threshold used for a spill shall be retained in the project file, and a copy of the sample test data verifying clean- up of the site shall also be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hazards HAZ-6:	and Hazardous Materials Vector management plans shall be prepared and use of pesticides shall be reviewed and coordinated with the West Valley Mosquito and Vector Control District for approval prior to implementing vector control at any of the new or expanded storage basins. All pesticides shall be applied in accordance with State and label requirements to minimize potential for residual concentrations that may be considered adverse to public health and water quality.	This measure shall be included in the O&M contract as a contract specification and implemented by the contractor during vector control activities. Additionally, the Vector Management Plans shall be completed prior to operation of an individual facility.	A copy of the Vector Management Plans shall be retained in the project file(s). The Implementing Agency shall retain copies of correspondence with vector control agencies. Site inspections by the Implementing Agency shall be performed to ensure adherence to this measure.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hazards and Hazardous Materials			
HAZ-7:	All accidental spills or discharge of hazardous material during construction activities shall be reported to the County Fire Department Certified Unified Program Agency and shall be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at an appropriately <u>a</u> licensed disposal or treatment facility. This measure shall be incorporated into the SWPPP prepared for each future facility developed under the OBMPU PEIR SEIR . Prior to accepting the site as remediated, the area contaminated shall be tested to verify that any residual concentrations meet the standard for future residential or public use of the site.	This measure shall be included in the construction contract as a contract specifi- cation and implemented by the contractor during construction, and shall be included as a measure in the SWPPP.	A copy of the SWPPP and construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hazards and Hazardous Materials			
HAZ-8:	Prior to final site selection for future OBMPU facilities, the Implementing Agency shall obtain a Phase I Environmental Site Assessment (ESA) for the selected site. If a site contains contamination the agency shall either avoid the site by selecting an alternative location or shall remove any contamination (remediate) at the site to a level of concentration that eliminates hazard to employees working at the site and that will not conflict with the installation and future operation of the facility. For sites located on agricultural land, this can include soil contaminated with unacceptable concentrations of pesticides or herbicides that shall be remediated through removal or blending to reduce concentrations below thresholds of significance established for the particular pesticide or herbicide <u>in compliance with California and federal</u> <u>law</u> .	The Phase I shall be completed prior to initiation of construction. Where applicable, site remediation shall be included as part of the construction contract for each individual project.	A copy of the Phase I shall be retained in the project file(s). A copy of the construction contract including this hazards mitigation measure shall be retained in the project file(s). Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hazards HAZ-9:	and Hazardous Materials Should an unknown contaminated site be encountered during construction of OBMPU facilities, all work in the immediate area shall cease; the type of contamination and its extent shall be determined; and the local CUPA Certified Unified Program Agency and other regulatory agencies (such as the DTSC or Regional Board) shall be notified. Based on investigations of the contamination, the site may be closed and avoided or the contaminant(s) shall be remediated to a threshold acceptable to the Certified Unified Program Agency CUPA or other regulatory agency threshold and any contaminated pail or other material shall be delivered to an outherized treatment or	This measure shall be included in the construction contract as a contract specification and implemented by the contractor during construction.	A copy of the construction contract including this hazards mitigation measure shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
	disposal site.		
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hazards and Hazardous Materials			
HAZ-10:	Prior to finalizing site selection of an OBMPU facility with <u>in</u> an airport safety zone, input from the affected airport management entity shall <u>be</u> solicited. For projects within airport safety zones, facility design shall follow the guidelines of the appropriate airport land use <u>compatibility</u> plan to the extent feasible. If legitimate safety hazards are a potential conflict with an airport land use <u>compatibility plan is</u> identified, the Implementing Agency shall relocate the facility outside the area of conflict if feasible, or if the site is deemed essential, the Implementing Agency shall propose an alternative design that reduces any conflict to a less than significant level of conflict. As an example, a pump station or reservoir could be installed below ground instead of above ground.	The input from the Airport shall be obtained prior to finalizing site selection. Specific mitigation shall be included in the construction contract as a contract specification and implemented by the contractor during construction.	A copy of the Airport input and all correspondence with Airport management agencies shall be retained in the project file. If a facility must be installed within an Airport safety zone, a copy of the construction contract including this hazards mitigation measure shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hazards and Haza HAZ-11: Prior to Agency contains access. steel tre open tre construct service provide construct The Imp and oth Bernarc	Aradous Materials o initiating construction of proposed facilities, the Implementing y shall prepare and implement a Traffic Control Plan that as comprehensive strategies for maintaining emergency s. Strategies shall include, but are not limited to, maintaining ench plates at the construction sites to restore access across renches and identification of alternate routing around uction zones. In addition, police, fire, and other emergency e providers (local agencies, Caltrans, and other service lers) shall be notified of the timing, location, and duration of the uction activities and the location of detours and lane closures. uplementing Agency shall ensure that the Traffic Control Plan her construction activities are consistent with the San dino County Operational Area Emergency Wesponse Plan, e reviewed and approved by the local agency with authority	This measure shall be included in the construction contract as a contract specifi- cation and implemented by the contractor during construction. The Traffic Control Plan shall be developed prior to initiation of construction.	A copy of the Traffic Control Plan shall be retained in the project file(s). Verification of implementation shall be based on field inspections by the Implementing Agency. Additionally, where applicable, correspondence with Caltrans, and/or the corresponding County or City traffic management division shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hazards a	and Hazardous Materials		
HAZ-12:	 During Prior to construction of facilities located in areas designated as High or Very High Fire Hazard Severity Zones (VHFHSZs) by CAL FIRE, fire hazard reduction measures shall be implemented and incorporated into a fire management plan for the proposed facility. and shall be implemented during construction. 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 shall 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. This plan shall be reviewed by the Implementing Agency and CALFIRE and approved prior to construction within high and very high severity zones and implemented once approved. The fire management plan shall also include sufficient defensible space or other measures at a facility site located in a high or very high fire severity area to minimize fire damage to a level acceptable to the Implementing Agency CALFIRE. Furthermore, the Counties of Riverside and San Bernardino require businesses that use or store certain quantities of hazardous materials and submit a Hazardous Materials Business Plan (HMBP) that describes the hazardous materials and submit a Hazardous materials be required businesses and submit a Hazardous materials business prove an HMBP pursuant to the applicable local agency. 	The input from CAL FIRE shall be obtained and the Fire Management Plan developed prior to initiating construction. This measure shall be included in the construction contract as a contract specification and implemented by the contractor during construction.	A copy of the Fire Control Plan shall be retained in the project file(s). Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file. During operations, records shall be kept documenting compliance with this measure; site inspections by Implementing Agencies inspection personnel shall be performed to ensure adherence to this measure.
		Responsible Party	Status / Date / Initials
		Implementing Agency	
	Mitigation Measure	Implementation Schedule	Verification
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Land Use	e / Planning		
LU-1:	Following selection of sites for future OBMPU-related facilities, each site and associated facility shall be evaluated for potential incompatibility with adjacent existing or proposed land uses. Where future facility operations can create significant incompatibilities (lighting, noise, use of hazardous materials, traffic, etc.) with adjacent uses, an alternative site shall be selected, or subsequent CEQA documentation shall be prepared that identifies the specific measures that will be utilized to reduce potential incompatible activities or effects to below significance thresholds established in the general plan for the jurisdiction where the facility will be located.	Site evaluation should be completed by the Implementing Agency during site selection, prior to construction. Where applicable, subsequent CEQA documentation shall be completed prior to initiation of construction. The measures generated in the subsequent CEQA documentation shall be incorporated into individual project design specifications, which shall be included in the construction contract as a contract specification and implemented by the contractor during construction.	Correspondence related to site selection shall be retained in the project file(s). Where applicable, a copy of the subsequent CEQA documentation for the individual project shall be retained in the project file. A copy of the construction contract including any land use related measures generated by the subse- quent CEQA documentation (where appli- cable) shall be retained in the project file(s). Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Mineral I	Resources		
MR-1:	For each new groundwater treatment facility (regionally located or near existing well sites), Flood MAR facility, and MS4 compliance sites, the Implementing Agency shall locate these facilities outside of sites designated for the extraction of or as containing significant mineral resources (such as, located within MRZ-2 zones) or otherwise identified by the local jurisdiction as containing important mineral resources (such as, designated by the local general plan as being located within a mineral extraction related land use). Where it is not feasible to locate such facilities outside of sites designated for mineral resources, a subsequent CEQA documentation shall be prepared that identifies specific measures that compensate for the loss of mineral resources.	Site evaluation should be completed by the Implementing Agency during site selection, prior to construction. Where applicable, subsequent CEQA documentation shall be completed prior to initiation of construction.	Correspondence related to site selection shall be retained in the project file(s). Where applicable, a copy of the subsequent CEQA documentation for the individual project shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Noise NOI-1:	Mitigation Measure The Watermaster and/or Implementing Agency shall implement the following measures during construction: • Include design measures where feasible to reduce the construction noise levels if necessary to comply with local noise ordinances, or seek a variance from local noise ordinance if otherwise not feasible to comply. These measures may include, but are not limited to, the erection of noise barriers/curtains, use of advanced or state-of-the-art mufflers on construction and/or reduction in the amount of	Implementation Schedule This measure shall be included in the construction contract as a contract specifi- cation and implemented by the contractor during construction.	Verification A copy of the construction contract including this noise mitigation measure shall be retained in the project file. Verification of implementation shall be based on field inspections by Watermaster and/or the Implementing Agency. Field notes documenting verification shall be retained in the project file.
	 Construction equipment, and/or reduction in the amount of equipment that would operate concurrently at the construction site. Place noise and groundborne vibration-generating construction activities whose specific location on a construction site may be flexible (e.g., operation of compressors and generators, cement mixing, general truck idling) as far as possible from the nearest noise- and vibration-sensitive land uses such as residences, schools, and hospitals. Minimize the effects of equipment with the greatest peak noise generating operation of compression of a construction of site may be flexible (e.g., operation of compressors and generators, cement mixing, general truck idling) as far as possible from the nearest noise- and vibration-sensitive land uses such as residences, schools, and hospitals. 		
	 generation potential via structuring of strieduling to the extent feasible. Examples include the use of drills, pavement breakers, and jackhammers. Locate stationary construction noise sources as far from adjacent noise-sensitive receptors as possible, and require that these noise sources be muffled and enclosed within temporary sheds, insulation barriers if necessary, to comply with local noise ordinances. Provide noise shielding and muffling devices on construction equipment per the manufacturer's specifications. 		
	 If construction is to occur near a school, the construction contractor shall coordinate the with school administration in order to limit disturbance to the campus. Efforts to limit construction activities to non-school days shall be encouraged. For major construction projects, identify a liaison for surrounding residents and property owners to contact with concerns regarding construction noise and vibration. The liaison's telephone number(s) shall be prominently displayed at 		
	 Construction locations. For major construction projects, notify in writing all landowners and occupants of properties adjacent to the construction area of the anticipated construction schedule at least two weeks prior to groundbreaking. 		

Mitigation Measure	Implementation Schedule	Verification
 Construction activities shall occur within the hours considered to be acceptable for construction by the applicable jurisdiction within which an individual project is constructed, except for activities, such as well drilling which are continuous, and for emergencies. Where no such restrictions are in place that limit hours of construction, construction shall be limited to the hours of 7 AM and 6 PM on weekdays, 8 AM and 5 PM on Saturdays, and at no time shall construction activities occur on Sundays or holidays, unless a declared emergency exists. 		
	Responsible Party	Status / Date / Initials
	Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Noise NOI-2:	The Watermaster and/or Implementing Agency shall require that all OBMPU-related aboveground facilities that include stationary noise generating equipment (such as emergency generators, blowers, pumps, motors, etc.) to minimize their audible noise levels by locating equipment away from noise-sensitive receptor areas, installing proper acoustical shielding for the equipment, and incorporating the use of parapets into building design to meet the applicable City or County noise level requirements at neighboring property lines.	This measure shall be included in the construction contract as a contract specification and implemented by the contractor during construction.	A copy of the construction contract including this noise mitigation measure shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Noise NOI-3:	For Prior to authorizing construction activities during non-standard working hours, or hours that are not exempt from compliance with applicable City or County noise ordinances (e.g., 24-hour well drilling), the Watermaster and/or Implementing Agency will secure a noise waiver from the appropriate jurisdiction if available .	This measure shall be included in the construction contract as a contract specifi- cation and implemented by the contractor during construction. The noise waiver shall be obtained prior to construction.	A copy of the noise waiver and the construc- tion contract including this noise mitigation measure shall be retained in the project file. Verification of implementation shall be based on the construction permit issued by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Noise NOI-4:	Injection and extraction wells shall be located as far from sensitive receptors as feasible. If new wells are to be constructed in the immediate vicinity of sensitive receptors, construction specification requirements shall include installation and maintenance of a temporary noise barrier (e.g. engineered sound wall or noise blanket) during 24-hour construction activities, to the extent feasible if necessary to comply with local noise ordinances. Specifications shall include use of appropriate materials that shall be installed to a height that intercepts the line of sight between the construction site and sensitive receptors in order to achieve maximum attenuation in an attempt to decrease construction area noise to as close as ambient noise levels as possible. Furthermore, where new wells are located adjacent to sensitive receptors, wells and any other associated noise generating facilities (i.e. associated treatment facilities, pumps, generators, etc.) shall be enclosed within a structure to attenuate noise to an acceptable level comply with the applicable noise threshold at the nearest sensitive receptor.	This measure shall be incorporated into the final design once a site has been selected for a well, and shall be included in the construction contract as a contract specifi- cation and implemented by the contractor during construction.	A copy of the construction contract including this noise mitigation measure shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Noise			
NOI-5:	 The Watermaster and/or Implementing Agency shall require the construction contractor(s) to implement the following measures: Ensure that the operation of construction equipment that generates high levels of vibration including, but not limited to, large bulldozers, loaded trucks, pile-drivers, vibratory compactors, and drilling rigs, is minimized to below the local jurisdiction's acceptable level of vibration, or where no level has been established, 72 vibration decibels (VdB), within 45 feet of existing residential structures and 35 feet of institutional structures (e.g., schools) during construction of the various OBMPU projects. Use of small rubber-tired bulldozers shall be enforced within these areas during grading operations to reduce vibration effects. The construction contractor for any individual OBMPU project shall provide signs along the roadway identifying a phone number for adjacent property owners to contact with any complaint. During future construction activities for any individual OBMPU project with heavy equipment within 300 feet of occupied residences, vibration field tests shall be conducted at the property line near the nearest occupied residences. To the extent feasible, If vibrations exceed 72 VdB, the construction activities shall be revised to reduce vibration below this threshold. These measures may include, but are not limited to the following: use different construction methods, slow down construction activity, or other mitigating measures to reduce vibration at the property from where the complaint was received. 	This measure shall be included in the construction contract as a contract specification and implemented by the contractor during construction.	A copy of the construction contract including this noise mitigation measure shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Noise NOI-6:	Where an OBMPU project would be constructed adjacent to an existing or potential historic building, the Watermaster and/or Implementing Agency shall require, through contract specifications, a certified structural engineer to be retained to submit <u>a report</u> <u>documenting</u> evidence that the operation of vibration-generating equipment associated with the construction activities would not result in any structural damage to the adjacent historic building <u>prior to</u> <u>construction commences</u> . Contract specifications shall be included in the construction documents for the applicable OBMPU project development.	This measure shall be included in the construction contract as a contract specification and implemented by the contractor during construction.	A copy of the construction contract including this noise mitigation measure shall be retained in the project file. Results of the findings of the structural engineer shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes or reports documenting verification shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Noise NOI-7:	Where an OBMPU project would be constructed within 2 miles of a public airport, any new indoor facilities should be retrofitted designed as documented by a professional noise technical study, to minimize noise to a level that is within OSHA's permissible exposure limit (PEL). Employees working outside at an OBMPU project, either during construction or operation, shall be provided with ear protection to minimize noise to a level that is below OSHA's PEL to be utilized during periods of excessive noise caused by any aircraft overflights.	This measure shall be included in the construction contract as a contract specifi- cation and implemented by the contractor during construction. Additionally, this measure shall be implemented ongoing during operation.	A copy of the construction contract including this noise mitigation measure shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes documenting verification shall be retained in the project file. During operations, site inspections by Implementing Agency inspection personnel shall be performed to ensure adherence to this measure.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Population and Housing			
POP-1:	If future OBMPU facilities must be located on parcels occupied by existing housing <u>and displaces that housing as a result</u> , the <u>proponent of the facility Implementing Agency</u> will <u>assist with a</u> <u>relocation plan in conformance with Section 7260 et seq. of the</u> <u>California Government Code ("California Relocation Assistance</u> <u>Law" or the "Act") to</u> ensure that short- and long-term housing of comparable quality and value are made available to the home owner(s) prior to initiating construction of the facility.	This measure shall be carried out prior to initiating construction and/or operation depending on the nature of the housing requirements.	The relocation plan shall be retained in the project file. Documentation of the actions taken to secure housing, where applicable, shall be retained in the project file, and the Implementing Agency shall verify that the housing is secured as required in this measure.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Public S PS-1:	Gervices OBMPU facilities shall be fenced or otherwise have access controlled to prevent illegal trespass to attractive nuisances, such as construction sites or recharge sites.	This measure shall be incorporated into the final site design, and shall be included in the construction contract as a contract specification and implemented by the contractor during construction.	A copy of the construction contract including this mitigation measure shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Public S PS-2:	ervices OBMPU facilities proposed to be located within vacant parkland or OBMPU facilities proposed to be located within existing park or recreation facilities that would require more than one acre of disturbance shall be either (1) Relocated to avoid significant impacts to parkland or (2) Shall provide supplemental parkland within the corresponding jurisdiction equal or greater to the amount of parkland or recreation facilities lost as a result of implementation of the OBMPU facility.	This measure shall be implemented during site selection and shall be completed prior to operation of the proposed facility.	Documentation verifying the provision of the supplemental park land shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Recreation REC-1: The Watermaster or Implementing Agency shall prepare subsequent CEQA documentation for any Park or Recreation facilities required to be developed as part of implementation of mitigation measure PS-2—i.e., in the event an OBMPU Facility would be result in loss of parkland or recreation facilities.		The subsequent CEQA documentation shall be completed prior to implementation of any park or recreation facility.	Where applicable, a copy of the subsequent CEQA documentation for the individual project shall be retained in the project file. Verification shall be based on the submission of the final CEQA documentation to the Implementing Agency.
		Responsible Party	Status / Date / Initials
		Watermaster or Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Transportation			
TRAN-1:	 For projects that may affect traffic flow along existing roadways, the Implementing Agency shall require that contractors prepare a construction traffic control plan prior to issuance of construction permits. 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. 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. Coordinate with facility owners or administrators of sensitive land uses such as police and fire stations, hospitals, and schools. Provide advance notification to the facility owner or operator of the timing, location, and duration of construction activities. 	This measure shall be included in the construction contract as a contract specifi- cation and implemented by the contractor during construction. The Traffic Control Plan shall be developed prior to initiation of construction.	A copy of the Traffic Control Plan and construction contract shall be retained in the project file(s). Verification of implementation shall be based on field inspections by the Implementing Agency. Additionally, correspondence with Caltrans, and/or the corresponding County or City traffic management division shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Utilities and Service Systems			
UTIL-1	The Watermaster or Implementing Agency shall prepare subsequent CEQA documentation for the Agua de Lejos Treatment Plant and upgrades to the Chino Desalters, new groundwater treatment facilities at or near well sites and at regionally located sites once specific improvements or facility locations have been identified, and design of such improvements or new facilities has been drafted.	The subsequent CEQA documentation shall be completed prior to implementation of any of the facilities listed in this measure.	Where applicable, a copy of the subsequent CEQA documentation for the individual project shall be retained in the project file. Verification shall be based on the submission of the final CEQA documentation to the Implementing Agency.
		Responsible Party	Status / Date / Initials
		Watermaster or Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Utilities UTIL-2	and Service Systems Implementation of a Drainage Plan to Reduce Downstream Flows. Prior to <u>issuance of permits for</u> construction of project facilities, the Watermaster or Implementing Agency shall prepare a drainage plan that includes design features to reduce stormwater peak concentration flows exiting the above ground facility sites (consistent with MS4 requirements) so that the capacities of the existing downstream drainage facilities are not exceeded. These design features could include bio-retention, sand infiltration, return of stormwater for treatment within the treatment plant, and/or detention facilities.	This measure shall be included in the site design and construction contract as a contract specification and implemented by the contractor during construction. The Drainage Plan shall be developed prior to initiation of construction.	A copy of the Drainage Plan and construction contract shall be retained in the project file(s). Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Watermaster or Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Utilities UTIL-3	and Service Systems The contract with demolition and construction contractors for a given OBMPU Project shall include the requirement that all materials that can feasibly be recycled shall be salvaged and recycled. This includes but is not limited to wood, metals, concrete, road base and asphalt. The contractors for a given OBMPU Project shall submit a recycling plan to the Watermaster or Implementing Agency for review and approval prior to issuance of permits for the construction of demolition/construction activities.	This measure shall be included in the construction contract as a contract specifi- cation and implemented by the contractor during construction. The recycling plan shall be developed and approved prior to construction.	A copy of the recycling plan, as well as copy of the construction contract including this mitigation measure shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Watermaster or Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Utilities a UTIL-4	and Service Systems The contract with demolition and construction contractors for a given OBMPU Project shall include the requirement that all soils that are planned to be exported from the site that can feasibly be recycled shall be recycled for re-use; alternatively, soils shall be reused on site to balance soil import/export.	This measure shall be included in the construction contract as a contract specification and implemented by the contractor during construction.	A copy of the construction contract including this mitigation measure shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Documentation of soils recycling shall be completed by the contractor and retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

SUBSEQUENT ENVIRONMENTAL IMPACT REPORT MEASURES

	Mitigation Measure	Implementation Schedule	Verification
Air Qual AQ-1	<i>ity</i> When using construction equipment greater than 150 horsepower (>150 hp), the Construction Contractor shall ensure that off-road diesel construction equipment complies with the Environmental Protection Agency (EPA)/California Air Resources Board (CARB) Tier 4 emissions standards or equivalent and shall ensure that all construction equipment is tuned and maintained in accordance with the manufacturer's specifications.	This measure shall be implemented during construction of future OBMPU facilities, and shall be included in the construction contract as a contract specification.	A copy of the construction contract including this mitigation measure shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Air Quali AQ-2	<i>ty</i> All actively graded areas within the Project site shall be watered at 2.1-hour watering intervals (e.g., 4 times per day) or a movable sprinkler system shall be in place to ensure minimum soil moisture of 12 percent (%) is maintained for actively graded areas. Moisture content can be verified with use of a moisture probe by the grading contractor.	This measure shall be implemented during construction of future OBMPU facilities, and shall be included in the construction contract as a contract specification.	A copy of the construction contract including this mitigation measure shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

Mitigatio	n Measure	Implementation Schedule	Verification
Biological Resources			
 BIO-1 <u>All future OBMPU Projects s</u> <u>gualified professional to dete</u> <u>biological surveys. Where a</u> <u>site-specific survey by a qua</u> <u>which a future OBMPU proje</u> <u>impacts</u> will affect undevelope <u>Agency seeks State Funding</u> qualified biologist/ecologist. If result of the survey for which n in accordance with regulatory n mitigation actions will be taken a. The project proponent shat habitat acreage lost by acc (through property or mitigat the sensitive species at a The property acquisition st animal or plant per animal compensate for the loss of b. The final mitigation may di negotiations between the p CDFW for any incidental ta project proponent shall ret as verification that the miti impacts at a project site w been accomplished. c. Preconstruction botanical communities and special-s areas that were not previo timing issues or project de for special-status plant cor species will be conducted activities during the approp 	thall be required to consult with a ermine the need for site-specific site has been determined to require a alified professional, in any case in ect Where future project-related ed land, or in which the Implementing g, site surveys shall be conducted by a sensitive species are identified as a initigation/compensation must be provided requirements, the following subsequent to all provide compensation for sensitive quiring and protecting in perpetuity ation bank credit acquisition) habitat for ratio of not less than 1:1 for habitat lost. hall include the presence of at least one or plant lost at the development site to f individual sensitive species. iffer from the above values based on project proponent and USFWS and ake permits for listed species. The ain a copy of the incidental take permit gation of significant biological resource ith sensitive biological resource has surveys for special-status plant status plant species will be conducted. In usly surveyed because of access or esign changes, pre-construction surveys mmunities and special-status plant before the start of ground-disturbing priate blooming period(s) for the species.	The survey(s) shall be conducted prior to construction. Where applicable, compensatory habitat shall be acquired prior to operation of the facility.	A copy of the survey(s) and any acquisition paperwork pertaining to compensatory habitat shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency, as well as by retaining the ITP. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologica	al Resources		
BIO-2	Biological Resources Management Plan (BRMP): During final design and prior to issuance of construction permits, a BRMP will be prepared to assemble the biological resources mitigation measures for each specific infrastructure improvement in the future. The BRMP will include terms and conditions from applicable permits and agreements and make provisions for monitoring assignments, scheduling, and responsibility. The BRMP will also discuss habitat replacement and revegetation, protection during ground-disturbing activities, performance (growth) standards, maintenance criteria, and monitoring requirements for temporary and permanent native plant community impacts. The parameters of the BRMP will be formed with the mitigation measures from the project-level EIR/EIS_subsequent CEQA documentation, including terms and conditions as applicable from the USFWS, USACE, SWRCB/RWQCB, and CDFW.	The BRMP shall be developed during final design of a given project site. The measures developed in the BRMP shall be implemented during construction of future OBMPU facilities, and shall be included in the construction contract as a contract specification.	A copy of the BRMP shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biological	Resources		
BIO-3 F BIO-3 F F o c c c c c c c c c c c c c c c c c	Prior to discharge of fill or streambed alteration of <u>state or federal</u> <u>water</u> jurisdictional areas, the project proponent shall obtain egulatory permits from the U.S. Army Corps of Engineers, local Regional Water Quality Control Board and the California Department of Fish and Wildlife. Any future project that must discharge fill into a channel or otherwise alter a streambed shall be minimized to the extent feasible, and any discharge of fill not avoidable shall be nitigated through compensatory mitigation. Mitigation can be provided by restoration of temporary impacts, enhancement of existing resources, or purchasing into any authorized mitigation bank or in-lieu fee program; by selecting a site of comparable acreage near he site and enhancing it with a native riparian habitat or invasive species removal in accordance with a habitat mitigation plan approved by regulatory agencies; or by acquiring sufficient compensating habitat to meet regulatory agency requirements. Typically, regulatory agencies require mitigation for jurisdictional vaters without any riparian or wetland habitat to be mitigated at a 1:1 atio. For loss of any riparian or other wetland areas, the mitigation atio will begin at 2:1 and the ratio will rise based on the type of nabitat, habitat quality, and presence of sensitive or listed plants or animals in the affected area. A Habitat Mitigation and Monitoring Proposal shall be prepared and reviewed and approved by the appropriate regulatory agencies. The project proponent will also obtain permits from the regulatory agencies (U.S. Army Corps of Engineers, Regional Water Quality Control Board, CDFW and any other applicable regulatory agency with jurisdiction over the proposed acility improvement) if any impacts to jurisdictional areas will occur. These agencies can impose greater mitigation requirements in their permits, but Caltrans-the Implementing Agency will utilize the ratios putlined above as the minimum required to offset or compensate for mpacts to jurisdictional waters, riparian ar	If necessary, the regulatory permits shall be obtained prior to ground disturbance within the jurisdictional area and the conditions of the regulatory permits shall be implemented as defined in the regulatory permits.	A copy of the regulatory permits shall be retained in the project file(s), and verification that all conditions have been implemented shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologica BIO-4	al Resources Jurisdictional Water Preconstruction Surveys: A federal and state jurisdictional water preconstruction survey will be conducted at least six months before the start of ground-disturbing activities to identify and map all jurisdictional waters in the project footprint and if possible within up to a 250-foot buffer <u>around the project</u> <u>footprint, subject to legal property access restrictions.</u> The purpose of this survey is to confirm the extent of jurisdictional waters <u>within the project footprint and adjacent up to 250 foot buffer in</u> areas where permission to enter was not previously granted and where aerial photograph interpretation was used to estimate the extent of these features. If possible, surveys would be performed during the spring, when plant species are in bloom and hydrological indicators are most readily identifiable. These results would then be used to calculate impact acreages and determine the amount of compensatory mitigation required to offset the loss of wetland functions and values.	The survey(s) shall be conducted at least six months prior to construction during the spring, where possible.	A copy of the survey(s) shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologica	al Resources		
BIO-5	It is illegal to "take" active bird nests of native birds, and if such nests are present at a project site, no take is allowed. To avoid an illegal take of active bird nests, any grubbing, brushing or tree removal will be conducted outside of the State identified nesting season (nesting season is approximately from February 15 through September 1 of a given calendar year). <u>Alternatively, a nesting bird</u> <u>survey that demonstrates that no bird nests will be disturbed</u> <u>during project construction can be conducted by a qualified</u> <u>biologist no more than 14 days prior to initiation of ground</u> <u>disturbance; construction may only commence once a qualified</u> <u>biologist has demonstrated that no nesting birds are present at a</u> <u>given site. Alternatively, The Implementing Agency shall</u> coordinate with the CDFW to conduct develop nesting bird surveys <u>protocol will be completed, and methodology of surveys will be</u> agreed upon. All nesting bird surveys will be conducted by a qualified biologist prior to initiation of ground disturbance to demonstrate that no bird nests will be disturbed by project construction activities. The results of the nesting bird survey will be documented in a report submitted by the avian biologist to the Implementing Agency. The Implementing Agency, in coordination with CDFW and USFWS (as appropriate), may designate nest buffers outside of which construction activities may be allowed to proceed.	Construction shall occur outside of the nesting season or a copy of the field survey docu- menting no nesting birds shall be completed prior to initiating construction within the nesting season.	The Implementing Agency shall document the dates of construction. If construction is proposed to occur within the nesting season, a copy of the field survey documenting the absence of nesting birds shall be retained in the project file. Any coordination with CDFW pertaining to nesting birds shall also be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologica	al Resources		
BIO-6	All future OBMPU Projects shall be required to consult with a qualified professional to determine the need for site-specific protocol burrowing owl surveys. Prior to commencement of construction activity where a site has been determined to require a protocol burrowing owl surveys survey by a qualified professional, or in locations that are not fully developed, a protocol burrowing owl survey will be conducted using the 2012 survey protocol methodology identified in the "Staff Report on Burrowing Owl Mitigation, State of California, Natural Resources Agency, Department of Fish and Game, March 7, 2012", or the most recent CDFW survey protocol available. Protocol surveys shall be conducted by a qualified biologist to determine if any burrowing owl burrows are located within the potential area of impact. If occupied burrows may be impacted, an impact minimization plan shall be developed and approved by in coordination with CDFW and submitted to the Implementing Agency that will protect the burrow in place or provide for passive relocation to an alternate burrow within the vicinity but outside of the project footprint in accordance with	The survey(s) shall be conducted prior to construction. All actions pertaining to the discovery of burrowing owl shall occur prior to or during construction depending on the direction within the impact minimization plan.	A copy of the survey(s), and where required, the impact minimization plan, shall be retained in the project file. Verification of implementa- tion shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
	foot buffer until all nestlings have fledged.		
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologic BIO-7	cal Resources Prior to commencement of construction activity on a project facility within a MSHCP/HCP plan area, consistency with that plan, or take authorization through that plan, shall be obtained. Through avoidance, compensation or a comparable mitigation alternative, each project shall be shown to be consistent with a MSHCP/HCP.	This measure shall be implemented prior to commencement of construction.	Documentation verifying consistency with the MSHCP/HCP shall be obtained by the Implementing Agency, and a copy of this documentation shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologica	al Resources		
BIO-8	During the design phase of future OBMPU projects, the Implementing Agency shall place primary emphasis on the preservation of large, unbroken blocks of natural open space and wildlife habitat area, and protect the integrity of habitat linkages. As part of this emphasis, the Watermaster shall facilitate incorporate programs for purchase of lands, clustering of development to increase the amount of preserved open space, and assurances that the construction of facilities or infrastructure improvements meet standards identical to the environmental protection policies applicable to the specific facilities improvement by implementing agencies.	This measure shall be implemented during the design stage of each facility, and shall be included in the construction contract as a contract specification.	A copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biological F	Resources		
BIO-9 R pr ar <u>fc</u> a. b.	 equire facility designs and maintenance activities to be planned to rotect habitat values and to preserve significant, viable habitat areas ind habitat connection in their natural conditions. <u>A qualified</u> iologist shall be retained to determine the scope of the pllowing for a given Project site: Within designated habitat areas of rare, threatened or endangered species, prohibit disturbance of protected biotic resources. Within riparian areas and wetlands subject to state or federal regulations, riparian woodlands, oak and walnut woodland, and habitat linkages, require that the vegetative resources which contribute to habitat carrying capacity (vegetative diversity, faunal resting sites, foraging areas, and food sources) are preserved in place or replaced so as not to result in a measurable reduction in the reproductive capacity of sensitive biotic resources. Within habitats of plants listed by the CNDDB or CNPS as "special" or "of concern," require that new facilities do not result 	This measure shall be implemented during the design stage of each facility, and shall be included in the construction contract as a contract specification.	A copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
	in a reduction in the number of these plants, if they are present.		
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologica BIO-10	al Resources Maximize the preservation of individual oak, sycamore and walnut trees within proposed OBMPU facility sites. Preservation is defined	This measure shall be implemented during the design stage of each facility, and shall be	A copy of the construction contract and final design for each project shall be retained in the
	within this measure as follows: existing oak, sycamore and walnut trees within a given Project site shall be retained within the site to the maximum extent feasible except where their preservations would interfere with functional and reasonable project design. Where the preservation of individual trees is not possible, the guidelines set forth in MM AES-4 regarding tree preservation and adherence to local ordinances thereof shall be followed.	included in the construction contract as a contract specification.	project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologica BIO-11	al Resources Require the establishment of buffer zones adjacent to areas of preserved-biological resources <u>as recommended and defined by</u> <u>the site Biologist.</u> Such buffer zones shall be of adequate width to protect biological resources from grading and construction activities, as well as from the long-term use of adjacent lands. Permitted land modification activities with preservation and buffer areas are to be limited to those that are consistent with the maintenance of the reproductive capacity of the identified resources. The land uses and design of project facilities adjacent to a vegetative preservation area, as well as activities within the designated buffer area are not to be permitted to disturb natural drainage patterns to the point that vegetative resources receive too much or too little water to permit their ongoing health. In addition, landscape adjacent to areas of preserved biological resources shall be designed so as to avoid invasive species which could negatively impact the value of the preserved resource.	This measure shall be implemented during the design stage of each facility, and shall be included in the construction contract as a contract specification.	A copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
<u>.</u>		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biological Resources			
BIO-12	As part of completion of the final site development, after ground disturbance has occurred Following construction activities within or adjacent to any natural area, the disturbed areas shall be revegetated using a plant mix of native plant species that are suitable for long term vegetation management at the specific site, which shall be implemented in cooperation with regulatory agencies and with oversight from a qualified biologist. The seeds mix shall be verified to contain the minimum amount of invasive plant species seeds reasonably available for the project area.	This measure shall be implemented during the construction, and shall be included in the construction contract as a contract specification.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologic BIO-13	al Resources Clean Construction Equipment. During construction, equipment will be washed before entering the project footprint to reduce potential indirect impacts from inadvertent introduction of nonnative invasive plant species. Mud and plant materials will be removed from construction equipment when working in native plant communities, near special-status plant communities, or in areas where special- status plant species have been identified.	This measure shall be implemented during construction and shall be included in the construction contract as a contract specifi- cation.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologica	al Resources		
BIO-14	Contractor Education and Environmental Training. Personnel who work onsite will attend a Contractor Education and Environmental Training session <u>conducted by a qualified biologist</u> . The environmental training is likely to be required by the regulatory agencies and will cover general and specific biological information on the special-status plant species <u>that may be present</u> <u>near the construction site</u> , including the distribution of the resources, the recovery efforts, the legal status of the resources, and the penalties for violation of project permits and laws. The Contractor Education and Environmental Training sessions will be given before the initiation of construction activities and repeated, as needed, when new personnel begin work within the project limits. Daily updates and synopsis of the training will be performed during the daily safety ("tailgate") meeting. All personnel who attend the training will be required to sign an attendance list stating that they have received the Contractor Education and Environmental Training. <u>and such tracking sheets shall be maintained for inspection by</u>	The Contractor Education and Environmental Training sessions will be given before the initiation of construction activities and repeated, as needed, when new personnel begin work within the project limits. Daily updates and synopsis of the training will be performed during the daily safety ("tailgate") meeting. The measure shall be included in the construction contract as a contract specifi- cation.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on the contractor to submit training attendance lists to the Implementing Agency. Field notes from inspections shall be retained in the project file.
	the implementing Agency.	De care a se il·le Deute	Otatus / Data / Initials
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologica	al Resources		
BIO-15	Biological Monitor to Be Present during Construction Activities in areas where impacts to Riparian, Riverine, Wetland, Endangered Species or Endangered Species Critical habitat occurs. A biological monitor (or monitors) will be present onsite during construction activities that could result in direct or indirect impacts on sensitive biological resources (including listed species) and to oversee permit compliance and monitoring efforts for all special-status resources. A biological monitor (qualified biologist) is any person who has a bachelor's degree in biological sciences, zoology, botany, ecology, or a closely related field and/or has demonstrated field experience in and knowledge about the identification and life history of the special- status species or jurisdictional waters that could be affected by project activities. The biological monitor(s) will be responsible for monitoring the Contractor to ensure compliance with the Section 404 Individual Permit, Section 401 Water Quality Certification and the Lake and Streambed Alteration Agreement. Activities to ensure compliance would include performing construction-monitoring activities, including monitoring environmental fencing, identifying areas where special-status plant species are or may be present, and advising the Contractor of methods that may minimize or avoid impacts on these resources. Biological monitor(s) will be required to be present in all areas during ground disturbance activities and for all construction activities conducted within or adjacent to identified Environmentally Sensitive Areas, Wildlife Exclusion Fencing, and Non-Disturbance Zones <u>as defined by the Project biologist</u> .	This measure shall be implemented during construction and shall be included in the construction contract as a contract specifi- cation.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections and from the biological monitor activities shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologic BIO-16	al Resources Food and Trash: All food-related trash items (e.g., wrappers, cans, bottles, food scraps) will be disposed of in closed containers and removed at least once a week from the construction site.	This measure shall be implemented during construction and shall be included in the construction contract as a contract specification.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologica BIO-17	al Resources Rodenticides and Herbicides: Use of rodenticides and herbicides in the project footprint will be restricted <u>at the direction of the project</u> <u>biologist</u> . This measure is necessary to prevent poisoning of special- status species and the potential reduction or depletion of the prey populations of special-status wildlife species. Where pesticides must be used, they must be used in full accordance with use instructions for the particular chemical <u>and at the direction of the project</u> <u>biologist</u> .	This measure shall be implemented during construction and shall be included in the construction contract as a contract specifi- cation. Additionally, this measure shall be implemented ongoing during operation.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file. During operations, site inspections by the Implementing Agency shall be performed to ensure adherence to this measure.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologica	al Resources		
BIO-18	Wildlife Exclusion Fencing: Exclusion barriers (e.g., silt fences) will be installed at the edge of the construction footprint and along the outer perimeter of Environmentally Sensitive Areas and Environmentally Restricted Areas <u>as defined by the Project</u> <u>biologist prior to the commencement of construction activities</u> to restrict special-status species from entering the construction area <u>during construction</u> . The design specifications of the exclusion fencing will be determined through consultation with the USFWS and/or CDFW <u>, as appropriate</u> . Clearance surveys will be conducted for special-status species after the exclusion fence is installed <u>in</u> <u>compliance with USFWS and/or CDFW requirements</u> . If <u>necessary The project biologist shall determine the frequency in</u> <u>which</u> clearance surveys will be conducted <u>efficacy of the exclusion fencing</u> .	This measure shall be implemented during the design stage of each facility, and shall be included in the construction contract as a contract specification.	A copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologica BIO-19	al Resources Equipment Staging Areas: <u>Prior to the commencement of</u> <u>construction, the Project Proponent shall identify</u> staging areas for construction equipment <u>to be utilized during construction that</u> will be located outside sensitive biological resources areas, including habitat for special-status species, jurisdictional waters, and wildlife movement corridors , to the maximum extent possible .	This measure shall be implemented during construction and shall be included in the construction contract as a contract specification.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biological Resources BIO-20 Plastic mono-filament netting (erosion-control matting) or similar material will not be used in erosion control materials to prevent potential harm to wildlife. Materials such as coconut coir matting or tackified hydroseeding compounds will be used as substitutes.		This measure shall be implemented during construction and shall be included in the construction contract as a contract specifi- cation.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologic BIO-21	al Resources Vehicle Traffic: During ground-disturbing activities, project-related vehicle traffic will be restricted within the construction area to established roads, construction areas, and other designated areas to prevent avoidable impacts. Access routes will be clearly flagged and off-road traffic outside of the designated areas will be prohibited.	This measure shall be implemented during construction and shall be included in the construction contract as a contract specification.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologica BIO-22	<i>al Resources</i> Entrapment Prevention: All excavated, steep-sided holes or trenches more than 8 inches deep will be covered at the close of each working day with plywood or similar materials, or a minimum of one escape ramp constructed of earth fill for every 10 feet of trenching will be provided to prevent the entrapment of wildlife. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. All culverts or similar enclosed structures with a diameter of 4 inches or greater will be covered, screened, or stored more than 1 for the ground to provent upp by wildlife. Stored moterial will be	This measure shall be implemented during construction and shall be included in the construction contract as a contract specification.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
	cleared for common and special-status wildlife species before the pipe is subsequently used or moved.	Responsible Party	Status / Date / Initials
		implementing Agency	

