

**FINAL
MITIGATED NEGATIVE DECLARATION /
INITIAL STUDY

FOR THE

LOWER DAY BASIN PROJECT**

Prepared for:

Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, California 91708
(909) 993-1600

Prepared by:

Tom Dodson & Associates
2150 North Arrowhead Avenue
San Bernardino, California 92405
(909) 882-3612

April 2016

Conformed
Notice of Determination

DATE FILED & POSTED

Posted On: 4/22/16

Removed On: 6/4/16

Receipt No: 36-04222016-0230

NOTICE OF DETERMINATION

To: Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708

and

San Bernardino County
Clerk of the Board of Supervisors
385 N. Arrowhead Avenue, 2nd Floor
San Bernardino, CA 92415

Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

LOWER DAY BASIN PROJECT

Project Title

SCH #2015121018	Joel Ignacio, P.E.	(909) 993-1913
State Clearinghouse Number	Lead Agency Contact Person	Area Code/Telephone/Extension

Project Location:

The proposed project is located in the City of Rancho Cucamonga, San Bernardino County, California. The proposed project site consists of an existing basin with several cells. The Lower Day Basin is located immediately south of Interstate 210; immediately west of Day Creek channel; about 1/4 mile north of Base Line Road; and immediately east of Rochester Avenue. The project location is depicted on the USGS Cucamonga Peak 7.5' Topographic Quadrangle map. Specifically, the project is located within Section 31, Township 1 North, Range 6 West, San Bernardino Base and Meridian.

Project Description:

The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (CBWM) are proposing the Lower Day Basin Improvement Project (proposed project). The objective of this project is to increase the recharge capacity (recycled water (RW) and stormwater (SW)) recharged into the Chino Groundwater Basin, specifically in the three cells located at Lower Day Basin. Under the Recharge Master Plan Update (RPMU), the proposed improvements for Lower Day Basin will increase recharge capacity by 789 acre-feet per year by modifying the San Bernardino County Flood Control District's (SBCFCD) diversion channel, installing a control gate valve on Cell 3's midlevel outlet, and improving the Basin embankments.

The proposed project includes modifications to the Basin inlets and outlets that will allow more storm water to be diverted into the Basin and stored at higher elevations for longer durations. There will be no modifications to the physical size, layout/configuration or storage volume of the Basin. The proposed improvements will allow the Basin operations to be modified to achieve increased groundwater recharge.

This is to advise that the Inland Empire Utilities Agency has approved the above described

☒ Lead Agency ☐ Responsible Agency

project on April 20, 2016 and has made the following determination regarding the project:

(Date)

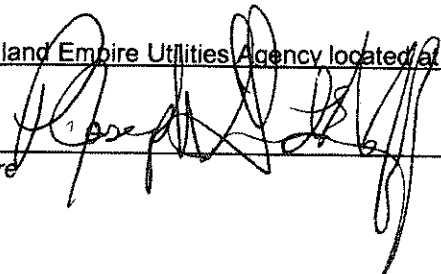
1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
☒ A Mitigated Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☒ were ☐ were not] made a condition of the approval of the project and a Mitigation Monitoring and Reporting Plan was adopted.
4. A Statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.

Notice of Determination
Page 2 of 2

Attachment 1

This is to certify that the Mitigated Negative Declaration/Initial Study and record of project approval is available to the general public at:

Inland Empire Utilities Agency located at 6075 Kimball Avenue, Chino, CA 91708

 General Manager 4/20/10

Signature Title Date



State of California - Department of Fish and Wildlife

2016 ENVIRONMENTAL FILING FEE CASH RECEIPT

DFW 753.5a (Rev. 12/15/15) Previously DFG 753.5a

RECEIPT NUMBER:

36 — 04222016 — 230

STATE CLEARINGHOUSE NUMBER (If applicable)

2015121018

SEE INSTRUCTIONS ON REVERSE. TYPE OR PRINT CLEARLY.

LEAD AGENCY

Inland Empire Utilities Agency

LEAD AGENCY EMAIL

jignacio@ieua.org

DATE

04/22/2016

COUNTY/STATE AGENCY OF FILING

San Bernardino

DOCUMENT NUMBER

N/A

PROJECT TITLE

Lower Day Basin Project

PROJECT APPLICANT NAME

Inland Empire Utilities Agency

PROJECT APPLICANT EMAIL

jignacio@ieua.org

PHONE NUMBER

(909) 993-1913

PROJECT APPLICANT ADDRESS

6075 Kimball Ave

CITY

Chino

STATE

CA

ZIP CODE

91708

PROJECT APPLICANT (Check appropriate box)☐ Local Public Agency ☐ School District ☒ Other Special District ☐ State Agency ☐ Private Entity**CHECK APPLICABLE FEES:**

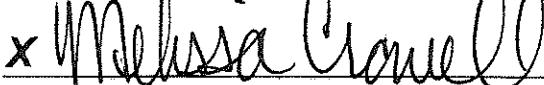
<input type="checkbox"/> Environmental Impact Report (EIR)	\$3,070.00	\$	0.00
<input checked="" type="checkbox"/> Mitigated/Negative Declaration (MND)(ND)	\$2,210.25	\$	2,210.25
<input type="checkbox"/> Certified Regulatory Program document (CRP)	\$1,043.75	\$	0.00

☐ Exempt from fee☐ Notice of Exemption (attach)☐ CDFW No Effect Determination (attach)☐ Fee previously paid (attach previously issued cash receipt copy)

<input type="checkbox"/> Water Right Application or Petition Fee (State Water Resources Control Board only)	\$850.00	\$	0.00
<input checked="" type="checkbox"/> County documentary handling fee		\$	50.00
<input type="checkbox"/> Other		\$	

PAYMENT METHOD:☐ Cash ☐ Credit ☒ Check ☐ Other**TOTAL RECEIVED** \$ 2,260.25

SIGNATURE

x  #9499

AGENCY OF FILING PRINTED NAME AND TITLE

Melissa Crowell, Deputy Clerk

MITIGATED NEGATIVE DECLARATION

Lead Agency: Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708

Contact: Joel Ignacio, P.E.
Phone: (909) 993-1913
Email: jignacio@ieua.org

Project Title: LOWER DAY BASIN PROJECT

State Clearinghouse Number: SCH#2015121018

Project Location: The proposed project is located in the City of Rancho Cucamonga, San Bernardino County, California. The proposed project site consists of an existing basin with several cells. The Lower Day Basin is located immediately south of Interstate 210; immediately west of Day Creek channel; about 1/4 mile north of Base Line Road; and immediately east of Rochester Avenue. The project location is depicted on the USGS Cucamonga Peak 7.5' Topographic Quadrangle map. Specifically, the project is located within Section 31, Township 1 North, Range 6 West, San Bernardino Base and Meridian.

Project Description: The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (CBWM) are proposing the Lower Day Basin Improvement Project (proposed project). The objective of this project is to increase the recharge capacity (recycled water (RW) and stormwater (SW)) recharged into the Chino Groundwater Basin, specifically in the three cells located at Lower Day Basin. Under the Recharge Master Plan Update (RPMU), the proposed improvements for Lower Day Basin will increase recharge capacity by 789 acre-feet per year by modifying the San Bernardino County Flood Control District's (SBCFCD) diversion channel, installing a control gate valve on Cell 3's midlevel outlet, and improving the Basin embankments.

The proposed project includes modifications to the Basin inlets and outlets that will allow more storm water to be diverted into the Basin and stored at higher elevations for longer durations. There will be no modifications to the physical size, layout/configuration or storage volume of the Basin. The proposed improvements will allow the Basin operations to be modified to achieve increased groundwater recharge.

Finding: Inland Empire Utilities Agency's (IEUA) decision to implement this proposed project is a discretionary decision or "project" that requires evaluation under the California Environmental Quality Act (CEQA). Based on the information in the project Initial Study, LACSD has made a *preliminary* determination that a Mitigated Negative Declaration will be the appropriate environmental determination for this project to comply with CEQA.

Initial Study: Copies of the Mitigated Negative Declaration/Initial Study are available for public review at the Copies of the Mitigated Negative Declaration/Initial Study are available for review at the IEUA's office located at 6075 Kimball Avenue, Chino, CA 91708. The proposed Mitigated Negative Declaration was available for public review and comment from December 7, 2015 through January 14, 2016.

Signature Carol A. Hoff Title General Manager Date 4/26/16

Comment Letters and Responses to Comments



MEMORANDUM

February 16, 2016

From: Tom Dodson

To: Mr. Joel Ignacio

Subj: Completion of the Mitigated Negative Declaration for the **Lower Day Basin Development Project (SCH#2015121018)**

The Inland Empire Utilities Agency (IEUA or Agency) received eight written comments on the proposed Mitigated Negative Declaration (MND) for the Lower Day Basin Development Project (SCH# 2015121018). CEQA requires a Negative Declaration, in this case with mitigation measures, to consist of the Initial Study, copies of the comments, any responses to comments as compiled on the following pages; and any other project related material prepared to address issues evaluated in the Initial Study or prepared as part of the planning review of the project.

For this project, the original Initial Study will be utilized as one component of the final MND package. The attached responses to comments, combined with the Initial Study and the Mitigation Monitoring and Reporting Program, constitute the final MND package that will be used by IEUA to consider the environmental effects of implementing the proposed project. The following parties submitted comments. These letters are addressed in the attached Responses to Comments:

1. State Office of Planning and Research, State Clearinghouse
2. California Department of Transportation, District 8
3. Albert A. Webb Associates
4. City of Rancho Cucamonga
5. San Bernardino County Department of Public Works
6. California Department of Fish and Wildlife
7. State Office of Planning and Research, State Clearinghouse
8. California State Water Resources Control Board

Because mitigation measures are required for this project to reduce potentially significant impacts to a less than significant level, the Mitigation Monitoring and Reporting Program (MMRP) attached to this package is required to be adopted as part of this final MND package by the Agency Board. Tom Dodson will be attending the public meeting on this project to address any questions that the Agency Board members may have regarding the adoption of the MND for the proposed project. This Initial Study/Mitigated Negative Declaration and the Lower Day Basin Development Project will be considered by the Agency Board at its meeting on April 20, 2016. Do not hesitate to give me a call if you have any questions regarding the contents of this package.

A handwritten signature in black ink that reads "Tom Dodson". The signature is written in a cursive, flowing style.

Tom Dodson
Attachments

COMMENT LETTER #1



Edmund G. Brown Jr.
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Ken Alex
Director

January 15, 2016

Joel Ignacio
Inland Empire Utility Agency
6075 Kimball Avenue
Chino, CA 91710

Subject: Lower Day Basin Project
SCH#: 2015121018

Dear Joel Ignacio:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on January 14, 2016, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

1-1

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

RESPONSES TO COMMENTS
LETTER #1
OFFICE OF PLANNING AND RESEARCH, STATE CLEARINGHOUSE

- 1-1 This is an acknowledgment letter verifying that the State Clearinghouse submitted the Initial Study and the Notice of Intent to Adopt a Mitigated Negative Declaration to selected state agencies for review, and that one state agency (California Department of Fish and Wildlife) submitted comments through the Clearinghouse by the close of the review period, which occurred on January 14, 2016. The State assigned this project the following tracking number, SCH #2015121018. This letter is for information only and does not require additional formal response.

**Document Details Report
State Clearinghouse Data Base**

SCH# 2015121018
Project Title Lower Day Basin Project
Lead Agency Inland Empire Utilities Agency

Type MND Mitigated Negative Declaration
Description Note: Review Per Lead

The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (CBWM) are proposing the Lower Day Basin Improvement Project (proposed project). The objective of this project is to increase the recharge capacity (recycled water (RW) and stormwater (SW) recharged into the Chino Groundwater Basin, specifically in the three cells located at Lower Day Basin. Under the Recharge Master Plan Update (RPMU), the proposed improvements for Lower Day Basin will increase recharge capacity by 789 acre-feet per year by modifying the San Bernardino County Flood Control District's (SBCFCD) diversion channel, installing a control gate valve on Cell 3's midlevel outlet, and improving the basin embankments.

The proposed project includes modifications to the Basin inlets and outlets that will allow more storm water to be diverted into the Basin and stored at higher elevations for longer durations. There will be no modifications to the physical size, layout/configuration or storage volume of the Basin. The proposed improvements will allow the Basin operations to be modified to achieve increased groundwater recharge.

Lead Agency Contact

Name	Joel Ignacio	
Agency	Inland Empire Utility Agency	
Phone	909-993-1913	Fax
email		
Address	6075 Kimball Avenue	
City	Chino	State CA Zip 91710

Project Location

County	San Bernardino
City	Rancho Cucamonga
Region	
Lat / Long	34° 7' N / 117° 32' W
Cross Streets	So of I-10, Baseline Line Road, Rochester Ave.
Parcel No.	
Township	1N
Range	6W
Section	31
Base	SBBM

Proximity to:

Highways	I-210
Airports	
Railways	
Waterways	Day Creek Channel
Schools	
Land Use	

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Coastal Zone; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Noise; Public Services; Recreation/Parks; Soil Erosion/Compaction/Grading; Traffic/Circulation; Toxic/Hazardous; Vegetation; Water Supply; Wetland/Riparian; Wildlife; Landuse

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 6; Department of Parks and Recreation; Department of Water Resources; Office of Emergency Services, California; Caltrans, District 8; Air Resources Board; State Water Resources Control Board, Division of Financial Assistance; State Water Resources Control Board, Division of Water Quality; State Water Resources Control Board, Division of

Document Details Report
State Clearinghouse Data Base

Water Rights; Regional Water Quality Control Board, Region 8; Native American Heritage
Commission; State Lands Commission

Date Received 12/07/2015 ***Start of Review*** 12/07/2015 ***End of Review*** 01/14/2016

DEPARTMENT OF TRANSPORTATION

DISTRICT 8

PLANNING (MS 725)

464 WEST 4th STREET, 6th FLOOR

SAN BERNARDINO, CA 92401-1400

PHONE (909) 388-7017

FAX (909) 383-5936

TTY 711

www.dot.ca.gov/dist8



*Serious Drought,
Help save water!*

December 30, 2015

File: 08-SBd-210-PM 8.675

Joel Ignacio
Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708

Lower Day Basin Project – Notice of Intent to Adopt a Mitigated Negative Declaration

Dear Mr. Ignacio:

2-1 Thank you for providing the California Department of Transportation (Department) the opportunity to review and comment on the Notice of Intent to Adopt a Mitigated Negative Declaration (NOI/MND) for the Lower Day Basin Project (Project). The proposed project is located just south of Interstate 210 and west of Lower Day Creek channel in the City of Rancho Cucamonga. The project proposes improvements for Lower Day Basin to increase recharge capacity by modifying the San Bernardino County Flood Control District's diversion channel and installing and improving the Basin embankments.

2-2 As the owner and operator of the State Highway System (SHS), it is our responsibility to coordinate and consult with local jurisdictions when proposed development may impact our facilities. As the responsible agency under the California Environmental Quality Act, it is also our responsibility to make recommendations to offset associated impacts with the proposed project. Although the project is under the jurisdiction of the City of Rancho and Inland Empire Utilities Agency, due to the project's potential impact to State facilities, it is also subject to the policies and regulations that govern the SHS. We offer the following comments:

- 2-3 • To ensure that proposed site grading and drainage design does not result in an adverse impact to State Right-of-Way, we ask that a requirement to review plans and provide written construction clearance be included among the project conditions of approval. Submit two hard and electronic copies of site grading and drainage plans, prior to issuance of construction permits.
- 2-4 • A Traffic Control Plan is required to be reviewed by the Department prior to the initiation of the construction activities where a public roadway will be affected by a lane or segment closure or modification of a travel lane.

RESPONSES TO COMMENTS
LETTER #2
CALIFORNIA DEPARTMENT OF TRANSPORTATION
DISTRICT 8 (CALTRANS)

- 2-1 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. The project summary presented in this section is accurate at a general level.
- 2-2 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. As detailed further in the following comments, the proposed Lower Day Basin Development Project will not encroach into Caltrans jurisdiction at nearby Interstate 210.
- 2-3 When IEUA proceeds with construction, it will submit the site grading and drainage design to Caltrans for review and verification that the project activities do not encroach into Caltrans right-of-way (ROW). Copies as requested will be submitted.
- 2-4 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. It is not anticipated that the proposed project will conduct construction within Caltrans ROW, but if such activities are considered, a Traffic Control Plan will be submitted to Caltrans for review and approval.

Mr. Ignacio
December 30, 2015
Page 2

2-5 The Department has the discretionary authority to issue special permits for the movement of construction equipment/vehicles/loads exceeding statutory limitations on the size, weight, and loading of vehicles contained in Division 15 of the California Vehicle Code. Requests for such special permits require the completion of a Transportation Permit. For information regarding Transportation Permit application for travel within the State of California contact:

Transportation Permits Office
P.O. Box 942874, MS # 41
Sacramento, CA 94274-0001
Main number: (916) 322-1297

<http://www.dot.ca.gov/hq/traffops/permits/contact.htm>

2-6 These recommendations are preliminary and summarize our review of materials provided for our evaluation. Please continue to keep us informed of this project and other future updates, which could potentially impact the SHS and interfacing transportation facilities. If you have any questions or need to contact us, please do not hesitate to contact Adrineh Melkonian at (909) 806-3928 or myself at (909) 383-4557.

Sincerely,



MARK ROBERTS
Office Chief
Intergovernmental Review, Community and Regional Planning

- 2-5 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. If the contractor utilizes equipment meeting the requirement for a special permit, IEUA will ensure that such permits are obtain prior to transport of such equipment.
- 2-6 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. Caltrans will be provided a copy of these responses prior to a decision on this project and will be notified prior to initiating construction as stated above.

Corporate Headquarters

3788 McCray Street
Riverside, CA 92506
951.686.1070

Palm Desert Office

41-990 Cook St., Bldg. I - #801B
Palm Desert, CA 92211
951.686.1070

Murrieta Office

41391 Kalmia Street #320
Murrieta, CA 92562
951.686.1070

January 11, 2016

Joel Ignacio, P.E.
Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708

via email jignacio@ieua.org

RE: Notice of Availability of Intent to Adopt a Mitigated Negative Declaration for
Inland Empire Utilities Agency's Lower Day Basin Project

Dear Mr. Ignacio:

3-1

On behalf of JCSD, Albert A. Webb Associates (WEBB), as District Engineer, has reviewed the Mitigated Negative Declaration (MND) for the "Lower Day Basin" Project. Although the MND did not include a discussion of impacts to water volumes or water quality within Day Creek downstream of the Project, WEBB does not anticipate negative impacts to JCSD's services. Indeed the Project has potential to positively benefit the whole basin.

If you have any questions, please call me.

