

**AGENDA  
IRVINE RANCH WATER DISTRICT  
BOARD OF DIRECTORS  
REGULAR MEETING**

**February 11, 2013**

**PLEDGE OF ALLEGIANCE**

**CALL TO ORDER**

5:00 P.M., Board Room, District Office  
15600 Sand Canyon Avenue, Irvine, California

**ROLL CALL**

Directors Matheis, LaMar, Swan, Withers and President Reinhart

**NOTICE**

If you wish to address the Board on any item, including Consent Calendar items, please file your name with the Secretary. Forms are provided on the lobby table. Remarks are limited to five minutes per speaker on each subject. Consent Calendar items will be acted upon by one motion, without discussion, unless a request is made for specific items to be removed from the Calendar for separate action.

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**COMMUNICATIONS TO THE BOARD**

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1. A. Written:

B. Oral: Mrs. Joan Irvine Smith's assistant relative to the Dyer Road Wellfield.

2. ITEMS RECEIVED TOO LATE TO BE AGENDIZED

Recommendation: Determine that the need to discuss and/or take immediate action on item(s) introduced come to the attention of the District subsequent to the agenda being posted.

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**PRESENTATION**

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3. SCE PRESENTATION

Southern California Edison (SCE) representatives Mr. James Pasmore and Mr. Cameron McPherson will present the Board with a \$500,000 incentive check for the MWRP Phase II Expansion project. SCE's Savings-by-Design program provides incentive awards to non-residential projects based on their installation and use of energy efficient equipment or systems that exceed Title 24 standards for energy efficiency. The MWRP project installed energy efficient pumps, motors, HVAC components, Turblex blowers, interior lighting and an ultraviolet disinfection system.

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**CONSENT CALENDAR**

**Next Resolution No. 2013-8**

**Items 4-8**

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4. MINUTES OF REGULAR BOARD MEETINGS

Recommendation: That the minutes of the January 28, 2013 Regular Board Meeting be approved as presented.

5. RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS

Recommendation: That the Board ratify/approve the meetings and events for Steven LaMar, Mary Aileen Matheis, Douglas Reinhart, John Withers and Peer Swan.

6. 2013 STATE LEGISLATIVE UPDATE

Recommendation: Receive and file.

7. MAIN STREET DIVERSION STRUCTURE GRATING MODIFICATIONS FINAL ACCEPTANCE

Recommendation: That the Board accept construction of the Main Street Diversion Structure Grating Modifications, project 20957 (1221); authorize filing of a Notice of Completion; and authorize the payment of the retention 35 days after the date of recording the Notice of Completion.

8. ADDENDUM NO.1 TO THE SYPHON RESERVOIR INTERIM FACILITIES FINAL MITIGATED NEGATIVE DECLARATION

Recommendation: That the Board approve the proposed Addendum No. 1 to the Syphon Reservoir Interim Facilities Final Initial Study/Mitigated Negative Declaration, including the determinations set forth in Addendum No. 1 and approve the modifications to the project.

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**ACTION CALENDAR**

9. AMENDMENT OF AGREEMENT BETWEEN CITY OF IRVINE AND IRVINE RANCH WATER DISTRICT FOR DEVELOPMENT OF CIENEGA FILTRATION PROJECT FIELD DEMONSTRATION

Recommendation: That the Board approve Amendment No. 2 to the Agreement between City of Irvine and Irvine Ranch Water District for development of Cienega Filtration Project Field Demonstration.

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**ACTION CALENDAR - Continued**

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10. BENEFIT FORMULA AND CONTRIBUTION RATES FOR NEW CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM MEMBERS

Recommendation: That the Board approve the employee contribution rate of 6.25% for new employees hired after January 1, 2013 as established by the California Public Employees' Retirement System (CalPERS).

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**OTHER BUSINESS**

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Pursuant to Government Code Section 54954.2, members of the Board of Directors or staff may ask questions for clarification, make brief announcements, make brief reports on his/her own activities. The Board or a Board member may provide a reference to staff or other resources for factual information, request staff to report back at a subsequent meeting concerning any matter, or direct staff to place a matter of business on a future agenda. Such matters may be brought up under the General Manager's Report or Directors' Comments.

11. A. General Manager's Report

B. Directors' Comments

C. CLOSED SESSION Conference With Legal Counsel relative to existing and anticipated litigation - Government Code Section 54956.9(a) and 54956.9(b) – Orange County Water District v. Sabic Innovative Plastics, et al.; significant exposure to litigation (two potential cases).

D. Adjourn meeting to Thursday, February 14, 2013 at 8:00 a.m. in the IRWD Community Room to hold an Adjourned Regular Board Meeting.

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Availability of agenda materials: Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Irvine Ranch Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection in the District's office, 15600 Sand Canyon Avenue, Irvine, California ("District Office"). If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available from the District Secretary of the District Office at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during, the meeting, they will be available at the entrance to the Board of Directors Room of the District Office.

The Irvine Ranch Water District Board Room is wheelchair accessible. If you require any special disability-related accommodations (e.g., access to an amplified sound system, etc.), please contact the District Secretary at (949) 453-5300 during business hours at least seventy-two (72) hours prior to the scheduled meeting. This agenda can be obtained in alternative format upon written request to the District Secretary at least seventy-two (72) hours prior to the scheduled meeting.

February 11, 2013  
Prepared and  
Submitted by: L. Bonkowski  
Approved by: P. Cook

LB  
P. Cook

CONSENT CALENDAR

MINUTES OF REGULAR BOARD MEETING

SUMMARY:

Provided are the minutes of the January 28, 2013 Regular Board meeting for approval.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

Not applicable.

RECOMMENDATION:

THAT THE MINUTES OF THE JANUARY 28, 2013 REGULAR BOARD MEETING BE APPROVED AS PRESENTED.

LIST OF EXHIBITS:

Exhibit "A" – Minutes – January 28, 2013

## EXHIBIT "A"

### MINUTES OF REGULAR MEETING – JANUARY 28, 2013

The regular meeting of the Board of Directors of the Irvine Ranch Water District (IRWD) was called to order at 5:00 p.m. by President Reinhart on January 28, 2013 in the District office, 15600 Sand Canyon Avenue, Irvine, California.

Directors Present: Matheis, Reinhart, LaMar, Swan and Withers

Directors Absent: None

Also Present: General Manager Cook, Executive Director of Finance Clary, Director of Risk Management and Treasury Jacobson, Executive Director of Engineering Burton, Executive Director of Water Policy Heiertz, Director of Water Resources Weghorst, Legal Counsel Arneson, Secretary Bonkowski, Mr. Mike Hoolihan, Ms. Christine Compton, Mr. Jim Reed, Mr. Bruce Newell, and other members of the public and staff.

WRITTEN COMMUNICATION: None.

#### ORAL COMMUNICATION:

1) Mrs. Joan Irvine Smith's assistant addressed the Board of Directors with respect to the Dyer Road wellfield. She said it was her understanding that currently wells C-8, C-9, 10, 11, 12, 15, 16 and 17 will operate in accordance with the District's annual pumping plan. Wells 1, 2, 3, 4, 5, 6, 7, 13, 14, and 18 will be off. This was confirmed by Mr. Cook, General Manager of the District.

With respect to the OCWD annexation of certain IRWD lands, on June 5, 2009, IRWD received a letter from OCWD noting that OCWD has completed the formal responses to comments they previously received on the draft program Environmental Impact Report. The letter further noted that with this task completed, OCWD has exercised its right to terminate the 2004 Memorandum of Understanding (MOU) regarding annexation. OCWD also indicated that due to the lack of progress on the annexation issue, the draft program Environmental Impact Report will not be completed. On June 8, 2009, OCWD completed the Long-Term Facilities Plan which was received and filed by the OCWD Board in July 2009. Staff has been coordinating with the City of Anaheim (Anaheim) and Yorba Linda Water District (YLWD) on their most recent annexation requests and has reinitiated the annexation process with OCWD. IRWD, YLWD and Anaheim have negotiated a joint MOU with OCWD to process and conduct environmental analysis of the annexation requests. The MOU was approved by the OCWD Board on July 21, 2010. This was confirmed by Mr. Cook.

With respect to the Groundwater Emergency Service Plan, IRWD has an agreement in place with various south Orange County water agencies, MWDOC and OCWD, to produce additional groundwater for use within IRWD and transfer imported water from IRWD to south Orange County in case of emergencies. IRWD has approved the operating agreement with certain south Orange County water agencies to fund the interconnection

facilities needed to affect the emergency transfer of water. MWDOC and OCWD have also both approved the operating agreement. This was confirmed by Mr. Cook.

### CONSENT CALENDAR

President Reinhart asked that Item No. 8, the Strategic Measures Dashboard, be moved to the Action Calendar for discussion. There being no objection, on MOTION by Withers, seconded and unanimously carried, CONSENT CALENDAR ITEMS 3 THROUGH 7 and 9 THROUGH 19 WERE APPROVED AS FOLLOWS:

3. MINUTES OF REGULAR BOARD MEETING

Recommendation: That the minutes of the January 14, 2013 Regular Board Meeting be approved as presented.

4. RATIFY/APPROVE BOARD OF DIRECTORS' ATTENDANCE AT MEETINGS AND EVENTS

Recommendation: That the Board ratify/approve the meetings and events for Steven LaMar, Mary Aileen Matheis, Doug Reinhart, John Withers and Peer Swan.

5. RATIFICATION OF MEMORANDUM RELATIVE TO THE BOARD, COMMITTEE AND OTHER ASSIGNMENTS, AND APPROVAL OF AGENCY AND OUTSIDE ORGANIZATION BOARD REPRESENTATION AT MEETINGS/EVENTS FOR 2013

Recommendation: That the Board ratify the Memorandum dated January 28, 2013 entitled Officers of the Board, Committees and Other Assignments, approve attendance for the meetings and events for the Board's representation for calendar year 2013 as delineated in the write-up, and that the following resolution be adopted by title rescinding Resolution No. 2012-35 and revising the assignment of Directors to Committees of the Board.

#### RESOLUTION NO. 2013 -3

RESOLUTION OF THE BOARD OF DIRECTORS OF  
IRVINE RANCH WATER DISTRICT, RESCINDING  
RESOLUTION NO. 2012-35 AND REVISING THE ASSIGNMENT  
OF DIRECTORS TO COMMITTEES OF THE BOARD

6. REIMBURSEMENT TO BOARD MEMBER FOR BUSINESS EXPENSES

Recommendation: That the Board approve the October 2012 Expense Report submitted for reimbursement for travel and business mileage expenses incurred by Director Peer Swan.

CONSENT CALENDAR (CONTINUED)

7. DECEMBER 2012 TREASURY REPORTS

Recommendation: That the Board receive and file the Treasurer's Investment Summary Report and the Monthly Interest Rate Swap Summary for December 2012; approve the December 2012 Summary of Payroll ACH payments in the total amount of \$1,351,423, and approve the December 2012 accounts payable Disbursement Summary of checks 335257 through 335831, Workers' Compensation distributions, wire transfers, payroll withholding distributions and voided checks in the total amount of \$15,368,754.

9. 54-INCH BARRANCA PARKWAY PIPELINE RELOCATION PROJECT CONTRACT TERMINATION

Recommendation: That the Board approve the termination for convenience of the construction contract with Vadnais Corporation for the 54-inch Barranca Parkway Pipeline Relocation, projects 11166 (1408) and 31166 (1696).

10. 2013 PROJECT MANUAL

Recommendation: That the Board adopt the following resolution by title rescinding Resolution No. 2011-50 and revising standard form construction contract documents.

RESOLUTION NO. 2013 -4

RESOLUTION OF THE BOARD OF DIRECTORS  
OF IRVINE RANCH WATER DISTRICT  
ORANGE COUNTY, CALIFORNIA, RESCINDING  
RESOLUTION NO. 2011-50 AND REVISING  
STANDARD FORM CONSTRUCTION  
CONTRACT DOCUMENTS

11. SAND CANYON AVENUE GRADE SEPARATION VARIANCE

Recommendation: That the Board authorize the General Manager to execute Variance No. 3 in the amount of \$84,000 with Tetra Tech, Inc. for additional construction management and support services for the IRWD Utility Relocations Project for the Sand Canyon Grade Separation, projects 11455 (1459) and 21455 (1152).

12. PLANNING AREA 9B (STONEGATE) PHASE 3 BUDGET, EXPENDITURE AUTHORIZATION AND CHANGE ORDER

Recommendation: That the Board authorize the addition of project 30390 (4228) to the FY 2012-13 Capital Budget in the amount of \$854,700; approve an Expenditure Authorization for project 30390 (4228) in the amount of \$854,700; and approve a design change order in the amount of \$31,372 to ICDC for the Planning Area 9B (Stonegate) Recycled Water and Syphon Lateral Pipeline Phase 3 project.

CONSENT CALENDAR (CONTINUED)

13. MICHELSON WATER RECYCLING PLANT PHASE 2 EXPANSION  
CONSTRUCTION MANAGEMENT AND INSPECTION SERVICES  
VARIANCE NO. 4

Recommendation: That the Board authorize the General Manager to execute Variance No. 4 in the amount of \$185,503 with ARCADIS-US for construction management and inspection services for the MWRP Phase 2 Expansion, projects 20214 (1599) and 30214 (1706).

14. QUITCLAIM OF REAL PROPERTY – IRVINE COMMUNITY DEVELOPMENT  
COMPANY (VILLAGE OF PORTOLA SPRINGS-TRACT NO. 17114)

Recommendation: That the Board adopt the following resolution by title approving execution of the Quitclaim Deed to Irvine Community Development Company LLC.

RESOLUTION NO. 2013 – 5

RESOLUTION OF THE BOARD OF DIRECTORS OF  
IRVINE RANCH WATER DISTRICT  
APPROVING EXECUTION OF THE QUITCLAIM DEED TO  
IRVINE COMMUNITY DEVELOPMENT COMPANY LLC

15. QUITCLAIM OF REAL PROPERTY – IRVINE COMMUNITY DEVELOPMENT  
COMPANY (VILLAGE OF PORTOLA SPRINGS-TRACT NO. 17070)

Recommendation: That the Board adopt the following resolution by title approving execution of the Quitclaim Deed to Irvine Community Development Company LLC.

RESOLUTION NO. 2013 – 6

RESOLUTION OF THE BOARD OF DIRECTORS OF  
IRVINE RANCH WATER DISTRICT  
APPROVING EXECUTION OF THE QUITCLAIM DEED TO  
IRVINE COMMUNITY DEVELOPMENT COMPANY LLC

16. ADDENDUM NO. 2 TO THE CITY OF LAKE FOREST SPORTS PARK AND  
RECREATION CENTER FINAL ENVIRONMENTAL IMPACT REPORT

Recommendation: That the Board approve the proposed Addendum No. 2 to the City of Lake Forest Sports Park and Recreation Center Final Environmental Impact Report, including the determination set forth in Addendum No. 2.



CONSENT CALENDAR(CONTINUED)

17. MISCELLANEOUS SEWER IMPROVEMENTS AT JAMBOREE CENTER EXPENDITURE AUTHORIZATION

Recommendation: That the Board approve an Expenditure Authorization in the amount of \$132,600 for the Miscellaneous Sewer Improvements at Jamboree Center, project 21122 (3775).

18. THREE-YEAR DAM MONITORING AND SURVEILLANCE CONSULTANT SELECTION

Recommendation: That the Board authorize the General Manager to execute a Professional Services Agreement with URS Corporation in the amount of \$131,623 for three years of dam monitoring and surveillance services.

19. SYPHON RESERVOIR INTERIM FACILITIES PROJECT FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Recommendation: That the Board find on the basis of the whole record before it (including the initial study and the comments received), that there is no substantial evidence that the Syphon Reservoir Interim Facilities Project will have a significant effect on the environment and that the Negative Declaration reflects IRWD's independent judgment and analysis; adopt the proposed Mitigated Negative Declaration for the Syphon Reservoir Interim Facilities Project and Mitigation Monitoring and Reporting Program incorporated within the Mitigated Negative Declaration and approve the project; and direct staff to post and file a Notice of Determination and submit payment for the California Department of Fish and Game filing fee.

ACTION CALENDAR

STRATEGIC MEASURES DASHBOARD

In response to President Reinhart's inquiry, discussion was held relative to the Deep Aquifer Treatment System targets as well as clarification of the overhead ratio fluctuations. On MOTION by LaMar, seconded and unanimously carried, THE STRATEGIC MEASURES DASHBOARD AND INFORMATION ITEMS WERE RECEIVED AND FILED.

SYPHON RESERVOIR INTERIM FACILITIES AND PIPELINE IMPROVEMENTS – CONSTRUCTION AWARD

General Manager Cook reported that the Syphon Reservoir Interim Facilities and Pipeline Improvements Project will construct a filtration system, chlorination system, and pipeline improvements to connect Syphon Reservoir to the recycled water system.

Executive Director of Engineering and Planning Burton reported that the project was advertised on January 3, 2013 to a select list of 27 contractors. The bid opening was held on January 22, 2013 with bids received from Paulus Engineering, Inc. and Vido Artukovich & Son, Inc. Paulus Engineering, Inc. is the apparent low bidder with a bid amount of \$1,529,800. Mr. Burton said

that Paulus has performed the majority of emergency work for the District in the past, and staff is satisfied with its performance. On MOTION by Withers, seconded and unanimously carried, THE BOARD AUTHORIZED A BUDGET INCREASE FOR PROJECT 30374 (3729) IN THE AMOUNT OF \$1,017,400 FROM \$1,399,800 TO \$2,417,200; APPROVED AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$1,817,600 FOR PROJECT 30374 (3729); AND AUTHORIZED THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH PAULUS ENGINEERING, INC. IN THE AMOUNT OF \$1,529,800 FOR THE SYPHON RESERVOIR INTERIM FACILITIES AND PIPELINE IMPROVEMENTS, PROJECT 30374 (3729).

PORTOLA HILLS SEWER LIFT STATION ABANDONMENT AND GRAVITY SEWER CONSTRUCTION AWARD

The Portola Hills Sewage Lift Station Abandonment and Gravity Sewer Project will abandon the existing Portola Hills Sewage Lift Station (PHSLS) and redirect wastewater to the Michelson Water Recycling Plant (MWRP) through a new gravity sewer segment within Glenn Ranch Road. Three contractors, Paulus Engineering, Inc., GCI Construction, Inc., and Kennedy Pipeline Company attended the pre-bid meeting on December 20, 2012. The bid opening was held on January 15, 2013 with bids received from Paulus Engineering, Inc., L&S Construction, Inc., Leatherwood Construction, CCL Contracting, Inc., GCI Construction, Inc., and Kennedy Pipeline Company. Paulus Engineering, Inc. is the apparent low bidder with a bid amount of \$1,149,197. The engineer's estimate was \$1,288,150.

On MOTION by Swan, seconded and unanimously carried, THE BOARD APPROVED AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$1,441,000 FOR PROJECT 20224 (1600) AND AUTHORIZED THE GENERAL MANAGER TO EXECUTE A CONSTRUCTION CONTRACT WITH PAULUS ENGINEERING, INC. IN THE AMOUNT OF \$1,149,197 FOR THE PORTOLA HILLS SEWER LIFT STATION ABANDONMENT AND GRAVITY SEWER PROJECT.

UNIVERSITY LIFT STATION ODOR CONTROL BUDGET ADDITION AND EXPENDITURE AUTHORIZATION

General Manager Cook reported that the District currently injects a chemical, BioMagic, at several sewer lift stations around the District to minimize the production of odor causing compounds in the force mains downstream of the lift stations. The University Lift Station is the District's largest station with an annual chemical cost of approximately \$33,000.

Director of Engineering and Planning Burton reported that in 2011 staff conducted a pilot test of the FORSe 5™ Pump Station Treatment System manufactured by ANUE Water Technologies, which injects a combination of ozone and oxygen into the force main to raise the dissolved oxygen level. He said that this pilot test was very successful.

Mr. Burton said that this project will construct a permanent odor and corrosion control system at the University Lift Station to replace the use of chemicals. The estimated total project cost is \$431,200. Based on the current usage rates and costs for BioMagic, the system will have a payback period of approximately 13 years. In addition to improved odor and corrosion control,

the system will also result in decreased nitrification costs at the Michelson Water Recycling Plant by eliminating the nitrogen loading associated with BioMagic injection. He said that Santa Margarita Water District (SMWD) is currently using the FORSe 5™ system at two lift stations and staff has visited these facilities and verified that they are satisfied with the performance of the FORSe 5™ system.

Mr. Burton said that staff proposes to retain SUN Engineering Services to design the project. SUN is a small engineering consultant that has performed electrical design work for the District in recent years. SUN attended recent business outreach events at the District and has demonstrated its full service design capabilities in follow-up meetings. Staff negotiated a scope of work and design fee of \$28,775 with SUN and believes this project will provide an opportunity for staff to evaluate their performance and develop a relationship with a new consultant that can provide design services for future small and mid-sized projects. The Professional Services Agreement with SUN for the design phase of the project is within the authorization limit of the General Manager.

Director Withers said that this item was reviewed by the Engineering and Operations Committee on January 17, 2013 and they concur with the staff recommendation. In response to Director Swan's inquiry and following discussion, staff was asked to investigate how to construct the project at a lower cost. On MOTION by Withers, seconded and unanimously carried, **THE BOARD AUTHORIZED THE ADDITION OF PROJECT 21133 (4157) IN THE AMOUNT OF \$431,200 TO THE FY 2012-13 CAPITAL BUDGET AND APPROVED AN EXPENDITURE AUTHORIZATION IN THE AMOUNT OF \$51,700 FOR THE UNIVERSITY LIFT STATION ODOR CONTROL SYSTEM, PROJECT 21133 (4157).**

#### APPROVAL OF INDEX-BASED TENDER NOTE REMARKETING STATEMENTS

Director of Risk Management/Treasurer Jacobson reported that in April 2011, the District refunded its \$100.9 million 2008-B general obligation bond issue and reissued the debt as Index-Based Tender Notes (ITNs). The ITNs are remarketed periodically and are priced at a spread to the SIFMA tax-exempt variable rate index. Mr. Jacobson said that last interest rate reset for the 2011 A-1 and 2011 A-2 issues was in February 2012 at the SIFMA weekly index less one basis point, resulting in an all-in rate for 2012 of 0.39%. The next interest rate reset date will be February 12, 2013. Underwriters responsible for remarketing the bonds include Goldman Sachs (2011 A-1) and Morgan Stanley (2011 A-2). The 2011 A-1 issue represents 60% of the ITNs and the 2011 A-2 represents the remaining 40%.

Mr. Jacobson said that staff the Remarketing Statements have been prepared in consultation among staff, legal counsel and remarketing agents reflecting the District's most recent financial information, updated disclosure information and other pertinent updates.

Director Swan said that this item was reviewed and approved by the Finance and Personnel Committee on January 10, 2013. On MOTION by Swan, seconded and unanimously carried, **THE BOARD ADOPT THE FOLLOWING RESOLUTION BY TITLE:**

RESOLUTION NO. 2013-7

RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE IRVINE RANCH WATER DISTRICT  
APPROVING REMARKETING STATEMENTS RELATING  
TO UNSCHEDULED MANDATORY TENDERS  
(REFUNDING SERIES 2011A-1 AND REFUNDING SERIES 2011A-2)

ITEMS TO LATE TO BE AGENDIZED

On MOTION by Swan, seconded and unanimously carried, IT WAS DETERMINED THAT THERE WAS A NEED TO TAKE IMMEDIATE RELATIVE TO THE ASSOCIATION OF CALIFORNIA WATER AGENCIES' (ACWA) STATE LEGISLATIVE COMMITTEE MEMBERSHIP, AND AN ITEM WAS ADDED TO THE ACTION CALENDAR (BELOW).

ACWA'S STATE LEGISLATIVE COMMITTEE MEMBERSHIP

For the 2013 Calendar year, Ms. Kirstin McLaughlin, Government Relations Manager, was a member of ACWA's State Legislative Committee. As Ms. McLaughlin is no longer employed by the District, the Board would like to have her replacement, Ms. Christine Compton, also be a member of this Committee. On MOTION by Swan, seconded and unanimously carried, THE BOARD RECOMMENDED MS. CHRISTINE COMPTON FOR A COMMITTEE APPOINTMENT TO THE ACWA'S STATE LEGISLATIVE COMMITTEE, AND DIRECTED STAFF TO SUBMIT A COMMITTEE CONSIDERATION FORM TO ACWA.

GENERAL MANAGER'S REPORT

General Manager Cook reported that Orange County LAFCO sent a letter to the District asking for comments to its proposed Sphere of Influence update. He said that staff responded with no comments, however, asked that LAFCO keep the District abreast of any changes they will be making. He said that a Public Hearing is scheduled for February 13, 2013 and staff will provide an update at this hearing to the Board.

Mr. Cook provided an update to the letter MWDOC is coordinating with Member Agencies to the Grand Jury.

Mr. Cook reported on the Press Release from MWDOC which had been placed before each Director relative to Poseidon's Draft Term Sheet for the Huntington Beach Seawater Desalination Project. He said that substantial comments were provided to MWDOC on this release, but unfortunately some of these comments were not included. He said that staff is working on an item to be placed on the IRWD website relative to desalination and its added costs associated with this project. In response to Director Swan's comments, Mr. Cook said that staff will prepare a Term Sheet in March for the Board to review relative to this project. In response to Director Matheis' comment relative to the quality of water, Mr. Cook said that the water quality is expected to match or be of a better quality than the water that IRWD receives from MWD.

Mr. Cook said that Ms. Blaska from Public Affairs attended Orange Park Acres' homeowner association annual general membership meeting last Saturday.

Mr. Cook further said that he recently met with Mr. Dunek of the City of Lake Forest as well as Mr. Terry Walker, Superintendent of the IUSD, relative to science programs.

#### DIRECTORS' COMMENTS

In response to Director Matheis' comment that she will be attending February's Urban Water Institute conference and encouraging other Board members to attend, Directors Reinhart, LaMar, and Withers said they will also be attending along with General Manager Cook, who is participating on a panel discussion. Ms. Matheis said that the Water Education Foundation will be using IRWD's facilities to hold a basic Water 101 class and would like to have City of Irvine staff attend to learn about water. She further said that ISDOC's quarterly luncheon meeting is scheduled for Thursday along with the OCBC's dinner, and that the Tustin Mayor's dinner is on Friday.

Director Withers reported on his attendance at Mr. Ronald Young's retirement dinner on January 12, 2013, LAFCO's southern California recent meeting, and that he will be attending both ISDOC's quarterly luncheon and OCBC's annual dinner on Thursday, and WACO on Friday.

Director Swan reported on his attendance at CASA's mid-year conference, ACWA's Finance Task Force meeting and ACWA's Board meeting in Sacramento. He also reported on his attendance at Mr. Young's retirement dinner.

Director LaMar reported that he, along with Mr. Heiertz, attended CEEB's Water Quality Task Force meeting, MWDOC's Water Policy Forum, and a Southern California Water Committee meeting.

Director Reinhart reported on his attendance at MWDOC's Water Policy Forum. He further said that this spring, he would like to have the Board and senior staff conduct a "360 review" discussing what the District is doing well and what can be done better. He said that he and General Manager Cook will be going through a selection process to find the best consultant to work through this process which will be submitted for Board approval in February.

#### ADJOURNMENT

There being no further discussion, President Reinhart adjourned the meeting at 6:15 p.m.

APPROVED and SIGNED this 11th day of February, 2013.

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President, IRVINE RANCH WATER DISTRICT

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Secretary IRVINE RANCH WATER DISTRICT

APPROVED AS TO FORM:

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Legal Counsel - Bowie, Arneson, Wiles & Giannone

February 11, 2013

Prepared and

Submitted by: N. Savedra

Approved by: P. Cook



CONSENT CALENDAR

RATIFY/APPROVE BOARD OF DIRECTORS'  
ATTENDANCE AT MEETINGS AND EVENTS

SUMMARY:

Pursuant to Resolution 2006-29 adopted on August 28, 2006, approval of attendance of the following events and meetings are required by the Board of Directors.

Events/Meetings

Steven LaMar

03/05/13 ACWA 2013 Legislative Symposium

Mary Aileen Matheis

02/01/13 Tustin Mayor's Inaugural Dinner Meeting  
02/07/13 So. OC Watershed Management Area Executive Committee Meeting  
02/25-28/13 ACWA Washington DC Conference & OC Water Issues Congressional Briefing  
03/05/13 ACWA 2013 Legislative Symposium  
3/14-15/13 WEF-Executive Briefing, Sacramento  
3/17-19/13 WateReuse California Annual Conference, Monterey, CA

Douglas Reinhart

01/31/13 OCBC Annual Meeting, Costa Mesa, CA  
3/17-19/13 WateReuse California Annual Conference, Monterey, CA

Peer Swan

01/03/13 ACWA Integrated Watershed Management Meeting

John Withers

02/26/13 City of Irvine State of the City Address

RECOMMENDATION:

THAT THE BOARD RATIFY/APPROVE THE MEETINGS AND EVENTS FOR STEVEN LaMAR, MARY AILEEN MATHEIS, DOUGLAS REINHART, PEER SWAN AND JOHN WITHERS AS DESCRIBED.

LIST OF EXHIBITS:

None

February 11, 2013

Prepared by: C. Compton

Submitted by: G. Heiertz

Approved by: Paul Cook

## CONSENT CALENDAR

### 2013 STATE LEGISLATIVE UPDATE

#### SUMMARY:

This report provides an update on the 2013 legislative session and IRWD priorities. As legislation develops, staff will provide updates and recommendations to the Water Resources Policy and Communications Committee and the Board as appropriate. A copy of the 2013 State Legislative Matrix is attached as Exhibit "A".

#### BACKGROUND:

The 2013-14 Legislature reconvened on January 7, 2013, for the first year of a two-year session. The last day for bills to be submitted to the Office of the Legislative Counsel was January 25, 2013, and the bill introduction deadline is February 22, 2013. Policy committee deadlines are in early May.

The November 2012 election brought historic supermajorities in both houses, and the highest number of new members in over 45 years. Given the large number of freshman legislators, only 402 bills have been introduced, as of January 30, and many of those are spot bills.

#### State of the State:

Governor Brown delivered his annual State of the State address to a joint session of the Legislature on January 24, 2013. The Governor began the address by stating that "California has once again confounded our critics" by putting itself in a better financial situation. He then emphasized that despite the State's improved financial situation, the State must live within its means and exercise fiscal discipline going forward. This year's address also featured an array of issues on which the Governor is seeking legislative action. Governor Brown laid out the following goals for the year:

- Education: "Subsidiarity" in education.
- Health Care: Opening of a special session to prepare California for the implementation of the federal Patient Protection and Affordable Care Act.
- Jobs: Change the Enterprise Zone Program and Jobs Hiring Credit along with streamlining regulatory procedures, particularly CEQA, to encourage job creation.
- Water: Proposed a Delta fix of two tunnels 30 miles long and 40 feet wide, designed to improve the ecology of the Delta, with almost 100 square miles of habitat restoration.
- Climate Change: Reduce electricity consumption through efficiency standards for buildings and appliances.