Mitigation Measure	Implementation Schedule	Verification
Biological Resources		
 BIO-23 Weed Control Plan: Prior to the commencement of construction, a Weed Control Plan will be developed for the Implementing Agency by the Project Biologist to minimize or avoid the spread of weeds during ground-disturbing activities. In the Weed Control Plan, the following topics will be addressed: A Schedule for noxious weed surveys shall be addressed. Weed control treatments shall be addressed and ultimately implemented by the Implementing Agency, including permitted herbicides, and manual and mechanical methods for application; herbicide application will be restricted in Environmentally Sensitive Areas (as defined by the Project biologist). The timing of the weed control treatment for each plant species shall be addressed. The project Proponent shall maintain records demonstrating implementation of the Weed Control Plan, and shall make those records available to inspection by the Implementing Agency upon request. 	The Weed Control Plan should be developed prior to construction commencement. The Weed Control Plan shall be implemented during construction and shall be included in the construction contract as a contract specifi- cation.	A copy of the Weed Control Plan and the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
	Responsible Party	Status / Date / Initials
	Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologica	al Resources		
BIO-24	 Dewatering/Water Diversion <u>Plan</u>: Open or flowing water may be present during construction. If construction is planned to occur where there is open or flowing water, prior to the commencement of construction the Project Proponent shall submit to the Implementing Agency a Dewatering Plan prepared in coordination with a strategy that is approved by the resource agencies (e.g., USACE, SWRCB/RWQCB, and CDFW, as appropriate). The Dewatering Plan shall identify how open or flowing water will be routed around construction areas, such as through the creation of cofferdams, will be used to dewater or divert water from the work area. If cofferdams are constructed, implementation of the following cofferdam or water diversion measures is recommended shall be implemented to avoid and lessen impacts on jurisdictional waters during construction: The cofferdams, filter fabric, and corrugated steel pipe are to be removed from the regulatory agencies. The cofferdam is to be placed upstream of the work area to direct base flows through an appropriately sized diversion pipe. The diversion pipe will extend through the Contractor's work area, where possible, and outlet through a sandbag dam at the downstream end. Sediment catch basins immediately below the construction to prevent silt- and sediment-laden water from entering the main stream flow. Accumulated sediments will be periodically removed from the catch basins. 	This measure shall be implemented during construction and shall be included in the construction contract as a contract specification.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Biologic	al Resources		
BIO-25	Permanent Water Diversion Projects: The Watermaster shall continue to prepare the annual Prado Basin Habitat Sustainability Monitoring Program. <u>The Implementing Agency shall conduct</u> a second-tier CEQA evaluation for proposed water diversion projects associated with the OBMPU. The potential impacts to Prado Basin <u>and sensitive</u> habitat <u>(for example riparian, wetland, or critical habitat)</u> from implementation of such diversion projects shall receive public review, including pertinent wildlife management agencies and interested parties.	This measure shall be implemented ongoing during operation; the Prado Basin Habitat Sustainability Monitoring Program shall continue to be implemented on its current schedule. The second-tier CEQA evaluation shall be completed prior to approval of permanent water diversion projects.	A copy of the second tier CEQA documen- tation shall be retained in the project file, and the Implementing Agency shall verify that the requirements in this measure have been completed. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Watermaster and the Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Cultural Resou	rces		
CUL-1: When or foll totally prepa agent comp Reso State a Pha plus r When follow expos • S c c iii a a b c s s tate a Pha s follow expos • S c c c c c c c c c c c c c c c c c c c	e a future discretionary project requiring a Negative Declaration low-on EIR is proposed within an existing facility that has been y disturbed due to it undergoing past engineered site aration (such as a well site or water treatment facility site), the cy implementing the OBMPU project will not be required to lete a follow on cultural resources report (Phase I Cultural urces Investigation) unless the Implementing Agency is seeking funding, in which case the Implementing Agency must prepare ase I Cultural Resources Investigation to satisfy State CEQA- requirements. The a Phase I Cultural Resources Investigation is not required, the ving shall be required to minimize impacts to any accidentally sed cultural resource materials: Should any cultural resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite nspection shall be performed immediately by a qualified archaeologist. Responsibility for making this determination shall be with the Implementing Agency's onsite inspector. The archaeological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.	This measure shall be implemented during construction and shall be included in the construction contract as a contract specifi- cation.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Cultural	Resources		
CUL-2:	Where a future discretionary project requiring a Negative Declaration or follow-on EIR is proposed within an undisturbed site and/or a site that will require substantial earthmoving activities and/or excavation, and/or the Implementing Agency is seeking State funding, the agency implementing the OBMPU project shall complete a follow on cultural resources report (Phase I Cultural Resources Investigation) regardless of whether the Implementing Agency is seeking State funding.	This measure shall be implemented prior to the construction of any OBMPU Facility, and any ongoing monitoring shall occur during the corresponding period of construction. Where required, monitoring and any other measures recommended shall be included as part of the construction contract, and shall be carried out during construction.	A copy of all cultural resource reports and of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
	Where a Phase I Cultural Resources Investigation is required, the following phases of identification, evaluation, mitigation, and monitoring shall be followed for a given OBMPU Project:		
	 Phase I (Identification): A Phase I Investigation to identify historical, archaeological, or paleontological resources in a project area shall include the following research procedures, as appropriate: Focused historical/archaeological resources records searches at SCCIC and/or EIC, depending on the project location, and paleontological resources records searches by NHMLAC, SBCM, and/or the Western Science Center in Hemet; Historical background research, geoarchaeological profile analysis, and paleontological literature review; Consultation with the State of California Native American Heritage Commission, Native American tribes in the surrounding area, pertinent local government agencies, and local historic preservation groups; Field survey of the project area by qualified professionals of the pertinent discipline and at the appropriate level of intensity as determined on the basis of sensitivity assessment and site conditions; Field recordation of any cultural resources encountered during the survey and proper documentation of the resources for incorporation into the appropriate inventories or databases. 		
	 Phase II (Evaluation): If cultural resources are encountered in a project area, a Phase II investigation shall be required to evaluate the potential significance of the resources in accordance with the statutory/regulatory framework outlined above. A typical Phase II study consists of the following research procedures: 		

Mitigation Measure	Implementation Schedule	Verification
 Mitigation Measure Preparation of a research design to discuss the specific goals and objectives of the study in the context of important scientific questions that may be addressed with the findings and the significance criteria to be used for the evaluation, and to formulate the proper methodology to accomplish such goals; In-depth exploration of historical, archaeological, or paleontological literature, archival records, as well as oral historical accounts for information pertaining to the cultural resources under evaluation; Fieldwork to ascertain the nature and extent of the archaeological/paleontological remains or resource-sensitive sediments identified during the Phase I study, such as surface collection of artifacts, controlled excavation of units, trenches, and/or shovel test pits, and collection of soil samples; Laboratory processing and analyses of the cultural artifacts, fossil specimens, and/or soil samples for the proper recovery, identification, recordation, and cataloguing of the materials collected during the fieldwork and to prepare the assemblage for permanent curation, if warranted. Phase III (Mitigation): For resources that prove to be significant under the appropriate criteria, mitigation of potential project impact is required. Depending on the characteristics of each resource type and the unique aspects of significance for each individual resource, mitigation may be accomplished through a variety of different methods, which shall be determined by a qualified archaeologist, paleontologist, historian, or other applicable professional in the "cultural resources" field. Typical mitigation for historical, archaeological, or paleontological mitigation for historical, archaeological, or paleontolog	Implementation Schedule	Verification
aimed mainly at the preservation of physical and/or archival data about a significant cultural resource that would be impacted by the project:		
 Data recovery through further excavation at an archaeological site or a paleontological locality to collect a representative sample of the identified remains, followed by laboratory processing and analysis as well as preparation for permanent curation; 		
 Comprehensive documentation of architectural and historical data about a significant building, structure, or object using methods comparable to the appropriate level of the Historic American Buildings Survey (HABS) and the Historic 		

Mitigation Measure	Implementation Schedule	Verification
 American Engineering Record (HAER) for permanent curation at a repository or repositories that provides access to the public; Adjustments to project plans to minimize potential impact on the significance and integrity of the resource(s) in question. Phase III-IV (Monitoring): At locations that are considered sensitive for subsurface deposits of undetected archaeological or paleontological remains, all earth-moving operations shall be monitored continuously or periodically, as warranted, by qualified professional practitioners. Archaeological monitoring programs shall be coordinated with the nearest Native American groups, who may wish to participate. <u>as put forth in MMs TCR-1 through TCR-3</u>. 		
	Responsible Party	Status / Date / Initials
	Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Cultural	Resources		
CUL-3:	After each phase of the studies required by mitigation measure CUL-2 has been completed, where required, a complete report on the methods, results, and final conclusions of the research procedures shall be prepared and submitted to <u>South Central Coastal</u> <u>Information Center</u> (SCCIC), <u>Eastern Information Center</u> (EIC), <u>Natural History Museum of Los Angeles County</u> (NHMLAC), and/or <u>San Bernardino County Museum</u> (SBCM), as appropriate and in addition to the lead - <u>Implementing</u> Agency for the project, for permanent documentation and easy references by future researchers.	The reports shall be completed after the corresponding study has been completed.	A copy of all cultural resource reports and of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Any correspondence with SCCIC, EIC, NHMLAC, and/or SBCM shall be retained in the project file, including verification of receipt of applicable reports. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Cultural	Resources		
CUL-4:	Prior to <u>commencement of</u> construction of OBMPU related facilities, the Watermaster and IEUA shall confer with the <u>Watermaster and</u> <u>Watermaster</u> Parties/ <u>stakeholders</u> to establish a programmatic agreement with SHPO that will stipulate a set of mutually accepted guidelines that address research procedures and the types of potential cultural resources that may be excluded from further consideration before OBMPU Projects are implemented, such as common infrastructure features that are more than 50 years of age, but have a low potential to be considered historically significant, such as existing roadways and minor, utilitarian structures serving as pumphouses or reservoirs, as well as numerous historic-period buildings that are adjacent to the project boundaries but are unlikely to receive any direct or indirect impact. Once this agreement has been made with SHPO, Watermaster shall retain the agreement in the Project file, and shall ensure that all Stakeholder Parties are given copies of the agreement for reference on future OBMPU Projects. For OBMPU Projects that are in development prior to an agreement with SHPO, all types of cultural resources shall be considered by the professionals assessing historical resources within the project footprint; regardless, the steps provided in MM <u>CUL-2 shall be followed to assess and minimize impacts to</u> sensitive cultural resources within a given site.	This mitigation measure shall be initiated prior to the construction of any OBMPU facilities.	A copy of the SHPO agreement shall be retained in the Project file and, per the requirements in the measure, shall be provided by Watermaster to Watermaster Stakeholders to be utilized in future resource assessments for future OBMPU Projects. Correspondence with SHPO on this matter shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		IEUA and Watermaster, Watermaster Stakeholders/Implementing Agencies	

	Mitigation Measure	Implementation Schedule	Verification
Energy EN-1:	Where feasible, future OBMPU Projects shall consider the use of alternative energy sources to serve the future OBMPU Facility energy demands. Examples of circumstances that would render use of alternative energy infeasible include, but are not limited to: lack of space within a given site for installation of alternative energy sources; fiscal infeasibility due to lack of efficiency of alternative sources of energy when compared to the energy demand for a given project; etc.	This measure shall be implemented during the design stage of each facility, and shall be included in the construction contract as a contract specification.	A copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Energy EN-2:	Future OBMPU Projects that are anticipated to utilize a substantial amount of energy for operations, such as regional groundwater treatment plants, pump stations, upgrades to expand capacity at existing water treatment plants, etc., shall undergo subsequent CEQA documentation to address assess operational energy demands and GHG emissions related to energy demands. The determination of whother a project will be a large consumer of energy shall be left to the Watermaster or Implementing Agency for the Project's discretion.	The subsequent CEQA documentation shall be completed prior to implementation of any of the facilities listed in this measure.	Where applicable, a copy of the subsequent CEQA documentation for the individual project shall be retained in the project file. Verification shall be based on the submission of the final CEQA documentation to the Implementing Agency.
		Responsible Party	Status / Date / Initials
		Implementing Agencies	

Mitigation Measure	Implementation Schedule	Verification
Hydrology and Water QualityHYD-1:Watermaster shall review each Storage and Recovery Program application, and estimate the surface and ground water systems response (estimate the potential for loss of pumping sustainability). Watermaster shall then prepare a report that describes the response and potential Material Physical Injury (MPI) to the Chino Basin, and shall develop mitigation requirements pursuant to MM HYD-2 to mitigate MPI caused by the proposed Storage and Recovery Program. The Storage and Recovery Program Applicant (Implementing Agency) will develop mitigation measures pursuant to these requirements established by the Watermaster; these measures shall be incorporated into their Storage and Recovery Program application. Upon approval by Watermaster, these mitigation measures will be incorporated into the Storage and Recovery Program storage agreement. Applications that do not adequately mitigate the potential for loss of pumping sustainability, which will be determined by the Watermaster based on the preceding analysis, shall not be accepted and therefore will not be developed.	This measure shall be implemented once a Storage and Recovery Program application has been received. The mitigation developed, depending on whether it applies to operations or construction related constraints, shall be implemented during the design phase, during construction and/or shall be carried out through operations of the project. Any measures that shall be implemented during construction shall be included in the construction contract as a contract specifi- cation.	A copy of report prepared by Watermaster, as well as the Storage and Recovery Program storage agreement shall be retained in the project file alongside the application. Additionally, a copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
	Responsible Party	Status / Date / Initials
	Watermaster and Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hydrolog	y and Water Quality		
HYD-2:	To mitigate MPI caused by a proposed Storage and Recovery Program Application (as described above under HYD-1), the data gathered through Watermaster's comprehensive groundwater-level monitoring shall be used to identify potential impacts on pumping sustainability and to develop mitigation requirements to mitigate for these impacts. Potential mitigation includes, but is not limited to: (1) modifying the put and take cycles to minimize impacts to pumping sustainability, (2) strategically increasing supplemental water recharge to mitigate loss of pumping sustainability, (3) modifying a party's affected well (lowering pump bowls), (4) providing an alternate supply to the affected party to ensure it can meet its demands, (5) a combination of (1) through (4), and (6) the implementation of a monitoring program to verify the effectiveness of the mitigation actions. The operation of certain facilities proposed as part of the OBMPU can be used to implement these mitigation actions.	This measure shall be implemented once a Storage and Recovery Program application has been received. The mitigation developed, depending on whether it applies to operations or construction related constraints, shall be implemented during the design phase, during construction and/or shall be carried out through operations of the project. Any measures that shall be implemented during construction shall be included in the construction contract as a contract specifi- cation.	A copy of mitigation identified to mitigate pumping sustainability impacts shall be retained in the project file alongside the application. Additionally, a copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Watermaster and Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hydrolog HYD-3:	Mitigation Measure <i>by and Water Quality</i> Watermaster shall review each Storage and Recovery Program application, and estimate the surface and ground water systems response (estimate the potential for new land subsidence). Watermaster shall then prepare a report that describes the response and potential MPI to the Chino Basin, and shall develop mitigation requirements <u>pursuant to MM HYD-4</u> to mitigate MPI caused by the proposed Storage and Recovery Program. The Storage and Recovery Program Applicant (Implementing Agency) will develop	Implementation Schedule This measure shall be implemented once a Storage and Recovery Program application has been received. The mitigation developed, depending on whether it applies to operations or construction related constraints, shall be implemented during the design phase, during construction and/or shall be carried out through operations of the project. Any	Verification A copy of report prepared by Watermaster, as well as the Storage and Recovery Program storage agreement shall be retained in the project file alongside the application. Additionally, a copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field
	Recovery Program Applicant (implementing Agency) will develop mitigation measures pursuant to these requirements established by the Watermaster; these measures shall be incorporated into their Storage and Recovery Program application. Upon approval by Watermaster, these mitigation measures will be incorporated into the Storage and Recovery Program storage agreement. Applications that do not adequately mitigate the potential for new land subsidence, which will be determined by the Watermaster, shall not be accepted and therefore will not be developed.	measures that shall be implemented during construction shall be included in the construction contract as a contract specifi- cation.	inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Watermaster and Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hydrolog	y and Water Quality		
HYD-4:	To mitigate the potential for new land subsidence caused by a proposed Storage and Recovery Program Application (as described above under HYD-3), the data gathered through Watermaster's comprehensive groundwater-level and ground-level monitoring shall be used to identify the potential for new land subsidence and to develop mitigation requirements to mitigate for these impacts. Potential mitigation includes, but is not limited to: (1) limiting facilities and operations of the Storage and Recovery Programs to MZ-2 and -3, (2) modifying the put and take cycles to ensure the Storage and Recovery Program does not contribute to the lowering of groundwater-levels below the new land subsidence metric, (4) providing an alternate supply to MZ-1 producers to maintain groundwater-levels above the new land subsidence metric, to the extent that the Storage and Recovery Program operation affect them, (5) a combination of (1) through (4) above, and (6) the implementation of a monitoring program to verify the effectiveness of the mitigation actions. The operation of certain facilities proposed as part of the OBMPU can be used to implement these mitigation actions.	This measure shall be implemented once a Storage and Recovery Program application has been received. The mitigation developed, depending on whether it applies to operations or construction related constraints, shall be implemented during the design phase, during construction and/or shall be carried out through operations of the project. Any measures that shall be implemented during construction shall be included in the construction contract as a contract specifi- cation.	A copy of mitigation identified to mitigate new land subsidence impacts shall be retained in the project file alongside the application. Additionally, a copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Watermaster and Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hydrolog	gy and Water Quality		
HYD-5:	Watermaster shall estimate the reduction in net recharge and Safe Yield for each Storage and Recovery Program/Project and deduct it from water stored in each Storage and Recovery Program storage account, which will compensate for its impact on net recharge and Safe Yield. Watermaster shall review these impacts and develop mitigation requirements pursuant to MM HYD-6 for the proposed Storage and Recovery Program. The Storage and Recovery Program Applicant (Implementing Agency) will develop mitigation measures pursuant to the requirements established by Watermaster; these measures shall be incorporated into the Applicant's Storage and Recovery Program application. Upon approval by Watermaster, these mitigation measures shall be incorporated into the Storage and Recovery Program storage agreement. Applications that do not adequately mitigate adverse impacts on net recharge and Safe Yield, which will be determined by Watermaster, shall not be accepted and therefore will not be developed.	This measure shall be implemented on an ongoing basis throughout the life of the OBMPU, and shall apply once a Storage and Recovery Program application has been received. The mitigation developed, depending on whether it applies to operations or construction related constraints, shall be implemented during the design phase, during construction and/or shall be carried out through operations of the project. Any measures that shall be implemented during construction shall be included in the construction contract as a contract specifi- cation.	A copy of report prepared by Watermaster, as well as the Storage and Recovery Program storage agreement shall be retained in the project file alongside the application. Additionally, a copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
-		Responsible Party	Status / Date / Initials
		Watermaster and Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hydrolog HYD-6:	<i>ty and Water Quality</i> <u>To mitigate impacts on net recharge and Safe Yield caused by a</u> <u>proposed Storage and Recovery Program Application (as</u> <u>described above under HYD-5), the</u> Watermaster's comprehensive monitoring and modeling that estimates net recharge of the Chino Basin shall be used to identify potential and actual losses of net recharge and to develop mitigation requirements to mitigate impacts thereof. Potential mitigation includes, but is not limited to: (1) modifying the put and take cycles to minimize reductions in net recharge, (2) deducting the reduction in net recharge from its Storage and Recovery account, (3) recharge additional water to mitigate reductions in net recharge, (4) construct facilities in the southern part of the basin to eliminate the reduction of net recharge due to Storage and Recovery Programs, (5) a combination of (1) through (4), and (6) the implementation of a monitoring program to verify the effectiveness of the mitigation actions. The operation of certain facilities proposed as part of the OBMPU can be used to implement these mitigation actions.	This measure shall be implemented once a Storage and Recovery Program application has been received. The mitigation developed, depending on whether it applies to operations or construction related constraints, shall be implemented during the design phase, during construction and/or shall be carried out through operations of the project. Any measures that shall be implemented during construction shall be included in the construction contract as a contract specifi- cation.	A copy of mitigation identified to mitigate potential and actual losses of net recharge shall be retained in the project file alongside the application. Additionally, a copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Watermaster and Implementing Agency	
	Mitigation Measure	Implementation Schedule	Verification
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Hydrolog	yy and Water Quality		
HYD-7:	Watermaster shall estimate the projected impacts that each Storage and Recovery Program may have on Hydraulic Control and review these impacts and develop mitigation requirements for the proposed Storage and Recovery Program. The Storage and Recovery Program Applicant (Implementing Agency) will develop mitigation measures pursuant to the requirements established by Watermaster <u>and MM</u> <u>HYD-8</u> ; these measures shall be incorporated into the Applicant's Storage and Recovery Program application. Upon approval by Watermaster, these mitigation measures shall be incorporated into the Storage and Recovery Program storage agreement. Applications that do not adequately mitigate adverse impacts on hydraulic control, which will be determined by Watermaster, shall not be accepted and therefore will not be developed.	This measure shall be implemented once a Storage and Recovery Program application has been received. The mitigation developed, depending on whether it applies to operations or construction related constraints, shall be implemented during the design phase, during construction and/or shall be carried out through operations of the project. Any measures that shall be implemented during construction shall be included in the construction contract as a contract specifi- cation.	A copy of report prepared by Watermaster, as well as the Storage and Recovery Program storage agreement shall be retained in the project file alongside the application. Additionally, a copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Watermaster and Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hydrolog	y and Water Quality		
HYD-8:	To mitigate for potential impacts on Hydraulic Control caused by a proposed Storage and Recovery Program Application (as described above under HYD-7), the Watermaster's comprehensive monitoring and modeling that assesses the state of Hydraulic Control in Chino Basin shall be used to estimate groundwater outflow from Chino North to the Santa Ana River, assess the state of Hydraulic Control, determine if the Storage and Recovery Program will cause a loss of hydraulic control, and develop mitigation requirements to mitigate for impacts to the state of Hydraulic Control. Potential mitigation includes, but is not limited to: (1) modifying the put and take cycles to minimize discharges to the Santa Ana River and maintain Hydraulic Control, (2) construct facilities in the southern part of the basin to minimize discharges to the Santa Ana River and maintain Hydraulic Control, (3) a combination of (1) and (2), and (4) the implementation of a monitoring program to verify the effectiveness of the mitigation actions. The Project Description contains facilities and their operations that can be used to implement these mitigation actions. The operation of certain facilities proposed as part of the OBMPU can be used to implement these mitigation actions.	This measure shall be implemented once a Storage and Recovery Program application has been received. The mitigation developed, depending on whether it applies to operations or construction related constraints, shall be implemented during the design phase, during construction and/or shall be carried out through operations of the project. Any measures that shall be implemented during construction shall be included in the construction contract as a contract specifi- cation.	A copy of mitigation identified to mitigate impacts to hydraulic control shall be retained in the project file alongside the application. Additionally, a copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Watermaster and Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hydrology and Water HYD-9: Watermaster application, a response (es Watermaster and potential requirements Recovery Pro (Implementin these require <u>MM HYD-10</u> and Recover these mitigat Recovery Pro adequately n will be deterr therefore will	Quality r shall review each Storage and Recovery Program and estimate the surface and ground water systems stimate the potential for water quality degradation). r shall then prepare a report that describes the response I MPI to the Chino Basin, and shall develop mitigation s to mitigate MPI caused by the proposed Storage and ogram. The Storage and Recovery Program Applicant ng Agency) will develop mitigation measures pursuant to ements established by the Watermaster <u>and pursuant to</u> ; these measures shall be incorporated into their Storage ry Program application. Upon approval by Watermaster, tion measures will be incorporated into the Storage and ogram storage agreement. Applications that do not nitigate the potential for water quality degradation, which mined by the Watermaster, shall not be accepted and I not be developed.	This measure shall be implemented once a Storage and Recovery Program application has been received. The mitigation developed, depending on whether it applies to operations or construction related constraints, shall be implemented during the design phase, during construction and/or shall be carried out through operations of the project. Any measures that shall be implemented during construction shall be included in the construction contract as a contract specifi- cation.	A copy of report prepared by Watermaster, as well as the Storage and Recovery Program storage agreement shall be retained in the project file alongside the application. Additionally, a copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Watermaster and Implementing Agency	

Mitigation Measure	Implementation Schedule	Verification
Hydrology and Water Quality HYD-10: To mitigate potential water quality degradation caused by a proposed Storage and Recovery Program Application (as described above under HYD-9), the data gathered through Watermaster's comprehensive groundwater-quality monitoring shall be used to identify changes in the direction and velocity for each plume that can be attributed to a Storage and Recovery Program that may impact its remediation or the water quality at wells, and to develop mitigation requirements to mitigate for any impacts related to the change in direction or velocity attributed to a Storage and Recovery Program. Potential mitigation includes, but is not limited to: (1) modifying the put and take cycles to minimize changes in the plume's direction and velocity that may impact remediation, (2) constructing facility improvements to mitigate impacts on existing remediation, or (3) a combination of (1) and 2, and (4) the implementation of a monitoring program to verify the effectiveness of the mitigation actions. The operation of certain facilities proposed as part of the OBMPU can be used to implement these mitigation actions.	This measure shall be implemented once a Storage and Recovery Program application has been received. The mitigation developed, depending on whether it applies to operations or construction related constraints, shall be implemented during the design phase, during construction and/or shall be carried out through operations of the project. Any measures that shall be implemented during construction shall be included in the construction contract as a contract specifi- cation.	A copy of mitigation identified to mitigate impacts to related to changes in the direction and velocity for each plume shall be retained in the project file alongside the application. Additionally, a copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
	Responsible Party	Status / Date / Initials
	Watermaster and Implementing Agency	

Mitigation Measure	Implementation Schedule	Verification
Hydrology and Water Quality		
HYD-11: Watermaster shall periodically review current and projected Basin conditions and shall compare this information to the projected basin conditions assumed in the evaluation of the Storage and Recovery Program application process, compare the projected Storage and Recovery Program operations to actual Storage and Recovery Program operations. The Watermaster shall then make findings regarding the efficacy of the mitigation program and requirements required herein and by the Storage and Recovery Program storage agreements. Based on Watermaster's review and subsequent findings, where applicable, Watermaster shall require changes and/or modifications in the Storage and Recover Program storage agreements that will adequately mitigate MPI and related adverse impacts. The Watermaster shall continue to determine what Programs and Projects should be implemented or should be rejected based on their potential to contribute to or cause MPI or other adverse impacts to the Basin.	This measure shall be implemented on an ongoing basis throughout the life of the OBMPU. Storage agreement modifications shall occur when the Watermaster has made a determination that such changes are required. Any mitigation developed, depending on whether it applies to operations or construction related constraints, shall be implemented during the design phase, during construction and/or shall be carried out through operations of the project. Any measures that shall be implemented during construction shall be included in the construction contract as a contract specifi- cation.	A copy of the findings made by Watermaster, any changes in storage agreements, and any modified mitigation identified to mitigate impacts to the Basin shall be retained in the project file alongside the application. Additionally, a copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by IEUA, Watermaster, Water- master Stakeholders/Implementing Agencies inspection personnel that verify that the requirements in this measure have been completed. Field notes from inspections shall be retained in the project file.
	Responsible Party	Status / Date / Initials
	Watermaster and Implementing Agency	

Mitigation Measure	Implementation Schedule	Verification
Hydrology and Water Quality		
Hydrology and Water Quality HYD-12: Prior to the commencement of construction of any OBMPU project that will disturb less than one acre (i.e., that is not subject to the California Construction Stormwater General Permit), the Watermaster and/or-Implementing Agency shall require implementation of and construction contractor(s) shall select best management practices (BMPs) applicable to well development sites and any other OBMPU Projects that are less than one acre in size. BMPs shall include activities on each site to achieve a reduction in pollutants from stormwater discharge to the maximum extent practicable during the construction of each OBMPU facility, and to control urban runoff after each OBMPU facility is constructed and the well (if approved for operation post well testing) or other OBMPU facility is in operation. Examples of BMP(s) that would achieve a reduction in pollutants include, but are not limited to: • The use of silt fences or coir rolls; • The use of water bars to reduce the velocity of stormwater runoff; • The use of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from the site onto public roads; • The washing of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from the site onto public roads;	This measure shall be implemented during construction and shall be included in the construction contract as a contract specification.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by the Watermaster and/or the Implementing Agency. Field notes from inspections shall be retained in the project file.
waterproof material during rain events to control erosion of		
soil from the stockpiles.		
	Responsible Party	Status / Date / Initials
	Watermaster and/or Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hydrology	/ and Water Quality		
HYD-13:	 Implementation of a Grading and Drainage Plan. Prior to commencement of construction of project facilities, the Watermaster and/or Implementing Agency shall require that the Project Proponent submit either: (1) Prepare a No Net Discharge Report demonstrating that within each facility, surface runoff shall be collected and retained (for use onsite) or detained and percolated into the ground on the site such that site development results in no net increase in offsite stormwater flows. Detainment shall be achieved through Low Impact Development techniques whenever possible, and shall include techniques that remove the majority of urban storm runoff pollutants, such as petroleum products and sediment. The purpose of this measure is to remove the onsite contribution to cumulative urban storm runoff and ensure the discharge from the sites is treated to reduce contributions of urban pollutants to downstream flows and to groundwater; or, where it is not possible to eliminate stormwater flows off of a site or where otherwise appropriate, the Watermaster and/or Implementing Agency shall: (2) Prepare a Grading and Drainage Plan that identifies anticipated changes in flow that would occur on site and minimizes any potential increases in discharge, erosion, or sedimentation potential in accordance with applicable regulations and requirements for the County and/or the City in which the facility would be located. In addition, all new drainage facilities shall be designed in accordance with standards and regulations. The plan shall identify and implement retention basins, best management practices, and other measures to ensure that potential increases in storm water flows and erosion would be minimized, in accordance with local requirements. 	The No Net Discharge Report or Grading Plan and Drainage Plan shall be developed prior to construction, and the measures called for shall be implemented during construction and shall be included in the construction contract as a contract specification.	A copy of the No Net Discharge Report or Grading Plan and, Drainage Plan and construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by Watermaster and/or the Implementing Agency. Field notes from inspections shall be retained in the project file.

	Mitigation Measure	Implementation Schedule	Verification
Hydrolog HYD-14:	To minimize potential ground disturbances associated with installation and maintenance of (a) proposed monitoring equipment on, or (b) groundwater treatment at existing wells, the equipment and treatment facilities shall be installed within or along existing disturbed easements or right-of-way or otherwise disturbed areas, including access roads and pipeline or existing utility easements, whenever feasible.	This measure shall be implemented both during project specific design and during construction, and shall be included in the construction contract as a contract specifi- cation.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by Implementing Agency inspection personnel that verify that the requirements in this measure have been completed. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Hydrolog HYD-15:	<i>ty and Water Quality</i> For long-term mitigation of site disturbances at OBMPU facility locations, all areas not covered by structures shall be covered with hardscape (concrete, asphalt, gravel, etc.), native vegetation and/or man-made landscape areas (for example, grass). Revegetated or landscaped areas shall provide sufficient cover to ensure that, after a two-year period, erosion will not occur from concentrated flows (rills, gully, etc.) and sediment transport will be minimal as part of sheet flows. These measures and requirements shall be applied to disturbed areas of abandoned well sites proposed for closure.	This measure shall be implemented both during project specific design and during construction, and shall be included in the construction contract as a contract specifi- cation.	A copy of the construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by Implementing Agency inspection personnel that verify that the requirements in this measure have been completed. Field notes from inspections shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

Mitigation Measure	Implementation Schedule	Verification
Hydrology and Water Quality		
HYD-16: Prior to implementation commencement of construction of any recharge or stormwater retention basin projects as either existing or new basins, the Implementing Agency shall require submittal of an Operational Risk Management Plan that will be established prepared to the satisfaction of San Bernardino County Flood Control District (SBCFCD), Riverside County Flood Control District (RCFCD) Division of Safety of Dams (DSOD), and/or Division of Safety, as appropriate. This Plan shall be created specifically for each individual basin to ensure the safety of surrounding property and people from undue risks associated with water-related hazards (i.e. flooding). The Operational Risk Management Plan will firmly establish a priority of flood-control functions over and above recharge or retention-related operations. Weather forecasts of upcoming storm events will be carefully monitored and in the event of a significant forecasted storm-event, water deliveries to the basins will be ceased until further notice is received from SBCFCD or RCFCD that it is safe for deliveries to resume. Additionally, each SBCFCD or RCFCD basin's will specific management plan will have a be developed, so as to coordinate flood control along with surface water recharge or retention. This mitigation measure will ensure that people and property are not subject to additional risk associated with water-related hazards in the Basin, and will allow SBCFCD or RCFCD to make full utilization of the basin's flood control capacity in the event of a storm.	This measure shall be implemented both during project specific design and during construction, and shall be included in the construction contract as a contract specifi- cation. The management plan shall be developed before the recharge or stormwater retention basin commences operation.	A copy of the management plan and construction contract and final design for each project shall be retained in the project file. Verification of implementation shall be based on field inspections by Implementing Agency inspection personnel that verify that the requirements in this measure have been completed. Field notes from inspections shall be retained in the project file. Correspondence with SBCFCD or RCFCDWCD pertaining to this issue shall be retained in the project file.
	Responsible Party	Status / Date / Initials
	Implementing Agency	

Mitigation Measure	Implementation Schedule	Verification
Hydrology and Water Quality		
HYD-17: Prior to cleaning out, refurbishing or capping a well, samples will be obtained and chemically analyzed to ensure that the discharge does not contain any contaminants exceeding regulatory thresholds. If contaminants are discovered, then they shall be removed or lowered below the regulatory threshold prior to discharge to the environment. Discharge of non-stormwater into storm drains will require a NPDES permit from the Santa Ana Regional Water Quality Control Board (RWQCB).	This measure shall be implemented during prior to cleaning out, refurbishing or capping a well and shall be included in the construction contract as a contract specification.	A copy of the steps taken pertaining to cleaning out, refurbishing or capping a well shall be documented and retained in the project file, as should the construction contract. Should a NPDES permit be required, it shall be retained in the project file. Verifica- tion of implementation shall be based on field inspections by Implementing Agency inspection personnel that verify that the requirements in this measure have been completed. Field notes from inspections shall be retained in the project file.
	Responsible Party	Status / Date / Initials
	Implementing Agency	

Mitigation Measure	Implementation Schedule	Verification
 Hydrology and Water Quality HYD-18: All new and expanded water treatment facilities associated with the OBMPU shall ensure that any brine generated from the water treatment process that cannot be otherwise treated on-site is disposed of in accordance with state and local regulations—such as through disposal to a brine line (Non-Reclaimable Wastewater System, Etiwanda Wastewater Line, and Inland Empire Brine Line, etc.)—to prevent brine from being discharged into the local stormwater collection system. 	This measure shall take place during the design phase for future new and expanded water treatment facilities projects.	A copy of the design documenting proper brine disposal shall be retained in the project file. Site inspections shall be performed to ensure the proper procedures pertaining to brine disposal are adhered to.
	Responsible Party	Status / Date / Initials
	Implementing Agency	

Mitigation Measure		Implementation Schedule	Verification
Hydrology and Water Quality			
HYD-19: The Watermaster and/or Implementing Ag given OBMPU facility (excepting those loca [wells, water treatment plants, etc.] and exc in-line flow meters or other facilities require channel, such as diversion structures) is loc 100-year floodplain by utilizing the FEMA F selected area prior to project implementation located outside of the 100-year floodplain, the documentation specific to floodplains are re- project is located within the 100-year floodplain s second tier CEQA evaluation shall be comp the given project's location within the 100-year	ency shall verify that any ted at existing facilities epting the installation of d to be installed in a cated outside of the IRM panels for the n. If a given project is hen no subsequent CEQA quired. However, if a lain either (1) a new shall be selected, or (2) a leted that would address ear floodplain.	Verification of the site's location shall occur during the design phase for a given project. Where applicable, the second tier CEQA documentation shall be completed prior to construction of the given facility.	Where applicable, a copy of the subsequent CEQA documentation for the individual project shall be retained in the project file. Verification shall be based on the submission of the final CEQA documentation to the Implementing Agency.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
Tribal C TCR-1	ultural Resources Where a future discretionary project requiring a Negative Declaration or follow-on EIR is proposed within an existing facility that has been totally disturbed due to it undergoing past engineered site preparation (such as a well site, water treatment facility, or wastewater treatment plant site), the agency implementing the OBMPU project will notify the three Tribes (Gabrieleño, Morongo, and San Manuel) under AB 52 but will point out that the project falls under the OBMPU evaluation and that the site is fully developed. No further cultural resources or TCR investigation will be conducted unless a Tribe identifies specific TCR resources/values at such site(s).	This measure shall be implemented prior to the commencement of construction for a given project.	A copy of the correspondence to the three tribes shall be retained in the project file(s). Verification shall be based on a copy of the correspondence that shall be provided to the Implementing Agency.
		Responsible Party	Status / Date / Initials
		IEUA, Watermaster, or Watermaster Stakeholders/Implementing Agencies	

	Mitigation Measure	Implementation Schedule	Verification
Tribal Cı	Iltural Resources		
TCR-2	Where a future discretionary project requiring a Negative Declaration or follow-on EIR is proposed at an undisturbed site, the agency implementing the OBMPU project will initiate AB 52 consultation and a records search at the appropriate California Historical Resources Information System (CHRIS) center with at least a 0.5-mile search radius. The Native American Heritage Commission (NAHC) shall also be contacted to identify tribal representatives to contact as part of a Phase 1 cultural resources investigation. Finally, a site-specific survey will be conducted by a qualified professional archaeologist. During the survey, the archaeologist shall engage the designated tribal representative(s) based on responses from the NAHC consultation among the three Tribes.	This measure shall be implemented by the Implementing Agency prior to construction.	A copy of the correspondence to the three tribes, the results of the records search, and the site specific survey shall be retained in the project file(s). The designated tribal represen- tative shall be documented in the project file. Documentation of correspondence with the NAHC shall be retained in the project file.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

Mitigation Measure	Implementation Schedule	Verification
Tribal Cultural Resources TCR-3 If the AB 52 consultation results in a request to consult from one or more of the three Tribes, and the consultation results in a request for monitoring from one or more of the Tribes, the agency implementing the OBMPU project shall meet with the Tribe or Tribes and develop a "Cultural Resources Monitoring and Treatment Plan" (Plan) for the specific project. This Plan shall follow the general outline of the Plan provided in the Appendices of this document. If more than one Tribe requests field monitoring participation, the agency shall ask the requesting Tribes to determine which one will provide the monitor(s), as only a single Tribe's monitor(s) shall be funded in the monitoring effort. If the Tribes cannot identify a single tribal monitor, the agency shall select a single tribal monitor to monitor a project after reviewing qualifications of the recommended monitors.	This measure shall be implemented by the Implementing Agency prior to construction. The meeting with the Tribe shall occur after the Tribe(s) request to consult. The Plan shall be developed prior to initiation of construction and shall be incorporated as a specific measure into the construction contract.	A copy of the correspondence between the tribes and the Implementing agency, and the Cultural Resources Monitoring and Treatment Plan, shall be retained in the project file(s). The designated Tribe that will be monitoring the project shall be documented in the project file. Monitoring activities shall be included as a specific measure in the construction contract, which shall be retained in the project file. Field notes generated by the monitor shall be retained in the project file. Verification of implementation shall be based on field inspections by the Implementing Agency. Field notes from inspections shall be retained in the project file.
	Responsible Party	Status / Date / Initials
	Implementing Agency	

	Mitigation Measure	Implementation Schedule	Verification
<i>Utilities a</i> UTIL-5:	And Service Systems For future OBMPU Projects that do not have access to electrical or natural gas connections in the immediate vicinity (defined here as a 500-foot buffer from a given project site), and will require either extension of infrastructure or creation of new infrastructure to meet electricity and/or natural gas needs at a future OBMPU Facility site, subsequent CEQA documentation shall be prepared that fully analyzes the impacts that would result from extension or development of <u>electrical energy</u> or natural gas infrastructure.	Where applicable, the second tier CEQA documentation shall be completed prior to construction of the given facility.	Where applicable, a copy of the subsequent CEQA documentation for the individual project shall be retained in the project file. Verification shall be based on the submission of the final CEQA documentation to the Implementing Agency.
		Responsible Party	Status / Date / Initials
		Implementing Agency	

FACTS AND FINDINGS REGARDING FINAL SUBSEQUENT ENVIRONMENTAL IMPACT REPORT FOR THE CHINO BASIN WATERMASTER OPTIMUM BASIN MANAGEMENT PROGRAM UPDATE (SCH# 2020020183) AND CANDIDATE STATEMENT OF OVERRIDING CONSIDERATIONS REGARDING THE ENVIRONMENTAL EFFECTS FROM IMPLEMENTING THE OPTIMUM BASIN MANAGEMENT PROGRAM UPDATE

A. INTRODUCTION

The Inland Empire Utilities Agency (IEUA), in consultation with Chino Basin Watermaster (Watermaster) and Chino Groundwater Basin stakeholders, has prepared the Final Subsequent Environmental Impact Report (FSEIR or Final SEIR), State Clearinghouse (SCH) #2020020183, to analyze the Optimum Basin Management Program Update (referred to interchangeably herein as the "OBMPU," the "Project," or the "Program"). The OBMPU updates the Optimum Basin Management Plan (OBMP), and the FSEIR analyzes the environmental impacts of the OBMPU compared to what was previously analyzed in the 2000 Final Program Environmental Impact Report (OBMP PEIR), 2010 Peace II Supplemental EIR (2010 OBMP SEIR), and 2017 Addendum adopted to provide a temporary increase in Safe Storage Capacity (SSC) (2017 Addendum).

IEUA makes the findings described below. These findings are based on the facts presented in public hearings on this matter, presented in the staff reports, environmental documents, and other information presented to the IEUA and summarized in this document. A statement of overriding considerations is presented at the end of these facts and findings in compliance with Section 15093 of the State CEQA Guidelines. The total action that may be implemented by approval of the proposed OBMPU consists of all of the actions outlined in the FSEIR. The IEUA Board considered the OBMPU as a modification of the Optimum Basin Management Program (OBMP) which was based on the Peace I Agreement (Peace I) adopted by Watermaster, IEUA, and stakeholders in the Chino Basin in the year 2000.