Sincerely yours,
ALBERT A. WEBB ASSOCIATES



Cheryl DeGano
Principal Environmental Analyst

c: JCSD

RESPONSES TO COMMENTS
LETTER #3
ALBERT A. WEBB ASSOCIATES

- 3-1 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. Regarding volumes of water to be captured, the runoff will only be diverted when available and will be limited to the expanded capacity of the Basin when completed. Refer to the Peace II Subsequent EIR which address the broad volumes of surface runoff that will ultimately be captured by all of the basins being used by IEUA to capture and recharge water in the Chino Groundwater Basin. Water quality of both the water that will be percolated and allowed to pass by Lower Day Basin will either be improved (percolation through the vadose zone to the groundwater aquifer) or remain the same as the quality characteristics of the surface water flowing from upstream of the Basin.



Mayor L. DENNIS MICHAEL • Mayor Pro Tem SAM SPAGNOLO
Council Members WILLIAM J. ALEXANDER, LYNNE B. KENNEDY, DIANE WILLIAMS
City Manager JOHN R. GILLISON

THE CITY OF RANCHO CUCAMONGA

January 12, 2016

Mr. Joel Ignacio, P.E.
Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708

SUBJECT: LOWER DAY BASIN IMPROVEMENT PROJECT – NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

Dear Mr. Ignacio:

4-1

The City of Rancho Cucamonga appreciates the opportunity to comment on the proposed Mitigated Negative Declaration (MND) for the Lower Day Basin Improvement Project. This project proposes to construct pneumatic gates to assist in managing recharge and water flows in the Lower Day Creek Recharge Basin by allowing more storm water to be diverted into the basin and stored at higher elevations for longer durations. The City is supportive of the Inland Empire Utilities Agency's (IEUA) goal of increasing groundwater recharge and reversing the current groundwater overdraft condition in the Chino Basin.

4-2

When reviewing documents that assess environmental impacts, one of the goals of the City is to protect its residents from potential nuisance and undesirable environmental impacts while achieving the highest quality built environment and preservation of natural resources. To that end, based upon a review of the proposed MND, Planning and Engineering staff offer the following comments, mitigation measures and modifications to the proposed MND:

Planning Department Comments
Donald Granger, Senior Planner
909-477-2750 ext. 4314
donald.granger@cityofrc.us

Air Quality Section:

4-3

Because of the immediate proximity of residential units and schools, the following mitigation measures, in addition to the mitigation measures proposed, are recommended to be included:

4-4

- 1) The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the midmorning, afternoon, and after work is done for the day.
- 2) The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less.

**RESPONSES TO COMMENTS
LETTER #4
CITY OF RANCHO CUCAMONGA**

- 4-1 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project.
- 4-2 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project.
- 4-3 Although not required to control emissions below a level of significant impact, IEUA will require disturbed areas to be watered at least three times per day in accordance with this comment.
- 4.4 Although not required to control emissions below a level of significant impact, IEUA will require speeds on unpaved areas of the project site to exceed 15 miles per hour.

- 4-5 3) Chemical soil-stabilizers (approved by SCAQMD and RWQCB) shall be applied to all inactive construction areas that remain inactive for 96 hours or more to reduce PM10 emissions.

Noise Section:

Because of the immediate proximity of residential units and schools, the following mitigation measures, in addition to the mitigation measures proposed, are recommended to be included:

- 4-6 1) Prior to the issuance of any grading plans, a construction-related noise mitigation plan shall be submitted to the City for review and approval. The Plan shall depict the location of the construction equipment and how the noise from this equipment would be mitigated during construction.
- 4-7 2) Construction or grading shall not take place between the hours of 7:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a national holiday.
- 4-8 3) Construction or grading noise levels shall not exceed the standards specified in Development Code Section 17.66.050, as measured at the property line of residential land uses. During earthwork and construction operations, the contractor shall hire a consultant to perform weekly noise level monitoring to ensure compliance with the levels specified in Development Code Section 17.66.050. Monitoring at other times may be required by the Planning Director or Building Official. If noise levels are compliant, the consultant shall report their findings to either the Planning Director or Building Official within 2 days of taking the sound readings; however, if noise levels exceed the above standards, then the consultant shall immediately notify the Planning Director or Building Official. If noise levels exceed the above standards, then construction activities shall be reduced in intensity to a level of compliance with above noise standards or halted.
- 4-9 4) Modify Noise Mitigation Measure XII-3 to read as follows: If equipment is being used that exceeds 65dBA at the property lines of residential land uses, (distance attenuation shall be taken into account), portable noise barriers shall be installed that are demonstrated to be adequate to reduce exterior noise levels at receptor locations to 65dBA or lower and interior noise levels at residential land uses to 50dBA or lower. The adequacy of the sound barriers shall be verified by a professional consultant or engineer by noise level monitoring.

Midge Fly Impacts:

- 4-10 As IEUA staff are aware, there has been a long standing and persistent problem with managing midge fly infestations and their impact on residential neighborhoods adjoining the project site. This has necessitated spraying and draining of the basins to keep the fly populations under control in order to avoid a nuisance condition for people living next to the basin. This has been costly and a detriment to managing recharge in the basins.

- 4-5 Although not required to control emissions below a level of significant impact, IEUA will require chemical stabilizers to be applied to all inactive construction areas that remain inactive for 96 hours or more to reduce particulate matter emissions.
- 4-6 The proposed project will be limited to daylight hours of operation, 7 a.m. to 7 p.m. on weekdays, and grading shall not take place at other times, unless there is a declared emergency. A construction-related noise mitigation plan shall be submitted to the City for review. This plan shall identify the locations of construction activities and equipment, and whether noise from this equipment will exceed City noise thresholds during construction activities.
- 4-7 Refer to response to comment 4-6.
- 4-8 IEUA concludes that existing noise mitigation measures XII-2, XII-5 and XII-6 meet the intent of the suggested mitigation in this comment.
- 4-9 IEUA concludes that existing noise mitigation measures XII-2, XII-5 and XII-6 meet the intent of the suggested mitigation measure modifications in this comment.
- 4-10 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project.

4-11

While the City understands that this project will allow for increased water storage for recharge purposes, it is unclear how exactly this will affect the managing of this important vector issue. Staff could not locate in the document where the midge fly issue was evaluated, let alone an analysis of how this potential impact will be affected by the changes in higher water elevations remaining in the basin(s) for longer periods. The City has no way to explain to its residents whether this project will have positive or negative affect on this problem. Additionally, the Mitigated Negative Declaration does not adequately address the impact on public services or the impact on environmentally based public nuisances resulting from midge fly management problems from the proposed project. The Initial Study should be revised to address potential impacts from vectors, including, but not limited to, the midge fly, and include mitigation measures as necessary.

Engineering Services Comments

Jason Welday, Traffic Engineer, P.E, T.E.
909-477-2740 ext.4051
jason.welday@cityofrc.us

4-12

- 1) Permits: The last paragraph on page 4 of the Initial Study indicates that other than those permits identified in the paragraph, "no other permits are known to be required." The scope of construction activities on the same page lists, "excavate and compact approximately 72,000 cubic yards onsite. Additional material may have to be brought to the site or removed from the site." Additionally, page 47 indicates that as many as 2,000 15 cubic-yard temporary truck trips may be needed to transport material to and from the site. Based on this information and the potential need for temporary traffic control within the public right-of-way as discussed below, the City of Rancho Cucamonga may require three additional types of permits: Oversize Load Permits, Lane Closure Permits, and Grading Permits for borrow sites within the City of Rancho Cucamonga.

4-13

- 2) Traffic Control Standards: The last paragraph on page 20 states that, "the proposed project would be required to implement all applicable traffic control standards as established by San Bernardino County to minimize traffic disruption." All public streets adjacent to the project site are within the jurisdiction of the City of Rancho Cucamonga. This statement should be corrected to read, "... as established by the City of Rancho Cucamonga ..."

4-14

- 3) Project Access and Haul Routes: Paragraph g. on page 35 and the Substantiation discussion for items a & b on page 47 both indicate that project access (for construction equipment, material, and employees) can be taken off of Rochester Avenue, Victoria Park Lane, or Highland Avenue. Access to and from these streets shall be taken at existing maintenance driveways unless a separate permit to modify improvements in the public right-of-way is issued. As well, given the proximity of the project site and access points to Rancho Cucamonga High School, temporary truck trips and haul routes shall be coordinated with the City of Rancho Cucamonga's Engineering Services Department to minimize impacts on daily school and other scheduled event traffic. As well, due to the high volume of traffic surrounding the Victoria Gardens mall during the months of November and December, construction

- 4-11 IEUA has not experienced problems with midge flies or other vectors at this location; however, in a manner similar to the commitments for San Sevaine Basin, IEUA will implement the following measure to control potential impact from midge flies or other vectors.

IV-4 IEUA shall cooperate with the San Bernardino County Department of Environmental Health-Vector Control to develop a strategy to use recharge basins in a manner that minimizes occurrence of vectors, such as midges and mosquitos. Based on discussions with Vector Control professionals, the strategy shall include monitoring for presence of vectors and shall consider the following range of control measures for implementation: a) revising basin floors or management to ensure depth of water can be raised to more than two feet deep, or to ensure the basin floors can be dried; b) using mechanical means (for example sprinklers) to keep the surface of the water stored in a basin in motion; c) use of short-lived, non-water polluting pesticides to control outbreaks of midges when necessary or pre-treatment of the basin floors prior to filling the basin; d) other water or pest management actions to minimize potential for vector populations to grow into a public nuisance to nearby sensitive receptors (such as using basins with higher rates of percolation or using lights to attract and keep the midges at the basin); and use of water recharge management options developed based on past experience, such as operation in seasonally cooler weather. The strategy may be general (applying to all basins) or basin-specific and the strategy shall be compiled and available for implementation prior to initiating the additional groundwater recharge at the San Sevaine Basins.

This measure incorporates IEUA commitment of sufficient resources to manage the vector issue to a less than significant impact level where sensitive populations occur adjacent to IEUA recharge basins.

- 4-12 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. IEUA acknowledges that the three additional permits identified in this comment may be required, but because of the independent jurisdiction of the Agency, IEUA would not typically obtain a grading permit from the local jurisdiction. IEUA commits to discussing the need for such a permit with the City. Based on existing mitigation measures, the potential for adverse impact to local residents is considered very low.
- 4-13 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. The requested change will be made in the text of the environmental document
- 4-14 In accordance with the request in response to comment 4-15, IEUA will prepare or have prepared a traffic management plan that will be reviewed and approved with the City prior to initiating ground disturbing activities. This is already required by mitigation measure 15-1. This will meet the intent of this comment and comment 4-15.

Lower Day Basin Improvement Project
Notice of Intent to Adopt a Mitigated Negative Declaration
January 12, 2016
Page 4

4-14 | traffic will not be permitted on Day Creek Boulevard south of Base Line Road or
cont. | Foothill Boulevard from Interstate 15 to Rochester Avenue during these months.

4-15 | 4) Traffic Management Plan: The third sentence of Mitigation Measure XV-1 as stated
on page 48 should be clarified to read, "The traffic management plan shall be
prepared by IEUA and approved by the City prior to initiation of excavation activities."

4-16 | As noted above, the City shares the goal of increased groundwater storage and appreciates the
opportunity to review and comment on the MND for the project. The City also requests to be
notified of any proposed action by the IEUA Board to approve the Lower Day Basin Improvement
Project and modifications made to the proposed MND prior to adoption.

4-17 | If you have any questions, please contact Donald Granger, Senior Planner, by phone at
(909) 477-2750, ext. 4314, Monday through Thursday from 7:00 a.m. to 6:00 p.m., or e-mail
donald.granger@cityofrc.us at your convenience.

Sincerely,



Candyce Burnett
Planning Director

CB/DG/lis

cc: Jeff Bloom, Deputy City Manager, Economic/Community Development

- 4-15 Refer to response to comment 4-14.
- 4-16 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. The City will be provided a copy of these responses prior to a decision on this project and will be provided the date when the IEUA Board of Directors will consider approval of this environmental document and the proposed project.
- 4-17 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project.

**Department of Public Works**

Environmental & Construction • Flood Control
Operations • Solid Waste Management
Surveyor • Transportation

Gerry Newcombe
Director

January 13, 2016

Inland Empire Utilities Agency
Joel Ignacio, P.E.
PO Box 9020
Chino Hills, CA. 91709
jignacio@ieua.org

File: 10(ENV)-4.01

RE: CEQA – NOTICE OF AVAILABILITY OF A MITIGATED NEGATIVE DECLARATION FOR THE LOWER DAY BASIN PROJECT FOR THE INLAND EMPIRE UTILITIES AGENCY

Dear Mr. Ignacio:

Thank you for giving the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project. **We received this request on December 8, 2015** and pursuant to our review, the following comments are provided:

Water Resources Division (Mary Lou Mermilliod, PWE III, 909-387-8213):

5-1

1. Prior to any encroachment on San Bernardino County Flood Control District (District) Right-of-Way, a permit shall be obtained from the District's Permits/Operations Support Division, Permit Section. Other on-site or off-site improvements may be required which cannot be determined at this time. In addition, the project site also consists of an easement with Southern California Edison. Further information regarding this may also be obtained from the District's Permit Section.

If you have any questions, please contact the individuals who provided the specific comment, as listed above.

Sincerely,


HAROLD ZAMORA, P.E., Chief
Environmental Management Division

HZ:PE:sr/CEQAComment_IEUA_MND_LowerDayBasinDevlop_2016-01-13.docx

BOARD OF SUPERVISORS

ROBERT A. LOVINGOOD
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GREGORY C. DEVEREAUX
Chief Executive Officer

**RESPONSES TO COMMENTS
LETTER #5
SAN BERNARDINO COUNTY
DEPARTMENT OF PUBLIC WORKS**

- 5-1 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. IEUA will obtain any required permits for the District's Permits/Operations Support Division, Permit Section before any ground disturbing activities are initiated.

COMMENT LETTER #6



State of California - Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Blvd., Suite C-220
Ontario, CA 91764
(909) 484-0459
www.wildlife.ca.gov

EDMUND G. BROWN, Jr., Governor
CHARLTON H. BONHAM, Director



January 13, 2016

Mr. Joel Ignacio
Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708

Subject: Initial Study and Proposed Mitigated Negative Declaration
Lower Day Basin Project
State Clearinghouse No. 2015121018

Dear Mr. Ignacio:

6-1 The Department of Fish and Wildlife (Department) appreciates the opportunity to comment on the Initial Study (IS) with Proposed Mitigated Negative Declaration (MND) for the Lower Day Basin Project (Project) [State Clearinghouse No. 2015121018]. The Department is responding to the IS and proposed MND as a Trustee Agency for fish and wildlife resources (California Fish and Game Code Sections 711.7 and 1802, and the California Environmental Quality Act [CEQA] Guidelines Section 15386), and as a Responsible Agency regarding any discretionary actions (CEQA Guidelines Section 15381), such as the issuance of a Lake or Streambed Alteration Agreement (California Fish and Game Code Sections 1600 *et seq.*) and/or a California Endangered Species Act (CESA) Permit for Incidental Take of Endangered, Threatened, and/or Candidate species (California Fish and Game Code Sections 2080 and 2080.1).

Project Description

6-2 The Project is located within the Lower Day Basin, south of Interstate 210, west of Rochester Avenue, north of Victoria Park Lane, and east of the Day Creek Flood Control Channel, in the City of Rancho Cucamonga, San Bernardino County, California; latitude 34°7'95", longitude -117°32'61". The objective of this project is to increase the recharge capacity within the three cells located within the Lower Day Basin. The proposed project includes modifications to the Basin inlets and outlets, modifications to the San Bernardino County Flood Control District's diversion channel, installation of a control gate valve on Cell 3's midlevel outlet, and improvements to the Basin's southern embankment. The proposed modifications are intended to allow more storm water to be diverted into the Basin, and to allow stormwater to be stored at higher elevations, for longer durations. The IS/MND estimates that this will increase the Basin's recharge capacity by approximately 789 acre-feet per year (AFY).

RESPONSES TO COMMENTS
LETTER #6
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

- 6-1 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project.
- 6-2 This is an accurate summary description of the proposed project.

Department Comments

- 6-3 The Department offers the following comments in order to assist the Inland Empire Utilities Agency (IEUA; the CEQA lead agency) in identifying, analyzing, and mitigating potential project impacts to fish and wildlife resources. Following review of the project description, biological resources section and Appendix 2 of the IS, the Department requests the following comments be addressed prior to the adoption of the proposed MND:

Impacts to Sensitive Species

- 6-4 Page 23 of the IS states that "No sensitive or special status species were identified within the Lower Day Basin's area of proposed modification (including protocol surveys for coastal California gnatcatcher, San Bernardino kangaroo rat, and burrowing owl). Therefore, no substantial potential exists to cause a substantial adverse effect, directly or indirectly, on sensitive, special status, and/or listed species." However, the San Bernardino kangaroo rat Focused Survey Report included in Appendix 2 indicates that 12 desert woodrats (*Neotoma lepida*) and 81 San Diego pocket mice (*Chaetodipus fallax*) were captured on the project site in June 2015. Due to the location of the project site and the habitat type in which the trapping occurred, the Department assumes that the desert woodrats belong to the subspecies *intermedia* (San Diego desert woodrat), and that the San Diego pocket mice belong to the subspecies *fallax* (northwestern San Diego pocket mouse). Both of these subspecies have been designated by the Department as California Species of Special Concern (SSCs).

Section 15380 of the CEQA Guidelines indicates that SSCs should be included in an analysis of project impacts if they meet the criteria of sensitivity outlined therein. Sections 15063 and 15065 of the CEQA Guidelines, which address how an impact is identified as significant, are particularly relevant to SSCs. Project-level impacts to listed (rare, threatened, or endangered species) species are generally considered significant thus requiring lead agencies to prepare an Environmental Impact Report to fully analyze and evaluate the impacts. In assigning "impact significance" to populations of non-listed species, analysts usually consider factors such as population-level effects, proportion of the taxon's range affected by a project, regional effects, and impacts to habitat features.

Please provide a thorough and detailed analysis of the anticipated impacts to San Diego desert woodrat and northwestern San Diego pocket mouse, and include a proposal for adequate, enforceable, and feasible measures to avoid, minimize, and/or mitigate the impacts.

Impacts to Sensitive Natural Communities

- 6-5 Page 23 of the IS states that the project will have a less than significant impact on "any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service." However, the IS and MND do not contain a complete description of the sensitive natural communities present or the reasonably foreseeable impacts to them.

6-3 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. CDFW will be provided a copy of these responses prior to a decision on this project and will be notified of the date of the hearing before the IEUA Board.

6-4 According to the project biologist, the desert wood rats and San Diego pocket mice were captured in the Coastal sage scrub habitat above the area that has historically been inundated within the basin. Refer to Figure 4 of the Initial Study. The vast portion of this area will not be disturbed by the proposed basin modifications shown on Figure 4. However, there will be some disturbance of this habitat that supports these two species. Therefore, in response to this comment, IEUA will implement the following additional mitigation measure.