- *Transportation and High Speed Rail*: Review current transportation priorities and explore long-term funding options. Break ground and start construction of the California High Speed Rail System.

#### State Budget Update:

Governor Brown submitted his proposed budget to the Legislature on January 10, 2013, as required by the State Constitution. With the passage of Proposition 30, the proposed budget projects a significant improvement in the State's finances. The Governor's budget proposes \$138.6 billion in General Fund expenditures, and projects a \$1 billion surplus at the end of the 2013-14 fiscal year.

The Governor's proposed budget also contains major proposals in education, Medi-Cal and debt repayment. The proposed budget funds education at \$56.2 billion, and includes a new formula for financing schools and additional General Fund resources for higher education. It includes \$350 million in new spending for Medi-Cal in order to fund the increase in enrollment expected as a result of the implementation of the federal Affordable Care Act. It also includes a reduction in California's debt by \$4 billion.

The Legislative Analyst's Office (LAO), in reviewing the Governor's proposed budget, stated that "the State has reached a point where its underlying expenditures and revenues are roughly in balance." (LAO Report, *The 2013-14 Budget: Overview of the Governor's Budget*, Jan. 14, 2013.) Despite this statement, the LAO estimates that there will still be a budget deficit of \$1.9 billion by June 2013 instead of a \$1 billion surplus as forecasted by the Governor. The difference between the two projections is due to the Governor assuming higher revenue forecasts of \$1.8 billion, higher savings of \$1 billion, and a lower repayment of special fund loans.

#### Expected 2013 Legislative Proposals:

##### *The Law of Recycled Water*

Throughout the fall and during January, Assembly Member Hueso's office and Senate Natural Resources Committee staff, in partnership with the California WaterReuse Association, led stakeholder meetings as a follow-up to AB 2398 (2012). The discussions have focused on WaterReuse's objectives and priorities for legislation, and the process for moving forward with the development of legislation. After much discussion at the stakeholder meetings, WaterReuse has narrowed the issues it would like addressed this year. WaterReuse is currently focusing its efforts on five issues during 2013. A summary of the five targeted issues and the course of action decided upon at the last stakeholder meeting are provided below.

A preliminary version of the 2013 legislation (referred to as the *Water Recycling Act of 2013*) was submitted to Legislative Counsel on January 25, 2013, and it has yet to be reviewed by the bicameral stakeholder group. It is expected that this legislation will only include the issues designated for legislative action noted below. IRWD staff will continue to participate in the discussion of these outstanding issues, and will provide an oral update at the Water Resources Policy and Communications Committee meeting on any new developments.

<b>WateReuse 2013 Issues</b>	<b>Outcome of January 24 Stakeholder Meeting</b>
Align the Health and Safety Code and the Water Code requirements for reporting recycled water spills.	Revise Health & Safety Code §5411.5 in the Water Recycling Act of 2013 to establish a reporting threshold consistent with the reporting thresholds in Water Code §13529.2.
Department of Public Health (DPH) lacks capacity to fully implement recycled water permitting and regulatory programs. WateReuse recommends a fee to fund these regulatory functions in DPH.	Continue discussion of a fee program to increase DPH’s regulatory capacity mindful of AB 145 (Perea), SB 117 (Rubio), and the budget process.  *AB 145 and SB 117 are discussed below.
Obsolete and inconsistent elements of DPH Code of Regulations Titles 17 and 22 represent barriers to recycling. Although in agreement as to the need for such code changes, DPH has not initiated the needed changes.	Achieve changes in statute through the Water Recycling Act of 2013.
Authority of DPH and the State Water Resources Control Board (SWRCB) over reservoir augmentation, raw water augmentation, direct reuse, and indoor non-potable reuse is unclear.	Further discussions between WateReuse, SWRCB and DPH will take place to develop a mutually agreeable permitting approach and to evaluate the impact of proposed legislation changing the location of the State’s drinking water programs.
Since ATPW is considered a waste, SWRCB considers a blend of ATPW with other raw waters in a conveyance facility to be a waste and subject to waste discharge requirements prior to discharge to a surface water such as a water supply reservoir. The quality of other raw water may render the blended water incapable of meeting expected discharge requirements, although ATPW alone would be expected to meet requirements. This is a barrier for two proposed large potable reuse projects.	Amend the Water Code through the Water Recycling Act of 2013 to recognize a permitting approach as appropriate.

### *CEQA Reform*

CEQA reform legislation is expected to be introduced in the 2013 legislative session. Although many doubt that significant reforms will be enacted, Senator Michael Rubio (D-Bakersfield) remains interested in “modernizing” CEQA. In an effort to ensure that the local government community has a seat at the table in these discussions, the Public Works Coalition, led by the California Special Districts Association (CSDA), submitted a second letter to Senate President pro Tem Darrell Steinberg and Assembly Speaker John Perez. The letter again expresses the coalition’s interest in CEQA reform, and offers several proposed solutions to common CEQA challenges. Specifically, the letter suggests that clear guidance on cumulative impacts review be implemented, significance thresholds and categorical exemption determinations be made more rational and reliable, and that the circulation and comment period for Environmental Impact Reports and negative declarations be amended to encourage more open discussions before these documents are finalized.

### IRWD-sponsored Legislation:

*Electronic Document Retention/Storage:* Staff believes that current laws limit special districts’ ability to utilize new electronic storage technologies, such as Cloud-based technology, due to the existing requirements in the Government Code to “store on a medium that does not permit additions, deletions, or changes to the original document.” If IRWD were able to utilize a Cloud-based storage medium that could meet the same requirements, the District could reduce the time and cost to back up District documents to the current storage medium, WORM (Write Once Read Many) tape cartridge.

IRWD staff submitted this potential legislative proposal to CSDA and discussed the matter with the California Municipal Utilities Association (CMUA) and the California Association of Sanitation Agencies (CASA). The discussions with CASA and CMUA raised a number of questions concerning the current state of the law. Staff is working with legal counsel to determine the need for clarifying legislation and will provide an oral update to the Water Resources Policy and Communications Committee if new information becomes available.

### Other 2013 Legislative Introduction:

#### *AB 145 (Perea) and SB 117 (Rubio) – Relocation of Responsibility for the State’s Drinking Water Programs*

AB 145 (Perea, D-Fresno), as introduced, and SB 117 (Rubio, D-Bakersfield), as introduced, would move responsibility for the State’s drinking water programs from DPH to SWRCB. AB 145 would vest authority and responsibility for drinking water programs with a new Division of Drinking Water Quality at the SWRCB. The existing Division of Drinking Water and Environmental Health within DPH would become the Division of Drinking Water Quality within the SWRCB. SB 117 would simply transfer responsibility for the State’s drinking water programs from DPH to the SWRCB. Most expect that discussions regarding these two bills will center on whether the drinking water programs should remain with DPH, move to SWRCB or move to Cal-EPA. According to ACWA, the authors have indicated that a key factor in this discussion will be where drinking water loans and grants can be issued most efficiently.

FISCAL IMPACTS:

Not applicable.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed at the Water Resources Policy and Communications Committee on February 7, 2013.

RECOMMENDATION:

RECEIVE AND FILE.

LIST OF EXHIBITS:

Exhibit "A" – 2013 IRWD Legislative Matrix

**EXHIBIT "A"**

**IRWD 2013 LEGISLATIVE MATRIX  
January 31, 2013**

Bill No. Author	Title	IRWD Position	Summary/Effect	Status
<b>AB 1</b> Alejo (D)	Water Quality: Integrated Plan: Salinas Valley		Appropriates funds for use by the Greater Monterey County Regional Water Management Group to develop the integrated plan to address the drinking water and wastewater needs of disadvantaged communities in the Salinas Valley whose waters have been affected by waste discharges.	01/14/2013 - To ASSEMBLY Committee on ENVIRONMENTAL SAFETY AND TOXIC MATERIALS.
<b>AB 11</b> Logue (R)	Reserve Peace Officers: Emergency Rescue Personnel		Requires specified employers to permit an employee who performs emergency duty as a volunteer firefighter, reserve peace officer, or as emergency rescue personnel to take a leave of absence for the purpose of engaging in fire, law enforcement, or emergency rescue training.	01/28/2013 - From ASSEMBLY Committee on LABOR AND EMPLOYMENT with author's amendments.  01/28/2013 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on LABOR AND EMPLOYMENT.
<b>AB 21</b> Alejo (D)	Safe Drinking Water Small Community Grant Fund		Authorizes the assessment of a specified annual charge in connection with loans for water projects made pursuant to the Safe Drinking Water Small Community Grant Fund. Authorizes expending the money for grants for specified water projects that serve disadvantaged and severely disadvantaged communities.	01/14/2013 - To ASSEMBLY Committee on ENVIRONMENTAL SAFETY AND TOXIC MATERIALS.

**EXHIBIT "A"**

**IRWD 2013 LEGISLATIVE MATRIX  
January 31, 2013**

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effect</b>	<b>Status</b>
<b><u>AB 25</u></b> Campos (D)	Employment: Social Media		Applies existing law that prohibits a private employer from requiring or requesting an employee or applicant for employment to disclose a username or password for the purpose of accessing personal social media, to access personal social media in the presence of the employer, or to divulge any personal social media to public employers.	01/24/2013 - To ASSEMBLY Committees on JUDICIARY and PUBLIC EMPLOYEES, RETIREMENT AND SOCIAL SECURITY.
<b><u>AB 26</u></b> Bonilla (D)	Global Warming Solutions Act of 2006		Makes a technical, nonsubstantive change to the California Global Warming Solutions Act of 2006 that designates the State Air Resources Board as the state agency charged with monitoring and regulating sources of emissions of greenhouse gases.	12/03/2012 - INTRODUCED.
<b><u>AB 30</u></b> Perea (D)	Water Quality		Amends the Porter-Cologne Water Quality Control Act to authorize the Water Resources Control Board to assess an annual charge in connection with any financial assistance under the Water Pollution Control Revolving Fund without a change unless it is determined that the charge is not consistent with federal requirements regarding the fund, at which time the board would replace the charge with an identical interest rate. Relates to deposits to another specified water pollution control fund.	01/24/2013 - From ASSEMBLY Committee on ENVIRONMENTAL SAFETY AND TOXIC MATERIALS with author's amendments  01/24/2013 - In ASSEMBLY. Read second time and amended. Re-referred to Committee on ENVIRONMENTAL SAFETY AND TOXIC MATERIALS.

**EXHIBIT "A"**

**IRWD 2013 LEGISLATIVE MATRIX  
January 31, 2013**

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effect</b>	<b>Status</b>
<b><u>AB 37</u></b> Perea (D)	Environmental Quality Act: Record of Proceedings		Requires the lead agency, at the request of a project applicant, to, prepare a record of proceedings concurrently with the preparation of negative declarations, mitigated negative declarations, EIR's, or other environmental documents for specified projects.	01/14/2013 - To ASSEMBLY Committee on NATURAL RESOURCES.
<b><u>AB 69</u></b> Perea (D)	Groundwater: Nitrate at Risk Area Fund		Establishes the Nitrate at Risk Area Fund. Provides that moneys in the fund would be available for the purposes of developing and implementing sustainable and affordable solutions for disadvantaged communities in specified areas designated by the State Department of Public Health, in conjunction with the State Water Resources Control Board.	01/10/2013 - INTRODUCED.
<b><u>AB 70</u></b> Morrell (R)	Budget Bill: Public Availability		Provides that no vote may be taken in either house of the Legislature on the Budget Bill or other bills providing for appropriations related to the Budget Bill, as defined in the Constitution, until those bills have been made available to the public for 3 days on a publicly available Internet Web site.	01/18/2013 - To ASSEMBLY Committee on BUDGET.
<b><u>AB 72</u></b> Holden (D)	Municipal Water District: Board of Directors		Requires the directors of a municipal water district, except directors elected at the district formation election, to take office on the first Friday in December succeeding their election.	01/18/2013 - To ASSEMBLY Committee on LOCAL GOVERNMENT.

**EXHIBIT "A"**

**IRWD 2013 LEGISLATIVE MATRIX  
January 31, 2013**

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effect</b>	<b>Status</b>
<b><u>AB 115</u></b> Perea (D)	Safe Drinking Water State Revolving Fund		Relates to the state Safe Drinking Water Act. Authorizes the Department of Public Health to fund projects by grant or loan where multiple water systems apply for funding as a single applicant for the purpose of consolidating water systems or extending services to households relying on private wells. Authorizes funding of a project to benefit a disadvantaged community.	01/18/2013 - To ASSEMBLY Committee on ENVIRONMENTAL SAFETY AND TOXIC MATERIALS.
<b><u>AB 118</u></b> Env safety & Toxic Material Committee	Safe Drinking Water State Revolving Fund		Authorizes the State Department of Public Health to adopt interim regulations for purposes of implementing provisions relating to the Safe Drinking Water State Revolving Fund. Requires an applicant for funding to demonstrate that it has the technical, managerial, and financial capacity to operate and maintain its water system for at least 20 years.	01/18/2013 - To ASSEMBLY Committee on ENVIRONMENTAL SAFETY AND TOXIC MATERIALS.
<b><u>AB 122</u></b> Rendon (D)	Energy Assessment: Nonresidential Buildings: Financing		Enacts the Nonresidential Building Energy Retrofit Financing Act. Requires the Energy Resources Conservation and Development Commission to establish the Nonresidential Building Energy Retrofit Financing Program to develop a request for proposal for a third-party administrator and to develop and operate the program to provide financial assistance, through authorizing the issuance of, revenue bonds, to owners of eligible nonresidential buildings for implementing energy property improvement.	01/14/2013 - INTRODUCED.
<b><u>AB 142</u></b> Perea (D)	Safe, Clean, and Reliable Drinking Water Supply Act		States the intent of the Legislature to enact legislation to amend the Safe, Clean, and Reliable Drinking Water Supply Act of 2012.	01/17/2013 - INTRODUCED.



**EXHIBIT "A"**

**IRWD 2013 LEGISLATIVE MATRIX  
January 31, 2013**

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effect</b>	<b>Status</b>
<b><u>AB 145</u></b> Perea (D)	State Water Resources Control Board: Drinking Water		Transfers to the State Water Resources Control Board the various duties and responsibilities imposed on the State Department of Public Health by the State Safe Drinking Water Act and the Safe Drinking Water State Revolving Fund Law of 1997.	01/18/2013 - INTRODUCED.
<b><u>AB 153</u></b> Bonilla (D)	Global Warming Solutions Act of 2006: Offsets		Amends the Global Warming Solutions Act of 2006. Requires the State Air Resources Board to adopt a specified process for the review and consideration of new offset protocols and, commencing in 2014 and continuing thereafter, use that process to review and consider new offset protocols.	01/18/2013 - INTRODUCED.
<b><u>AB 155</u></b> Alejo (D)	Employment: Payroll Records: Right to Inspect		Requires an employee to elect to inspect or copy, or receive a copy of, or any combination thereof, his or her employment records.	01/22/2013 - INTRODUCED.
<b><u>AB 160</u></b> Alejo (D)	Public Employees' Pension Reform Act: Exceptions		Excepts from the Public Employees' Pension Reform Act of 2013 certain multiemployer plans authorized under federal law and retirement plans for public employees whose collective bargaining rights are protected by a specified provision of federal law.	01/22/2013 - INTRODUCED.
<b><u>AB 183</u></b> Dickinson (D)	Delta Protection Commission: Executive Director		Amends the Johnson-Baker-Andal-Boatwright Delta Protection Act of 1992. Requires the Executive Director of the Delta Commission to determine a discretionary project located in the primary zone to be consistent with the resource management plan provided that the project satisfies specified criteria. Authorizes appeals to specified decisions.	01/28/2013 - INTRODUCED.

**EXHIBIT "A"**

**IRWD 2013 LEGISLATIVE MATRIX  
January 31, 2013**

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effect</b>	<b>Status</b>
<b><u>AB 185</u></b> Hernandez R (D)	Open and Public Meetings: Televised Meetings		Provides that an audio or video recording of an open and public meeting made at the direction of a local agency may be erased or destroyed 2 years after the recording. Requires a local agency that collects a franchise fee from the holder of a state franchise that provides PEG channels to televise open and public meetings of its legislative body and any of its advisory committees, if financially feasible, and to only use the franchise fees for that purpose.	01/28/2013 - INTRODUCED.
<b><u>AB 194</u></b> Campos (D)	Open Meetings: Protections for Public Criticism		Makes it a misdemeanor for a member of a legislative body, while acting as a chairperson of a legislative body of a local agency, to prohibit public criticism protected under the Ralph M. Brown Act. Authorizes a district attorney to commence an action for the purpose of obtaining a judicial determination that an action taken by a legislative body of a local agency in violation of the protection for public criticism is null and void.	01/28/2013 - INTRODUCED.
<b><u>ACA 1</u></b> Donnelly (R)	Administrative Regulations: Legislative Approval		Requires an administrative agency to submit all regulations to the Legislature for approval. Authorizes the Legislature, by means of a concurrent resolution, to approve a regulation adopted by an administrative agency of the state.	12/03/2012 - INTRODUCED.

**EXHIBIT "A"**

**IRWD 2013 LEGISLATIVE MATRIX  
January 31, 2013**

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effect</b>	<b>Status</b>
<b>SB 1</b> Steinberg (D)	Sustainable Communities Investment Authority		Authorizes certain public entities of a Sustainable Communities Investment Area to form a Sustainable Communities Investment Authority to carry out the Community Redevelopment Law. Provides for tax increment funding receipt under certain economic development and planning criteria. Establishes prequalification requirements for receipt of funding. Requires monitoring and enforcement of prevailing wage requirements within the area.	01/10/2013 - To SENATE Committees on GOVERNANCE AND FINANCE and TRANSPORTATION AND HOUSING.
<b>SB 7</b> Steinberg (D)	Public Works: Where Performed		Relates to the general prevailing rate of per diem wages paid to workers employed on public works projects. Defines the locality in which a public work is performed as the county in which the public work is done.	01/10/2013 - To SENATE Committee on LABOR AND INDUSTRIAL RELATIONS.
<b>SB 13</b> Negrete McLeod (D)	Public Employees' Retirement Benefits		Corrects an erroneous cross-reference in the Public Employees' Pension Reform Act of 2013 regarding the Judges' Retirement System I and II defined benefit formula adoption. Amends the act regarding employers offering one of more defined benefit formulas to new members who are safety employees. Relates to contribution rates for defined pension plans. Repeals provisions regarding disability retirements. Relates to state miscellaneous or industrial members contributions or service credit.	01/10/2013 - To SENATE Committee on PUBLIC EMPLOYMENT AND RETIREMENT.
<b>SB 14</b> Gaines T (R)	Bear Lake Reservoir: Recreational Use		Relates to existing law which prohibits recreational use in which there is bodily contact with water in a reservoir in which water is stored for domestic use. Exempts from this prohibition any participant in the Bear Lake Reservoir, and establishes standards in this regard, including water treatment, monitoring, and reporting requirements.	01/10/2013 - To SENATE Committee on ENVIRONMENTAL QUALITY.

**EXHIBIT "A"**

**IRWD 2013 LEGISLATIVE MATRIX  
January 31, 2013**

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effect</b>	<b>Status</b>
<b>SB 24</b> Walters (R)	Public Employees' Retirement: Benefit Plans		Authorizes a local agency public employer or public retirement system that offers a defined benefit pension plan to offer a benefit formula with a lower benefit factor at normal retirement age and that results in a lower normal cost than the benefit formulas that are currently required, for purposes of addressing a fiscal necessity.	01/10/2013 - To SENATE Committee on PUBLIC EMPLOYMENT AND RETIREMENT.
<b>SB 36</b> Rubio (D)	Safe, Clean, and Reliable Drinking Water Supply Act		Declares the intent of the Legislature to amend the Safe, Clean, and Reliable Drinking Water Supply Act of 2012 for the purpose of reducing the amount of the bond.	01/10/2013 - To SENATE Committee on RULES.
<b>SB 40</b> Pavley (D)	Safe, Clean, and Reliable Drinking Water Supply Act		Changes the name of the Safe, Clean, and Reliable Drinking Water Supply Act of 2012 to the Safe, Clean, and Reliable Drinking Water Supply Act of 2014. Declares the intent of the Legislature to amend the act for the purpose of reducing and potentially refocussing the bond.	01/17/2013 - From SENATE Committee on RULES with author's amendments.  01/17/2013 - In SENATE. Read second time and amended. Re- referred to Committee on RULES.
<b>SB 42</b> Wolk (D)	Clean, Secure Water Supply and Delta Recovery Act		Enacts the Clean, Secure Water Supply and Delta Recovery Act of 2014. Authorizes the issuance of general obligation bonds for the Sacramento-San Joaquin Delta Recovery.	01/10/2013 - To SENATE Committee on NATURAL RESOURCES AND WATER.

**EXHIBIT "A"**

**IRWD 2013 LEGISLATIVE MATRIX  
January 31, 2013**

<b>Bill No. Author</b>	<b>Title</b>	<b>IRWD Position</b>	<b>Summary/Effect</b>	<b>Status</b>
<b>SB 43</b> Wolk (D)	Shared Renewable Energy Self-Generation Program		States the intent of the Legislature to enact legislation relating to a shared renewable energy self-generation program.	01/10/2013 - To SENATE Committee on RULES.
<b>SB 46</b> Corbett (D)	Personal Information: Privacy		Amends existing law that requires any agency, and any person or business conducting business that owns or licenses computerized data that includes personal information to disclose in specified ways, any breach of the security of the system or revise certain data elements within the definition of personal information, by adding certain information relating to an account other than a financial account.	01/10/2013 - To SENATE Committee on JUDICIARY.
<b>SB 117</b> Rubio (D)	Drinking Water: State Water Resources Control Board		Transfers the various duties and responsibilities imposed on the State Department of Public Health by the State Safe Drinking Water Act to the State Water Resources Control Board. Makes conforming changes.	01/17/2013 - INTRODUCED.
<b>SCA 10</b> Wolk (D)	Legislative Procedure		Authorizes a committee to hear or act on a bill if the bill, in the form to be considered by the committee, has been in print and published on the Internet for at least 15 days. Prohibits either house of the Legislature from passing a bill until the bill, in the form to be voted on, has been made available to the public, in print and published on the Internet, for at least 72 hours preceding the vote.	01/22/2013 - INTRODUCED.
<b>SCA 11</b> Hancock (D)	Local Government: Special Taxes: Voter Approval		Proposes an amendment to the Constitution to condition the imposition, extension, or increase of a special tax by a local government upon the approval of 55% of the voters voting on the proposition. Makes conforming and technical, nonsubstantive changes.	01/25/2013 - INTRODUCED.

DS

February 11, 2013  
Prepared by: A. Murphy/M Cortez  
Submitted by: K. Burton (KLB)  
Approved by: Paul Cook *[Signature]*

CONSENT CALENDAR

MAIN STREET DIVERSION STRUCTURE GRATING MODIFICATIONS  
FINAL ACCEPTANCE

SUMMARY:

Construction of the Main Street Diversion Structure Grating Modifications Project is complete. The contractor, S.S. Mechanical Corp., has completed the required work and all punch list items. The project has received final inspection and acceptance of construction is recommended.

BACKGROUND:

S.S. Mechanical Corp. was awarded the construction contract for the Main Street Diversion Structure Grating Modifications Project to remove and dispose of the existing grating, construct a new modified grating, and replace the vault lid at the Main Street Diversion Structure. The project is located at the corner of Main Street and San Mateo in Irvine.

Project Title:	Main Street Diversion Structure Grating Modifications
Project No.:	20949 (1211) Design 20957 (1221) Construction
Design Engineer:	Arcadis U.S.
Contractor:	S.S. Mechanical Corp.
Original Contract Cost:	\$118,497
Final Contract Cost:	\$131,497.90
Original Contract Days:	150
Final Contract Days:	158
Total Budget:	\$160,429.80
Total Project Cost (Est.):	\$160,429.80
Final Change Order Approved On:	December 26, 2012

FISCAL IMPACTS:

Project 20949 (1211) was included in the FY 2011-12 Capital Budget to fund the design phase of the project. Project 20957 (1221) is included in the FY 2012-13 Capital Budget to fund the construction phase of the project. The existing budget and Expenditure Authorizations are sufficient to complete this project.

ENVIRONMENTAL COMPLIANCE:

This activity is exempt from the California Environmental Quality Act (CEQA) as authorized under the California Code of Regulations, Title 14, Chapter 3, Section 15302(c) which provides exemption for projects requiring the replacement or reconstruction of existing facilities where the new structure will be located on the same site as the structure being replaced and will have substantially the same purpose and capacity as the structure to be replaced.

COMMITTEE STATUS:

This item was not reviewed by a Committee.

RECOMMENDATION:

THAT THE BOARD ACCEPT CONSTRUCTION OF THE MAIN STREET DIVERSION STRUCTURE GRATING MODIFICATIONS, PROJECT 20957 (1221); AUTHORIZE FILING OF A NOTICE OF COMPLETION; AND AUTHORIZE THE PAYMENT OF THE RETENTION 35 DAYS AFTER THE DATE OF RECORDING THE NOTICE OF COMPLETION.

LIST OF EXHIBITS:

None.

February 11, 2013

Prepared by: J. Corey

Submitted by: P. Weghorst/G. Heiertz

Approved by: Paul Cook

## CONSENT CALENDAR

### ADDENDUM NO.1 TO THE SYPHON RESERVOIR INTERIM FACILITIES INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

#### SUMMARY:

Irvine Ranch Water District proposes minor modifications to the project analyzed in the Syphon Reservoir Interim Facilities Final Initial Study/Mitigated Negative Declaration (Final IS/MND). Project modifications include increasing the size of areas needed for the construction of various pipelines, increasing the width of a permanent access road and including an alternate alignment for the installation of temporary power lines. Environmental review has been completed for the proposed modifications and staff recommends that the Board approve Addendum No. 1 to the Final IS/MND and approve the proposed modifications.

#### BACKGROUND:

On January 28, 2013, the Board adopted a Final IS/MND and approved the project for the Syphon Reservoir Interim Facilities. The Final IS/MND analyzed the potential environmental impacts associated with the construction and operation of the facilities that will allow IRWD to utilize the reservoir to store and delivery recycled water. The Syphon Reservoir project site is located northwest of the intersection of Portola Parkway and Sand Canyon Avenue and includes the area directly south of the Syphon Reservoir between the south face of the dam and Portola Parkway. Following is a description of proposed modifications to the project that have been evaluated in Addendum No. 1 to the Final IS/MND.

#### Project Modifications:

When the Final IS/MND was adopted by the Board, the surface area requirements for the construction of pipelines that will cross the Crean property assumed that Crean would rough grade its proposed sports park site prior to IRWD beginning construction. This assumption reduced the expected excavation depths for installing the pipelines. Crean has informed IRWD, that due to financial constraints, Crean will not be able to rough grade its site before IRWD begins construction of project facilities. Therefore, the depths of excavation will increase and additional construction access will be needed for the installation of a 36-inch recycled pipeline, a 48-inch storm drain, an 8-inch storm drain, an emergency reservoir drain and a 16-inch recycled water pipeline.

Additional project modifications include providing an alternate alignment for the installation of temporary power to the project and a request from the Orange County Fire Authority to increase the width of the permanent access road for the project from 15 feet to 20 feet.



Addendum No. 1:

Environmental review has been completed for the proposed modifications to the Project as described above and Addendum No. 1 to the Final IS/MND has been prepared. A copy of Addendum No. 1 is attached as Exhibit "A". The proposed project modifications would not change the regulatory framework, impact discussion, mitigation measures or conclusions as described in the Final IS/MND.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

Section 15164 of the State of California Environmental Quality Act (CEQA) Guidelines provides for the preparation of an addendum to a previously certified EIR by lead agency or a responsible agency if some changes or additions to the project are necessary but none of the conditions described in CEQA calling for preparation of a subsequent EIR have occurred. Based on the information and analysis in the proposed Addendum No. 1, the determination section of the Addendum sets forth the proposed determinations by the District that none of such conditions have occurred. The proposed modifications would not change the regulatory framework, impact discussion, mitigation measures or conclusions as described in the Final IS/MND.

COMMITTEE STATUS:

Addenda to mitigated negative declaration reports are not typically taken to Committee prior to submittal for Board approval.

RECOMMENDATION:

THAT THE BOARD APPROVE THE PROPOSED ADDENDUM NO. 1 TO THE SYPHON RESERVOIR INTERIM FACILITIES FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION, INCLUDING THE DETERMINATIONS SET FORTH IN ADDENDUM NO. 1 AND APPROVE THE MODIFICATIONS TO THE PROJECT.

LIST OF EXHIBITS:

Exhibit "A" – Addendum No. 1 to the Syphon Reservoir Interim Facilities Final Initial Study/Mitigated Negative Impact Report

# EXHIBIT "A"

## **Addendum No. 1 to the Syphon Reservoir Interim Facilities Final Initial Study/Mitigated Negative Declaration**

*Prepared for:*

**Irvine Ranch Water District**  
15600 Sand Canyon Avenue  
Irvine, California 92618

*Prepared by:*

**DUDEK**  
31878 Camino Capistrano, Suite 200  
San Juan Capistrano, California 92675

FEBRUARY 2013

Printed on 30% post-consumer recycled material.

**Addendum to the Syphon Reservoir Interim Facilities  
Final Initial Study/Mitigated Negative Declaration**

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**APPENDIX**

A	Final Biological Resources Technical Report	
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## Addendum to the Syphon Reservoir Interim Facilities Final Initial Study/Mitigated Negative Declaration

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### ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Meaning
CEQA	California Environmental Quality Act
CO	carbon monoxide
EIR	environmental impact report
HCP	Habitat Conservation Plan
IRWD	Irvine Ranch Water District
MND	initial study/mitigation negative declaration
NCCP	Natural Communities Conservation Plan
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	oxides of nitrogen
PM <sub>10</sub>	particulate matter with a diameter less than or equal to 10 microns
PM <sub>2.5</sub>	particulate matter with a diameter less than or equal to 2.5 microns
PVC	polyvinyl chloride
SCAQMD	South Coast Air Quality Management District
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	sulfur oxides
VOC	volatile organic compound

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## 1.0 INTRODUCTION AND BACKGROUND

The Irvine Ranch Water District (IRWD) is planning to convert the Syphon Reservoir, which has been used for agricultural water storage over the past 60 years, to a recycled water reservoir, located in the northern portion of the City of Irvine, California. IRWD adopted the Mitigated Negative Declaration (MND) for the Syphon Reservoir Interim Facilities Project in January 2013. The MND evaluated the potential effects on the environment from constructing new water treatment facilities at the base of the dam to allow IRWD to operate the reservoir for recycled water use.