IEUA in consultation with Watermaster concluded that a Subsequent EIR should be prepared to analyze the potential significant adverse environmental impacts that may result from implementing the OBMPU. IEUA based this determination to prepare a subsequent EIR for the OBMPU on the following factors: First, IEUA compared the proposed activities of the Project with those identified in the OBMP PEIR, Peace II SEIR, and 2017 Addendum. Second, IEUA determined that certain circumstances had changed in the 20 years since the adoption of the OBMP PEIR, and these changes in circumstances could result in a significant environmental impact. Finally, a decision was made to update the environmental database for continued implementation of the OBMP as modified by the OBMPU.

The FSEIR has been prepared as the complete environmental document that encompasses all the issues addressed in the Initial Study and the Draft SEIR (DSEIR) that were identified as having a potential to cause significant adverse environmental impacts. The FSEIR serves as an informational document intended for use by IEUA, Watermaster and Chino Groundwater Basin stakeholders (interested and responsible agencies and parties), and the general public in evaluating the potential environmental effects of implementing this Project. Based on the information in the OBMPU Initial Study, IEUA concluded that potential impacts associated with implementation of this Project were less than significant or could be mitigated to a less than significant level with implementation of mitigation measures provided for all issues evaluated except; *Air Quality, Biological Resources, Cultural Resources, Energy, Greenhouse Gas, Hydrology and Water Quality, Tribal Cultural Resources, and parts of Utilities and Service Systems.* IEUA then prepared the Draft Subsequent Environmental Impact Report (DSEIR) to address these potentially significant issues.

Based upon data provided in the DSEIR, it was concluded that the Project could result in significant adverse impacts to biological resources because of the potential that a future OBMPU facility may be developed within an area containing biological resources that cannot be avoided, even at the design level. Therefore, the Program's contribution is considered cumulatively considerable, and would result in a significant or cumulatively considerable adverse impact under Biological Resources. Additionally, it was concluded that, even with the implementation of mitigation measures designed to reduce greenhouse gas emissions, the Program would still exceed the SCAQMD screening thresholds of 3,000 MTCO2e/yr and 10,000 MTCO2e/yr. Thus, exceedances of applicable SCAQMD regional GHG thresholds are considered significant and unavoidable, and OBMPU could create a significant cumulative impact to global climate change over the 30 year planning period. Finally, it was concluded that the proposed OBMPU could result in significant impacts related to the construction-related GHG emissions that would result from the extension of water-related infrastructure, as such water infrastructure impacts under Utilities and Service Systems are considered significant and unavoidable.

All other potential environmental issues evaluated in the DSEIR were determined to be less than significant either without mitigation or with implementation of the mitigation measures identified in the OBMPU Initial Study and the FSEIR.

Approval and implementation of the OBMPU over the next 30 years constitutes the "Project" that was evaluated in the DSEIR. It is the total Project outlined in Chapters 2 and 3 of the DSEIR that constitutes the Project considered in this FSEIR.

B. ENVIRONMENTAL REVIEW

The entire administrative record, including the OBMPU FSEIR and DSEIR, public comments and responses, IEUA Staff reports, and these facts, findings and statement of overriding considerations, serve as the basis for the IEUA's environmental determination. The IEUA Board's environmental determination is that the OBMPU FSEIR addresses all of the potential impacts from implementing the Project as outlined above and defined in detail in Chapter 3 of the OBMPU FSEIR. The detailed environmental impacts and proposed mitigation measures for the future development of the Project's facilities are presented in Chapter 4 of the OBMPU FSEIR, in the Chapter 1 Executive Summary and in the response to comments which is part of the OBMPU FSEIR. Alternatives to the Project are discussed in Chapter 5 of the OBMPU FSEIR. Evaluations of growth inducement, cumulative impacts, and irreversible commitment of resources are provided in Chapter 6, Topical Issues, of the OBMPU FSEIR. The findings outlined in the following section of this document contain a summary of the facts used in making findings and determinations for each environmental issues addressed in the OBMPU FSEIR.

1. Consideration and Certification of the FSEIR: The CEQA environmental review process for the OBMPU was initiated in February 2020 with the release of a Notice of Preparation (NOP) for public review and comment. The initial NOP review period began on February 10, 2020 and ended on March 10, 2020. The NOP was distributed to

responsible and interested agencies and organizations and the State Clearinghouse, and was provided by email to the Watermaster's mailing list. A scoping meeting was held on February 27, 2020 in the IEUA Board Room, in the City of Chino, California.

As previously indicated, this FSEIR has been prepared to address the issues identified above in Section A and provide an informational document intended for use by the Watermaster, IEUA, interested and responsible agencies and parties, and the general public in evaluating the potential environmental effects of implementing this Project. Technical documents relied upon for the analyses are provided in the appendices in Volume 2 of the DSEIR. The air quality and greenhouse gas emissions forecasts, and energy analysis were provided by Urban Crossroads; the cultural resources report was provided by CRM TECH; the hydrology and water quality analyses were provided by Wildermuth Environmental; and the biological analysis was provided by Jacobs. The NOP identified the full scope of environmental issues for focus in a Draft SEIR. After review of the NOP comments, the scope of the DSEIR (DSEIR) was finalized and no additional issues were added to the scope of the DSEIR beyond those mentioned in Section A of this document.

The DSEIR was released to the public for review and comment on March 27, 2020. The mandatory 45-day review period closed on May 11, 2020. A total of seven (7) comment letters were received on the DSEIR.

The FSEIR dated July 2, 2020 was transmitted to all interested parties, including public agencies that commented on the DSEIR, to fulfill the requirements of Public Resources Code Section 21092.5. The OBMPU FSEIR and all supporting material has been made available to the IEUA Board and a summary of the FSEIR and its findings presented directly to the Board for consideration in making its decision to certify the OBMPU FSEIR and approve the OBMPU.

The IEUA Board makes the following certifications pursuant to the California Environmental Quality Act Guidelines Section 15090. The Board finds and certifies that the OBMPU FSEIR has been completed in compliance with CEQA. The Board certifies that all voting members have reviewed and considered the FSEIR prior to approving the proposed OBMPU Project. In addition, all voting Board members have reviewed and considered the additional information presented at or prior to the public hearing on July 15, 2020. The Board further finds and certifies that the FSEIR reflects the independent judgment and analysis of IEUA, the Board and its Staff and the OBMPU FSEIR is adequate to make a decision for this Project.

- 2. **Full Disclosure:** The IEUA Board finds and certifies that the OBMPU FSEIR constitutes a complete, accurate, adequate and good faith effort at full disclosure under CEQA.
- **3.** Location of Record Proceedings: The documents and other materials which constitute the record of proceeding upon which this decision is based are in the custody of the IEUA located at 6075 Kimball Avenue, Chino, CA 91708. This information is provided in compliance with Public Resources Code Section 21081.6(a)(2).
- 4. Inland Empire Utilities Agency as Lead Agency under CEQA: The Inland Empire Utilities Agency is the "lead agency" as defined by CEQA Guidelines Section 15050. In compliance with its authority and responsibility for overseeing wastewater treatment and imported water for the Chino Basin, IEUA has prepared the Draft and Final SEIRs for the

Project, compiled these candidate Facts, Findings and Statement of Overriding Considerations in accordance with the CEQA Guidelines and the Public Resources Code, and will carry out all other duties and responsibilities required of a lead agency under the Public Resources Code and the State CEQA Guidelines.

C. FINDINGS

Presented below are the environmental findings made by IEUA after its review of the documents referenced above; and consideration of written and oral comments on the Project at public hearings, including all other information provided during the decision-making process. These findings provide a summary of the information contained in the FSEIR, related technical documents, and the public hearing record that have been referenced by the IEUA Board in making its decision to approve the OBMPU.

I. NON-SIGNIFICANT ENVIRONMENTAL CONSIDERATIONS THAT WILL HAVE NO IMPACT

The following issues were identified in the OBMPU FSEIR as having no potential to cause a significant impact. All of these issues were fully addressed and substantiated in the FSEIR. All the following references are to findings in the OBMPU FSEIR.

- 1. Agricultural and Forestry Resources: Impact (c)
- c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?
- <u>Finding:</u> No Impact (pg. 127, Initial Study [IS], [Appendix 8.2, Final Subsequent Environmental Impact Report (FSEIR)])
- <u>Facts:</u> The Chino Basin does not include zoning designations for forest land, timberland, or timberland zoned Timberland Production. The Project area borders the San Bernardino National Forest, but it does not overlap with the Chino Basin boundaries.

With no acreage designated for timberland development in the Chino Basin by any of the local jurisdictions, no potential exists to adversely impact timberland through conflicts with such land use designation.

2. Air Quality: Impacts (a) and (d)

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

- <u>Finding:</u> Less Than Significant Impact (pg. 4-21 to 4-22, FSEIR)
- Facts: The OBMPU would be consistent with the South Coast Air Quality Management District (SCAQMD) Consistency Criterion No. 1 (The proposed Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the Air Quality Management Plan (AQMP), and No. 2 (The Project will not exceed the

assumptions in the AQMP based on the years of Project build-out phase), and as such would not result in or cause National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) violations. The Project does not propose a land use development but rather involves pump station, well construction, monitoring and associated improvements. The Project is therefore considered to be consistent with the AQMP, and therefore the Project would have a less than significant potential to conflict with or obstruct implementation of the applicable air quality plan and no mitigation is required.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

- <u>Finding:</u> Less Than Significant Impact (pg. 4-34 to 4-35, FSEIR)
- Facts: Potential odor sources associated with the proposed Project may result from construction equipment exhaust during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the lead agency's solid waste regulations. The Project would be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the proposed Project construction and operations would be less than significant and no mitigation is required.

3. Cultural Resources: Impact (c)

- c) Would the project disturb any human remains, including those interred outside of formal cemeteries?
- <u>Finding:</u> Less Than Significant Impact (pg. 4-99 to 4-100, FSEIR)
- **Facts:** Given the large size of the Chino Basin, there is a potential that a given OBMPU Project site could be located in a sensitive area. As such, in the event that human remains are inadvertently discovered during Project construction activities, the human remains could be inadvertently damaged, which could result in a significant impact. Implementation of the Project must comply with provisions of state law regarding discovery of human remains, including PRC Section 5097.98 and Health and Safety Code Section 7050.5. If human remains are accidentally exposed during site grading, Section 7050.5 of the California Health and Safety Code requires a contractor to immediately stop work in the vicinity of the discovery and notify the County Coroner, who must follow procedures to ensure the most likely descendant (MLD) has an opportunity to be consulted. Since this process is mandatory, no additional mitigation is required to ensure that the impacts to human remains will be less than significant.

4. **Geology and Soils:** Impacts (a[ii]) and (e)

- a(ii). Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: (ii) Strong seismic ground shaking?
- <u>Finding:</u> Less Than Significant Impact (pg. 145-146, IS, [Appendix 8.2, FSEIR])
- Facts: As addressed under issue a(i) above, the Chino Basin is located within a region that is seismically active. In the event of an earthquake in Southern California, some seismic ground shaking would likely be experienced in the Project area sometime during the operational life of the facilities proposed as part of the OBMPU. Ground shaking could result in structural damage to new facilities, which in turn could affect operation of related systems. Some of the proposed facilities are non-habitable or will only require visits on an as-needed basis; however, the OBMPU proposes upgrades and improvements to existing facilities, and new facilities that currently or would require full time employees on-site. Therefore, structural and mechanical failure of facilities onset by seismic ground shaking could potentially threaten the safety of on-site workers.

The structural elements of proposed OBMPU facilities would undergo appropriate design-level geotechnical evaluations prior to final design and construction as required to comply with the California Building Code (CBC). The geotechnical engineer, as a registered professional with the State of California, is required to comply with the CBC and local codes while applying standard engineering practice and the appropriate standard of care required for projects in the San Bernardino and Riverside County areas. The California Professional Engineers Act (Building and Professions Code Sections 6700- 6799), and the Codes of Professional Conduct, as administered by the California Board of Professional Engineers and Land Surveyors, provides the basis for regulating and enforcing engineering practice in California. In addition, pipelines would be constructed according to industry standards using American Water Works Association (AWWA) guidelines. Compliance with these construction and building safety design standards would reduce potential impacts associated with ground shaking to a level of less than significant.

- e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?
- Finding: No Impact (pg. 153, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> Implementation of proposed OBMPU facilities would require the use of septic systems. The majority of facilities would be upgrades to existing infrastructure, wells, pipelines, and other water conveyance facilities that do not require septic systems. There is no planned use of on-site septic systems for the Project facilities. Therefore, no impact would occur related to soil suitability for septic systems.

5. Land Use / Planning

a. Would the project physically divide an established community?

- <u>Finding:</u> 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 FSEIR. (pg. 203, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> The Project does not propose any action that could physically divide an established community. The physical division of an established community generally refers to the construction of features such as an interstate highway, railroad tracks, or permanent removal of a means of access, such as a local road or bridge that would impact mobility within an existing community or between a community and outlying area. At the Project specific level, the exact locations of the many of the proposed OBMPU have not yet been determined; however, there are no features of these facilities that would create a barrier or physically divide an established community. No impacts are anticipated.

6. **Population and Housing:** Impact (a)

- a. Would the project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?
- <u>Finding:</u> Less Than Significant Impact (pg. 241, IS, [Appendix 8.2, FSEIR])
- **Facts:** The facilities proposed to be implemented by the OBMPU are intended to ensure water supply reliability for the water agencies utilizing groundwater from the Chino Basin. However, regardless of whether the OBMPU is implemented, individual water agencies have identified individual actions that they can implement to meet future water demands within the Chino Basin. The OBMPU is growth accommodating, but it does not in and of itself create opportunities for additional people to move to the region, nor to construct additional facilities beyond those previously under consideration to accommodate the population envisioned within the applicable general plan at buildout within each community located in the Chino Basin. Based on this analysis, there is a less than significant potential for implementation of the OBMPU to cause or contribute to significant adverse population growth inducement within the Chino Basin.

Construction and operational of OBMPU facilities will require employees to accomplish each of these activities. Given the large area that makes up the Chino Basin, it is reasonable to assume that many employment opportunities would be filled by workers drawn from the Chino Basin area. As such, it is assumed that there would be an adequate number of workers within the Chino Basin that could be available for construction jobs and could commute to the temporary construction jobs rather than relocate and induce growth in the area. Furthermore, the overall OBMPU is anticipated to require about 30 new employees in support of facility operations. These employees are expected to be drawn from existing population. This population increase is minimal and is within the population increase anticipated to occur within the Chino Basin of the 20- and 30-year horizon. Therefore, the implementation of the proposed facilities and the overall OBMPU

would result in less than significant impacts related to inducement of population growth.

- 7. **Public Services:** Impacts (a), (c), and (e)
- a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire protection?
- <u>Finding:</u> Less Than Significant Impact (pg. 258, IS, [Appendix 8.2, FSEIR])
- Facts: The proposed OBMPU does not include construction of new homes or businesses that would result in a direct increase in population or create a substantial number of new jobs that would result in new residents of the Chino Basin area. Operational activities associated with the proposed OBMPU facilities could require fire department service in the unlikely event of a hazardous materials emergency or accident/medical emergency at a given site. Although proposed OBMPU facilities may result in limited additional demand on fire protection services, the implementation of the HMBP (Business Plans) and/or continuation of adopted safety standards and procedures by agencies implementing the proposed OBMPU facilities would result in a nominal increase in service due to the limited number of such facilities. Any OBMPU Project requiring structures will be required to meet building codes, including those related to fire protection. The indirect increase in population and the use of hazardous materials associated with the well development would result in a nominal potential increase in fire services. As a result, no new fire facilities would be required. Therefore, no environmental effects would occur because construction of a new fire facilities would not be required.
- c. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Schools?
- <u>Finding:</u> Less Than Significant Impact (pg. 261, IS, [Appendix 8.2, FSEIR])
- Facts: Similar to the discussion under Fire and Police Protection above, the development of OBMPU facilities will not cause a significant demand for schools. Implementation of the OBMPU is not forecast to change existing land uses or independently increase either the number of residential units located within the Study Area or the number of students generated from the Study Area beyond that which is anticipated in the local agency general plans. Operation of the proposed OBMPU facilities is not forecast to require more than a total of 30 employees. School districts in the Chino Basin have adopted classroom loading standards (number of students per classroom) and collect development fees per square foot of residential, commercial and industrial development. Because the Project is not forecast to change land uses, or create activities that can increase demand for additional school capacity beyond that which is anticipated in the jurisdiction's General Plans, and because there are adopted standards and development fees are collected for new development, no potential for adverse impacts to schools is identified. No mitigation is required for schools on behalf of OBMPU projects.

- e. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered govern- mental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Other public facilities?
- <u>Finding:</u> Less Than Significant Impact (pg. 265, IS, [Appendix 8.2, FSEIR])
- Facts: Similar to the discussion under Fire and Police Protection services above, the development of the OBMPU will not cause a significant demand for or increase in library services. It is not forecast that the OBMPU would change land uses or otherwise create activities that can increase demand for or increase in library services beyond that which is anticipated in the jurisdiction's General Plans. Operation of the OBMPU facilities are anticipated to a total of about 30 employees. Additionally, it is not forecast to change land uses or otherwise create activities that can increase demand for additional library capacity services beyond that which is anticipated in local agency general plans. Libraries are currently provided by the Counties and local agencies under authority of the various jurisdictions that comprise the Chino Basin. OBMPU projects will not produce any direct demand for library capacity or contribute to indirect demand for such services. Mitigation is not required to reduce potential library capacity impacts to a level of less than significant since none is forecast to occur. Overall levels of library service will also be increased based upon the future population as characterized by demands of the local agencies. No potential for any significant demand for library services is identified and no mitigation is required.
- 8. **Transportation:** Impact (b)
- b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?
- <u>Finding:</u> No Impact (pg. 279, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> Vehicle miles traveled (VMT) in support of infrastructure construction and operation over the next 30 years will be responsive to the need for travel during both construction and operations. Unlike a development Project, traffic in support of OBMPU facilities will be sporadic (construction and operations) and based on demand, not discretional travel associated with a residence. Extraneous travel is not forecast to be carried out in support of OBMPU infrastructure facilities during either construction or operations. Therefore, future implementation of the OBMPU has no potential to conflict with or be inconsistent with State CEQA Guidelines Section 15064.3, Subdivision 3.

II. POTENTIALLY SIGNIFICANT IMPACTS THAT CAN BE MITIGATED BELOW A LEVEL OF SIGNIFICANCE (CEQA GUIDELINES § 15091(A)(1))

Pursuant to Section 21081(a) of the Public Resources Code and Section 15091(a)(1) of the State CEQA Guidelines, the IEUA Board finds that, for each of the following significant effects identified in the FSEIR, changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen the significant effects on as identified in the FSEIR. The significant effects and mitigation measures are stated fully in the FSEIR. These findings are explained below and are supported by substantial evidence in the record of proceedings.

1. Aesthetics:

a. Would the project have a substantial adverse effect on a scenic vista?

- <u>Finding:</u> 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 FSEIR. (pg. 111, IS, [Appendix 8.2, FSEIR])
- Facts: The most significant visual resources in the Project area are the hills and mountains surrounding the Chino Basin, pastoral landscapes in and within view of the Project area and the Prado Basin wetlands that occur in the southern portion of the Chino Basin. The predominant scenic vistas in the program area, as identified in local General Plans (Cities of Upland, Pomona, Montclair, Chino Hills, Chino, Ontario, Rancho Cucamonga, Eastvale, Jurupa Valley, Fontana, Claremont, Pomona and Counties of San Bernardino and Riverside), are: the views of the San Gabriel, San Bernardino and Santa Ana Mountains, Chino Hills, Jurupa Hills, Puente Hills and San Jose Hills, Tonner Canyon, Prado Basin, the Chino farmlands, and certain road corridors.

For all 4 Project Categories, construction was determined to result in less than significant impacts due to the temporary nature of construction. Due to the varied footprints of the types of projects proposed, as well as the speculative nature of the locations for future OBMPU projects, mitigation was required to minimize the potential for an individual project to impact a scenic vista.

The implementation of Mitigation Measure (MM) **AES-1** would ensure that the proposed facilities' contribution to cumulative scenic vista impacts would be reduced to less than cumulatively considerable by meeting the local design and landscape standards. Furthermore, MM **AES-2** would ensure that the pastoral setting that presently exists at the Mills Wetland site is not lost due to implementation of the proposed storage basin Project; this will reduce scenic vista impacts to a level of less than significant. The implementation of MM **AES-3** will ensure that impacts to scenic resources from the implementation of future regional groundwater treatment facility projects will be avoided or assessed further in future CEQA documentation.

Ultimately, with the implementation of mitigation, no permanent significant adverse effect on a scenic vista or the visual character of the area is forecast to result from implementing the Project.

- b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- <u>Finding:</u> 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 FSEIR. (pg. 113-114, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> There are roadways classified as eligible for state scenic highway status within the Chino Basin; however, there are no officially designated scenic highways. Eligible state scenic highways include: State Route (SR) 142 south of SR 71 and SR 71 south of SR 83 (Caltrans, 2016). The most significant visual resources are the hills

and mountains surrounding the Chino Basin and the pastoral landscape that occurs in the southern portion of the Chino Basin. The activity with the highest potential to conflict with local agency design guidelines is construction disturbance of the landscape. Such disturbance can be reduced to an acceptable level by landscaping or revegetating disturbed areas.

In general, many of the groundwater treatment plants, wells, reservoirs, and conveyance facilities that are likely to be implemented under the OBMPU would be installed within existing, developed water facility sites, many of which are in commercialized or industrial areas. The existing facilities are surrounded by block walls and/or chain link fences and, in some cases, vegetative visual buffers. Additionally, some of these facilities are landscaped. As such, on-site operations, including the proposed OBMPU facilities that would be installed within developed sites, would generally not be visible from off-site, and the visual character of these sites would not change. As specific facilities are proposed in the future, the associated environmental impacts will be evaluated in a subsequent Project-specific CEQA evaluation to allow a final determination on future Project's specific impacts. Such review is appropriate and consistent with utilization of a program environmental document in accordance with Sections 15162 and 15168 of the State CEQA Guidelines.

The implementation of MM **AES-4** would ensure that the proposed facilities' impacts to scenic resources, such as trees, are minimized to a level of less than significant. Furthermore, MM **AES-5** would ensure that future facilities are either not located within sites containing scenic resources or undergo subsequent CEQA documentation to fully analyze the impacts thereof.

With implementation of mitigation as discussed above, development under the OBMPU will be consistent with current general plan requirements for protecting scenic resources and scenic highway visual values. No permanent loss of significant scenic resources will result from implementing the Project.

- c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning or other regulations governing scenic quality?
- <u>Finding:</u> 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 FSEIR. (pg. 116, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> The proposed OBMPU facilities will utilize a variety of types of sites including existing facilities, underground systems within road- and through-ways, and new sites that may be undeveloped or highly disturbed to meet OBMPU Objectives. Installation of surface facilities has a potential to modify the existing view or visual setting at future specific Project sites which could cause a substantial negative visual impact. All facilities will be required to comply with the local jurisdiction zoning codes and other regulations governing scenic quality. However, mitigation measures are required to ensure compliance with the applicable zoning code, and to ensure that the proposed facilities will conform with design requirements established by local jurisdictions.

Although the specific Project sites will be altered, and the impacts may be considered an adverse change, the change is not considered sufficient to be characterized as a significant adverse impact due to the limited area that will be impacted at any one facility, and the fact that the pipelines are not visible once construction is complete. The visual character and quality of the Project area is not forecast to be significantly degraded. The facilities would be constructed to meet current design standards.

The implementation of MM **AES-6** would ensure compliance with the applicable zoning code. Furthermore, MM **AES-7** would ensure that future facilities will conform with design requirements established by local jurisdictions.

Based on the specific criteria identified above, the existing visual character and quality of the site will be modified, but it will be modified in a manner consistent with the local City/County General Plans vision for roadways within their various jurisdictions. With adherence to community standards and through compliance with mitigation measures ensuring compliance with design requirements and zoning standards, the negative effects to aesthetics would be less than significant.

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

- <u>Finding:</u> 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 FSEIR. (pg. 118, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> Some of the proposed OBMPU facilities will require the installation of night lighting, possibly including areas where little or no night lighting currently exists. The development of most of the proposed facilities are to be within existing facility sites, which already have some lighting features. Glare from new light fixtures that may be installed as part of proposed improvements has a potential to result in spill over lighting onto adjacent sensitive receptors such as residential, rural or wildlife habitat portions within the project area. Though no unusual or unique sources of light and glare are anticipated to be required in support of OBMPU facilities, mitigation to address the increased lighting that may result from the proposed OBMPU facilities is required.

The implementation of MM **AES-8** would ensure that light and glare impacts from future structures associated with the OBMPU are minimized to a level of less than significant.

With implementation of mitigation to ensure that this future increase in lighting does not result in a new source of substantial light or glare which would adversely affect day or nighttime views in the area, implementation of the OBMPU is not forecast to result in any significant light or glare effects.

Mitigation Measures

The IEUA has determined that the Project would have a potentially significant impact as a result of aesthetics or visual modifications from future OBMPU projects. Mitigation measures to reduce the impact to below a level of potential significance are provided below.

- AES-1: Proposed facilities shall be designed in accordance with local design standards and integrated with local surroundings. Landscaping shall be installed in conformance with local landscaping design guidelines as appropriate to screen views of new facilities and to integrate facilities with surrounding areas.
- AES-2: The Mills Wetland Storage Basin Project shall be designed to include landscaping commensurate with the existing pastoral setting that exists at this site at present. The Implementing Agency shall utilize existing photos of the Mills Wetlands prior to construction to develop a landscape plan that the Implementing Agency and/or Watermaster deem acceptable as "commensurate with the existing pastoral setting."
- AES-3: Future regional groundwater treatment facilities and other proposed facilities defined within the OBMPU at unknown locations shall either (1) Be located outside of scenic viewsheds identified in the General Plan or Municipal Code corresponding to a proposed location for a future facility, or (2) Undergo subsequent CEQA documentation to assess potential impacts from locating a future facility in an area that may contain scenic resources.
- AES-4: Should the removal of trees be required for a specific project, the Implementing Agency shall comply with the local jurisdiction's tree ordinance, municipal code, or other local regulations. If no tree ordinance exists within the local jurisdiction, and a project will remove healthy trees as defined by a qualified arborist, (1) the Implementing Agency shall replace all trees removed at a 1:1 ratio, and (2) The specific location selected for a well shall avoid rock outcroppings and other scenic resources as defined in CEQA Guidelines Appendix G. If this cannot be accomplished a second tier CEQA evaluation shall be completed.
- AES-5: Future proposed facilities defined within the OBMPU at unknown locations shall either (1) Be located within sites that avoid rock outcroppings and other scenic resources as defined in CEQA Guidelines Appendix G, or (2) Undergo subsequent CEQA documentation to assess potential impacts from locating a future facility in an area that may contain scenic resources.
- AES-6: OBMPU facility implementation will conform with design requirements established in the local jurisdiction planning documents, including but not limited to the applicable zoning code, except where such compliance is not required by California law.
- AES-7: When OBMPU above ground facilities are constructed in the future, the local agency design guidelines for the project site shall be followed to the extent that they do not conflict with the engineering and budget constraints established for the facility and except where such compliance is not required by California law.
- AES-8: Future OBMPU projects shall implement at least the following measures, unless they conflict with the local jurisdiction's light requirements, in which case the local jurisdiction's requirements shall be enforced:
 - Use of low-pressure sodium lights where security needs require such lighting to minimize
 - impacts of glare; Projects within a 45-mile radius of the Mount Palomar Observatory and located within Riverside County must adhere to special standards set by the County of Riverside relating to the use of low-pressure sodium lights.
 - The height of lighting fixtures shall be lowered to the lowest level consistent with the purpose of the lighting to reduce unwanted illumination.
 - Directing light and shielding shall be used to minimize off-site illumination.
 - No light shall be allowed to intrude into sensitive light receptor areas.

IEUA finds that implementation of the above measures can reduce potential adverse aesthetic impacts to a level of less than significant. As described in Section I of the IS, [Appendix 8.2, FSEIR], all potential aesthetic impacts associated with the OBMPU can be mitigated to a less than significant impact level. Mitigation measures would: minimize impacts to scenic vistas through enforcing future projects to meet local design standards; minimize visual impacts to the pastoral setting at the Mills Wetland site; minimize impacts to scenic resources through avoidance of such resources, or through assessment in subsequent CEQA documentation; minimize impacts to scenic resources such as trees through enforcement of compliance with local jurisdiction tree ordinance(s); minimize conflicts with regulations governing scenic quality through enforcing compliance with applicable zoning code and design requirements established by local jurisdictions; and, minimize light and glare impacts by enforcing local jurisdiction light and glare minimization standards. The above measures will be integrated into the proposed facilities that will be constructed without additional impacts on the environment. Since the Projects as analyzed above with the implementation of the above identified mitigation measures will not directly or indirectly cause significant adverse impact to aesthetic resources, the Project is not forecast to contribute to cumulatively significant aesthetic impacts within the Project area.

2. Agricultural and Forestry Resources:

- a. Would the convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- <u>Finding:</u> 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 FSEIR. (pg. 124-125, IS, [Appendix 8.2, FSEIR])
- The Chino Basin area historically contains significant agricultural resources; Facts: primarily dairy ranches and vegetable farms located in the southwestern portion of the County of San Bernardino. There are several areas of land designated by the California Department of Conservation as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the Chino Basin area which includes portions of Riverside County. Those new facilities located north of State Highway (SH) 60 will not cause the loss of any important farmland. Those located south of SH 60 have a potential to cause the loss of some important farmland soil resources. The facilities proposed as part of the OBMPU include development within possibly hundreds of acres of important farmland. To offset the impacts to important farmland in the southern Chino Basin, which may remove more than 100 acres of important farmland from production, projects can compensate for such impacts to farmland resources by participating in important farmland mitigation banks, either ones created in the local area or mitigation banks established in other areas of California.

The implementation of MM **AGF-1** would ensure the proposed facilities' contribution to project-specific or cumulative farmland impacts would be reduced to less than cumulatively considerable level of impact. If there is a determination of significance, then the implementing agency will either relocate and avoid the impact, or offset the loss by acquiring agricultural land conservation credits at a minimum ratio of 1:1.

With the implementation of mitigation to address any OBMPU facilities located within important farmland, through avoidance of important farmlands during site selection or through compensatory mitigation, the OBMPU would avoid or compensate for such impacts, thereby reducing impacts to a level of less than significant.

b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

- <u>Finding:</u> 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 FSEIR. (pg. 125-126, IS, [Appendix 8.2, FSEIR])
- Facts: The same circumstance exists for the six cities that no longer include any designated agricultural land. The Project cannot conflict with exist land use designations. On the other hand, there are five agencies, the two counties and the cities of Chino, Chino Hills and Eastvale that still have some land assigned agricultural designations. The critical issue for such designated land is whether such designated land constitutes "important farmlands" in contrast to low value (from an agricultural perspective) agricultural land, such as grazing land. Where future OBMPU water facilities or operations are proposed for implementation, a potential does exist for impact to important farmlands that are coincidental. However, mitigation is provided to minimize potential impacts to high value agricultural land.

The implementation of MM **AGF-2** includes the need to conduct a Land Evaluation Site Assessment (LESA) Model if a facility is proposed on land designated as important farmland. If there is a determination that the loss of farmland is significant based on the LESA Model, the implementing agency would offset the loss by acquiring agricultural land conservation credits at a minimum ratio of 1:1 so that potential impacts to land zoned for agriculture would be reduced to less than significant.

With the implementation of mitigation to address any OBMPU facilities located within important farmland, through avoidance or providing a LESA Model of important farmlands during site selection and through compensatory mitigation where important farmland exists, the OBMPU would avoid or compensate for agricultural impacts, thereby reducing impacts to a level of less than significant.

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

- <u>Finding:</u> 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 FSEIR. (pg. 127-128, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> The southern-most portion of the Chino Basin overlaps with riparian woodland areas along the Santa Ana River; Chino Creek; and Mill Creek; and in the Prado Basin. Certain areas of these riparian woodlands may qualify as forest land. Other than these specific areas, no contiguous area of forest land occur in the Chino Basin. Further, no jurisdictions have designated areas within their jurisdiction with zoning designations for forest land. Some of the OBMPU facilities, particularly

monitoring wells, other wells, and the proposed Mill Creek water storage basin could impact riparian woodland that might qualify as "forest land."

For all projects implemented in the Chino Basin that actually impact "forest land/riparian woodland" MM **AGF-3** shall be required when five acres or more of such woodland is impacted in support of OBMPU projects.

With the implementation of mitigation to address the loss of significant riparian woodland/forest land (defined as loss of over five acres), through compensatory mitigation where significant riparian woodland/forest land exists, the OBMPU would avoid or compensate for forestry impacts, thereby reducing impacts to a level of less than significant.

- e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?
- <u>Finding:</u> 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 FSEIR. (pg. 128, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> With the exceptions of impacts to Williamson Act lands, lands zone for agriculture and property zoned for forest land, a limited potential has been identified to convert agricultural land and forest land to water management uses from implementing the OBMPU Program Elements (Project Categories) in the Chino Basin.

The implementation of each mitigation involves avoidance as the first mitigation approach, but provides contingency measures to address impacts that cannot fully avoid these resources. Two of the mitigation measures require tests of onsite resources (the LESA Model or an evaluation to determine whether woodlands qualify as "forest land") to determine whether they qualify as resources of sufficient importance that would require mitigation of potential impacts.

For all Project Categories (1-4) mitigation measures **AGF-1**, **AGF-2**, and **AGF-3** can be implemented to reduce potentially significant adverse impacts to agricultural, forest, and timber resources to a less than significant impact level.

Mitigation Measures

The IEUA has determined that the Project would have a potentially significant impact as a result of the development proposed OBMPU facilities that have a reasonable possibility of removing some agricultural or forest land from operation. Mitigation measures to reduce the impact to below a level of potential significance are provided below.

AGF-1 For all proposed facilities in the southern portion of the Chino Basin (south of SH 60), the potential for impact to Important Farmlands (Prime Farmland, Farmland of Statewide Importance, or Unique Farmland) shall be determined prior to final site selection. If important farmland cannot be avoided and individually exceeds 5 acres or cumulatively exceeds 10 acres of important farmland lost to agricultural production over the life of the program, the agency implementing the project shall provide compensatory mitigation in the form of comparable important farmland permanently conserved in either a local or State- approved important farmland mitigation bank at a mitigation ratio of 1:1. The acquisition of this compensatory mitigation shall be completed within one year of initiating construction of the proposed facility and verification shall be documented with the Chino Basin Watermaster.

- AGF-2 For all proposed facilities in the southern portion of the Chino Basin (south of SH 60), the potential for impact to Important Farmlands (Prime Farmland, Farmland of Statewide Importance, or Unique Farmland) shall be determined prior to final site selection. If Important Farmland cannot be avoided and individually exceeds 5 acres or cumulatively exceeds 10 acres of Important Farmland lost to agricultural production over the life of the program, the agency implementing the project shall relocate and avoid the site, or alternatively the agency shall conduct a California Land Evaluation and Assessment (LESA) model evaluation. If the evaluation determines the loss of Important Farmland will occur, the agency shall provide compensatory mitigation in the form of comparable Important Farmland mitigation bank at a mitigation ratio of 1:1. The acquisition of this compensatory mitigation shall be completed within one year of initiating construction of the proposed facility and verification shall be documented with the Chino Basin Watermaster.
- AGF-3 For all proposed facilities that may impact riparian woodland/forest land in the portion of the Chino Basin (SH 60), the potential for impacts to riparian woodland/forest land shall be determined prior to final site election. If important forest land cannot be avoided and permanently will exceed 5 acres in area, the agency implementing the project shall relocate and avoid the site, or alternatively the agency shall conduct an evaluation to determine if it qualifies with the State definition of "forest land." If the evaluation determines the permanent loss of important forest land will occur, the agency shall provide compensatory mitigation in the form of comparable forest land permanently conserved in either a local or State-approved important forest land mitigation bank at a mitigation ratio of 1:1. Alternatively, the agency may carry out a forest land creation program at a 1:1 ratio for comparable woodland. The acquisition or creation of this compensatory mitigation shall be completed/initiated within one year of initiating construction of the proposed facility and verification shall be documented with the Chino Basin Watermaster.

IEUA finds that implementation of the above measures can reduce potential adverse impacts associated with the conversion of important agricultural and/or forest lands. The above measures can be implemented without causing additional adverse environmental impacts. The above measures will be integrated into the proposed facilities that will be constructed without additional impacts on the environment. Since the Project as analyzed above will not directly or indirectly cause significant adverse impact to agricultural lands, the Project is not forecast to contribute to cumulatively significant conversion of agricultural or forest lands within the State.

3. Air Quality

- b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
- <u>Finding:</u> 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 FSEIR. (pg. 4-26 to 4-28, FSEIR)
- <u>Facts:</u> The SCAQMD significance thresholds for criteria pollutants are as follows, along with the Project maximum daily emissions with mitigation implemented for <u>Construction</u>:
 - VOC: threshold 75; Project 13.64; Exceeds Threshold? No
 - NO_x: <u>threshold</u> 100; <u>Project</u> 87.93; Exceeds Threshold? No
 - CO: <u>threshold</u> 550; <u>Project</u> 391.36; Exceeds Threshold? No
 - SO_x: <u>threshold</u> 150; <u>Project</u> 0.92; Exceeds Threshold? No

- PM₁₀: <u>threshold</u> 150; <u>Project</u> 12.58; Exceeds Threshold? No
- PM_{2.5}: threshold 55; Project 6.11; Exceeds Threshold? No

Mitigation is required to minimize impacts related to construction emissions, specifically to minimize NO_x emissions. MM **AQ-1** would minimize the horsepower of construction equipment, ensure that off-road diesel construction equipment conforms to Tier 4 standards, and ensure that all construction equipment is tuned and maintained in accordance with manufacturer specifications. MM **AQ-2** would ensure that all graded areas within future OBMPU Project sites are watered at 2.1 hour watering intervals or otherwise ensure a soil moisture of 12%. As such, OBMPU construction would not result in cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard; impacts are less than significant with mitigation.

The Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment. Backup generators would be used only in emergency situations and for routine testing and maintenance purposes and would not contribute a substantial amount of emissions capable of exceeding SCAQMD thresholds. As Project operations would not exceed SCAQMD thresholds, the Project would not violate an air quality standard or contribute to an existing violation. Therefore, Project operations would not result in a cumulatively considerable net increase of any criteria pollutant and impacts would be less than significant.

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

- <u>Finding:</u> 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 FSEIR. (pg. 4-34, FSEIR)
- <u>Facts:</u> The SCAQMD screening look-up tables are utilized to determine localized significance thresholds (LSTs) and impacts thereof. The values vary between the Project Categories put forth as part of the OBMPU. Results of the LST analysis indicate that, the Project would not exceed the SCAQMD localized significance thresholds during construction (NO_x, CO, PM₁₀, and PM_{2.5} emissions are below thresholds for all Project Categories during construction). Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction.

After implementation of MM **AQ-1**—which would minimize the horsepower of construction equipment, ensure that off-road diesel construction equipment conforms to Tier 4 standards, and ensure that all construction equipment is tuned and maintained in accordance with manufacturer specifications—construction-source emissions would not exceed the applicable SCAQMD LSTs thresholds and would be less than significant.

The SCAQMD is responsible for issuing permits for the operation of stationary sources in order to reduce air pollution, and to attain and maintain the national and California ambient air quality standards in the South Coast Air Basin (SCAB). Upon compliance with SCAQMD permitting procedures, localized emissions from any

potential diesel generator would not result in substantial pollutant concentrations capable of exceeding operational LST thresholds. Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant.

At buildout of the Project, the highest daily traffic volumes generated at the roadways within the vicinity of the Project are expected to generate less than the highest daily traffic volumes generated at the busiest intersection in the CO "hot spot" analysis. As such, the Project would not likely exceed the most stringent 1-hour CO standard.

Ultimately, with implementation of mitigation, the OBMPU would have a less than significant potential to expose sensitive receptors to substantial pollutant concentrations.

Mitigation Measures

The IEUA has determined that the Project would have a potentially significant impact as a result of the emissions generated by the development proposed OBMPU facilities. Mitigation measures to reduce the impact to below a level of potential significance are provided below.

- AQ-1 When using construction equipment greater than 150 horsepower (>150 hp), the Construction Contractor shall ensure that off-road diesel construction equipment complies with the Environmental Protection Agency (EPA)/California Air Resources Board (CARB) Tier 4 emissions standards or equivalent and shall ensure that all construction equipment is tuned and maintained in accordance with the manufacturer's specifications.
- AQ-2 All actively graded areas within the Project site shall be watered at 2.1-hour watering intervals (e.g., 4 times per day) or a movable sprinkler system shall be in place to ensure minimum soil moisture of 12 percent (%) in maintained for actively graded areas. Moisture content can be verified with use of a moisture probe by the grading contractor.

IEUA finds that implementation of the above measures can reduce potential adverse impacts associated with the generation of emissions during construction of the proposed OBMPU facilities. The above measures can be implemented without causing additional adverse environmental impacts. The above measures will be integrated into the proposed facilities that will be constructed without additional impacts on the environment. Since the Project, as analyzed above will not cause significant adverse impact to air quality, implementation of the OBMPU is not forecast to result in any unavoidable Project specific or cumulatively considerable adverse impacts to air quality.

- 4. **Biological Resources:** Impacts under Biological Resources, checklist questions "a," "b," and "d" are significant and cannot be mitigated below significance level. The discussion of this specific issue under Biological Resources is located below in Section C.3 of this document. The checklist questions under Biological Resources that can be mitigated to a level of less than significant are as follows:
- c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?
- <u>Finding:</u> 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 FSEIR. (pg. 4-67 to 4-69, 4-71, and 4-76, FSEIR)
- <u>Facts:</u> Based on the background review and subsequent windshield surveys, numerous jurisdictional waters occur in the Study Area where the OBMPU will be implemented. Many of the jurisdictional waters (built waterways) are heavily managed by local agencies, which serve public water needs, flood control, and agricultural production. As a result, some of these jurisdictional waters support few natural biological functions and values.