IV-2 IEUA will establish fences to prevent accidental entry of construction personnel and equipment into areas that are not scheduled to experience construction. Within those areas sage scrub areas where construction will occur, an exclusion fence will be installed and these areas will be trapped to remove the individuals of these two species. Once construction is completed, those disturbed areas that have not been developed with support facilities will be replanted with native Coastal sage scrub plants comparable to the surrounding plant community in the Basin.

It must be kept in mind that this whole Basin in a man-made landscape that have been revegetated with native plants to provide erosion control over the Basin slopes. Also, the biologist notes that the trapping did not trap 12 individual woodrats or 81 individual pocket mice. These represents the number of animals captured in the traps over the five nights of trapping and many of the animals may have been captured several times over this period. Regardless, the above measure along with retention of most of this existing Basin habitat (which is surrounded by development on all sides) will provide the mitigation sought in comment.

6-5 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. As noted in the preceding comment, the Basin walls were created as landscaping on a man-made slope and the bottom of the Basin is an actively management man-made landscape that is maintained under an existing Streambed Alteration Agreement. Thus, they can be considered natural only by the fact that they contain vegetation (or aquatic habitat) that is comparable to natural communities, albeit they are maintained. The aerial photo in Figure 4 clearly shows the three different communities: aquatic (when water is present/wetland; Coastal sage scrub (side walls of the Basin); and ruderal, where access and disturbed areas are maintained to support the functions of this man-made Basin (flood control and groundwater recharge). As shown on Figure 4, the permanently disturbed area in the Basin encompasses about 1/3 of the site; the Coastal sage scrub encompasses another 1/3 of the site; and the Basin floors (Cells 1, 2 and 3) encompass the final 1/3 of the site.

6-5
cont.

Appendix 2 lists the vegetation communities present as "urban/disturbed, wetlands, riparian/streambed, and coastal sage scrub." Additionally, based on the list of plant species present, the geographic location of the basin, and the hydrologic regime within the basin, the Department believes that all or part of the vegetation community described as "coastal sage scrub" (CSS) may be more accurately described as Riversidean alluvial fan sage scrub (RAFSS). Please clarify the methods used to identify the community as CSS, and clarify whether any RAFSS exists on-site. Please note that the Department considers both CSS and RAFSS to be sensitive natural communities; CSS is ranked S3.3 ("vulnerable") and RAFSS is ranked S1.1 ("very threatened").

The Department requests that the MND be revised to include a delineation of each type of vegetation community, a list of the acreages of each community present on-site, and a list of the acreages of proposed impacts to each community. If impacts will occur to wetlands, riparian/streambed, CSS, and/or RAFSS, the Department recommends that the MND include adequate, enforceable, and feasible measures to avoid, minimize, and/or mitigate the impacts.

Impacts to Streambed and Riparian Habitat

For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river or stream or use material from a streambed, the project applicant (or "entity") must provide written notification to the Department pursuant to Section 1602 of the Fish and Game Code (FGC). Based on this notification and other information, the Department then determines whether a Lake and Streambed Alteration (LSA) Agreement is required. The Department's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065).

6-6

Based on the information provided in the project description, the Department agrees that there are likely permanent and temporary impacts to areas subject to FGC section 1600 *et seq.* Please note that the Department's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). The Department will act as a Responsible Agency and will need to rely on the IEUA's CEQA analysis if and when it issues an LSA Agreement for the project. However, if the impacts are not fully described in the CEQA document, the Department may need to act as a Lead Agency and prepare its own separate analysis for public review. To ensure that the project impacts are adequately described in the IS and MND and to avoid potential delays in the permitting process, the Department recommends that the MND be revised to include the following:

- a) A Jurisdictional Delineation prepared on aerial photography of the project site, showing all areas subject to FGC section 1600 *et seq.* as well as the areas that will be impacted by project activities, including staging and access;
- b) A description of the nature of the temporary impacts and a list of measures that will be implemented in order to return the temporarily impacted area to its original state;

- 6-6 As noted in response 6-5, IEUA already has a Streambed Alteration Agreement (SAA No. 1600-2009-0072-R6) for its operations and maintenance activities at 19 recharge basins within the Chino Groundwater Basin, including the Lower Day Basin. IEUA intends to process a modification of this permit for Lower Day Basin to account for the proposed project modifications. The existing Coastal sage scrub habitat will be retained except in those areas shown on Figure 4 where the Basin modifications will be installed. The floor of the Basin will be slightly expanded and the disturbed area will also be slightly expanded. These modifications will be addressed as part of the process of modifying SAA No. 1600-2009-0072-R6.

6-6
cont.

c) A list of avoidance, minimization, and mitigation measures designed to address the direct, indirect, and cumulative impacts to areas subject to FGC section 1600 *et seq.* If the "additional aquatic habitat created within the Basins by the proposed project" mentioned on page 24 of the IS is intended to serve as mitigation for the project impacts, please specify the expected acreage of new habitat, the anticipated type and quality of new habitat, the type of habitat that is expected to be converted into "additional aquatic habitat", the amount of time needed for the habitat conversion to occur, and the contingency measures that will be implemented if the expected habitat conversion does not occur or does not result in sufficient habitat to adequately mitigate the project impacts. Please also specify whether this additional habitat will be subject to future maintenance activities or other foreseeable disturbances.

In addition, the Department recommends IEUA submit for an amendment to SAA No. 1600-2009-0072-R6 if the proposed project results in any changes to the activities covered under this existing routine maintenance Agreement. To obtain a Lake or Streambed Alteration notification package and/or amendment request form, please go to <https://www.wildlife.ca.gov/Conservation/LSA/Forms>.

Cumulative Impacts

6-7

The Department is concerned with the cumulative impacts of groundwater recharge projects on existing habitat within basins and on downstream riparian and riverine habitats. Based on the location of the basins, the Department assumes that some or all of the additional 789 AFY that will be captured by the basins following implementation of the project would otherwise flow into the Santa Ana River. Please provide a thorough and detailed analysis of the cumulative impacts of the IEUA's and other local agencies' water recharge projects, particularly on the decrease in flows into the Santa Ana River and the resulting impacts to riparian habitat, surface water level, water temperature, and sensitive riparian and riverine species.

6-8

The Department appreciates the opportunity to comment on the Initial Study (IS) with Proposed Mitigated Negative Declaration (MND) for the Lower Day Basin Project (Project) [State Clearinghouse No. 2015121018] and requests that the comments be addressed prior to the adoption of the MND. If you should have any comments pertaining to this letter, please contact Gabriele Quillman at gabriele.quillman@wildlife.ca.gov or by phone at 909-980-3818.

Sincerely,


Leslie MacNair
Regional Manager
Inland Deserts Region

cc: State Clearinghouse, Sacramento

- 6-7 The detailed evaluation of storm flow captures has been addressed in three program environmental document compiled by IEUA in support of the overall management of the Chino Groundwater Basin. It is a complicated issue, but the bottom line is that the cumulative issues related to overall water management within the Chino Basin have been fully evaluated and the continued delivery of the adequate surface water to Prado Basin to meet habitat requirements has been determined. Please refer to the biology and hydrology/water quality sections of the following three documents: OBMP, FMP and Peace II Program EIRs. The Department should have copies of these documents, but if not, please contact Ms. Sylvie Lee at IEUA to obtain copies.
- 6-8 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. CDFW will be provided a copy of these responses prior to a decision on this project and will be notified of the date of the hearing before the IEUA Board.



Edmund G. Brown Jr.
Governor

COMMENT LETTER #7

STATE OF CALIFORNIA

Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Ken Alex
Director

January 19, 2016

Joel Ignacio
Inland Empire Utility Agency
6075 Kimball Avenue
Chino, CA 91710

Subject: Lower Day Basin Project
SCH#: 2015121018

Dear Joel Ignacio:

The enclosed comment (s) on your Mitigated Negative Declaration was (were) received by the State Clearinghouse after the end of the state review period, which closed on January 14, 2016. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document.

7-1 The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project.

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the ten-digit State Clearinghouse number (2015121018) when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

**RESPONSES TO COMMENTS
LETTER #7
OFFICE OF PLANNING AND RESEARCH, STATE CLEARINGHOUSE**

- 7-1 This letter notifies IEUA that a State agency comment letter, Comment Letter #8, was received after the close of the required 30-day formal comment period provided to State Agencies. IEUA responds to this comment letter beginning on the following page.

COMMENT LETTER #8



State Water Resources Control Board

JAN 13 2016

Joel Ignacio
Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708

Dear Mr. Ignacio:

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION (IS/MND) FOR INLAND EMPIRE UTILITIES AGENCY (AGENCY); LOWER DAY BASIN PROJECT (PROJECT); SAN BERNARDINO COUNTY; STATE CLEARINGHOUSE NO. 2015121018

We understand that the Agency may be pursuing Clean Water State Revolving Fund (CWSRF) financing for this Project. As a funding agency and a state agency with jurisdiction by law to preserve, enhance, and restore the quality of California's water resources, the State Water Resources Control Board (State Water Board) is providing the following information and comments for the environmental document prepared for the Project.

8-1 The State Water Board, Division of Financial Assistance, is responsible for administering the CWSRF Program. The primary purpose for the CWSRF Program is to implement the Clean Water Act and various state laws by providing financial assistance for wastewater treatment facilities necessary to prevent water pollution, recycle water, correct nonpoint source and storm drainage pollution problems, provide for estuary enhancement, and thereby protect and promote health, safety and welfare of the inhabitants of the state. The CWSRF Program provides low-interest funding equal to one-half of the most recent State General Obligation Bond Rates with a 30-year term. Applications are accepted and processed continuously. Please refer to the State Water Board's CWSRF website at:
www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/index.shtml.

8-2 The CWSRF Program is partially funded by the United States Environmental Protection Agency and requires additional "California Environmental Quality Act (CEQA)-Plus" environmental documentation and review. Three enclosures are included that further explain the CWSRF Program environmental review process and the additional federal requirements. For the complete environmental application package please visit:
http://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/srf_forms.shtml. The State Water Board is required to consult directly with agencies responsible for implementing federal environmental laws and regulations. Any environmental issues raised by federal agencies or their representatives will need to be resolved prior to State Water Board approval of a CWSRF financing commitment for the proposed Project. For further information on the CWSRF Program, please contact Mr. Ahmad Kashkoli, at (916) 341-5855.

RESPONSES TO COMMENTS
LETTER #8
STATE WATER RESOURCES CONTROL BOARD

- 8-1 IEUA may pursue funding through the State Board for CWSRF in the future, but the Initial Study/Mitigated Negative Declaration (IS/MND) was not prepared under this assumption. As the State Board is aware, IEUA is very familiar with the CWSRF CEQA-Plus environmental requirements and if CWSRF funding is considered in the future, the appropriate documentation will be compiled and submitted.
- 8-2 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. Please refer to response to comment #8-1.

It is important to note that prior to a CWSRF financing commitment, projects are subject to provisions of the Federal Endangered Species Act (ESA), and must obtain Section 7 clearance from the United States Department of the Interior, Fish and Wildlife Service (USFWS), and/or the United States Department of Commerce National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) for any potential effects to special status species.

- 8-3 Please be advised that the State Water Board will consult with the USFWS, and/or the NMFS regarding all federal special-status species that the Project has the potential to impact if the Project is to be financed by the CWSRF Program. The Agency will need to identify whether the Project will involve any direct effects from construction activities, or indirect effects such as growth inducement, that may affect federally listed threatened, endangered, or candidate species that are known, or have a potential to occur in the Project site, in the surrounding areas, or in the service area, and to identify applicable conservation measures to reduce such effects.

In addition, CWSRF projects must comply with federal laws pertaining to cultural resources, specifically Section 106 of the National Historic Preservation Act (Section 106). The State Water Board has responsibility for ensuring compliance with Section 106 and the State Water Board must consult directly with the California State Historic Preservation Officer (SHPO). SHPO consultation is initiated when sufficient information is provided by the CWSRF applicant. The Agency must retain a consultant that meets the Secretary of the Interior's Professional Qualifications Standards (http://www.nps.gov/history/local-law/arch_stnds_9.htm) to prepare a Section 106 compliance report.

- 8-4 Note that the Agency will need to identify the Area of Potential Effects (APE), including construction and staging areas, and the depth of any excavation. The APE is three-dimensional and includes all areas that may be affected by the Project. The APE includes the surface area and extends below ground to the depth of any Project excavations. The records search request should extend to a 1/2-mile beyond project APE. The appropriate area varies for different projects but should be drawn large enough to provide information on what types of sites may exist in the vicinity.

Other federal environmental requirements pertinent to the Project under the CWSRF Program include the following (for a complete list of all environmental requirements please visit: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/docs/forms/application_environmental_package.pdf):

- 8-5
- A. Compliance with the Federal Clean Air Act: (a) Provide air quality studies that may have been done for the Project; and (b) if the Project is in a nonattainment area or attainment area subject to a maintenance plan; (i) provide a summary of the estimated emissions (in tons per year) that are expected from both the construction and operation of the Project for each federal criteria pollutant in a nonattainment or maintenance area, and indicate if the nonattainment designation is moderate, serious, or severe (if applicable); (ii) if emissions are above the federal de minimis levels, but the Project is sized to meet only the needs of current population projections that are used in the approved State Implementation Plan for air quality, quantitatively indicate how the proposed capacity increase was calculated using population projections.
 - B. Compliance with the Coastal Zone Management Act: Identify whether the Project is within a coastal zone and the status of any coordination with the California Coastal Commission.

- 8-3 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. As documented in this IS/MND package, there were no endangered species discovered at Lower Day Basin. Given that this Basin consists of a man-made and maintained environment this is not unusual. However, depending on the timing of any future application to CWSRF for funding, appropriate biological resource information will be submitted to assist the State Board staff make findings regarding the need to initiate consultation with the U. S. Fish and Wildlife Service.
- 8-4 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. As documented in this IS/MND package, there were no cultural resources discovered at Lower Day Basin. Given that this Basin consists of a man-made and maintained environment this is not unexpected. However, depending on the timing of any future application to CWSRF for funding, appropriate cultural resource information, including comprehensive Native American consultation, will be submitted to assist the State Board staff make findings regarding the need to initiate consultation with the State Historic Preservation Office.
- 8-5 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. IEUA recognizes the responsibility to provide the State Board with sufficient data to address each of the seven environmental issues summarized in this comment. The requisite data would be submitted to the State Board if an application is submitted for CWSRF funding.

8-5
cont.

- C. Protection of Wetlands: Identify any portion of the proposed Project area that should be evaluated for wetlands or United States waters delineation by the United States Army Corps of Engineers (USACE), or requires a permit from the USACE, and identify the status of coordination with the USACE.
- D. Compliance with the Farmland Protection Policy Act: Identify whether the Project will result in the conversion of farmland. State the status of farmland (Prime, Unique, or Local Statewide Importance) in the Project area and determine if this area is under a Williamson Act Contract.
- E. Compliance with the Migratory Bird Treaty Act: List any birds protected under this act that may be impacted by the Project and identify conservation measures to minimize impacts.
- F. Compliance with the Flood Plain Management Act: Identify whether or not the Project is in a Flood Management Zone and include a copy of the Federal Emergency Management Agency flood zone maps for the area.
- G. Compliance with the Wild and Scenic Rivers Act: Identify whether or not any Wild and Scenic Rivers would be potentially impacted by the Project and include conservation measures to minimize such impacts.

Following are specific comments on the Agency's draft IS/MND:

- 8-6 | 1. On page 35, in the discussion regarding Biological Resources, a is used twice. Therefore, a-e are mismarked, and should instead be marked as b-f.
- 8-7 | 2. On pages 34 and 35, the Biological Resources table lists interference with movement of fish or wildlife as less than significant, however, the subsequent discussion lists this as less than significant with mitigation incorporated. Please ensure that the table coincides with the subsequent discussions.
- 8-8 | 3. On pages 37, all of the cultural resources impacts are marked in the table as "No Impact"; however, a mitigation measure is included in the subsequent discussion. Please change b and d to "less than significant with mitigation incorporated."
- 8-9 | 4. Page 37 states that no response has been received from Native Americans, however, page 38 states that a response has been received. Please correct this discrepancy.
- 8-10 | 5. Page 38 states that one pending historic-built resource was identified within the project area as a result of the records search. Where in the vicinity of the APE is this historic resource located?
- 8-11 | 6. Part a for Hazards and Hazardous Materials states, "create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials" and is marked "No Impact" in the table. The subsequent discussion states "the following mitigation measure will be implemented to prevent any significant hazard through "the routine transport, use, or disposal" of petroleum products during construction." Please change part a to "less than significant with mitigation incorporated", since a mitigation measure has been identified.
- 8-12 | 7. Part f in the Hydrology and Water Quality section is marked as "less than significant impact", however the subsequent discussion states, "The required mitigation measure will ensure that both short and long-term water quality can be enhanced or not substantially degraded within the project area." Please change part f to "less than significant with mitigation incorporated."

- 8-6 The correction noted in this comment will be included in the Final IS/MND package for the Lower Day Basin.
- 8-7 The correction noted in this comment will be included in the Final IS/MND package for the Lower Day Basin. The table and the text will be revised to indicate a “Less Than Significant With Mitigation Incorporated” finding.
- 8-8 The correction noted in this comment will be included in the Final IS/MND package for the Lower Day Basin.
- 8-9 The correction noted in this comment will be included in the Final IS/MND package for the Lower Day Basin. Native American consultation was conducted for this project by the cultural resources consultant and IEUA itself through AB-52 consultation. This mitigation measure was added at the last moment in response to a request through the AB-52 consultation process.
- 8-10 The single historic resource (P-36-00002H) was a historic road alignment (identified based on the 1897 USGS topographic map) that was determined to no longer exist within the project APE. Note that since this project consists of a man-made basin, originally for flood control purposes, a surface road feature would have been eliminated within the project APE by the creation of the Basin itself.
- 8-11 The correction noted in this comment will be included in the Final IS/MND package for the Lower Day Basin.
- 8-12 The correction noted in this comment will be included in the Final IS/MND package for the Lower Day Basin.