### 1.1 Project Setting

The Syphon Reservoir Interim Facilities Project site is located in the City of Irvine, in Orange County, California. Figure 1 shows the regional location of the Syphon Reservoir. The Project site is located within the IRWD service boundary in the Santiago Hills in north Irvine as shown on Figure 2. More specifically, the Project site is located northwest of the intersection of Portola Parkway and Sand Canyon Avenue and includes the area directly south of the Syphon Reservoir between the south face of the dam and Portola Parkway as shown on Figure 3. The Project site is located within a Central and Coastal Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) preserve area.

The Syphon site includes three upland vegetation communities (coastal sage scrub, annual grassland, disturbed mulefat scrub) and two land cover types (developed land and disturbed land). No federally or state-listed special-status plant species occur within the Project site. Two special-status wildlife species, California gnatcatcher (*Polioptila californica*) (a federally listed threatened, state-listed Species of Special Concern, and NCCP/HCP covered target species) and coyote (*Canis latrans*) (NCCP/HCP covered), were detected during the 2011 and 2012 field surveys. A total of 13 other special-status wildlife species are determined to have a moderate potential to occur on site as described in the Final Biological Resources Technical Report attached as Appendix A. Revisions to the Biological Technical Report that are a result of the proposed project modifications are identified as ~~strike through~~ and underline text.



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### **1.2 Proposed Modifications to the Project**

This Addendum, prepared in accordance with the California Environmental Quality Act (CEQA) (California Public Resources Code, Section 21000 et seq.) and its implementing CEQA Guidelines (California Code of Regulations Title 14, Chapter 3, Section 15000 et seq.), addresses four changes from what was previously assessed in the original MND. The modifications include:

- An increased construction footprint around the 36-inch steel recycled water line and the 48-inch storm drain pipeline primarily on the Crean property. This increase in construction footprint increased the size of the Project site from 6.39 acres to approximately 8 acres.
- An increase in width from a 15-foot wide access road to a 20-foot wide access road. This modification is included in response to a request from the Orange County Fire Authority.
- An increase in construction footprint around the 8-inch polyvinyl (PVC) storm drain, the emergency reservoir drain, and the 16-inch steel recycled water pipeline on the IRWD property
- The addition of alternate Alignments for temporary power poles either along the access road or in already disturbed areas.

When the Final IS/MND was adopted by the IRWD Board of Directors, the surface area requirements for the construction of pipelines that will cross the Crean property assumed that Crean would rough grade its proposed sports park site prior to IRWD beginning construction. This assumption reduced the expected excavation depths for installing the pipelines. Crean has informed IRWD that due to financial constraints, Crean will not be able to rough grade its site before IRWD begins construction of project facilities. Therefore, the depths of excavation will increase, and additional construction access will be needed for the installation of the pipelines as described above.

Specifically, Project changes are reflected in two portions of the previous MND: Project Description and Biological Resources impact analysis. Changes to the project description included in the MND are shown as ~~striketrough~~ and underline text below. Biological resources are addressed in the Environmental Impact Analysis section below. The Final Biological Resources Technical Report is attached as Appendix A. Figure 3 shows the grant deed mitigation land boundary and illustrates the proposed changes outlined above, and Figure 4 shows the potential for impacts related to biological resources.

No substantial changes have occurred that warrant preparation of subsequent or supplemental environmental impact reports (EIRs) pursuant to Section 15162 of the CEQA Guidelines.

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### **1.3 Project Description Changes**

The following bullet points from pages 6 and 7 of the MND have been changed:

- A temporary electrical power line on temporary power poles located along an existing dirt access road located on the adjacent IRWD property on the southeast or located along the gravel access road depicted in Figure 3. This temporary electrical power line will be used until the permanent electrical power line is constructed.
- An approximately ~~15~~20-foot-wide gravel access road

The third paragraph on page 9 under the heading *Construction* has been changed:

The second phase of construction would entail installation of buried and exposed piping, construction of an access road, and mechanical, electrical/control, and structural facilities. The second phase of construction would last approximately 12 to 14 weeks, necessitate a crew of five workers, and require the use of one front-end loader (on site full time), one backhoe (on site full time), one bobtail dump truck (25 to 30 trips), one transit mix concrete truck (5 trips), one vibratory walk-behind compactor (on site full time), and one water truck (on site full time). Construction methods for installation of piping would require excavation and trenching at a maximum depth of 26 feet below ground surface. If water is encountered during open trench construction, it would be discharged to the storm drain under a permit from the Regional Water Quality Control Board (RWQCB). Trench width would vary depending upon the size (diameter) of the pipeline but would generally be between 2 to 6 feet for the 4-inch, 16-inch, and 48-inch water, electrical, and storm drain installations. For deeper installations of up to 26 feet deep, trench width would be up to 50 feet wide. Excavated soils would be placed back within the trench and spread over the site in other disturbed areas. No off-site trucking of soils would be necessary.

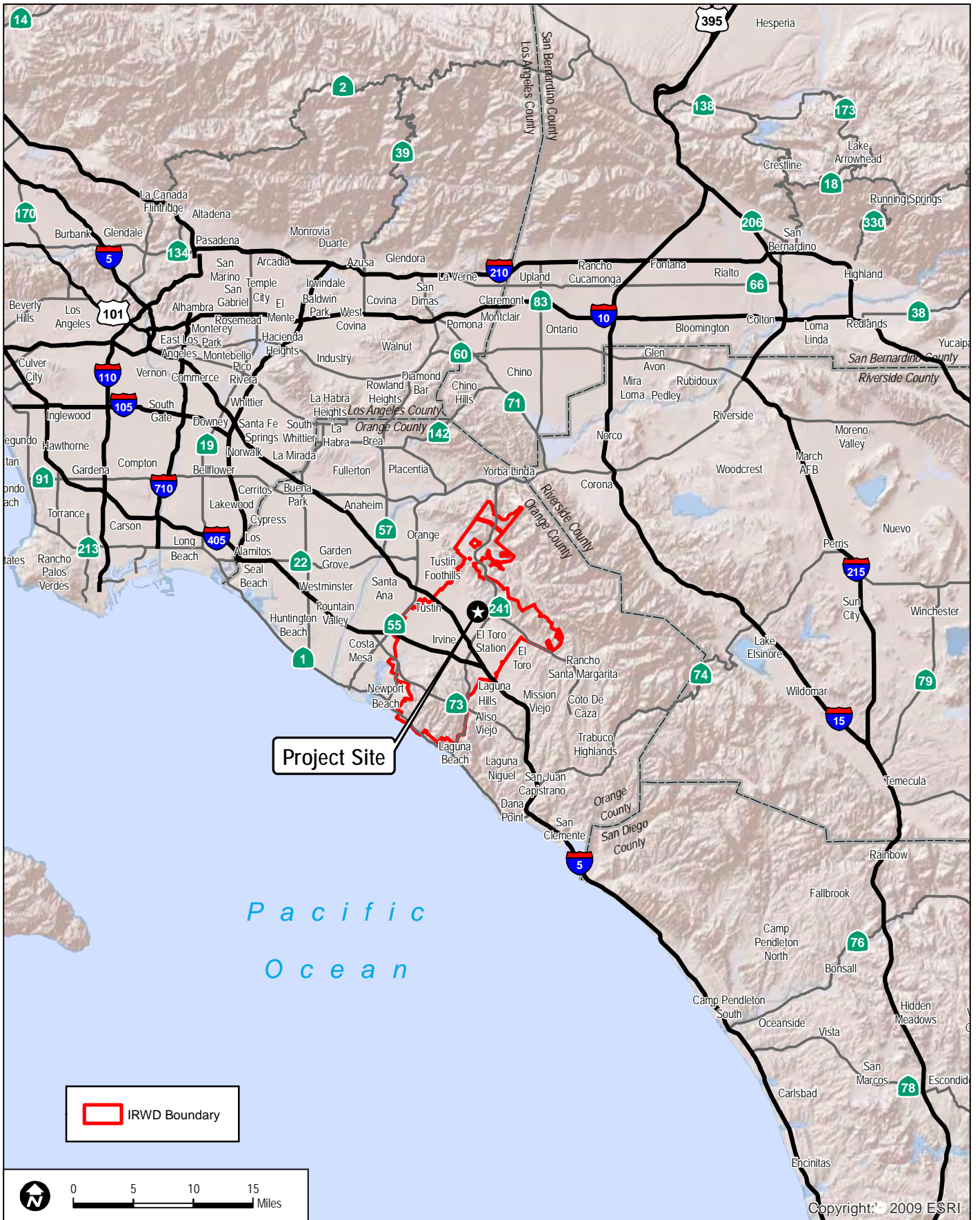
The fifth paragraph on page 9 under the heading *Construction* has been changed:

Construction of the Project would disturb approximately ~~1.83~~ 3.42 acres of the approximately 8-acre site.

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Copyright: 2009 ESRI

**FIGURE 1**  
**Regional Map**

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SOURCE: IRWD 2009

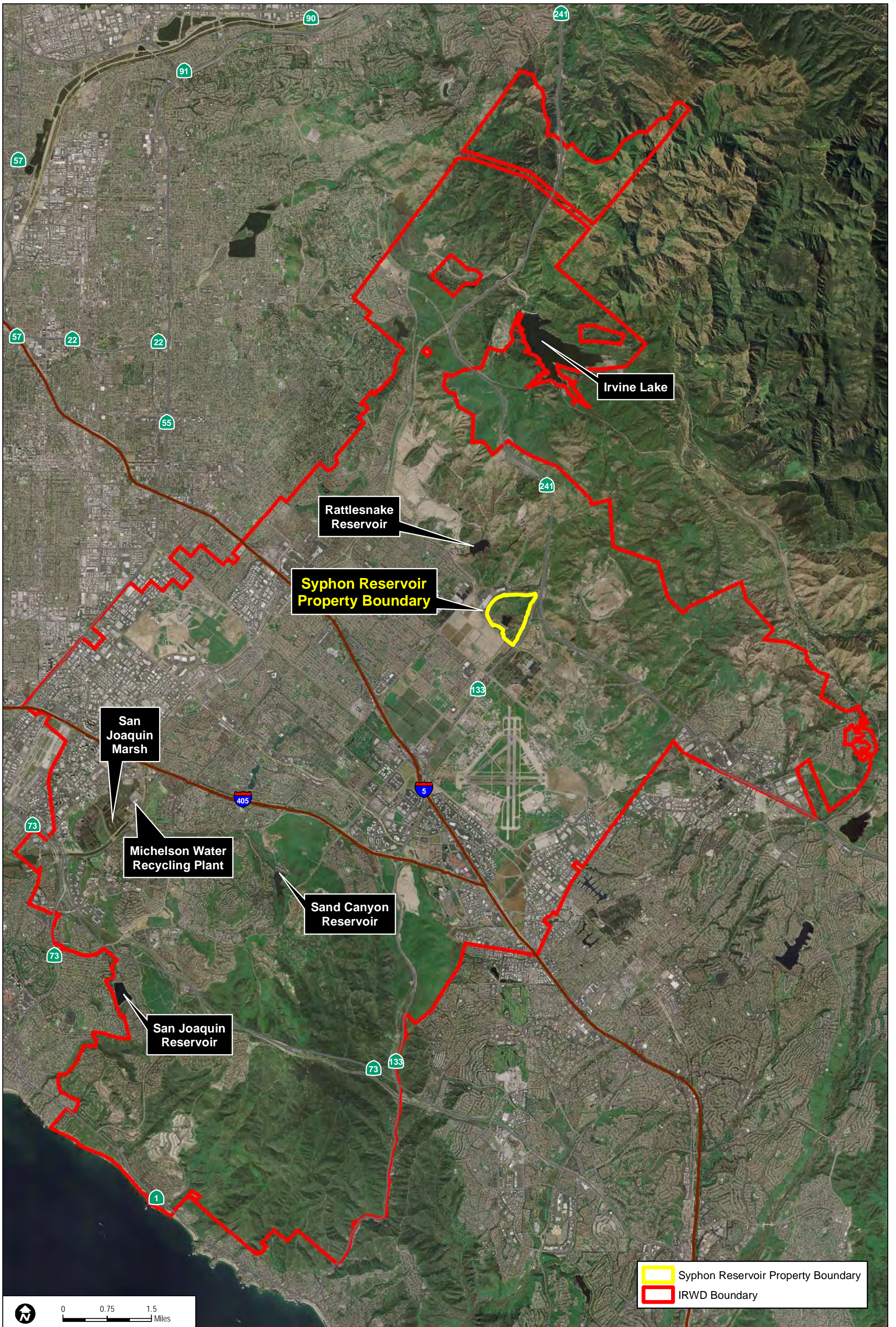
7036-04

IRWD Syphon Reservoir Interim Facilities - MND Addendum

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Syphon Reservoir Property Boundary  
 IRWD Boundary

0 0.75 1.5  
 Miles

**DUDEK**

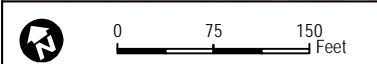
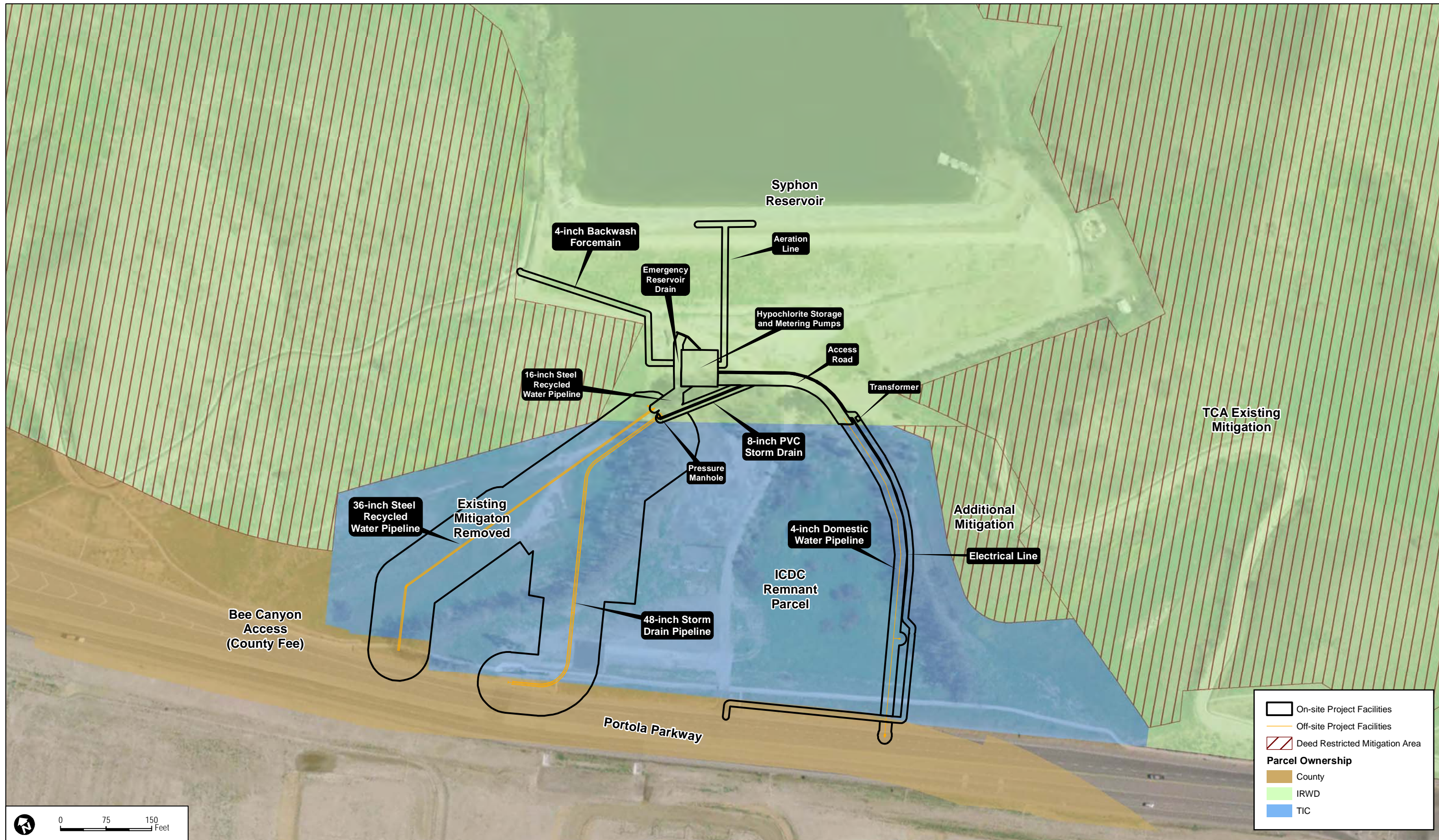
SOURCE: IRWD 2009

7036-04

IRWD Syphon Reservoir Interim Facilities - MND Addendum

**FIGURE 2**  
**Vicinity Map**

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**DUDEK**

SOURCE: IRWD 2009; URS October 2012; Hunsaker 2012

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IRWD Syphon Reservoir Interim Facilities - MND Addendum

**FIGURE 3**  
Grant Deed for Syphon Reservoir Mitigation Land boundary



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## **2.0 ENVIRONMENTAL IMPACT ANALYSIS**

The four proposed modifications to the original project as discussed above do not change the conclusions of the impact analysis of the referenced MND. The modifications described in Section 1.0 would have no new significant adverse environmental impacts.

To ensure that no significant environmental impacts would occur, the Proposed Project would adhere to applicable mitigation measures included in the previously adopted MND for the Syphon Reservoir Interim Facilities Project, as described in the following sections. Only the mitigation measures stated in the adopted MND that apply to the modifications are restated in the applicable sections below. Some mitigation measures have been slightly revised in order to make the mitigation measures specific to the proposed modifications. Underline indicates added text and ~~strikeout~~ indicates deleted text in the mitigation measures.

### **2.1 Aesthetics**

As discussed in the MND, there are no scenic vistas identified in the City of Irvine's (City's) General Plan. The closest designated viewpoint to the Project site is located at the intersection of Portola Parkway and Sand Canyon Road, which is approximately 1,900 feet southeast of the Project site. Due to the elevated topography of the area east and west of the Project site and naturally vegetated topography at this viewpoint, views to the Project site would not be visible at this location. Construction equipment would be screened at the construction staging area, setback away from Portola Parkway, and would be removed upon the completion of construction.

The view of the Project site from Portola Parkway includes the Syphon Reservoir dam face, hills, ridgelines and terraced slopes, and natural vegetation. Syphon Reservoir has existed for the past 60 years and, thus, has been part of the visual character of the area. The uses surrounding the interim facilities site include Syphon Reservoir, vacant lands designated for preservation, recreation, residential uses, and an elementary school. The Project would include the construction of facilities immediately south of Syphon Reservoir that would convert the reservoir from an agricultural storage basin to a recycled water reservoir. There are few opportunities for passersby to view the reservoir, as it is higher in elevation than most viewers are located with the exception of an intermittent view available to motorists along the State Route 133 toll road travelling south.

The proposed modifications would not result in any permanent visual impacts and would remain consistent with the aesthetics of the alignment analyzed within the MND. Therefore, any potential aesthetic impacts associated with the proposed modifications would be less than significant and no mitigation measures would be required.

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### **2.2 Agricultural Resources**

According to the State of California Department of Conservation Farmland Mapping and Monitoring Program (California Department of Conservation 2010), the Project site is designated as “Other Land” and is not in an area identified as Prime Farmland or Farmland of Statewide Importance. There are no agricultural activities practiced on the Project site, nor is there a Williamson Act contract in force on any of these properties. The Project site is zoned for Preservation (City of Irvine 2010). There is no change in impacts related to agricultural resources associated with the proposed modifications. Therefore, no impacts related to agricultural resources would occur and no mitigation measures would be required.

### **2.3 Air Quality**

The proposed modifications would involve limited use of construction equipment and activities which would result in construction emissions from heavy equipment exhaust, construction-related trips by workers, material hauling trucks, and associated fugitive dust generation from clearing and grading activities. The principal pollutants would be carbon monoxide (CO), volatile organic compounds (VOC), oxides of nitrogen (NO<sub>x</sub>) and PM<sub>10</sub>. VOC and NO<sub>x</sub> are precursors of ozone (O<sub>3</sub>). Due to the limited construction activities associated with the proposed modifications, construction emissions are expected to be below the South Coast Air Quality Management District (SCAQMD) significance thresholds and are therefore less than significant.

Once constructed, operation of the Project would produce VOC, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions from vehicle sources. Truck traffic on paved roads would also generate PM<sub>10</sub> and PM<sub>2.5</sub> emissions from fugitive dust and brake and tire wear, as discussed in the MND.

The Proposed Project would not result in any impacts related to air quality. Therefore, any potential air quality impacts associated with proposed modifications would be less than significant, and no mitigation measures would be required.

### **2.4 Biological Resources**

The four proposed modifications to the original project would result in specific changes to the biological resources analysis contained in the MND. Because of the proposed project modifications, changes have occurred to the permanent and temporary acreage estimates included in the biological resources impact analysis and the corresponding Biological Resources Technical Report included in Appendix A. These changes are summarized in Table 3-5 below. Specific text changes to the text of the MND follow. Underline indicates added text and ~~strikeout~~ indicates deleted text.

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**Table 3-5**

### Estimated Impacts to Vegetation Communities and Land Cover Types

Vegetation Community or Land Cover Type	Jurisdictional/Regulated	Impact Acreages (linear foot)			Total
		IRWD property		Crean Property <sup>1</sup>	
		Permanent	Temporary	Temporary	
<i>Uplands</i>					
Coastal Sage Scrub (NA-VDTCSS) <sup>2</sup>	Yes; NCCP/HCP	0.04	<del>0.04</del> <u>0.04</u>	0.20	<del>0.25</del> <u>0.28</u>
Annual Grassland (AGL)	No	0.00	<del>0.04</del> <u>0.14</u>	<del>0.62</del> <u>2.34</u>	<del>0.66</del> <u>2.45</u>
Disturbed Mule Fat Scrub (dMFS)	No	<del>0.02</del> <u>0.03</u>	<del>0.02</del> <u>0.01</u>	0.02	<del>0.06</del> <u>0.05</u>
Disturbed (DIS)	No	<del>0.04</del> <u>0.00</u>	<del>0.04</del> <u>0.08</u>	0.00	0.08
Developed (DEV)	No	<del>0.15</del> <u>0.13</u>	<del>0.06</del> <u>0.11</u>	<del>0.57</del> <u>0.30</u>	<del>0.78</del> <u>0.53</u>
<b>Grand Total</b>		<b><u>0.25</u></b>	<b><u>0.17</u></b>	<b><u>1.41</u></b>	<b><u>1.83</u></b>
		<b><u>0.20</u></b>	<b><u>0.36</u></b>	<b><u>2.85</u></b>	<b><u>3.42</u></b>

<sup>1</sup>No Direct Permanent Impacts proposed on the Crean property.

<sup>2</sup>Includes the disturbed form (dNA-VDTCSS).

**Notes:** This table corresponds to Table 6 of the Biological Resources Technical Report for the Syphon Reservoir Interim Facilities Project, Orange County, California (see Appendix A of this Addendum). Variations in totals are due to rounding.

Second paragraph under item (a) under Biological Resources includes the following changes:

The Project would impact ~~0.96-acre~~ 2.78 acres of land supporting annual grassland, coastal sage scrub, and disturbed mulefat scrub vegetation communities potentially supporting the special-status wildlife species listed above. Impacts to the riparian species (red-shouldered hawk, white-tailed kite, and Cooper's hawk) and their habitat are considered less than significant due to the disturbed character of riparian habitat (i.e., disturbed mulefat scrub) on site that would be impacted and the amount of habitat available in the Project vicinity. Impacts to the grassland species (northern harrier, burrowing owl, prairie falcon, ferruginous hawk, California horned lark, orange-throated whiptail) and their habitat are considered less than significant because of the limited habitat on site and the larger amount of habitat available in the Project vicinity. Impacts to other special-status species including coyote, Southern California rufous-crowned sparrow, coast horned lizard, coastal western whiptail, and northwestern San Diego pocket mouse are not significant because the number of individuals of these species likely to be lost (i.e., direct mortality) is insubstantial and would not appreciably affect the species in the region.

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Item (b) under Biological Resources includes the following changes:

**Less-than-Significant Impact with Mitigation Incorporated.** Direct permanent impacts associated with the Project are limited to the IRWD property and include the access road, a pressure manhole, an emergency reservoir drain, a 16-inch steel recycled water line, an 8-inch PVC storm drain, a 4-inch domestic water pipeline, ~~an~~ a permanent electrical line and transformer, and an operations facility. No direct permanent impacts are proposed on the Crean property.

Other activities associated with the Project would result in temporary impacts to biological resources and include the removal of vegetation and trenching of pipeline alignments. The proposed facilities that would result in such temporary impacts include the proposed 48-inch storm drain, several water lines, and electrical conduit. All impacts on the Crean property are considered temporary, as are some of the impacts that would occur on the IRWD property. Table 3-5 identifies the estimated temporary and permanent impacts for each vegetation community on the Project site.

The proposed modifications to the project have caused one minor change to a mitigation measure as shown below:

### **Mitigation Measure**

**MM-BIO-8** The Project shall mitigate for permanent impacts to approximately ~~0.05~~ 0.04 acre of coastal sage scrub, at a 1:1 ratio, totaling ~~0.05~~ 0.04 acre, through a deduction of IRWD's existing take allowance for habitats occurring with the NCCP/HCP Reserve for permanent impacts.

The proposed modifications would not result in any other changes to biological impacts which were not previously analyzed in the MND. All mitigation measures included in the MND (MM-BIO-1 through MM-BIO-9) continue to be applicable to the project and to the proposed modifications. Therefore, any potential biological resources impacts associated with proposed modifications would be mitigated to a less than significant level, and no additional mitigation measures would be required.

## **2.5 Cultural Resources**

Construction activities related to the proposed modifications to the Syphon Reservoir Interim Facilities Project would not result in changes to archaeological and historical resources; therefore, cultural resources would not be significantly impacted. Results of an archival records search completed for the larger Syphon Reservoir Project identified several cultural resources

## **Addendum to the Syphon Reservoir Interim Facilities Final Initial Study/Mitigated Negative Declaration**

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within a half-mile radius of the Project area, although no resources are within the area of potential effect for the current Project site. One archaeological site, CA-ORA-601, was previously recorded near the southeast corner of the Syphon Reservoir dam, but no cultural materials extend within or near to the current Project site area of potential effect. In the unlikely event that archaeological/historical resources and/or human remains are encountered during grading or excavation activities during construction, mitigation measures MM CR-1 through MM CR-3 as identified in the MND would reduce potential impacts to less than significant.

### **2.6 Geology and Soils**

The proposed modifications would not result in changes in stormwater runoff or subsequent soil erosion impacts resulting from ground disturbance during construction of the project. The proposed modifications would involve grading and excavation, which would not expose people or structures to seismic hazards. During construction, the Project is anticipated to disturb approximately 3.42 acres on the site. During the 4-month-long construction period, erosion may occur where the soils are temporarily exposed. The limited amount of disturbance on site is not anticipated to cause a significant amount of soil erosion or loss of topsoil.

Once construction is complete, the soils on site that are currently exposed would not be exposed because they would be covered in gravel (the access road) or a concrete pad (the disinfection facility). The location of the off-site pipelines is proposed for development as a sports complex by the Crean Lutheran Church. As such, impacts related to geology and soils would be less than significant, and no mitigation measures would be required.

### **2.7 Greenhouse Gases**

The proposed modifications to the Project would involve the use of construction equipment within the same 4-month schedule construction analyzed in the MND. Due to the limited construction activities associated with the Proposed Project, greenhouse gas emissions are expected to be below a level of significance. Once constructed, the Proposed Project would not result in any additional impacts related to greenhouse gases that were not previously analyzed under the MND. Therefore, any potential greenhouse gas emissions associated with construction of the proposed modifications would be less than significant, and no mitigation measures would be required.

### **2.8 Hazards**

There will be no change in the number of hazards encountered during construction associated with the proposed modifications. The proposed construction activities may involve introducing limited quantities of hazardous materials, such as diesel fuel, gasoline, lubricating oil, grease, and solvents.



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As discussed in the MND, mitigation measure MM-HAZ-1 would reduce this potential impact to less than significant. Mitigation measure MM-HAZ-1 would be applicable to the proposed modification as well as other project activities, and therefore, any impacts related to hazardous materials would be less than significant after mitigation.

### **2.9 Hydrology and Water Quality**

Construction activities related to the Proposed Project and proposed modifications may result in minimal temporary changes to drainage patterns or stormwater runoff. These changes would be negligible when compared to the existing conditions and as discussed in the MND, the Project would not contribute a substantial amount of stormwater into the stormwater drainage system or create additional sources of pollution. The Proposed Project would have a less-than-significant impact to the existing drainage pattern of the site and would not result in significant new hydrology or water quality impacts. Impacts to hydrology and water quality would be less than significant, and no mitigation measures would be necessary.

### **2.10 Land Use and Planning**

The proposed modifications to the Project would have no significant impacts on land use and planning. The Proposed Project would be in a General Plan designation of Preservation and within the Central and Coastal NCCP/HCP Reserve Boundary and is designated as Reserve Open Space (IRWD property) and Non-Reserve Open Space (Crean property). The Proposed Project would still be consistent with the City of Irvine General Plan and zoning designations for the site. Therefore, no impacts related to land use and planning are expected, and no mitigation measures would be required.

### **2.11 Minerals**

There are no known mineral resources that would be of value to the region and residents of the state (County of Orange 2011) on the Project site or in the Project vicinity that would be impacted by the Proposed Project. Therefore, no impacts on mineral resources would occur, and no mitigation measures would be required.

### **2.12 Noise**

The proposed modifications to the Project would occur within the construction schedule and parameters outlined and analyzed in the MND. Construction would involve the use of grading and excavation equipment for approximately 4 months, and would comply with the City of Irvine Noise Ordinance. Therefore, potential noise impacts would be less than significant and no mitigation measures are required.

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### **2.13 Population and Housing**

The Project and the proposed modifications would entail the construction of facilities that would convert the existing reservoir from an agricultural storage basin to a recycled water reservoir. The Project would not include new homes or business or otherwise generate population growth. Therefore, potential impacts related to population and housing would be less than significant and no mitigation measures are required.