Direct impacts to man-made features would remove or disrupt the limited biological functions that these features provide. Direct impacts in natural areas would remove or disrupt the hydrology, vegetation, wildlife use, water quality conditions, and other biological functions provided by the resources. Temporary impacts on jurisdictional waters could result in a temporary loss of jurisdictional waters and could potentially increase erosion and sediment transport into adjacent areas. Indirect impacts on jurisdictional waters.

A Jurisdictional Determination and subsequent approval of the determination by the regulatory agencies will be conducted on each facility as the design becomes available and construction of a particular facility is scheduled to occur within the foreseeable future. As stated above under Biological Resources issues "a" and "b", the mitigation strategy includes avoidance of impacts on sensitive habitat to the extent possible through requiring the following: acquisition of regulatory permits and implementing subsequent mitigation that would minimize impacts related to discharge of fill or streambed alteration of jurisdictional areas (BIO-3); require jurisdictional water preconstruction surveys to determine the potential impacts thereof, which will inform the mitigative actions required to minimize impacts to jurisdictional waters/areas (BIO-4); and, require specific measures pertaining to water diversion to minimize impacts to jurisdictional waters during construction (BIO-24); and, require the continued preparation of annual Prado Basin Habitat Sustainability Monitoring Program and review of impacts thereof in subsequent environmental documents should the monitoring program suggest that habitat is adversely impacted (BIO-25).

With implementation of mitigation measures outlined herein, unforeseen direct impacts, indirect impacts, and temporary impacts to natural and man-made water bodies would be mitigated to a level of less than significant. As such, the OBMPU would have a less than significant potential to have a substantial adverse effect on

state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means.

- e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?
- <u>Finding:</u> 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 FSEIR. (pg. 4-69 and 4-73, FSEIR)
- <u>Facts:</u> The proposed OBMPU that will be developed within the Chino Basin includes the following incorporated cities: Chino, Chino Hills, Eastvale, Fontana, Jurupa Valley, Montclair, Ontario, Pomona, Rancho Cucamonga, and Upland. The Basin includes limited areas of unincorporated Riverside and San Bernardino Counties. As such, future OBMPU Facilities would be subject to various local ordinances.

One of the main concerns under this issue is the potential for the OBMPU to conflict with a tree preservation policy. MM **BIO-10**, which requires the maximization of the preservation of trees. Furthermore, under Aesthetics, MM **AES-4** requires the implementing agency to comply with the local jurisdiction's tree ordinance, municipal code, or other local regulations and provides subsequent requirements where a tree preservation ordinance does not exist, including completion of a second tier CEQA evaluation, to further minimize impacts thereof. Additionally, MM **LU-1** ensures that the facilities associated with the OBMPU are developed to minimize conflicts with adjacent land uses, which would further minimize the OBMPU's potential to conflict with any local policies or ordinances protecting biological resources. With the implementation of the above mitigation measures, as well as the entirety of the compiled mitigation designed to result in conflicts with local ordinances would be less than significant.

- f. Would the project Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan??
- <u>Finding:</u> 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 FSEIR. (pg. 4-69 and 4-72, FSEIR)
- **Facts:** The OBMPU is located within the Chino Basin, which includes a part of western Riverside County, and as such, areas located therein are subject to the Western Riverside County MSHCP. Other HCPs within the Chino Basin include the Oakmont Industrial Group HCP in Ontario and the North Fontana MSHCP in Fontana. OBMPU Facilities located within these areas would have a potential to conflict with the provisions of an HCP, therefore, mitigation is required to minimize impacts to a less than significant level. As such, MM **BIO-7** would require verification of consistency with or require acquisition of take authorization through applicable habitat conservation plans (HCPs) or multiple species habitat conservation plans (MSHCPs) within a given site. Thus, impacts would be less than significant through avoidance, compensation or a comparable mitigation alternative, which will ensure that each Project will be shown to be consistent with the applicable MSHCP/HCP when implemented.

Mitigation Measures

IEUA has determined that the Project could have a potentially significant impact on biological resources checklist items "c," "e," and "f." Mitigation measures to reduce the impact to below a level of potential significance are provided below.

To reduce or prevent activities that may adversely affect rivers, streambeds or wetlands, the following mitigation measures will be incorporated into any specific projects and/or contractor specifications for future Project-related impacts to protect sensitive resources and habitat.

- Prior to discharge of fill or streambed alteration of state or federal water jurisdictional BIO-3 areas, the project proponent shall obtain regulatory permits from the U.S. Army Corps of Engineers, local Regional Water Quality Control Board and the California Department of Fish and Wildlife. Any future project that must discharge fill into a channel or otherwise alter a streambed shall be minimized to the extent feasible, and any discharge of fill not avoidable shall be mitigated through compensatory mitigation. Mitigation can be provided by restoration of temporary impacts, enhancement of existing resources, or purchasing into any authorized mitigation bank or in-lieu fee program; by selecting a site of comparable acreage near the site and enhancing it with a native riparian habitat or invasive species removal in accordance with a habitat mitigation plan approved by regulatory agencies; or by acquiring sufficient compensating habitat to meet regulatory agency requirements. Typically, regulatory agencies require mitigation for jurisdictional waters without any riparian or wetland habitat to be mitigated at a 1:1 ratio. For loss of any riparian or other wetland areas, the mitigation ratio will begin at 2:1 and the ratio will rise based on the type of habitat, habitat quality, and presence of sensitive or listed plants or animals in the affected area. A Habitat Mitigation and Monitoring Proposal shall be prepared and reviewed and approved by the appropriate regulatory agencies. The project proponent will also obtain permits from the regulatory agencies (U.S. Army Corps of Engineers, Regional Water Quality Control Board, CDFW and any other applicable regulatory agency with jurisdiction over the proposed facility improvement) if any impacts to jurisdictional areas will occur. These agencies can impose greater mitigation requirements in their permits, but the Implementing Agency will utilize the ratios outlined above as the minimum required to offset or compensate for impacts to jurisdictional waters, riparian areas or other wetlands.
- BIO-4 Jurisdictional Water Preconstruction Surveys: A federal and state jurisdictional water preconstruction survey will be conducted at least six months before the start of grounddisturbing activities to identify and map all jurisdictional waters in the project footprint and up to a 250-foot buffer around the project footprint, subject to legal property access restrictions. The purpose of this survey is to confirm the extent of jurisdictional waters within the project footprint and adjacent up to 250 foot buffer. If possible, surveys would be performed during the spring, when plant species are in bloom and hydrological indicators are most readily identifiable. These results would then be used to calculate impact acreages and determine the amount of compensatory mitigation required to offset the loss of wetland functions and values.

Implementation of the following mitigation measures will ensure that project design and site selection reduce impacts to sensitive biological resources to the extent feasible.

BIO-10 Maximize the preservation of individual oak, sycamore and walnut trees within proposed OBMPU facility sites. Preservation is defined within this measure as follows: existing oak, sycamore and walnut trees within a given Project site shall be retained within the site to the maximum extent feasible except where their preservations would interfere with functional and reasonable project design. Where the preservation of individual trees is not possible, the guidelines set forth in MM AES-4 regarding tree preservation and adherence to local ordinances thereof shall be followed. Implementation of the following mitigation measures will ensure that project construction impacts to sensitive biological resources, including the potential effects of invasive species, are reduced to the extent feasible.

- BIO-24 Dewatering/Water Diversion Plan: If construction is planned to occur where there is open or flowing water, prior to the commencement of construction the Project Proponent shall submit to the Implementing Agency a Dewatering Plan prepared in coordination with the resource agencies (e.g., USACE, SWRCB/RWQCB, and CDFW, as appropriate). The Dewatering Plan shall identify how open or flowing water will be routed around construction areas, such as through the creation of cofferdams. If cofferdams are constructed, implementation of the following cofferdam or water diversion measures shall be implemented to avoid and lessen impacts on jurisdictional waters during construction:
 - The cofferdams, filter fabric, and corrugated steel pipe are to be removed from the creek bed after completion of the project.
 - The timing of work within all channelized waters is to be coordinated with the regulatory agencies.
 - The cofferdam is to be placed upstream of the work area to direct base flows through an appropriately sized diversion pipe. The diversion pipe will extend through the Contractor's work area, where possible, and outlet through a sandbag dam at the downstream end.
 - Sediment catch basins immediately below the construction site are to be constructed when performing in-channel construction to prevent silt- and sedimentladen water from entering the main stream flow. Accumulated sediments will be periodically removed from the catch basins.
 - BIO-25 Permanent Water Diversion Projects: The Watermaster shall continue to prepare the annual Prado Basin Habitat Sustainability Monitoring Program. A second-tier CEQA evaluation shall be conducted for proposed water diversion projects associated with the OBMPU. The potential impacts to Prado Basin habitat from implementation of such diversion projects shall receive public review, including pertinent wildlife management agencies and interested parties.

The following measures are also required to minimize impacts under biological resources, though these measures (**AES-4**, and **LU-1**) are provided under their respective sections herein.

IEUA finds that implementation of the above measures can reduce potential impacts to wetlands, impacts related to compliance with local policies or ordinances pertaining to the protection of biological resources, and impacts related to compliance with applicable MSHCPs/HCPs. The above measures can be implemented without causing additional adverse environmental impacts. The above measures will be integrated into the future development activities without additional impacts on the environment. Since the Project as analyzed above will not directly or indirectly cause significant adverse wetland, local policy or MSHCP/HCP impacts under biological resources with implementation of mitigation, the Project is not forecast to contribute to cumulatively considerable wetland, local policy or MSHCP/HCP impacts related to implementation of the OBMPU.

5. Cultural Resources

- a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?
- b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

The facts and findings below apply both to impacts (a) and (b).

- <u>Finding:</u> 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 FSEIR. (pg. 4-94 to 4-99, FSEIR)
- <u>Facts:</u> Since specific locations for the proposed wells have not been have yet to be determined, impacts to specific historical, archaeological, and paleontological resources are speculative. Previously unknown and unrecorded cultural resources may be unearthed during excavation and grading activities for individual projects. If previously unknown potentially unique buried archaeological or paleontological resources are uncovered during excavation or construction, significant impacts could occur. Therefore, mitigation will be implemented that would require site-specific studies to identify potentially significant historical, archaeological, and paleontological resources. Additional studies would minimize potential impacts to historical, archaeological, and paleontological resources.

MM **CUL-1** would exclude highly disturbed sites from requiring further cultural resource evaluation, unless the Implementing Agency is seeking state funding for the Project. Furthermore, MM **CUL-1** would require the Implementing Agency to adhere to procedures pertaining to treatment of cultural resources that may be accidentally discovered during earthmoving activities.

MM **CUL-2** would ensure that future OBMPU Projects that are located within undisturbed areas, within a site that will require substantial earthmoving activities and/or excavation, and/or the Implementing Agency is seeking State funding, will require a follow-on Phase I Cultural Resources Investigation. This mitigation measure includes several phases or steps beyond the completion of a Phase I Cultural Resources Investigation, evaluation, mitigation, and monitoring associated with a given Project where resources may be located. This would ensure that adequate mitigation is provided in the event that significant cultural resources are located within a given OBMPU Project site.

MM **CUL-3** would ensure that, after each phase of the studies required by MM **CUL-2** has been completed, where required, a complete report on the methods, results, and final conclusions of the research procedures is prepared and submitted to SCCIC, EIC, NHMLAC, and/or SBCM. This would ensure that any discoveries are properly documented for future researchers that may seek information in the OBMPU Project area.

It can be anticipated that projects proposed under OBMPU may involve modifications to or may otherwise encounter common infrastructure features that are more than 50 years of age, but have a low potential to be considered historically significant, such as existing roadways and minor, utilitarian structures serving as pumphouses or reservoirs, as well as numerous historic-period buildings that are adjacent to the Project boundaries but are unlikely to receive any direct or indirect impact. A programmatic agreement, enforced through MM **CUL-4** would outline the proper treatment of such properties in future Project-specific studies, which will greatly streamline the design and completion of such studies, facilitate the SHPO review process, and minimize potential Project delays.

The potential construction impacts of the Project, in combination with other projects as a result of growth in the area, could contribute to a cumulatively significant impact specific historical, archaeological, and paleontological resources. Therefore, the Project's cumulative effects to specific historical, archaeological, and paleontological resources would be cumulatively considerable and cumulative impacts would require mitigation, as addressed above, to minimize impacts to a level of less than significant.

Mitigation Measures

IEUA has determined that the Project could have a potentially significant impact on unknown subsurface cultural resources. Mitigation measures to reduce the impact to below a level of potential significance are provided below.

CUL-1: Where a future discretionary project requiring a Negative Declaration or follow-on EIR is proposed within an existing facility that has been totally disturbed due to it undergoing past engineered site preparation (such as a well site or water treatment facility site), the agency implementing the OBMPU project will not be required to complete a follow on cultural resources report (Phase I Cultural Resources Investigation) unless the Implementing Agency is seeking State funding, in which case the Implementing Agency must prepare a Phase I Cultural Resources Investigation to satisfy State CEQA-plus requirements.

Where a Phase I Cultural Resources Investigation is not required, the following shall be required to minimize impacts to any accidentally exposed cultural resource materials:

- Should any cultural resources be encountered during construction of these facilities, earthmoving or grading activities in the immediate area of the finds shall be halted and an onsite inspection shall be performed immediately by a qualified archaeologist. Responsibility for making this determination shall be with the Implementing Agency's onsite inspector. The archaeological professional shall assess the find, determine its significance, and make recommendations for appropriate mitigation measures within the guidelines of the California Environmental Quality Act.
- CUL-2: Where a future discretionary project requiring a Negative Declaration or follow-on EIR is proposed within an undisturbed site and/or a site that will require substantial earthmoving activities and/or excavation, and/or the Implementing Agency is seeking State funding, the agency implementing the OBMPU project shall complete a follow on cultural resources report (Phase I Cultural Resources Investigation) regardless of whether the Implementing Agency is seeking State funding.

Where a Phase I Cultural Resources Investigation is required, the following phases of identification, evaluation, mitigation, and monitoring shall be followed for a given OBMPU Project:

1. Phase I (Identification): A Phase I Investigation to identify historical, archaeological, or paleontological resources in a project area shall include the following research procedures, as appropriate:
- Focused historical/archaeological resources records searches at SCCIC and/or EIC, depending on the project location, and paleontological resources records searches by NHMLAC, SBCM, and/or the Western Science Center in Hemet;
- Historical background research, geoarchaeological profile analysis, and paleontological literature review;
- Consultation with the State of California Native American Heritage Commission, Native American tribes in the surrounding area, pertinent local government agencies, and local historic preservation groups;
- Field survey of the project area by qualified professionals of the pertinent discipline and at the appropriate level of intensity as determined on the basis of sensitivity assessment and site conditions;
- Field recordation of any cultural resources encountered during the survey and proper documentation of the resources for incorporation into the appropriate inventories or databases.
- 2. Phase II (Evaluation): If cultural resources are encountered in a project area, a Phase II investigation shall be required to evaluate the potential significance of the resources in accordance with the statutory/regulatory framework outlined above. A typical Phase II study consists of the following research procedures:
 - Preparation of a research design to discuss the specific goals and objectives of the study in the context of important scientific questions that may be addressed with the findings and the significance criteria to be used for the evaluation, and to formulate the proper methodology to accomplish such goals;
 - In-depth exploration of historical, archaeological, or paleontological literature, archival records, as well as oral historical accounts for information pertaining to the cultural resources under evaluation;
 - Fieldwork to ascertain the nature and extent of the archaeological/paleontological remains or resource-sensitive sediments identified during the Phase I study, such as surface collection of artifacts, controlled excavation of units, trenches, and/or shovel test pits, and collection of soil samples;
 - Laboratory processing and analyses of the cultural artifacts, fossil specimens, and/or soil samples for the proper recovery, identification, recordation, and cataloguing of the materials collected during the fieldwork and to prepare the assemblage for permanent curation, if warranted.
- 3. Phase III (Mitigation): For resources that prove to be significant under the appropriate criteria, mitigation of potential project impact is required. Depending on the characteristics of each resource type and the unique aspects of significance for each individual resource, mitigation may be accomplished through a variety of different methods, which shall be determined by a qualified archaeologist, paleontologist, historian, or other applicable professional in the "cultural resources" field. Typical mitigation for historical, archaeological, or paleontological resources, however, may focus on the following procedures, aimed mainly at the preservation of physical and/or archival data about a significant cultural resource that would be impacted by the project:
 - Data recovery through further excavation at an archaeological site or a paleontological locality to collect a representative sample of the identified remains, followed by laboratory processing and analysis as well as preparation for permanent curation;
 - Comprehensive documentation of architectural and historical data about a significant building, structure, or object using methods comparable to the appropriate level of the Historic American Buildings Survey (HABS) and the Historic American Engineering Record (HAER) for permanent curation at a repository or repositories that provides access to the public;
 - Adjustments to project plans to minimize potential impact on the significance and integrity of the resource(s) in question.
- 4. Phase IV (Monitoring): At locations that are considered sensitive for subsurface deposits of undetected archaeological or paleontological remains, all earth-moving operations shall be monitored continuously or periodically, as warranted, by qualified professional practitioners. Archaeological monitoring programs shall be coordinated with the nearest Native American groups, who may wish to participate, as put forth in MMs TCR-1 through TCR-3.

- CUL-3: After each phase of the studies required by mitigation measure CUL 2 has been completed, where required, a complete report on the methods, results, and final conclusions of the research procedures shall be prepared and submitted to South Central Coastal Information Center (SCCIC), Eastern Information Center (EIC), Natural History Museum of Los Angeles County (NHMLAC), and/or San Bernardino County Museum (SBCM), as appropriate and in addition to the lead Implementing Agency for the project, for permanent documentation and easy references by future researchers.
- CUL-4: Prior to commencement of construction of OBMPU related facilities, the Watermaster and IEUA shall confer with the Watermaster and Watermaster Parties/stakeholders to establish a programmatic agreement with SHPO that will stipulate a set of mutually accepted guidelines that address research procedures and the types of potential cultural resources that may be excluded from further consideration before OBMPU Projects are implemented, such as common infrastructure features that are more than 50 years of age, but have a low potential to be considered historically significant, such as existing roadways and minor, utilitarian structures serving as pumphouses or reservoirs, as well as numerous historic-period buildings that are adjacent to the project boundaries but are unlikely to receive any direct or indirect impact. Once this agreement has been made with SHPO, Watermaster shall retain the agreement in the Project file, and shall ensure that all Stakeholder Parties are given copies of the agreement for reference on future OBMPU Projects. For OBMPU Projects that are in development prior to an agreement with SHPO, all types of cultural resources shall be considered by the professionals assessing historical resources within the project footprint; regardless, the steps provided in MM CUL-2 shall be followed to assess and minimize impacts to sensitive cultural resources within a given site.

IEUA finds that implementation of the above measures can reduce potential impacts to unknown subsurface cultural resources to a less than significant impact level. The above measures can be implemented without causing additional adverse environmental impacts. The above measures will be integrated into the future development activities without additional impacts on the environment. Since the Project as analyzed above will not directly or indirectly cause significant adverse impact related to cultural, archeological, or historical resources with implementation of mitigation, the Project is not forecast to contribute to cumulatively considerable cultural resource impacts required to support the Project.

6. Energy

- a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operations?
- b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The facts and findings below apply both to impacts (a) and (b).

- <u>Finding:</u> 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 FSEIR. (pg. 4-117 to 4-118, FSEIR)
- <u>Facts:</u> OBMPU construction and operation would not result in inefficient, wasteful or unnecessary consumption of energy and would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to

the applicable California Ai Resources Board (CARB) emissions standards, acting to promote equipment fuel efficiencies.

California Code of Regulations (CCR) Title 13, Title 13, Motor Vehicles, Section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Best Available Control Measures (BACMs) inform construction equipment operators of this requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by County building officials, agency field inspectors, and/or in response to citizen complaints.

Diesel fuel would be supplied by County and regional commercial vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved through the use of bulk purchases, transport and use of construction materials. The 2018 Integrated Energy Policy Report (IEPR) released by the California Energy Commission (CEC) has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements. As such, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

Operation of OBMPU facilities would not include any substantive new stationary or mobile sources of emissions, and therefore, by its very nature, will not generate substantive amounts of energy demand from Project operations. The Project does not propose a trip-generating land use or facilities that would generate any substantive amount of on-going energy demands. While it is anticipated that the Project would require intermittent maintenance, such maintenance would be minimal requiring a negligible amount of traffic trips on an annual basis.

Due to the scope of the OBMPU, there is a potential for certain types of OBMPU Facilities to require a substantial amount of operational energy, as such, mitigation that would accomplish the following is required to minimize impacts to a level of less than significant: implementing agencies shall consider use of alternative energy sources for future OBMPU Projects; and, for those OBMPU facilities that are anticipated to utilize a substantial amount of energy for operations, subsequent CEQA documentation to address operational energy demands. With implementation of these mitigation measures, and compliance with current Federal and State regulations pertaining to energy conservation, the proposed OBMPU is anticipated to have a less than significant impact on energy demand and resources.

Mitigation Measures

The IEUA has determined that the Project would have a potentially significant impact as a result of the energy demanded by construction and operation of facilities associated with the OBMPU. Mitigation measures to reduce the impact to below a level of potential significance are provided below.

EN-1 Where feasible, future OBMPU Projects shall use alternative energy sources to serve the future OBMPU Facility energy demands. Examples of circumstances that would render use of alternative energy infeasible include, but are not limited to: lack of space within a given site for installation of alternative energy sources; fiscal infeasibility due to lack of efficiency of alternative sources of energy when compared to the energy demand for a given project; etc.

EN-2 Future OBMPU Projects that are anticipated to utilize a substantial amount of energy for operations, such as regional groundwater treatment plants, pump stations, upgrades to expand capacity at existing water treatment plants, etc., shall undergo subsequent CEQA documentation to assess operational energy demands and GHG emissions related to energy demands.

IEUA finds that implementation of the above measures can reduce potential adverse impacts associated with the energy demand anticipated as a result of construction and operational activities proposed by the OBMPU. The above measure can be implemented without causing additional adverse environmental impacts. The above measures will be integrated into the proposed facilities that will be constructed without additional impacts on the environment. Since the Project, as analyzed above will not cause significant adverse impact to energy, implementation of the OBMPU is not forecast to result in any unavoidable Project specific or cumulative adverse impacts to energy.

7. Geology/Soils

- a(i). Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: (i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
- <u>Finding:</u> 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 FSEIR. (pg. 141-142, IS, [Appendix 8.2, FSEIR])
- Facts: There are three faults delineated on the Alquist-Priolo Earthquake Fault Zoning Map within and adjacent to the Chino Basin: the Elsinore Fault Zone (Chino Fault), which crosses the western boundary of the Chino Basin; the Red Hill-Etiwanda Avenue Fault, which traverses the northern boundary of the Chino Basin; and, a segment of the Sierra Madre Fault Zone, Cucamonga Section passes through the northwestern portion of the Chino Basin. Many OBMPU facilities would be located within developed sites containing desalter or water treatment facilities. None of these sites is located within an Alquist Priolo Earthquake Fault Zone. Because not all Projects locations are determined at this time, there is the potential for projects to be constructed and operated within an Alquist-Priolo Fault Zone. Projects proposed as part of all Project Categories that would be operated within these zones could expose structures to potential substantial adverse effects; therefore, mitigation is required to minimize impacts under this issue.

The implementation of MM **GEO-1** would ensure new facilities are located outside of delineated fault zones, or otherwise minimize impacts if located within a fault zone.

Ultimately, through the implementation of mitigation that would ensure that new facilities are located outside of delineated fault zones, or if located within a fault zone are analyzed thoroughly through a site specific geotechnical report with specific design recommendations or through a second tier CEQA evaluation, fault rupture-related impacts would be less than significant. As specific facilities are

proposed in the future, the associated environmental impacts will be evaluated in a subsequent Project-specific CEQA evaluation to allow a final determination on each future Project's specific impacts. Such review is appropriate and consistent with utilization of a program environmental document in accordance with Sections 15162 and 15168 of the State CEQA Guidelines.

a(iii). Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: (iii) Seismic-related ground failure, including liquefaction?

- <u>Finding:</u> 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 FSEIR. (pg. 145-146, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> Given that the locations of many of the proposed OBMPU facilities are presently unknown, it is possible that future OBMPU facilities could be located within an area with a high potential for liquefaction, as liquefaction is known to occur within the Chino Basin area. OBMPU facilities located on or within (underground facilities, such as pipelines) soils with a moderate to high potential for liquefaction could experience damage or failure as a result of liquefaction. Therefore, mitigation is required to minimize impacts under this issue.

The implementation of MM **GEO-2** would reduce the potential impacts from liquefaction and landslide hazards through a design level geotechnical investigation with implementation of specific design recommendations.

Ultimately, through the implementation of mitigation that would ensure that OBMPU facilities are analyzed thoroughly through a site-specific geotechnical report with specific design recommendations, liquefaction-related impacts would be controlled to a less than significant impact.

- a(iv). Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: (iv) Landslides?
- <u>Finding:</u> 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 FSEIR. (pg. 147, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> Landslides and mudflow hazards exist throughout the Chino Basin on steep hillsides and in creek and streambed areas. Given that the locations of many of the proposed OBMPU facilities are presently unknown, it is possible that future OBMPU facilities could be located within an area with a high potential for landslide. OBMPU facilities located in areas that are highly susceptible to landslide could experience damage or failure as a result of of this geotechnical hazard. Therefore, mitigation is required to minimize impacts under this issue.

The implementation of Mitigation Measure (MM) **GEO-2** would reduce the potential impacts from landslide hazards through a design level geotechnical investigation with implementation of specific design recommendations.

Ultimately, through the implementation of mitigation that would ensure that OBMPU facilities are analyzed thoroughly through a site-specific geotechnical report with

specific design recommendations, landslide-related impacts would be less than significant.

- b. Would the project result in substantial soil erosion or the loss of topsoil?
- <u>Finding:</u> 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 FSEIR. (pg. 149, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> Construction activities for proposed OBMPU facilities such as excavation and grading could result in soil erosion during rain or high wind events. Development of the proposed OBMPU facilities would result in construction activities that would need to comply with South Coast Air Quality Management District (SCAQMD) Rule 403 for dust control that would ensure the prevention and/or management of wind erosion and subsequent topsoil loss. Compliance with SCAQMD Rule 403 would ensure that construction activities that generate wind-induced soil erosion are below significance thresholds.

For OBMPU projects that would disturb less than an acre, no Storm Water Pollution Prevention Plan (SWPPP) would be required. However, in order to prevent erosion associated with runoff from construction sites for each Project, the implementing agency will abide by best management practices (BMPs) to ensure that the discharge of storm runoff from construction sites does not cause erosion downstream to the discharge point. The implementation of BMPs will be enforced through mitigation. Additionally, for OBMPU projects that are less than one acre in size, compliance with minimum BMPs, as specified by the San Bernardino County MS4 Permit (SARWQCB, 2016), shall include erosion and sediment control BMPs for the construction site. Adherence to these conditions and mitigation identified would ensure that potential soil erosion and loss of topsoil impacts would be minimized to less than significant.

The implementation of MM **GEO-3** would ensure that the proposed facilities associated with the OBMPU that are less than one acre in size would not exacerbate conditions related to erosion associated with runoff from construction sites through the implementation of BMPs.

For OBMPU projects that would disturb an acre or more, a SWPPP—in accordance with the requirements of the statewide Construction General Permit (CGP)—would be required. The SWPPP would identify best management practices (BMPs) to control erosion, sedimentation, and hazardous materials potentially released from construction sites into surface waters. Compliance with the CGP, required SWPPP, and identified BMPs would ensure soil erosion and loss of topsoil impacts would be reduced to a level of less than significant.

Ultimately, through the implementation of mitigation that would ensure that BMPs are implemented for projects that would occupy less than one acre, and through compliance with the CGP, required SWPPP, and identified BMPs, the potential for the OBMPU to result in substantial soil erosion or the loss of topsoil would be less than significant.

- c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?
- <u>Finding:</u> 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 FSEIR. (pg. 151, IS, [Appendix 8.2, FSEIR])
- Subsidence is the shrinking of earth material caused by natural or artificial removal Facts: This process occurs in poor, unconsolidated soils of underlying support. (sediment) and poorly compacted fills. Seismically induced groundshaking, both local and regional, and heavy rainfall contribute to naturally induced causes of The substantial lowering of groundwater may also result in subsidence. subsidence. As identified in the OBMP FPEIR and this OBMPU FSEIR, a portion of the Chino Basin has experienced land subsidence related to extraction of groundwater from the area aquifer. The Project includes a robust discussion of subsidence within the Chino Basin under Hydrology and Water Quality (Subchapter 4.7 of the OBMPU FSEIR), and includes mitigation to address and minimize potential for new land subsidence from OBMPU implementation (MM **HYD-3** and **HYD-4**). Given that the locations of many of the proposed OBMPU facilities are presently unknown, it is possible that any of the future OBMPU facilities could be located within a site with unstable soils, which could cause the facilities to experience damage or failure as a result; furthermore, groundwater pumping facilities, such as wells, could cause aquifer system compaction and land subsidence, which is known to occur within the Chino Basin. Additionally, subsidence and collapse could damage the proposed facilities and affect the safety of on-site or visiting employees. As such, mitigation is required to minimize impacts under this issue.

The implementation of MM **GEO-2** would reduce the potential impacts related to unstable soils through a design level geotechnical investigation with implementation of specific design recommendations for future OBMPU projects.

Ultimately, through the implementation of mitigation that would ensure that OBMPU facilities are analyzed thoroughly through a site-specific geotechnical report with specific design recommendations, the potential for OBMPU facilities to be significantly impacted through being located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse would be less than significant.

d. Would the project be located on expansive soil, as defined in Table 18 1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

- <u>Finding:</u> 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 FSEIR. (pg. 153, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> The entire Chino Basin generally has soils with low to moderate shrink-swell potential. When expansive soils swell, the change in volume can exert significant pressures on structural loads that are placed on them, such as loads resulting from structure foundations or underground utilities, and can result in structural distress

and/or damage. Most of the Chino Basin is comprised of old alluvial fans and valley deposits, which vary in composition. The specific soil properties of a site can vary on a small scale, and may include undetermined area soils that exhibit expansive properties. Given that the location of many future OBMPU facilities are unknown, there is a potential that such facilities could be installed within a site containing expansive soils. As such, mitigation is required to minimize impacts under this issue.

The implementation of MM **GEO-2** would reduce the potential impacts related to expansive soils through a design level geotechnical investigation with implementation of specific design recommendations for future OBMPU projects.

Ultimately, through the implementation of mitigation that would ensure that OBMPU facilities are analyzed thoroughly through a site-specific geotechnical report with specific design recommendations, the potential for OBMPU facilities to experience a significant adverse effect from being located on expansive soil, as defined in Table 18 1-B of the Uniform Building Code (1994), creating substantial risks to life or property would be less than significant.

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

- <u>Finding:</u> 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 FSEIR. (pg. 154-155, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> Previous investigations in the region have identified the presence of significant paleontological resources where construction activities extend into or below the older alluvial sediment boundary. Since specific locations for the many OBMPU facilities have not been have yet to be determined, impacts to specific paleontological resources are speculative. Previously unknown and unrecorded paleontological resources may be unearthed during excavation and grading activities for individual projects, which could result in significant impacts. Therefore, mitigation will be implemented to address the potential for impacting paleontological resources.

The implementation of MM **GEO-4** would require a site-specific study to identify potentially significant paleontological resources, which would minimize potential impacts to paleontological resources.

Ultimately, through the implementation of mitigation that would require a sitespecific study to identify potentially significant paleontological resources, the OBMPU will have a less than significant impact unique paleontological resources or unique geologic features.

Mitigation Measures

IEUA has determined that, because the Chino Basin contains substantial geological and soilsrelated constraints, the Project could experience potentially significant impact as identified in identified in Section VI of the IS, [Appendix 8.2, FSEIR]. Mitigation measures to reduce these impacts to below a level of potential significance are provided below.

- GEO-1: If a specific project is proposed within a designated Alquist-Priolo Fault Zone, the facility shall be relocated, if possible. If relocation is not possible, the project shall be designed in accordance with the California Building Code (CBC) and according to the recommendations generated by a project specific geotechnical study. If the project specific geotechnical study cannot mitigate potential seismic related impacts, then a second tier CEQA evaluation shall be completed.
- GEO-2: Prior to construction of each improvement, a design-level geotechnical investigation, including collection of site-specific subsurface data if appropriate, shall be completed. The geotechnical evaluation shall identify all potential seismic hazards including fault rupture, and characterize the soil profiles, including liquefaction potential, expansive soil potential, subsidence, and landslide potential. The geotechnical investigation shall recommend site-specific design criteria to mitigate for seismic and non-seismic hazards, such as special foundations and structural setbacks, and these recommendations shall be incorporated into the design of individual proposed projects.
- GEO-3: For each well development or other OBMPU projects that is less than one acre in size requiring ground disturbing activities such as grading, the Implementing Agency shall identify best management practices (BMPs, such as hay bales, wattles, detention basins, silt fences, coir rolls, etc.) to ensure that the discharge of the storm runoff from the construction site does not cause erosion downstream of the discharge point. If any substantial erosion or sedimentation occurs as a result of discharging storm water from a project construction site, any erosion or sedimentation damage shall be restored to pre-discharge conditions.
- GEO-4: For project-level development involving ground disturbance, a qualified paleontologist shall be retained to determine the necessity of conducting a study of the project area(s) based on the potential sensitivity of the project site for paleontological resources. If deemed necessary, the paleontologist shall conduct a paleontological resources inventory designed to identify potentially significant resources. The paleontological resources inventory would consist of: a paleontological resource records search to be conducted at the San Bernardino County Museum and/or other appropriate facilities; a field survey or monitoring where deemed appropriate by the paleontologist; and recordation of all identified paleontological resources. Treatment of any discovered paleontological resources shall follow the Phasing and corresponding actions identified under MM CUL-2.

IEUA finds that implementation of the above measures can minimize geology and soils impacts to a less than significant level. The above measures can be implemented without causing additional adverse environmental impacts. The above measures will be integrated into the future development activities without additional impacts on the environment. Since the Project as analyzed above will not directly or indirectly cause significant adverse impact due to onsite or offsite geotechnical hazards with implementation of mitigation, the Project is not forecast to contribute to cumulatively considerable impacts due to geotechnical hazards to structures and facilities required to support the Project. Refer to the Hydrology and Water Quality discussion for additional measures that address subsidence.

8. **Greenhouse Gas Emissions:** Impacts under Greenhouse Gas Emissions were determined to be an unavoidable significant impact and cannot be mitigated below significance level. The discussion of Greenhouse Gas Impacts are below in Section C.3 of this document.

9. Hazards and Hazardous Materials

- a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- <u>Finding:</u> 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 FSEIR. (pg. 170-171, IS, [Appendix 8.2, FSEIR])
- **Facts:** Installation of OBMPU facilities can require delivery of hazardous materials (such as petroleum products) to support their installation. Long term operation of some OBMPU facilities can require small quantities of hazardous materials, but typically only minimal quantities to keep equipment operating safely and efficiently. The anticipated construction activities required to develop OBMPU facilities will temporarily require the transport, use, and disposal of hazardous materials including gasoline, diesel fuel, hydraulic fluids, paint, and other similarly related materials. Operational activities could require modest quantities of hazardous materials, such as chemicals like chlorine (commonly in the form of sodium hypochlorite) to treat recycled water or potable water sources prior to distribution. The IS, [Appendix 8.2, FSEIR] identified several measures that would ensure that the use and generation of hazardous substances in support of OBMPU projects does not pose a significant hazard to workers, adjacent land uses and the environment.

Several mitigation measures were identified to minimize hazards and hazardous materials impacts including those that would: ensure that applicable OBMPU facilities' Business Plans incorporate best management practices designed to minimize the potential for accidental release of such chemicals; ensure that applicable OBMPU facilities' Business Plans identify the equipment and response capabilities required to provide immediate containment, control and collection of any released material (HAZ-1 & HAZ-2); ensure sensitive receptors will not be exposed to significant health threat by modeling the pathways of release and implementing specific measures that would minimize potential exposure to acutely hazardous materials (HAZ-3); ensure hazardous materials are disposed of and delivered to licensed facilities (HAZ-4); ensure the establishment of and adherence to specific thresholds of acceptable clean-up of hazardous materials (HAZ-5); and, ensure the preparation of and adherence to vector management plans (HAZ-6).

Additionally, the expansion of the storage bands within the Chino Basin has a potential to adversely impact known contamination plumes and unknown vadose zone contamination. These issues are addressed in the Subchapter 4.7 of the FSEIR, Hydrology & Water Quality in relation to increase groundwater storage and are all mitigable to a level of less than significant (See measures **HYD-1** through **HYD-11**).

Ultimately, through the implementation of substantive mitigation measures to minimize the potential for the OBMPU to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, the OBMPU would have a less than significant impact under this issue.

- b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- <u>Finding:</u> 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 FSEIR. (pg. 173-174, IS, [Appendix 8.2, FSEIR])
- Both during construction and at specific facilities, such as water treatment facilities, Facts: a potential exists for accidental release of hazardous materials. Accidental releases of hazardous materials during construction or operations are readily controlled to a less than significant level of hazard through control or remediation of the material accidentally released. Because the construction equipment can contain enough petroleum products to damage the environment or expose people to hazardous emissions, the Agency requires compliance with Best Management Practices to manage clean-up of potential spills of hazardous materials during construction. This includes the Cal/OSHA regulations that provide for the proper labeling, storage, and handling of hazardous materials to reduce the potential harmful health effects that could result from worker exposure to hazardous materials. Agencies implementing OBMPU projects are required to comply with all relevant and applicable federal, state and local laws and regulations that pertain to the accidental release of hazardous materials during construction of proposed facilities-such as Health and Safety Code, Section 2550 et seq.-which can reduce potential impacts to the public or the environment regarding accidental release of hazardous materials to less than significant impact. A contingency mitigation measure is provided to ensure accidental releases and any related contamination do not significantly affect the environment at facility locations.

Operation of the proposed facilities could include the storage and use of chemicals. Any storage tanks would be designed in accordance with the applicable hazardous materials storage regulations for long-term use summarized in the Regulatory Framework. The delivery and disposal of chemicals to and from water and wastewater treatment facility sites would occur in full accordance with all applicable federal, state, and local regulations. Compliance with all applicable federal, state and local regulations regarding the handling, storage, transportation, and disposal of hazardous materials, and preparation and implementation of the Hazardous Materials Business Plan (HMBP) would reduce potential impacts to the public, employees, or the environment related to the transport, use, or disposal of hazardous materials to a less than significant impact.

Mitigation measure **HAZ-7** was identified to ensure remediation of an accidental spill or discharge of hazardous material in compliance with state and local regulations.

Ultimately, through the implementation of mitigation to minimize the potential for the OBMPU to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, the OBMPU would have a less than significant impact under this issue.

- c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- <u>Finding:</u> 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 FSEIR. (pg. 176, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> Due to the potentially extensive nature of facilities associated with implementing the OBMPU, it is possible that construction of proposed facilities would occur within one-quarter mile of a school. Construction activities would use limited quantities of hazardous materials, such as gasoline and diesel fuel. A Project proponent is required to comply with all relevant and applicable federal, State and local laws and regulations that pertain to the release of hazardous materials during construction of proposed facilities; compliance with these regulatons and compliance with MM **HAZ-1**—which would ensure remediation of an accidental spill or discharge of hazardous material in compliance thresholds.

Operation of proposed OBMPU facilities may also occur within one quarter mile of a school. As stated above under issue "b," the facilities proposed as part of the OBMPU may handle hazardous materials to serve water treatment operations. The established handling protocols would ensure that no significant operational impacts would occur as a result of OBMPU facility operations.

- d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?
- <u>Finding:</u> 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 FSEIR. (pg. 178, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> During construction of individual OBMPU facilities, it is possible that unknown contaminated soil and/or groundwater could be encountered during excavation, thereby posing a health threat to construction workers, the public, and the environment. Within the Chino Basin the contaminated locations can be divided into two categories. First, there are known surface contaminated sites of which there are more than 100 locations and which are generally limited in area. Second, there are larger legacy contamination sites that have cause extensive groundwater contamination plumes, such as the GE Flatiron plume. Therefore, mitigation will be implemented to prevent future site-specific conflicts or impacts between OBMPU facilities and such sites.

The implementation of MMs **HAZ-8** and **HAZ-9** would require site-specific studies to identify known hazardous materials risks or the potential for risk related to hazardous materials. These studies would identify recommendations and cleanup measures to reduce risk to the public and the environment from development on hazardous materials sites. Implementation of MMs **HAZ-8** and **HAZ-9** would reduce potential impacts to construction workers and the public from exposure to unknown affected soils. Therefore, impacts to the public or the environment related to hazardous materials sites would be less than significant.

- e. Would the project, for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?
- <u>Finding:</u> 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 FSEIR. (pg. 180-181, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> The following three airports are located within the Chino Basin boundaries: Chino Airport, Ontario International Airport, and Cable Airport in Upland. There are no private airstrips located within the Chino Basin. Most proposed facility locations have not yet been determined, and therefore, have the potential to be sited within an airport land use plan area, which in turn could result in a safety hazard to airport flight patterns, light, or navigation resulting in a significant impact. If a location within a safety zone is required compliance with mitigation can reduce potential environmental impacts to a less than significant level.

The implementation of MM **HAZ-10** would ensure compliance with the appropriate airport land use plan and coordination with the appropriate airport management agencies to ensure safety for people residing or working within the Project area. Implementation of MM **HAZ-10** would reduce potential impacts from development within an airport safety zone to a less than significant impact.

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?
- <u>Finding:</u> 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 FSEIR. (pg. 183-184, IS, [Appendix 8.2, FSEIR])
- Facts: Major evacuation routes are located within the Chino Basin along major interstates, freeways and major north-south and east-west roads. The Project activities and facilities have no potential to permanently impact emergency evacuation plans or emergency response plans over the long-term. In the short-term, construction activities related to pipeline and other infrastructure system improvements located within existing road rights-of-way have a potential to interfere with such plans. Mitigation measure **HAZ-11** would be required to minimize impacts related to emergency access during construction. Operation of the proposed facilities would not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. Maintenance activities would require minimal trips and would not significantly impact the surrounding roadways.