- 8-13 8. Parts f and g on page 61 do not discuss compliance with federal, state, and local statutes and regulations related to solid waste. Please discuss how the Project is in compliance in these areas.
- 8-14 9. The discussion in part a on page 62 states that "no mitigation was identified or required" for cultural resources. However, a mitigation measure was identified, and therefore, this statement should be changed to reflect the use of a mitigation measure for cultural resources.
- 8-15 10. The conclusion on page 63 states, "The issues of air quality, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, and transportation and traffic require the implementation of mitigation measures to reduce impacts to a less than significant level." Biological resources and cultural resources should also be included in this list, since mitigation measures have been identified for both.
- 8-16 11. Figure 3- Site Aerial Map in the Biological Resources Report is blurred, and the words are not readable.
12. If seeking CWSRF funding, please consider the following comments:
- 8-17 i. Please supply a copy of any required permits for the Project to the State Water Board.
- ii. Please include a floodplain map from the Federal Emergency Management Agency for the Project area.
- iii. Please include dates for which the species lists were accessed for review. The species lists include United States Fish and Wildlife Service, California Natural Diversity Database, and California Native Plant Society Rare Finds Database.
- iv. Provide documentation of the cultural resources report authors' qualifications according to the Secretary of the Interior's Professional Qualifications Standards.
- v. In support of Section 106 documentation, include detailed, properly scaled maps indicating the location of the half-mile search radius in relation to the Project APE. Provide labeled locations of any archaeological or historical properties located within the APE and search area.
- vi. Provide the cultural resources report to the State Water Board.

8-18 Please provide us with the following documents applicable to the proposed Project if seeking CWSRF or other State Water Board funding: (1) one copy of the draft and final IS/MND, (2) the resolution adopting the IS/MND and a Mitigation Monitoring and Reporting Program (MMRP) making CEQA findings, (3) all comments received during the review period and the Agency's response to those comments, (4) the adopted MMRP, and (5) the Notice of Determination filed with the San Bernardino County Clerk and the Governor's Office of Planning and Research, State Clearinghouse. In addition, we would appreciate notices of any hearings or meetings held regarding environmental review of any projects to be funded by the State Water Board.

- 8-13 The project consists of clearing, grading and installation of the Basin modifications and then subsequent maintenance of the Basin floor to support groundwater recharge. The project will generate green waste that will be recycled as required by current law. Thus, the proposed project will comply with state and federal solid waste management regulations by delivering vegetative matter to a green waste composing/processing facility.
- 8-14 The correction noted in this comment will be included in the Final IS/MND package for the Lower Day Basin.
- 8-15 The correction noted in this comment will be included in the Final IS/MND package for the Lower Day Basin.
- 8-16 The correction noted in this comment will be included in the Final IS/MND package for the Lower Day Basin.
- 8-17 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. If CWSRF funding is sought in the future, IEUA will provide the information listed in this comment.
- 8-18 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project. If CWSRF funding is sought in the future, IEUA will provide the documents listed in this comment.

8-19

Thank you for the opportunity to review the Agency's draft IS/MND. If you have any questions or concerns, please feel free to contact me at (916) 341- 5739, or by email at Stephanie.holstege@waterboards.ca.gov, or contact Ahmad Kashkoli at (916) 341-5855 or by email at ahmad.kashkoli@waterboards.ca.gov.

Sincerely,



Ahmad Kashkoli
Senior Environmental Scientist

Enclosures (3)

1. Clean Water State Revolving Fund Environmental Review Requirements
2. Quick Reference Guide to CEQA Requirements for State Revolving Fund Loans
3. Basic Criteria for Cultural Resources Reports

cc: State Clearinghouse
(Re: SCH# 2015121018)
P.O. Box 3044
Sacramento, CA 95812-3044

8-19 Your comment is noted and will be retained in the project file that is made available to the Agency decision-makers prior to a decision on the proposed project.

California Environmental Quality Act Requirements

State Water Resources Control Board

Division of Financial Assistance

The State Water Resources Control Board (State Water Board), Division of Financial Assistance, administers the Clean Water State Revolving Fund (CWSRF) Program. The CWSRF Program is partially funded by grants from the United States Environmental Protection Agency. All applicants seeking CWSRF financing must comply with the California Environmental Quality Act (CEQA), and provide sufficient information so that the State Water Board can document compliance with federal environmental laws. The "Environmental Package" provides the forms and instructions needed to complete the environmental review requirements for CWSRF Program financing. It is available at:
http://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/srf_forms.shtml



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Contact Information: For more information related to the CWSRF Program environmental review process and requirements, please contact your State Water Board Project Manager or Mr. Ahmad Kashkoli at 916-341-5855 or Ahmad.Kashkoli@waterboards.ca.gov

LEAD AGENCY

The applicant is usually the "Lead Agency" and must prepare and circulate an environmental document before approving a project. Only a public agency, such as a local, regional or state government, may be the "Lead Agency" under CEQA. If a project will be completed by a non-governmental organization, "Lead Agency" responsibility goes to the first public agency providing discretionary approval for the project.

RESPONSIBLE AGENCY

The State Water Board is generally a "Responsible Agency" under CEQA. As a "Responsible Agency," the State Water Board must make findings based on information provided by the "Lead Agency" before financing a project.

ENVIRONMENTAL REVIEW

The State Water Board's environmental review of the project's compliance with both CEQA and federal cross-cutting regulations must be completed before a project can be financed by the CWSRF Program.

DOCUMENT REVIEW

Applicants are encouraged to consult with State Water Board staff early during preparation of CEQA document if considering CWSRF financing. Applicants shall also send their environmental documents to the State Water Board, Environmental Review Unit during the CEQA public review period. This way, any environmental concerns can be addressed early in the process.

REQUIRED DOCUMENTS

The Environmental Review Unit requires the documents listed below to make findings and complete its environmental review. Once the State Water Board receives all the required documents and makes its own findings, the environmental review for the project will be complete.

- ✓ Draft and Final Environmental Documents: Environmental Impact Report, Negative Declaration, and Mitigated Negative Declaration as appropriate to the project
- ✓ Resolution adopting/certifying the environmental document, making CEQA findings, and approving the project
- ✓ All comments received during the public review period and the "Lead Agency's" responses to those comments
- ✓ Adopted Mitigation Monitoring and Reporting Plan, if applicable
- ✓ Date-stamped copy of the Notice of Determination or Notice of Exemption filed with the County Clerk(s) and the Governor's Office of Planning and Research
- ✓ CWSRF Evaluation Form for Environmental Review and Federal Coordination with supporting documents



STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

waterboards.ca.gov

Basic Criteria for Cultural Resources Report Preparation

State Water Resources Control Board

Division of Financial Assistance

For Section 106 Consultation with the State Historic Preservation Officer (SHPO)
under the National Historic Preservation Act

CULTURAL RESOURCES REPORT

The Cultural Resources Report must be prepared by a qualified researcher that meets the Secretary of the Interior's Professional Qualifications Standards. Please see the Professional Qualifications Standards at the following website at: http://www.cr.nps.gov/local-law/arch_stnds_9.htm

The Cultural Resources Report should include one of the four "findings" listed in Section 106. These include:

"No historic properties affected"

(no properties are within the area of potential effect (APE; including below the ground).

"No effect to historic properties"

(properties may be near the APE, but the project will not have any adverse effects).

"No adverse effect to historic properties"

(the project may affect "historic properties", but the effects will not be adverse).

"Adverse effect to historic properties"

Note: Consultation with the SHPO will be required if a "no adverse effect to historic properties" or an "adverse effect to historic properties" determination is made, to develop and evaluate alternatives or modifications to the proposed project that could avoid, minimize or mitigate adverse effects on "historic properties."

RECORDS SEARCH

- A records search (less than one year old) extending to a half-mile beyond the project APE from a geographically appropriate Information Center is required. The records search should include maps that show all recorded sites and surveys in relation to the APE for the proposed project, and copies of the confidential site records included as an appendix to the Cultural Resources Report.
- The APE is three-dimensional (depth, length and width) and all areas (e.g., new construction, easements, staging areas, and access roads) directly affected by the proposed project.



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NATIVE AMERICAN and INTERESTED PARTY CONSULTATION

- Native American and interested party consultation should be initiated at the planning phase of the proposed project to gather information to assist with the preparation of an adequate Cultural Resources Report.
- The Native American Heritage Commission (NAHC) must be contacted to obtain documentation of a search of the Sacred Lands Files for or near the project APE.
- All local Native American tribal organizations or individuals identified by the NAHC must be contacted by certified mail, and the letter should include a map and a description of the proposed project.
- Follow-up contact should be made by telephone and a phone log maintained to document the contacts and responses.
- Letters of inquiry seeking historical information on the project area and local vicinity should be sent to local historical societies, preservation organizations, or individual members of the public with a demonstrated interest in the proposed project.

Copies of all documents mentioned above (project description, map, phone log and letters sent to the NAHC and Native American tribal organizations or individuals and interested parties) must be included in the Cultural Resources Report.

Contact Information: For more information related to the CWSRF Program Cultural Resources and Requirements, please contact Mr. Ahmad Kashkoli at 916-341-5855 or Ahmad.Kashkoli@waterboards.ca.gov

PRECAUTIONS

A finding of ***“no known resources”*** without supporting evidence is unacceptable. The Cultural Resources Report must identify resources within the APE or demonstrate with sufficient evidence that none are present.

“The area is sensitive for buried archaeological resources,” followed by a statement that ***“monitoring is recommended.”*** Monitoring is not an acceptable option without good-faith effort to demonstrate that no known resource is present.

If ***“the area is already disturbed by previous construction”*** documentation is still required to demonstrate that the proposed project will not affect “historic properties.” An existing road can be protecting a buried archaeological deposit or may itself be a “historic property.” Additionally, previous construction may have impacted an archaeological site that has not been previously documented.

SHPO CONSULTATION LETTER

Submit a draft consultation letter prepared by the qualified researcher with the Cultural Resources Report to the State Water Resources Control Board. A draft consultation letter template is available for download on the State Water Board webpage at: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/cwsrf_requirements.shtml

National Historic Preservation Act (NHPA)

Section 106 of the NHPA requires an analysis of the effects on "historic properties." The Section 106 process is designed to accommodate historic preservation concerns for federal actions with the potential to affect historic properties. Early consultation with appropriate government agencies, Indian tribes, and members of the public, will ensure that their views and concerns are addressed during the planning phase.

Historic properties (i.e., buildings, structures, objects, and archaeological sites 50 years or older) are properties that are included in the National Register of Historic Places or meet the criteria for the National Register.

Required Documents:

- ✓ A draft State Historic Preservation Officer consultation request letter; and
- ✓ A cultural resources report on historic properties conducted according to the Secretary of the Interior's Standards, including:
 - A clearly defined Area of Potential Effect (APE), specifying the length, width, and depth of excavation, with a map clearly illustrating the project APE;
 - A records search, less than one year old, extending to a half-mile beyond the project APE;
 - Written description of field methods;
 - Identification and evaluation of historic properties within the project's APE; and
 - Documentation of consultation with the Native American Heritage Commission and local Native American tribes.

ADDITIONAL INFORMATION

If your project has the potential to affect biological resources or historic properties, the consultation process can be lengthy. Please contact the State Water Board staff early in your planning process to discuss what additional information may be needed for your specific project.

Please contact your State Water Board Project Manager or Mr. Ahmad Kashkoli at (916) 341-5855 or Ahmad.Kashkoli@waterboards.ca.gov for more information related to the CWSRF Program environmental review process and requirements.



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Environmental Review Requirements

State Water Resources Control Board
Division of Financial Assistance

ENVIRONMENTAL REVIEW REQUIREMENTS

The Clean Water State Revolving Fund (CWSRF) Program is partially funded by the United States Environmental Protection Agency (EPA), and is subject to federal environmental regulations as well as the California Environmental Quality Act (CEQA). All applicants seeking CWSRF financing must comply with both CEQA and the federal cross-cutting regulations. The "Environmental Package" provides the forms and instructions needed to complete the environmental review requirements for CWSRF financing. The forms and instructions are available at: http://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/srf_forms.shtml.

Lead Agency/Applicant

The applicant will generally act as the "Lead Agency" for environmental review. It will prepare, circulate, and consider the environmental documents prior to approving the project. It also provides the State Water Board with copies of the CEQA documents, and a completed "Environmental Evaluation Form for Environmental Review and Federal Coordination" (http://www.waterboards.ca.gov/water_issues/programs/grants_loans/srf/docs/forms/application_environmental_package.pdf) with supporting documents as part of the "Environmental Package."

Responsible Agency/State Water Board

The State Water Board acts on behalf of EPA to review and consider the environmental documents before approving financing. The State Water Board may require additional studies or documentation to make its own CEQA findings, as well as circulate CEQA documents and other environmental reports to relevant federal agencies for consultation before making a determination about the project financing.

The Applicant must address all relevant federal agencies' comments before project financing is approved.

FEDERAL CROSS-CUTTING REGULATIONS

The CWSRF Program requires consultation with relevant federal agencies on the following federal environmental regulations, if applicable to the project:

- Clean Air Act
- Coastal Barriers Resources Act
- Coastal Zone Management Act
- Endangered Species Act
- Environmental Justice
- Farmland Protection Policy Act
- Floodplain Management
- Magnuson-Stevens Fishery Conservation and Management Act
- Migratory Bird Treaty Act
- National Historic Preservation Act
- Protection of Wetlands
- Safe Drinking Water Act, Sole Source Aquifer Protection
- Wild and Scenic Rivers Act

The following is a brief overview of requirements for some of the key regulations.

Clean Air Act (CAA)

The CAA general conformity analysis only applies to projects in areas not meeting the National Ambient Air Quality Standards or subject to a maintenance plan.

If project emissions are below the federal "de minimis" levels then:

- A general conformity analysis is not required.

If project emissions are above the federal "de minimis" levels then:

- A general conformity determination for the project must be made. A general conformity determination can be made if facilities are sized to meet the needs of current population projections used in an approved State Implementation Plan for air quality.

- Using population projections, applicants must explain how the proposed capacity increase was calculated.

An air quality modeling analysis is necessary of all projects for the following criteria pollutants, regardless of attainment status:

- Carbon monoxide
- Lead
- Oxides of nitrogen
- Ozone
- Particulate matter (PM2.5 and PM10)
- Sulfur dioxide

Endangered Species Act (ESA)

The ESA requires an analysis of the effects on federally listed species. The State Water Board will determine the project's potential effects on federally listed species, and will initiate informal/formal consultation with the United States Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service, as necessary under Section 7 of the ESA.

Required Documents:

- ✓ A species list, less than one year old, from the USFWS and the California Department of Fish and Wildlife's Natural Diversity Database;
- ✓ A biological survey conducted during the appropriate time of year;
- ✓ Maps or documents (biological reports or biological assessments, if necessary); and
- ✓ An assessment of the direct or indirect impacts to any federally listed species and/or critical habitat. If no effects are expected, explain why and provide the supporting evidence.



Mitigation Monitoring and Reporting Plan

**INLAND EMPIRE UTILITIES AGENCY
LOWER DAY BASIN PROJECT
MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Implementation Schedule	Verification
Air Quality III-1 Use best available control measures during soil disturbance. The menu of enhanced dust control measures includes the following: <ul style="list-style-type: none"> • Limit the disturbance "footprint" to as small an area as practical. • Water all active construction areas at least twice daily. • Cover all off-site haul trucks or maintain at least 2 feet of freeboard. • Pave or apply water four times daily to all unpaved parking or staging areas. • Sweep or wash any site access points daily of any visible dirt deposition on any public roadway. • Cover or water twice daily any on-site stockpiles of debris, dirt or other dusty material. • Suspend all operations on any unpaved surface if winds exceed 25 mph. 	This measure shall be incorporated into the construction contract when it is prepared. This measure shall be implemented and monitored by the Contractor during construction. Field notes documenting implementation shall be maintained onsite by the Contractor.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by Agency inspection personnel during construction. Field notes documenting verification shall be retained in the project file.
	Source Initial Study	Responsible Party IEUA / Contractor
		Status / Date / Initials

Mitigation Measure	Implementation Schedule	Verification
Air Quality III-2 Limit allowable idling to 5 minutes for trucks and heavy equipment before shutting the equipment down.	This measure shall be incorporated into the construction contract when it is prepared. This measure shall be implemented and monitored by the Contractor during construction. Field notes documenting implementation shall be maintained onsite by the Contractor.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by Agency inspection personnel during construction. Field notes documenting verification shall be retained in the project file.
	Source Initial Study	Responsible Party IEUA / Contractor
		Status / Date / Initials

**INLAND EMPIRE UTILITIES AGENCY
LOWER DAY BASIN PROJECT
MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Implementation Schedule	Verification
Air Quality III-3 Utilize Tier 3 rated diesel engines for off-road construction equipment.	This measure shall be incorporated into the construction contract when it is prepared. This measure shall be implemented and monitored by the Contractor during construction. Field notes documenting implementation shall be maintained onsite by the Contractor.	A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by Agency inspection personnel during construction. Field notes documenting verification shall be retained in the project file.
	Source Initial Study	Responsible Party IEUA / Contractor
		Status / Date / Initials

Mitigation Measure	Implementation Schedule	Verification
Biological Resources IV-1 <u>Burrowing Owl</u> . In compliance with the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012) the Project proponent shall ensure that a pre-construction burrowing owl survey is conducted at least 30 days prior to construction activities. A qualified Biologist shall conduct the survey to determine if there are any active burrowing owl burrows within or adjacent to (within 300 feet) the impact area. If an active burrow is observed outside the nesting season (September 1 to January 31) and the burrow is within the impact area, a Burrowing Owl Exclusion Plan shall be prepared and submitted to CDFW for approval, outlining standard burrowing owl burrow closing procedures used to exclude burrowing owls (e.g., using passive relocation with one-way doors). The loss of any active burrowing owl burrow territory shall be mitigated through replacement of habitat and burrows at no less than a 1:1 ratio. If an active burrow is observed outside the nesting season (i.e., between September 1 and January 31) and the burrow is not within the impact area, construction work shall be restricted within 160 to 1,605 feet of the burrow depending on the time of year and level of disturbance near the site in accordance with guidelines specified by the CDFW.	Construction shall occur outside of the burrowing owl nesting season or a copy of the field survey documenting no nesting owls shall be completed prior to initiating construction within the nesting season.	Agency personnel shall document the dates of construction. If construction is proposed to occur within the owl nesting season, a copy of the field survey documenting the absence of nesting owls shall be retained in the project file.
	Source Initial Study	Responsible Party IEUA
		Status / Date / Initials

**INLAND EMPIRE UTILITIES AGENCY
LOWER DAY BASIN PROJECT
MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Implementation Schedule	Verification
Biological Resources IV-2 IEUA will establish fences to prevent accidental entry of construction personnel and equipment into areas that are not scheduled to experience construction. Within those areas sage scrub areas where construction will occur, an exclusion fence will be installed and these areas will be trapped to remove the individuals of these two species. Once construction is completed, those disturbed areas that have not been developed with support facilities will be replanted with native Coastal sage scrub plants comparable to the surrounding plant community in the Basin.	This measure will be implemented during construction activities where such activities may occur in close proximity to sage scrub habitat.	The fences will be installed under the direction of a professional biologist and the fencing will be inspected weekly by the biologist to ensure sage scrub habitat loss has been minimized. The replanting of any sage scrub habitat shall be completed following completion of construction. The biologist shall file a final report documenting compliance with this measure and verification that the revegetation effort has succeeded.
	Source	Responsible Party
	Initial Study	IEUA / Contractor