### **2.14 Public Services/Utilities**

The Project and the proposed modifications would not require additional fire services and police protection; would not result in impacts to schools, libraries, or other public facilities; and does not require the construction or expansion of recreational facilities. The proposed modifications would occur within the construction schedule analyzed in the MND. Therefore, impacts related to public services/utilities would be less than significant, and no new mitigation measures would be required.

### **2.15 Recreation**

This Project would not generate an increase in population; therefore, an increase in the local neighborhood and regional park use would not occur. Further, the on-site fishing uses would not change as a result of the Proposed Project or the proposed modifications. Therefore, impacts related to recreation would be less than significant, and no mitigation measures would be required.

### **2.16 Transportation and Circulation**

There would be no change in the temporary lane or road closures during construction activities related to the proposed modifications. In addition, construction vehicle traffic would not interfere with bicycle or pedestrian circulation in the project area. There would be no change in traffic during construction activities related to the proposed project from construction trucks and vehicles associated with construction worker commutes. Therefore, impacts related to transportation and circulation would remain less than significant, and no mitigation measures would be required.

### **2.17 Utilities and Service Systems**

The Project would not result in water or wastewater demands, and would result in minimal solid waste generation and stormwater generation, as discussed in the MND. The proposed modifications would not change the analysis in the MND. Therefore, impacts related to utilities and service systems would remain less than significant, and no mitigation measures would be required.

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### **3.0 DETERMINATION**

Based on the information and analysis in this Addendum, and pursuant to Section 15162 of the CEQA Guidelines, IRWD has determined that:

1. There are no substantial changes to the Project that would require major revisions to the MND due to new, significant environmental effects or a substantial increase in the severity of impacts identified in the MND;
2. Substantial changes have not occurred in the circumstances under which the Project is being undertaken that would require major revisions to the MND to disclose new, significant environmental effects or a substantial increase in the severity of the impacts identified in the MND; and
3. There is no new information of substantial importance not known at the time the MND was certified that shows the project would have any new significant effects not discussed in the certified MND or a substantial increase in the severity of the impacts identified in the MND, or that mitigation measures or alternatives previously found not feasible, or that are considerably different from those analyzed in the MND, would substantially reduce one or more significant effects.

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### **4.0 REPORT PREPARERS**

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Becky Golden-Harrell, Technical Editor

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APPENDIX A  
*Final Biological Resources Technical Report*



FINAL

**Biological Resources Technical Report for the  
Syphon Reservoir Interim Facilities Project,  
Orange County, California**

*Prepared for:*

**Irvine Ranch Water District**  
Water Resources and Administration  
15600 Sand Canyon Avenue  
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FEBRUARY 2013

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**Final Biological Resources Technical Report  
for the Syphon Reservoir Interim Facilities Project**

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## **1.0 INTRODUCTION**

The proposed Syphon Reservoir Interim Facilities Project (Proposed Project or Project) consists of the construction of interim facilities to convert the existing Syphon Reservoir from an irrigation water storage facility to seasonal storage facility for recycled water. These interim facilities include the construction/installation of an access road, pipelines, electrical lines, transformers, drains, a manhole, and an operations facility. The Project is located immediately east of Portola Parkway and north of Toll Road 133, within Irvine Ranch Water District (IRWD) service boundary in the northern hills of the City of Irvine, Orange County, California. The Project is on the U.S. Geological Survey 7.5-minute El Toro Quadrangle in Section 29, Township 5 South, Range 8 West; 33°42'33.08" north latitude and 117°43'53.35" west longitude.

The Proposed Project is located on portions of two separately owned properties, the IRWD Syphon Reservoir property and the Crean property (Crean). Both properties are located within the Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) for the County of Orange Central Coastal Subregion, adopted in 1996. The Syphon Reservoir IRWD property was previously surveyed by Dudek in 2011 to assess a variety of biological resources (Dudek 2011). A recent biological survey of the Proposed Project study area was conducted by Dudek in October 2012 to verify biological resources documented from the 2011 surveys and inventory the existing resources present. Harmsworth Associates (HWA) conducted an evaluation of a drainage feature within the Project area in November 2012 (HWA 2012). The purpose of this biological resources technical report is to provide a description of the on-site vegetation, jurisdictional resources, and potential for plant and animal species recognized as sensitive by local, state, or federal wildlife agencies and/or environmental organizations. This report describes the biological character of the Project site, provides an analysis of direct and indirect impacts based on the Proposed Project design, analyzes the biological significance of the site with respect to regional resource planning, and discusses mitigation measures that will reduce any significant impacts to a level below significant. This report conforms with the Central Coastal Subregion NCCP/HCP (County 1996).

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## **2.0 PROJECT SETTING**

### **2.1 Project Location**

The Project is located near the eastern limits of the City of Irvine, Orange County, California, as depicted on Figure 1. Specifically, the Project is located directly south of the Syphon Reservoir between the south face of the dam and Portola Parkway. As shown on Figure 2, the study area is located on the U.S. Geological Survey 7.5-minute El Toro quadrangle, Township 5 South, Range 8 West, in Section 29. The central point of the study area is at longitude 117°43'53.35" west and latitude 33°42'33.08" north.

### **2.2 Soils**

According to U.S. Department of Agriculture and Natural Resources Conservation Service (USDA and NRCS 2012), there are three soil types found in the study area: Metz loamy sand, Soper gravelly loam 30%–50% slopes, and Sorrento loam 0%–2% slopes.

Metz loamy sand consists of very deep, excessively drained soils that formed from alluvial, sedimentary rocks. Metz soils are found on floodplains and alluvial fan and consist mostly of sandy loam. Soper gravelly loam soils are well-drained soils found along hills and side slopes. Soper gravelly loam soils are derived from residuum weathered from sandstone and consist of loam, gravelly clay loam, and weathered bedrock. Sorrento loams are well-drained soils found along alluvial fans at the toe of slopes. Sorrento loam soils are formed in alluvium derived from sedimentary rock and consist of loam, silty clay loam, and stratified loamy fine sand to silt loam. Of these soils, Soper and Sorrento soils would likely have a higher potential for rare plants due to the potential for clay lenses, which are known to support several endemic species.

### **2.3 Terrain**

The study area currently supports native vegetation communities, disturbed areas, and the Syphon Reservoir. On-site elevations range from approximately 360 feet above mean sea level near the edges of the reservoir to approximately 450 feet above mean sea level on the hilltops. The study area burned in October 2007 as part of the Santiago Fire and is currently in a post-fire succession.

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## **2.4 Land Uses**

### **2.4.1 On-Site Land Uses**

The northeastern portion of the study area is located within the 265-acre IRWD Syphon Reservoir property. The IRWD property currently supports a functioning reservoir, dam, access roads, and existing reservoir facilities related to reservoir operations.

The southern portion of the study area is located within the Crean property. The Crean property currently supports vacant land bounded between the IRWD property and Portola Parkway.

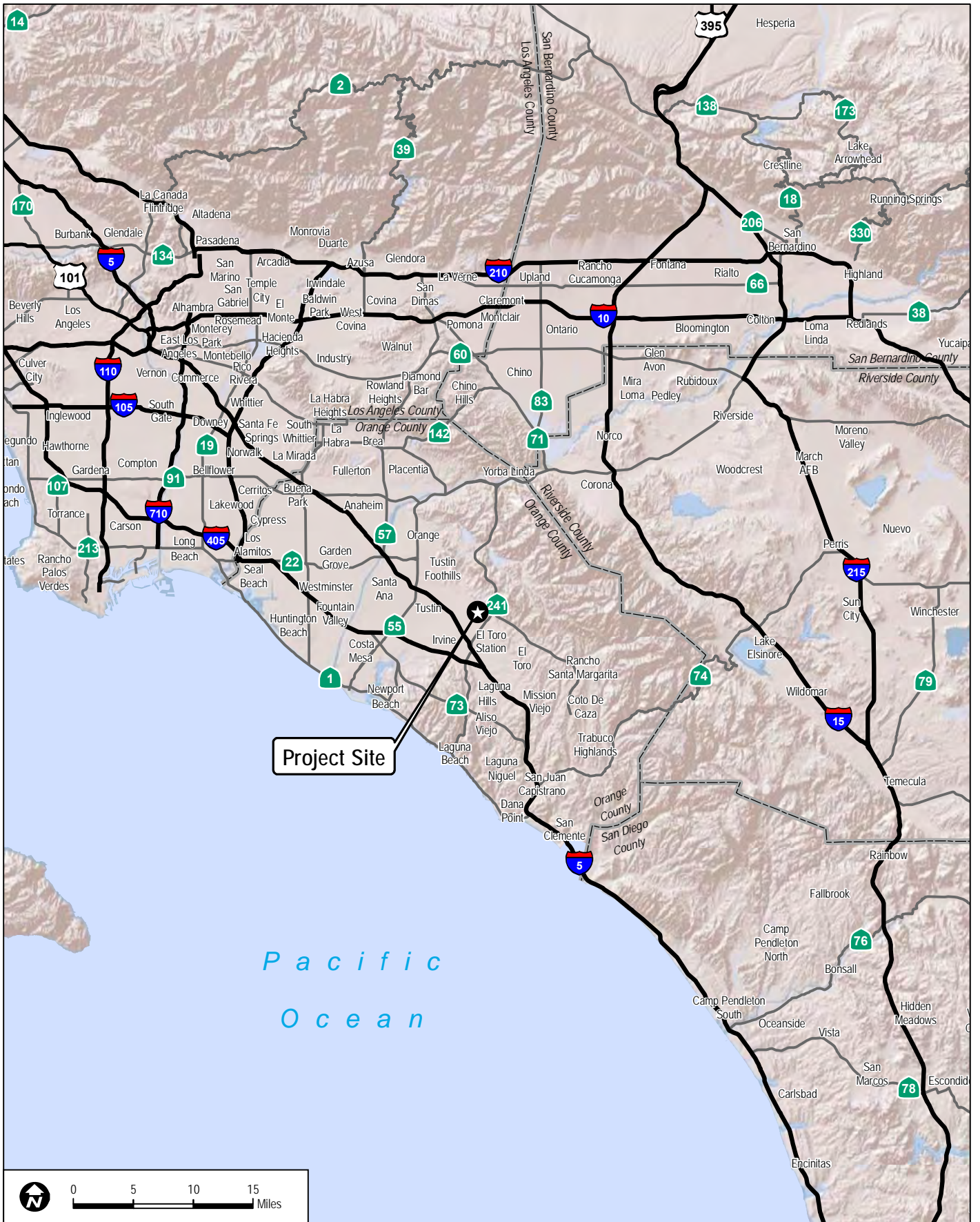
A small portion of the project extends over Portola Parkway; however, this area is not included in the study area because there are no potential biological resources within this area.

### **2.4.2 Surrounding Land Uses**

Surrounding land uses include the 265-acre IRWD Syphon Reservoir property to the north and east and residential properties to the northwest, south, and southwest.

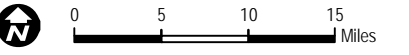
## **2.5 Hydrology**

The Project site is located in the Santa Ana River Watershed within the Lower Santa Ana River (HA 801.10). More specifically, it is located within the East Coastal Plain Hydrologic Subarea (HSA 801.11) of the watershed (Figure 3). The Project site is located approximately 5 miles east of San Diego Creek, which eventually flows into Newport Bay in the City of Newport Beach, California (RWQCB 1986).



Project Site

Pacific  
Ocean



**DUDEK**

SOURCE: IRWD 2009

7036-04

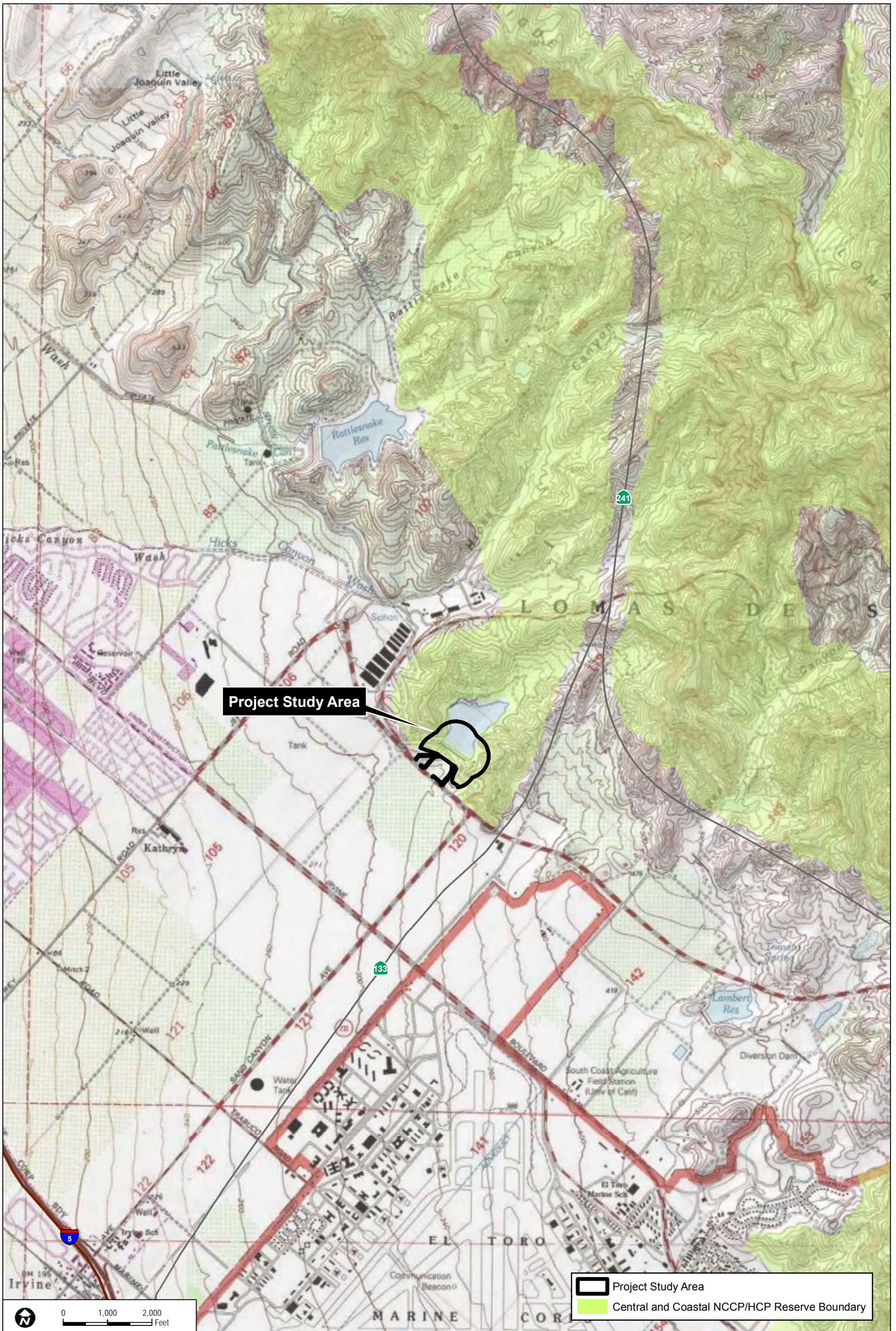
IRWD Syphon Reservoir Interim Facilities - Biological Technical Report

**FIGURE 1  
Regional Map**

**Final Biological Resources Technical Report  
for the Syphon Reservoir Interim Facilities Project**

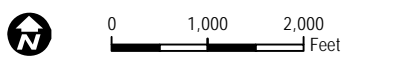
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**Project Study Area**

Project Study Area  
 Central and Coastal NCCP/HCP Reserve Boundary



**DUDEK**

SOURCE: IRWD 2009

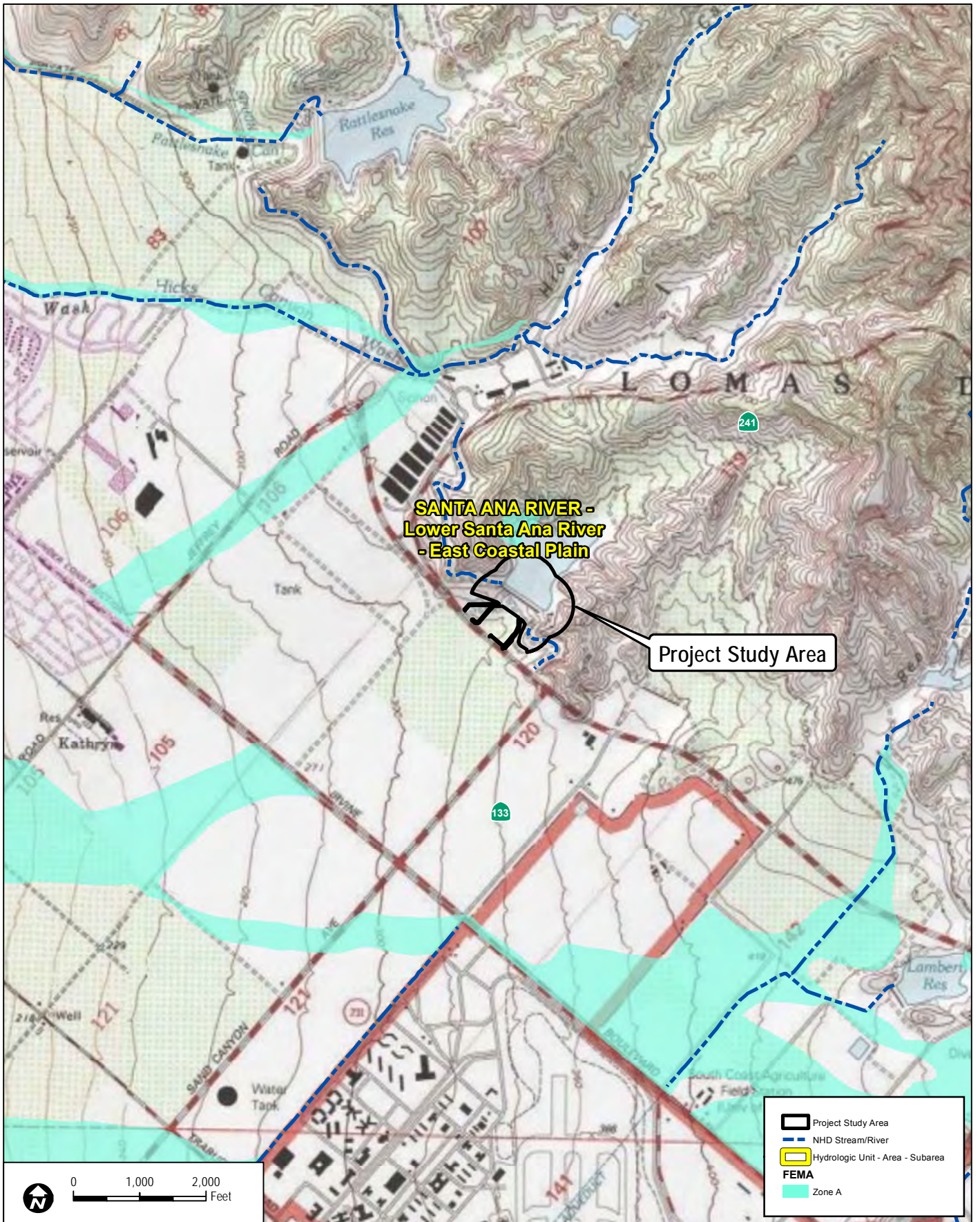
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IRWD Syphon Reservoir Interim Facilities - Biological Technical Report

**FIGURE 2**  
**Vicinity Map**



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**SANTA ANA RIVER -  
Lower Santa Ana River  
- East Coastal Plain**

Project Study Area

- Project Study Area
- NHD Stream/River
- Hydrologic Unit - Area - Subarea
- FEMA**
- Zone A

0 1,000 2,000  
Feet

**DUDEK**

SOURCES: USGS 7.5 Minute Series El Toro Quadrangle  
Federal Emergency Management Agency (FEMA)  
USGS National Hydrography Dataset

**FIGURE 3  
Hydrologic Setting**

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IRWD Syphon Reservoir Interim Facilities - Biological Technical Report

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## **3.0 METHODS**

Data regarding biological resources present in the study area were obtained through a review of pertinent literature and field reconnaissance; both are described in detail below.

### **3.1 Literature Review**

Prior to conducting the field investigation, a review of the existing biological resources and species within the vicinity of the study area was conducted using the California Department of Fish and Game (CDFG) California Natural Diversity Database (CNDDDB) (CDFG 2011, 2012a–d), the California Native Plant Society (CNPS) online *Inventory of Rare and Endangered Plants* (CNPS 2012), and U.S. Fish and Wildlife Service (USFWS) critical habitat data (2012).

In terms of regional preserve planning efforts, the Project site is located within the Central Coastal Subregion NCCP/HCP; and this document was consulted to ensure consistency with local conservation efforts, goals, and policies (County 1996). A Minor Amendment to the NCCP/HCP was approved for the Crean property in 2009, removing that property from the NCCP/HCP Reserve. Documentation of biological resources present on the property at that time is provided in report prepared by LSA Associates Inc. (LSA 2009).

General information regarding wildlife species present in the region was obtained from Hamilton and Willick (1996) for birds, Hall (1981) and Ingles (1965) for mammals, Stebbins (2003) for reptiles and amphibians, and Emmel and Emmel (1973) for butterflies. General information regarding vegetation communities and plant species was obtained from Gray and Bramlet (1992), Holland (1986), and Oberbauer et al. (2008). The hydrologic setting of the site was evaluated utilizing a federal waters database and is presented on Figure 3 (FEMA 2012).

### **3.2 Field Reconnaissance**

Dudek biologist Thomas Liddicoat conducted a biological reconnaissance survey of the study area that incorporated vegetation communities and land cover mapping, a formal jurisdictional delineation, and an evaluation of potential for special-status species to occur on site in October 2012. The Project survey study area was defined as the proposed interim facilities site plan and a 500-foot buffer surround facilities on IRWD property and an approximate ~~20-foot~~ 150-foot buffer surrounding facilities proposed on the Crean property. The survey was performed under favorable conditions to detect most plant and animal species present and was conducted on foot to ensure 100% visual coverall of the site, as described in Table 1.

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**Table 1**  
**Survey Conditions**

Date	Hours	Personnel	Conditions
10/24/12	0930-1145	Thomas Liddicoat	64°F-80°F; 75%-10% cloud cover; 0 mile per hour wind

In addition, HWA biologist Paul Galvin conducted an evaluation of a drainage feature on the Crean property on November 30, 2012 (HWA 2012).

### **3.2.1 Resource Mapping**

Mapping of the existing site conditions, biological resources, and jurisdictional areas present was performed directly in the field onto a 100-foot-scale (1 inch = 100 feet) aerial photograph-based field map with an overlay of the Project study area. Native plant community classifications used in this report follow the Habitat Classification System for Orange County (Gray and Bramlet 1992). Areas on site that supported less than 20% native plant species cover were mapped as disturbed, and areas that supported at least 20% native plant species but fewer than 50% native cover were mapped as a disturbed native vegetation community (e.g., disturbed coastal sage scrub).

A Global Positioning System (GPS) unit was used where necessary to record the biological resources of site. All areas identified as being potentially subject to the jurisdiction of the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and CDFG was also verified and mapped directly in the field. Following completion of the field work, Dudek Geographic Information System (GIS) Specialist Mark McGinnis digitized the mapped findings using ArcGIS and calculated coverage acreages using ArcCAD.

### **3.2.2 Flora**

All plant species encountered during the field survey were identified and recorded directly into a field notebook. Those species that could not be identified immediately were brought into the laboratory for further investigation. A compiled list of plant species observed on site is presented in Appendix A.

Latin and common names for plant species with a California Rare Plant Rank (CRPR) (formerly CNPS list) follow the CNPS online *Inventory of Rare and Endangered Plants* (CNPS 2012). For plant species without a CRPR, Latin names follow the Jepson Interchange List of Currently Accepted Names of Native and Naturalized Plants of California (Jepson Flora Project 2012).

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### **3.2.3 Fauna**

All wildlife species detected during the field survey by sight, calls, tracks, scat, or other signs were recorded directly into a field notebook. Binoculars (8.5x42 magnification) were used to aid in the identification of observed wildlife. In addition to species actually detected, expected wildlife use of the site was determined by known habitat preferences of local species and knowledge of their relative distributions in the area. A cumulative list of wildlife species observed within the study area is presented in Appendix B.

Scientific and common names of animals follow Crother (2008) for reptiles and amphibians, American Ornithologists' Union (AOU) (2012) for birds, Wilson and Reeder (2005) for mammals, North American Butterfly Association (NABA) (2001) for butterflies, and Moyle (2002) for fish.

### **3.2.4 Special-Status and/or Regulated Resources**

Special-status biological resources are defined as follows: (1) species that have been given special recognition by federal, state, or local conservation agencies and organizations due to limited, declining, or threatened population sizes; (2) species and habitat types recognized by local and regional resource agencies as sensitive; (3) habitat areas or plant communities that are unique, are of relatively limited distribution, or are of particular value to wildlife; and (4) wildlife corridors and habitat linkages. Regulated biological resources may or may not be considered special-status, but they meet jurisdictional determination criteria under any of several local, state, and/or federal laws. Such resources may be species locations, habitat, or topographic features such as drainage courses.

### **3.2.5 Jurisdictional Wetlands Delineation**

A formal delineation of jurisdictional "waters of the United States," including wetlands, under the regulation of the ACOE, CDFG, and RWQCB was conducted for the IRWD property.

The delineation was performed in accordance with the methods prescribed in the 1987 *Corps of Engineers Wetland Delineation Manual* (ACOE 1987) and the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (ACOE 2008). Pursuant to the federal Clean Water Act, ACOE- and RWQCB-jurisdictional areas include those supporting all three wetlands criteria described in the ACOE manual: hydric soils, hydrology, and hydrophytic vegetation. Areas regulated by the RWQCB are generally coincident with the ACOE, but they can also include isolated features that have evidence of surface water inundation pursuant to the state Porter-Cologne Act. These areas generally support at least one of the three ACOE wetlands indicators but are considered isolated through the lack of surface water hydrology/connectivity downstream. The extent of CDFG regulated

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areas typically include areas supporting a predominance of hydrophytic vegetation (i.e., 50% cover or greater) where associated with a stream channel.

To assist in the determination of jurisdictional areas on the IRWD property, data was collected at one sampling point. Hydrology, vegetation, and soils were assessed and sampling data was collected on an approved ACOE form (Appendix C). The Project site was evaluated for evidence of an ordinary high water mark, surface water, saturation, wetland vegetation, and nexus to a navigable water. The extent of any identified jurisdictional areas was determined by mapping the areas with similar vegetation and topography to the sampled locations. Any jurisdictional features were verified and recorded directly in the field using a GPS unit. Subsequent to the fieldwork, any collected GPS data was transferred to topographic base, and a GIS coverage was created.

An evaluation of jurisdiction of a drainage feature on the Crean property was performed by HWA based on a site visit conducted on November 30, 2012 (HWA 2012). The methods and results are summarized in a report attached as Appendix D.

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## 4.0 RESULTS

The quantification of biological resources described herein pertain to the Project site (i.e., proposed facilities on the IRWD property and associated pipeline easements on the Crean property), totaling approximately ~~1.83~~ 3.42 acres, and do not include the entire 500-foot and ~~20-~~ ~~foot~~ 150-foot survey buffers evaluated during the reconnaissance survey. Also, the portion of the project within Portola Parkway is not considered in this report because it is already developed and does not support biological resources. The 500-foot buffer on the IRWD property is included on Project maps to provide context as to the type of adjacent biological resources present only. Representative photographs of the study area are included as Appendix E.

### 4.1 Botany – Plant Communities

Based on species composition and general physiognomy, three vegetation communities and two land cover types identified within the Project site (on site): annual grassland, coastal sage scrub, disturbed mulefat scrub, disturbed areas, and developed areas. The communities and land covers mapped on site are described below, their acreages are presented in Table 2, and their spatial distributions are shown in Figure 4.

**Table 2**  
**Acreage of Vegetation Communities and Land Cover Types**

Vegetation Community/Land Cover Type	Code <sup>1</sup>	Acres		Total
		IRWD Property	Crean Property	
<i>Upland</i>				
Annual Grassland (AGL)	4.1	<del>0.1</del> <u>0.14</u>	<del>0.62</del> <u>2.34</u>	<del>0.66</del> <u>2.45</u>
Coastal Sage Scrub <sup>2</sup> (NA-VDTCSS)	2.3	<del>0.05</del> <u>0.10</u>	0.20	<del>0.25</del> <u>0.30</u>
Developed Areas (DEV)	15.6	<del>0.21</del> <u>0.24</u>	<del>0.57</del> <u>0.30</u>	<del>0.78</del> <u>0.54</u>
Disturbed Areas (DIS)	16.1	0.08	—	0.08
<i>Wetland</i>				
Disturbed Mulefat Scrub (dMFS)	7.3	<del>0.03</del> <u>0.34</u>	0.02	<del>0.05</del> <u>0.6</u>
Total		<del>0.56</del> <u>4.2</u>	<del>1.41</del> <u>2.86</u>	<del>1.83</del> <u>3.42</u>

<sup>1</sup>Vegetation Code is from vegetation described in Gray and Bramlet 1992.

<sup>2</sup>Includes the disturbed form (i.e., dNA-VDTCSS).

#### 4.1.1 Annual Grassland (4.1)

According to Gray and Bramlet (1992), annual grassland (AGL) is typically dominated by the following annual grass species: *Bromus*, *Avena*, *Vulpia*, and *Hordeum*. Other common forbs include *Amsinckia*, *Cryptantha*, *Erodium*, *Brassica*, and *Centaurea*. Annual grassland on site is



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dominated mustard (*Brassica*) species and star-thistle (*Centaurea solstitialis*), but the area also supports foxtail brome (*Bromus madritensis*), fennel (*Foeniculum vulgare*), laurel sumac (*Malosma laurina*), blue elderberry (*Sambucus mexicanus*), castor bean (*Ricinus communis*), and telegraph weed (*Heterotheca grandiflora*).

Annual grassland occupies a total of ~~0.66~~2.45 acres on site (~~0.10~~14 acre IRWD property, ~~0.62~~2.34 acres Crean property). Within the Project site, this community has a high component of non-native invasive forbs (primarily mustard), which is likely the result of prior disturbance. Such a disturbance history is consistent with the site location between Portola Parkway and Syphon Reservoir and is consistent with previously mapping that classified this areas as disturbed or barren (LSA 2009). Annual grasslands may provide foraging habitat for many raptor species.

### **4.1.2 Coastal Sage Scrub (2.3)**

According to Gray and Bramlet (1992), Venturan-Diegan transitional coastal sage scrub (NA-VDTCCS) vegetation consists of low-stature, mesophyllous, drought-deciduous species. Venturan-Diegan coastal sage scrub is considered a transitional association that contains elements of two recognized geographical associations of sage, Venturan and Diegan.