The implementation of MM **HAZ-11** would require the preparation of a Traffic Control Plan with comprehensive strategies to reduce disruption to emergency access. This issue is also evaluated in the Traffic Section (Section XVII of the IS, [Appendix 8.2, FSEIR]) and implementation of mitigation will ensure that roads under construction remain passable or that alternative routes (detours) are available both during daily construction and at the end of the day after construction is completed. Therefore, potential significant impacts to emergency access would be reduced to less than significant.

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?
- <u>Finding:</u> 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 FSEIR. (pg. 185-186, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> CAL FIRE designates all areas immediately within or surrounding these areas as "Non-Very High Fire Hazard Severity Zone (Non-VHFHSZ). The proposed OBMPU facilities would generally not expose people or structures to a significant risk of loss, injury or death involving wildland fires. The use of spark-producing construction machinery within a fire risk area could create hazardous fire conditions and expose people or structures to wildfire risks. If OBMPU facilities must be installed within high or severe fire hazard areas, a potential exists to cause a significant wildfire hazard; therefore, mitigation is required to minimize the potential for such impacts to occur.

During operation, the proposed facilities would distribute recycled, imported, and treated water throughout the Project area, and these facilities would not be constructed of flammable materials or involve any spark- producing activities. However, many of the ancillary facilities will be supplied and operate on electricity. Therefore, mitigation must be implemented to minimize fire hazards at proposed OBMPU facilities in high and very high fire severity zones.

The implementation of MM **HAZ-12** would ensure implementation of fire hazard reduction measures during construction in areas designated as VHFHSZs to reduce the potential for wildfire impacts on people or structures to a less than significant impact. Operational impacts would also be reduced to a less than significant impact through the same measure. Therefore, with implementation of mitigation, potentially significant impacts related to wildland fire would be reduced to a level of less than significant.

Mitigation Measures

IEUA has determined that the Project could create significant health hazards or exposure to such hazards from construction and occupancy/operation of the future OBMPU facilities. Mitigation measures to reduce this impact to below a level of potential significance are provided below.

- HAZ-1: For OBMPU facilities that handle hazardous materials or generate hazardous waste, the Hazardous Materials Business Plan prepared and submitted to the Certified Unified Program Agency shall incorporate best management practices designed to minimize the potential for accidental release of such chemicals and will meet the standards required by California law for Hazardous Materials Business Plans. The facility managers shall implement these measures to reduce the potential for accidental releases of hazardous materials or wastes. The Hazardous Materials Business Plan shall be approved prior to operation of the given facility.
- HAZ-2: The Hazardous Materials Business Plan shall assess the potential accidental release scenarios and identify the equipment and response capabilities required to provide immediate containment, control and collection of any released hazardous material. Prior to issuance of the certificate of occupancy, each facility shall satisfy the Implementing Agency that necessary equipment, has been installed and training of

personnel has occurred in responses and to obtain sufficient resources to control and prevent the spread of any accidentally released hazardous or toxic materials.

- HAZ-3: Prior to issuing the certificate of occupancy for any storage of any acutely hazardous material at an OBMPU facility, such as chlorine gas, modeling of pathways of release and potential exposure of the public to any released material shall be completed and specific measures, such as secondary containment, shall be implemented to the satisfaction of the Implementing Agency to ensure that sensitive receptors will not be exposed to significant health threats based on the toxic substance involved.
- HAZ-4: All hazardous contaminated material shall be delivered to a licensed treatment, disposal or recycling facility and be disposed of in accordance with California and federal law.
- HAZ-5: Before determining that an area contaminated as a result of an accidental release is fully remediated, specific thresholds of acceptable clean-up shall be established and sufficient samples shall be taken within the contaminated area to verify that these clean-up thresholds have been met in compliance with state and federal law.
- HAZ-6: Vector management plans shall be prepared and use of pesticides shall be reviewed and coordinated with the West Valley Mosquito and Vector Control District for approval prior to implementing vector control at any of the new or expanded storage basins. All pesticides shall be applied in accordance with State and label requirements to minimize potential for residual concentrations that may be considered adverse to public health and water quality.
- HAZ-7: All accidental spills or discharge of hazardous material during construction activities shall be reported to the Certified Unified Program Agency and shall be remediated in compliance with applicable state and local regulations regarding cleanup and disposal of the contaminant released. The contaminated waste will be collected and disposed of at a licensed disposal or treatment facility. This measure shall be incorporated into the SWPPP prepared or each future facility developed under the OBMPU SEIR. Prior to accepting the site as remediated, the area contaminated shall be tested to verify that any residual concentrations meet the standard for future residential or public use of the site.
- HAZ-8: Prior to final site selection for future OBMPU facilities, the implementing agency shall obtain a Phase I Environmental Site Assessment (ESA) for the selected site. If a site contains contamination the agency shall either avoid the site by selecting an alternative location or shall remove any contamination (remediate) at the site to a level of concentration that eliminates hazard to employees working at the site and that will not conflict with the installation and future operation of the facility. For sites located on agricultural land, this can include soil contaminated with unacceptable concentrations of pesticides or herbicides that shall be remediated through removal or blending to reduce concentrations below thresholds of significance established for the particular pesticide or herbicide in compliance with California and federal law.
- HAZ-9: Should an unknown contaminated site be encountered during construction of OBMPU facilities, all work in the immediate area shall cease; the type of contamination and its extent shall be determined; and the local Certified Unified Program Agency or other regulatory agencies (such as the DTSC or Regional Board) shall be notified. Based on investigations of the contamination, the site may be closed and avoided or the contaminant(s) shall be remediated to a threshold acceptable to the Certified Unified Program Agency or other regulatory agency threshold and any contaminated soil or other material shall be delivered to an authorized treatment or disposal site.
- HAZ-10: Prior to finalizing sit selection of an OBMPU facility within an airport safety zone, input from the affected airport management entity shall be solicited. For projects within airport safety zones, facility design shall follow the guidelines of the appropriate airport land use compatibility plan. If a potential conflict with an airport land use compatibility plan is identified, the implementing agency shall relocate the facility outside the area of conflict, or if the site is deemed essential, the implementing agency shall propose an alternative design that reduces any conflict to a less than significant level of conflict. As

an example, a pump station or reservoir could be installed below ground instead of above ground.

- HAZ-11: Prior to initiating construction of proposed facilities, the implementing agency shall prepare and implement a Traffic Control Plan that contains comprehensive strategies for maintaining emergency access. Strategies shall include, but are not limited to, maintaining steel trench plates at the construction sites to restore access across open trenches and identification of alternate routing around construction zones. In addition, police, fire, and other emergency service providers (local agencies, Caltrans, and other service providers) shall be notified of the timing, location, and duration of the construction activities and the location of detours and lane closures. The implementing agency shall ensure that the Traffic Control Plan and other construction activities are consistent with the San Bernardino County Operational Area Emergency Response Plan, and are reviewed and approved by the local agency with authority over the roadways.
- HAZ-12: Prior to construction of facilities located in areas designated as High or Very High Fire Hazard Severity Zones (VHFHSZs) by CAL FIRE, fire hazard reduction measures shall be incorporated into a fire management plan for the proposed facility, and shall be implemented during construction. 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 shall 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. This plan shall be reviewed by the Implementing Agency and CALFIRE and approved prior to construction within high and very high severity zones and implemented once approved. The fire management plan shall also include sufficient defensible space or other measures at a facility site located in a high or very high fire severity area to minimize fire damage to a level acceptable to the Implementing Agency.

Though the OBMPU would have a potential to result in some potentially significant adverse impacts as a result of implementing the Project, specific mitigation measures have been identified to reduce potential Project specific and cumulative (direct and indirect) effects to a less than significant impact level for hazards and hazardous material issues. Thus, the Project is not forecast to cause any unavoidable significant adverse hazards or hazardous material impacts.

10. Hydrology and Water Quality

- a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?
- b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?

The facts and findings below apply both to impacts (a) and (b).

- <u>Finding:</u> 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 FSEIR. (pg. 4-199 to 4-205, FSEIR)
- <u>Facts:</u> The OBMPU is a groundwater management program that requires physical projects proposed as part of the OBMPU in order to implement the program

elements. Wildermuth Environmental, Inc. (WEI) has modeled and analyzed the impacts that implementation of the OBMPU would have on the Chino Basin, and through the analysis contained in the FSEIR, have demonstrated that the OBMPU would result in a less than significant potential to violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality, and would result in a less than significant potential to substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.

The table below is extracted from the FSEIR, and summarizes the impacts to the basin from the use of storage by future Storage and Recovery Program scenarios.

TABLE 4.7-4
SUMMARY OF CONCLUSIONS FOR OPERATIONAL BANDS 2, 3, AND 4,
AND SCENARIOS 2, 3 AND 4

	Scenario				
	2C ¹	3A	3B	4A	4B
Operational Bands	2	2 and 3 2, 3, and 4			and 4
Range in Managed Storage Used for Storage and Recovery Programs	700,000 to 800,000 af	700,000 to 900,000 af 700,000 to 1,000,000 af		,000,000 af	
New Land Subsidence	None				
Pumping Sustainability	No new pumping sustainability challenges	Potential new pumping sustainability challenges			
Average Annual Reduction in Net Recharge as a Percentage of Average Annual Storage Space Used	2.41%	1.5%	1.48%	1.46%	1.50%
Hydraulic Control	Maintained	Maintained; however, the groundwater discharge through the CCWF is projected to increase and approach the Hydraulic Control standard.			
Contaminant Plumes	Potential MPI related to GE Flat Iron and Test Cell plumes				

¹ The annual reduction in net recharge for Scenarios 2A and 2B was estimated to be 2.41 percent. This loss in net recharge was mitigated in Scenario 2C by reducing the takes by the net recharge reduction. This type of mitigation may help maintain pumping sustainability in Scenario 2C. This mitigation was not included in Scenarios 3A, 3B, 4A, and 4B, and may contribute to the pumping sustainability challenges identified for these scenarios.

The groundwater level impacts are spatially varying, and they are embedded in the impact assessment for new land subsidence and pumping sustainability. The Storage and Recovery Program scenarios analyzed herein will cause a reduction in storage if the storage-induced reduction in net recharge is not accounted for. As mentioned earlier, one way to mitigate the storage program induced reduction in net recharge is to reduce the takes by the amount of reduced net recharge. Not addressing the storage program induced reduction in net recharge will reduce the Safe Yield allocated to the Appropriative Pool parties, cause overdraft, or both, and will cause pumping sustainability challenges.

Storage and Recovery Program Scenarios 2C, 3B, and 4B are projected to affect the direction and speed of the GE Flat Iron and Test Cell plumes.

Watermaster will periodically review current and projected basin conditions, compare this information to the projected basin conditions assumed in the evaluation of the Storage and Recovery Program application process, compare the projected Storage and Recovery Program operations to actual Storage and Recovery Program operations to actual Storage and Recovery Program operations. Watermaster will then make findings regarding the efficacy of the mitigation program and requirements required herein and by the Storage and Recovery Program storage agreements. Based on Watermaster's review and subsequent findings, where applicable, Watermaster will then require changes and/or modifications in the Storage and Recover Program storage agreements that would adequately mitigate material physical inhury (MPI) and related adverse impacts. Mitigation measures are explained and provided below. These measures address each the issues outlined in Subchapter 4.7, Hydrology and Water Quality of the FSEIR under issues "a" and "b."

Note the FSEIR acknowledges that monitoring is not mitigation in and of itself, but it is essential to the Watermaster's mitigation process because it provides the necessary information to identify the potential for a significant adverse impact to the Chino Groundwater Basin. Data indicating a significant impact may be evolving will allow Watermaster to initiate any of the mitigation measures outlined below that can reduce or eliminate the potential impact identified through monitoring. The text below identifies how this can be accomplished.

Pumping Sustainability

MMs **HYD-1** and **HYD-2** address impacts related to pumping sustainability in the Chino Basin; these measures would ensure that Watermaster gathers the appropriate data to (1) determine whether future OBMPU projects would result in loss of pumping sustainability, and (2) respond with appropriate mitigation to minimize the potential loss of pumping sustainability that may occur from a Project or, where mitigation is not feasible, reject the Project. These measures would enable the Watermaster to prevent adverse impacts related to pumping sustainability that may result from implementation of future OBMPU Projects.

Subsidence

MMs **HYD-3** and **HYD-4** address potential new subsidence within the Chino Basin; these measures would ensure that Watermaster gathers the appropriate data to respond (1) determine whether future OBMPU projects would result in new subsidence, and (2) respond with appropriate mitigation to minimize the potential for new subsidence that may occur from a Project or, where mitigation is not feasible, reject the Project. These measures would enable the Watermaster to prevent adverse impacts related to new subsidence that may result from implementation of future OBMPU Projects.

Net Recharge and Safe Yield

MMs **HYD-5** and **HYD-6** address potential reduction in net recharge and impacts to Safe Yield within the Chino Basin; these measures would ensure that Watermaster gathers the appropriate data to (1) determine whether future OBMPU projects would result in potential reduction in net recharge and impacts to Safe Yield, and (2) respond with appropriate mitigation to minimize the potential for a reduction in net recharge and for impacts to Safe Yield that may occur from a Project or, where mitigation is not feasible, reject the Project. These measures would enable the Watermaster to prevent adverse impacts related to potential reduction in net

recharge and impacts to Safe Yield that may result from implementation of future OBMPU Projects.

Hydraulic Control

MMs **HYD-7** and **HYD-8** address potential adverse impacts to Hydraulic Control of the Chino Basin; these measures would ensure that Watermaster gathers the appropriate data to (1) determine whether future OBMPU projects would result in potential adverse impacts to Hydraulic Control, and (2) respond with appropriate mitigation to minimize potential adverse impacts to Hydraulic Control that may occur from a Project or, where mitigation is not feasible, reject the Project. These measures would enable the Watermaster to prevent adverse impacts to Hydraulic Control that may result from implementation of future OBMPU Projects.

Water Quality

MMs **HYD-9** and **HYD-10** address potential degradation of water quality within the Chino Basin; these measures would ensure that Watermaster gathers the appropriate data to (1) determine whether future OBMPU projects would result in potential degradation of water quality, and (2) respond with appropriate mitigation to minimize potential degradation of water quality that may occur from a Project or, where mitigation is not feasible, reject the Project. These measures would enable the Watermaster to prevent potential degradation of water quality that may result from implementation of future OBMPU Projects.

General Impacts to Groundwater from OBMPU Implementation

Mitigation measure **HYD-11** addresses the plan of response by Watermaster should the Basin conditions come to vary from the projections that have been modeled as part of the OBMPU (and all supporting documentation). This measure would enable Watermaster to modify previously agreed upon mitigation measures to address actual basin conditions and apply these measures to OBMPU projects that have obtained storage agreements and to future OBMPU projects. This allows for flexibility in how Watermaster approaches minimizing the groundwater issues outlined herein to below significance levels. Furthermore, Watermaster is able to accept or reject projects based on a Project's ability to avoid the basin constraints outlined herein, which will ultimately minimize impacts related to groundwater from implementation of the OBMPU to below significance thresholds.

Based on this information, the Project does not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the Project may impede sustainable groundwater management of the basin.

- c(i). Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation onsite or offsite?
- <u>Finding:</u> 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 FSEIR. (pg. 4-208 to 4-210, FSEIR)
- <u>Facts:</u> The majority of the proposed facilities would not alter the course of a stream or river; though the installation of some monitoring devices would be placed within surface water, these devices would not substantially impact the course of a stream

or river due to their small size. The construction of proposed facilities would require activities that would temporarily alter each Project site's existing ground surface and drainage patterns. Compliance with the CGP, SWPPP, County MS4 Permits, and BMPs enforced through mitigation provided below would minimize all construction impacts to less than significant levels. The presence of all new facilities at each Project site could change permeable and impermeable surfaces and alter the direction and volume of overland flows. As such, mitigation is required.

MM **HYD-12** would require implementation of BMPs for projects of less than one acre in size that would be comparable to the requirements of the CGP and SWPPP, which are required for larger projects.

During Project design, overland flows and drainage at each OBMPU Project site would be assessed and drainage facilities would be designed such that no net increase in runoff would occur, in accordance with the Riverside and San Bernardino County MS4 Permits. As required by MM **HYD-13**, either surface runoff shall be collected and retained or a grading and drainage plan would be developed during Project design and implemented to ensure no increase in offsite discharges would occur and no substantial increase in erosion or sedimentation would occur. Impacts would be less than significant with mitigation.

MM **HYD-14** would require OBMPU projects at existing well sites to remain within disturbed areas wherever feasible to minimize the potential for further ground disturbance at these sites, which may result in substantial siltation or erosion. MM **HYD-15** would require all disturbed areas that are not covered in hardscape or vegetation would be revegetated or landscaped at future OBMPU facility sites to minimize the potential for erosion on- or off-site.

The mitigation measures identified above are required to address potential impacts related to onsite drainage at future OBMPU facilities. Ultimately, with implementation of these mitigation measures, the OBMPU would have a less than significant potential to result in substantial or cumulatively considerable erosion or siltation onsite or offsite.

- c(ii). Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite?
- <u>Finding:</u> 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 FSEIR. (pg. 4-212 to 4-214, FSEIR)
- Facts: The construction of proposed facilities would require activities that could temporarily alter each Project site's existing ground surface and drainage patterns. Compliance with the CGP, SWPPP, County MS4 Permits, and BMPs enforced through mitigation provided below would minimize all construction impacts to less than significant levels. The presence of all new facilities at each Project site could change permeable and impermeable surfaces and alter the direction and volume of overland flows. As such, mitigation is required to address the increased potential for flooding on- or off-site.

MM **HYD-12** would require implementation of BMPs for projects of less than one acre in size that would be comparable to the requirements of the CGP and SWPPP, which are required for larger projects. This measure would control urban runoff and thereby reduce potential on- and off-site flooding.

During Project design, overland flows and drainage at each OBMPU Project site would be assessed and drainage facilities would be designed such that no net increase in runoff would occur, in accordance with the Riverside and San Bernardino County MS4 Permits. As required by MM **HYD-13**, either surface runoff shall be collected and retained or a grading and drainage plan would be developed during Project design and implemented to ensure no increase in offsite discharges would occur and no substantial increased potential on- or off-site flooding would occur. Impacts would be less than significant with mitigation.

MM **HYD-14** would require OBMPU projects at existing well sites to remain within disturbed areas wherever feasible to minimize the potential for further ground disturbance at these sites, which may result in on- or off-site flooding. MM **HYD-15** is also required to ensure that a management plan for each storage or recharge basin is established to ensure the safety of surrounding property and people from undue risks associated with water-related hazards such as flooding. This measure would reduce the potential for flooding on- or off-site.

The mitigation measures identified above are required to address potential impacts related to onsite drainage at future OBMPU facilities. Ultimately, with implementation of these mitigation measures, the OBMPU would have a less than significant potential to substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite.

- c(iii). Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
- <u>Finding:</u> 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 FSEIR. (pg. 4-215 to 4-217, FSEIR)
- <u>Facts:</u> The construction of proposed facilities would require activities that would temporarily alter each Project site's existing ground surface and drainage patterns, which could result in excess runoff. Compliance with the CGP, SWPPP, County MS4 Permits, and BMPs enforced through mitigation provided below would minimize all construction impacts to less than significant levels.

The presence of all new facilities at each Project site could change permeable and impermeable surfaces and alter the direction and volume of overland flows. As such, mitigation to address implementation of a drainage management plan or otherwise retain runoff onsite for each Project is required to reduce potential for OBMPU facilities to create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

MM **HYD-12** would require implementation of BMPs for projects of less than one acre in size that would be comparable to the requirements of the CGP and SWPPP, which are required for larger projects. This measure would control urban runoff and thereby reduce potential for substantial polluted runoff.

During Project design, overland flows and drainage at each OBMPU Project site would be assessed and drainage facilities would be designed such that no net increase in runoff would occur, in accordance with the Riverside and San Bernardino County MS4 Permits. As required by MM **HYD-13**, either surface runoff shall be collected and retained or a grading and drainage plan would be developed during Project design and implemented to ensure no increase in offsite discharges would occur and no substantial contribution of runoff to area drainage systems would occur. Impacts would be less than significant with mitigation.

MM **HYD-14** would require OBMPU projects at existing well sites to remain within disturbed areas wherever feasible to minimize the potential for further ground disturbance at these sites, which may result in excess runoff. MM **HYD-16** is also required to ensure that significant polluted runoff does not occur from contaminated discharge that may result from refurbishing or capping a well. Implementation of these mitigation measures would ensure that the Project does not contribute substantial runoff; as such, impacts are less than significant. MM **HYD-17** is provided to ensure that brine generated by water treatment systems would be disposed of in a manner that would minimize the potential for release of polluted runoff.

The mitigation measures identified above are required to address potential impacts related to onsite drainage at future OBMPU facilities. Ultimately, with implementation of these mitigation measures, the OBMPU would have a less than significant potential to create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

- c(iv). Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (iv) impede or redirect flood flows?
- <u>Finding:</u> 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 FSEIR. (pg. 4-219 to 4-220, FSEIR)
- <u>Facts:</u> The construction of proposed facilities would require activities that would temporarily alter each Project site's existing ground surface and drainage patterns, which could result in impeding or redirecting flood flows. Compliance with the CGP, SWPPP, County MS4 Permits, and BMPs enforced through mitigation provided below would minimize all construction impacts to less than significant levels.

The presence of all new facilities at each Project site could change permeable and impermeable surfaces and alter the direction and volume of overland flows. As such, mitigation to address implementation of a drainage management plan or otherwise retain runoff onsite for each Project is required to reduce potential for OBMPU facilities to impede or redirect flood flows. Furthermore, given that the Chino Basin contains areas that are located within flood hazard zones, the development of several facilities in a given area may, when combined, result in a substantial potential to impede or redirect flows; as such, mitigation is required to minimize impacts thereof.

During Project design, overland flows and drainage at each OBMPU Project site would be assessed and drainage facilities would be designed such that no net increase in runoff would occur, in accordance with the Riverside and San Bernardino County MS4 Permits. As required by MM **HYD-13**, either surface runoff shall be collected and retained or a grading and drainage plan would be developed during Project design and implemented to ensure no increase in offsite discharges would occur and no substantial increased potential for impeding or redirecting flood flows would occur. Impacts would be less than significant with mitigation.

MM **HYD-15** is also required to ensure that a management plan for each storage or recharge basin is established to ensure the safety of surrounding property and people from undue risks associated with water-related hazards such as flooding. This measure would ensure no substantial increased potential for impeding or redirecting flood flows would occur. The Chino Basin contains several areas in the 100-year floodplain, particularly given the creeks, channels, and Santa Ana River that are within or along the boundaries of the Chino Basin. As such, MM **HYD-18** would ensure that future OBMPU projects located within a floodplain would be further evaluated to determine their potential to impede or redirect flood flows.

The mitigation measures identified above are required to address potential impacts related to onsite drainage at future OBMPU facilities. Ultimately, with implementation of these mitigation measures, the OBMPU would have a less than significant potential to impede or redirect flows.

d. Would the project In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

- <u>Finding:</u> 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 FSEIR. (pg. 4-222 to 4-223, FSEIR)
- <u>Facts:</u> The presence of all new facilities at each Project site could create a new risk for pollutants within a given site to be released as a result of inundation. As such, mitigation to address implementation of a drainage management plan or otherwise retain runoff onsite for each Project is required to reduce potential for OBMPU facilities to risk release of pollutants from inundation. Furthermore, given that the Chino Basin contains areas that are located within flood hazard zones, the development of several facilities in a given area may, when combined, result in a substantial potential to release pollutants as a result of inundation; as such, mitigation is required to minimize impacts thereof.

As required by MM **HYD-13**, either surface runoff shall be collected and retained or a grading and drainage plan would be developed during Project design and implemented to ensure that pollutants are managed on site and the potential for risk of release thereof due to inundation is minimized. Impacts would be less than significant with mitigation.

MM **HYD-15** is also required to ensure that a management plan for each storage or recharge basin is established to ensure the safety of surrounding property and people from undue risks associated with water-related hazards such as flooding. This measure would ensure no substantial increased potential for release pollutants as a result of inundation would result from implementation of the OBMPU. The Chino Basin contains several areas in the 100-year floodplain, particularly given the creeks, channels, and Santa Ana River that are within or along the boundaries of the Chino Basin. As such, MM **HYD-17** would ensure that future OBMPU projects located within a floodplain would be further evaluated to determine their potential to result in significant impacts related to flood inundation. MM **HYD-18** is provided to ensure that brine generated by water treatment systems would be disposed of in a manner that would minimize the potential to release pollutants as a result of inundation.

The mitigation measures identified above are required to address potential impacts related to flooding and pollutant release at future OBMPU facilities. Ultimately, with implementation of these mitigation measures, the OBMPU would have a less than significant potential to risk release of pollutants due to potential Project inundation.

- e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?
- <u>Finding:</u> 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 FSEIR. (pg. 4-223 to 4-224, FSEIR)
- Facts: Watermaster and the IEUA are co-permittees for the Chino Basin maximum-benefit SNMP incorporated in the Basin Plan (see Section 3.4.3.7 of Chapter 3 of the FSEIR). The Project will be operated such that there is no conflict with or obstruction of the Basin Plan. The current OBMPU contains a set of management programs that will improve the reliability and long-term sustainability of the Chino Basin and the water supply reliability of the Judgment Parties and sets the framework for the next 30 years of basin-management activities. The OBMPU specifically aims for sustainability in Goal No.3 Enhance Management of the Basin. The intent of this goal is to encourage sustainable management of the Chino Basin to avoid Material Physical Injury, promote local control, and improve water-supply reliability for the benefit of all Chino Basin Parties. As such, the proposed OBMPU is not anticipated to conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Mitigation Measures

The IEUA has determined that the Project may adversely impact the hydrology of the Chino Basin and water quality during construction and operation. Mitigation to reduce these potential impacts to below a level of potential significance is provided below.

HYD-1: Watermaster shall review each Storage and Recovery Program application, and estimate the surface and ground water systems response (estimate the potential for loss of pumping sustainability). Watermaster shall then prepare a report that describes

the response and potential Material Physical Injury (MPI) to the Chino Basin, and shall develop mitigation requirements pursuant to MM HYD-2 to mitigate MPI caused by the proposed Storage and Recovery Program. The Storage and Recovery Program Applicant (Implementing Agency) will develop mitigation measures pursuant to these requirements established by the Watermaster; these measures shall be incorporated into their Storage and Recovery Program application. Upon approval by Watermaster, these mitigation measures will be incorporated into the Storage and Recovery Program storage agreement. Applications that do not adequately mitigate the potential for loss of pumping sustainability, which will be determined by the Watermaster based on the preceding analysis, shall not be accepted and therefore will not be developed.

- HYD-2: To mitigate MPI caused by a proposed Storage and Recovery Program Application (as described above under HYD-1), the data gathered through Watermaster's comprehensive groundwater-level monitoring shall be used to identify potential impacts on pumping sustainability and to develop mitigation requirements to mitigate for these impacts. Potential mitigation includes, but is not limited to: (1) modifying the put and take cycles to minimize impacts to pumping sustainability, (2) strategically increasing supplemental water recharge to mitigate loss of pumping sustainability, (3) modifying a party's affected well (lowering pump bowls), (4) providing an alternate supply to the affected party to ensure it can meet its demands, (5) a combination of (1) through (4), and (6) the implementation of a monitoring program to verify the effectiveness of the mitigation actions. The operation of certain facilities proposed as part of the OBMPU can be used to implement these mitigation actions.
- HYD-3: Watermaster shall review each Storage and Recovery Program application, and estimate the surface and ground water systems response (estimate the potential for new land subsidence). Watermaster shall then prepare a report that describes the response and potential MPI to the Chino Basin, and shall develop mitigation requirements pursuant to MM HYD-4 to mitigate MPI caused by the proposed Storage and Recovery Program. The Storage and Recovery Program Applicant (Implementing Agency) will develop mitigation measures pursuant to these requirements established by the Watermaster; these measures shall be incorporated into their Storage and Recovery Program application. Upon approval by Watermaster, these mitigation measures will be incorporated into the Storage and Recovery Program storage agreement. Applications that do not adequately mitigate the potential for new land subsidence, which will be determined by the Watermaster, shall not be accepted and therefore will not be developed.
- HYD-4: To mitigate the potential for new land subsidence caused by a proposed Storage and Recovery Program Application (as described above under HYD-3), the data gathered through Watermaster's comprehensive groundwater-level and ground-level monitoring shall be used to identify the potential for new land subsidence and to develop mitigation requirements to mitigate for these impacts. Potential mitigation includes, but is not limited to: (1) limiting facilities and operations of the Storage and Recovery Programs to MZ-2 and -3, (2) modifying the put and take cycles to ensure the Storage and Recovery Program does not contribute to the lowering of groundwater-levels below the new land subsidence metric, (4) providing an alternate supply to MZ-1 producers to maintain groundwater-levels above the new land subsidence metric, to the extent that the Storage and Recovery Program operation affect them, (5) a combination of (1) through (4) above, and (6) the implementation of a monitoring program to verify the effectiveness of the mitigation actions. The operation of certain facilities proposed as part of the OBMPU can be used to implement these mitigation actions.
- HYD-5: Watermaster shall estimate the reduction in net recharge and Safe Yield for each Storage and Recovery Program/Project and deduct it from water stored in each Storage and Recovery Program storage account, which will compensate for its impact on net recharge and Safe Yield. Watermaster shall review these impacts and develop mitigation requirements pursuant to MM HYD-6 for the proposed Storage and Recovery Program. The Storage and Recovery Program Applicant (Implementing Agency) will develop mitigation measures pursuant to the requirements established by Watermaster; these measures shall be incorporated into the Applicant's Storage and Recovery Program application. Upon approval by Watermaster, these mitigation measures shall

be incorporated into the Storage and Recovery Program storage agreement. Applications that do not adequately mitigate adverse impacts on net recharge and Safe Yield, which will be determined by Watermaster, shall not be accepted and therefore will not be developed.

- HYD-6: To mitigate impacts on net recharge and Safe Yield caused by a proposed Storage and Recovery Program Application (as described above under HYD-5), the Watermaster's comprehensive monitoring and modeling that estimates net recharge of the Chino Basin shall be used to identify potential and actual losses of net recharge and to develop mitigation requirements to mitigate impacts thereof. Potential mitigation includes, but is not limited to: (1) modifying the put and take cycles to minimize reductions in net recharge, (2) deducting the reduction in net recharge from its Storage and Recovery account, (3) recharge additional water to mitigate reductions in net recharge, (4) construct facilities in the southern part of the basin to eliminate the reduction of net recharge due to Storage and Recovery Programs, (5) a combination of (1) through (4), and (6) the implementation of a monitoring program to verify the effectiveness of the mitigation actions. The operation of certain facilities proposed as part of the OBMPU can be used to implement these mitigation actions.
- HYD-7: Watermaster shall estimate the projected impacts that each Storage and Recovery Program may have on Hydraulic Control and review these impacts and develop mitigation requirements for the proposed Storage and Recovery Program. The Storage and Recovery Program Applicant (Implementing Agency) will develop mitigation measures pursuant to the requirements established by Watermaster and MM HYD-8; these measures shall be incorporated into the Applicant's Storage and Recovery Program application. Upon approval by Watermaster, these mitigation measures shall be incorporated into the Storage and Recovery Program storage agreement. Applications that do not adequately mitigate adverse impacts on hydraulic control, which will be determined by Watermaster, shall not be accepted and therefore will not be developed.
- HYD-8: To mitigate for potential impacts on Hydraulic Control caused by a proposed Storage and Recovery Program Application (as described above under HYD-7), the Watermaster's comprehensive monitoring and modeling that assesses the state of Hydraulic Control in Chino Basin shall be used to estimate groundwater outflow from Chino North to the Santa Ana River, assess the state of Hydraulic Control, determine if the Storage and Recovery Program will cause a loss of hydraulic control, and develop mitigation requirements to mitigate for impacts to the state of Hydraulic Control. Potential mitigation includes, but is not limited to: (1) modifying the put and take cycles to minimize discharges to the Santa Ana River and maintain Hydraulic Control, (2) construct facilities in the southern part of the basin to minimize discharges to the Santa Ana River and maintain Hydraulic Control, (3) a combination of (1) and (2), and (4) the implementation of a monitoring program to verify the effectiveness of the mitigation actions. The Project Description contains facilities and their operations that can be used to implement these mitigation actions. The operation of certain facilities proposed as part of the OBMPU can be used to implement these mitigation actions.
- HYD-9: Watermaster shall review each Storage and Recovery Program application, and estimate the surface and ground water systems response (estimate the potential for water quality degradation). Watermaster shall then prepare a report that describes the response and potential MPI to the Chino Basin, and shall develop mitigation requirements to mitigate MPI caused by the proposed Storage and Recovery Program. The Storage and Recovery Program Applicant (Implementing Agency) will develop mitigation measures pursuant to these requirements established by the Watermaster and pursuant to MM HYD-10; these measures shall be incorporated into their Storage and Recovery Program application. Upon approval by Watermaster, these mitigation measures will be incorporated into the Storage and Recovery Program storage agreement. Applications that do not adequately mitigate the potential for water quality degradation, which will be determined by the Watermaster, shall not be accepted and therefore will not be developed.

- HYD-10: To mitigate potential water quality degradation caused by a proposed Storage and Recovery Program Application (as described above under HYD-9), The data gathered through Watermaster's comprehensive groundwater-quality monitoring shall be used to identify changes in the direction and velocity for each plume that can be attributed to a Storage and Recovery Program that may impact its remediation or the water quality at wells, and to develop mitigation requirements to mitigate for any impacts related to the change in direction or velocity attributed to a Storage and Recovery Program. Potential mitigation includes, but is not limited to: (1) modifying the put and take cycles to minimize changes in the plume's direction and velocity that may impact remediation, (2) constructing facility improvements to mitigate impacts on existing remediation, or (3) a combination of (1) and 2, and (4) the implementation of a monitoring program to verify the effectiveness of the mitigation actions. The operation of certain facilities proposed as part of the OBMPU can be used to implement these mitigation actions.
- HYD-11: Watermaster shall periodically review current and projected Basin conditions and shall compare this information to the projected basin conditions assumed in the evaluation of the Storage and Recovery Program application process, compare the projected Storage and Recovery Program operations to actual Storage and Recovery Program operations. The Watermaster shall then make findings regarding the efficacy of the mitigation program and requirements required herein and by the Storage and Recovery Program storage agreements. Based on Watermaster's review and subsequent findings, where applicable, Watermaster shall require changes and/or modifications in the Storage and Recover Program storage agreements that will adequately mitigate MPI and related adverse impacts. The Watermaster shall continue to determine what Programs and Projects should be implemented or should be rejected based on their potential to contribute to or cause MPI or other adverse impacts to the Basin.
- HYD-12: Prior to the commencement of construction of any OBMPU project that will disturb less than one acre (i.e., that is not subject to the California Construction Stormwater General Permit), the Implementing Agency shall require implementation of and construction contractor(s) shall select best management practices (BMPs) to achieve a reduction in pollutants from stormwater discharge to the maximum extent practicable during the construction of each OBMPU facility, and to control urban runoff after each OBMPU facility is constructed and the well (if approved for operation post well testing) or other OBMPU facility is in operation. Examples of BMP(s) that would achieve a reduction in pollutants include, but are not limited to:
 - The use of silt fences or coir rolls;
 - The use of temporary stormwater desilting or retention basins;
 - The use of water bars to reduce the velocity of stormwater runoff;
 - The use of wheel washers on construction equipment leaving the site;
 - The washing of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from the site onto public roads;
 - The storage of excavated material shall be kept to the minimum necessary to
 efficiently perform the construction activities required. Excavated or stockpiled
 material shall not be stored in water courses or other areas subject to the flow of
 surface water; and
 - Where feasible, stockpiled material shall be covered with waterproof material during rain events to control erosion of soil from the stockpiles.

HYD-13: Prior to construction of project facilities, the Implementing Agency shall either:

(1) Prepare a No Net Discharge Report demonstrating that each facility surface runoff shall be collected and retained (for use onsite) or detained and percolated into the ground on the site such that site development results in no net increase in offsite stormwater flows. Detainment shall be achieved through Low Impact Development techniques whenever possible, and shall include techniques that remove the majority of urban storm runoff pollutants, such as petroleum products and sediment. The purpose of this measure is to remove the onsite contribution to cumulative urban storm runoff and ensure the discharge from the sites is treated to reduce contributions of urban pollutants to downstream flows and to groundwater; or, where it is not possible to eliminate stormwater flows off of a site or where otherwise appropriate, the Watermaster and/or Implementing Agency shall:

- (2) Prepare a grading and drainage plan that identifies anticipated changes in flow that would occur on site and minimizes any potential increases in discharge, erosion, or sedimentation potential in accordance with applicable regulations and requirements for the County and/or the City in which the facility would be located. In addition, all new drainage facilities shall be designed in accordance with standards and regulations. The plan shall identify and implement retention basins, best management practices, and other measures to ensure that potential increases in storm water flows and erosion would be minimized, in accordance with local requirements.
- HYD-14: To minimize potential ground disturbances associated with installation and maintenance of (a) proposed monitoring equipment on, or (b) groundwater treatment at existing wells, the equipment and treatment facilities shall be installed within or along existing disturbed easements or right-of-way or otherwise disturbed areas, including access roads and pipeline or existing utility easements, whenever feasible.
- HYD-15: For long-term mitigation of site disturbances at OBMPU facility locations, all areas not covered by structures shall be covered with hardscape (concrete, asphalt, gravel, etc.), native vegetation and/or man-made landscape areas (for example, grass). Revegetated or landscaped areas shall provide sufficient cover to ensure that, after a two-year period, erosion will not occur from concentrated flows (rills, gully, etc.) and sediment transport will be minimal as part of sheet flows. These measures and requirements shall be applied to disturbed areas of abandoned well sites proposed for closure.
- HYD-16: Prior to commencement of construction of any recharge or stormwater retention basin projects as either existing or new basins, a management plan will be established to the satisfaction of San Bernardino County Flood Control District (SBCFCD), Riverside County Flood Control District (RCFCD), and/or Division of Safety. This plan shall be created specifically for each individual basin to ensure the safety of surrounding property and people from undue risks associated with water-related hazards (i.e. flooding). The Operational Risk Management Plan will firmly establish a priority of flood-control functions over and above recharge or retention-related operations. Weather forecasts of upcoming storm events will be carefully monitored and in the event of a significant forecasted storm-event, water deliveries to the basins will be ceased until further notice is received from SBCFCD or RCFCD that it is safe for Additionally, each SBCFCD or RCFCD basin's specific deliveries to resume. management plan will be developed, to coordinate flood control along with surface water recharge or retention. This mitigation measure will ensure that people and property are not subject to additional risk associated with water-related hazards in the Basin, and will allow SBCFCD or RCFCDWCD to make full utilization of the basin's flood control capacity in the event of a storm.
- HYD-17: Prior to cleaning out, refurbishing or capping a well, samples will be obtained and chemically analyzed to ensure that the discharge does not contain any contaminants exceeding regulatory thresholds. If contaminants are discovered, then they shall be removed or lowered below the regulatory threshold prior to discharge to the environment. Discharge of non-stormwater into storm drains will require a permit from the Santa Ana Regional Water Quality Control Board (RWQCB).
- HYD-18: All new and expanded water treatment facilities associated with the OBMPU shall ensure that any brine generated from the water treatment process that cannot be otherwise treated on-site is disposed of in accordance with state and local regulations—such as through disposal to a brine line (Non-Reclaimable Wastewater System, Etiwanda Wastewater Line, and Inland Empire Brine Line, etc.)—to prevent brine from being discharged into the local stormwater collection system.
- HYD-19: The Implementing Agency shall verify that any given OBMPU facility (excepting those located at existing facilities [wells, water treatment plants, etc.] and excepting the installation of in-line flow meters or other facilities required to be installed in a channel, such as diversion structures) is located outside of the 100-year floodplain by utilizing the FEMA FIRM panels for the selected area prior to project implementation. If a given project is located outside of the 100-year floodplain, then no subsequent CEQA

documentation specific to floodplains are required. However, if a project is located within the 100-year floodplain either (1) a new location outside of the 100-year floodplain shall be selected, or (2) a second tier CEQA evaluation shall be completed that would address the given project's location within the 100-year floodplain.

IEUA finds that implementation of the above measures can minimize hydrology and water quality impacts to a less than significant level. The above measures can be implemented without causing additional adverse environmental impacts. The above measures will be integrated into the future development activities without additional impacts on the environment. Since the Project as analyzed above will not directly or indirectly cause significant adverse impact due to the Chino Basin management actions proposed as part of the OBMPU, or to the water quality of the Chino Basin with implementation of mitigation provided above, the OBMPU is not forecast to contribute to cumulatively considerable hydrology and water quality impacts.

11. Land Use / Planning

- b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?
- <u>Finding:</u> 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 FSEIR. (pg. 205, IS, [Appendix 8.2, FSEIR])
- **Facts:** Because the precise location for future wells is presently unknown, OBMPU facilities may be developed across other designated land uses. Per Government Code Section 53091, building ordinances of local cities or counties do not apply to the location or construction of facilities for the projection, generation, storage, treatment, or transmission of water or wastewater. Therefore, any Project facilities that conflict with local General Plan land use designations would not be subject to a conditional use permit or general plan amendment. The Watermaster or Implementing Agency would determine the most suitable locations to place facilities, taking into consideration surrounding land uses. The Watermaster or Implementing Agency would coordinate directly with local agencies with jurisdiction to ensure compatibility with existing adjacent land uses; therefore, mitigation is required to ensure incompatibilities are minimized.

MM **LU-1** would ensure that the facilities associated with the OBMPU are developed in appropriate areas, and conform with the surrounding land uses or are developed to minimize conflicts with adjacent land uses. This measure will minimize impacts below significance thresholds.

Through compliance with the applicable land use plans, policies, and regulations, and through implementation of mitigation, the OBMPU would have a less than significant potential to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Mitigation Measures

The IEUA has determined that the Project may adversely impact water quality during construction and operation. Mitigation to reduce this impact to below a level of potential significance is provided below.