Mitigation Measure	Implementation Schedule	Verification
Biological Resources IV-3 <u>Nesting Birds</u> . A migratory nesting bird survey of the Project's impact footprint shall be conducted by a qualified biologist within 2 weeks and 3 days prior to initiating vegetation clearing or ground disturbance. If active nests are found during the pre-construction nesting bird surveys, a Nesting Bird Plan (NBP) will be prepared and implemented. At a minimum the NBP will include guidelines for addressing active nests, establishing buffers, monitoring, and reporting. The NBP will include a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be determined by the biologist in consultation with the CDFW, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be visually marked in the field, which no vegetation clearing or ground disturbance shall commence until the qualified biologist has determined the nest in question has become inactive (failed or successful with fledged young birds) and a monitoring report has been submitted to the CDFW for review and approval. Construction within the designated buffer area shall not proceed until approved by the site biologist.	Construction shall occur outside of the nesting season or a copy of the field survey documenting no nesting birds shall be completed prior to initiating construction within the nesting season.	Agency personnel shall document the dates of construction. If construction is proposed to occur within the nesting season, a copy of the field survey documenting the absence of nesting birds shall be retained in the project file.
	Source	Responsible Party
	Initial Study	IEUA

**INLAND EMPIRE UTILITIES AGENCY
LOWER DAY BASIN PROJECT
MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Implementation Schedule	Verification		
<p>Biological Resources</p> <p>IV-4 IEUA shall cooperate with the San Bernardino County Department of Environmental Health-Vector Control to develop a strategy to use recharge basins in a manner that minimizes occurrence of vectors, such as midges and mosquitos. Based on discussions with Vector Control professionals, the strategy shall include monitoring for presence of vectors and shall consider the following range of control measures for implementation: a) revising basin floors or management to ensure depth of water can be raised to more than two feet deep, or to ensure the basin floors can be dried; b) using mechanical means (for example sprinklers) to keep the surface of the water stored in a basin in motion; c) use of short-lived, non-water polluting pesticides to control outbreaks of midges when necessary or pre-treatment of the basin floors prior to filling the basin; d) other water or pest management actions to minimize potential for vector populations to grow into a public nuisance to nearby sensitive receptors (such as using basins with higher rates of percolation or using lights to attract and keep the midges at the basin); and use of water recharge management options developed based on past experience, such as operation in seasonally cooler weather. The strategy may be general (applying to all basins) or basin-specific and the strategy shall be compiled and available for implementation prior to initiating the additional groundwater recharge at the San Sevaine Basins.</p>	<p>The strategy shall be completed prior to initiating construction on the San Sevaine Development Project. The vector control strategies shall be implemented concurrent with water recharge activities at these basins if or when vector populations are anticipated or detected..</p>	<p>A copy of the strategy shall be retained by IEUA within the project file. Implementation of any of the control strategies shall be documented by IEUA basin management personnel. The documentation shall be maintained in the project file.</p>		
	Source	Responsible Party	Status / Date / Initials	
	Initial Study	IEUA / Contractor		

**INLAND EMPIRE UTILITIES AGENCY
LOWER DAY BASIN PROJECT
MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Implementation Schedule	Verification		
<p><i>Cultural Resources</i></p> <p>VI-1 During ground disturbing activities (including but not limited to pavement removal, pot-holing or auguring, boring, grading, excavation and trenching) at least one Native American Monitor will be present at the project site. The Native American Monitor will compile monitoring logs on a daily basis. The logs will provide descriptions of the daily activities, including construction activities, locations, soil characteristics and any cultural materials identified. The Monitor will photo-document the ground disturbing activities. If any cultural materials are identified, the Monitor shall have the authority to redirect construction activities until the extent and importance of the materials are assessed. Subsequent management of any Native American cultural materials shall be determined through consultation between IEUA and the Native American Band supplying the monitor. Any human remains encountered shall be handled through the County Coroner's office and, if necessary, in conjunction with the Native American Heritage Commission and Native American Band.</p>	<p>This measure shall be implemented during ground disturbing construction activities.</p>	<p>Logs compiled during monitoring shall be retained in the project file. If any cultural resources or human remains are discovered, the reports compiled regarding management of any discovery shall also be retained in the project file.</p>		
	Source	Responsible Party		Status / Date / Initials
	Initial Study	IEUA / Contractor		

**INLAND EMPIRE UTILITIES AGENCY
LOWER DAY BASIN PROJECT
MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Implementation Schedule	Verification		
<p>Geology and Soils</p> <p>VI-1 The SWPPP will include appropriate best management practices (BMPs) to prevent surface runoff with excessive sediment from leaving the project site and to address the potential for remediating any accidental spills of petroleum products that occur during construction activities. The final SWPPP shall be compiled prior to initiating construction. BMPs to be implemented in the SWPPP may include but not be limited to:</p> <ul style="list-style-type: none"> • The use of silt fences; • The use of temporary stormwater desilting or retention basins; • The use of water bars to reduce the velocity of stormwater runoff; • The use of wheel washers on construction equipment leaving the site • The washing or sweeping of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from the site onto public roads. • The storage of excavated material shall be kept to the minimum necessary to efficiently perform the construction activities required. Excavated or stockpiled material shall not be stored in water courses or other areas subject to the flow of surface water. • Where feasible, stockpiled material shall be covered with water proof material during rain events to control erosion of soil from the stockpiles. 	<p>The SWPPP shall be completed by the Contractor prior to initiating construction and provided to the Agency. The SWPPP shall be implemented during construction.</p>	<p>A copy of the SWPPP shall be retained in the project file and at the construction job site. Field inspections shall verify that the best management practices required by a project specific SWPPP are effective in controlling erosion and water quality degradation, and a copy of inspection notes shall be retained in the project file.</p>		
		Source	Responsible Party	Status / Date / Initials
		Initial Study	IEUA / Contractor	

Mitigation Measure	Implementation Schedule	Verification		
<p>Geology and Soils</p> <p>VI-2 Prior to completing the proposed project, project-related disturbed areas shall be stabilized to prevent the discharge of runoff from the project sites in a manner that could initiate erosion or sedimentation. A variety of stabilization measures may be used including: grading the site so all runoff is delivered to the basins, chemical stabilizers, gravel cover, mulch or other means to prevent the site from becoming a source of polluted surface runoff shall be installed.</p>	<p>This measure shall be incorporated into the project final design and the construction contract. These stabilization measures shall be implemented during construction before it is complete.</p>	<p>A copy of the construction contract shall be retained in the project file. Verification of implementation shall be based on field inspections by Agency inspection personnel that verify the measure is being implemented during construction. Field notes documenting verification shall be retained in the project file.</p>		
		Source	Responsible Party	Status / Date / Initials
		Initial Study	IEUA / Contractor	

**INLAND EMPIRE UTILITIES AGENCY
LOWER DAY BASIN PROJECT
MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Implementation Schedule		Verification
Hazards and Hazardous Materials VIII-1 If petroleum products are accidentally released to the environment during any phase of construction, the Agency shall require the area of contamination to be defined; shall require the removal of any contaminated soil or material from the contaminated area; and ensure that any area exposed to accidentally released contaminants are remediated to a threshold that meets regulatory requirements established by law or agencies overseeing the remediation.	This measure shall be incorporated into the construction contract. This measure shall be implemented by the Contractor during construction when contamination is encountered within the construction area.		Verification of implementation shall be based on field inspections by Agency inspection personnel during construction. A record of findings at any contaminated site shall be developed and retained in the Agency project file. Documentation of all remediation actions, including ultimate disposal or treatment, shall be included in the Agency project file.
	Source	Responsible Party	Status / Date / Initials
	Initial Study	IEUA / Contractor	

Mitigation Measure	Implementation Schedule	Verification
Hydrology and Water Quality IX-1 The construction contractor shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices that will be implemented to prevent construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving offsite. The SWPPP shall be developed with the goal of achieving a reduction in pollutants both during and following construction to control storm water runoff to the maximum extent practicable based on available, feasible best management practices. The SWPPP and the monitoring program for the construction project shall be consistent with the requirements of the latest version of the Santa Ana Regional Board's NPDES Permit No. CAS618036, Order No. R8-2002-0012 for San Bernardino County. The following items should be included in the SWPPP: <ul style="list-style-type: none"> • Stockpiled material should not be stored in areas which are subject to the erosive flows of water. • Measures such as the use of straw bales, sandbags, silt fencing or detention basins shall be used to capture and hold eroded material for future cleanup. • Rainfall will be prevented from entering material and waste storage areas and pollution-laden surfaces. 	The SWPPP shall be completed by the Contractor prior to initiating construction and provided to the Agency. The SWPPP shall be incorporated into the construction contract and implemented by the Contractor during construction.	A copy of the SWPPP shall be retained in the project file and at the construction job site. Field inspections by the Contractor shall verify that the best management practices required by the SWPPP are effective in controlling erosion and water quality degradation, and a copy of inspection notes shall be retained in the project file. Agency inspectors will verify that the Contractor is complying with the requirement to implement the SWPPP.

**INLAND EMPIRE UTILITIES AGENCY
LOWER DAY BASIN PROJECT
MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Implementation Schedule		Verification
<ul style="list-style-type: none"> Construction-related contaminants will be prevented from leaving the site and polluting waterways. A spill prevention control and remediation plan to control release of hazardous substances. 			
	Source	Responsible Party	Status / Date / Initials
	Initial Study	IEUA / Contractor	

Mitigation Measure	Implementation Schedule		Verification
Noise XII-1 All construction vehicles and fixed or mobile equipment shall be equipped with properly operating and maintained mufflers.	This measure shall be incorporated into the construction contract. This measure shall be implemented and monitored by the Contractor during construction. Field notes documenting implementation shall be maintained onsite by the Contractor.		Verification of implementation shall be based on field inspections by Agency inspection personnel during construction. Field notes documenting verification shall be retained in the project file.
	Source	Responsible Party	Status / Date / Initials
	Initial Study	IEUA / Contractor	

Mitigation Measure	Implementation Schedule		Verification
Noise XII-2 All employees that will be exposed to noise levels greater than 75 dB over an 8-hour period shall be provided with adequate hearing protection devices to ensure no hearing damage will result from construction activities.	This measure shall be incorporated into the construction contract when it is prepared. This measure shall be implemented and monitored by the Contractor during construction. Field notes documenting implementation shall be maintained onsite by the Contractor.		Verification of implementation shall be based on field inspections by Agency inspection personnel during construction. Field notes documenting verification shall be retained in the project file.
	Source	Responsible Party	Status / Date / Initials
	Initial Study	IEUA / Contractor	

**INLAND EMPIRE UTILITIES AGENCY
LOWER DAY BASIN PROJECT
MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Implementation Schedule	Verification	
Noise XII-3 If equipment is being used that can cause hearing damage at adjacent noise receptor locations (distance attenuation shall be taken into account), portable noise barriers shall be installed that are demonstrated to be adequate to reduce noise levels at receptor locations below hearing damage thresholds.	This measure shall be incorporated into the construction contract when it is prepared. This measure shall be implemented and monitored by the Contractor during construction. Field notes documenting implementation shall be maintained onsite by the Contractor.	Verification of implementation shall be based on field inspections by Agency inspection personnel during construction. Field notes documenting verification shall be retained in the project file.	
	Source	Responsible Party	Status / Date / Initials
	Initial Study	IEUA / Contractor	

Mitigation Measure	Implementation Schedule	Verification	
Noise XII-4 Construction staging areas shall be located as far from adjacent sensitive receptor locations as possible at each facility, for example adjacent to the southern end of Basin 5.	This measure shall be incorporated into the construction contract when it is prepared. This measure shall be implemented and monitored by the Contractor during construction. Field notes documenting implementation shall be maintained onsite by the Contractor.	Verification of implementation shall be based on field inspections by Agency inspection personnel during construction. Field notes documenting verification shall be retained in the project file.	
	Source	Responsible Party	Status / Date / Initials
	Initial Study	IEUA / Contractor	

Mitigation Measure	Implementation Schedule	Verification	
Noise XII-5 Good relations with the local community shall be maintained where construction is scheduled, such as by keeping the community informed of the schedule, duration, and progress of the construction to minimize the public objections of unavoidable noise. Communities (City of Rancho Cucamonga and San Bernardino County) should be notified in advance of the construction and the expected temporary and intermittent noise increases during the construction period.	This measure shall be incorporated into the construction contract when it is prepared. This measure shall be implemented and monitored by the Contractor during construction. Field notes documenting implementation shall be maintained onsite by the Contractor.	Verification of implementation shall be based on field inspections by Agency inspection personnel during construction. Field notes documenting verification shall be retained in the project file.	
	Source	Responsible Party	Status / Date / Initials
	Initial Study	IEUA / Contractor	

**INLAND EMPIRE UTILITIES AGENCY
LOWER DAY BASIN PROJECT
MITIGATION MONITORING AND REPORTING PROGRAM**

Mitigation Measure	Implementation Schedule	Verification
Noise XII-6 IEUA will establish a noise complaint/response program and will respond to any noise complaints received for this project by measuring noise levels at the affected receptor. A sign shall be placed where nearby residents can read it and identify a point of contact at IEUA to make a noise complaint. If the noise level exceeds an Ldn of 65 dBA exterior or an Ldn of 45 dBA interior at the receptor, IEUA will implement adequate measures to reduce noise levels to the acceptable thresholds, including scheduling specific construction activities to avoid conflict with adjacent sensitive receptors.	This measure shall be incorporated into the construction contract when it is prepared. This measure shall be implemented and monitored by the Contractor during construction. Field notes documenting implementation shall be maintained onsite by the Contractor.	Verification of implementation shall be based on field inspections by Agency inspection personnel during construction. Field notes documenting verification shall be retained in the project file.
	Source Initial Study	Responsible Party IEUA / Contractor
		Status / Date / Initials

Mitigation Measure	Implementation Schedule	Verification
Transportation / Traffic XV-1 The construction contractor will provide adequate traffic management resources, as determined by the City of Rancho Cucamonga. The City shall require a construction traffic management plan for work in public roads that complies with the Work Area Traffic Control Handbook, or other applicable standard, to provide adequate traffic control and safety during excavation activities. The traffic management plan shall be prepared and approved by the City prior to initiation of excavation activities. At a minimum this plan shall include how to minimize the amount of time spent on construction activities; how to minimize disruption of vehicle and alternative modes of transport traffic at all times, but particularly during periods of high traffic volumes; how to maintain safe traffic flow on local streets affected by construction at all times, including through the use of adequate signage, protective devices, flag persons or police assistance to ensure that traffic can flow adequately during construction; the identification of alternative routes that can meet the traffic flow requirements of a specific area, including communication (signs, webpages, etc.) with drivers and neighborhoods where construction activities will occur; and at the end of each construction day roadways shall be prepared for continued utilization without any significant roadway hazards remaining.	This measure shall be completed prior to initiation of construction activities at Lower Day Basin.	A copy of the approved traffic management plan shall be retained in the project file. Verification of implementation shall be based on field inspections by Agency inspection personnel during construction. Field notes documenting verification shall be retained in the project file.
	Source Initial Study	Responsible Party IEUA / Contractor
		Status / Date / Initials

Draft MND and Initial Study for Lower Day Basin Project

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

To: San Bernardino County
Clerk of the Board
385 North Arrowhead Avenue
San Bernardino, CA 92415

From: Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708

and

Office of Planning and Research
State Clearinghouse
1400 Tenth Street
Sacramento, CA 95814

Subject: Filing of Notice of Intent to Adopt a Mitigated Negative Declaration in compliance with Section 21092.3 of the Public Resources Code.

Project Title

Lower Day Basin Project

Not Yet Assigned	Joel Ignacio, P.E.	(909) 993-1913
State Clearinghouse Number	Lead Agency Contact Person	Telephone Number

Project Location

The proposed project is located in the City of Rancho Cucamonga, San Bernardino County, California. The proposed project site consists of an existing basin with several cells. The Lower Day Basin is located immediately south of Interstate 210; immediately west of Day Creek channel; about 1/4 mile north of Base Line Road; and immediately east of Rochester Avenue. The project location is depicted on the USGS Cucamonga Peak 7.5' Topographic Quadrangle map. Specifically, the project is located within Section 31, Township 1 North, Range 6 West, San Bernardino Base and Meridian.

Project Description

The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (CBWM) are proposing the Lower Day Basin Improvement Project (proposed project). The objective of this project is to increase the recharge capacity (recycled water (RW) and stormwater (SW)) recharged into the Chino Groundwater Basin, specifically in the three cells located at Lower Day Basin. Under the Recharge Master Plan Update (RPMU), the proposed improvements for Lower Day Basin will increase recharge capacity by 789 acre-feet per year by modifying the San Bernardino County Flood Control District's (SBCFCD) diversion channel, installing a control gate valve on Cell 3's midlevel outlet, and improving the Basin embankments.

The proposed project includes modifications to the Basin inlets and outlets that will allow more storm water to be diverted into the Basin and stored at higher elevations for longer durations. There will be no modifications to the physical size, layout/configuration or storage volume of the Basin. The proposed improvements will allow the Basin operations to be modified to achieve increased groundwater recharge.

Notice of Intent to Adopt a Mitigated Negative Declaration

Page 2 of 2

Proposed Review Process

A capital improvement project such as the proposed project is a discretionary decision or "project" that requires evaluation under the California Environmental Quality Act (CEQA). This Mitigated Negative Declaration is the proposed CEQA determination for this project. Inland Empire Utilities Agency acting as the CEQA lead agency for this project will consider adoption of this Mitigated Negative Declaration at a future scheduled public meeting.

After public review of the Initial Study is completed, IEUA proposes to adopt a Mitigated Negative Declaration in accordance with CEQA and the State CEQA Guidelines. Any parties that comment on this proposed Mitigated Negative Declaration will be notified of the meeting date where adoption of the Mitigated Negative Declaration will be considered. Copies of the Mitigated Negative Declaration/Initial Study are available for review at the IEUA's office located at 6075 Kimball Avenue, Chino, CA 91708. The proposed Mitigated Negative Declaration will be available for public review and comment from December 7, 2015 through January 14, 2016. Any comments you have must be submitted in writing no later than January 14, 2016.