Within the Project site, the coastal sage scrub is dominated by coastal sagebrush (*Artemisia Californica*), laurel sumac (*Malosma laurina*), spreading goldendbush (*Isocoma menziesii*), bush sunflower (*Encelia Californica*), and deerweed (*Lotus scoparius*). Other species within the coastal sage community on site include wreath plant (*Stephanomeria virgata*), ladies' tobacco (*Pseudognaphalium californicum*), mulefat (*Baccharis salicifolia*), mustard species, star thistle, and eucalyptus saplings (*Eucalyptus globulus*). The coastal sage scrub (including the disturbed form) on site occupies approximately ~~0.25~~30 acre (~~0.05~~10 acre IRWD property, 0.20 acre Crean property).

### **4.1.3 Mulefat Scrub (7.3)**

Mulefat scrub (MFS) is dominated by dense stands of mulefat with other occurring species, including willow (*Salix* spp.). This community generally has little to no understory, but some areas contain coastal sagebrush, Ambrosia species, castor bean, and other perennial herbs.

This community is disturbed on site (approximately 25% native species cover) and supports mulefat, Mexican fan palm, (*Washingtonia robusta*), wreath plant, coyote bush (*Baccharis pilularis*), pulicaria (*Pulicaria paludosa*), horseweed (*Conyza canadensis*), and foxtail brome grass. There is a total of ~~0.05~~6 acre of disturbed mulefat on the Project site (~~0.03~~4 acre IRWD property, 0.02 acre Crean property).



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### 4.1.4 Developed (15.6)

According to Gray and Bramlet (1992), the areas on site are classified as “other disturbed areas,” which on site specifically refers to the existing gravel areas, gravel access roads, and the cemented areas associated with Portola Parkway. These developed areas (DEV) are predominantly unvegetated on site and occupy a majority of the Project site, totaling ~~0.78~~54 acre (0.~~24~~4 acre IRWD property, 0.~~57~~30 acre Crean property).

### 4.1.5 Disturbed Habitat (16.0)

Disturbed habitat (DIS) refers to areas that lack vegetation but still retain a pervious surface. The disturbed habitat on site is classified by Gray and Bramlet as “cleared or graded,” which on site specifically refers to the south face of the dam. This area is routinely maintained by IRWD and cleared free of vegetation to maintain the stability of the dam. The area is primarily bare ground and supports the following sparse annual non-native species: mustard, star-thistle, castor bean, horseweed, wreath plant, and telegraph weed. Disturbed habitat occupies 0.08 acre on site (0.08 acre IRWD property, 0.0 acre Crean property).

## 4.2 Zoology – Wildlife Diversity

### 4.2.1 General Wildlife

The Project site supports habitat for a limited number of common upland and wetland wildlife species. The annual grassland that occupies most of the site provides limited habitat value due to the lack of plant species and structural diversity, low cover and foraging value, the small site size, and the isolation of the Project site. The riparian vegetation supports some wildlife species, but the overall diversity of species on site is low due to surrounding development, limited native habitat, and the highly disturbed nature of the site. Eighteen species of wildlife were observed during the surveys and are discussed further below (Appendix B).

### 4.2.2 Birds

Sixteen species of birds were observed during surveys. Typical species observed on site include Anna’s hummingbird (*Calypte anna*) and mourning dove (*Zenaida macroura*). One red-tailed hawk (*Buteo jamaicensis*) was observed flying over the site.

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### **4.2.3 Reptiles and Amphibians**

One reptile species was observed on site, common side-blotched lizard (*Uta stansburiana*). Some species that were not observed but are likely to occur include common species such as the western fence lizard (*Sceloporus occidentalis*) and gopher snake (*Pituophis melanoleucus*).

### **4.2.4 Mammals**

Two mammal species were detected, California ground squirrel (*Otospermophilus beecheyi*) and coyote (*Canis latrans*). Small mammal burrows likely made by ground squirrels were also observed on site. Other common fauna species that were not observed but are likely to occur on site include common raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginica*). Common small rodent species such as woodrats (*Neotoma* spp.), pocket mice (*Chaetodipus* spp.), or deer mice (*Peromyscus* spp.) are also likely to occur on the Project site.

### **4.2.5 Invertebrates**

No invertebrates were recorded during the field survey.

## **4.3 Special-Status/Regulated Resources**

Endangered, rare, or threatened species, as defined in Section 15380(b) of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.), are referred to as “special-status species” in this report and include the following: (1) endangered or threatened species recognized in the context of the California Endangered Species Act and the federal Endangered Species Act; (2) plant species with a CRPR (Lists 1 through 4) (CDFG 2012c; CNPS 2012); (3) California Species of Special Concern (SSC) and Watch (WL) species, as designated by CDFG (2011); (4) mammals and birds that are fully protected (FP) species, as described in California Fish and Game Code, Sections 4700 and 3511; (5) Birds of Conservation Concern (BCC), as designated by the USFWS (2012); and (6) plant and wildlife species that are “covered” under the Central Coastal Subregion NCCP/HCP (County 1996).

### **4.3.1 Special-Status Plant Species**

No special-status plant species were observed on site during the 2012 survey. A records search of CNPS and CNDDB was utilized to develop a list of special-status plant species that may have potential to occur on site due to the presence of suitable habitat (taking into consideration vegetation communities, soils, elevation, and geographic range). A list of these special-status species (i.e., federally, state, or locally listed species), their suitable habitat conditions (life form,

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blooming period, etc.), and their potential to occur on site based on the findings of the field investigations are presented in Table 3. Species considered special-status (i.e., covered) under the NCCP/HCP, including conditionally covered species under the NCCP/HCP, are also included in Table 3. None of the species presented in Table 3 were detected on site during the field surveys.

As presented in Table 3, there are no special-status plant species that are determined to have a moderate or high potential to occur on site. The disturbed character of the Project site and proximity to developed areas and existing facility roads limit the potential for special-status plants. No special-status plants are expected to occur on the Project site, and focused rare plant surveys are not considered necessary to adequately determine potential impacts to special-status plant species.

**Table 3  
Special-Status Plant Species and Potential to Occur in the Project Area**

Scientific Name	Common Name	Status Federal/ State/NCCP	CRPR	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Status On Site or Potential to Occur <sup>1, 2</sup>
<i>Abronia villosa</i> var. <i>aurita</i>	Chaparral sand- verbena	None/ None/ None	1B.1	Chaparral, coastal scrub, desert dunes; sandy/ annual herb/ January - September/ 260-5300 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Allium munzii</i>	Munz's onion	FE/ ST/ None	1B.1	Chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, valley and foothill grassland/ perennial bulbiferous herb/ March-May/ 974-3500 ft.	Low potential to occur. Site is outside the species' recorded elevation range. Recorded within the region.
<i>Aphanisma blitoides</i>	Aphanisma	None/ None/ None	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub; annual herb/ March- June/ <1000 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Asplenium vespertinum</i>	Western spleenwort	None/ None/ None	4.2	Chaparral, cismontane woodland, coastal scrub; rocky/ /February-June/ 600-3300 ft.	Low potential to occur. Limited suitable habitat is present on site. Site is outside the species' recorded elevation range. Recorded within the region.

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**Table 3**  
**Special-Status Plant Species and Potential to Occur in the Project Area**

Scientific Name	Common Name	Status Federal/ State/NCCP	CRPR	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Status On Site or Potential to Occur <sup>1,2</sup>
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	FE/ None/ None	1B.1	Chaparral, Coastal scrub, Valley and foothill grassland/recent burns or disturbed areas, usually sandstone with carbonate layers/ perennial herb/ January-August/ 10-2100 ft.	Low potential to occur. Site has been burned recently (2007) and is disturbed but lacks appropriate soils. Recorded within the region.
<i>Atriplex coulteri</i>	Coulter's saltbush	None/ None/ None	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland; alkaline or clay/ perennial herb/ March-October/ 10-1500 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Atriplex pacifica</i>	South Coast saltscale	None/ None/ None	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, playas/ annual herb/ March-October/ < 500 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Atriplex parishii</i>	Parish's brittlescale	None/ None/ None	1B.1	Chenopod scrub, Playas, Vernal pools/alkaline/April-October/ 30-600 ft.	No potential to occur. No suitable habitat is present on site and species is thought to be extirpated. Recorded within the region.
<i>Atriplex serenana</i> var. <i> davidsonii</i>	Davidson's saltscale	None/ None/ None	1B.2	Coastal bluff scrub, coastal scrub; alkaline/ annual herb/ April-October/ 30-650 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Baccharis malibuensis</i>	Malibu baccharis	None/ None/ None	1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland/ perennial deciduous shrub/ August/ 490-1000 ft.	Site is outside the species' recorded elevation range. Recorded within the region.
<i>Brodiaea filifolia</i>	Thread-leaved brodiaea	FT/ SE/ None	1B.1	Chaparral (openings) cismontane woodland, coastal scrub, playas, valley and foothill grassland, vernal pools; often clay/ bulbiferous herb/ March-June/ 400-2800 ft.	Low potential to occur. No suitable habitat is present and site is slightly outside the species' recorded elevation range. Recorded within the vicinity.

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Scientific Name	Common Name	Status Federal/ State/NCCP	CRPR	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Status On Site or Potential to Occur <sup>1,2</sup>
<i>Calandrinia breweri</i>	Brewer's calandrinia	None/ None/ None	4.2	Chaparral, coastal scrub; sandy or loamy, disturbed sites and burns/ annual herb/ March-June/ 30-4000 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Calochortus catalinae</i>	Catalina mariposa lily	None/ None/ Covered	4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland/ bulbiferous herb/ March-June/ 50 – 2300 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the vicinity.
<i>Calochortus plummerae</i>	Plummer's mariposa lily	None/None/ None	1B.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland/granitic, rocky/ May-July/ 330-5600 ft.	Low potential to occur. Limited suitable habitat and soils not present on site. Recorded within the region.
<i>Calochortus weedii</i> var. <i>intermedius</i>	intermediate mariposa lily	None/None/C overed	1B.2	Chaparral, Coastal scrub, Valley and foothill grassland/rocky, calcareous/ May-July/ 340-2800 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the vicinity.
<i>Camissonia lewisii</i>	Lewis's evening primrose	None/ None/ None	3	Coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland; sandy or clay/ annual herb/ March-May (June)/ <1000 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the vicinity.
<i>Cercocarpus minutiflorus</i>	Small-flowered mountain mahogany	None/ None/ Covered	CBR	Chaparral (coastal area)/ shrub/ March-May	Low potential to occur. Limited suitable habitat is present on site. Included due to coverage under the NCCP/HCP.
<i>Centromadia</i> (= <i>Hemizonia</i> ) <i>parryi</i> spp. <i>australis</i>	Southern tarplant	None/ None/ None	1B.1	Marshes and swamps (margins), valley and foothill grassland (vernally mesic), vernal pools/ annual herb/ May-November/ < 400 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.



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**Table 3  
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Scientific Name	Common Name	Status Federal/ State/NCCP	CRPR	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range	Status On Site or Potential to Occur <sup>1,2</sup>
<i>Centromadia pungens</i> ssp. <i>laevis</i>	Smooth tarplant	None/ None/ None	1B.1	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland; alkaline/ annual herb/ April-September/ <1580 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	None/ None/ None	1B.1	Coastal bluff scrub, coastal dunes/ annual herb/ January -August/ 10- 330 ft.	Low potential to occur. No suitable habitat is present on site. Recorded within the region.
<i>Chorizanthe parryi</i> var. <i>fernandina</i>	San Fernando Valley spineflower	FC/ SE/ None	1B.1	Coastal scrub(sandy) / annual herb/ April-July/ 500-4000 ft.	Low potential to occur. Limited suitable habitat is present on site. Site is outside the species' recorded elevation range and last observed in Orange County in 1902. Recorded within the region.
<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	Long-spined spineflower	None/ None/ None	1B.2	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland; often clay/ annual herb/ April-July/ 100-5000 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Chorizanthe xanti</i> var. <i>leucotheca</i>	White-bracted spineflower	None/ None/ None	1B.2	Coastal scrub, Mojavean desert scrub, pinyon and juniper woodland/ annual herb/ April-June/ 980-3900 ft.	Low potential to occur. Limited suitable habitat is present on site. Site is outside the species' recorded elevation range. Recorded within the region.
<i>Cistanthe maritima</i>	Seaside cistanthe	None/ None/ None	4.2	Coastal bluff scrub, coastal scrub, valley and foothill grassland/ annual herb/ Feb-Aug/ 16-980 ft.	Low potential to occur. No suitable habitat is present on site. Recorded within the region.
<i>Clinopodium chandleri</i>	San Miguel savory	None/ None/ None	1B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland/ perennial shrub/ March- July/ 390-3500 ft.	Low potential to occur. No suitable habitat is present and site is slightly outside the species' recorded elevation range Recorded within the region.

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**Table 3**  
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<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	Summer-holly	None/ None/ None	1B.2	Chaparral, cismontane woodland/ evergreen shrub/ April-June/100-1800 ft.	Low potential to occur. Limited suitable habitat is present on site. Evergreen species would have been observed during surveys. Recorded within the region.
<i>Deinandra paniculata</i>	Paniculate tarplant	None/ None/ None	4.2	Coastal scrub, valley and foothill grassland, vernal pools; usually vernal mesic/ annual herb/ April-November/ 80-3100 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the vicinity.
<i>Dichondra occidentalis</i>	Western dichondra	None/ None/ Covered	4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland/ rhizomatous herb/ March-May/ 160-1650 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Dodecahema leptoceras</i>	slender-horned spineflower	FE/ SE/ None	1B.1	Chaparral, Cismontane woodland, Coastal scrub(alluvial fan)/sandy/ April-June/ 660-2500 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the vicinity.
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Blochman's dudleya	None/ None/ Covered	1B.1	Coastal bluff scrub, chaparral coastal scrub and valley and foothill grassland/ perennial herb/ April-June/ 16-1480 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	Santa Monica dudleya	FT/ None/ Covered	1B.2	Chaparral, Coastal scrub/volcanic or sedimentary, rocky/ March-June/ 500-5500 ft.	Low potential to occur. Limited suitable habitat is present and site is outside the species' recorded elevation range. Recorded within the region.
<i>Dudleya multicaulis</i>	Many-stemmed dudleya	None/ None/ None	1B.2	Chaparral, coastal scrub, valley and foothill grassland; often clay/ perennial herb/ April-July/ 50-2600 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the vicinity.
<i>Dudleya stolonifera</i>	Laguna Beach dudleya	FT/ ST/ Covered	1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland/rocky/ May-July/ 30-850 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.

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<i>Dudleya viscida</i>	Sticky dudleya	None/ None/ None	1B.2	Coastal bluff scrub, chaparral, coastal scrub; rocky/ perennial herb/ May-June/ 30-1800 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Santa Ana River woollystar	FE/ SE/ None	1B.1	Chaparral, Coastal scrub(alluvial fan)/sandy or gravelly/ perennial herb/ May-September/ 300-2000 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Euphorbia misera</i>	Cliff spurge	None/ None/ Covered	2.2	Coastal bluff scrub, coastal scrub, Mojavean desert scrub; rocky/ shrub/ December-August/ 30- 1650 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Harpegonella palmeri</i>	Palmer's grapplinghook	None/ None/ Covered	4.2	Chaparral, coastal scrub, valley and foothill grassland; clay/ annual herb/ March- May/ 60-3100 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	Los Angeles sunflower	None/ None/ None	1A	Coastal salt marsh, wetland-riparian/ August- October/ 30-5500 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Hesperocyparis forbesii</i>	Tecate cypress	None/ None/ Covered	1B.1	Closed-cone coniferous forest, Chaparral/clay, gabbroic or metavolcanic/ 260-4900 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the vicinity.
<i>Hordeum intercedens</i>	vernal barley	None/ None/ None	3.2	Coastal dunes, Coastal scrub, Valley and foothill grassland(saline flats and depressions), Vernal pools/ March-June/ 15- 3300 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the vicinity.
<i>Horkelia cuneata</i> ssp. <i>puberula</i>	Mesa horkelia	None/ None/ None	1B.1	Chaparral(maritime), Cismontane woodland, Coastal scrub/sandy or gravelly/ February-July/ 200-2600 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Imperata brevifolia</i>	California satintail	None/ None/ None	2.1	Chaparral, Coastal scrub, Mojavean desert scrub, Meadows and seeps(often alkali), Riparian scrub/mesic/ September- May/ 0-4000 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.

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<i>Isocoma menziesii</i> var. <i>decumbens</i>	Decumbent goldenbush	None/ None/ None	1B.2	Chaparral, coastal scrub (sandy, often disturbed areas)/ shrub/ April- November/ 30-450 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	None/ None/ None	1B.1	Saltwater marsh and swamps, playas, vernal pools/ annual herb/ February-June/ <4000 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Lepechinia</i> <i>cardiophylla</i>	Heart-leaved pitcher sage	None/ None/ Covered	1B.2	Chaparral, cismontane woodland, closed-cone coniferous forest; perennial shrub/ April- June/ 1700-4500 ft.	Low potential to occur. Limited suitable habitat is present and site is outside the species' recorded elevation range. Recorded within the region.
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	None/ None/ None	1B.2	Chaparral, coastal scrub/ annual herb/ January-July/ < 2900 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the vicinity.
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i>	Ocellated Humbolt lily	None/ None/ None	4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland/openings/ perennial bulbiferous herb/ March-July(Aug)/ 100- 5910 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Malacothrix saxatilis</i> var. <i>saxatilis</i>	cliff malacothrix	None/ None/ None	4.2	Coastal bluff scrub, Coastal scrub/ perennial rhizomatous herb/ March- September/ 10-675 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Mimulus clevelandii</i>	Cleveland's bush monkeyflower	None/ None/ None	4.2	Chaparral, Cismontane woodland, Lower montane coniferous forest/gabbroic, often in disturbed areas, openings, rocky/ perennial rhizomatous herb/ April- June/ 2675-6250 ft.	Low potential to occur. Limited suitable habitat is present on site and site is outside the species' recorded elevation range. Recorded within the region.
<i>Mimulus diffusus</i>	Palomar monkeyflower	None/ None/ None	4.3	Chaparral, Lower montane coniferous forest/sandy or gravelly/ annual herb/ April-June/ 4000-6000 ft.	Low potential to occur. Limited suitable habitat is present on site and site is outside the species' recorded elevation range. Recorded within the region.

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<i>Monardella hypoleuca</i> ssp. <i>lanata</i>	Felt-leaved monardella	None/ None/ None	1B.2	Chaparral, cismontane woodland/ rhizomatous herb/ June-August/ 1000-3600 ft.	Low potential to occur. Limited suitable habitat is present on site. Site is outside the species' recorded elevation range Recorded within the region.
<i>Monardella macrantha</i> ssp. <i>hallii</i>	Hall's monardella	None/ None/ None	1B.3	Broadleaved upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland/ June-October/ 2400-7200 ft.	Low potential to occur. Limited suitable habitat is present on site. Site is outside the species' recorded elevation range Recorded within the region.
<i>Nama stenocarpum</i>	Mud nama	None/ None/ None	2.2	Marshes and swamps, lake margins, riverbanks/ annual-perennial herb/ January-July/ 15-1650 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the vicinity.
<i>Navarretia prostrata</i>	Prostrate navarretia	None/ None/ None	1B.1	Coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools; annual herb/ April-July/ 50-3970 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Nolina cismontana</i>	Chaparral nolina	None/ None/ None	1B.2	Chaparral, coastal scrub; sandstone or gabbro/ evergreen shrub/ May-July/ 460-4200 ft.	Low potential to occur. Limited suitable habitat is present on site. Evergreen shrub would have been observed during surveys. Recorded within the vicinity.
<i>Penstemon californicus</i>	California beardtongue	None/ None/ None	1B.2	Chaparral, lower montane coniferous forest, pinyon and juniper woodland (sandy)/ perennial herb/ May-August/ 3800-7545 ft.	Low potential to occur. Limited suitable habitat is present on site. Site is outside the species' recorded elevation range Recorded within the region.
<i>Pentachaeta aurea</i> ssp. <i>allenii</i>	Allen's pentachaeta	None/ None/ None	1B.1	Coastal scrub(openings), Valley and foothill grassland/ March-June/ 250-1700 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the vicinity.
<i>Phacelia keckii</i>	Santiago Peak phacelia	None/ None/ None	1B.3	Closed-cone coniferous forest, Chaparral/ May-June/ 1800-5300 ft.	Low potential to occur. Limited suitable habitat is present on site. Site is outside the species' recorded elevation range Recorded within the region.

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<i>Phacelia ramosissima</i> var. <i>australitoralis</i>	south coast branching phacelia	None/ None/ None	3.2	Chaparral, Coastal dunes, Coastal scrub, Marshes and swamps(coastal salt)/sandy, sometimes rocky/ March-August/ 15-1000 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Pickeringia montana</i> var. <i>tomentosa</i>	woolly chaparral-pea	None/ None/ None	4.3	Chaparral/gabbroic, granitic, clay/ evergreen shrub/ May-August/ <5580 ft.	Low potential to occur. Limited suitable habitat is present on site. Evergreen shrub would have been observed during surveys. Recorded within the region.
<i>Piperia leptopetala</i>	narrow-petaled rein orchid	None/ None/ None	4.3	Cismontane woodland, Lower montane coniferous forest, Upper montane coniferous forest/ perennial herb/ May-July/ 1250-7300 ft.	Low potential to occur. Limited suitable habitat is present and site is outside the species' recorded elevation range. Recorded within the region.
<i>Polygala cornuta</i> var. <i>fishiae</i>	Fish's milkwort	None/ None/ None	4.3	Chaparral, Cismontane woodland, Riparian woodland/ perennial deciduous shrub/ May-August/ 330-3610 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Pseudognaphalium leucocephalum</i>	white rabbit-tobacco	None/ None/ None	2.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland/sandy, gravelly/ July-August/ 0-6900 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Quercus dumosa</i>	Nuttall's scrub oak	None/ None/ Covered	1B.1	Chaparral, coastal scrub, closed-cone coniferous forest; sandy, clay loam/ evergreen shrub/ February-April/ 50-1300 ft.	Low potential to occur. Limited suitable habitat is present on site. Evergreen shrub would have been observed during surveys. Recorded within the region.
<i>Romneya coulteri</i>	Coulter's matilija poppy	None/ None/ Covered	4.2	Chaparral, Coastal scrub/often in burns/ perennial rhizomatous herb/ March-July/ 70-3940 ft.	Absent. Tall perennial species would have been observed. Recorded within the region.
<i>Senecio aphanactis</i>	chaparral ragwort	None/ None/ None	2.2	Chaparral, Cismontane woodland, Coastal scrub/sometimes alkaline/ January-April/ 50-2600 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the vicinity.

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<i>Sidalcea neomexicana</i>	salt spring checkerbloom	None/ None/ None	2.2	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas/alkaline, mesic/ March-June/ 50-5000 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Suaeda esteroa</i>	Estuary seablite	None/ None/ None	1B.2	Coastal salt marshes and swamps/ perennial herb/ May-October (Jan)/ < 20 ft.	Low potential. Site is outside the species' recorded elevation range and no suitable habitat on site. Recorded within the region.
<i>Symphotrichum defoliatum</i>	San Bernardino aster	None/ None/ None	1B.2	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Meadows and seeps, Marshes and swamps, Valley and foothill grassland(vernally mesic)/near ditches, streams, springs/ July-November/ 6-6700 ft.	Low potential to occur. Limited suitable habitat is present on site. Recorded within the region.
<i>Tetradococcus dioicus</i>	Parry's tetradococcus	None/ None/ None	1B.2	Chaparral, coastal scrub/ deciduous shrub/ April-May/ 550-3300 ft.	Low potential to occur. Shrub would have been observed during surveys. Site is outside the species' recorded elevation range. Recorded within the region.
<i>Verbesina dissita</i>	big-leaved crownbeard	FT/ ST/ None	1B.1	Chaparral(maritime), Coastal scrub/ April-June/ 150-670 ft.	Low potential to occur. Known from only four occurrences in southern Laguna Beach. Recorded within the region.

The federal and state status of species is based on the Special Plants List (September 2010), California Department of Fish and Game.

**Federal Designations:**

FE: Federally-listed as endangered

FT: Federally-listed as threatened

FC: Federal Candidate

**State Designations:**

SE: State-listed as endangered

ST: State-listed as threatened

**CRPR:**

CBR: Considered but Rejected

**NCCP Designations:**

Covered: Central-Coastal NCCP/NCP (includes target species, covered species, and conditionally covered species)

**Notes:**

<sup>1</sup>Vicinity = El Toro 7.5 minute quadrangle

<sup>2</sup>Region = Nine, 7.5 minute quadrangles including and surrounding El Toro.

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### 4.3.2 Special-Status Wildlife Species

Two special status wildlife species were detected on the Project site during the survey, the federally listed threatened California gnatcatcher (*Polioptila californica*) (gnatcatcher) and the NCCP/HCP covered coyote. Both species were observed within the coastal sage (i.e., NA-VDTCSS and dNA-VDTCSS) on site. Focused surveys for gnatcatcher were conducted by Dudek in 2011 and concluded that the IRWD Syphon Reservoir property supports multiple breeding pairs of gnatcatcher (Dudek 2011). The gnatcatcher pair nearest the Project site recorded in the 2011 survey report is presented on Figure 4 of this report. Also presented on Figure 4 is a special-status species location for coastal cactus wren (*Campylorhynchus brunneicapillus*) that was recorded by the Nature Reserve of Orange County (NROC) during the annual NCCP/HCP biological surveys (NROC 2011). Cactus wren has a low potential to occur within the Project site because there are no suitable cactus thickets on site.

A CNDDDB records search was performed to develop a list of special-status wildlife species that may have potential to occur on site based to the presence of suitable habitat, elevation, and geographic range. A list of special-status species (i.e., federally, state, or locally listed species), their favorable habitat conditions, and their potential to occur on site based on the results of the field investigations are presented in Table 4. Species considered special-status (i.e., covered) under the NCCP/HCP, including conditionally covered species, are also included in Table 4.

As presented in Table 4, 13 additional special-status wildlife species are determined to have a moderate potential to occur on site. These wildlife species include the following: burrowing owl (*Athene cunicularia*), California horned lark (*Eremophila alpestris*), Cooper's hawk (*Accipiter cooperii*), ferruginous hawk (*Buteo regalis*), northern harrier (*Circus cyaneus*), prairie falcon (*Falco mexicanus*), red-shouldered hawk (*Buteo lineatus*), Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), white-tailed kite (*Elanus leucurus*), coast horned lizard (*Phrynosoma blainvillei*), coastal western whiptail (*Aspidoscelis tigris stejnegeri*), orange throated whiptail (*Aspidoscelis hyperythra*), and northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*). Due to limited suitable habitat and small size of the Project site, these species have a moderate to high potential to forage on site, but the potential for nesting is either low or moderate. Bird species that have a moderate potential to nest on site include California horned lark and Southern California rufous-crowned sparrow, while the potential for nesting raptors is low to not anticipated, except for burrowing owl, which has a moderate potential to nest on site. Only one special-status wildlife species, California gnatcatcher, was observed on site during the survey. The 2011 focused survey for this species found very limited nesting activities within this Project area, presumably due to the low-quality habitat and proximity to dam operations activities. No raptor nests were detected on site during the reconnaissance survey. Due to limited potential of special-status animals occurring on site and the small Project size (i.e., less than 2 acres), no focused wildlife surveys are needed to adequately determine potential impacts to special-status wildlife species.



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**Table 4  
Special-Status Wildlife Species And To Potential To Occur In The Project Area**

Scientific Name	Common Name	Status Federal/ State/NCCP	Primary Habitat Associations	Status on Site or Potential to Occur <sup>1,2</sup>
<i>Amphibians</i>				
<i>Aneides lugubris</i>	Arboreal salamander	None/ None/ Covered	Oak and sycamore woodland and forest; moist habitats under rocks and woody debris	Not expected. No suitable habitat on site. Species is not recorded in the region, but covered under the NCCP.
<i>Anaxyrus [=Bufo] californicus</i>	Arroyo toad	FE/ SSC/ Covered	Stream channels for breeding (typically 3 <sup>rd</sup> order); adjacent stream terraces and uplands for foraging and wintering.	Not expected. No suitable stream habitat on site. Species is recorded within the vicinity <sup>1</sup> .
<i>Batrachoseps nigriventris</i>	Black-bellied slender salamander	None/ None/ Covered	Moist canyon woodland and forest and chaparral; moist habitats under rocks, logs and bark	Not expected. Lack of suitable habitat on site. Species is not recorded in the region, but covered under the NCCP.
<i>Lithobates pipiens</i>	Northern leopard frog	FS/ SSC/ None	In or near quiet, permanent and semi-permanent water in many habitats, <7,000 feet	Not expected. No suitable habitat present on site. Site is outside the known range for this species; however, the species is recorded in the region.
<i>Spea [=Scaphiopus] hammondi</i>	Western spadefoot	BLM / SSC/ Covered	Most common in grasslands, coastal sage scrub near rain pools or vernal pools; riparian habitats	Not expected. No streams on site. Species is recorded within the vicinity.
<i>Taricha torosa</i>	Coast Range newt	None/SSC/ None	Chaparral, wetlands and grasslands	Low potential. Grasslands on site not ideal and are open and dominated with annual invasive species. Species is recorded in the region.

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**Table 4  
Special-Status Wildlife Species And To Potential To Occur In The Project Area**

Scientific Name	Common Name	Status Federal/ State/NCCP	Primary Habitat Associations	Status on Site or Potential to Occur <sup>1,2</sup>
<i>Reptiles</i>				
<i>Aspidoscelis hyperythra</i>	Orange-throated whiptail	None/ SSC/ Covered	Coastal sage scrub, chaparral, grassland, juniper and oak woodland	Moderate potential. Suitable habitat on site. Species is recorded within the site vicinity.
<i>Aspidoscelis tigris stejnegeri</i>	Coastal western whiptail	None/ None/ Covered	Coastal sage scrub, chaparral	Moderate potential. Suitable habitat on site. Species is recorded within the site vicinity.
<i>Charina [=Lichanura] trivirgata</i>	Rosy boa	FS/ None/ Covered	Rocky chaparral, coastal sage scrub, oak woodlands, desert and semi-desert scrub	Not expected. Lack of suitable habitat on site; no rocky areas on site. Species is recorded in the region.
<i>Crotalus ruber ruber</i>	Northern red-diamond rattlesnake	None/ SSC/ Covered	Variety of scrub habitats where there is heavy brush, large rocks, or boulders	Low potential. Limited suitable habitat on site. Species is recorded within the vicinity.
<i>Diadophis punctatus modestus</i>	San Bernardino ringneck snake	FS/ None/ Covered	Open, relatively rocky areas in woodland, chaparral and grassland, often in somewhat moist microhabitats near intermittent streams.	Not expected. Lack of suitable habitat on site. Species is not recorded within the region.
<i>Emys [=Clemmys] marmorata pallida</i>	Southwestern pond turtle	FS, BLM/ SSC/ None	Slow-moving permanent or intermittent streams, ponds, small lakes, reservoirs with emergent basking sites; adjacent uplands used during winter	Not expected. Lack of suitable aquatic habitat on site, and limited suitable upland nesting habitat is present on site. Species is recorded in the vicinity.
<i>Lampropeltis zonata (pulchra)</i>	California mountain kingsnake (San Diego population)	FS/ SSC/ None	Valley foothill, riparian and wet meadows, conifer, mixed and montane chaparral	Not expected. Lack of suitable habitat on site. Species is recorded in the region.