LU-1: Following selection of sites for future OBMPU-related facilities, each site and associated facility shall be evaluated for potential incompatibility with adjacent existing or proposed land uses. Where future facility operations can create significant incompatibilities (lighting, noise, use of hazardous materials, traffic, etc.) with adjacent uses, an alternative site shall be selected, or subsequent CEQA documentation shall be prepared that identifies the specific measures that will be utilized to reduce potential incompatible activities or effects to below significance thresholds established in the general plan for the jurisdiction where the facility will be located.

IEUA finds that implementation of the above measure can reduce potential land use conflicts. The above measures can be implemented without causing additional adverse environmental impacts. The above measure will be integrated into the future development activities without additional impacts on the environment. Since the Project as analyzed above will not directly or indirectly cause significant land use conflicts with implementation of mitigation, the Project is not forecast to contribute cumulatively to land use.

12. Mineral Resources

- a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?
- <u>Finding:</u> 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 FSEIR. (pg. 208-209, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> Mineral deposits in the Chino Basin are important to many industries, including construction, transportation and chemical processing. The value of mineral deposits within the Chino Basin area is enhanced by their close proximity to urban areas. However, these mineral deposits are endangered by the same urbanization that enhances their value. The only significant mineral resources that occur within or near the Project area are limestone, sand and gravel, crushed rock and rip rap. The location of these resources is primarily in the Jurupa and Pedley Hills, and also near the Santa Ana River. As such, there is a nominal potential for future OBMPU facilities to be located within a site containing mineral resources, which could result in the loss of available mineral resources. As such, mitigation is required in order to minimize potential impacts thereof.

The implementation of MM **MR-1** would ensure that the proposed facilities associated with the OBMPU would not result in significant loss of mineral resources through either relocation, or compensation for development proposed to be located within an area containing significant mineral resources.

Through compliance with the above mitigation measure, the OBMPU would have a less than significant potential to result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

- b. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?
- <u>Finding:</u> 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 FSEIR. (pg. 210, IS, [Appendix 8.2, FSEIR])
- **Facts:** As outlined in the documentation for the OBMP, including the Peace II Draft SEIR and the original OBMP PEIR, the only significant mineral resources that occur within or near the Project area are limestone, sand and gravel, crushed rock and rip rap. The location of these resources is primarily in the Jurupa and Pedley Hills, and also near the Santa Ana River. At the Project specific level, the facilities associated with the OBMPU, such as wells, monitoring devices, and other facilities outlined in the remaining Project Categories may have a very small impact on mineral resources. Some OBMPU facilities may be large enough to interfere with locally important mineral resources recovery sites, should these facilities be located within such sites. As such, mitigation is required to minimize potential impacts below significance thresholds.

Implementation of MM **MR-1** is sufficient to reduce the potential for impacts to mineral resources to a less than significant level through either relocation, or compensation for development proposed to be located within an area containing significant mineral resources.

Therefore, the installation and operation of OBMPU facilities has little potential to have a direct adverse impact on mineral resources, unless the parcel(s) selected for such facilities are within an active mining area or are designated for recovery of mineral resources. Implementation of MM **MR-1** is sufficient to reduce the potential for impacts to mineral resources to a less than significant level.

Mitigation Measures

The IEUA has determined that—as described in Section XII of the IS, [Appendix 8.2, FSEIR] limited mineral resources occur in the northern portion of the Chino Basin. There is a nominal potential for future OBMPU facilities to be installed within a mineral resource zones. As such, mitigation has been identified to minimize mineral resource impacts.

MR-1: For each new groundwater treatment facility (regionally located or near existing well sites), Flood MAR facility, and MS4 compliance site, the Implementing Agency shall locate these facilities outside of sites designated for the extraction of or as containing significant mineral resources (such as, located within MRZ-2 zones) or otherwise identified by the local jurisdiction as containing important mineral resources (such as, designated by the local general plan as being located within a mineral extraction related land use). Where it is not feasible to locate such facilities outside of sites designated for mineral resources, a subsequent CEQA documentation shall be prepared that identifies specific measures that compensates for the loss of mineral resources.

With implementation of this mitigation measure, the Project-related mineral resource impacts can be reduced below significance thresholds, and as such, the proposed Project will not cause unavoidable significant mineral resource impacts.

13. Noise

- a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of a project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- <u>Finding:</u> 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 FSEIR. (pg. 228-229, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> Implementation of the OBMPU would involve the installation of several new facilities related to the Program Elements. These facilities include wells, monitoring devices, conveyance pipelines, pump stations, reservoirs, storage basins, upgrades to treatment plants, new treatment plants, and new groundwater treatment facilities all within the Chino Basin.

Construction of the proposed OBMPU facilities would involve a variety of noise generating activities throughout the Chino Basin including 24-hour drilling activities for varying lengths of time depending on the depth to which each well must be drilled, trenching for new pipelines, etc. Because not all locations of the projects are determined at this time, the construction noise standards and/or regulations that would apply to each of the projects would depend on the agency with jurisdiction over each Project location. Noise during construction, depending upon the final location of facilities, may exceed local construction noise standards or violate local construction noise regulations. As a result, mitigation to address noise generated by construction activities is required.

Given the urbanized environment of much of the Chino Basin area, many of the aboveground facilities could operate in proximity or adjacent to existing noisesensitive land uses, such as residential uses, schools, hospitals, etc. The operation of these facilities could potentially expose the adjacent sensitive receptors to noise levels that exceed local established exterior noise standards. Noise-generating equipment such as new above ground pump stations and other ancillary facilities must be designed to meet local nighttime ambient noise standards, such that local sensitive receptors, would not experience a substantial increase in noise, this will be enforced through the implementation of required mitigation measures.

MM **NOI-1** would require the following: all construction activities to be conducted in accordance with the applicable noise regulations and standards, the implementation of noise reduction devices and techniques during construction activities, limits to construction hours, and advance notification of the surrounding noise-sensitive receptors to a construction site about upcoming construction activities and their hours of operation. This measure is anticipated to reduce the construction-related noise levels at nearby receptors to the maximum extent feasible, which is anticipated to be sufficient for the types of projects proposed as part of the OBMPU. MM **NOI-2** will ensure that operational noise meets the applicable City or County noise level requirement, which will ensure that noise to a less than significant level. MM **NOI-3** can ensure that construction activities outside of standard working hours secure a noise waiver, which will minimize conflicts with the applicable noise standards. MM **NOI-4** will enforce noise

minimizing techniques that will ensure that the proposed well developments will not result in excessive operation or construction related noise.

Implementation of mitigation measures below is sufficient to ensure that the OBMPU would have a less than significant potential to result in a substantial temporary or permanent increase in ambient noise levels in the vicinity of a Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. No significant adverse impact is forecast to occur.

- b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?
- <u>Finding:</u> 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 FSEIR. (pg. 232-233, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> Construction of the OBMPU projects would include activities such as grading, excavation, and drilling, which would have the potential to generate low levels of groundborne vibration. Persons residing and working in an area located in proximity to a construction site could be exposed to excessive groundborne vibration or groundborne noise levels related to construction activities. Given the urbanized environment of much of the Chino Basin area, construction of OBMPU facilities may have some potential to create vibration at the nearest sensitive receptor to a given OBMPU site. The majority of OBMPU construction activities are anticipated to attenuate at the nearest sensitive receptor, however mitigation is provided below to minimize vibration to the greatest extent feasible, particularly given that the locations for many OBMPU facilities are presently unknown.

Implementation of MM **NOI-5** would discourage the use of construction equipment that generates high levels of vibration within specific distances from existing land uses that are located near active construction areas and would ensure vibration field testing and subsequent minimization near occupied residences. This will reduce the construction-related vibration levels experienced by these existing off-site land uses to a level of less than significant. Additionally, implementation of MM **NOI-6** would serve to ensure the safety of existing historic buildings by requiring a certified structural engineer to analyze and provide evidence that no structural damage would result at these buildings due to the Project's construction activities.

Operational vibration is anticipated to be less than significant given that there are no large pieces of heavy machinery that would be required to operate OBMPU facilities.

Ultimately, although construction related vibration could be experienced for some specific locations, impacts would be limited in scope and scale and substantially avoided or minimized with implementation of the MM **NOI-5** and **NOI-6**; therefore, implementation of the OBMPU would have a less than significant potential to generate excessive groundborne vibration or noise through implementation of mitigation.

- c. Would the project result in, for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?
- <u>Finding:</u> 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 FSEIR. (pg. 234-235, IS, [Appendix 8.2, FSEIR])
- **Facts:** The following three airports are located within Chino Basin's boundaries: Chino Airport, LA/Ontario International Airport, and Cable Airport in Upland. There are no private airstrips located within the Chino Basin. Of the known locations in which OBMPU facilities will be located, there are a few that will be installed within a two-mile radius of the nearest airport. Additionally, given that the locations for many of the OBMPU facilities could be developed within the vicinity of an airport and within an airport land use plan. During both construction and operations of OBMPU facilities located within an airport land use plan or within two miles of an airport, there is a potential for employees working at, visiting or maintaining the site to be exposed to excessive noise from nearby airports. The facilities outside of airport land use plans would have no potential to be exposed to excessive airport-related noise. In order to protect employees working within facilities near airports, implementation of mitigation is required to minimize impacts thereof.

MM **NOI-7** would ensure that projects located in close proximity to the airport would minimize exposure of persons working at or visiting a site to excessive noise levels.

Given that noise attenuates at a rate between 6 dBA for hard sites and 7.5 dBA for soft sites for each doubling of distance from the reference measurement, it is anticipated that excessive noise generated by nearby airports will not result in significant impacts to persons working in the vicinity of the proposed OBMPU projects with the implementation of mitigation addressed above.

Mitigation Measures

The IEUA has determined that the Project may cause significant short- and long- term noise impacts, as well as short-term vibration impacts, and may cause significant impacts to workers at future OBMPU sites near airports. The Chino Basin contains extensive areas with noise sensitive land uses. Due to these substantial noise constraints and the installation of future noise-producing OBMPU facilities in locations where such noise sensitive uses may exist, a potential for significant noise impacts from implementation of the OBMPU. However, several mitigation measures were identified to minimize noise impacts as outlined below:

NOI-1: The Implementing Agency shall implement the following measures during construction:

- Include design measures to reduce the construction noise levels if necessary to comply with local noise ordinances, or seek a variance from local noise ordinance if otherwise not feasible to comply. These measures may include, but are not limited to, the erection of noise barriers/curtains, use of advanced or state-of-the-art mufflers on construction equipment, and/or reduction in the amount of equipment that would operate concurrently at the construction site.
- Place noise and groundborne vibration-generating construction activities whose specific location on a construction site may be flexible (e.g., operation of compressors and generators, cement mixing, general truck idling) as far as

possible from the nearest noise- and vibration-sensitive land uses such as residences, schools, and hospitals.

- Minimize the effects of equipment with the greatest peak noise generation potential via shrouding or shielding to the extent feasible. Examples include the use of drills, pavement breakers, and jackhammers.
- Locate stationary construction noise sources as far from adjacent noise-sensitive receptors as possible, and require that these noise sources be muffled and enclosed within temporary sheds, insulation barriers if necessary to comply with local noise ordinances.
- Provide noise shielding and muffling devices on construction equipment per the manufacturer's specifications.
- If construction is to occur near a school, the construction contractor shall coordinate the with school administration in order to limit disturbance to the campus. Efforts to limit construction activities to non-school days shall be encouraged.
- For major construction projects, identify a liaison for surrounding residents and property owners to contact with concerns regarding construction noise and vibration. The liaison's telephone number(s) shall be prominently displayed at construction locations.
- For major construction projects, notify in writing all landowners and occupants of properties adjacent to the construction area of the anticipated construction schedule at least two weeks prior to groundbreaking.
- Construction activities shall occur within the hours considered to be acceptable for construction by the applicable jurisdiction within which an individual project is constructed, except for activities, such as well drilling which are continuous, and for emergencies. Where no such restrictions are in place that limit hours of construction, construction shall be limited to the hours of 7 AM and 6 PM on weekdays, 8 AM and 5 PM on Saturdays, and at no time shall construction activities occur on Sundays or holidays, unless a declared emergency exists.
- NOI-2: The Implementing Agency shall require that all OBMPU-related aboveground facilities that include stationary noise generating equipment (such as emergency generators, blowers, pumps, motors, etc.) to minimize their audible noise levels by locating equipment away from noise-sensitive receptor areas, installing proper acoustical shielding for the equipment, and incorporating the use of parapets into building design to meet the applicable City or County noise level requirements at neighboring property lines.
- NOI-3: Prior to authorizing construction activities during non-standard working hours or hours that are not exempt from compliance with applicable City or County noise ordinances (e.g., 24-hour well drilling), the Implementing Agency will secure a noise waiver from the appropriate jurisdiction.
- NOI-4: Injection and extraction wells shall be located as far from sensitive receptors as feasible. If new wells are to be constructed in the immediate vicinity of sensitive receptors, construction specification requirements shall include installation and maintenance of a temporary noise barrier (e.g. engineered sound wall or noise blanket) during 24-hour construction activities, if necessary to comply with local noise ordinances. Specifications shall include use of appropriate materials that shall be installed to a height that intercepts the line of sight between the construction site and sensitive receptors in order to achieve maximum attenuation in an attempt to decrease construction area noise to as close as ambient noise levels as possible. Furthermore, where new wells are located adjacent to sensitive receptors, wells and any other associated noise generating facilities (i.e. associated treatment facilities, pumps, generators, etc.) shall be enclosed within a structure to attenuate noise to comply with the applicable noise threshold at the nearest sensitive receptor.
- *NOI-5:* The Implementing Agency shall require the construction contractor(s) to implement the following measure:
 - Ensure that the operation of construction equipment that generates high levels of vibration including, but not limited to, large bulldozers, loaded trucks, pile-drivers, vibratory compactors, and drilling rigs, is minimized to below the local

jurisdiction's acceptable level of vibration, or where no level has been established, 72 vibration decibels (VdB), within 45 feet of existing residential structures and 35 feet of institutional structures (e.g., schools) during construction of the various OBMPU projects. Use of small rubber-tired bulldozers shall be enforced within these areas during grading operations to reduce vibration effects.

- The construction contractor for any individual OBMPU project shall provide signs along the roadway identifying a phone number for adjacent property owners to contact with any complaint. During future construction activities for any individual OBMPU project with heavy equipment within 300 feet of occupied residences, vibration field tests shall be conducted at the property line near the nearest occupied residences. If vibrations exceed 72 VdB, the construction activities shall be revised to reduce vibration below this threshold. These measures may include, but are not limited to the following: use different construction methods, slow down construction activity, or other mitigating measures to reduce vibration at the property from where the complaint was received.
- NOI-6: Where an OBMPU project would be constructed adjacent to an existing or potential historic building, the Implementing Agency shall require, through contract specifications, a certified structural engineer to be retained to submit a report documenting evidence that the operation of vibration-generating equipment associated with the construction activities would not result in any structural damage to the adjacent historic building prior to construction commences. Contract specifications shall be included in the construction documents for the applicable OBMPU project development.
- NOI-7: Where an OBMPU project would be constructed within 2 miles of a public airport, any new indoor facilities should be designed as documented by a professional noise technical study, to minimize noise to a level that is within OSHA's permissible exposure limit (PEL). Employees working outside at an OBMPU project, either during construction or operation, shall be provided with ear protection to minimize noise to a level that is below OSHA's PEL to be utilized during periods of excessive noise caused by any aircraft overflights.

The IEUA finds that implementation of the above measures can reduce potential construction noise impacts to a less than significant impact level. The above measures can be implemented without causing additional adverse environmental impacts. The above measures will be integrated into the future development activities without additional impacts on the environment. Since the Project as analyzed above will not directly or indirectly cause significant construction noise impacts with implementation of mitigation, the Project is not forecast to contribute to cumulatively considerable noise during construction activities.

14. Population and Housing

b. Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

- <u>Finding:</u> 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 FSEIR. (pg. 243, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> No housing is proposed to be displaced or eliminated by the proposed OBMPU facilities varying footprints. The goal of the Project and the effect of the physical changes to the environment is to install infrastructure to enhance safe yield and water quality within the Chino Basin. However, given that the locations of the many of the OBMPU facilities are presently unknown, it is remotely possible that the development of specific facilities could adversely impact existing housing, though many of the OBMPU facilities will be located within existing sites utilized for water
and wastewater infrastructure. Implementation of mitigation is required to ensure that the OBMPU's potential to displace housing or persons is fully mitigated.

MM **POP-1** would ensure that the facilities associated with the OBMPU that must be located on parcels containing housing would be minimized through the provision of short- and long-term housing of comparable quality, thereby minimizing impacts below significance thresholds.

Ultimately, through the implementation of mitigation, the OBMPU is not forecast to cause a significant displacement of existing housing or persons.

Mitigation Measures

The IEUA has determined that the Project may displace a persons or housing, which could result in a significant impact. Mitigation measure to reduce this impact to below a level of potential significance is provided below.

POP-1: If future OBMPU facilities must be located on parcels occupied by existing housing and displaces that housing as a result, the Implementing Agency will assist with a relocation plan in conformance with Section 7260 et seq. of the California Government Code ("California Relocation Assistance Law" or the "Act") to ensure that short- and long-term housing of comparable quality and value are made available to the home owner(s) prior to initiating construction of the facility.

The IEUA finds that implementation of the above measure can reduce potential for a substantial number of people to be displaced to a less than significant impact level. The above measure can be implemented without causing additional adverse environmental impacts. The above measure will be integrated into the future development activities without additional impacts on the environment. Since the Project as analyzed above will not directly or indirectly cause substantial displacement of people or housing with implementation of mitigation, the OBMPU is not forecast to contribute to cumulatively considerable noise during construction or operational activities.

15. Public Services

- b. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered govern- mental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Police protection?
- <u>Finding:</u> 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 FSEIR. (pg. 259-260, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> Similar to the discussion under Fire Protection above, the development of OBMPU facilities will not cause a significant demand for police protection services. It is not forecast that the OBMPU would change land uses or otherwise create activities that can increase demand for additional police protection services beyond that which is anticipated in each jurisdiction's General Plans. Operational activities associated with the proposed OBMPU could require police department service in the unlikely event of an emergency or trespass at a given site. However, it is anticipated that all sites containing facilities associated with the proposed OBMPU

would be fenced, which would minimize the future need for police protection from trespass. The Chino Basin area is currently served by police departments and agencies under authority of the various jurisdictions that comprise the Chino Basin as discussed under Environmental Setting above. Overall levels of police service will be increased based upon the future population growth and demands of the local agencies within the Chino Basin. Though a significant demand for police protection services is not anticipated, contingency mitigation is proposed to address trespass issues.

Implementation of MM **PS-1** above would minimize the potential for trespass that could exacerbate police protection services. With implementation of this mitigation measure, the Project-related police protection impacts can be reduced to a less than significant impact level.

- d. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered govern- mental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Parks?
- <u>Finding:</u> 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 FSEIR. (pg. 263, IS, [Appendix 8.2, FSEIR])
- **Facts:** There is a potential that a proposed OBMPU facility could be located within existing parks or facilities designated for such uses. Construction and staging areas may result in the temporary closure of parks or portions of parks. However, several parks in the Chino Basin area would be available for use. This increased use of other parks would be temporary, during construction only. Once construction is completed, parks would return to serve their original purpose, with only slightly less parkland area available for use. In addition to development OBMPU facilities within existing parks, there is a potential for wells or other OBMPU facilities to be developed within a vacant site designated for park use, which would effectively minimize available designated parkland within the Chino Basin. As such, mitigation is provided below to ensure that, for OBMPU facilities located within vacant land designated for park uses, or OBMPU facilities larger than one acre in size within existing park facilities, additional parkland is developed to supplement the loss of this parkland or recreation facility.

Once in operation, the proposed OBMPU facilities would not directly increase the population as discussed under Police Protection, Fire Protection, and Schools, though there is a potential for this development to result in nominal (30 new employees over 30 years) indirect population growth. Overall demand for parks and recreation facilities will be increased based on the future population-based demands of the local agencies within the Chino Basin. The OBMPU is not anticipated to create activities that can substantially increase demand for additional park and recreation facilities beyond that which is anticipated in the jurisdiction's General Plans. Because there are adopted standards and development fees are collected for new development that are directed towards parks and recreation facilities are identified beyond those addressed through the mitigation provided below.

Implementation of MM **PS-2** above would minimize the potential for loss of park or recreational facilities as a result of OBMPU projects located within facilities designated for such uses. With implementation of this mitigation measure, the Project-related parks and recreation impacts can be reduced to a less than significant impact level.

Mitigation Measures

The IEUA has determined that the Project has little potential to impact public facilities. However, the following mitigation measure to reduce or remove any potential impact to police services, and to parks and recreation facilities to below a level of potential significance is provided below.

- PS-1: OBMPU facilities shall be fenced or otherwise have access controlled to prevent illegal trespass to attractive nuisances, such as construction sites or recharge sites.
- PS-2: OBMPU facilities proposed to be located within vacant parkland or OBMPU facilities proposed to be located within existing park or recreation facilities that would require more than one acre of disturbance shall be either (1) Relocated to avoid significant impacts to parkland or (2) Shall provide supplemental parkland within the corresponding jurisdiction equal or greater to the amount of parkland or recreation facilities lost as a result of implementation of the OBMPU facility.

The IEUA finds that implementation of these mitigation measures, the Project-related police protection and park/recreation impacts can be reduced to a less than significant impact level. The above measures can be implemented without causing additional adverse environmental impacts. The above measures will be integrated into the future development activities without additional impacts on the environment. Since the Project as analyzed above will not directly or indirectly cause a significant adverse impact to any public services with the implementation of mitigation, the Project is not forecast to contribute to cumulatively considerable public services.

16. Recreation

- a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- <u>Finding:</u> 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 FSEIR. (pg. 266, IS, [Appendix 8.2, FSEIR])
- Facts: There is a potential for wells or other OBMPU facilities to be developed within a vacant site designated for park/recreation use, which would effectively minimize available designated recreation- and park-land within the Chino Basin. As such, mitigation is provided below to ensure that, for OBMPU facilities located within vacant land designated for park/recreation uses, or OBMPU facilities larger than one acre in size within existing park/recreation facilities, additional parkland/recreation land is developed to supplement the loss of this parkland or recreation facility.

Once in operation, the proposed OBMPU facilities would not directly increase the population, though there is a potential for this development to result in nominal indirect population growth. Overall demand for recreation facilities will be increased based on the future population-based demands of the local agencies within the Chino Basin. The OBMPU is not anticipated to create activities that can increase

demand for additional recreation facilities beyond that which is anticipated in the jurisdiction's General Plans, and because there are adopted standards and development fees are collected for new development that are directed towards recreation facilities, no other potential for adverse impacts to recreation facilities are identified beyond those addressed through the mitigation provided below.

Implementation of Mitigation Measure **PS-2** above would minimize the potential for loss of park or recreational facilities as a result of OBMPU projects located within facilities designated for such uses. As such, impacts are less than significant. With implementation of this mitigation measure, the Project-related recreation impacts can be reduced to a less than significant impact level.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

- <u>Finding:</u> 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 FSEIR. (pg. 268, IS, [Appendix 8.2, FSEIR])
- Facts: The development of OBMPU facilities will not involve the construction or expansion of recreational facilities. There is a potential that a proposed well or other OBMPU-related facility could be located within parks or facilities designated for recreational use. Depending on the area required for the development of OBMPU facilities, an individual Project could result in the removal of all or a portion of a park or recreational facility. The removal of a facility could require the construction of new park or recreational facilities elsewhere to accommodate for the loss of the existing recreational facility. As such, mitigation is required to ensure that, should loss of recreation or park facilities occur, replacement occurs resulting in impacts to recreational facilities are minimized.

Implementation of MM **PS-2** above would minimize the potential for loss of park or recreational facilities as a result of OBMPU projects located within facilities designated for such uses. As such, impacts are less than significant. Implementation of MM **REC-1** would ensure that, should construction of recreation or park facilities be required as a part of the OBMPU, a subsequent CEQA determination will be prepared to ensure that impacts are appropriately assessed and mitigated. As such, impacts are less than significant. With implementation of this mitigation measure, the Project-related recreation impacts can be reduced to a less than significant impact level.

Mitigation Measures

The IEUA has determined that the Project has a potential to impact recreation facilities through the increased use of existing neighborhood and regional parks or other recreational facilities and may require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. However, several mitigation measures were identified to minimize impacts to police protection and recreation/parks including those that would: minimize the potential for trespass that could exacerbate demand for police protection services; and, minimize the potential for loss of park or recreational facilities as a result of OBMPU projects through relocation or provision of supplemental parkland or recreation facilities, as demonstrated through the following mitigation measures: MM PS-2 under Public Services, above, is required to minimize impacts under recreation.

REC-1: The Implementing Agency shall prepare subsequent CEQA documentation for any Park or Recreation facilities required to be developed as part of implementation of mitigation measure PS-2—i.e., in the event an OBMPU Facility would be result in loss of parkland or recreation facilities.

The IEUA finds that with implementation of these mitigation measures, the Project-related recreation impacts can be reduced to a less than significant impact level. The above measures can be implemented without causing additional adverse environmental impacts, or subsequent CEQA evaluation. The above measures will be integrated into the future development activities without additional impacts on the environment. Since the Project as analyzed above will not directly or indirectly cause substantial adverse recreation impacts with implementation of mitigation, the Project is not forecast to contribute to cumulatively considerable recreation impacts.

17. Transportation

- a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
- <u>Finding:</u> 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 FSEIR. (pg. 278-279, IS, [Appendix 8.2, FSEIR])
- **Facts:** The implementation of improvements proposed in Project Categories 1 through 4 of the OBMPU could occur concurrently. Based on a conservative assumption that the maximum trips by each Project category occur concurrently, there would be a maximum of several hundred two-way vehicle trips per day by construction workers and a maximum of several hundred two-way truck trips per day. The construction workers are expected to arrive at and depart from the work sites during a one-hour period at the start and end of the work day, respectively, while truck trips would be spread over the course of the work day. Both the worker trips and truck trips would be spread over different roads that provide access to the locations of the treatment facilities. Installation of certain facilities, such as pipelines, would occur within roadways, two-lane roads would likely require active traffic control (flaggers) to allow alternate one-way traffic flow on the available road width, and could possibly require full road closure (with detour routing around the construction work zone).

Once construction is completed, OBMPU facilities will either continue modified operations, or require a new employee base. Overall changes in traffic due to these OBMPU facilities would not make any major changes in traffic during operations, estimated to be 30 or so plus trips per day in the future. This potential operational impact is considered a less than significant impact to traffic flow or the circulation system without mitigation.

MM **TRAN-1** would be required to reduce potential impacts to traffic and transportation conditions. Implementation of this measure during construction, in conjunction with the temporary character of the construction impacts, is considered sufficient to ensure adequate flow of traffic in a safe manner for OBMPU facility installation. With implementation of this mitigation measure, the OBMPU would have a less than significant potential to conflict with a program, plan, ordinance or

policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

- c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous inter- sections) or incompatible uses (e.g., farm equipment)?
- <u>Finding:</u> 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 FSEIR. (pg. 280-281, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> OBMPU construction would not alter the physical configuration of the existing roadway network serving the area, and would not introduce unsafe design features. Also, although construction of the OBMPU facilities could temporarily increase the type of vehicles (i.e., trucks) that could be incompatible with predominantly automobile vehicles on local roadways that change to the mix of vehicles would stop when Project construction is completed. The potential conflicts between construction trucks and automobiles on local roadway are considered a less than significant impact through implementation of mitigation.

The implementation of MM **TRAN-1** would reduce the Project's contribution to potential construction traffic hazard impacts to less than significant. The above measure would reduce traffic hazards by requiring all construction activities to be conducted in accordance with an approved construction traffic control plan. 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. With implementation of this mitigation measure, the OBMPU would have a less than significant potential to substantially increase hazards due to a geometric design feature or incompatible uses.

d. Would the project result in inadequate emergency access?

- <u>Finding:</u> 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 FSEIR. (pg. 282-283, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> The improvements proposed as part of the OBMPU would have less than significant impacts on emergency vehicle access from construction vehicles travelling on the roadways. Construction trucks generated by installation of OBMPU facilities would interact with other vehicles on Project area roadways, including emergency vehicles, but would not alter the physical configuration of the existing roadway network serving the area. While individual emergency vehicles could be slowed if travelling behind a slow-moving truck, per vehicle code requirements, vehicles must yield to emergency vehicles using a siren and red lights. As such, OBMPU facilities located outside of road rights-of-way (ROB) would have a less than significant impact to emergency access within the Chino Basin.

However, the implementation of OBMPU facilities that could require the closure of lanes during construction activities. Lane closures could result in potential access impacts on emergency vehicles. These potential impacts are considered a less than significant impact through implementation of mitigation.

The implementation of MM **TRAN-1** would reduce the Project's potential construction impacts and cumulative contribution to potential construction impacts on emergency access to a less than significant impact. The above measure would reduce impacts on emergency access by requiring all construction activities to be conducted in accordance with an approved construction traffic control plan and require coordination of timing, location, and duration of construction activities with emergency services such as police and fire. With implementation of this mitigation measure, the OBMPU would have a less than significant potential to result in inadequate emergency access.

Mitigation Measures

The IEUA has determined that the Project may adversely impact the local circulation system during construction. Mitigation measures to reduce this impact to below a level of potential significance are provided below.

- TRAN-1: For projects that may affect traffic flow along existing roadways, the Implementing Agency shall require that contractors prepare a construction traffic control plan prior to issuance of construction permits. 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. 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.
 - Coordinate with facility owners or administrators of sensitive land uses such as police and fire stations, hospitals, and schools. Provide advance notification to the facility owner or operator

The IEUA finds that implementation of the above measures can reduce potential adverse impacts to circulation and emergency access during construction and operation of the proposed roadway extension to a less than significant level. The above measure can be implemented without causing additional adverse environmental impacts. The above measure will be integrated into the future development activities without additional impacts on the environment. Since the Project as analyzed above will not directly or indirectly cause significant circulation system impacts or significant conflicts with emergency access or evacuations with implementation of mitigation, the Project is not forecast to contribute to cumulatively considerable transportation impacts.

18. Tribal Cultural Resources

- a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and 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 Public Resources Code section 5020.1(k), or
- b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is a resourced 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 Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

The facts and findings below apply both to impacts (a) and (b).

- <u>Finding:</u> 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 FSEIR. (pg. 4-246 to 4-248, FSEIR)
- The San Manuel Band of Mission Indians, Gabrieleño Band of Mission Indians -Facts: Kizh Nation, and Morongo Band of Mission Indians requested continued participation with this Project's CEQA process and future projects implemented under the OBMPU. Concerns expressed include the following: accidental exposure of subsurface cultural resources and proper management of such resources; concerns over exposure of human remains and proper management: and presence of Native American monitors during future ground disturbing activities. Through incorporation of mitigation measures, impacts to Tribal Cultural Resources are considered less that significant. The mitigation measures provide a hierarchy from which to approach future OBMPU Projects, involving (1, MM TCR-1) notification to the three tribes at Project sites that have been totally disturbed; (2, MM TCR-2) at undisturbed Project sites, AB 52 consultation will be initiated and a records search shall be performed as part of a site specific Phase I evaluation, and the site shall be surveyed; and, (3, MM TCR-3) development and implementation of a Cultural Resources Monitoring and Treatment Plan which may require monitoring and treatment of any resources located within a given site. Thus, with implementation of mitigation to protect tribal cultural resources, the Project would not cause significant unavoidable adverse impacts to tribal cultural resources.

Mitigation Measures

IEUA has determined that the Project could have a potentially significant impact on unknown subsurface tribal cultural resources. Mitigation measures to reduce the impact to below a level of potential significance are provided below.

TCR-1 Where a future discretionary project requiring a Negative Declaration or follow- on EIR is proposed within an existing facility that has been totally disturbed due to it undergoing past engineered site preparation (such as a well site, water treatment facility, or wastewater treatment plant site), the agency implementing the OBMPU project will notify the three Tribes (Gabrieleño, Morongo, and San Manuel) under AB 52 but will point out that the project falls under the OBMPU evaluation and that the site is fully developed. No further cultural resources or TCR investigation will be conducted unless a Tribe identifies specific TCR resources/values at such site(s).

- TCR-2 Where a future discretionary project requiring a Negative Declaration or follow- on EIR is proposed at an undisturbed site, the agency implementing the OBMPU project will initiate AB 52 consultation and a records search at the appropriate California Historical Resources Information System (CHRIS) center with at least a 0.5-mile search radius. The Native American Heritage Commission (NAHC) shall also be contacted to identify tribal representatives tocontactaspartofaPhase1culturalresourcesinvestigation. Finally, a site- specific survey will be conducted by a qualified professional archaeologist. During the survey, the archaeologist shall engage the designated tribal representative(s) based on responses from the NAHC consultation among the three Tribes.
- TCR-3 If the AB 52 consultation results in a request to consult from one or more of the three Tribes, and the consultation results in a request for monitoring from one or more of the Tribes, the agency implementing the OBMPU project shall meet with the Tribe or Tribes and develop a "Cultural Resources Monitoring and Treatment Plan" (Plan) for the specific project. This Plan shall follow the general outline of one of the two Plans provided in Appendix 8 of this document. If more than one Tribe requests field monitoring participation, the agency shall ask the requesting Tribes to determine which one will provide the monitor(s), as only a single Tribe's monitor(s) shall be funded in the monitoring effort. If the Tribes cannot identify a single tribal monitor, the agency shall select a single tribal monitor to monitor a project after reviewing qualifications of the recommended monitors in light of the resources identified by the tribes. Monitoring activities and follow-on management of any discovered tribal cultural resources shall conducted be in accordance with the Cultural Resources Monitoring and Treatment Plan agreed upon for the specific project and specific project site.

IEUA finds that implementation of the above measures can reduce potential impacts to unknown subsurface tribal cultural resources to a less than significant impact level. The above measures can be implemented without causing additional adverse environmental impacts. The above measures will be integrated into the future development activities without additional impacts on the environment. Since the Project as analyzed above will not directly or indirectly cause significant adverse tribal cultural resource impact with implementation of mitigation, the Project is not forecast to contribute to cumulatively considerable tribal cultural resource impacts required to support the Project.

- **19. Utilities and Service Systems**: Impacts under Utilities and Service Systems, checklist question "a" are significant and cannot be mitigated below significance level. The discussion of this specific issue under Utilities and Service Systems is located below in Section C.3 of this document. The checklist questions under Utilities and Service Systems that can be mitigated to a level of less than significant are as follows:
- b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?
- <u>Finding:</u> 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 FSEIR. (pg. 4-261 to 4-262, FSEIR)
- <u>Facts:</u> The purpose of the proposed OBMPU is to address the drivers and trends that are shaping water management, specifically within Chino Basin. These drivers and trends have implications for the Parties who extract water from the Chino Basin and rely upon Safe Yield of the Chino Basin to serve the Parties' individual service areas. The purpose of implementing the proposed OBMPU facilities over a 30-

vear horizon is to enhance management of the Chino Basin through enhancing basin water supply and to improve water supply reliability, protect and enhance water quality, encourage sustainable management of the Basin to avoid MPI, and identify and use efficient and equitable methods to fund OBMPU implementation. Given that the proposed OBMPU is a groundwater basin management plan, the Project in and of itself is designed to ensure that the Parties that utilize Chino Basin groundwater have sufficient supply available to serve the demand of each individual service area. It is the responsibility of each of the Parties to utilize the data contained herein, and within the technical studies provided as Appendices to this OBMPU FSEIR, and the 2020 Optimum Basin Management Program Update Report to Project future demand within their individual service areas and determine how to meet demand given the circumstances within the Basin. However, as described within Subchapter 4.7, Hydrology and Water Quality, implementation of the OBMPU requires mitigation to ensure adequate management of the Basin as the individual OBMPU facilities are developed. This includes mitigation that addresses pumping sustainability, hydraulic control, and reduction in net recharge, which could, without mitigation, result in variability in available supply to Chino Basin parties.

Watermaster will periodically review current and projected basin conditions, compare this information to the projected basin conditions assumed in the evaluation of the Storage and Recovery Program application process, compare the projected Storage and Recovery Program operations to actual Storage and Recovery Program operations to actual Storage and Recovery Program operations. Watermaster will then make findings regarding the efficacy of the mitigation program and requirements required herein and by the Storage and Recovery Program storage agreements. Based on Watermaster's review and subsequent findings, where applicable, Watermaster will then require changes and/or modifications in the Storage and Recover Program storage agreements that would adequately mitigate MPI and related adverse impacts. The mitigation provided under Subchapter 4.7, Hydrology and Water Quality, issue (b), would enable Watermaster to maintain sustainable management of the Basin, and thereby maintain sufficient water supply allocated to the Parties for the foreseeable future.

Based on this information, implementation of the OBMPU as a comprehensive program would have a less than significant potential to adversely impact sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years, once mitigation is implemented.

Individual OBMPU Projects may demand water during construction; however, given the short period of construction, water demand during construction would not be substantial and would not require new or expanded water supply resources. Furthermore, the development of, for instance, new wells would not require expanded supply to operate beyond those created by the implementation of OBMPU Facilities as discussed above. Additionally, facilities such as storage basins would aid in the recharge and storage of the groundwater basin and would not require additional water for operation. Storage of the groundwater would enable sustainable management of the basin by preventing overdraft and protecting water quality of the basin, and also ensuring that Basin Water and storage capacity are put to maximum beneficial use while causing no MPI.

Ultimately, MMs **HYD-1**, **HYD-2**, **HYD-5**, **HYD-6**, **HYD-7**, **HYD-8**, **HYD-9**, **HYD-10**, and **HYD-11** would create a hierarchy of checks and balances as part of the sustainable management of the Basin through continuous monitoring of known issues within the Basin and a comprehensive mitigative response to ensure that these issues do not result in a significant impact. No further mitigation is required to ensure that sufficient water supplies are available to serve the Parties within the Chino Basin.

- c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
- <u>Finding:</u> 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 FSEIR. (pg. 294, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> As stated under the facts presented under issue "b" above, construction workers would temporarily require use of portable sanitary units during construction of the proposed wells and potentially during the installation of the proposed monitoring devices. Wastewater generated during construction of the proposed OBMPU facilities would be minimal, consisting of portable toilet waste generated by construction workers and therefore would not substantially impact wastewater treatment capacity. All conveyance systems, groundwater recharge, storage basins, wells, monitoring devices, and ancillary facilities would not generate wastewater during their operation. Therefore, impacts related to available wastewater treatment capacity for these facilities would be less than significant.

Those OBMPU projects that would include the development of new groundwater treatment facilities, upgrades to the Chino Desalters, and improvements to the Agua de Lejos Treatment Plant may generate new or expanded sources of brine waste generated by water treatment that would require treatment by the applicable wastewater treatment provider. Given that the amount of water proposed to be treated by these existing and proposed water treatment facilities is unknown, it is not possible to determine whether these facilities would require OCSD (or another agency responsible for managing brine waste) to expand the capacity of its treatment plant to accommodate the additional brine waste generated by these projects. As such, MM **UTIL-1**, which requires subsequent CEQA documentation to be prepared for certain projects is required to minimize potential impacts below significance thresholds. Therefore, with the implementation of mitigation, the potential for impacts related to capacity of area wastewater treatment plants would be below significance thresholds.

- d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- <u>Finding:</u> 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 FSEIR. (pg. 296 IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> The development of OBMPU facilities is not anticipated to result in generation of solid waste in excess of the capacities of local infrastructure. However, given that development of several OBMPU facilities may require substantial earthmoving

activities that may result in substantial soil export, as such, mitigation is required to ensure that, in the event substantial soil export is required, soils of a usable quality are recycled for reuse.

Implementation of MM **UTIL-3** will ensure that construction and demolition materials that are salvageable are recycled, and thereby diverted from the local landfill, which will minimize the potential for OBMPU projects to generate waste in excess of local landfill capacities. Similarly, MM **UTIL-4** will ensure that soils that would generally be exported from a given construction site are salvaged where possible for ultimate reuse, thereby diverting this waste stream from the local landfill. This too will minimize the potential for OBMPU projects to generate waste in excess of local landfill capacities.

Ultimately, with the implementation of these mitigation measures, the OBMPU would have a less than significant potential to generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

- <u>Finding:</u> 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 FSEIR. (pg. 297, IS, [Appendix 8.2, FSEIR])
- Implementation of proposed OBMPU facilities would comply with all City and Facts: County construction and demolition requirements during construction of the proposed facilities as described above in the regulatory setting. All excavated soil would be hauled offsite by truck to an appropriately permitted solid waste or re-use facility. The amount of soil to be disposed per day would not exceed the maximum permitted throughput for each waste type (i.e., non-hazardous and hazardous). Any hazardous materials collected on a given OBMPU Project site during either construction or operation will be transported and disposed of by a permitted and licensed hazardous materials service provider. OBMPU projects would be required, through the implementation of MM **UTIL-2** to recycle construction and demolition materials beyond the mandated 50 percent diversion required by AB 939. Furthermore, MM UTIL-3 would require further diversion through the recycling of soils where possible for future OBMPU projects. The Projects would comply with all federal, State, and local statues related to solid waste disposal. Therefore, the proposed OBMPU would result in less than significant impacts related to construction waste generation.

The Cities and County in which a given Project would be located are required to comply with the California Integrated Waste Management Act of 1989, requiring diversion of solid waste from landfills through reuse and recycling. Facilities proposed as part of the OBMPU would be required to recycle as part of the projects' operational activities. As such, the operation of proposed OBMPU facilities would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Construction and operational impacts are therefore less than significant.

Mitigation Measures

IEUA has determined that the Project could have a potentially significant impact on utilities and service systems checklist items "b," "c," "d," and "e." Mitigation measures to reduce the impact to below a level of potential significance are provided below.