Signature

Title

Date

Paul S. / SA SENIOR ENGINEER

12-4-15

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814 — 916/445-0613

SCH # _____

Project Title: LOWER DAY BASIN PROJECT

Lead Agency Inland Empire Utilities Agency
Mailing Address 6075 Kimball Avenue
City Chino Zip 91708

Contact Person Joel Ignacio, P.E.
Phone (909) 993-1913
County San Bernardino County

Project Location: County San Bernardino County
Cross Streets So of I-10, Baseline Line Road, Rochester Avenue
Lat. / Long. general area 34° 7' 95" N / 117° 32' 61" W
Assessor's Parcel No N/A
Within 2 miles: State Hwy # I-210
Airports N/A Railways N/A

City/Nearest Community Rancho Cucamonga
Zip Code _____
Total Acres 22.6 acres
Sections 31, T1N, R6W SBBM
Waterways Day Creek Channel
Schools N/A

Document Type:

CEQA: ☐ NOP ☐ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) _____
☐ Early Cons ☐ Neg Dec ☒ Mit Neg Dec ☐ Other _____
NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI
Other: ☐ Joint Document ☐ Final Document ☐ Other _____

Local Action Type:

☐ General Plan Update ☐ Specific Plan ☐ Rezone ☐ Annexation
☐ General Plan Amendment ☐ Master Plan ☐ Prezone ☐ Redevelopment
☐ General Plan Element ☐ Planned Unit Development ☐ Use Permit ☐ Coastal Permit
☐ Community Plan ☐ Site Plan ☐ Land Division (Subdivision, etc.) ☒ Other Basin Improvements

Development Type:

☐ Residential: Units _____ Acres _____
☐ Office: Sq.ft. _____ Acres _____ Employees _____
☐ Commercial: Sq.ft. _____ Acres _____ Employees _____
☐ Industrial: Sq.ft. _____ Acres _____ Employees _____
☐ Education _____
☐ Recreational _____
☒ Water Facilities: Type _____ MGD _____
☐ Transportation: Type _____
☐ Mining: Mineral _____
☐ Power: Type _____ Watts _____
☐ Waste Treatment: Type _____ MGD _____
☐ Hazardous Waste: Type _____
☐ Other: _____

Project Issues Discussed in Document:

☒ Aesthetics / Visual ☐ Fiscal ☒ Recreation / Parks ☒ Vegetation
☒ Agricultural Land ☒ Floodplain / Flooding ☐ Schools / Universities ☐ Water Quality
☒ Air Quality ☒ Forest Land / Fire Hazard ☐ Septic Systems ☐ Water Supply / Groundwater
☒ Archaeological / Historical ☒ Geologic / Seismic ☐ Sewer Capacity ☒ Wetland/Riparian
☒ Biological Resources ☐ Minerals ☒ Soil Erosion / Compaction / Grading ☒ Wildlife
☒ Coastal Zone ☒ Noise ☐ Solid Waste ☐ Growth Inducing
☐ Drainage / Absorption ☐ Population / Housing Balance ☒ Toxic / Hazards ☒ Land Use
☐ Economic / Jobs ☒ Public Services / Facilities ☒ Traffic / Circulation ☐ Cumulative Effects
☐ Other _____

Present Land Use / Zoning / General Plan Designation:

Project Description: The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (CBWM) are proposing the Lower Day Basin Improvement Project (proposed project). The objective of this project is to increase the recharge capacity (recycled water (RW) and stormwater (SW)) recharged into the Chino Groundwater Basin, specifically in the three cells located at Lower Day Basin. Under the Recharge Master Plan Update (RPMU), the proposed improvements for Lower Day Basin will increase recharge capacity by 789 acre-feet per year by modifying the San Bernardino County Flood Control District's (SBCFCD) diversion channel, installing a control gate valve on Cell 3's midlevel outlet, and improving the Basin embankments.

The proposed project includes modifications to the Basin inlets and outlets that will allow more storm water to be diverted into the Basin and stored at higher elevations for longer durations. There will be no modifications to the physical size, layout/configuration or storage volume of the Basin. The proposed improvements will allow the Basin operations to be modified to achieve increased groundwater recharge.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with an "X".
If you have already sent your document to the agency please denote that with an "S".

<input type="checkbox"/> Air Resources Board	<input type="checkbox"/> Office of Historic Preservation
<input type="checkbox"/> Boating / Waterways, Department of	<input type="checkbox"/> Office of Public School Construction
<input type="checkbox"/> California Highway Patrol	<input type="checkbox"/> Parks & Recreation
<input checked="" type="checkbox"/> Caltrans District # <u>8</u>	<input type="checkbox"/> Pesticide Regulation, Department of
<input type="checkbox"/> Caltrans Division of Aeronautics	<input type="checkbox"/> Public Utilities Commission
<input type="checkbox"/> Caltrans Planning (Headquarters)	<input type="checkbox"/> Reclamation Board
<input type="checkbox"/> Coachella Valley Mountain Conservancy	<input checked="" type="checkbox"/> Regional WQCB, # <u>8, Santa Ana</u>
<input type="checkbox"/> Coastal Commission	<input type="checkbox"/> Resources Agency
<input type="checkbox"/> Colorado River Board	<input type="checkbox"/> S.F. Bay Conservation & Development Commission
<input type="checkbox"/> Conservation, Department of	<input type="checkbox"/> San Gabriel & Lower L.A. Rivers & Mtns Conservancy
<input type="checkbox"/> Corrections, Department of	<input type="checkbox"/> San Joaquin River Conservancy
<input type="checkbox"/> Delta Protection Commission	<input type="checkbox"/> Santa Monica Mountains Conservancy
<input type="checkbox"/> Education, Department of	<input type="checkbox"/> State Lands Commission
<input type="checkbox"/> Energy Commission	<input checked="" type="checkbox"/> SWRCB: Clean Water Grants
<input checked="" type="checkbox"/> Fish & Wildlife, Region # <u>6</u>	<input type="checkbox"/> SWRCB: Water Quality
<input type="checkbox"/> Food & Agriculture, Department of	<input type="checkbox"/> SWRCB: Water Rights
<input type="checkbox"/> Forestry & Fire Protection	<input type="checkbox"/> Tahoe Regional Planning Agency
<input type="checkbox"/> General Services, Department of	<input type="checkbox"/> Toxic Substances Control, Department of
<input type="checkbox"/> Health Services, Department of	<input checked="" type="checkbox"/> Water Resources, Department of
<input type="checkbox"/> Housing & Community Development	<input type="checkbox"/> Other _____
<input type="checkbox"/> Integrated Waste Management Board	<input type="checkbox"/> Other _____
<input type="checkbox"/> Native American Heritage Commission	
<input type="checkbox"/> Office of Emergency Services	

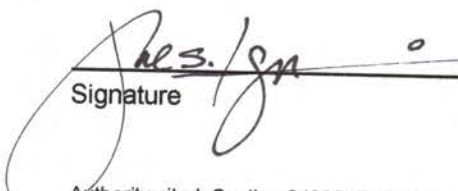
Local Public Review Period (to be filled in by lead agency)

Starting Date December 7 2015 Ending Date January 14, 2016

Lead Agency (complete if applicable)

Consulting Firm: <u>Tom Dodson & Associates</u>	Applicant: <u>Inland Empire Utilities Agency</u>
Address: <u>2150 N. Arrowhead Avenue</u>	Address: <u>6075 Kimball Avenue</u>
City/State/Zip: <u>San Bernardino, CA 92405</u>	City/State/Zip: <u>Chino, CA 91708</u>
Contact: <u>Tom Dodson</u>	Contact: <u>Joel Ignacio, P.E.</u>
Phone: <u>(909) 882-3612</u>	Phone: <u>(909) 993-1913</u>

Signature of Lead Agency Representative:

 SENIOR ENGINEER 12-4-15
Signature Title Date

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

DRAFT MITIGATED NEGATIVE DECLARATION

Lead Agency: Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, CA 91708

Contact: Joel Ignacio, P.E.
Phone: (909) 993-1913
Email: jignacio@ieua.org

Project Title: LOWER DAY BASIN PROJECT

State Clearinghouse Number: Not yet assigned

Project Location: The proposed project is located in the City of Rancho Cucamonga, San Bernardino County, California. The proposed project site consists of an existing basin with several cells. The Lower Day Basin is located immediately south of Interstate 210; immediately west of Day Creek channel; about 1/4 mile north of Base Line Road; and immediately east of Rochester Avenue. The project location is depicted on the USGS Cucamonga Peak 7.5' Topographic Quadrangle map. Specifically, the project is located within Section 31, Township 1 North, Range 6 West, San Bernardino Base and Meridian.

Project Description: The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (CBWM) are proposing the Lower Day Basin Improvement Project (proposed project). The objective of this project is to increase the recharge capacity (recycled water (RW) and stormwater (SW)) recharged into the Chino Groundwater Basin, specifically in the three cells located at Lower Day Basin. Under the Recharge Master Plan Update (RPMU), the proposed improvements for Lower Day Basin will increase recharge capacity by 789 acre-feet per year by modifying the San Bernardino County Flood Control District's (SBCFCD) diversion channel, installing a control gate valve on Cell 3's midlevel outlet, and improving the Basin embankments.

The proposed project includes modifications to the Basin inlets and outlets that will allow more storm water to be diverted into the Basin and stored at higher elevations for longer durations. There will be no modifications to the physical size, layout/configuration or storage volume of the Basin. The proposed improvements will allow the Basin operations to be modified to achieve increased groundwater recharge.

Finding: Inland Empire Utilities Agency's (IEUA) decision to implement this proposed project is a discretionary decision or "project" that requires evaluation under the California Environmental Quality Act (CEQA). Based on the information in the project Initial Study, LACSD has made a *preliminary* determination that a Mitigated Negative Declaration will be the appropriate environmental determination for this project to comply with CEQA.

Initial Study: Copies of the Mitigated Negative Declaration/Initial Study are available for public review at the Copies of the Mitigated Negative Declaration/Initial Study are available for review at the IEUA's office located at 6075 Kimball Avenue, Chino, CA 91708. The proposed Mitigated Negative Declaration will be available for public review and comment from December 7, 2015 through January 14, 2016. Any comments you have must be submitted in writing no later than January 14, 2016.

Mitigated Negative Declaration

Page 2 of 2

Mitigation Measures: All mitigation measures identified in the Initial Study are summarized on pages 52-56 and are proposed for adoption as conditions of the project. These measures will be implemented through a mitigation monitoring and reporting program if the Mitigated Negative Declaration is adopted.

DRAFT
Signature

Title

Date

INITIAL STUDY

FOR THE

LOWER DAY BASIN PROJECT

Prepared for:

Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, California 91708
(909) 993-1600

Prepared by:

Tom Dodson & Associates
2150 North Arrowhead Avenue
San Bernardino, California 92405
(909) 882-3612

December 2015

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FIGURES

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ACROYNMS AND ABBREVIATIONS

AAQS	ambient air quality standards
AB	Assembly Bill
APE	Area of Potential Effect
AQMP	Air Quality Management Plan
ARA	Aggregate Resources Areas
BACM	Best Available Control Measures
BMP	Best Management Practices
CAA	Clean Air Act
CalEEMod	California Emissions Estimator Model
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CB	Chino Basin
CBWD	Chino Basin Watermaster
CCAA	California Clean Air Act
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
Corps	U.S. Army Corps of Engineers
dB	decibel
dBA	A-weighted decibel
DSOD	Division of Safety of Dams
EPA	U.S. Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
GHG	Greenhouse Gas
GWR Server	Groundwater Recharge Server system
IEUA	Inland Empire Utilities Agency
IPCC	Intergovernmental Panel on Climate Change
LST	Localized Significance Thresholds
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Significance
MWD	Metropolitan Water District of Southern California
NAHC	Native American Heritage Commission
NAVD 88	North American Vertical Datum of 1988
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NOI	Notice of Intent
OEHHA	Office of Environmental Health Hazard Assessment
RPMU	Recharge Master Plan Update

RW	recycled water
RWQCB	Regional Water Quality Control Board
SBCFCD	San Bernardino County Flood Control District
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SIP	State Implementation Plan
SoCAB	South Coast Air Basin
SRA	source receptor area
SRF	State Revolving Fund
SW	stormwater
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminants
TDA	Tom Dodson & Associates
TDS	Total Dissolved Solids
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WRFs	Water Reclamation Facilities

PROJECT DESCRIPTION

Introduction

The Inland Empire Utilities Agency (IEUA or Agency) was formed by popular vote of its residents in June of 1950, for the purpose of importing supplemental water supplies from Metropolitan Water District of Southern California (MWD). IEUA, as a member of the MWD, distributes imported water, and provides municipal and industrial wastewater collection and treatment services and other related utility services for the mid-portion of the Upper Santa Ana River watershed in the southwestern-most portion of San Bernardino County, California. In its wastewater management role, the IEUA serves the cities of Chino, Chino Hills, Fontana, Montclair, Ontario and Upland, and the Cucamonga Valley Water District (which generally encompasses the City of Rancho Cucamonga as well as some unincorporated areas of San Bernardino County). Approximately 800,000 people are currently estimated to reside in the IEUA service area, which encompasses approximately 242 square miles.

The proposed project includes the expansion of stormwater capture at the existing Lower Day Basin (Basin) and potential future delivery of recycled water produced by IEUA Water Reclamation Facilities (WRFs) to the Basin which is located just south of Interstate 210 and west of Lower Day Creek channel in the City of Rancho Cucamonga. The Basin was originally constructed in 1975-1976 by the San Bernardino County Flood Control District (SBCFCD). The Basin site includes two interconnected basins, Upper Day Basin and Lower Day Basin. The Upper Basin (SBCFCD Day Creek Basin #2) is situated on the southern two-thirds of the site and is approximately 22.6 acres in size.

Lower Day Basin is currently operated as a multi-purpose facility serving primarily as a flood control facility and secondarily for recharge of storm and supplemental water. It has an upper basin which receives local stormwater runoff and a lower basin which is divided into three recharge cells and receives water from the Day Creek Channel for recharge during low-flow events by means of an existing rubber dam diversion structures and pipe conduit. The lower basin also receives inflow from a side channel overflow weir for flood control operation.

As a recharge facility the Lower Day Basin consists of the following assets:

1. Three recharge cells: Cell 1, Cell 2, and Cell 3.
 - *Lower Day Basin Cell 1* – Lower Day Basin Cell 1 receives storm water from Day Creek and storm water from a local storm drain system.
 - *Lower Day Basin Cell 2* – Lower Day Basin Cell 2 receives storm water and imported water from Day Creek and flows from Lower Day basin Cell 1.
 - *Lower Day Basin Cell 3* – Lower Day Basin Cell 3 receives flows from Lower Day Basin Cell 2.
2. Rubber Dam System at Day Creek
 - Flow released from the CB 15 MWD Imported Water Turnout and storm water can be dammed behind an inflatable rubber dam located at the northeast corner of Lower Day Basin.

3. Imported Water Turnout (CB 15 MWD)

- The CB 15 MWD Imported Water Turnout is located near the intersection of Banyan Street and Day Creek in the City of Rancho Cucamonga, north of Lower Day Basin. It provides Lower Day and other downstream basins imported water through Day Creek Channel.

4. Electrical Systems

- The electrical system is common to the basin and rubber dam system
- The Turnout's power is local.

5. Instrumentation and Control Systems

- The basin and rubber dam controls are operated by local PLC with a radio system that receives and transmits control data to the IEUA's GWR servers for control and remote access.
- The turnout's control system is local PLC with a cellular system that receives and transmits control data to the IEUA's GWR servers for control and remote access.

The purpose of the proposed basin modifications is to increase the Agency's groundwater recharge capacity as part of a comprehensive effort to reverse the groundwater overdraft condition in the Chino Basin and to support the groundwater demands (potable water supply) of the population within the Agency's service area.

Location

The proposed project is located in the City of Rancho Cucamonga, San Bernardino County, California. The proposed project site consists of an existing basin with several cells. The Lower Day Basin is located immediately south of Interstate 210; immediately west of Day Creek channel; about 1/4 mile north of Base Line Road; and immediately east of Rochester Avenue. Figure 1 shows the regional location of the project site and Figure 2 shows the project location on the USGS Cucamonga Peak 7.5' Topographic Quadrangle map. Specifically, the project is located within Section 31, Township 1 North, Range 6 West, San Bernardino Base and Meridian. Figure 3 shows the project vicinity on an aerial photograph.

Project Description

The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (CBWM) are proposing the Lower Day Basin Improvement Project (proposed project). The objective of this project is to increase the recharge capacity (recycled water (RW) and stormwater (SW)) recharged into the Chino Groundwater Basin, specifically in the three cells located at Lower Day Basin. Under the Recharge Master Plan Update (RPMU), the proposed improvements for Lower Day Basin will increase recharge capacity by 789 acre-feet per year by modifying the San Bernardino County Flood Control District's (SBCFCD) diversion channel, installing a control gate valve on Cell 3's midlevel outlet, and improving the Basin embankments.

With the proposed modifications Lower Day Basin will function as a modified flow-through basin through modification of the existing diversion and inlet channel structures which are located on

the northeast of the basin. Additional modifications include the installation of flow control gates in the Day Creek channel. Gate structure(s) will provide the capability to fully adjust diversion rates through the diversion and Davy Creek channels. The gate in the Day Creek channel will function to impede water flowing through the channel so that it can be diverted through the existing diversion channel into Lower Day Basin. Gates will automatically raise or lower to maintain the set channel water surface elevation. If the Basin is filled to capacity, the gate will function to allow only enough water into the facility to keep the Basin full.

The proposed project includes modifications to the Basin inlets and outlets that will allow more storm water to be diverted into the Basin and stored at higher elevations for longer durations. There will be no modifications to the physical size, layout/configuration or storage volume of the Basin. The proposed improvements will allow the Basin operations to be modified to achieve increased groundwater recharge.

The storage volume of the Upper Basin (about 44 acre-feet (af)) is held entirely at elevations lower than the topography surrounding the Basin. The majority of the volume of the Lower Basin is also held at elevations lower than the topography surrounding the Basin (408 af of the total 558 af). The remaining 150 af of storage volume is held by an above grade embankment measuring from 0 to 7 feet in height around the southern one-third of the Lower Basin.

The water level in the Lower Basin is controlled by a low-level, 36-inch diameter gated outlet, a mid-level, 72-inch diameter ungated outlet and by a reinforced concrete overflow spillway. The low-level outlet is positioned at elevation 1,364.0 feet (NAVD 88); the mid-level outlet is positioned at 1,382.0 feet (NAVD 88); the overflow spillway is positioned at elevation 1,400.0 feet (NAVD 88); and the toe of the slope of the outside perimeter embankment is at approximately 1,393.0 feet (NAVD 88).

The proposed project would gate the mid-level outlet and allow water to be stored up to elevation 1,398.0 feet (NAVD 88) until such time it is infiltrated into the groundwater basin or released to downstream recharge facilities. Refer to the drawings in Appendix 1 that illustrate these features. This equates to a regular storage elevation approximately 5.0 feet higher than the outside toe of slope of the perimeter embankment. The volume of water stored between elevation 1,393.0 feet and 1,398.0 feet (NAVD 88) is approximately 106 af.