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**Table 4  
Special-Status Wildlife Species And To Potential To Occur In The Project Area**

Scientific Name	Common Name	Status Federal/ State/NCCP	Primary Habitat Associations	Status on Site or Potential to Occur <sup>1,2</sup>
<i>Phrynosoma blainvillei</i>	Coast horned lizard	BLM, FS/ SSC/ Covered	Coastal sage scrub, annual grassland, chaparral, oak and riparian woodland, coniferous forest	Moderate potential. Suitable grassland and coastal sage scrub present. Species is recorded within the vicinity.
<i>Plestiodon skiltonianus interparietalis</i>	Coronado Island skink	BLM/ SSC/ Covered	Grassland, woodlands, conifer forests, chaparral; rocky areas near streams with substantial vegetation.	Not expected. Lack of suitable habitat on site. Species is not recorded in the region, but is covered under the NCCP.
<i>Salvadora hexalepis virgultea</i>	Coast patch-nosed snake	None/ SSC/ None	Chaparral, washes, sandy flats, rocky areas	Not expected. Lack of suitable habitat on site. Species is recorded within the vicinity.
<i>Thamnophis hammondi</i>	Two-striped garter snake	BLM, FS/ SSC/ None	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Not expected. No suitable aquatic habitat on site. Species is recorded within the vicinity.
<i>Birds</i>				
<i>Accipiter cooperii</i> (nesting)	Cooper's hawk	BLM/ WL/ None	Riparian and oak woodlands, montane canyons	Moderate potential. Grasslands on site may provide suitable foraging habitat; however, no suitable nesting habitat on site. Species is recorded within the vicinity.

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**Table 4  
Special-Status Wildlife Species And To Potential To Occur In The Project Area**

Scientific Name	Common Name	Status Federal/ State/NCCP	Primary Habitat Associations	Status on Site or Potential to Occur <sup>1,2</sup>
<i>Accipiter striatus</i> (nesting)	Sharp-shinned hawk	None/ WL/ Covered	Nests in woodlands and forages over dense chaparral and scrublands	Not expected. Species occurs in the region only as a winter visitor. No suitable nest or forage habitat on site. Species is not recorded in the region, but is covered under the NCCP.
<i>Agelaius tricolor</i> (nesting colony)	Tricolored blackbird	BCC, BLM/ SSC/ None	Nests near fresh water, emergent wetland with cattails or tules; forages in grasslands, woodland, agriculture	Not expected. Lack of suitable habitat on site. Species is recorded in the region.
<i>Aimophila ruficeps canescens</i>	Southern California rufous-crowned	None / WL/ Covered	Grass-covered hillsides, coastal sage scrub, chaparral with boulders and outcrops	High potential. Suitable habitat on site. Species is recorded within the vicinity.
<i>Ammodramus savannarum</i> (nesting)	Grasshopper sparrow	None/ SSC/ None	Open grassland and prairie, especially native grassland with a mix of grasses and forbs	Low potential. Grassland habitat on site is dominated by invasive species. Species is recorded within the vicinity.
<i>Aquila chrysaetos</i> (nesting and nonbreeding/wintering)	Golden eagle	BCC/ CDF, WL, P/ Covered	Open country, especially hilly and mountainous regions; grassland, coastal sage scrub, chaparral, oak savannas, open coniferous forest	Low potential. Limited suitable foraging habitat on site; no suitable nesting habitat on site. Species is recorded in the region.
<i>Ardea herodias</i> (nesting colony)	Great blue heron	None/ CDF/ None	Variety of habitats, but primarily wetlands; lakes, rivers, marshes, mudflats, estuaries, saltmarsh, riparian habitats.	Low potential. Limited suitable habitat on site. Species is recorded in the region.
<i>Asio otus</i> (nesting)	Long-eared owl	None/ SSC/ None	Riparian, live oak thickets, other dense stands of trees, edges of coniferous forest	Not expected. Lack of suitable habitat on site. Species is recorded in the region.

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**Table 4  
Special-Status Wildlife Species And To Potential To Occur In The Project Area**

Scientific Name	Common Name	Status Federal/ State/NCCP	Primary Habitat Associations	Status on Site or Potential to Occur <sup>1,2</sup>
<i>Athene cunicularia</i> (burrow sites and some wintering sites)	Burrowing owl	BLM, BCC/ SSC/ None	Grassland, lowland scrub, agriculture, coastal dunes and other artificial open areas	Moderate potential. Suitable habitat on site. Species is recorded within the vicinity.
<i>Buteo lagopus</i>	Rough-legged hawk	None/ None/ Covered	Winter forages in wet meadows, grasslands, and riparian edges.	Low potential. Species only occurs in region as a winter visitor; species does not nest in California. Some suitable winter foraging habitat present. Species is not recorded in the region, but is covered under the NCCP.
<i>Buteo lineatus</i>	Red-shouldered hawk	None/ None/ Covered	Nests and forages in woodland and riparian habitats.	Moderate Low potential. Limited suitable foraging habitat on site; but no suitable nesting habitat. Species is not recorded in the region, but is covered under the NCCP.
<i>Buteo regalis</i> (wintering)	Ferruginous hawk	BCC/ WL/ None	Winter forages in open, dry country, grasslands, open fields, agriculture	Moderate potential. Species only occurs in region as a winter visitor; species does not nest in California. Limited suitable foraging habitat on site. Species is recorded within the vicinity.

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**Table 4  
Special-Status Wildlife Species And To Potential To Occur In The Project Area**

Scientific Name	Common Name	Status Federal/ State/NCCP	Primary Habitat Associations	Status on Site or Potential to Occur <sup>1,2</sup>
<i>Campylorhynchus brunneicapillus sandiegensis</i> (San Diego & Orange Counties only)	Coastal cactus wren	BCC, FS/ SSC/ Covered	Southern cactus scrub, maritime succulent scrub, cactus thickets in coastal sage scrub	Low potential. Although species is recorded by NROC approximately 500 feet west of the site, the proposed impact area lacks suitable cactus or succulent scrub habitat. Species is recorded within the vicinity.
<i>Circus cyaneus</i> (nesting)	Northern harrier	None/ SSC/ Covered	Open wetlands (nesting), pasture, old fields, dry uplands, grasslands, rangelands, coastal sage scrub	High potential. Suitable foraging habitat on site. Not expected to nest on site as site is outside of the recorded breeding range of this species in southern California. Species is recorded in the region.
<i>Coccyzus americanus occidentalis</i> (nesting)	Western yellow-billed cuckoo	FC, BCC, FS/ SE/ None	Dense, wide riparian woodlands and forest with well-developed understories	Not expected. No suitable habitat on site. Species is recorded in the region.
<i>Elanus leucurus</i> (nesting)	White-tailed kite	None/ P/ None	Open grasslands, savannah-like habitats, agriculture, wetlands, oak woodlands, riparian	High potential. Suitable foraging habitat on site. Not expected to nest on site as no suitable breeding habitat present. Species is recorded in the region.
<i>Empidonax traillii extimus</i> (nesting)	Southwestern willow flycatcher	FE/ SE/ Covered	Riparian woodlands along streams and rivers with mature, dense stands of willows or alders; may nest in thickets dominated by tamarisk	Not expected. No suitable nesting habitat on site. Species is recorded in the region.

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**Table 4  
Special-Status Wildlife Species And To Potential To Occur In The Project Area**

Scientific Name	Common Name	Status Federal/ State/NCCP	Primary Habitat Associations	Status on Site or Potential to Occur <sup>1,2</sup>
<i>Eremophila alpestris actia</i>	California horned lark	None/ WL/ None	Open habitats, grassland, rangeland, shortgrass prairie, montane meadows, coastal plains, fallow grain fields	Moderate potential. Some suitable habitat on site. Species is recorded within the site vicinity.
<i>Falco peregrinus</i> (nesting)	Peregrine falcon	BCC (FD)/ P (SD)/ Covered	Nests on cliffs, banks, and human-made structures generally near wetlands, lakes, rivers, or other water bodies. Winter forages near coastlines and inland water bodies.	Low potential. No nest habitat on site but may forage near Syphon Reservoir, particularly during winter months. Species is not recorded in the region, but is covered under the NCCP.
<i>Falco mexicanus</i> (nesting)	Prairie falcon	BCC/ WL/ Covered	Grasslands, savannas, rangeland, agricultural fields, and desert scrub; requires sheltered cliff faces for shelter and nesting	Moderate potential. Suitable foraging habitat on site; no suitable nesting habitat. Species is not recorded in the region, but is covered under the NCCP and was detected in the study area during the 2011 California gnatcatcher survey conducted in 2011 by Dudek.
<i>Icteria virens</i> (nesting)	Yellow-breasted chat	None / SSC/ None	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles and dense brush.	Not expected. Lack of suitable habitat on site. Riparian vegetation on site is disturbed and primarily supports non-native vegetation. Species is recorded within the vicinity.

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**Table 4  
Special-Status Wildlife Species And To Potential To Occur In The Project Area**

Scientific Name	Common Name	Status Federal/ State/NCCP	Primary Habitat Associations	Status on Site or Potential to Occur <sup>1,2</sup>
<i>Laterallus jamaicensis coturniculus</i>	California black rail	BCC/ ST, P/ None	Saline, brackish, and fresh emergent wetlands	Not expected. No suitable habitat on site. Species is recorded in the region.
<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow	None/ SE/ None	Saltmarsh, pickleweed habitats near coastal water bodies.	Not expected. No suitable habitat on site. Species is recorded in the region.
<i>Polioptila californica californica</i>	Coastal California gnatcatcher	FT/ SSC/ Covered	Coastal sage scrub, coastal sage scrub-chaparral mix, coastal sage scrub-grassland ecotone, riparian in late summer	High potential. Observed on site during the survey. Suitable habitat on site. Species is also recorded in the vicinity.
<i>Rallus longirostris levipes</i>	Light-footed clapper rail	FE/ SE, P/ None	Coastal saltmarsh	Not expected. No suitable habitat on site. Species is recorded in the region.
<i>Sternula [=Sterna] antillarum browni</i> (nesting colony)	California least tern	FE/ SE, P/ None	Coastal waters, estuaries, large bays and harbors, mudflats; nests on sandy beaches	Not expected. No suitable habitat on site. Species is recorded in the region.
<i>Vireo bellii pusillus</i> (nesting)	Least Bell's vireo	FE/ SE/ Covered	Nests in southern willow scrub with dense cover within 1-2 meters of the ground; habitat includes willows, cottonwoods, baccharis, wild blackberry or mesquite on desert areas	Not expected. Riparian vegetation on site is disturbed, limited, and primarily supports non-native vegetation. Species is recorded within the vicinity.



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**Table 4  
Special-Status Wildlife Species And To Potential To Occur In The Project Area**

Scientific Name	Common Name	Status Federal/ State/NCCP	Primary Habitat Associations	Status on Site or Potential to Occur <sup>1,2</sup>
<i>Mammals</i>				
<i>Antrozous pallidus</i>	Pallid bat	BLM, FS/ SSC/ None	Rocky outcrops, cliffs, and crevices with access to open habitats for foraging	Low potential. No suitable habitat for roosting, but may forage over the site.
<i>Canis latrans</i>	Coyote	None/ None/ Covered	All habitats where it finds food, including residential settings	High potential. Detected on site. Evidence (scat, tracks) of coyote observed during survey. Species is not recorded in the region, but is covered under the NCCP.
<i>Chaetodipus fallax fallax</i>	Northwestern San Diego pocket mouse	None/ SSC/ None	Coastal sage scrub, grassland, sage scrub-grassland ecotones, sparse chaparral; rocky substrates, loams and sandy loams	Moderate potential. Suitable habitat on site. Species is recorded in the region.
<i>Choeronycteris mexicana</i>	Mexican long-tongued bat	None/ SSC/ None	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon-juniper woodland. Roosts in caves, mines, and buildings.	Not expected. No suitable vegetation or roosting structures/microhabitat and habitat on site not typical of foraging habitat for this species.
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	FE/ ST/ None	Open habitat, grassland, sparse coastal sage scrub, sandy loam and loamy soils with low clay content; gentle slopes (<30%)	Not expected. Site is outside the recorded range for this species. Species is recorded in the region.

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**Table 4  
Special-Status Wildlife Species And To Potential To Occur In The Project Area**

Scientific Name	Common Name	Status Federal/ State/NCCP	Primary Habitat Associations	Status on Site or Potential to Occur <sup>1,2</sup>
<i>Eumops perotis californicus</i>	Western mastiff bat	BLM/ SSC/ None	Roosts in small colonies in cracks and small holes, seeming to prefer man-made structures	Low potential. No suitable roosting structures/ microhabitat, but may forage over the site. Species is recorded within the site vicinity.
<i>Lasiurus blossevillii</i>	Western red bat	FS/ SSC/ None	Prefers edges or habitat mosaics with access to trees for roosting and open areas for feeding.	Low potential. No suitable roosting structures/ microhabitat, but may forage over the site. Species is recorded in the region.
<i>Lasiurus xanthinus</i>	Western yellow bat	None/SSC/ None	Desert and montane riparian, desert succulent scrub, desert scrub, and pinyon-juniper woodland.	Not expected. No suitable roosting or foraging habitat on site. Species is recorded in the region.
<i>Myotis yumanensis</i>	Yuma myotis	BLM/ None/ None	Closely tied to open water which is used for foraging; open forests and woodlands are optimal habitat	Low potential. No suitable habitat, but may forage over the site. Species is recorded in the region.
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	None/ SSC/ Covered	Coastal sage scrub, chaparral, pinyon-juniper woodland with rock outcrops, cactus thickets, dense undergrowth	Low potential. Limited suitable habitat on site. Species is recorded within the site vicinity.
<i>Nyctinomops femorosaccus</i>	Pocketed free-tailed bat	None/ SSC/ None	Rocky desert areas with high cliffs or rock outcrops	Not expected. No suitable roosting or foraging habitat on site. Species is recorded in the region.

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**Table 4  
Special-Status Wildlife Species And To Potential To Occur In The Project Area**

Scientific Name	Common Name	Status Federal/ State/NCCP	Primary Habitat Associations	Status on Site or Potential to Occur <sup>1,2</sup>
<i>Nyctinomops macrotis</i>	Big free-tailed bat	None/ SSC/ None	Rugged, rocky canyons	Not expected. No suitable roosting or foraging habitat on site. Species is recorded in the region.
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	FE/ SSC/ Covered	Grassland, coastal sage scrub with sandy soils; along immediate coast	Not expected. Suitable habitat on site; however, site is not within the recorded range of the species. Species is recorded within the region <sup>2</sup> .
<i>Sorex ornatus salicornicus</i>	Southern California saltmarsh shrew	None/ SSC/ None	Coastal salt marshes and wetland habitat	Not expected. No suitable habitat on site. Species is recorded in the region.
<i>Taxidea taxus</i>	American badger	None/ SSC/ None	Dry, open treeless areas, grasslands, coastal sage scrub	Low potential. Limited suitable habitat on site. Species is recorded in the region.
<i>Urocyon cinereoargenteus</i>	Gray fox	None/ None/ Covered	Dense coastal scrub and chaparral, woodland and riparian	Not expected. Lack of suitable habitat on site. Species is not recorded in the region, but is covered under the NCCP.
<i>Invertebrates</i>				
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	FE/ None/ Covered	Small, shallow vernal pools, occasionally ditches and road ruts	Not expected. No vernal pools or depressions were observed during the survey. Species is recorded in the region.
<i>Danaus plexippus</i>	Monarch butterfly	None/ None/ None	Overwinters in eucalyptus groves	Not expected. Lack of suitable habitat on site. Species is recorded in the region.

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**Table 4  
Special-Status Wildlife Species And To Potential To Occur In The Project Area**

Scientific Name	Common Name	Status Federal/ State/NCCP	Primary Habitat Associations	Status on Site or Potential to Occur <sup>1,2</sup>
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	FE/ None/ Covered	Patchy shrub or small tree landscapes; scrublands	Not expected. Species considered to be extirpated from Orange County. Species is historically recorded in the region and the species is conditionally covered under the NCCP.
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE/ None/ Covered	Deep, long-lived vernal pools, vernal pool-like seasonal ponds, stock ponds; warm water pools that have low to moderate dissolved solids	Not expected. No vernal pools or depressions were observed during the survey. Species is recorded in the vicinity.
<i>Tryonia imitator</i>	Mimic tryonia (=California brackishwater snail)	None/ None/ None	Coastal lagoons, estuaries and salt marshes	Not expected. No suitable habitat on site. Species is recorded in the region.
<i>Fish</i>				
<i>Catostomus santaanae</i>	Santa Ana sucker	FT/ SSC/ None	Small, shallow, cool, clear streams less than 7 meters in width and a few centimeters to more than a meter in depth; substrates are generally coarse gravel, rubble and boulder	Not expected. No suitable habitat on site. Species is recorded in the region.
<i>Eucyclogobius newberryi</i>	Tidewater goby	FE/ SSC/ None	Low-salinity waters in coastal wetlands	Not expected. No suitable habitat on site. Species is recorded in the region.
<i>Gila orcutti</i>	Arroyo chub	FS/ SSC/ None	Warm, fluctuating streams with slow-moving or backwater sections of warm to cool streams at depths > 40 centimeters; substrates of sand or mud	Not expected. No suitable habitat on site. Species is recorded in the region.

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**Table 4**  
**Special-Status Wildlife Species And To Potential To Occur In The Project Area**

Scientific Name	Common Name	Status Federal/ State/NCCP	Primary Habitat Associations	Status on Site or Potential to Occur <sup>1,2</sup>
<i>Rhinichthys osculus</i> ssp. 3	Santa Ana speckled dace	FS/ SSC/ None	Aquatic, south coast flowing waters	Not expected. No suitable habitat on site. Species is recorded in the vicinity <sup>1</sup> .

The federal and state status of species primarily is based on the Special Animals List (January 2011), California Department of Fish and Game.

**Federal Designations:**

BCC	Fish and Wildlife Service: Birds of Conservation Concern
FC	Candidate for federal listing as threatened or endangered
(FD)	Federally-delisted
FE	Federally-listed Endangered
FS	Forest Service Sensitive Species
FT	Federally-listed as Threatened

**State Designations:**

CDF	California Department of Forestry and Fire Protection Sensitive Species
SSC	California Species of Special Concern
P	California Department of Fish and Game Protected and Fully Protected Species
SC	Candidate for state listing as threatened or endangered
(SD)	State-delisted
SE	State-listed as Endangered
ST	State-listed as Threatened
WL	California Department of Fish and Game Watch List

**NCCP Designations:**

Covered: Central-Coastal NCCP/NCP (includes target species, covered species, and conditionally covered species)

**Notes:**

<sup>1</sup>Vicinity = El Toro 7.5 minute quadrangle

<sup>2</sup>Region = Nine, 7.5 minute quadrangles including and surrounding El Toro.

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### **4.3.3 Special-Status Habitats/Regulated Resources**

Special-status habitats are those that are considered to support unique vegetation communities, special-status plant and/or wildlife species, or function as corridors for wildlife movement. Unique vegetation communities include habitats found only in the Southern California region, a local representative of a species not generally found in Orange County, or are outstanding examples of CDFG special-status plant communities. Regulated biological resources may or may not be considered special-status, but are regulated under local, state, and/or federal laws. Special-status habitats under the NCCP/HCP (i.e., “Covered Habitats”) are regulated by CDFG and USFWS pursuant to the NCCP/HCP. The CDFG and the USFWS have determined that further protection of certain habitats within the NCCP/HCP comparable to the protection provided for coastal sage scrub habitat are necessary and these certain “covered habitats” include coast live oak, Tecate cypress forest, cliff and rock, and chaparral within the Coastal Subarea only. None of these additional NCCP/HCP covered habitats occur on the Project site. The coastal sage scrub (i.e., NA-VDTCSS, including the disturbed form) vegetation is considered special-status and is regulated by CDFG and USFWS pursuant to the NCCP/HCP. Annual grassland and disturbed mulefat scrub are the only other plant communities identified in the study area. Annual grassland is composed primarily of non-native species, and given the small size and urban location of the study area, the annual grassland in this situation is not likely to support special-status species and is therefore not considered a special-status habitat. Disturbed mulefat scrub occurs as a small patch of habitat that does not support typical wetland features, including drainage patterns that would indicate that there is a regular source of hydrology to sustain the habitat in this area. This habitat was not noted in LSA’s 2009 survey of the property, and it is likely that the disturbed mulefat scrub is a temporary feature established as a result of temporary drainage associated with dam operations and maintenance activities. This small patch of habitat is not sufficient in size to support special-status species and is not a unique native vegetation community and therefore is not considered a special-status habitat.

### **4.3.4 Wildlife Corridors and Habitat Linkages**

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for the migration of animals. Wildlife corridors contribute to population viability by ensuring continual exchange of genes between populations, and by providing access to adjacent habitat and routes for recolonization after local extirpation or ecological catastrophes (e.g., fires).

Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals and may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as stepping stones for dispersal.

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The Project site is partially on lands included in the NCCP/HCP Reserve (i.e., IRWD property); however, the Project site does not likely function as a wildlife corridor due to the surrounding development (Figure 5). Adjacent to the Project site, the larger IRWD Syphon Reservoir property, particularly around the reservoir itself, is more likely to serve as a potential movement corridor and linkage connecting with NCCP/HCP Reserve lands to the north and northeast.

### 4.3.5 Jurisdictional Wetlands and Waters of the United States

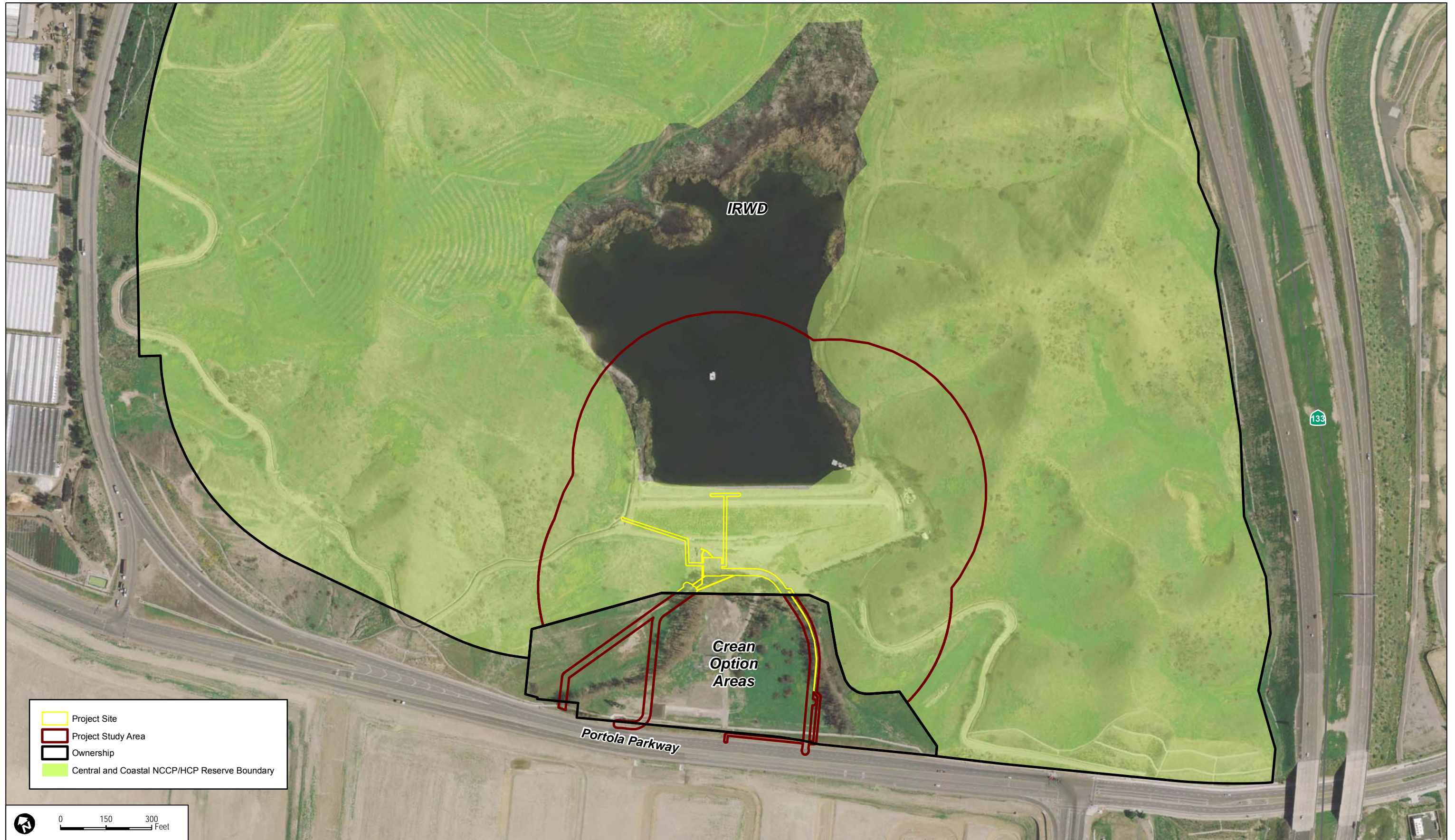
Results of the formal jurisdictional delineation concluded that there are no areas on site subject to jurisdiction by the ACOE, RWQCB, and CDFG. Two features were evaluated for potential jurisdiction: a manufactured, concrete channel adjacent to Portola Parkway on the edge of the study area was evaluated by HWA and disturbed mulefat scrub vegetation on the IRWD property was evaluated by Dudek.

HWA determined that the concrete channel adjacent to Portola Parkway is not subject to ACOE, RWQCB, and CDFG jurisdiction for the following reasons: the channel was artificially created in an upland area; there was no natural drainage feature, creek, or other jurisdictional feature in the area prior to creation of the channel; there are no jurisdictional features currently in the area; the channel is devoid of soil or vegetation; and the channel does not connect with any upstream jurisdictional features, although the channel does connect with the storm system downstream via an underground culvert (HWA 2012).

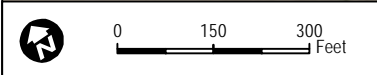
Hydrology and vegetation were examined throughout the Project site and one data station pit was dug, within the disturbed mulefat scrub, to analyze the specific soil characteristics/conditions. A formal wetland determination data form was recorded, the results are summarized in Table 5, and the form is attached to this report as Appendix C.

**Table 5**  
**Data Station Point Summary**

Data Station	Wetland Determination Field Indicators			Stream Association	Determination	Jurisdiction
	<i>Vegetation</i>	<i>Hydric Soils</i>	<i>Hydrology</i>			
1	No	No	No	No	Non-jurisdictional	None



- Project Site
- Project Study Area
- Ownership
- Central and Coastal NCCP/HCP Reserve Boundary



**DUDEK**

SOURCE: IRWD 2009; Central Coastal NCCP 1997

7036-04

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**FIGURE 5**  
**Central and Coastal NCCP/HCP Reserve Boundary**



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The disturbed mulefat area was examined as a potential jurisdictional wetland. However, the area supports none of the required three parameters and there is no streambed associated with the area; therefore, it is not considered jurisdictional. The mulefat that predominates this area is likely the result of intermittent runoff from access roads located upslope and reservoir maintenance activities that may have provided temporary drainage sufficient to allow for germination of mulefat but not sufficient enough to develop required wetland parameters.

No jurisdictional features occur within the Project area.

### **4.4 Regional Resource Planning Context**

The municipalities of Orange County collaborated in producing the Central Coastal Subregion NCCP/HCP (1996). This NCCP/HCP is implemented through the County of Orange Environmental Management Agency, which manages impacts to covered species and habitats. The NCCP/HCP was prepared pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act of 1973, as well as an NCCP under the NCCP Act of 2001. The NCCP/HCP allows the participating landowners to authorize “take” of plant and wildlife species identified within the plan area. The USFWS and CDFG have authority to regulate the take of a set of covered species and habitat. Under the NCCP/HCP, the USFWS and CDFG have granted take authorizations for covered species to the local landowners, including the County and IRWD, for otherwise lawful actions, such as public and private development that may incidentally take species or their habitat outside of the designated Reserve, in exchange for the assembly and management of a coordinated NCCP/HCP Reserve. The NCCP/HCP acknowledges that existing facilities, such as Syphon Reservoir, occur within the Reserve and may require upgrades, such as proposed under this Project. Hence, the NCCP/HCP provides for a list of allowable uses within the Reserve and criteria by which such allowable improvement may be made without significantly affecting the conservation value of the Reserve.

The Project site is included in the NCCP/HCP; specifically, the IRWD property incorporated in the Project site (i.e., ~~0.56-42~~ acre) is within the NCCP/HCP Reserve, and the portion of the Project site on the Crean property (i.e., ~~1.412.86~~ acres) is located outside the NCCP/HCP Reserve. The Crean property was removed from the NCCP/HCP Reserve as documented in the NCCP/HCP Reserve Boundary Minor Amendment Syphon Reservoir Spillway (LSA 2009).

The Project site is not within proposed or designated federal critical habitat for any species. The study area is approximately 2.6 miles from critical habitat for California gnatcatcher (USFWS 2012). The Project site is outside of the coastal zone boundary.

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### 5.0 PROJECT IMPACTS

This section addresses direct and indirect impacts to biological resources that may result from implementation of the Proposed Project.

*Direct impacts* include both the permanent loss of on-site habitat and the plant and wildlife species that it contains and the temporary loss of on-site habitat.

All biological resources within the direct permanent impact area are considered 100% lost. Direct impacts were quantified by overlaying the proposed footprint of various permanent facilities onto the biological resources map of the Project study area. Direct impacts associated with the Proposed Project are only located in the IRWD property and include the following facilities: a pressure manhole, an access road, an electrical transformer, and an operations facility. No direct permanent impacts are proposed on the Crean property.