- UTIL-1 The Implementing Agency shall prepare subsequent CEQA documentation for the Agua de Lejos Treatment Plant and upgrades to the Chino Desalters, new groundwater treatment facilities at or near well sites and at regionally located sites once specific improvements or facility locations have been identified, and design of such improvements or new facilities has been drafted.
- UTIL-2 Implementation of a Drainage Plan to Reduce Downstream Flows. Prior to issuance of permits for construction of project facilities, the Implementing Agency shall prepare a drainage plan that includes design features to reduce stormwater peak concentration flows exiting the above ground facility sites (consistent with MS4 requirements) so that the capacities of the existing downstream drainage facilities are not exceeded. These design features could include bio- retention, sand infiltration, return of stormwater for treatment within the treatment plant, and/or detention facilities.
- UTIL-3 The contract with demolition and construction contractors for a given OBMPU Project shall include the requirement that all materials that can feasibly be recycled shall be salvaged and recycled. This includes but is not limited to wood, metals, concrete, road base and asphalt. The contractors for a given OBMPU Project shall submit a recycling plan to the Watermaster or Implementing Agency for review and approval prior to issuance of permits for the construction of demolition/construction activities.
- UTIL-4 The contract with demolition and construction contractors for a given OBMPU Project shall include the requirement that all soils that are planned to be exported from the site that can feasibly be recycled shall be recycled for re-use; alternatively, soils shall be reused on site to balance soil import/export.

The following measures are also required to minimize impacts under utilities and service systems, though these measures (HYD-1, HYD-2, HYD-5, HYD-6, HYD-7, HYD-8, HYD-9, HYD-10, and HYD-11) are provided under their respective section above.

IEUA finds that implementation of the above measures can reduce potential impacts to water supply, provision of wastewater management, and solid waste management under utilities and service systems. The above measures can be implemented without causing additional adverse environmental impacts. The above measures will be integrated into the future development activities without additional impacts on the environment. Since the Project as analyzed above will not directly or indirectly cause significant adverse water supply, provision of wastewater, or solid waste impacts under utilities and service systems with implementation of mitigation, the Project is not forecast to contribute to cumulatively considerable water supply, provision of wastewater, or solid waste impacts related to implementation of the OBMPU.

Based upon the findings presented in the FSEIR, the above described environmental issues have been determined by the IEUA to be: (1) adequately addressed in the FSEIR; and (2) impacted to a degree deemed by the IEUA to be less than significant with implementation of the mitigation measures identified above (where required) and summarized in the Mitigation Monitoring and Reporting Program. No substantial evidence was subsequently presented to or identified by the IEUA which further modified or otherwise altered IEUA's less-than-significant impact determinations for each of these environmental issues. Where mitigation has been required, these changes or alterations have been required in, or incorporated into the Project, and they avoid or substantially

lessen the significant environmental effects as identified in the FSEIR. The IEUA Board further finds that no additional mitigation measures or Project changes are required to reduce the potential impacts discussed above to a less than significant level.

This concludes the summary of environmental impacts that were identified in the FSEIR and the Initial Study as non-significant impacts without or with mitigation related to implementation of the Project.

III. POTENTIALLY SIGNIFICANT IMPACTS THAT CANNOT BE MITIGATED BELOW A LEVEL OF SIGNIFICANCE (CEQA GUIDELINES § 15091(A)(3))

The IEUA Board finds that despite the incorporation of extensive changes and alterations into the Project, approving and implementing the OBMPU will allow three environmental impacts to remain unavoidably significant because these impacts cannot be assured of mitigation to a less than significant level. These unavoidable significant adverse environmental impacts are related to biological resources, greenhouse gas emissions, and utilities and service systems (water supply). The impacts and the feasible mitigation measures identified to minimize them are summarized below. Thus, the potential for significant effects to occur for these issues would continue to exist regardless of whether or not the Project implements the Project changes and mitigation measures mandated by the IEUA Board in the FSEIR.

The potential impact to the above impact categories—Biological Resources, Greenhouse Gas Emissions, and Utilities and Service Systems—were concluded to be significant based on the whole record which demonstrated that these impacts could not be reduced below thresholds of significance by the changes to the Project (alternatives, mitigation measures or design changes) and still achieve Project objectives. This finding is based on a mix of varying Project locations containing potentially significant biological resources, and cumulative construction activities over the next 30 years generating substantial construction-related greenhouse gas emissions. To the extent that future Project development generates the emissions forecast from construction activities and to the extent that the future OBMPU facilities could be located—out of necessity—within sites containing significant biological resources, approval of the OBMPU contributes to the significant impacts as described in detail below. Thus, despite the incorporation of changes to the OBMPU, biological resources, greenhouse gas emissions, and utilities and service systems impacts cannot be fully mitigated to a level of less than significant.

Pursuant to Section 21081(a) of the Public Resources Code and Section 15091(a)(3) of the State CEQA Guidelines, the IEUA finds that, for each of the following significant effects, specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the FSEIR. These findings are explained below and are supported by substantial evidence in the record of proceedings.

- **1. Biological Resources:** Only checklist items "(a)," "(b)," and "(d)" are discussed below as these are the only impact categories that are significant and unavoidable.
- a. Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

- <u>Finding:</u> Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make other mitigation measures or Project alternatives identified in the final EIR infeasible for the reasons set forth in Section D and E, below. (pg. 4-66, and 4-69 through 4-76, FSEIR)
- Potential impacts on jurisdictional waters, special-status plant communities, Facts: protected trees, special-status plant, and wildlife species (including critical habitat) will be analyzed for each facility as site-specific design has been established. Once a particular facility area of potential effect (APE) is established, the following steps will be taken during a detailed second-tier evaluation to assure resource impacts are quantified, and site specific measures are identified: In specific instances outlined in the FSEIR, no further biological resource impact analysis may be necessary; in other instances specified in the FSEIR, potentially significant impacts may occur, but specific mitigation can reduce such impacts to a less than significant level; and finally, in circumstances in which a site must be selected for OBMPU facility development where significant biological resources cannot be avoided or mitigated, a significant impact may occur. Future documentation may rely upon the procedures outlined in Sections 15162 and 15168 of the State CEQA Guidelines to determine the required level of CEQA documentation for future infrastructure projects.

The following steps shall occur to determine the level of significance at a given proposed OBMPU facility site:

- Each biological resource will be evaluated for its presence or absence, and for the presence of habitat that could support the resource or provide habitat for the resource. Suitable habitat was determined based on background review and identification of species-specific life-history requirements.
- Potential impacts on special-status wildlife species will be determined using a habitat-based approach where the presence of the species was assumed in suitable habitat. Habitats in the Project footprint and vicinity were determined through a combination of background review, habitat mapping during field surveys, and aerial photograph interpretation.
- Potential impacts on designated critical habitat will be based on the location of the critical habitat relative to the Project footprint and the presence of primary constituent elements (PCEs) associated with the critical habitat designation.

In determining the potential direct and indirect impacts associated with construction and operation impacts on biological resources, a number of assumptions and limitations are identified:

- Construction and operation impacts will be considered temporary if they can be fully restored to pre-disturbance conditions following construction. Temporary impacts would include construction staging areas, construction laydown areas, relocation of underground utilities, and other work space that would not be occupied by permanent above-ground facilities during Project operation.
- Impacts will be considered permanent when they have lasting effects beyond the Project construction period, or cannot be fully restored following

construction. Permanent impacts would include new right-of-way for new or expanded facility or water conveyance systems, road crossings, electrical substations, maintenance and operations facilities, and monitoring stations.

• Certain jurisdictional waters types (wetlands) are especially sensitive to disturbance; therefore, impacts on these features will be considered permanent where these features cannot be restored to their pre-Project condition due to the permanent loss by new infrastructure.

Ultimately, because the Chino Basin contains many areas that may support candidate, sensitive, or special status species, and the specific sites in which future OBMPU facilities will be developed is presently unknown, a significant impact may occur. Because the individual projects implemented throughout the Program could result in potentially significant impacts on biological resources, mitigation measures were designed to avoid or reduce the impacts on these resources. The mitigation strategy includes avoidance of impacts on biological resources to the extent possible through requiring the following: preconstruction surveys and field verification of sensitive resources and mitigation to provide compensation for sensitive habitat lost (BIO-1); preparation of a Biological Resources Management Plan (BRMP) that would develop parameters with site-specific mitigation measures to minimize impacts to sensitive biological resources (BIO-2); conduct a preconstruction burrowing owl survey at OBMPU sites that are not fully developed (BIO-6); require facility design and maintenance activity to be planned to protect habitat, which would minimize the potential for OBMPU facilities to significantly modify sensitive habitat (BIO-9); require the establishment of buffer zones adjacent to sensitive biological resources to minimize any potential impacts thereof (BIO-11); revegetate areas disturbed by construction of OBMPU facilities to ensure that construction impacts to sensitive biological resources are minimized and to prevent invasive species from adversely impacting native biological resources (BIO-12); clean construction equipment to minimize introduction of non-native species that might adversely impact native biological resources on a given site (BIO-13); require contractor education and environmental training to ensure that personnel are informed of the protocols required to minimize impacts to biological resources at a given site (BIO-14); require that a biological monitor be present during construction where impacts to Riparian, Riverine, Wetland, Endangered Species or Endangered Species Critical habitat occurs to minimize impacts thereof (BIO-15); require that all trash is disposed of in closed containers to minimize the potential to attract or adversely impact sensitive biological species (BIO-16); restrict use of rodenticides and herbicides to prevent impacts to sensitive biological species (BIO-17); installation of wildlife exclusion fencing at the edge of the construction footprint and along the outer perimeter of Environmentally Sensitive Areas and Environmentally Restricted Areas to restrict special-status species from entering the construction area (BIO-18); require that equipment staging areas are delineated and enforced during construction at each site (BIO-19); restriction of Plastic mono-filament netting or similar material to prevent potential harm to wildlife (BIO-20); access roads will be clearly delineated to minimize potential for impacts to habitat located outside of these delineated areas (BIO-21); to prevent use of trenches and other similar features by wildlife, all excavated, steep-sided holes or trenches more than 8 inches deep will be covered at the close of each working day (BIO-22); and, required preparation and implementation of weed control plan to ensure the measures taken to prevent the spread of weeds do not adversely

impact sensitive biological resources, and conversely this plan shall ensure that invasive species do not adversely impact sensitive biological resources (**BIO-23**).

Given the speculative nature of the locations of proposed OBMPU Project, there is a potential that an individual OBMPU facility may be developed and have operations within an area containing important biological resources that cannot be avoided, even at the design level. Therefore, the program's contribution is considered cumulatively considerable, and would result in a significant or cumulatively considerable adverse impact. Furthermore, though substantial mitigation is provided to minimize impacts under most circumstances for future OBMPU facilities, no feasible mitigation exists to completely avoid the potential for the OBMPU to have a substantial unmitigable adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Thus, the proposed Project is forecast to cause significant unavoidable adverse impacts to biological resources, specifically under this issue.

- b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
- <u>Finding:</u> Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make other mitigation measures or Project alternatives identified in the final EIR infeasible for the reasons set forth in Section D and E, below (pg. 4-64 to 4-65, 4-68 to 4-70, and 4-73 to 4-75, FSEIR)
- <u>Facts:</u> Critical habitat has been designated for several species adjacent to, directly overlapping, or in the general vicinity of the Program area, with significant concentration of such species along the Santa Ana River corridor and Prado Basin. The primary mitigation for potential impacts to critical habitat will be avoidance. Where avoidance is not feasible, MMs **BIO-1** and **BIO-7** will be implemented to minimize impacts to the maximum extent feasible. Mitigation is required to address potential impacts to riparian habitat or other sensitive natural communities, furthermore, the future OBMPU Facilities will be required to prepare site-specific subsequent environmental documentation to minimize impacts to riparian habitat or other sensitive natural communities.

As stated above under Biological Resources issue "a", the mitigation strategy includes avoidance of impacts on sensitive habitat to the extent possible through requiring the following: preconstruction surveys and field verification of sensitive resources and mitigation to provide compensation for sensitive habitat lost (**BIO-1**); preparation of a Biological Resources Management Plan (BRMP) that would develop parameters with site-specific mitigation measures to minimize impacts to sensitive biological resources (**BIO-2**); obtainment of regulatory permits and implementing subsequent mitigation that would minimize impacts related to discharge of fill or streambed alteration of jurisdictional areas (**BIO-3**); require jurisdictional water preconstruction surveys to determine the potential impacts thereof, which will inform the mitigative actions required to minimize impacts to jurisdictional waters/areas (**BIO-4**); protect migratory birds through conducting

grubbing, brushing or tree removal outside of nesting season or coordinating with the California Department of Fish and Wildlife (CDFW) (**BIO-5**); conduct a preconstruction burrowing owl survey at OBMPU sites that are not fully developed (**BIO-6**); and, verify consistency with or obtain take authorization through applicable habitat conservation plans (HCPs) or multiple species habitat conservation plans (MSHCPs) within a given site (**BIO-7**).

It is rare that critical habitat extends directly within the property owned by Project proponents because these areas are already generally maintained to support the OBMPU operations, not protect habitat. However, where either permanent or temporary disturbances will occur within critical habitat, mitigation will be provided to offset impacts to such habitat to the maximum extent feasible. Furthermore, though substantial mitigation is provided to minimize impacts under most circumstances for future OBMPU facilities, no feasible mitigation exists to completely avoid the potential for the OBMPU to have a substantial unmitigable adverse effect because certain areas that contain critical habitat for species may not be fully mitigable, and an unavoidable significant adverse biological resource impact may occur. Therefore, where avoidance cannot be achieved, the residual impact to critical habitat may be determined to be unavoidable, and therefore, significant.

- d. Would the project 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?
- <u>Finding:</u> Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make other mitigation measures or Project alternatives identified in the final EIR infeasible for the reasons set forth in Section D and E, below (pg. 4-69 to 4-76, FSEIR)
- <u>Facts:</u> The proposed OBMPU will be developed within the Chino Basin, which contains many areas that could serve to enable movement of native resident or migratory fish or wildlife species, or serve established native resident or migratory wildlife movement corridors, or serve as native wildlife nursery sites. As such, future OBMPU Facilities will be required to perform these subsequent environmental analyses at the time individual infrastructure improvements are considered for funding. Mitigation is required to minimize impacts under this issue to a level of less than significant.

As stated above under Biological Resources issues "a," "b", and "c," The mitigation strategy includes avoidance of impacts on biological resources to the extent possible through requiring the following: preconstruction surveys and field verification of sensitive resources and mitigation to provide compensation for sensitive habitat lost (**BIO-1**); preparation of a Biological Resources Management Plan (BRMP) that would develop parameters with site-specific mitigation measures to minimize impacts to sensitive biological resources (**BIO-2**); protect migratory birds through conducting grubbing, brushing or tree removal outside of nesting season or coordinating with the California Department of Fish and Wildlife (CDFW) (**BIO-5**); conduct a preconstruction burrowing owl survey at OBMPU sites that are not fully developed (**BIO-6**); and, verify consistency with or obtain take authorization through applicable habitat conservation plans (HCPs) or multiple species habitat conservation plans (MSHCPs) within a given site (**BIO-7**); Place

primary emphasis on the preservation of large, unbroken blocks of natural open space and wildlife habitat area, and protect the integrity of habitat linkages (BIO-8); require facility design and maintenance activity to be planned to protect habitat, which would minimize the potential for OBMPU facilities to significantly modify sensitive habitat (BIO-9); require the establishment of buffer zones adjacent to sensitive biological resources to minimize any potential impacts thereof (**BIO-11**); revegetate areas disturbed by construction of OBMPU facilities to ensure that construction impacts to sensitive biological resources are minimized and to prevent invasive species from adversely impacting native biological resources (BIO-12); clean construction equipment to minimize introduction of non-native species that might adversely impact native biological resources on a given site (BIO-13); require contractor education and environmental training to ensure that personnel are informed of the protocols required to minimize impacts to biological resources at a given site (BIO-14); require that a biological monitor be present during construction where impacts to Riparian, Riverine, Wetland, Endangered Species or Endangered Species Critical habitat occurs to minimize impacts thereof (BIO-15); require that all trash is disposed of in closed containers to minimize the potential to attract or adversely impact sensitive biological species (BIO-16); restrict use of rodenticides and herbicides to prevent impacts to sensitive biological species (BIO-17); installation of wildlife exclusion fencing at the edge of the construction footprint and along the outer perimeter of Environmentally Sensitive Areas and Environmentally Restricted Areas to restrict special-status species from entering the construction area (BIO-18); require that equipment staging areas are delineated and enforced during construction at each site (BIO-19); restriction of Plastic mono-filament netting or similar material to prevent potential harm to wildlife (BIO-20); access roads will be clearly delineated to minimize potential for impacts to habitat located outside of these delineated areas (BIO-21); to prevent use of trenches and other similar features by wildlife, all excavated, steep-sided holes or trenches more than 8 inches deep will be covered at the close of each working day (BIO-22); and, required preparation and implementation of weed control plan to ensure the measures taken to prevent the spread of weeds do not adversely impact sensitive biological resources, and conversely this plan shall ensure that invasive species do not adversely impact sensitive biological resources (BIO-23).

Furthermore, though substantial mitigation is provided to minimize impacts under most circumstances for future OBMPU facilities, no feasible mitigation exists to completely avoid the potential for the OBMPU to have a substantial unmitigable adverse effect due to interfering substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impeding the use of native wildlife nursery sites. Accordingly, this impact cannot be reduced below a less than significant impact and must be concluded to be an unavoidable significant impact.

Mitigation Measures

The IEUA has determined that the Project could have a potentially significant impact on sensitive biological resources. Given the speculative nature of the locations of proposed OBMPU Project, there is a potential that an individual OBMPU facility may have to be developed and have operations within an area containing biological resources that cannot be avoided, even at the design level. Though substantial mitigation is provided to minimize impacts under most circumstances for future OBMPU facilities, no feasible mitigation exists to

completely avoid impacts to biological resources within the Chino Basin due to the significance of such resources within riparian areas, such as the Santa Ana River and Prado Basin. Below are the substantive mitigation measures addressed under Biological Resources:

To reduce or prevent activities that may adversely affect sensitive species to the extent feasible, the following mitigation measures will be incorporated into any specific projects and/or contractor specifications for future Project-related impacts to protect sensitive resources and habitat.

- BIO-1 All future OBMPU Projects shall be required to consult with a qualified professional to determine the need for site-specific biological surveys. Where a site has been determined to require a site-specific survey by a qualified professional, in any case in which a future OBMPU project will affect undeveloped land, or in which the Implementing Agency seeks State Funding, site surveys shall be conducted by a qualified biologist/ecologist. If sensitive species are identified as a result of the survey for which mitigation/compensation must be provided in accordance with regulatory requirements, the following subsequent mitigation actions will be taken:
 - a. The project proponent shall provide compensation for sensitive habitat acreage lost by acquiring and protecting in perpetuity (through property or mitigation bank credit acquisition) habitat for the sensitive species at a ratio of not less than 1:1 for habitat lost. The property acquisition shall include the presence of at least one animal or plant per animal or plant lost at the development site to compensate for the loss of individual sensitive species.
 - b. The final mitigation may differ from the above values based on negotiations between the project proponent and USFWS and CDFW for any incidental take permits for listed species. The project proponent shall retain a copy of the incidental take permit as verification that the mitigation of significant biological resource impacts at a project site with sensitive biological resources has been accomplished.
 - c. Preconstruction botanical surveys for special-status plant communities and special-status plant species will be conducted. in areas that were not previously surveyed because of access or timing issues or project design changes, preconstruction surveys for special-status plant communities and special-status plant species will be conducted before the start of ground-disturbing activities during the appropriate blooming period(s) for the species.
- BIO-2 Biological Resources Management Plan (BRMP): During final design and prior to issuance of construction permits, a BRMP will be prepared to assemble the biological resources mitigation measures for each specific infrastructure improvement in the future. The BRMP will include terms and conditions from applicable permits and agreements and make provisions for monitoring assignments, scheduling, and responsibility. The BRMP will also discuss habitat replacement and revegetation, protection during ground-disturbing activities, performance (growth) standards, maintenance criteria, and monitoring requirements for temporary and permanent native plant community impacts. The parameters of the BRMP will be formed with the mitigation measures from subsequent CEQA documentation, including terms and conditions as applicable from the USFWS, USACE, SWRCB/RWQCB, and CDFW.
- BIO-3 Prior to discharge of fill or streambed alteration of state or federal water jurisdictional areas, the project proponent shall obtain regulatory permits from the U.S. Army Corps of Engineers, local Regional Water Quality Control Board and the California Department of Fish and Wildlife. Any future project that must discharge fill into a channel or otherwise alter a streambed shall be minimized to the extent feasible, and any discharge of fill not avoidable shall be mitigated through compensatory mitigation. Mitigation can be provided by restoration of temporary impacts, enhancement of existing resources, or purchasing into any authorized mitigation bank or in-lieu fee program; by selecting a site of comparable acreage near the site and enhancing it with a native riparian habitat or invasive species removal in accordance with a habitat mitigation plan approved by regulatory agencies; or by acquiring sufficient compensating habitat to meet regulatory agency requirements. Typically, regulatory agencies require mitigation for jurisdi-

ctional waters without any riparian or wetland habitat to be mitigated at a 1:1 ratio. For loss of any riparian or other wetland areas, the mitigation ratio will begin at 2:1 and the ratio will rise based on the type of habitat, habitat quality, and presence of sensitive or listed plants or animals in the affected area. A Habitat Mitigation and Monitoring Proposal shall be prepared and reviewed and approved by the appropriate regulatory agencies. The project proponent will also obtain permits from the regulatory agencies (U.S. Army Corps of Engineers, Regional Water Quality Control Board, CDFW and any other applicable regulatory agency with jurisdiction over the proposed facility improvement) if any impacts to jurisdictional areas will occur. These agencies can impose greater mitigation requirements in their permits, but the Implementing Agency will utilize the ratios outlined above as the minimum required to offset or compensate for impacts to jurisdictional waters, riparian areas or other wetlands.

- BIO-4 Jurisdictional Water Preconstruction Surveys: A federal and state jurisdictional water preconstruction survey will be conducted at least six months before the start of ground-disturbing activities to identify and map all jurisdictional waters in the project footprint and up to a 250-foot buffer around the project footprint, subject to legal property access restrictions. The purpose of this survey is to confirm the extent of jurisdictional waters within the project footprint and adjacent up to 250 foot buffer. If possible, surveys would be performed during the spring, when plant species are in bloom and hydrological indicators are most readily identifiable. These results would then be used to calculate impact acreages and determine the amount of compensatory mitigation required to offset the loss of wetland functions and values.
- BIO-5 To avoid an illegal take of active bird nests, any grubbing, brushing or tree removal will be conducted outside of the State identified nesting season (nesting season is approximately from February 15 through September 1 of a given calendar year). Alternatively, a nesting bird survey that demonstrates that no bird nests will be disturbed during project construction can be conducted by a qualified biologist no more than 14 days prior to initiation of ground disturbance; construction may only commence once a qualified biologist has demonstrated that no nesting birds are present at a given site. The Implementing Agency shall coordinate with the CDFW to develop nesting bird survey protocol. The results of the nesting bird survey will be documented in a report submitted by the avian biologist to the Implementing Agency. The Implementing Agency, in coordination with CDFW and USFWS (as appropriate), may designate nest buffers outside of which construction activities may be allowed to proceed.
- BIO-6 All future OBMPU Projects shall be required to consult with a gualified professional to determine the need for site-specific protocol burrowing owl surveys. Prior to commencement of construction activity where a site has been determined to require a protocol burrowing owl surveys survey by a qualified professional, or in locations that are not fully developed, a protocol burrowing owl survey will be conducted using the 2012 survey protocol methodology identified in the "Staff Report on Burrowing Owl Mitigation, State of California, Natural Resources Agency, Department of Fish and Game, March 7, 2012", or the most recent CDFW survey protocol available. Protocol surveys shall be conducted by a qualified biologist to determine if any burrowing owl burrows are located within the potential area of impact. If occupied burrows may be impacted, an impact minimization plan shall be developed in coordination with CDFW and submitted to the Implementing Agency that will protect the burrow in place or provide for passive relocation to an alternate burrow within the vicinity but outside of the project footprint in accordance with current CDFW guidelines. Active nests must be avoided with a 250-foot buffer until all nestlings have fledged.
- BIO-7 Prior to commencement of construction activity on a project facility within a MSHCP/HCP plan area, consistency with that plan, or take authorization through that plan, shall be obtained. Through avoidance, compensation or a comparable mitigation alternative, each project shall be shown to be consistent with a MSHCP/HCP.
- BIO-8 During the design phase of future OBMPU projects, the Implementing Agency shall place primary emphasis on the preservation of large, unbroken blocks of natural open

space and wildlife habitat area, and protect the integrity of habitat linkages. As part of this emphasis, the Watermaster shall facilitate incorporate programs for purchase of lands, clustering of development to increase the amount of preserved open space, and assurances that the construction of facilities or infrastructure improvements meet standards identical to the environmental protection policies applicable to the specific facilities improvement by implementing agencies.

- BIO-9 Require facility designs and maintenance activities to be planned to protect habitat values and to preserve significant, viable habitat areas and habitat connection in their natural conditions. A qualified biologist shall be retained to determine the scope of the following for a given Project site:
 - a. Within designated habitat areas of rare, threatened or endangered species, prohibit disturbance of protected biotic resources.
 - b. Within riparian areas and wetlands subject to state or federal regulations, riparian woodlands, oak and walnut woodland, and habitat linkages, require that the vegetative resources which contribute to habitat carrying capacity (vegetative diversity, faunal resting sites, foraging areas, and food sources) are preserved in place or replaced so as not to result in an measurable reduction in the reproductive capacity of sensitive biotic resources.
 - c. Within habitats of plants listed by the CNDDB or CNPS as "special" or "of concern," require that new facilities do not result in a reduction in the number of these plants, if they are present.
- BIO-11 Require the establishment of buffer zones adjacent to areas of biological resources as recommended and defined by the site Biologist. Such buffer zones shall be of adequate width to protect biological resources from grading and construction activities, as well as from the long-term use of adjacent lands. Permitted land modification activities with preservation and buffer areas are to be limited to those that are consistent with the maintenance of the reproductive capacity of the identified resources. The land uses and design of project facilities adjacent to a vegetative preservation area, as well as activities within the designated buffer area are not to be permitted to disturb natural drainage patterns to the point that vegetative resources receive too much or too little water to permit their ongoing health. In addition, landscape adjacent to areas of preserved biological resources shall be designed so as to avoid invasive species which could negatively impact the value of the preserved resource.
- BIO-12 As part of completion of the final site development, after ground disturbance has occurred within or adjacent to any natural area, the disturbed areas shall be revegetated using a plant mix of native plant species that are suitable for long term vegetation management at the specific site, which shall be implemented in cooperation with regulatory agencies and with oversight from a qualified biologist. The seeds mix shall be verified to contain the minimum amount of invasive plant species seeds reasonably available for the project area.
- BIO-13 Clean Construction Equipment. During construction, equipment will be washed before entering the project footprint to reduce potential indirect impacts from inadvertent introduction of nonnative invasive plant species. Mud and plant materials will be removed from construction equipment when working in native plant communities, near special-status plant communities, or in areas where special-status plant species have been identified.
- BIO-14 Contractor Education and Environmental Training.

Personnel who work onsite will attend a Contractor Education and Environmental Training session conducted by a qualified biologist. The environmental training will cover general and specific biological information on the special-status plant species that may be present near the construction site, including the distribution of the resources, the recovery efforts, the legal status of the resources, and the penalties for violation of project permits and laws.

The Contractor Education and Environmental Training sessions will be given before the initiation of construction activities and repeated, as needed, when new personnel begin

work within the project limits. Daily updates and synopsis of the training will be performed during the daily safety ("tailgate") meeting. All personnel who attend the training will be required to sign an attendance list stating that they have received the Contractor Education and Environmental Training, and such tracking sheets shall be maintained for inspection by the Implementing Agency.

BIO-15 Biological Monitor to Be Present during Construction Activities in areas where impacts to Riparian, Riverine, Wetland, Endangered Species or Endangered Species Critical habitat occurs. A biological monitor (or monitors) will be present onsite during construction activities that could result in direct or indirect impacts on sensitive biological resources (including listed species) and to oversee permit compliance and monitoring efforts for all special-status resources.

A biological monitor (qualified biologist) is any person who has a bachelor's degree in biological sciences, zoology, botany, ecology, or a closely related field and/or has demonstrated field experience in and knowledge about the identification and life history of the special-status species or jurisdictional waters that could be affected by project activities. The biological monitor(s) will be responsible for monitoring the Contractor to ensure compliance with the Section 404 Individual Permit, Section 401 Water Quality Certification and the Lake and Streambed Alteration Agreement. Activities to ensure compliance would include performing construction-monitoring activities, including monitoring environmental fencing, identifying areas where special-status plant species are or may be present, and advising the Contractor of methods that may minimize or avoid impacts on these resources. Biological monitor(s) will be required to be present in all areas during ground disturbance activities and for all construction activities conducted within or adjacent to identified Environmentally Sensitive Areas, Wildlife Exclusion Fencing, and Non-Disturbance Zones as defined by the Project biologist.

- BIO-16 Food and Trash: All food-related trash items (e.g., wrappers, cans, bottles, food scraps) will be disposed of in closed containers and removed at least once a week from the construction site.
- BIO-17 Rodenticides and Herbicides: Use of rodenticides and herbicides in the project footprint will be restricted at the direction of the project biologist. This measure is necessary to prevent poisoning of special-status species and the potential reduction or depletion of the prey populations of special-status wildlife species. Where pesticides must be used, they must be used in full accordance with use instructions for the particular chemical and at the direction of the project biologist.
- BIO-18 Wildlife Exclusion Fencing: Exclusion barriers (e.g., silt fences) will be installed at the edge of the construction footprint and along the outer perimeter of Environmentally Sensitive Areas and Environmentally Restricted Areas as defined by the Project biologist prior to the commencement of construction activities to restrict special-status species from entering the construction area during construction. The design specifications of the exclusion fencing will be determined through consultation with the USFWS and/or CDFW, as appropriate. Clearance surveys will be conducted for special-status species after the exclusion fence is installed in compliance with USFWS and/or CDFW requirements. The project biologist shall determine the frequency in which clearance surveys will be conducted to determine the efficacy of the exclusion fencing.
- BIO-19 Equipment Staging Areas: Prior to the commencement of construction, the Project Proponent shall identify staging areas for construction equipment to be utilized during construction that will be located outside sensitive biological resources areas, including habitat for special-status species, jurisdictional waters, and wildlife movement corridors.
- BIO-20 Plastic mono-filament netting (erosion-control matting) or similar material will <u>not</u> be used in erosion control materials to prevent potential harm to wildlife. Materials such as coconut coir matting or tackified hydroseeding compounds will be used as substitutes.
- BIO-21 Vehicle Traffic: During ground-disturbing activities, project-related vehicle traffic will be restricted within the construction area to established roads, construction areas, and

other designated areas to prevent avoidable impacts. Access routes will be clearly flagged and traffic outside of the designated areas will be prohibited.

- BIO-22 Entrapment Prevention: All excavated, steep-sided holes or trenches more than 8 inches deep will be covered at the close of each working day with plywood or similar materials, or a minimum of one escape ramp constructed of earth fill for every 10 feet of trenching will be provided to prevent the entrapment of wildlife. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. All culverts or similar enclosed structures with a diameter of 4 inches or greater will be covered, screened, or stored more than 1 foot off the ground to prevent use by wildlife. Stored material will be cleared for common and special-status wildlife species before the pipe is subsequently used or moved.
- BIO-23 Weed Control Plan: Prior to the commencement of construction, a Weed Control Plan will be developed for the Implementing Agency by the Project Biologist to minimize or avoid the spread of weeds during ground-disturbing activities. In the Weed Control Plan, the following topics will be addressed:
 - A Schedule for noxious weed surveys shall be addressed.
 - Weed control treatments shall be addressed and ultimately implemented by the Implementing Agency, including permitted herbicides, and manual and mechanical methods for application; herbicide application will be restricted in Environmentally Sensitive Areas (as defined by the Project biologist).
 - The timing of the weed control treatment for each plant species shall be addressed.
 - Fire prevention measures shall be addressed.

The Project Proponent shall maintain records demonstrating implementation of the Weed Control Plan, and shall make those records available to inspection by the Implementing Agency upon request.

Implementation of the Project specific mitigation measures would minimize construction-related impacts to the greatest extent feasible, including the potential for invasive species occupancy caused by Project-related disturbance of natural areas. However, under items "4(a)," "4(b)," and "4(d)"—which pertain to whether the Project would (a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?, (b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?, and (d) 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?—the substantive mitigation provided cannot guarantee minimization of impacts to these resources below significance levels.

The IEUA Board finds that with the implementation of the above measures, impacts to biological resources from future OBMPU Project implementation would be reduced or controlled to the maximum extent feasible because specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible other mitigation measures or project alternatives identified in the FSEIR.

2. Greenhouse Gas Emissions

- a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- <u>Finding:</u> Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make other mitigation measures or Project alternatives identified in the final EIR infeasible for the reasons set forth in Section D and E, below (pg. 4-150 to 4-152, FSEIR)
- The SCAQMD significance thresholds for greenhouse gas emissions generation Facts: are 3,000 metric tons of carbon dioxide equivalent per year (MTCO₂e/yr) and 10,000 MTCO₂e/yr depending on the type of end use. The OBMPU is anticipated to generate 18,986.93 MTCO₂e/yr as a result of OBMPU construction, which is beyond the SCAQMD 3,000 MTCO₂e/yr and 10,000 MTCO₂e/yr thresholds. The OBMPU will be required to comply with regulations imposed by the State of California and the SCAQMD aimed at the reduction of air pollutant emissions. A list of the regulations that OBMPU projects must comply with is provided on page 4-148 of the FSEIR. While no feasible mitigation measures have been identified that would reduce these emissions to levels that are less than significant, MM AQ-1 would minimize the horsepower of construction equipment, ensure that off-road diesel construction equipment conforms to Tier 4 standards, and ensure that all construction equipment is tuned and maintained in accordance with manufacturer specifications. MM AQ-2 would ensure that all graded areas within future OBMPU Project sites are watered at 2.1-hour watering intervals or otherwise ensure a soil moisture of 12% to control fugitive dust.

In terms of operational GHG emissions, the proposed Project involves the construction of wells, conveyance facilities and ancillary facilities, storage basins, recharge facilities, storage bands, desalters and water treatment facilities, and associated improvements. The proposed Project does not include any substantive new stationary or mobile sources of emissions, and therefore, by its very nature, OBMPU projects will not generate quantifiable GHG emissions from Project operations. The Project does not propose a trip-generating land use or facilities that would generate any substantive amount of on-going GHG emissions. While it is anticipated that the Project would require intermittent maintenance to be conducted, such maintenance would be minimal requiring a negligible amount of traffic trips on an annual basis. However, given that certain components of the OBMPU may require substantial electricity to operate, mitigation is required to ensure that subsequent CEQA documentation is prepared to address projects that generate substantial operational energy-related emissions. As such, MM EN-2 is also required as it addresses operational energy demands and potential GHG emissions.

With implementation of these mitigation measures, the OBMPU would generate greenhouse gas emissions beyond the SCAQMD thresholds, thereby resulting in a significant impact that cannot be mitigated to a level of less than significant with feasible mitigation.

- b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?
- <u>Finding:</u> Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make other mitigation measures or Project alternatives identified in the final EIR infeasible for the reasons set forth in Section D and E, below (pg. 4-152, FSEIR)
- **Facts:** The Project would generate direct or indirect GHG emissions during construction that could result in a significant impact on the environment. Screening thresholds of 3,000 MTCO₂e/yr or 10,000 MTCO₂e/yr to determine if additional analysis is required is an acceptable approach for small projects. This approach is a widely accepted screening threshold used by numerous cities and counties in the SCAB and is based on the SCAQMD staff's proposed GHG screening threshold for stationary source emissions for non-industrial and industrial projects. The SCAQMD Interim GHG Threshold identifies a screening threshold to determine whether additional analysis is required. The Project will result in approximately 18,986.93 MTCO2e/yr from construction activities. As such, the Project would exceed the SCAQMD's recommended numeric thresholds of 3,000 MTCO2e and 10,000 MTCO2e/yr if they were applied. Thus, the Project has the potential to result in a cumulatively considerable impact with respect to GHG emissions.

Additionally, the Project involves construction activity and does not propose a tripgenerating land use or facilities that would generate any substantial amount of ongoing GHG emissions. However, the Project's short-term GHG emissions are above the 3,000 MTCO2e/yr and 10,000 MTCO2e/yr screening thresholds. As such, proposed Project has a significant potential to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Mitigation Measures

The IEUA has determined that the Project could contribute potentially significant greenhouse gas emissions. With implementation of the recommended Air Quality mitigation measures identified Subchapter 4.2 and 4.5, the Air Quality and Energy Sections of this Draft EIR, GHG emissions still exceed the SCAQMD screening thresholds of 3,000 MTCO₂e/yr and 10,000 MTCO₂e/yr. While greenhouse gas impacts are mitigated to the maximum extent feasible, no feasible mitigation exists to completely avoid generating significant greenhouse gas emissions within the Chino Basin. These mitigation measures (AQ-1, AQ-2, and EN-1) are provided under their respective sections above.

The IEUA Board finds that with the implementation of the above measures, impacts from greenhouse gas emissions generated by future OBMPU construction and operations would be reduced or controlled to the maximum extent feasible. Regardless, no feasible mitigation is available to minimize GHG emissions to below significance thresholds. Thus, exceedances of applicable SCAQMD regional thresholds are considered significant and unavoidable, and the construction of the Project could create a significant cumulative impact to global climate change.

- **3. Utilities and Service Systems:** Only checklist item "(a)" is discussed below as this is the only impact category that is significant and unavoidable.
- a) Would the project require or result in the relocation or construction of new or expanded water, electric power, or natural gas facilities, the construction or relocation of which could cause significant environmental effects?
- <u>Finding:</u> Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make other mitigation measures or Project alternatives identified in the final EIR infeasible for the reasons set forth in Section D and E, below (pg. 4-256 to 4-258, FSEIR and pg. 290 and 292, IS, [Appendix 8.2, FSEIR])
- <u>Facts:</u> The impact analysis for this question was broken down into the following categories, each were addressed in either the FSEIR or the IS, [Appendix 8.2, FSEIR]: water (FSEIR), wastewater (IS, [Appendix 8.2, FSEIR]), stormwater (IS, [Appendix 8.2, FSEIR]), electric power (FSEIR), natural gas (FSEIR), and telecommunications (IS, [Appendix 8.2, FSEIR]).

Water: The extension of infrastructure was determined to be significant because the OBMPU in and of itself would develop—almost solely—water infrastructure projects. As such, given that the proposed OBMPU is anticipated to result in a significant and unavoidable impact related to greenhouse gas from construction of the OBMPU facilities, the construction of the proposed water facilities associated with the OBMPU is anticipated to cause a significant impact. Therefore, impacts under this issue are considered significant and unavoidable.

As stated above under Greenhouse Gas issues "a" and "b", while no feasible mitigation measures have been identified that would reduce greenhouse gas emissions to levels that are less than significant, MM AQ-1 would minimize the horsepower of construction equipment, ensure that off-road diesel construction equipment conforms to Tier 4 standards, and ensure that all construction equipment is tuned and maintained in accordance with manufacturer specifications. MM AQ-2 would ensure that all graded areas within future OBMPU Project sites are watered at 2.1-hour watering intervals or otherwise ensure a soil moisture of 12%. Additionally, while MMs AQ-1, and AQ-2 address construction emissions, MM EN-2 is also required as it addresses operational energy demands and potential GHG emissions. As discussed throughout the FSEIR, the proposed OBMPU would not result in any cumulative impacts from developing the proposed water facilities except those identified under Greenhouse Gas. Project GHG impacts are mitigated to the greatest extent feasible, but the program will still contribute to global climate change through a cumulatively considerable contribution of greenhouse gases. As such, the Project would result in a cumulatively considerable/significant adverse impact related to construction or new or expansion or modifications to existing water facilities.

Wastewater: The extension of wastewater infrastructure was determined to be less than significant, as the few wastewater treatment facilities that would require upgrades or improvements, or the facilities that would require connection to a brine waste disposal pipeline as a result of OBMPU implementation were concluded to individually not anticipated to result in significant impacts. Given that the proposed

improvements have not been completely identified or designed, and that the specific improvements proposed are needed to fully analyze a Project, these improvements need to be further studied once the design has been drafted for each facility. As such, mitigation is required to minimize impacts below significance thresholds.

Implementation of MM **UTIL-1**—which requires the preparation of subsequent CEQA documentation for specific facilities requiring extension wastewater treatment infrastructure—is sufficient to reduce the potential for impacts related to construction of wastewater facilities.

During operation, the majority of the proposed OBMPU facilities would not require connection to the sewer system to operate because such facilities already exist or are not required to support the proposed facilities. As such, there would be less than significant potential for a significant impact related to operational impacts associated with the provision of wastewater treatment facilities that would serve the OBMPU projects.

Ultimately, through the implementation of mitigation, the OBMPU would have a less than significant potential require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects.

Stormwater: Implementation of proposed OBMPU would result in the addition of impervious surfaces that would increase stormwater quantity. This increase could affect on-site drainage patterns as well as off-site drainage volume and require the construction and operation of new and/or expanded stormwater drainage facilities. Mitigation is required to minimize impacts related to the extension of stormwater infrastructure at future OBMPU facilities.

Implementation of MM **UTIL-2** is sufficient to reduce the potential for impacts related to construction of stormwater facilities through the requirement that the Watermaster or implementing agency prepare a drainage plan prior to construction with facilities that will be included in the Project's final design.

Ultimately, through the implementation of mitigation, the OBMPU would have a less than significant potential require or result in the relocation or construction of new or expanded stormwater facilities, the construction or relocation of which could cause significant environmental effects.

Electric Power and Natural Gas: The proposed OBMPU would not cause or result in the need for additional energy producing facilities or energy delivery systems, which includes electricity and natural gas. Given that connection to the electrical power grid and connection to natural gas, where a connection to natural gas is required at future facilities, are minor components of the overall construction of OBMPU facilities and that the energy analysis concluded that impacts thereof would be less than significant, the provision of these facilities as part of the overall OBMPU would not cause a significant environmental effect.