The existing earth embankment structure at the south end of the Lower Day Basin will be evaluated and (if required) reconstructed to meet the requirements of a dam embankment under the jurisdiction of the Division of Safety of Dams (DSOD). Improvements to the dam structure may include excavation of the existing embankment to expose firm, undisturbed and stable material across the entire width and length of the embankment and excavation of a keyway or cutoff trench that will extend to an underlying impervious material, or to a depth considered adequate to prevent piping or seepage through the embankment. The dam embankment will be constructed at a typical slope of about 3:1 (H:V) on the upstream side and 2:1 (H:V) on the downstream side.

The project will also include modifications to a "mid-level outlet" pipe to gain additional recharge storage. The outlet pipe is located on the far southeast corner of the Basin. Currently, the existing this outlet sits approximately 16-feet below the height of the Basin spillway. Without a gate structure on the outlet, the storage water height cannot be raised above the outlet. This project will consider the placement of a weir gate on the fact of this outlet to gain additional

recharge storage volume. The new Lower Day Basin will be able to store and recharge an additional 789 acre-feet/year of storm water in addition to the existing baseline storm water recharge capacity of 395 acre-feet/year.

Construction Activities

Construction activities will consist of the following activities:

- Excavate and compact approximately 72,000 cubic yards onsite. Additional material may have to be brought to the site or removed from the site.
- Install the modified diversion channel (pneumatic gate)
- Install a control gate valve on Cell 3's midlevel outlet
- Improve the Basin embankments
- Possible reconstruct the existing earth embankment structure at the south end of Lower Day Basin
- Modify upper basin outlet
- Install ungated mid-level outlet riser per DSOD's requirements (pending)

Operational Activities

- Higher water surface elevations in the basins more frequently
- Periodic facility maintenance, which can be incorporated with existing maintenance activities
- Management of the new structures to increase the volume of storm water runoff recharged at Lower Day Basin

Other Agency Permits

The Lower Day Basin property is owned by San Bernardino County and managed by the SBCFCD and IEUA. SBCFCD has authorized IEUA to act as the CEQA lead agency for this proposed project. If approved by IEUA, the County will act as a CEQA responsible agency when it considers whether to issue an encroachment permit to allow the contractor to carry out the proposed project construction activities.

In addition to the County permit, the project exceeds the one-acre threshold for a General Construction National Pollutant Discharge Elimination System (NPDES) permit. This requires notification to the State Water Board and preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP). Also, the acreage of the project will require the preparation of a dust management plan to comply with South Coast Air Quality Management District (SCAQMD) Rule 403.

The proposed basin modifications occur within water recharge basins that are isolated from any stream and therefore do not receive inflows unless water is diverted from adjacent stream channels. Therefore, it is not clear whether any permits from regulatory agencies (Corps, Regional Board or Department of Fish and Game) will be required to conduct the proposed modifications and to maintain these basins over the long-term. This environmental review process addresses the possible requirement to obtain regulatory permits, but it is anticipated that comments from regulatory agencies will indicate whether they believe such permits are required. No other permits are known to be required. Since State responsible or trustee

agencies have been identified for this project, IEUA will implement a 30-day review period for this Initial Study and proposed Mitigated Negative Declaration.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that requires mitigation as indicated by the checklist on the following pages. After implementation of mitigation, no "Potentially Significant Impact" has been identified for this project based on the detailed evaluation contained in this Initial Study.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology / Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input checked="" type="checkbox"/> Hydrology & Water Quality |
| <input type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation / Traffic | <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Mandatory Findings of Significance |

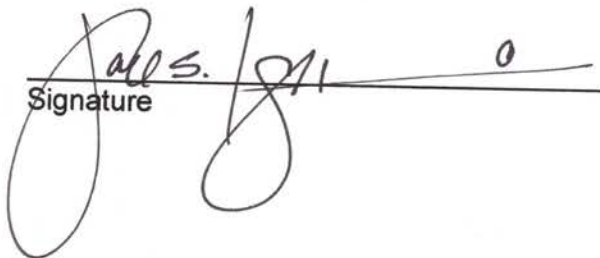
DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

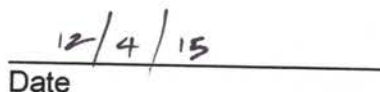
Tom Dodson & Associates

Signature (prepared by)


Signature

December 4, 2015

Date


Date

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
I. AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			X	

SUBSTANTIATION

a&c. *Less Than Significant Impact* – The proposed project site is currently developed with existing recharge basins, spillways, and adjacent access roadways. The project site is surrounded by residential development to the West, South, and East and Interstate 210 to the North. Additionally, Rancho Cucamonga High School lies to the West of the project site; a commercial shopping center lies to the North East of the project; separating the residential development and commercial shopping center from the project site to the East is Day Creek Channel. The proposed project consists of three recharge cells (Cell 1, Cell 2, and Cell 3), a rubber dam system at Day Creek, an Imported Water Turnout, Electrical Systems, and Instrumentation and Control Systems. Once installed, the new facilities will not impact scenic vistas or affect visual resources. During the short term, piles of soils may be established during the excavation of the existing embankment and the modifications to a “mid-level outlet” pipe. The existing embankment structure at the south end of the Lower Day Basin may need to be reconstructed, which could also require the establishment of soil piles. These piles will all be located on the existing Basin floor.

The proposed facilities will exist below grade or near the existing ground-surface elevation of the site's main changes. The proposed project will install a modified diversion channel, install a control gate valve, and modify the mid-level outlet pipe with a gate structure; each of these proposed changes modifies the existing embankments with minimal visual changes. Due to the existing basins that already occur and the lack of above-ground facilities on the site, it is concluded that the proposed project will not have the potential to significantly obstruct scenic views (the San Gabriel Mountains to the north of the site) or vistas available to the public. Also with no important visual qualities on the site, the proposed project does not have a potential to substantially degrade the visual character or quality of the site of its surroundings.

b. *No Impact* – The project basins are already developed as a multi-purpose facility serving primarily as a flood control facility and secondarily for recharge of storm and supplemental water. The proposed project includes modifications to the basin inlets and outlets that will allow more storm water to be diverted into the basin and stored at higher elevations for longer durations. Due to past and existing uses, the proposed project does not contain any native trees, rock outcroppings, other scenic resources, or historical buildings within the project footprint. In addition, there are no designated scenic highways or corridors located within the project vicinity. No scenic resources

were identified for the project site and no adverse impact to such resources can occur. No mitigation is required.

- d. *Less Than Significant Impact* – Because the construction activities are limited to daylight hours and the amount of security lighting needed during construction will be limited, potential impacts are considered to be less than significant. The security and operational lighting for the proposed modifications to Lower Day Basin will be minor relative to the existing background lighting generated from the adjacent freeway, high school, and commercial shopping center. Therefore, no potential exists for significant light effects and no mitigation is proposed or required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
II. AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

SUBSTANTIATION

- a-e. *No Impact* – According to the City of Rancho Cucamonga General Plan, the proposed project sites are located on lands designated as public facilities and used for flood control purposes, such as the existing flood control/water recharge basins. Further, no agricultural activities or lands designated for agricultural use exist near the project site. Also, no known Williamson Act lands exist on or near the project site. No forest land or timberland (as defined by the referenced government code sections) exists on or near the project sites. Therefore, the proposed project has no potential to convert Farmland to non-agricultural use or forest land to non-forest use.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		X		
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?			X	

SUBSTANTIATION: Air emission calculations to substantiate the findings presented below are provided in Appendix 1 of this document.

- a. *Less than Significant Impact* – A significant air quality impact may occur if a project is not consistent with the applicable Air Quality Management Plan (AQMP) or would in some way obstruct the implementation of the policies or obtainment of the goals of that plan. The proposed project is located within the City of Rancho Cucamonga (City) in San Bernardino County, California. This City is located in the South Coast Air Basin (Basin), which is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin. To that end, the SCAQMD, a regional agency, works directly with the Southern California Association of Governments (SCAG), county transportation commissions, local governments, and cooperates actively with all state and federal government agencies. The SCAQMD develops rules and regulations, establishes permitting requirements, inspects stationary emissions sources, and enforces such measures through educational programs or fines, when necessary. SCAQMD and SCAG are responsible for preparing the AQMP, which addresses federal and state Clean Air Act (CAA) requirements. Pursuant to these requirements, the SCAQMD is required to reduce emissions of criteria pollutants for which the Basin is in non-attainment. The AQMP details goals, policies, and programs for improving air quality in the Basin.

Since the forecasted growth in SCAQMD's AQMP for the Basin relies on SCAG's regional growth forecasts, and because SCAG's growth forecasts are based upon, among other things, land uses specified in local jurisdiction general plans, a project that is consistent with the land use designated in a general plan would also be consistent with the AQMP growth projections. The proposed

project includes the modification of the existing basin inlets and outlets and the expansion of delivery system for recycled water produced by IEUA Water Reclamation Facilities (WRFs) and of stormwater capture to the existing Lower Day Basin. No growth-inducing development or land use would occur under the project as the fundamental land use of the site will remain the same. Therefore, as implementation of the project would not change the growth forecasts identified in the City's General Plan or SCAG's forecasts, it would not conflict with or obstruct the implementation of SCAQMD's current AQMP.

The SCAQMD is responsible for the development of the Basin's portion of the State Implementation Plan (SIP), which is required under the federal Clean Air Act for areas that are in nonattainment for criteria pollutants. The project may receive funds from the State Revolving Fund (SRF) and therefore, under the Clean Air Act the project would be subject to a SIP conformity determination. This is because the project is in an extreme nonattainment area for 8-hour ozone, a moderate nonattainment area for PM_{2.5} and a maintenance area for CO and PM₁₀. Table III-1 shows the attainment status for each of the criteria air pollutants and the *de minimis* levels for ozone precursor pollutants (i.e., NO_x and VOC, PM_{2.5}, PM₁₀, and CO) that the project's emissions are compared to in order to make a SIP conformity determination. If the project is below the *de minimis* levels, then the project is determined to be in conformity with the SIP.

As shown in Table III-1, ozone precursors are below the *de minimis* thresholds for construction activities and therefore the project is consistent with the SIP. As there would be no overall increase in the size/use of the project, and maintenance activities would be similar to existing maintenance routines, there would be no new operational emissions associated with the proposed project. As such, a SIP conformity determination with respect to operational emissions is not required for this project.

**Table III-1
SIP CONFORMITY EVALUATION**

Pollutant	Federal Status	Nonattainment Rates	Threshold of Significance (tons/year)	Construction Emissions (tons/year)
Ozone (O ₃)	Nonattainment	Extreme	See (VOC & NO _x)	
Carbon Monoxide (CO)	Attainment / Maintenance	N/A	100	6.4648
Oxides of Nitrogen (NO _x)	N/A	N/A	10	4.4699
Volatile Organic Compounds (VOC)	N/A	N/A	10	0.6599
Lead (Pb)	Attainment	N/A	N/A	N/A
Particulate matter less than 2.5 microns (PM _{2.5})*	Nonattainment	Moderate	100	0.3575
Particulate matter less than 10 microns (PM ₁₀)*	Attainment / Maintenance	N/A	100	0.8267
Sulfur Dioxide (SO ₂)	Attainment	N/A	N/A	0.0119

Notes: N/A = Non-applicable

* Mitigated values from the CalEEMod model were used for PM₁₀ and PM_{2.5} in order to account for the implementation of mandatory dust control measures as required by SCAQMD Rule 403 – Fugitive Dust.

Source: ESA CalEEMod modeling 2015; EPA 2014; EPA 2015

As discussed previously, no growth-inducing development or land use would occur if the project is implemented; therefore the project would not conflict with the City's General Plan. Thus, the project would be consistent with the AQMP. Additionally, as the annual emissions from the project would be well below the *de minimis* thresholds for SIP conformity, the proposed project is considered to be in conformance with the SIP. This would be a less than significant impact and no mitigation would be required.

- b. *Less than Significant With Mitigation Incorporated* – A project may have a significant impact where project-related emissions would exceed federal, state, or regional standards or thresholds, or where project-related emissions would substantially contribute to an existing or projected air quality violation. Refer to Table III-2 for current standards; Table III-3 for health impacts of air pollutants; and Table III-4 for recent air quality in the project vicinity. As the proposed project consists of infrastructure modifications to the Basin in the City of Rancho Cucamonga along the Lower Day Basin, potential air quality impacts associated with the project would mostly occur during the construction phase as the ground disturbance and operation of construction equipment would result in additional air emissions in the region. Once construction activities have been completed, operation of the proposed project would not involve any new direct pollutant emissions sources onsite. As there would be no overall increase in the size/use of the project, and maintenance activities would be similar to existing maintenance routines, there would be no operational emissions associated with the proposed project. As such, the mobile emissions generated during project operations would not exceed SCAQMD's applicable regional thresholds. Thus, this analysis focuses on the potential air quality impacts that could result from construction of the proposed project.

Construction of the proposed project includes modifications to the Basin inlets and outlets that will allow more storm water to be diverted into the Basin and stored at higher elevations for longer durations. There will be no modifications to the physical size, layout/configuration or storage volume of the Basin. The proposed improvements will allow the Basin operations to be modified to achieve increased groundwater recharge. Construction activities would generate pollutant emissions from the following construction activities: (1) site preparation, excavation, and building construction; (2) construction workers traveling to and from the construction site; (3) delivery and hauling of construction supplies and import/export of soil to and from the construction site; and (4) the fuel combustion by onsite construction equipment.

The analysis of daily construction emissions has been prepared utilizing the California Emissions Estimator Model (CalEEMod). CalEEMod was used to determine whether short-term construction-related emissions of criteria air pollutants associated with the proposed project would exceed SCAQMD's applicable regional thresholds and if mitigation would be required. Modeling was based on project-specific data, when available. Where project-specific information was not available, default model settings were used to estimate criteria air pollutant and ozone precursor emissions. For the purpose of this analysis, the construction emissions occurring on a peak (worst-case) day over the entire project construction period were estimated and evaluated against the applicable SCAQMD significance thresholds. It is estimated that none of the construction phases would occur concurrently. Therefore each individual phase is compared to the regulatory thresholds.

The estimated daily emissions during peak construction days for the proposed project are shown in Table III-5. These calculations take into account that appropriate dust control measures under SCAQMD Rule 403 would be implemented by the project during each phase of construction.¹

¹ The CalEEMod model does not allow for the implementation of Rule 403 under the "unmitigated" scenario. Therefore, in order to take into account the benefits of implementation of Rule 403 it is entered as "mitigation" and therefore the "mitigated" emissions from CalEEMod are reported in this analysis. However, because implementation of Rule 403 is mandatory, it is not considered mitigation with respect to the analysis.

**Table III-2
AMBIENT AIR QUALITY STANDARDS**

Pollutant	Average Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O3)	1 Hour	0.09 ppm (180 µg/m3)	Ultraviolet Photometry	–	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m3)		0.075 ppm (147 µg/m3)		
Respirable Particulate Matter (PM10)	24 Hour	50 µg/m3	Gravimetric or Beta Attenuation	150 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m3		–		
Fine Particulate Matter (PM2.5)	24 Hour	–	–	35 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m3	Gravimetric or Beta Attenuation	15 µg/m3		
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m3)	–	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9 ppm (10 mg/m3)		9 ppm (10 mg/m3)	–	
	8 Hour (Lake Tahoe)	6 ppm (7 g/m3)		–	–	
Nitrogen Dioxide (NO2) ⁸	1 Hour	0.18 ppm (339 µg/m3)	Gas Phase Chemiluminescence	100 ppb (118 µg/m3)	–	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m3)		0.053 ppm (100 µg/m3)	Same as Primary Standard	
Sulfur Dioxide (SO2) ⁹	1 Hour	0.25 ppm (655 µg/m3)	Ultraviolet Fluorescence	75 ppb (196 µg/m3)	–	Ultraviolet Flourescence; Spectrophotometry (Paraosaniline Method)
	3 Hour	–		–	0.5 ppm (1300 µg/m3)	
	24 Hour	0.04 ppm (105 µg/m3)		0.14 ppm (for certain areas) ⁹	–	
	Annual Arithmetic Mean	–		0.030 ppm (for certain areas) ⁹	–	
Lead 8 ^{10,11}	30-Day Average	1.5 µg/m3	Atomic Absorption	–	–	–
	Calendar Quarter	–		1.5 µg/m3 (for certain areas) ¹¹	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Rolling 3-Month Avg	–		0.15 µg/m3)		
Visibility Reducing Particles ¹²	8 Hour	See footnote 12	Beta Attenuation and Transmittance through Filter Tape	No Federal Standards		
Sulfates	24 Hour	25 µg/m3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m3)	Ultraviolet Fluorescence			
Vinyl Chloride ¹⁰	24 Hour	0.01 ppm (26 µg/m3)	Gas Chromatography			

Footnotes

- 1 California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter – PM₁₀, PM_{2.5}, and visibility reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- 2 National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year, with a 24-hour average concentration above 150 µg/m³, is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.
- 3 Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- 4 Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
- 5 National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
- 6 National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- 7 Reference method as described by the EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the EPA.
- 8 To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- 9 On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
- 10 The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- 11 The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 j.tg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- 12 In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: California Air Resources Board (6/4/13)

**Table III-3
HEALTH EFFECTS OF MAJOR CRITERIA POLLUTANTS**

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	<ul style="list-style-type: none"> • Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter. 	<ul style="list-style-type: none"> • Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO ₂)	<ul style="list-style-type: none"> • Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions. 	<ul style="list-style-type: none"> • Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O ₃)	<ul style="list-style-type: none"> • Atmospheric reaction of organic gases with nitrogen oxides in sunlight. 	<ul style="list-style-type: none"> • Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	<ul style="list-style-type: none"> • Contaminated soil. 	<ul style="list-style-type: none"> • Impairment of blood function and nerve construction. • Behavioral and hearing problems in children.
Fine Particulate Matter (PM-10)	<ul style="list-style-type: none"> • Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions. 	<ul style="list-style-type: none"> • Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility.
Fine Particulate Matter (PM-2.5)	<ul style="list-style-type: none"> • Fuel combustion in motor vehicles, equipment, and industrial sources. • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NO_x, sulfur oxides, and organics. 	<ul style="list-style-type: none"> • Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO ₂)	<ul style="list-style-type: none"> • Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes. 	<ul style="list-style-type: none"> • Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board, 2002.