Other facilities associated with the Project would result in only temporary impacts to biological resources. These facilities require the removal of vegetation, trenching of pipeline alignments, and backfilling such that preconstruction contours will largely be restored. The proposed facilities that would result in temporary impacts include the proposed storm drain, several water lines, and electrical conduit. All impacts on the Crean property are considered temporary, as are a portion of the impacts that would occur on the IRWD property.

It should be noted that aeration tubes included as part of the Project would not result in any impacts to biological resources since these will be installed within the reservoir inundation area and will be below the water surface. Since these tubes will not affect the extent of open water, there are no impacts associated with this Project component.

*Indirect Impacts* refer to off-site and on-site effects that are either short-term impacts (i.e., not permanent) due to the Project construction or long-term (i.e., permanent) due to the design of the Project and the effects it may have to adjacent resources. For this Project, it is assumed that the potential indirect impacts resulting from Project implementation may include dust, noise, and general human presence that may temporarily disrupt species and habitat vitality and construction-related soil erosion and runoff. With respect to these latter factors, however, all Project grading will be subject to the typical restrictions (e.g., best management practices) and requirements that address erosion and runoff. Furthermore, the Project is located in an area that already receives construction traffic as part of operations and maintenance of the Syphon Reservoir, and the Proposed Project is not considered a substantial change from existing conditions with regard to potential indirect impacts such as dust and general human presence.

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## 5.1 Direct Impacts

### 5.1.1 Vegetation Communities/Land Covers

The Proposed Project will result in approximately ~~1.833~~1.833.42 acres of direct impacts (~~0.564~~0.5642 acre on the IRWD property and ~~1.412~~1.412.85 acres on the Crean property) (Figure 6). Direct impacts as a result of the Project are summarized by vegetation/land cover type, impact type, and property ownership in Table 6.

**Table 6**  
**Direct Estimated Impacts to Vegetation Communities and Land Covers**

Vegetation Community or Land Cover Type	Jurisdictional/ Regulated	Impact Acreages (linear foot)			Total
		IRWD property		Crean Property <sup>1</sup>	
		Permanent	Temporary	Temporary	
<i>Uplands</i>					
Coastal Sage Scrub (NA-VDTCSS) <sup>2</sup>	Yes; NCCP/HCP	0.04	<del>0.04</del> <u>0.04</u>	0.20	<del>0.25</del> <u>0.25</u> <u>28</u>
Annual Grassland (AGL)	No	0.00	<del>0.10</del> <u>0.10</u> <u>14</u>	<del>0.62</del> <u>0.62</u> <u>.34</u>	<del>0.66</del> <u>0.66</u> <u>2.45</u>
Disturbed Mule Fat Scrub (dMFS)	No	<del>0.03</del> <u>0.03</u> <u>2</u>	<del>0.01</del> <u>0.01</u> <u>2</u>	0.02	0.05
Disturbed (DIS)	No	<del>0.00</del> <u>0.00</u> <u>4</u>	<del>0.08</del> <u>0.08</u> <u>4</u>	0.00	0.08
Developed (DEV)	No	0.13	<del>0.06</del> <u>0.06</u> <u>0.11</u>	<del>0.57</del> <u>0.57</u> <u>0.30</u>	<del>0.77</del> <u>0.77</u> <u>0.53</u>
<b>Grand Total</b>		<b><del>0.25</del><u>0.25</u><u>0.20</u></b>	<b><del>0.17</del><u>0.17</u><u>0.36</u></b>	<b><del>1.41</del><u>1.41</u><u>2.85</u></b>	<b><del>1.83</del><u>1.83</u><u>3.42</u></b>

<sup>1</sup>No Direct Permanent Impacts proposed on the Crean property.

<sup>2</sup>Includes the disturbed form (dNA-VDTCSS).

**Note:** Variations in totals are due to rounding.

### 5.1.2 Special-Status Plant Species

No special-status plants were detected during the reconnaissance survey and none are known to occur on site. No special-status plants species were identified to have at least moderate potential to occur given the habitat suitability of the Project site; therefore, direct impacts to special-status plants are not expected.

### 5.1.3 Special-Status Wildlife Species

Two special-status wildlife species, California gnatcatcher (federally listed threatened, state-listed species of special concern, NCCP/HCP covered target species) and coyote (NCCP/HCP covered), were detected during the field survey, and a number of special-status species have a moderate to high potential to occur on site (Figure 4). There is a moderate potential for raptor species to forage on site, including Cooper's hawk (state watch species, NCCP/HCP not

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covered), northern harrier (state species of special concern, NCCP/HCP covered), red-shouldered hawk (NCCP/HCP covered), prairie falcon (federal bird of conservation concern, state watch species, NCCP/HCP conditionally covered), ferruginous hawk (state watch species, NCCP/HCP not covered), and white-tailed kite (state fully protected species, NCCP/HCP not covered), but the potential for raptor breeding on site is low potential to not expected; thus, no direct impacts would occur to the breeding of these species.

Other wildlife species with a potential to occur on site include California horned lark (state-listed watch species, NCCP/HCP not covered), Southern California rufous-crowned sparrow (state watch species, NCCP/HCP covered), orange-throated whiptail (state-species of special concern, NCCP/HCP covered), coastal western whiptail (NCCP/HCP covered), and coast horned lizard (state species of special concern, NCCP/HCP covered). All of these species primarily associate with riparian, grassland, or coastal sage scrub habitats. Direct permanent impacts could occur to these species if they are present within the Project site. The northwestern San Diego pocket mouse (state species of special concern, NCCP/HCP not covered) is primarily a nocturnal species and may not have been detected during the reconnaissance survey. This rodent species is a state species of special concern, not NCCP/HCP covered, and has a moderate potential to occur on site. Direct permanent impacts could occur through direct mortality and loss of habitat if this species is present on site.

### **5.1.4 Habitat Linkages/Wildlife Corridors**

The IRWD Syphon Reservoir property (included in the NCCP/HCP Reserve) serves as a biological resource area and most likely provides wildlife habitats associated with the reservoir and the undeveloped NCCP/HCP reserve lands to the north and northeast. The Project site itself is partially located within the NCCP/HCP Reserve area (i.e., IRWD property); however, this portion does not function as a movement corridor and is not expected to aid in the movement of wildlife species because of its close proximity to other disturbed and developed sites. Thus, implementation of the Proposed Project would not alter wildlife movement.

## **5.2 Indirect Impacts**

### **5.2.1 Vegetation Communities/Special-Status Plants**

For the Proposed Project, it is assumed that the potential short-term indirect impacts resulting from construction activities may include dust, noise, general human presence, and construction-related soil erosion and runoff. Potential long-term indirect impacts to biological resources may also occur as a result of the Proposed Project through the alteration of drainage patterns/runoff conditions and introduction of non-native species.



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There are native vegetation communities adjacent to the Project site. Implementation of typical construction best management practices are expected to substantially control adverse edge effects during and following construction. Drainage from the Project site is directed toward Portola Parkway and is not expected to affect native habitat areas, which are all located upslope from the Project site. As stated in Section 5.0, the Project site is already subject to operations and maintenance vehicular traffic with associated dust and human presence. Therefore, short- and long-term indirect impacts to off-site vegetation communities and potential special-status species are not anticipated to be appreciably greater than current conditions.

### **5.2.2 Special-Status Wildlife**

Most of the indirect impacts to vegetation communities and special-status plants cited above can also affect special-status wildlife. In addition, wildlife may be indirectly affected in the short-term and long-term by noise and lighting, which can disrupt normal activities and subject wildlife to higher predation risks. Also, adverse edge effects can cause degradation of habitat quality through the invasion of pest species. Breeding birds can be significantly affected by short-term construction-related noise, which can result in the disruption of foraging, nesting, and reproductive activities.

Some of the areas adjacent to the Project site support suitable vegetation for bird nesting. For example, the eucalyptus trees and grassland may support nesting habitat for raptors and the coastal sage habitat adjacent to the Project site may support nesting special-status bird species (California gnatcatcher and coastal cactus wren). Indirect impacts from construction-related noise may occur to wildlife if construction occurs during the breeding season (i.e., February 15 through July 15 for most bird species, per the NCCP/HCP; and January 1 through July 15 for raptors).

### **5.2.3 Habitat Linkages/Movement Corridors**

Because the Project site does not function as a potential wildlife corridor and the adjacent IRWD Syphon Reservoir property functions as a biological resource area in the NCCP/HCP reserve rather than a wildlife corridor, there are no anticipated indirect impacts to wildlife movement or corridors associated with implementation of the Proposed Project.

## **5.3 Impacts to Regional Resource Planning**

The portion of the Proposed Project within the IRWD property is within the NCCP/HCP Reserve and therefore requires consistency with the allowable uses in the Reserve as defined by the NCCP/HCP. Section 5.3 of the NCCP/HCP defines the permitted uses within the NCCP/HCP Reserve. These permitted uses include “activities related to the provision and operation of necessary public...infrastructure facilities identified in” other portions of the NCCP/HCP and Implementation

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Agreement (County 1996). Syphon Reservoir is clearly included as an existing facility within the NCCP/HCP Reserve (including Figure 27 of the NCCP/HCP) and the Proposed Project consists of minor alterations to existing facilities to provide necessary public services (i.e., recycled water).

Section 5.9 of the NCCP/HCP further defines the Infrastructure Policies of the NCCP/HCP Reserve, including specific reference to water lines, reservoir, and associated facilities (e.g., pump stations, pressure control facilities, and access roads). The section provides specific siting criteria and avoidance and minimization measures for the design of these facilities. These criteria indicate that “to the extent feasible, siting of new infrastructure within the Reserve System should minimize impacts to CSS [coastal sage scrub], other habitat, and ‘Target Species.’” The Proposed Project is largely located on existing disturbed areas, and impacts to native habitat are limited to marginal areas adjacent to existing disturbed roads/pads.

The NCCP/HCP Implementing Agreement allows for take to occur within the Reserve by Participating Landowners related to construction of infrastructure included as a permitted use within the Reserve without processing of a Minor or Major Amendment to the NCCP/HCP. The Implementing Agreement requires that the Participating Landowner proposing infrastructure within the NCCP/HCP Reserve develop these facilities consistent with Section 5.9 of the NCCP/HCP and “confer with USFWS and CDFG regarding the effects of final facility location in order to minimize impacts to Identified Species and Covered Habitats” (County 1996). The loss of coastal sage scrub associated with construction of the facilities will constitute an authorized take under the NCCP/HCP and will require a deduction from the In-Reserve credits held by IRWD. No Minor or Major Amendment to the NCCP/HCP is required for this Project. This determination will be provided to the NROC who will be responsible for coordinating review by the USFWS and CDFG, if necessary.

The portion of the Proposed Project located within the Crean property is located outside of the NCCP/HCP Reserve and has been planned for development since approval of the Minor Amendment for that property. The Minor Amendment provides additional Reserve acreage over and above the value of the habitat on the Crean property, and therefore the habitat values on the Crean property are already mitigated and replaced and no additional mitigation related to NCCP/HCP covered species and habitat should be required.

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## **6.0 SIGNIFICANT IMPACTS**

### **6.1 Explanation of Findings of Significance**

Impacts to sensitive habitats, special-status plants, and special-status wildlife species must be quantified and analyzed to determine whether such impacts are significant under CEQA. CEQA Guidelines Section 15064(b) states that an ironclad definition of “significant” effect is not possible because the significance of an activity may vary with the setting. Appendix G of the CEQA Guidelines, however, does provide “examples of consequences which may be deemed to be a significant effect on the environment” (14 CCR 15064[e]). These effects include substantial effects on rare or endangered species of animal or plant, or the habitat of the species. CEQA Guidelines Section 15065(a) is also helpful in defining whether a project may have “a significant effect on the environment.” Under that section, a proposed project may have a significant effect on the environment if the project has the potential to: (1) substantially degrade the quality of the environment; (2) substantially reduce the habitat of a fish or wildlife species; (3) cause a fish or wildlife population to drop below self-sustaining levels; (4) threaten to eliminate a plant or animal community; (5) reduce the number or restrict the range of a rare or endangered plant or animal; or (6) eliminate important examples of the major period of California history or prehistory.

The evaluation of whether or not an impact to a particular biological resource is significant must consider both the resource itself and the role of that resource in a regional context. Substantial impacts are those that contribute to, or result in, permanent loss of an important resource, such as a population of a rare plant or animal. Impacts may be important locally because they result in an adverse alteration of existing site conditions but considered not significant because they do not contribute substantially to the permanent loss of that resource regionally. The severity of an impact is the primary determinant of whether or not that impact can be mitigated to a level below significant.

### **6.2 Vegetation Communities**

The Project site supports one vegetation community that is considered special-status, coastal sage scrub. Annual grassland and disturbed mulefat scrub are not covered habitats under the NCCP/HCP and are not considered special-status communities as discussed in Section 4.3.3. Thus, impacts to coastal sage scrub are considered significant but impacts to annual grassland and disturbed mulefat scrub are not significant.

As stated in Section 5.2.1, there are no expected short- or long-term indirect impacts to vegetation communities or jurisdictional waters of the United States, and therefore no significant impacts would occur.

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### **6.3 Special-Status Plant Species**

As stated in Section 5.1.2 and 5.2.1, there are no expected direct or short- or long-term indirect impacts to special-status plants; therefore, no significant impacts would occur.

### **6.4 Special-Status Wildlife Species**

In determining significance, the significance threshold applied to wildlife is whether the project would have a substantial adverse effect on the special-status species. Potential direct impacts to the 15 special-status wildlife species, including the 8 NCCP/HCP covered species (i.e., northern harrier, red-shouldered hawk, prairie falcon, southern California rufous-crowned sparrow, coyote, coast horned lizard, orange-throated whiptail, and coastal western whiptail), are considered less than significant, as outlined below.

Impacts to the riparian species (red-shouldered hawk and Cooper's hawk) and their habitat are considered less than significant due to the disturbed character of riparian habitat (i.e., disturbed mulefat scrub) on site that would be impacted and the amount of habitat available in the Project vicinity. The loss of riparian habitat would not appreciably affect these species and is not considered significant.

Impacts to the grassland species (northern harrier, burrowing owl, prairie falcon, ferruginous hawk, California horned lark, orange-throated whiptail) and their habitat are considered less than significant because of the limited habitat on site and the larger amount of habitat available in the Project vicinity.

Impacts to California gnatcatcher and its habitat are considered significant. However, because of the small amount of disturbed habitat impacted by the Project and the larger non-disturbed habitat available in the Project vicinity, it is unlikely that the species is breeding on site. If construction activities occur during the gnatcatcher breeding season (February 15 through July 15), direct and indirect impacts to nesting are considered significant if nesting is detected within 500 feet of construction.

Impacts to resident breeding birds, migratory birds, and raptors are considered significant. If construction activities occur during combined bird breeding season (January through September), direct and indirect impacts to nesting sensitive raptors and species addressed under the Migratory Bird Treaty Act are considered potentially significant if nesting on site or if nesting is within 300 feet of construction for resident/migratory birds and within 500 feet of construction for raptors or other special-status bird species.

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Impacts to small mammals and reptiles on site are not significant because the number of individuals of these species likely to be lost (i.e., direct mortality) is insubstantial and would not appreciably affect the species in the region.

### **6.5 Habitat Linkages/Wildlife Corridors**

Implementation of the Proposed Project is not expected to preclude the use of on-site and adjacent habitat by wildlife or hinder its suitability to permit wildlife movement. Therefore, there would be no significant impacts to habitat linkages or wildlife corridors within the Project site.

### **6.6 Regional Resource Planning**

As discussed in Section 5.3, the Proposed Project is consistent with the NCCP/HCP and would not result in any significant impacts to regional biological resource conservation planning.

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## 7.0 MITIGATION

### 7.1 Vegetation Communities

Permanent impacts to coastal sage scrub (NA-VDTCCS) on site, including the disturbed form, are considered significant and require mitigation. Table 7 lists the significant impacts to vegetation communities and the proposed mitigation per the NCCP/HCP (County 1996).

**Table 7**  
**Mitigation for Significant Impacts to Vegetation Communities**

Vegetation Community	Mitigation Ratio <sup>1</sup>	Impact Acreage		Mitigation Acreage Required
		Permanent Impact (IRWD Property)	Temporary Impact (IRWD Property)	
<i>Uplands</i>				
Coastal sage scrub <sup>2</sup> (NA-VDTCCS)	1:1	0.04	0.04 <del>1</del>	0.05 <del>0</del> 8

<sup>1</sup>Mitigation Ratio established by NCCP/HCP Guidelines (County 1996).

<sup>2</sup>Includes disturbed form (dNA-VDTCCS).

Mitigation for impacts presented in Table 7 is proposed in the form of deduction of IRWD's existing take allowance for habitats occurring with the Reserve for permanent impacts and restoration through application of a native hydroseed mix for temporary impacts. IRWD will continue to manage the Syphon Reservoir property consistent with ongoing management activities conducted for the NCCP/HCP in coordination with NROC. Such management will ensure that temporary impacts are successfully mitigated.

### 7.2 Special-Status Wildlife

If construction activity is to take place during the combined bird breeding season (i.e., January through September), a one-time biological survey for nesting bird species must be conducted within the proposed impact area within 72 hours prior to construction. This survey is necessary to assure avoidance of impacts to nesting raptors and/or birds protected by the federal Migratory Bird Treaty Act. If any active nests are detected, the area will be flagged and mapped on the Project construction plans, along with a buffer established by a qualified biologist (typically a 500-foot buffer for raptors, a 300-foot buffer for other special-status birds, or an appropriate buffer established by the Project biologist for other nesting birds), and it will be avoided until the nesting cycle is complete, or unsuccessful, or otherwise recommended by a qualified biologist.

Furthermore, minimization and mitigation measures described in Section 7.5.3 of the Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the NCCP/HCP shall be implemented



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to reduce potentially significant indirect impacts to coastal sage scrub habitat located in the Reserve. The pertinent sections of these measures include the following (County 1996):

1. To the maximum extent practicable, no grading of coastal sage scrub habitat that is occupied by nesting gnatcatchers will occur during the breeding season (February 15 through July 15).
2. Prior to the commencement of grading operations...all areas of coastal sage scrub habitat to be avoided...shall be identified with temporary fencing or other markers clearly visible to construction personnel. Additionally, prior to the commencement of grading operations...a survey will be conducted to locate gnatcatchers and cactus wrens within 100 feet of the outer extent of projected soil disturbance activities and the locations of any such species shall be clearly marked and identified on the construction/grading plans.
3. A qualified monitoring biologist will be on site during any clearing of coastal sage scrub. IRWD will advise USFWS/CDFG at least seven calendar days prior to the clearing of any habitat occupied by Identified Species to allow USFWS/CDFG to work with the monitoring biologist in connection with bird flushing/capturing activities.
4. Following the completion of initial grading, all areas of coastal sage scrub habitat to be avoided by construction equipment and personnel will be marked with temporary fencing other appropriate markers clearly visible to construction personnel.
5. Preconstruction meetings involving the monitoring biologist, construction supervisors, and equipment operators will be conducted and documented to ensure maximum practicable adherence to these measures.
6. Coastal sage scrub located within the likely dust drift radius of construction areas shall be periodically sprayed with water to reduce accumulated dust on the leaves as necessary and recommended by the monitoring biologist.

With implementation of these mitigation measures, all significant impacts to biological resources would be reduced to below a level of significance due to mitigation provided through the IRWD take deduction (which represents IRWD's participation in conserving lands under the NCCP/HCP), restoration of temporary coastal sage scrub impacts to preconstruction conditions, and avoidance and minimization of bird breeding habitat and adverse effects on adjacent Reserve habitats.

## **Final Biological Resources Technical Report for the Syphon Reservoir Interim Facilities Project**

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### **8.0 ACKNOWLEDGMENTS**

This report was prepared by Dudek biologists Danielle Mullen and Thomas Liddicoat. Vipul Joshi and Anita Hayworth, PhD, provided review. Graphics were provided by Mark McGinnis; Hannah Westwood provided word processing.

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APPENDIX A  
*Plant Species Observed*





# APPENDIX A

## Plant Species Observed

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### PLANT SPECIES

#### ANGIOSPERMS (DICOTS)

##### **ADOXACEAE—MUSKROOT FAMILY**

*Sambucus nigra* ssp. *caerulea*—blue elderberry

##### **ANACARDIACEAE—SUMAC FAMILY**

*Malosma laurina*—laurel sumac

##### **APIACEAE—CARROT FAMILY**

\* *Foeniculum vulgare*—sweet fennel

##### **ASTERACEAE—SUNFLOWER FAMILY**

*Artemisia californica*—California sagebrush

*Baccharis pilularis*—coyotebrush

*Baccharis salicifolia*—mulefat, seep-willow, water-wally

*Baccharis sarothroides*—desertbroom

\* *Centaurea melitensis*—tocalote

\* *Centaurea solstitialis*—yellow star-thistle

*Encelia californica*—California brittlebrush

*Ericameria fasciculata*—Eastwood's goldenbush

*Erigeron canadensis*—Canadian horseweed

*Heterotheca grandiflora*—telegraph weed

*Isocoma menziesii* ssp. *menziesii*—spreading goldenbush

*Pseudognaphalium californicum*—ladies' tobacco

\* *Pulicaria paludosa*—Spanish false fleabane

*Stephanomeria* sp.—wirelettuce

##### **BRASSICACEAE—MUSTARD FAMILY**

\* *Brassica nigra*—black mustard

\* *Hirschfeldia incana*—short-pod mustard

##### **CACTACEAE—CACTUS FAMILY**

*Opuntia littoralis*—coastal pricklypear

##### **CHENOPODIACEA—GOOSEFOOT FAMILY**

\* *Atriplex semibaccata*—Australian saltbush

\* *Salsola australis*—Russian thistle

## APPENDIX A (Continued)

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### ***EUPHORBIACEAE*—SPURGE FAMILY**

- \* *Ricinus communis*—castorbean

### ***FABACEAE*—LEGUME FAMILY**

- Acmispon glaber*—common deerweed

### ***MYRTACEAE*—MYRTLE FAMILY**

- Eucalyptus sp.*—eucalyptus

### ***SALICACEAE*—WILLOW FAMILY**

- Salix gooddingii*—Goodding's willow

### ***SOLANACEAE*—NIGHTSHADE FAMILY**

- \* *Nicotiana glauca*—tree tobacco

## ANGIOSPERMS (MONOCOTS)

### ***ARECACEAE*—PALM FAMILY**

- \* *Washingtonia robusta*—Washington fan palm

### ***POACEAE*—GRASS FAMILY**

- \* *Bromus madritensis*—foxtail chess

- \* Signifies introduced (non-native) species

APPENDIX B  
*Wildlife Species Observed*



**APPENDIX B**  
**Wildlife Species Observed**

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**WILDLIFE SPECIES—VERTEBRATES**

**BIRDS**

**ACCIPITRIDAE—HAWKS, KITES, EAGLES, AND ALLIES**

*Buteo jamaicensis*—red-tailed hawk

**CATHARTIDAE—NEW WORLD VULTURES**

*Cathartes aura*—turkey vulture

**CORVIDAE—CROWS AND JAYS**

*Corvus corax*—common raven

**COLUMBIDAE—PIGEONS AND DOVES**

*Zenaida macroura*—mourning dove

**TROCHILIDAE—HUMMINGBIRDS**

*Calypte anna*—Anna's hummingbird

**AEGITHALIDAE—LONG-TAILED TITS AND BUSHTITS**

*Psaltriparus minimus*—bushtit

**TROGLODYTIDAE—WRENS**

*Thryomanes bewickii*—Bewick's wren

**MIMIDAE—MOCKINGBIRDS AND THRASHERS**

*Mimus polyglottos*—northern mockingbird

**PARULIDAE—WOOD-WARBLERS**

*Dendroica coronata*—yellow-rumped warbler

**POLIOPTILIDAE—GNATCATCHERS AND GNATWRENS**

*Polioptila californica*—California gnatcatcher

**EMBERIZIDAE—EMBERIZIDS**

*Melospiza melodia*—song sparrow

*Melospiza crissalis*—California towhee

## APPENDIX B (Continued)

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### ***TYRANNIDAE*—TYRANT FLYCATCHERS**

*Sayornis nigricans*—black phoebe

*Sayornis saya*—Say's phoebe

*Tyrannus vociferans*—Cassin's kingbird

### ***FRINGILLIDAE*—FRINGILLINE AND CARDUELINE FINCHES AND ALLIES**

*Carpodacus mexicanus*—house finch

## MAMMALS

### ***CANIDAE*—WOLVES & FOXES**

*Canis latrans*—Coyote

### ***LEPORIDAE*—HARES AND RABBITS**

*Sylvilagus bachmani*—brush rabbit

\* signifies introduced (non-native) species

APPENDIX C  
*Wetland Determination Data Form*





**WETLAND DETERMINATION DATA FORM - Arid West Region**

Project/Site: IRWD Syphon Reservoir Interim Facilities City/County: Irvine/Orange Sampling Date: 10/24/12  
 Applicant/Owner: Irvine Ranch Water District (IRWD) State: CA Sampling Point: 1  
 Investigator(s): Thomas Liddicoat Section, Township, Range: Section 29, Township 5S, Range 8W  
 Landform (hillslope, terrace, etc.): none Local relief (concave, convex, none): none Slope (%): \_\_\_\_\_  
 Subregion (LRR): C - Mediterranean California Lat: 33°42'30.49"N Long: 117° 43'54.40"W Datum: \_\_\_\_\_  
 Soil Map Unit Name: Sorrento Loam, 0-2% slopes NWI classification: \_\_\_\_\_

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation  Soil  or Hydrology  significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation  Soil  or Hydrology  naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: Data Station is within mapped disturbed mule fat scrub vegetation. This area is considered non-jurisdictional.	

**VEGETATION**

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b>	
1. <i>Washingtonia sp.</i>	2	Yes	Not Listed	Number of Dominant Species That Are OBL, FACW, or FAC:	2 (A)
2. <i>Eucalyptus sp.</i>	2	Yes	Not Listed	Total Number of Dominant Species Across All Strata:	7 (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC:	28.6 % (A/B)
4. _____					
Total Cover:	4 %				
Sapling/Shrub Stratum				<b>Prevalence Index worksheet:</b>	
1. <i>Malosma laurina</i>	5	Yes	Not Listed	Total % Cover of:	Multiply by:
2. <i>Baccharis salicifolia</i>	10	Yes	FACW*	OBL species	x 1 = 0
3. <i>Baccharis pilularis</i>	2		Not Listed	FACW species	10 x 2 = 20
4. <i>Washingtonia sp.</i>	3		Not Listed	FAC species	5 x 3 = 15
5. <i>Artemisia californica</i>	2		Not Listed	FACU species	x 4 = 0
				UPL species	35 x 5 = 175
Total Cover:	22 %			Column Totals:	50 (A) 210 (B)
Herb Stratum				Prevalence Index = B/A = 4.20	
1. <i>Heterotheca grandiflora</i>	5	Yes	Not Listed	<b>Hydrophytic Vegetation Indicators:</b>	
2. <i>Conyza canadensis</i>	5	Yes	FAC	<input checked="" type="checkbox"/> Dominance Test is >50%	
3. <i>Bromus madritensis</i>	2		Not Listed	<input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup>	
4. <i>Brassica sp.</i>	10	Yes	Not Listed	<input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)	
5. <i>Centaurea sp.</i>	2		Not Listed	<input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)	
6. _____				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present.	
7. _____					
8. _____					
Total Cover:	24 %			<b>Hydrophytic Vegetation Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>	
Woody Vine Stratum					
1. _____					
2. _____					
Total Cover:	%				
% Bare Ground in Herb Stratum	80 %	% Cover of Biotic Crust	%		

Remarks:

**SOIL**

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth (inches)	Matrix		Redox Features			Texture <sup>3</sup>	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>		
0-6	10 YR 3/2	100%				clay loam	fill dirt? very rocky, hard to dig

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix.    <sup>2</sup>Location: PL=Pore Lining, RC=Root Channel, M=Matrix.  
<sup>3</sup>Soil Textures: Clay, Silty Clay, Sandy Clay, Loam, Sandy Clay Loam, Sandy Loam, Clay Loam, Silty Clay Loam, Silt Loam, Silt, Loamy Sand, Sand.

<b>Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)</b> <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)	<b>Indicators for Problematic Hydric Soils:<sup>4</sup></b> <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
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<sup>4</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present.

<b>Restrictive Layer (if present):</b> Type: _____ Depth (inches): _____	<b>Hydric Soil Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
--------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------

Remarks: No redox features, organic materials, stratification. Very difficult to hand dig pit; very rocky.

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (any one indicator is sufficient) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6) <input type="checkbox"/> Other (Explain in Remarks)	<b>Secondary Indicators (2 or more required)</b> <input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)
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<b>Field Observations:</b> Surface Water Present?    Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present?    Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe)    Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____	<b>Wetland Hydrology Present?</b> Yes <input type="radio"/> No <input checked="" type="radio"/>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No signs of hydrology.

APPENDIX D  
*Drainage Ditch Assessment*



# HARMSWORTH ASSOCIATES

## Environmental Consultants

December 5, 2012

Ms. Jo Ann Corey  
Irvine Ranch Water District  
3512 Michelson Drive  
Irvine, California 92612.

### **Re: Syphon Reservoir Ditch Assessment**

Dear Ms. Corey,

As requested, Harmsworth Associates (HWA) conducted an assessment of a concrete channel (the Portola Drainage Channel) at Syphon Reservoir to determine its jurisdictional status. The Irvine Ranch Water District (IRWD) is conducting environmental reviews for the Syphon Reservoir Interim Facilities Project and a jurisdictional assessment of the concrete ditch is required as part of the environmental review.

Paul Galvin of HWA conducted the site assessment at Syphon Reservoir on November 30, 2012. Mr. Galvin met Jo Ann Corey and Chris Kessler of IRWD onsite to review the concrete channel. The objective of the assessment was to determine if the concrete channel (the Portola Drainage Channel) is subject to the jurisdiction of the US Army Corps of Engineers (Corps) 404 program, the California Regional Water Quality Control Board (CRWQCB) 401 program and the California Department of Fish and Game (CDFG) 1600 program.

The Portola Drainage Channel was installed as part of the original Portola Parkway alignment work and its function is to direct flows from the road offsite. The channel runs along the north side of Portola Parkway (Figures 1 and 2) and collects water from the road and other concrete v-ditches located on cut slopes on the northeast and northwest of Portola Parkway. The channel crosses under Portola Parkway via an underground culvert directly south of Syphon Reservoir. The concrete channel does not connect with Syphon Reservoir and does not connect with any natural drainage features, creeks or wetlands.