However, there is a potential that specific OBMPU facilities may not have access to electricity or natural gas, and will require either extension of infrastructure or

creation of new infrastructure to meet electricity and/or natural gas needs at a future OBMPU site. As such, mitigation will be required to examine the environmental impacts thereof.

Because it is not known where future OBMPU facilities will be installed, there may be locations in which energy and/or natural gas services are not available within the immediate vicinity of a given OBMPU site. As such, MM **UTIL-5** would ensure that a subsequent CEQA documentation is prepared for projects that require extension or development of such infrastructure, which will ensure that any impacts are appropriately assessed and mitigated. Ultimately, through the implementation of mitigation, the OBMPU would have a less than significant potential require or result in the relocation or construction of new or expanded electric power or natural gas facilities, the construction or relocation of which could cause significant environmental effects.

Telecommunications: The types of facilities proposed as part of the OBMPU typically would not require extension of telecommunication services. However, given that the facilities proposed as part the OBMPU have not been designed, there is a potential for certain facilities (such as regional groundwater treatment facilities, and any other facilities proposed that would require full-time personnel on site) to require extension of telecommunication infrastructure as part of operation. As such, MM **UTIL-1** would suffice to ensure that impacts related to extension of infrastructure are minimized for the proposed OBMPU projects that would require telecommunication services by requiring Project-specific subsequent CEQA documentation.

Mitigation Measures

The IEUA has determined that the Project could contribute potentially significant constructionrelated greenhouse gas emissions, therefore resulting in a significant impact related to construction or new or expansion or modifications to existing water facilities under utilities and service systems. All other issues under utilities and service systems can be mitigated through the implementation of the following measures:

- UTIL-1 The Implementing Agency shall prepare subsequent CEQA documentation for the Agua de Lejos Treatment Plant and upgrades to the Chino Desalters, new groundwater treatment facilities at or near well sites and at regionally located sites once specific improvements or facility locations have been identified, and design of such improvements or new facilities has been drafted.
- UTIL-2 Implementation of a Drainage Plan to Reduce Downstream Flows. Prior to issuance of permits for construction of project facilities, the Implementing Agency shall prepare a drainage plan that includes design features to reduce stormwater peak concentration flows exiting the above ground facility sites (consistent with MS4 requirements) so that the capacities of the existing downstream drainage facilities are not exceeded. These design features could include bio- retention, sand infiltration, return of stormwater for treatment within the treatment plant, and/or detention facilities.
- UTIL-5 Future OBMPU Projects that do not have access to electrical or natural gas connections in the immediate vicinity (defined here as a 500-foot buffer from a given project site), and will require either extension of infrastructure or creation of new infrastructure to meet electricity and/or natural gas needs at a future OBMPU Facility site, subsequent CEQA documentation shall be prepared that fully analyzes the impacts that would result from extension or development of electrical or natural gas infrastructure.

The following measures are also required to minimize impacts under utilities and service systems, though these measures (HYD-1, HYD-2, HYD-5, HYD-6, HYD-7, HYD-8, HYD-9, HYD-10, and HYD-11) are provided under their respective section above.

With implementation of the recommended Air Quality mitigation measures identified Subchapter 4.2 and 4.5, the Air Quality and Energy Sections of this FSEIR, GHG emissions still exceed the SCAQMD screening thresholds of 3,000 MTCO₂e/yr and 10,000 MTCO₂e/yr. While impacts are mitigated to the maximum extent feasible (see **AQ-1**, **AQ-2**, and **EN-1** are provided under their respective sections, above), no feasible mitigation exists to completely avoid generating significant greenhouse gas emissions within the Chino Basin as a result of implementing these water infrastructure projects.

The IEUA Board finds that with the implementation of the above measures, impacts from greenhouse gas emissions generated by future OBMPU construction and operations would be reduced or controlled to the maximum extent feasible, thereby minimizing the potential for the OBMPU to cause a significant impact related to the extension of water infrastructure. Regardless, no feasible mitigation is available to minimize GHG emissions to below significance thresholds. Thus, exceedances of applicable SCAQMD regional thresholds are considered significant and unavoidable, and therefore the proposed OBMPU would result in significant and unavoidable impacts related to construction or new or expansion or modifications to existing water facilities.

Based upon the findings presented in the Final SEIR, the above described environmental issue has been determined by IEUA to be: (1) adequately addressed in the FSEIR; and (2) impacted to a degree deemed by IEUA to be significant and unavoidable because of the limited ability of the Project to fully mitigate biological resource, greenhouse gas emission, and utilities and service systems impacts. No substantial evidence was subsequently presented to or identified by IEUA which further modified or otherwise altered IEUA's significant and unavoidable impact finding with mitigation determined for these environmental issues. This concludes the summary of environmental impacts that were identified in the FSEIR as unavoidable significant adverse impacts even with mitigation related to implementation of the Project.

D. FINDINGS REGARDING SPECIFIC MITIGATION MEASURES

(1) Findings Regarding All Other Mitigation Measures

With the exception of those mitigation measures set forth in the adopted Mitigation Monitoring and Reporting Plan and explained in these findings, the IEUA Board finds that there are no feasible mitigation measures that would substantially lessen or avoid any significant effect that the Project would have on the environment.

E. FINDINGS REGARDING ALTERNATIVES TO THE PROPOSED ACTION

The California Environmental Quality Act (CEQA) requires discussion of "a range of reasonable alternatives to the Project, or to the location of the Project, which could feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project, and evaluate the comparative merits of the alternatives. (14 CCR §15126.6(a)). The EIR need not "consider alternatives which are infeasible." (14 CCR § 15126.6(a)).

Among the factors that may be taken into account when addressing the feasibility of alternatives are "site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives." (CEQA Guidelines §15126.6(f)(1)).

The Project's purpose and objectives are as follows:

<u>Goal No. 1 - Enhance Basin Water Supplies.</u> The intent of this goal is to increase the water supplies available for Chino Basin Parties and improve water supply reliability. This goal applies to Chino Basin groundwater and all other sources of water available for beneficial use.

<u>Goal No.2 - Protect and Enhance Water Quality.</u> The intent of this goal is to ensure the protection of the long-term beneficial uses of Chino Basin groundwater.

<u>Goal No.3 - Enhance Management of the Basin.</u> The intent of this goal is to encourage sustainable management of the Chino Basin to avoid Material Physical Injury, promote local control, and improve water-supply reliability for the benefit of all Chino Basin Parties.

<u>Goal No. 4 - Equitably Finance the OBMP.</u> The intent of this goal is to identify and use efficient and equitable methods to fund OBMP implementation.

(1) Alternatives Considered But Rejected

Two alternatives considered were screened out for lack of feasibility. First, since management of water resources in the Chino Basin is an activity that cannot be conducted at another location, an alternative location is rejected as infeasible and unable to meet basic Project objectives because a project outside of the Chino Basin cannot achieve the fundamental Project objectives.

Second, the OBMPU is an integrated program/plan designed to incrementally implement the water infrastructure required to create a sustainable water supply and meet the forecast increase in water demand from growth in the Chino Basin over the next 30 years. The Watermaster and the stakeholders/parties spent the past two years developing an integrated program to establish sustainability of water resources in the Chino Basin. The OBMPU consists of a complex, complicated and integrated program that incorporates a mix of projects and operations that are designed to meet the primary re-stated objectives of the OBMPU to meet sustainable and sufficient water supply though 2050. Although minor tweaks or modifications to the OBMPU are likely to occur over the next 30 years, no major changes in the Program have been identified at this stage that can be implemented without harming its ability meet each of the essential OBMPU program objectives. For example, deferring installation of water-related infrastructure in any given year to reduce GHG would simply increase the amount of construction required in the following year, thus raising GHG emissions. Therefore, a reduction of the OBMPU scope in this manner would not achieve the fundamental Project objectives. However, a second "reduced project" alternative is proposed below (the "SMP Alternative"), as it singles out only those components of the OBMPU that would be needed to implement the 2020 Storage Management Plan (SMP) and Storage and Recovery Master Plan (SRMP).

Therefore, the OBMPU considers two alternatives: the "No Project-Baseline Alternative" and the "SMP Alternative".

(2) No Project / Baseline Alternative

(a) Description of Alternative

One of the alternatives that must be evaluated in an EIR is the "no project alternative," regardless of whether it is a feasible alternative to the Project, i.e. would meet the Project objectives or requirements. Under this alternative, the environmental impacts that would occur if the OBMPU Agreement programs are not implemented are evaluated. However, under a No Project alternative, water management activities in the Chino Basin do not go away. By default, the Chino Basin stakeholders would continue to implement the OBMP, which represents the "business as usual" approach to water resources management in the Basin. This alternative represents the continuation of OBMP programs under the approved Peace I and Peace II Agreements. The expanded storage approved in the 2017 Addendum to the OBMP enabled a short-term increase in groundwater storage, but it expires on June 30, 2021.¹ This alternative includes the installation of water infrastructure on an as-needed basis to meet the Peace I and II Agreement programs outlined in the OBMP, without installing those facilities required to achieve the objectives of the proposed OBMPU.

When the No Project Alternative is compared at a general level with the proposed Project facilities, the primary differences are:

- Project Category 1 Wells: a few wells may be installed to support continued OBMP implementation whereas the OBMPU envisions up to 78 new wells and support equipment, including up 60 ASR wells to support expanded storage and recovery capacity (not included under the OBMP);
- Project Category 2 pipelines and support facilities: up to 550,000 lineal feet of new pipeline would be installed to interconnect various new OBMPU facilities whereas under the OBMP some additional pipelines might be installed, without the new OBMPU facilities the amount of pipeline installation would be less;
- Project Category 3 storage basins: recharge facilities and storage bands, six new storage basins (310 acres estimated) and increased groundwater storage of up to 1,000,000 af are envisioned under the OBMPU, whereas no new storage basins are envisioned under the OBMP and maximum groundwater storage under the OBMP will soon return to 500,000 af;
- Project Category 4: desalter facility and water treatment facility development or expansions are envisioned under the OBMPU, and none of these expansions or new facilities are envisioned under the OBMP.

(b) Finding

The IEUA Board finds that although this alternative would reduce potentially significant impacts identified in the FSEIR as compared to the Project in some areas, it would lead to greater impacts in others, including hydrology/water quality and utilities and service systems. Accordingly, this alternative cannot be considered environmentally superior to all other alternatives considered. (CEQA Guidelines §15126.6(e)(2)).

¹ Tom Dodson & Associates. (2017). Addendum No. 1 to the Optimum Basin Management Program Project. Page 2.

The IEUA Board finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make this alternative infeasible. (Public Resources Code §21081(a)(3), CEQA Guidelines §15091(a)(3).)

The IEUA Board identifies the following specific economic, legal, social, technological, or other considerations that make this alternative infeasible. The IEUA Board finds that each of these reasons, standing alone, renders this alternative infeasible:

- The IEUA Board finds that this alternative is infeasible as a matter of public policy because it would not achieve the Project objectives to the extent that the Project would.
- The IEUA Board finds that this alternative is infeasible because it would increase environmental impacts to hydrology/water quality by causing Basin-wide facilities required to ensure that ample water supply is available to meet future demand not to be developed. Further, under this alternative management of the Chino Basin would not address drivers and trends, including climate change, which can result in reduced groundwater recharge, increased evaporation, and reduced imported water supply.
- The IEUA Board finds that this alternative is infeasible because it would increase environmental impacts to utilities and service systems by causing Basin-wide facilities required to ensure that ample water supply is available to meet future demand not to be developed.

(c) Facts in Support of Finding

A summary comparative discussion of the no project alternative was conducted in terms of the specific issues evaluated in the FSEIR (air quality, biological resources, cultural resources, energy, greenhouse gas emissions, hydrology and water quality, tribal cultural resources, and utilities/service systems [extension of water, natural gas, and electrical power infrastructure and adequacy of water supply]). The following text assesses the impacts for the categories with unavoidable significant effects: Biological Resources, Greenhouse Gas Emissions, and Utilities and Service Systems.

<u>Biological Resources</u>: By eliminating the surface water storage facilities, the No Project/Baseline Alternative will have the less general biological resource impacts. In particular the elimination of surface water facilities in the vicinity of Prado Basin (Mill Creek) and related surface water diversions has a potential to eliminate the potentially significant impacts to "critical habitat" in Prado Basin. When mitigation is implemented—primarily avoidance of biologically sensitive areas or compensation to offset losses to sensitive biological resources—the proposed Project approaches the No Project/Baseline Alternative biological resource impacts, but a potential still exists for significant impacts. This is because it is assumed that in order to achieve management of water resources in the Basin under the OBMPU, a given project may be required at a specific location that may contain significant biological resources that cannot be avoided. As such, under this evaluation and set of assumptions the proposed Project effects on biological resources is considered to be greater than the No Project/Baseline Alternative.

<u>Greenhouse Gas</u>: Based on the preceding comparative evaluation of OBMPU and OBMP Project activities, the level of construction GHG impact is forecast to be substantially reduced for the No Project/Baseline Alternative because it would implement substantially fewer facilities. Similarly, it is forecast that this alternative's operations would require substantially less electricity that would cause air emissions because most of the energy consuming facilities would not be constructed under this alternative. However, after mitigation is implemented—primarily through minimization of construction equipment emissions—the impact of the two alternatives would be different. GHG emissions might be reduced below the industrial threshold of 10,000 metric tons, but probably not below the residential threshold of 3,000 tons of GHG. As such, under this evaluation and set of assumptions the No Project/Baseline Alternative would have substantially less overall construction and operation emissions, but the impact of both alternatives may still be considered to be an unavoidable significant adverse impact.

<u>Utilities and Service Systems</u>: Utilities and service systems is another environmental issue where the two Project alternatives, OBMPU Alternative and No Project/Baseline Alternative, diverge in their potential environmental impacts. Under the No Project/Baseline Alternative it is anticipated that there would be challenges with managing the basin, including that total water demand is projected to grow from about 290,000 afy in 2015 to about 420,000 afy by 2040, for which several of the management programs proposed as part of the OBMPU address. As such, under the No Project/Baseline Alternative, the Basin-wide facilities required to ensure that ample water supply is available to meet future demand may not be developed, and as such a significant impact could occur. Under the OBMPU, unlike the No Project/Baseline Alternative, the Chino Basin would have sufficient water supplies available to serve the Project area through 2050 and reasonably foreseeable future development during normal, dry and multiple dry years, once mitigation is implemented.

For all other Utilities and Service Systems impacts discussed in the FSEIR, including extension of infrastructure (electricity, natural gas, and water), it is anticipated that the No Project/Baseline Alternative would result in substantially lower impacts. This is inclusive of the significant impact related to extension of water infrastructure that would result due to construction related GHG emissions.

Finally, under the No Project/Baseline Alternative, the ability to attain the goals and objectives as described under Chapter 3, Project Description, in this FSEIR would be virtually eliminated. The stakeholders in the Basin would be disabled in their attempt to collectively correct and mitigate conditions of water quality impairment and reduced water supplies (safe yield, and possibly recharge of recycled water in the upper portion of the Chino Basin) to meet their build out development needs.

(3) Storage Management Plan Only Alternative

(a) Description of Alternative

One component of the OBMPU that has been analyzed as part of the whole of the OBMPU in this FSEIR is the 2020 SMP. In order to support the design of optimized storage and recovery programs that are consistent with the 2020 SMP, implementation of the OBMPU also includes the development of a SRMP. An alternative that singles out implementation of activities in support of the SMP, and thereby the SRMP, would encompass the development of the majority of the facilities that meet the objectives of Program Elements (PEs) 8 and 9, refer to Exhibit 5, located within Chapter 3, the Project Description.

The SMP Alternative would enable the development of many of the facilities analyzed as part of the OBMPU—with only a few exceptions—at a reduced intensity. The SMP Alternative would omit the following facilities that were included as part of the scope of projects evaluated in the OBMPU:

- Approximately 100,000 LF of pipeline intended to be utilized to expand the recycled water system for indirect reuse
- New advanced water treatment systems
- Approximately 50,000 LF of pipeline intended to be utilized to conduct direct potable use (50,000 LF)
- Upgrades to an existing recycled water treatment plant to desalt effluent
- Restoration of the WFA Agua de Lejos Treatment Plant capacity for in-lieu recharge
- Stormwater diversion, storage, transfer, and recharge facilities:
 - New storage basin: Chino Institute for Men
 - o Flood Managed Aquifer Recharge
 - Modifications to an existing basin Jurupa Basin
 - New storage basin: Lower Cucamonga Basin
 - New storage basin: Mills Wetlands
 - Modifications to an existing basin: Riverside Basin
 - New storage basin: Vulcan Basin
 - New storage basin: Confluence Project
 - MS4 compliant projects

An SMP Alternative would include the following provisions regarding the use of storage space in the basin, identical to those identified and evaluated under the OBMPU SEIR:

- An aggregate amount of 800,000 af is reserved for the Parties' conjunctive-use activities (includes Carryover, Excess Carryover, and Supplemental Accounts) and Metropolitan's DYYP. This amount is referred to as the "First Managed Storage Band" (FMSB).
- The managed storage space between 800,000 and 1,000,000 af is reserved for Storage and Recovery Programs.
 - Storage and Recovery Programs that utilize the managed storage space above 800,000 af will be required to mitigate potential MPI and other adverse impacts as if the 800,000 af in the FMSB is fully used.
 - Renewal or extension of the DYYP agreement will require the DYYP to use storage space above the 800,000 af of the FMSB.

The facilities and/or improvements to existing facilities envisioned under an SMP Alternative to conduct a Storage and Recovery Program within the SMP are listed below, separated into Project Categories, commensurate with the manner in which the summary of all facilities was presented for the OBMPU.

The implementation of the facilities proposed as part of the SMP Alternative consists of construction and operation of the various facilities that are summarized below. These potential facilities are separated into four project categories: (1) Project Category 1: Well Development and Monitoring Devices; (2) Project Category 2: Conveyance Facilities and Ancillary Facilities; (3) Project Category 3: Storage Basins, Recharge Facilities, and Storage Bands; and, (4) Desalters and Water Treatment Facilities. Below are general descriptions of the facilities and operations proposed as part of the SMP Alternative.

Project Category 1: Well Development and Monitoring Devices

Well development includes up to 60 new ASR wells, 10 wells relocated to adjust up to 25,000 afy of pumping, and 8 new wells to expand desalter capacity for a total of 78 new wells. In addition, the SMP Alternative anticipates reconstruction and/or modification of up to 5 wells to mitigate loss of pumping capacity, and destruction and replacement of 5 wells. This category also includes the development of 100 monitoring wells, for a total of up to 178 wells, which

serve the varying purposes listed above and outlined below. The monitoring devices proposed as part of the SMP Alternative include up to 300 flow meters, 100 transducer data loggers and 3 extensometers installed in existing private wells.

Project Category 2: Conveyance Facilities and Related Infrastructure

This category includes the construction of about 400,000 LF of new pipelines, booster pump stations, reservoirs and minor appurtenances whose number, locations and capacities are presently unknown.

Project Category 3: Storage Basins and Recharge Facilities and Storage Bands

This Project Category includes the expansion of the maximum storage space (safe storage capacity) to be used within the Chino Basin from 600,000 af (through June 30, 2021) to between 700,000 af and 1,000,000 af going forward with various impacts that may result for each 100,000 af within this range of storage.

Project Category 4: Desalters and Water Treatment Facilities

The projects proposed under this category are: upgrades to the Chino Desalters, new groundwater treatment facilities at or near well sites and at regionally located sites, and improvements to existing groundwater treatment facilities.

Construction and operational scenarios for the facilities listed above are assumed to be identical to those analyzed and outlined in the OBMPU SEIR.

(b) Finding

The IEUA Board finds that specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make this alternative infeasible. (Public Resources Code §21081(a)(3), CEQA Guidelines §15091(a)(3).)

The IEUA Board identifies the following specific economic, legal, social, technological, or other considerations that make this alternative infeasible. The IEUA Board finds that each of these reasons, standing alone, renders this alternative infeasible:

- The IEUA Board finds that this alternative is infeasible as a matter of public policy because it would not achieve the Project objectives to the extent that the Project would.
- The IEUA Board finds that this alternative is infeasible because the SMP Alternative would fail to fully meet Goal No. 2 of the OBMPU, which is to enhance basin water quality, as several of the facilities proposed to meet this objective are eliminated under this alternative.
- The IEUA Board finds that this alternative is infeasible because the SMP Alternative would eliminate the majority of the facilities proposed to meet the objectives of PE 2, which are required to meet the Project Goal No. 1, to Enhance Basin Water Supplies, and thus the SMP Alternative would not adequately meet this goal because it omits PE 2 projects.
- The IEUA Board finds that this alternative is infeasible because the SMP Alternative narrows the range of projects such that the potential to acquire financing for projects
from a variety of sources would be proportionally narrowed, thereby diminishing the SMP Alternative's ability to meet OBMPU Goal No. 4.

• The IEUA Board finds that this alternative is infeasible for social and policy reasons because it would violate the principal of inclusion used by the Watermaster Board to develop the wide-range of projects that make up the OBMPU.

(c) Facts in Support of Finding

A summary comparative discussion of the no project alternative was conducted in terms of the specific issues evaluated in the FSEIR (air quality, biological resources, cultural resources, energy, greenhouse gas emissions, hydrology and water quality, tribal cultural resources, and utilities/service systems [extension of water, natural gas, and electrical power infrastructure and adequacy of water supply]). The following text assesses the impacts for the categories with unavoidable significant effects: Biological Resources, Greenhouse Gas Emissions, and Utilities and Service Systems.

<u>Biological Resources</u>: While direct impacts to Biological Resources would be substantially reduced and possibly less than significant under the SMP Alternative, indirect impacts to Biological Resources (diversion of surface flows into Prado Basin) would remain potentially significant and unavoidable. When mitigation is implemented—primarily avoidance of biologically sensitive areas or compensation to offset losses to sensitive biological resources—a potential for significant impacts to occur still exists under the SMP Alternative. This is because it is assumed that in order to achieve management of water resources in the Basin under the OBMPU, a given project may be required at a specific location in the southern portion of the Basin that may contain significant biological resources that cannot be avoided. As such, under this evaluation and set of assumptions the anticipated impacts from the OBMPU on biological resources are considered to be greater than the SMP Alternative.

<u>Greenhouse Gas</u>: Though greenhouse gas (GHG) emissions from construction would be considerably reduced under the SMP Alternative, a construction emissions reduction of approximately 47% would be required to fall below the SCAQMD 10,000 MTCO₂e/yr threshold, and an even more significant reduction of operating emissions of approximately 84% would be required to fall below the SCAQMD 3,000 MTCO₂e/yr threshold. Additionally, it is forecast that the SMP Alternative's operations would require less electricity that would cause GHG emissions because this alternative would permit a reduced scope of facilities that could be developed, thereby minimizing potential electricity consumption. As such, under this evaluation and set of assumptions, the SMP alternative would have reduced overall construction and operational emissions, though it is not anticipated that the SMP Alternative would eliminate the significant impact generated by construction-related GHG emissions.

<u>Utilities and Service Systems</u>: Given that the construction of water-related infrastructure would result in significant construction-related GHG emissions, the SMP Alternative would also result in a significant impact under Utilities and Service Systems, though the overall impacts under this issue would be reduced when compared to the OBMPU. For all other Utilities and Service Systems impacts discussed in EIR, it is anticipated that the SMP Alternative would result in lesser impacts than the OBMPU.

The SMP Alternative has comparable, if reduced environmental impacts for all of the resource issues, which is consistent with the SMP Alternative being a "reduced project" alternative, i.e., a component of the OBMPU. While the SMP Alternative could be postulated as the environmentally superior alternative—given that impacts are lessened in all categories except

Hydrology and Water Quality—the SMP Alternative would not meet the fundamental project objectives outlined in the OBMPU Project Description to the extent of the Proposed Project, which are to enhance basin water supplies through improving water supply reliability, protect and enhance water quality, enhance management of the Basin, and equitably finance the OBMPU.

(4) Conclusion

The IEUA Board finds that while No Project/Baseline Alternative and the SMP Alternative reduce environmental impacts as compared to the Proposed Project, they do not meet the project objectives to the extent that the Proposed Project does and lead to some environmental impacts that are greater than the Proposed Project.

As explained in the Statement of Overriding Considerations (see Section F, below), however, the IEUA Board has determined that the benefits of the Proposed Project outweigh any environmental impacts that will be caused by the Proposed Project because of overriding considerations.

Therefore, the IEUA Board is adopting the Proposed Project. The IEUA Board adopts and incorporates by reference herein the analysis in the FSEIR with regard to the Proposed Project and Project alternatives as identified in the FSEIR.

This concludes the summary of alternatives that were identified and considered in the FSEIR and their feasibility and capability to be implemented to reduce the identified significant impacts to biological resource, greenhouse gas emission, and utilities and service systems.

F. STATEMENT OF OVERRIDING CONSIDERATIONS

(1) **Project Benefits**

The IEUA Board finds that the Proposed Project would have the following economic, legal, social, technological, or other overriding benefits, including region-wide or statewide environmental benefits.

- 1. Sustainable Water Supply: The OBMPU would enable a more sustainable and reliable water supply within the Chino Basin as a result of the expanded safe storage capacity.
- 2. Chino Desalter Program Expansion: Desalter operations help manage the production, treatment, and distribution of highly treated potable water to cities and water agencies throughout the region. The Desalter Program purifies brackish groundwater extracted from the lower Chino Basin and distributes the drinking water to serve the dual purpose of providing a reliable water supply and managing groundwater quantity and quality in the region. The Program improves water supply reliability through enhanced local supplies reducing dependency on imported supplies, as well as water quality through salt and nitrate removal from the groundwater basin. Lastly, the Program is a key in helping achieve and maintain hydraulic control in the Basin.
- 3. Maintain Hydraulic Control: Hydraulic control prevents groundwater that is high in salinity and nitrates from spilling over the Chino Basin southern barrier into the Santa Ana River and downstream users. The OBMPU would enable the Watermaster and Stakeholders to

maintain hydraulic control, and minimize subsidence, prevent material physical injury (MPI), and manage plume movement through extensive monitoring and mitigation efforts.

- 4. Climate Change Planning: The OBMPU would enable the Watermaster and stakeholders to better manage the Chino Basin in the face of the changing climate, which is forecast to cause reduced groundwater recharge, increased evaporation, and reduced imported water supply.
- 5. Expanded Water and Recycled Water Delivery, and Brine Waste Collection: The OBMPU would enable expanded infrastructure to deliver water and recycled water throughout the Basin, thereby expanding access to these water supplies. Furthermore, the OBMPU would enable expanded collection of brine waste generated by the expanded water treatment within the Basin. These efforts will contribute to the management of total dissolved solids or other compounds such as nitrate within the water drawn from the Chino Basin.
- 6. Maximum Benefit Objectives: The OBMPU would establish a foundation for meeting future salt and nutrient management objectives within the Chino Basin by enhancing water quality.
- 7. Creation of New Permanent Jobs: The OBMPU will create high-quality permanent job opportunities to serve future OBMPU facilities.
- 8. Enable Management of Existing and Emerging Contaminants of Concern: Program Element 6 will enable stakeholders to create a groundwater quality management plan that will enable management of existing and emerging contaminants, helping increase resiliency of the Basin. Furthermore, the OBMPU projects would contribute to the remediation of the contaminant Plumes within the Basin. This Program Element (1) proactively addresses new and near-future drinking water regulation; (2) enables stakeholders to make informed decisions on infrastructure improvements for water-quality management and regulatory compliance; (3) removes groundwater contaminants from the Chino Basin; (4) enables the Parties to produce or leverage their water rights that may be constrained by water quality; and (5) ensures that groundwater is pumped and thereby protects/enhances the Safe Yield of the Basin.
- 9. Economic Expansion: Increasing reliability of the water supply enables economic expansion in the region.
- 10. Regional Benefits: The OBMPU supports and enables projects with a regional focus, benefiting the larger Chino Basin area.
- 11. Construction of new storage/recharge facilities (1) increases recharge of high-quality stormwater that will protect/enhance the Safe Yield of the Basin, improve water quality, reduce dependence on imported water, increase pumping capacity in areas of low groundwater levels and areas of subsidence concern, and provide new supplies for blending water to support the recycled-water recharge program in the Basin; and (2) provides additional supplemental water recharge capacity for replenishment.
- 12. The development, implementation and optimization of Storage and Recovery Programs leverages unused storage space in the basin, reduces reliance on imported water

(especially during dry periods), potentially provides outside funding sources to implement the OBMP Update and improves water quality through the recharge of high-quality water.

- 13. The construction of regional conveyance and treatment projects enables producers in MZ1 and MZ2 to obtain water through regional conveyance, which supports management of groundwater levels to reduce the potential for subsidence and ground fissuring and enables the Parties to increase production in areas currently constrained by poor water quality.
- 14. The monitoring program ensures full compliance with regulatory requirements, ensures full support of basin management initiatives, and enables stakeholders to monitor the performance of the OBMP Update.

(2) **Overriding Considerations**

This section of the findings addresses the requirements in Public Resources Code Section 21081(b) and Section 15093(a) and (b) of the California Environmental Quality Act Guidelines, which require the Lead Agency to balance the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable significant adverse impacts, and to determine whether the project-related significant impacts can be acceptably overridden by the project benefits when the impacts/benefits are compared and balanced.

As outlined in Section C.3, above, the Proposed Project will contribute to cumulative, unavoidable significant adverse environmental impacts in three environmental categories: biological resources, greenhouse gas emissions, and utilities and service systems.

The IEUA Board finds that the previously-stated benefits of the Proposed Project, outlined in Section F.1 above, each individually constitutes a separate and independent basis that justifies approval of the Proposed Project and outweighs the unavoidable adverse environmental effects to biological resources, greenhouse gas emissions, and utilities and service systems that have been outlined above. Thus, even in the absence of one or more of the reasons set forth in Section F.1 above, the IEUA Board has determined that each remaining reason, or any combinations of reasons, is a sufficient basis for approving the Proposed Project, notwithstanding any significant and unavoidable impacts that may occur.

The expansion and improvements in facilities and infrastructure facilitated by the OBMPU are significant long-term benefits to all the communities in the Chino Basin. Furthermore, sustainable management, and thereby sustainable water supply of the Chino Basin is a significant benefit to the entities utilizing Chino Basin groundwater as their primary water supply. Expansion of water, recycled water, and brine waste infrastructure will enable enhanced storage, and enable the efficient conveyance and distribution of basin waters to Chino Basin water users, which is a benefit to the entire community of Chino Basin water users. The OBMPU will enable Watermaster and stakeholders to better anticipate how climate change will impact the Basin water supply, which will allow Watermaster and stakeholders to more accurately plan for the future. The provision of high quality, low salt and nutrient water within the Chino Basin through OBMPU implementation is a benefit to all users of Chino Basin waters, which have historically been impacted by agricultural and other uses that degraded water quality. Construction-related employment created by the proposed project would have an important short-term benefit to the Inland Empire communities, as would the long-term employment opportunities created by the operation of future OBMPU facilities. Ultimately, there are

numerous benefits from implementation of the OBMPU due to the importance of the sustainable provision of groundwater to users within the Chino Basin that would be facilitated through updated groundwater management of the Chino Basin through the implementation of the OBMPU.

Thus, the IEUA Board concludes that the benefits outlined above, that accrue to the community from authorizing the implementation of the Proposed Project, outweigh the unavoidable significant adverse impacts to biological resources, greenhouse gas emissions, and utilities and service systems identified in the FSEIR and described above. The social and economic benefits stated in the previous section are considered sufficient to offset the significant adverse effects that cannot be avoided if the project is implemented.

The IEUA Board's findings set forth in the preceding sections have identified all of the adverse environmental impacts and feasible mitigation measures which can reduce potential adverse environmental impacts to insignificant levels where feasible, or to the lowest achievable levels where significant unavoidable adverse environmental impacts remain. The findings have also analyzed alternatives to determine whether they are reasonable or feasible alternatives to the proposed action, or whether alternatives might reduce or eliminate the significant biological resources, greenhouse gas emissions, and utilities and service systems impacts of the proposed action. No feasible alternative can achieve the requisite minimization of biological resource, greenhouse gas emission, and utilities and service systems impacts without failing to meet the project goals and without causing a significant adverse impact to hydrology and water quality.

The OBMPU FSEIR presents evidence that implementing the proposed project will contribute to significant adverse biological resource, greenhouse gas emission, and utilities and service systems impacts which cannot be assuredly mitigated to an insignificant level. These significant impacts have been outlined above and presented in detail in the FSEIR and the IEUA Board finds that all feasible alternatives and mitigation measures have been adopted or identified for implementation by the IEUA, Watermaster, and/or other agencies, where appropriate. Nonetheless, the IEUA Board recognizes significant adverse effects remain after imposition of all feasible mitigation in the areas of biological resources, greenhouse gas emissions, and utilities and service systems, which can only be offset by the substantial list of benefits described in Section F.

The IEUA Board finds that the project's benefits are substantial as outlined in Section F of this document and that these benefits, individually and collectively, justify overriding the unavoidable significant adverse impacts associated with the Proposed Project. This finding is supported by the fact that the benefits listed above result in the Proposed Project fulfilling the objectives of implementing Chino Basin OBMPU vision for sustainable basin management, through integrating management of water supply, wastewater, and groundwater management over the next 30 years within the Chino Basin. Because the OBMPU is an extension of the existing OBMP, its implementation is deemed essential to sustainable management of the Chino Basin and achieving the objectives of the OBMP and OBMPU—to enhance basin water supply, protect and enhance water quality, enhance management of the basin, and equitably finance OBMPU implementation. The management of the Chino Basin cannot be attained at any other location, through reducing the scope of the OBMPU, or in another alternative manner without equal or greater adverse impacts.

Thus, the IEUA Board concludes that the proposed project's benefits offset the adverse impacts to biological resource, greenhouse gas emission, and utilities and service systems that may

result from implementing the OBMPU. The IEUA Board further finds that the benefits outlined above, when balanced against the unavoidable significant adverse environmental impacts, outweigh these impacts because of the environmental, social, and economic benefits which accrue to IEUA, Watermaster, and the stakeholders in its service area as outlined in Section F of this document.

As the CEQA Lead Agency for the proposed action, the IEUA Board has independently reviewed the applicable sections of this document and the OBMPU FSEIR, and fully understands the scope of impacts caused by implementation of the Proposed Project. Further, the IEUA Board finds that all potential adverse environmental impacts and all feasible mitigation measures to reduce these impacts have been identified in the FSEIR, public comment, and public testimony. These impacts and mitigation measures are discussed in Section C.1 through C.3, and the Board concurs with the facts and findings contained in those sections. The IEUA Board also finds that a reasonable range of alternatives was considered in the SEIR, as summarized in Section E of this document, and that no feasible alternatives which substantially lessen project impacts are available for adoption.

The IEUA Board concurs with the extensive environmental, economic and societal benefits identified above, which will accrue to the Chino Basin groundwater resources, the Board, Watermaster, the stakeholders, and the population residing within Chino Basin. The Board has balanced these substantial environmental, social and economic benefits against the unavoid-able significant adverse environmental effects of the proposed project. Given that these substantial benefits will support the residents of the Chino Basin over the long term if the OBMPU is implemented, the IEUA Board hereby finds that the benefits identified herein, collectively and individually, outweigh the unavoidable, cumulative significant adverse biological resource, greenhouse gas emission, and utilities and service systems impacts, and hereby override these impacts to obtain the benefits listed in Section F that will result from approval and implementation of this project.

G. <u>CERTIFICATION OF THE FINAL SUBSEQUENT ENVIRONMENTAL IMPACT REPORT</u> (CEQA GUIDELINES § 15090)

The IEUA Board certifies that the Final Subsequent Environmental Impact Report, dated July 2, 2020, on file with IEUA as SCH#2020020183, has been completed in compliance with CEQA and the State CEQA Guidelines, that the EIR was presented to the Board of Directors, and that the Board of Directors reviewed and considered the information contained therein before approving the Proposed Project, and that the FSEIR reflects the independent judgment and analysis of the Board. (CEQA Guidelines § 15090.)

Engineering, Operations, and Water Resources Committee

INFORMATION ITEM **3B**

Operations Division Update







Scott Oakden Manager of Operations and Maintenance



IEUA Incident Rates vs Industry & Total Recordable Injuries



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

Inland Empire Utilities Agency A MUNICIPAL WATER DISTRICT

 RECORDABLE INCIDENT RATE - Incident rates are a metric used to compare a company's safety performance against a national. This comparison is a safety benchmark to gauge performance with other companies in the same business group, so you can make an "apples to apples" comparison

Total Recordable Injuries by Calendar Year



O/M Training Brings It All Together





What is Asset Management (AM)?



Doing the **right projects**,

at the **right cost**,

at the **right time**.

How does this relate to O/M training





Operations Training



Vendor Supplied Equipment Training

- RP-4 Tertiary Filters
- RP-1 Grit Washers & Classifiers
- Aeration Blowers
- Dewatering Centrifuges



Maintenance Training

Inland Empire Utilities Agency



Technical Training

- Basic PLC
- Instrumentation
- AC/DC Generator Theory
- National Electrical Code
- Bearings

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Engineering, Operations, and Water Resources Committee

INFORMATION ITEM **3C**

Water Use Efficiency Program Update









Pietro Cambiaso July 2020



- Residential Pressure Regulation, Residential Tune-up, Residential Small and Large Sites Controller Program
 - March 16th programs suspended
 - May 26th programs restarted
 - Mandatory masks, social distancing, employee health check, & increased sanitization
- National Theater for Children and Shows That Teach
 - Remaining 2020 in person classes cancelled
 - Live online performances for next school year





FY 19/20 Water Use Efficiency Results

Programs	Unit	FY 18/19	FY 19/20*
Residential Pressure Regulation	Valves	396	311
Residential Tune-up	Sites	163	126
Residential Small & Large Sites Controller	Sites	323	580
School Productions	School	59	60
Turf Replacement	Sq. Feet	91,058	496,734
Rebates	Devices	5,235	7,062
Landscape Evaluation & Audit	Sites	161	145
Residential Leak Detection Meter	Purchased	N/A	100

*To Date 6/8/2020



Residential Pressure Regulation Program

- Pressure Regulating Valves (PRV) replacement or adjustment
 - 311 valves FY19/20 (21% decrease from FY18/19)
- MWD & IEUA pilot study on water savings
 - 2.5% average water use reduction

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- MWD rebate = \$195/PRV reduced to \$26.86/PRV FY20/21
- Customer service, high cost per acre-foot saved

Estimated Expenditure 19/20	Proposed Rollover 19/20	Adopted Budget 20/21	Proposed Amended Budget 20/21	Lifetime Water Savings (acre-feet/PRV)
\$200,000	\$100,000	\$300,000	\$225,000	0.138



Residential Tune-Up Program

- Audit, valve replacement, sprinkler and minor lines repair
 - 290 sites (pilot program, April to August 2019)
 - 126 sites (new contract, February to June 2020)
- MWD & IEUA pilot study on water savings
 - MWD rebate = \$150/site FY20/21

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• High customers demand, marketing other programs

Estimated Expenditure 19/20	Proposed Rollover 19/20	Adopted Budget 20/21	Proposed Amended Budget 20/21	Lifetime Water Savings (acre-feet/site)
\$135,000	\$65,000	\$200,000	\$420,000	TBD



Residential Small & Large Controller Programs

- Training, landscape evaluation, smart controller upgrade
 - Small sites = 400 sites FY19/20 (71% increase from FY18/19)
 - Large sites = 180 sites FY19/20 (102% increase from FY18/19)
- MWD funding

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- Small sites = \$80/controller + \$18/evaluation
- Large sites = 50% of project cost, up to \$530/site

Program	Estimated Expenditure 19/20	Proposed Rollover 19/20	Adopted Budget 20/21	Proposed Amended Budget 20/21	Lifetime Water Savings (acre-feet/site)
Small	\$305,000	\$85,000	\$200,000	\$370,000	0.414
Large	\$175,000	\$25,000	\$200,000	\$310,000	5



Member Agencies' Recommendation

A MUNICIPAL WATER DISTRICT

Programs	Proposed Rollover FY 19/20	Adopted Budget FY 20/21	Proposed Amended Budget FY 20/21
Residential Pressure Regulation	\$100,000	\$300,000	\$225,000
Residential Tune-Up	\$65,000	\$200,000	\$420,000
Residential Small Sites Controller	\$85,000	\$200,000	\$370,000
Residential Large Sites Controller	\$25,000	\$200,000	\$310,000
Turf Replacement	\$555,000	-	\$555,000
Other Programs	\$255,000	\$803,000	\$908,000
Total	\$1,085,000	\$1,703,000	\$2,788,000
			=
			\$1,703,000
			+
Inland Empire Utilities Agency	Budg	get Rollover	\$1,085,000

Engineering, Operations, and Water Resources Committee

INFORMATION ITEM **3E**

Engineering and Construction Management Project Updates







Jerry Burke, P.E. July 2020



HQ Driveway Safety Improvements

Project Goal: Improve Safety and Accessibility

Total Project Budget: \$400 K Project Completion: May 2021 Design Percent Complete: 90%

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



Existing Driveway



RP-1 TP-1 Waste Wash Water Basin Pumps Replacement

Project Goal: Increase Operational Efficiency



Existing pump motors Inland Empire Utilities Agency A MUNICIPAL WATER DISTRICT

Total Project Budget: \$650 K Project Completion: March 2021 Design Percent Complete: 100%

Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Design (Current)	WSC	\$91 K	0%
Construction	TBD	\$0	0%

RSS Haven Avenue Repair and Replacement

Project Goal: Increase Asset Life

Total Project Budget: \$6 M Project Completion: September 2022 Design Percent Complete: 20%

Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Design (Current)	GHD	\$222 K	3%
Construction	TBD	TBD	0%



Pipeline Lining Deterioration



Philadelphia Lift Station Force Main Improvements

Project Goal: Increase Asset Life



Proposed New Alignment

Inland Empire Utilities Agency

Total Project Budget: \$18.4 M Project Completion: August 2022 Pre-Design Percent Complete: 80%

Phase	Consultant/ Contractor	Current Contract	Amendments/ Change Orders
Pre-Design (Current)	GHD	\$812 K	32%
Construction	TBD	\$0 M	0%