The concrete channel is approximately 6 feet wide with steep sides and is devoid of vegetation (Photographs 1-4). The channel has no soil (other than some deposited sand) and no vegetation but does convey storm water. The channel does not connect with any natural drainage features, any creeks, wetlands or any jurisdictional areas. All water comes from the road run-off, the feeder v-ditches and surface flow from the immediate vicinity of the channel.

The Portola Drainage Channel was artificially created in an upland to remove storm flows from the road. Prior to the creation of the channel there was no natural drainage features, creeks or other jurisdictional features in this or adjacent areas. There are no natural drainage features in this area, as evidenced from field surveys, site photographs, aerial photographs and the topographic map of the area.

The Portola Drainage Ditch is not subject to the Corps, RWQCB or CDFG jurisdiction since;

1. The concrete channel was artificially created in an upland,
2. Prior to the creation of the channel there was no natural drainage features, creeks or other jurisdictional features in this area,
3. There are currently no natural drainage features, creeks or other jurisdictional features in the area,
4. The channel is concrete and devoid of soil or vegetation,
5. The channel does not connect upstream with any jurisdictional features; downstream it does connect with the storm system via an underground culvert.

In summary, the Portola Drainage Ditch is a non-jurisdictional concrete channel that does connect with the storm system via an underground culvert.

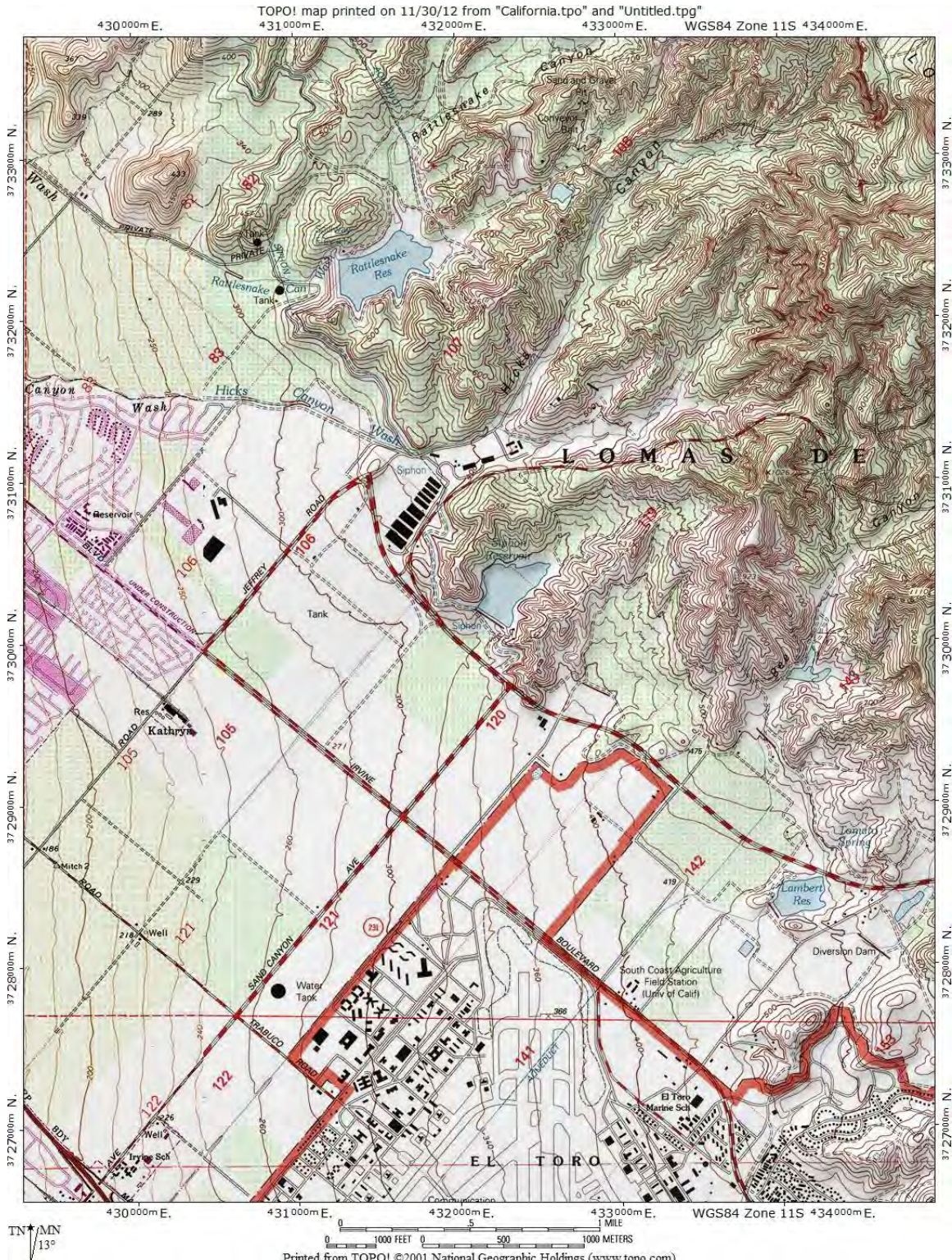
Therefore, no Corps, RWQCB or CDFG permits are required. Standard BMPs should be implemented to prevent any sediment or pollutants going downstream to the storm system via the underground culvert.

If you need additional information please contact me at (714) 389-9527.

Yours sincerely,  
Harmsworth Associates

A handwritten signature in black ink, appearing to read "Paul Galvin". The signature is fluid and cursive, with the first name "Paul" written in a larger, more prominent script than the last name "Galvin".

Paul Galvin, M.S.  
Vice President



**Figure 1:** Topographic map of the project vicinity. Source: U.S.G.S. Topographic Series.





**Figure 2:** Aerial photograph of the project site. Source: Google Earth, Inc.



**Photograph 1:** Portola Drainage Channel, looking east.



**Photograph 2:** Portola Drainage Channel, looking west.



**Photograph 3:** Portola Drainage Channel, looking east at Portola Parkway culvert crossing.



**Photograph 4:** Portola Drainage Channel, at Portola Parkway culvert crossing.

APPENDIX E  
*Project Site Photographs*



## APPENDIX E

### Project Site Photographs

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**Exhibit A – Photograph is facing northwest and represents the project site  
(dam face is in the foreground)**



**Exhibit B – Photograph is facing west and represents the project site  
(dam face is in the foreground)**

## APPENDIX E (Continued)

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**Exhibit C – Photograph is facing southwest and represents the project site  
(dam face is in the foreground)**



**Exhibit D – Photograph is facing east and represents the project site  
(dam face background)**

## APPENDIX E (Continued)

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**Exhibit E – Photograph is facing south and shows the concrete drainage structure adjacent to Portola Parkway**



## APPENDIX E (Continued)

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February 11, 2013

Prepared by: F. Sanchez

Submitted by: G. Heiertz

Approved by: Paul Cook



## ACTION CALENDAR

### AMENDMENT OF AGREEMENT BETWEEN CITY OF IRVINE AND IRVINE RANCH WATER DISTRICT FOR DEVELOPMENT OF CIENEGA FILTRATION PROJECT FIELD DEMONSTRATION

#### SUMMARY:

The purpose of this item is to recommend approval of a second amendment to the partnership agreement between Irvine Ranch Water District (IRWD) and the City of Irvine (City) for the construction and operation of the Cienega Field Demonstration Project. The term of the original agreement was based on the assumption that an agreement for construction of a Full-Scale Cienega Project would have been negotiated in 2009. The first amendment, executed in 2010, anticipated authorization for construction of a Full-Scale Cienega Project in 2011, and extended the term to December 2012. The proposed second amendment extends the term to December 2015, removes all references to construction of a full-scale project and includes a provision for the City and IRWD to cost-share the direct operating costs of the facility. Extension of the term allows the City of Irvine to remain in compliance with its permit obligations.

#### BACKGROUND:

In 2007, IRWD and the City entered into an agreement for the construction and operation of the Cienega Field Demonstration Project. The City contributed \$1,425,000 toward the construction of the project. The City's participation in the project was approved by the Executive Officer of the Regional Board as a mechanism for the City to comply with its permit requirements for compliance with selenium and nitrogen TMDLs.

The original agreement was executed based on the assumption that in 2009 the parties would negotiate a new agreement regarding participation in the Full-Scale Cienega Project. In January 2010, the agreement was amended to extend the term to December 2012 to accommodate additional technology evaluations and pilot testing. Later in 2010, IRWD opted to not pursue development of a Full-Scale Project due to lack of uncertainty over the selenium TMDL, lack of funding commitments from stakeholders, and overall project cost. The City is currently working on developing other project alternatives for its long-term compliance with the TMDLs. The schedule for the proposed selenium revision is unknown due to unresolved legal issues and Regional Board staff resource limitations. In order to ensure continued permit compliance the City has requested that IRWD continue to operate the pilot Cienega facility.

The proposed amendment will extend the term of the agreement until the earlier of (i) December 31, 2015 or (ii) the City notifies IRWD that it is terminating its continued participation. The amendment also removes all references to construction of a full-scale project and includes a provision that the parties will cost-share all direct chemical and water pumping maintenance costs for the facility on a 50-50 basis. In no event will the agreement extend beyond December 31, 2015, unless otherwise agreed to in writing.

FISCAL IMPACTS:

None.

ENVIRONMENTAL COMPLIANCE:

This project is subject to the California Environmental Quality Act (CEQA) and in conformance with the California Code of Regulations Title 14, Chapter 3, Article 7, an Environmental Impact Report was prepared. The final Environmental Impact Report was certified by the Board on April 24, 2004.

COMMITTEE STATUS:

This item was reviewed at the Water Resources Policy and Communications Committee on February 7, 2013.

RECOMMENDATION:

THAT THE BOARD APPROVE AMENDMENT NO. 2 TO THE AGREEMENT BETWEEN CITY OF IRVINE AND IRVINE RANCH WATER DISTRICT FOR DEVELOPMENT OF CIENEGA FILTRATION PROJECT FIELD DEMONSTRATION.

LIST OF EXHIBITS:

Exhibit "A" – "Amendment No. 2 to Agreement Between City of Irvine and Irvine Ranch Water District for Development of Cienega Filtration Project Field Demonstration"

## EXHIBIT "A"

### AMENDMENT NO. 2 TO AGREEMENT BETWEEN CITY OF IRVINE AND IRVINE RANCH WATER DISTRICT FOR DEVELOPMENT OF CIENEGA FILTRATION PROJECT FIELD DEMONSTRATION

This Amendment No. 2 to the Agreement for Development of the Cienega Filtration Project Field Demonstration ("Amendment No.2") is effective as of December 31, 2012 ("Effective Date"), by and between the CITY OF IRVINE, a municipal corporation formed and existing under its Charter and the Constitution and laws of the State of California ("CITY"), and the IRVINE RANCH WATER DISTRICT, a California water district formed and existing under section 34000 *et seq.* of the California Water Code ("IRWD"), pursuant to the following terms and conditions. The City and the IRWD are collectively referred to herein as the "Parties."

#### RECITALS

A. The Parties have entered into that certain agreement entitled "Agreement Between City of Irvine and Irvine Ranch Water District For Development of the Cienega Filtration Project Field Demonstration," dated June 12, 2007 ("Agreement"), as amended by Amendment No. 1, dated December 30, 2010 ("Amendment No. 1"). Capitalized terms used herein shall have the meanings given such terms in the Agreement, unless otherwise defined herein.

B. Pursuant to the Agreement, the Field Demonstration Project was constructed and was continuing to operate pending the proposed design and possible implementation of a full scale Cienega Project (the "Full Scale Project"). The term of the Agreement reflected the initial contemplation of the Parties that they would meet and confer to develop a new agreement for the Parties' participation in the Full-Scale Project in 2009. At the time Amendment No. 1 was

entered into, construction of the Full-Scale Project was anticipated to commence in 2011. The parties no longer envision that the Full-Scale Project will be constructed.

C. In the Agreement (Recital I), the Parties acknowledged that the viability of the Full-Scale Project was dependent upon a number of factors and there was no assurance it would be implemented. Section 9 of the Agreement provided that if the Full-Scale Project did not proceed, the Parties would meet and confer to discuss an agreement on the continued operation and maintenance of the Field Demonstration Project, and/or on alternative project(s) that may be implemented to meet the City Offsets. The Parties acknowledge that IRWD has determined not to proceed with construction of the Full-Scale Project, and the Parties wish to enter into this Amendment No. 2 to further extend the term of the Agreement beyond the extension provided in Amendment No. 1, so as to allow for the continued operation and maintenance of the Field Demonstration Project and to provide for the sharing of certain costs associated with such continued operation and maintenance.

D. The Parties acknowledge that this Amendment No. 2 is also being entered into to account for the recently constructed Jeffrey Road underpass and the resulting selenium and nitrogen loads and necessary offsets for those loads for continued compliance with the City Dewatering Permit. This Amendment No. 2 will, therefore, also apply the terms of the Agreement to acknowledge an allocation of offsets to the City, so as to provide continued coverage to the City under the City Dewatering Permit for the selenium and nitrogen discharges from the Jeffrey Road underpass dewatering activities as well.

#### **TERMS OF AMENDMENT**

NOW, THEREFORE, the Parties agree as follows:

1. Incorporation of Recitals. The above referenced Recitals are incorporated into the terms of this Amendment No. 2 in their entirety.

2. Definitions of the Terms "Nitrogen Offset," "Selenium Offset" and "City Offsets." For purposes of the Agreement, the terms "Nitrogen Offset" and "Selenium Offset," as defined in Recital D to the Agreement, are hereby redefined as follows: The term "Nitrogen Offset" shall mean all necessary offsets for nitrogen discharges from dewatering activities associated with the Jamboree Road, Culver Drive and Jeffrey Road underpasses, as needed to comply with the City Dewatering Permit. The term "Selenium Offset" shall mean all necessary offsets for selenium discharges from dewatering activities associated with the Jamboree Road, Culver Drive and Jeffrey Road underpasses, as needed to comply with the City Dewatering Permit. The term "City Offsets" is thus correspondingly defined to include the necessary Nitrogen and Selenium Offsets, as needed under the City Dewatering Permit, for the Jamboree Road, Culver Drive and Jeffrey Road underpasses.

3. Duration of Operation of Field Demonstration Project. Section 3 of the Agreement is amended and replaced to read in its entirety as follows: "IRWD shall use its best efforts to secure permit extensions and/or new permits to continuously operate the Field Demonstration Project so as to ensure uninterrupted compliance with the required City Offsets through the earlier of (i) December 31, 2015, or (ii) until such time as the City has notified IRWD in writing that the City is terminating its continued participation in this Agreement ("Termination Notice"), whereby upon service of the Termination Notice, the City shall have no further obligations under this Agreement, except for its share of "Direct Costs" (defined below) incurred up to that time. It is the intent of the Parties that during the term of this Agreement, City compliance with the City Offsets is to be secured through the continuous operation of the

Field Demonstration Project (as may be supplemented by the San Joaquin Marsh Project for the Nitrogen Offset). After December 31, 2015, or such earlier date described in clause (ii) above, City compliance with the City Offsets shall be secured by such other means as may be separately determined appropriate by the City, unless the termination date of this Agreement is further extended pursuant to the mutual written agreement of the Parties. IRWD makes no representations or warranties regarding the acceptance of the City Offsets by the Regional Board and/or the U.S. Environmental Protection Agency as an acceptable offset program for purposes of the City Dewatering Permit or otherwise.”

4. Operation Costs. Section 7 of the Agreement is amended and replaced to read in its entirety as follows: “IRWD and the City will share on a 50-50 basis all direct chemical and water pumping maintenance costs of the Field Demonstration Project (hereafter, “Direct Costs”) until this Agreement terminates. The total Direct Costs anticipated for the 2013 calendar year have been estimated to be \$45,200. The total Direct Costs are thus estimated to be less than \$50,000 annually, throughout the term of the Agreement. IRWD will annually provide to the City an accounting of the total Direct Costs for the calendar year, along with an invoice to the City, for payment by the City of its 50% share of the Direct Costs, within thirty (30) days following the end of such calendar year. The City’s payment shall be due and payable within forty-five (45) days of its receipt of such invoice. Except as otherwise provided in this Section 7, the City shall have no responsibility for any other ongoing operations and/or maintenance costs that concern or relate to the Field Demonstration Project, nor for any other costs or expenses associated with the continued operation of the Field Demonstration Project, and IRWD shall bear all such responsibility, including responsibility for all testing and monitoring costs associated with the Field Demonstration Project.”

5. Offsets. Section 8 of the Agreement is amended and replaced to read in its entirety as follows: “For as long as the Field Demonstration Project is operated, nitrogen, selenium and other pollutant removal achieved by the Field Demonstration Project, as determined and documented by the IRWD (at its sole cost and expense), and in a manner acceptable to the Regional Board (subject to the provisions below in this section regarding cooperation by the Parties in the preparation and filing of documentation required by the Regional Board), shall be credited first to the City, in amounts as needed for the City to achieve the City Offsets, as required under the City Dewatering Permit for the Jamboree Road, Culver Drive and Jeffrey Road underpasses, and over such amounts, to IRWD. If, in any given year, the Field Demonstration Project does not achieve the Nitrogen Offset required for the City Dewatering Permit, IRWD shall provide any Nitrogen Offset shortfall required for the City to achieve the needed Nitrogen Offset, from the San Joaquin Marsh Project, to be designed, constructed, operated and maintained by the IRWD and at no charge or cost to the City. Continued operation and maintenance of the Field Demonstration Project is expected to achieve sufficient reductions in selenium loads to enable the City to achieve its Selenium Offset; however, IRWD makes no representation or warranty in this regard. No adjustments to any payment amounts in Section 7 of this Agreement shall be made on account of any such potential shortfall in the City achieving the City Offsets. The Parties agree to cooperate with one another in preparing and filing documentation, as may be required by the Regional Board and/or the U.S. Environmental Protection Agency, to implement the requirements of this Section and achieve the Selenium Offset through the Field Demonstration Project, and to achieve the Nitrogen Offset through the Field Demonstration Project, and if needed, the San Joaquin Marsh Project. Any other pollutant offsets, other than those to be achieved for the Jamboree Road, Culver Drive and



Jeffrey Road underpass dewatering activities, are to be addressed as a part of some other project or project (s).”

6. Termination. Section 13 of the Agreement is amended and replaced to read in its entirety as follows: “Unless otherwise extended or shortened in a writing signed by the Parties, or an earlier termination date occurs as provided for in this Agreement, this Agreement will expire on December 31, 2015.”

7. Titles and Captions. Titles and captions are for convenience of reference only and do not define, describe or limit the scope or the intent of this Amendment or of any of its terms. References to section numbers are to sections in this Amendment, unless expressly stated otherwise.

8. Legal Advice. Each Party represents and warrants to the other the following: they have carefully read this Amendment, and in signing this Amendment, they do so with full knowledge of any right which they may have; they have received independent legal advice from their respective legal counsel as to the matters set forth in this Amendment, or have knowingly chosen not to consult legal counsel as to the matters set forth in this Amendment; and, they have freely signed this Amendment without any reliance upon any agreement, promise, statement or representation by or on behalf of the other Party, or their respective agents, employees, or attorneys, except as specifically set forth in this Amendment, and without duress or coercion, whether economic or otherwise.

9. Counterparts. This Amendment No. 2 may be signed in multiple counterparts which, when signed by the Parties hereto, shall constitute a binding agreement.

10. Modification of Agreement. Except as modified by this Amendment No. 2, the provisions of the Agreement shall continue in full force and effect.

IN WITNESS WHEREOF, this Amendment No. 2 has been executed in the names of the respective parties by their duly authorized officers, and shall be effective as of the Effective Date.

“CITY”

CITY OF IRVINE, a California municipal corporation

Dated: \_\_\_\_\_

By: \_\_\_\_\_

Its: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
City Clerk

IRVINE RANCH WATER DISTRICT

Dated: \_\_\_\_\_

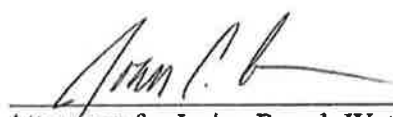
By: \_\_\_\_\_


Its: \_\_\_\_\_

APPROVED AS TO FORM:

By \_\_\_\_\_  
Attorneys for City of Irvine

APPROVED AS TO FORM:

By  \_\_\_\_\_  
Attorneys for Irvine Ranch Water District  
00167026

February 11, 2013  
Prepared by: G. Maswadeh  
Submitted by: Janet Wells/Cheryl Clary  
Approved by: Paul Cook 

## ACTION CALENDAR

### BENEFIT FORMULA AND CONTRIBUTION RATES FOR NEW CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM MEMBERS

#### SUMMARY:

The District has received information from the California Public Employees' Retirement System (CalPERS) regarding the impact of Assembly Bill 340 on employee and employer contribution rates. AB 340 created the Public Employees' Pension Reform Act (PEPRA) that implemented new benefit formulas and final compensation period, as well as contribution requirements for new employees hired on or after January 1, 2013 who meet the definition of a "new member" under PEPRA. CalPERS has recommended an Employee Contribution rate of 6.25% of reportable compensation for new employees that receive the 2% @ 62 retirement benefit.

On September 24, 2012, the IRWD Board adopted a "second tier" retirement benefit of 2% at 60 for employees hired after September 29, 2012. As part of this action, the Board stipulated that employees receiving this benefit shall pay the entire Employee Contribution rate, defined by CalPERS as 7%. The new 2% @ 62 retirement benefit is approximately 10% less valuable than the 2% at 60 benefit, and the Employee Contribution rate of 6.25% associated with the 2% @ 62 benefit is approximately 10% percent less than the 7% contribution rate associated with the 2% @ 60 benefit. Since this lower contribution rate corresponds with the lower value of the 2% @ 62 formula, staff recommends that the Board approve the Employee Contribution rate of 6.25% for IRWD employees hired after January 1, 2013 at the 2% @ 62 retirement benefit formula.

#### BACKGROUND:

As of December 31, 2012, IRWD employees were enrolled in two pension formulas based on their dates of hire and PERS eligibility. Employees hired before September 29, 2012 are covered by the 2.5% @ 55 benefit formula and have a one-year final compensation period. The Employee Contribution rate for this formula is set by CalPERS at 8%, of which current employees pay 5%, 7% or 8% depending on job classification with the District currently paying the balance (3%, 1% or 0%) of the employee contribution on behalf of covered employees. These contribution rates are set to change as of March 2, 2013, with employees paying an additional 1%. Employees hired after September 29, 2012 are covered by the 2% @ 60 pension formula and have a three-year final compensation period; all other optional benefits contracted for by the District under the 2.5% @ 55 formula apply. This formula is referred to as IRWD's "second tier" retirement benefit. The Employee Contribution rate for this formula is set by CalPERS at 7%. When the District amended its contract with CalPERS, the amendment stipulated that employees hired under the 2% @ 60 formula pay the full 7% Employee Contribution.

Under PEPRA, employees hired on or after January 1, 2013 who are coming from another agency that contracts with CalPERS for pension benefits or has reciprocity with CalPERS with

less than a 180-day break in service between that employment and employment with the District, do not meet the PEPRA definition of "new members". The new employees will be considered "classic members" and will be covered by the pension benefits in place on December 31, 2012. They will be included in IRWD's second tier benefit: 2% @ 60 pension formula, with a three-year final compensation period, paying the full 7% Employee Contribution.

Employees hired as new members (as per CalPERS' definition) on or after January 1, 2013 will be enrolled in the newly established 2% @ 62 formula and will have a three-year final compensation period; all other optional benefits contracted for by the District under the 2.5% @ 55 formula apply. This formula is referred to as IRWD's "third tier" retirement benefit. The employer rate for employees in this tier of benefits will be equal to the District's current employer rate through June 30, 2013, or 16.106% of reportable compensation. The employer contribution rate for fiscal year July 1, 2013 through June 30, 2014 for new members will be the same as the employer contribution rate for existing miscellaneous members as set in the June 30, 2011 valuation, or 16.795% of reportable compensation.

PERS has recommended an Employee Contribution rate for the 2% @ 62 formula of 6.25% of reportable compensation. The 2% @ 62 formula reflects a reduction in benefits to the employee by approximately 10% from the previous 2% @ 60 formula. The 10% reduction in benefits logically translates to the new Employee Contribution rate of 6.25%. In determining the 6.25% rate, CalPERS set the Employee Contribution rate at 50% of the expected total normal cost for the benefits that will apply to new members on January 1, 2013, rounded to the nearest one quarter of one percent. The total expected normal cost used for this calculation was 12.5%. The normal cost rate was derived based on the benefit formula and final compensation under PEPRA as well as other optional benefit provisions for which the District contracts with CalPERS. Details on the derivation of total normal cost for this formula are provided in Exhibit "A". The new member contribution may change over time if the total normal cost for new miscellaneous members fluctuates by more than one percent of payroll from the estimated initial normal cost of 12.5%. The total normal cost will be impacted over time by the actual demographics of the District's plan and the actuarial assumptions used by CalPERS. The employee contribution rate will be reviewed once a year when the District's annual actuarial valuation is performed. The first review is expected to be conducted in conjunction with the June 30, 2013 actuarial valuation that will take place in the fall of 2014. Therefore, the Employer Contribution rate of 6.25% for new members is expected to remain unchanged until July 1, 2015. As with all of the District's formulas, the District retains the ability to change the amount of the CalPERS contribution paid by the District and paid by the employees.

Consultants from the Aon Hewitt team prepared a preliminary update of the previous funding analysis discussed by the Board in April 2012 to show the effect of the proposed 6.25% employee contribution rate on the overall long-term funding status of the plan. The update included incorporating the most recent returns as reported by CalPERS, the changes in employee contributions being made as of March 1, 2012 and employee demographics changes (based on recent employee turnover data and projected turnover rates). The results showed that the District's long-term strategic goal of being fully funded within approximately the next 20 years increases slightly – approximately two years.

Based on correlation of the reduced value of the retirement (comparing 2% @ 60 with 2% @ 62) and the reduced employee contribution amount (6.25% compared with 7%, respectively), staff recommends that the Board adopt an employee contribution amount of 6.25% for the new "third tier" 2% @ 62 retirement benefit.

FISCAL IMPACTS:

The projected future fiscal impacts for changes enacted under PEPRA will occur gradually beginning no earlier than July 1, 2015 and will be based on the ratio of the second and third tier annual payroll as compared to the District's annual payroll as of June 30, 2012.

ENVIRONMENTAL COMPLIANCE:

This item is not a project as defined in the California Environmental Quality Act Code of Regulations, Title 14, Chapter 3, Section 15378.

COMMITTEE STATUS:

This item was reviewed by the Finance and Personnel Committee on February 5, 2013.

RECOMMENDATION:

THAT THE BOARD APPROVE THE EMPLOYEE CONTRIBUTION RATE OF 6.25% FOR NEW EMPLOYEES HIRED AFTER JANUARY 1, 2013 AS ESTABLISHED BY THE CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM (CALPERS).

LIST OF EXHIBITS:

Exhibit "A" – Derivation of Total Normal Cost for Purposes of Setting New Members Contribution Rates effective January 1, 2013.

## EXHIBIT "A"



### DERIVATION OF TOTAL NORMAL COST FOR PURPOSES OF SETTING NEW MEMBERS CONTRIBUTION RATES EFFECTIVE JANUARY 1, 2013

December 2012

The purpose of this document is to support the letter that was sent in December 2012 to all public agency employers regarding the new member and employer contribution rates starting on January 1<sup>st</sup> 2013. Specifically, this document explains how the total normal cost was derived for new members. Assembly Bill (AB) 340 created the Public Employees' Pension Reform Act (PEPRA) that implemented new benefit formula and final compensation period as well as new contribution requirements for new employees hired after January 1, 2013 who meet the definition of new member under PEPRA. Please refer to the [Pension Reform](#) section of the CalPERS website for more information on pension reform, including information regarding when an employee will be considered a new member under PEPRA.

In accordance with PEPRA and CalPERS interpretation of the term similarly situated, the member contribution rate was set at 50 percent of the expected total normal cost rate for the benefits that will apply to new members on January 1, 2013 rounded to the nearest one quarter of one percent. The normal cost rate was derived based on the PEPRA benefit formula and any optional benefit provisions the employer has contracted with CalPERS. Since the actual demographics of new members will not be known until they are hired and due to the limited time available for implementation of PEPRA, the normal cost rate was derived based on the average demographics of new members hired in the last ten years in the current 2 percent at age 55 miscellaneous risk pool and the 3 percent at age 50 safety risk pool.

The table below provides a summary of the membership data used. For additional information, please refer to the Summary of Participant Data section of the June 30, 2011 risk pool annual valuation reports for the 2 percent at age 55 miscellaneous and the 3 percent at age 50 safety risk pools. These reports are available on the CalPERS website.

	Miscellaneous	Safety
Member Count	6,998	4,590
Average Entry Age	37	29
Average Attained Age	41	34
Average Service	4.2	4.7

The actuarial assumptions and methods used in calculating the total normal cost rate are consistent as those used in the actuarial cost analysis of AB 340. A copy of the cost

analysis, which contains the actuarial assumptions and methods used, can be found at the following link on the CalPERS website:

<http://www.calpers.ca.gov/eip-docs/about/press/pr-2012/aug/cost-analysis.pdf>

To derive the total normal cost used to set the contribution rates for new members, first the total normal cost rate was calculated for each employee category (e.g., Miscellaneous, Fire, Police and County Police Officer). This was done since actuarial assumptions used in actuarial valuations differ by employee category. Consistent with our annual valuations, the actuarial assumptions that were applied to Police were also applied to local prosecutors, local sheriffs and other local safety categories.

Once the total normal cost and surcharges for each category were known, these normal costs and surcharges were blended for each non-pooled plan and each pool to obtain the total normal cost to be used for setting the contribution rate for that plan or pool for all new members. For non-pooled plans, the total normal cost rate was derived by blending the normal costs proportional to the actual payroll for each employee category in the plan as of June 30, 2011. For pooled plans, the normal cost was blended based on the membership demographics of the 2 percent at age 55 miscellaneous risk pool and 3 percent at age 50 safety risk pool for miscellaneous plans and safety plans, respectively.

The tables below provide the total normal costs and surcharges for optional benefit provisions for new members by employee category that were used for the calculation of each plan's individual total normal cost.

**2% at Age 62 Miscellaneous**

	Total Normal Cost
Basic Total Normal Cost	12.5%
<b>Surcharges</b>	
Cost-of-Living Adjustments (3%,4% or 5% COLA)	0.7%
25% Post Retirement Survivor Allowance (PRSA)	0.4%
50% Post Retirement Survivor Allowance (PRSA)	0.8%
Industrial Disability Retirement (IDR)	0.5%
Increased IDR	0.8%