**Table III-4
PROJECT AREA AIR QUALITY MONITORING SUMMARY (2008-2012)
(Days Standards Were Exceeded and Maximum Observed Levels)**

Pollutant/Standard	2008	2009	2010	2011	2012
Ozone					
1-Hour > 0.09 ppm (S)	51	51	31	36	42
8-Hour > 0.07 ppm (S)	65	70	54	45	66
8- Hour > 0.075 ppm (F)	50	48	39	36	45
Max. 1-Hour Conc. (ppm)	0.155	0.146	0.131	0.145	0.136
Max. 8-Hour Conc. (ppm)	0.123	0.121	0.098	0.122	0.111
Carbon Monoxide					
1-Hour > 20. ppm (S)	0	0	0	0	0
1-Hour > 9. ppm (S, F)	0	0	0	0	0
Max 1-Hour Conc. (ppm)	2.1	1.7	2.3	1.8	xx
Max 8-Hour Conc. (ppm)	1.6	1.6	1.5	1.3	0.9
Nitrogen Dioxide					
1-Hour > 0.18 ppm (S)	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.094	0.096	0.079	0.069	0.063
Inhalable Particulates (PM-10)					
24-Hour > 50 µg/m ³ (S)	13/62	6/60	4/60	3/60	4/ xx
24-Hour > 150 µg/m ³ (F)	0/62	0/60	0/60	0/60	0/xx
Max. 24-Hr. Conc. (µg/m ³)	87.	68.	86.	68.	57.
Ultra-Fine Particulates (PM-2.5)					
24-Hour > 35 µg/m ³ (F)	6/113	3/114	1/112	2/120	0/xx
Max. 24-Hr. Conc. (µg/m ³)	54.2	46.9	46.1	52.9	35.2

S=State Standard F=Federal Standard xx= data not available

Source: South Coast AQMD
Upland Monitoring Station (Ozone, CO, NOx)
Ontario Monitoring Station (PM-10, PM-2.5)
Data: www.arb.ca.gov/adam/

Table III-5
PROJECT PEAK DAY CONSTRUCTION EMISSIONS

Emissions Source	Pounds Per Day					
	ROG	NO _x	CO	SO _x	PM ₁₀ ^a	PM _{2.5} ^a
2016						
Site Preparation						
Fugitive Dust	--	--	--	--	2.23	1.23
Off-Road Equipment	1.92	20.38	15.31	0.02	1.15	1.05
On-Road Vehicles	0.03	0.04	0.55	0.001	0.09	0.02
Total Emissions	1.95	20.43	15.86	0.021	3.47	2.30
<i>Regional Significance Threshold</i>	75	100	550	150	150	55
Significant Impact?	No	No	No	No	No	No
Grading						
Fugitive Dust	--	--	--	--	2.01	0.96
Off-Road Equipment	3.36	38.21	24.56	0.03	1.81	1.66
On-Road Vehicles	1.13	17.27	14.69	0.042	1.45	0.56
Total Emissions	4.49	55.39	39.25	0.054	5.27	3.18
<i>Regional Significance Threshold</i>	75	100	550	150	150	55
Significant Impact?	No	No	No	No	No	No
Building Construction						
Fugitive Dust	--	--	--	--	--	--
Off-Road Equipment	2.58	18.72	12.04	0.02	1.22	1.15
On-Road Vehicles	3.14	16.75	42.68	0.09	5.90	1.76
Total Emissions	5.72	35.47	54.72	0.11	7.12	2.91
<i>Regional Significance Threshold</i>	75	100	550	150	150	55
Significant Impact?	No	No	No	No	No	No
2017						
Building Construction						
Fugitive Dust	--	--	--	--	--	--
Off-Road Equipment	2.33	17.37	11.68	0.02	1.11	1.04
On-Road Vehicles	2.84	15.19	40.71	0.09	5.87	1.74
Total Emissions	5.17	32.56	52.39	0.11	9.00	3.74
<i>Regional Significance Threshold</i>	75	100	550	150	150	55
Significant Impact?	No	No	No	No	No	No

^a Emissions shown accounts for the implementation of mandatory dust control measures as required by SCAQMD Rule 403—Fugitive Dust.

^b On-road emissions for the grading phase includes the export of 10,000 cubic yards of coarse material and the import of 10,000 cubic yards of fine material. This is estimated over 20 days with an estimated 450 cubic yards (30 trucks) per day.

NOTE: See **Appendix A** for CalEEMod output.

*Totals may not add exactly due to rounding.

As shown in Table III-2, the peak daily regional emissions generated during project construction would not exceed the SCAQMD daily significance thresholds for ROG, NO_x, CO, SO_x, PM_{2.5} and PM₁₀. Since construction emissions would not exceed the SCAQMD thresholds, the regional impacts related to air quality during project construction activities would be less than significant. However, the following dust and particulate control measures will at a minimum be implemented to comply with Rule 403 and to minimize overall particulate emissions:

III-1 *Using best available control measures during soil disturbance. The menu of enhanced dust control measures includes the following:*

- ***Limit the disturbance “footprint” to as small an area as practical.***
- ***Water all active construction areas at least twice daily.***
- ***Cover all off-site haul trucks or maintain at least 2 feet of freeboard.***
- ***Pave or apply water four times daily to all unpaved parking or staging areas.***
- ***Sweep or wash any site access points within 30 minutes of any visible dirt deposition on any public roadway.***
- ***Cover or water twice daily any on-site stockpiles of debris, dirt or other dusty material.***
- ***Suspend all operations on any unpaved surface if winds exceed 25 mph.***

III-2 *Limit allowable idling to 5 minutes for trucks and heavy equipment before shutting the equipment down.*

III-3 *Utilize Tier 3 rated diesel engines for off-road construction equipment.*

- c. *Less than Significant Impact* – With respect to air quality, a significant impact may occur if the project would add a considerable cumulative contribution to federal or state non-attainment pollutants. Because the Basin is currently classified as a state nonattainment area for ozone, PM₁₀, and PM_{2.5}, cumulative development consisting of the project along with other reasonably foreseeable future projects in the Basin as a whole could violate an air quality standard or contribute to an existing or projected air quality violation. However, based on SCAQMD's cumulative air quality impact methodology, SCAQMD recommends using the project level thresholds as the thresholds cumulative impacts. Therefore, if an individual project results in air emissions of criteria pollutants (ROG, CO, NO_x, SO_x, PM₁₀, and PM_{2.5}) that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of these criteria pollutants for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.

As discussed under Question 3(b) above, the proposed project would not generate construction emissions that would exceed the SCAQMD's recommended thresholds and operational activities would not be associated with the project. Therefore, the proposed project would not generate a cumulatively considerable increase in emissions of the pollutants for which the Basin is in nonattainment, and impacts would be less than significant.

- d. *Less than Significant Impact* – A significant impact may occur if a project were to generate pollutant concentrations to a degree that would significantly affect sensitive receptors. Sensitive receptors are populations that are more susceptible to the effects of air pollution than the population at large. The SCAQMD identifies the following as sensitive receptors: long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, child care centers, and athletic facilities. The nearest and most notable off-site sensitive receptors to the project would be the existing residential uses that are currently adjacent to the project site, on the east and west borders.

Localized Construction Emissions

Emissions from construction activities have the potential to generate localized emissions that may expose sensitive receptors to harmful pollutant concentrations. The SCAQMD has developed localized significance thresholds (LSTs) that are based on the pounds of emissions per day that can be generated by a project before that project would cause or contribute to adverse localized air quality impacts. These localized thresholds, which are found in the mass rate look-up tables in the *Final Localized Significance Threshold Methodology* document prepared by the SCAQMD, apply to projects that are less than or equal to five acres in size and are only applicable to a project's on-site emissions for the following criteria pollutants: NO_x, CO, PM₁₀, and PM_{2.5}. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA) within the Basin. The project is located just south of Interstate 210 and west of Lower Dry Creek channel in the City of Rancho Cucamonga (SRA 32).

The LSTs developed by SCAQMD are provided for the following distances from the source of emissions: 25 meters, 50 meters, 100 meters, 200 meters, and 500 meters. Additionally, the LSTs at these distances also vary based on the size of the project site. The SCAQMD has provided LSTs for sites that are 1-acre, 2-acre, and 5-acre in size. In order to determine the appropriate LST area to use, the SCAQMD has provided a method of determining the daily area of disturbance based on the construction equipment operated on a daily basis. Based on this methodology (SCAQMD, 2013) and the equipment used during the grading phase (the phase with the greatest onsite emissions), a total of 2 acres of soil would be disturbed daily. As 2 acres would be disturbed and the nearest sensitive receptors are adjacent to the project site, the LSTs for a two-acre site with receptors located within 25 meters are used to address the potential localized air quality impacts associated with the project's construction-related NO_x, CO, PM₁₀, and PM_{2.5} emissions².

Whereas the construction emissions analysis conducted under Question 3(b) pertained to the project's total daily mass emissions, the LST analysis is concerned with a project's localized air quality impacts. The peak daily emissions generated during construction activities were estimated using CalEEMod and are shown in Table III-6. As LSTs are only concerned with a project's on-site emissions, the emissions shown in Table III-6 only account for fugitive dust as well as off-road equipment operating at the proposed construction site.

As shown in Table III-6, the peak daily emissions generated during project construction activities would not exceed the applicable construction LSTs. Therefore, localized air quality impacts from the project's construction activities to the surrounding off-site sensitive receptors would be less than significant.

Localized Traffic-Related Emissions

Construction of the proposed Basin improvement is not anticipated to result in substantial air quality impacts to the public with respect to traffic congestion. The proposed project limits the construction of the Basin improvement to within existing access roads. In addition, the proposed project would be required to implement all applicable traffic control standards established by San Bernardino County to minimize traffic disruption. As discussed under Question 3(b) above, once construction activities have been completed, new operational activities would not be associated with the proposed project. Overall, the proposed project would result in a less-than-significant impact related to localized, traffic-related pollutant concentrations during construction.

² SCAQMD methodology states that if a receptor is located less than 25 meters from the emissions source, the 25 meter screening level values should be used for the screening comparison.

Table III-6
LOCALIZED CONSTRUCTION POLLUTANT EMISSIONS

Construction phase	Pounds Per Day			
	NOx	CO	PM ₁₀	PM _{2.5}
2016				
Site Preparation	20.38	15.31	3.38	2.28
Grading	38.21	24.56	3.82	2.62
Building Construction	18.72	12.04	1.22	1.15
2017				
Building Construction	17.37	1.68	1.11	1.04
Peak Day Localized Emissions	38.21	24.56	3.82	2.62
City of Rancho Cucamonga Localized Significance Threshold ^a	170	1,232	6	5
Exceed City of Rancho Cucamonga Threshold?	No	No	No	No

See Appendix A for CalEEMod output.

^a LSTs for a 2-acre site located in SRA 32 at a distance of 25 meters.

Toxic Air Contaminants

A substance is considered toxic if it has the potential to cause adverse health effects in humans. A toxic substance released into the air is considered a toxic air contaminant (TAC). TACs are identified by state and federal agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management was designed to protect residents from the health effects of toxic substances in the air.

Construction of the proposed project would result in short-term diesel exhaust emissions from off-road heavy-duty equipment. Diesel exhaust is considered a TAC. Construction would result in the generation of diesel exhaust emissions from the use of off-road diesel equipment required for site preparation and excavation, and other construction activities.

The dose to which sensitive receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the proposed project. The construction period for the proposed project would be less than two years, less than the 70-year period used for risk determination. Because off-road heavy-duty diesel equipment would be used only for short time periods, project construction would not expose sensitive receptors to substantial emissions of TACs. This impact would be less than significant.

Additionally, operational emissions would not be associated with the proposed project. As such, no impacts related to TAC emissions would occur during project operations.

- e. *Less than Significant Impact* – A significant impact may occur if objectionable odors occur which would adversely impact sensitive receptors. According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. As the proposed project consists of the installation of infrastructure in order to increase the amount of recycled water and stormwater recharge into the Lower Day Basin, the proposed project is not a type of use identified by the SCAQMD as being associated with odors. Thus, the proposed project would not result in objectionable odors during operations, and this impact would be less than significant.

During construction of the proposed project, exhaust from equipment may produce discernible odors typical of most construction sites. Such odors would be a temporary source of nuisance to adjacent uses, but would not affect a substantial number of people. As odors associated with project construction would be temporary and intermittent in nature, the odors would not be considered to be a significant environmental impact. Therefore, impacts associated with objectionable odors would be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

SUBSTANTIATION: The data in the following text is abstracted from a site specific biology report “Biological Resources Report For Lower Day Basin Development Project.” This document is provided as Appendix 2 to this Initial Study.

- a. *Less Than Significant With Mitigation Incorporated* – The basins proposed for modification contains a mixture of non-native and native vegetation and all of the basins undergo maintenance, some on a routine basis and others on a non-routine basis. A TDA associated biologist, Ms. Lisa Patterson, compiled a field review of the biology of the Lower Day Basin. A report of findings from this field evaluation is provided as Appendix 2 of this document. No sensitive or special status species were identified within the Lower Day Basin’s area of proposed modification (including protocol surveys for coastal California gnatcatcher, San Bernardino kangaroo rat, and burrowing owl). Therefore, no

substantial potential exists to cause a substantial adverse effect, directly or indirectly, on sensitive, special status, and/or listed species. Although burrowing owls were determined to not occupy the project site and have historically not been observed in the site area, this mobile species can occupy the project area in the future due to the presence of suitable habitat. Therefore, the following contingency mitigation measure will be implemented to ensure that no burrowing owl will be adversely impacted by project implementation when it occurs in the future.

IV-1 Burrowing Owl. In compliance with the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012) the Project proponent shall ensure that a pre-construction burrowing owl survey is conducted at least 30 days prior to construction activities. A qualified Biologist shall conduct the survey to determine if there are any active burrowing owl burrows within or adjacent to (within 300 feet) the impact area. If an active burrow is observed outside the nesting season (September 1 to January 31) and the burrow is within the impact area, a Burrowing Owl Exclusion Plan shall be prepared and submitted to CDFW for approval, outlining standard burrowing owl burrow closing procedures used to exclude burrowing owls (e.g., using passive relocation with one-way doors). The loss of any active burrowing owl burrow territory shall be mitigated through replacement of habitat and burrows at no less than a 1:1 ratio. If an active burrow is observed outside the nesting season (i.e., between September 1 and January 31) and the burrow is not within the impact area, construction work shall be restricted within 160 to 1,605 feet of the burrow depending on the time of year and level of disturbance near the site in accordance with guidelines specified by the CDFW.

- a. *Less Than Significant Impact* – Appendix 2 contains a preliminary jurisdictional delineation for the Lower Day Basin. Two components of the project, the spillway height for the entire basin complex and the top of the bank for each sub-basin and the cells are located within the jurisdictional waters of the United States and the State of California. The estimated area of disturbance within the waters is more than one acre for temporary impacts and less than ½ acre for permanent impacts. The preliminary jurisdictional delineation was compiled using the current federal and state guidelines in order to determine what areas on the project site will likely be subject to regulatory jurisdiction. To offset the impact to this jurisdictional area by the proposed project, IEUA concludes that the additional aquatic habitat created within the Basins by the proposed project fully offsets the temporal loss of habitat in the basin during construction. Thus, with implementation of the proposed project, the amount of water that can be recharged will increase by 789 acre-feet per year by modifying the San Bernardino County Flood Control District's (SBCFCD) diversion channel, installing a control gate valve on Cell 3's midlevel outlet, and improving the Basin embankments. This increase in aquatic habitat when compared to the current situation is deemed to fully offset the small loss of jurisdictional waters associated with the proposed project and will reduce adverse impacts to a less than significant level.
- b. *Less Than Significant Impact* – A minimal amount of federally protected wetlands occur within these Basins as is discussed in section 4.1.1.2 of Appendix 2. The proposed project will not alter any of these wetland areas, and with greater recharge activities following completion of the proposed project, additional wetlands may be created within the Basins. Thus, the proposed project's potential effects to such resources are considered to be a less than significant adverse resource.
- c. *Less Than Significant Impact With Mitigation Incorporated* – The Lower Day Basin is surrounded by the I-210 Freeway to the North, a School and Residential Land to the West, Residential Land to the South, and Residential and Commercial Land to the East. Because the Lower Day Basin is completely surrounded by development there is no way that the proposed project could conflict with any wildlife movement patterns over the long term. Thus, the proposed project modifications will not cause a significant conflict with wildlife movements through the project area in the future, and the

impact is considered to be less than significant. Lower Day Basin is not known to support any native wildlife nursery sites other than nesting birds. To ensure that nesting birds will not experience a significant adverse impact during construction, the following mitigation measure will be implemented.

IV-2 Nesting Birds. A migratory nesting bird survey of the Project's impact footprint shall be conducted by a qualified biologist within 2 weeks and 3 days prior to initiating vegetation clearing or ground disturbance. If active nests are found during the pre-construction nesting bird surveys, a Nesting Bird Plan (NBP) will be prepared and implemented. At a minimum the NBP will include guidelines for addressing active nests, establishing buffers, monitoring, and reporting. The NBP will include a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be determined by the biologist in consultation with the CDFW, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be visually marked in the field, which no vegetation clearing or ground disturbance shall commence until the qualified biologist has determined the nest in question has become inactive (failed or successful with fledged young birds) and a monitoring report has been submitted to the CDFW for review and approval. Construction within the designated buffer area shall not proceed until approved by the site biologist.

- d. *No Impact* – Based on the field survey, the basins do not contain any biological resources, such as trees, that might be protected by local policies or ordinances. Past grading maintenance activities in the Basins have eliminated any trees or other biological resources that might be protected. With no potential for conflicts with local policies or ordinances, no mitigation is required.
- e. *No Impact* – The project area is not subject to any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no potential exists to conflict with such plans. With no potential for conflicts with such plans, no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?				X
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d) Disturb any human remains, including those interred outside of formal cemeteries?				X

SUBSTANTIATION: A cultural resources report has been prepared to evaluate the potential for cultural resources to occur within the project area of potential effect. This report is titled: "Day Creek Basin Development Project, Rancho Cucamonga, California, Phase I Cultural Resources Study – CONFIDENTIAL." It is available to authorized persons for review upon request to IEUA.

Background

ESA Water Prepared a Phase 1 Cultural Resources Study for the Lower Day Basin Improvements Project. The project proposed the expansion and modifications to increase the recharge capacity that is recharged into the Chino Groundwater Basin. The proposed modifications include modifying the Day Creek diversion channel, installing a control gate valve on Cell 3's midlevel outlet, and improving the Basin's embankments.

A records search for the project was conducted on September 2, 2015 at the South Central Coastal Information Center (SCCIC). The records search indicated that 20 cultural resources studies have been previously conducted within 0.5-mile of the project area, seven of which overlap with the project area. Approximately 95 percent of the search radius and 100 percent of the project area have been previously surveyed for cultural resources. A total of eight cultural resources, including four historic-period archaeological sites and four historic-period built resources have been previously recorded within 0.5-mile of the project area. One pending historic-period built resource (P-36-00002H) is located within the project area. Resource P-36-00002H is a historic-period road visible on an 1897 topographic map. No prehistoric archaeological sites have been previously recorded within the project area or a 0.5-mile radius.

The Native American Heritage Commission (NAHC) was contacted on August 29, 2015 to request a search of the Sacred Lands File and contact list of Native American representatives for the project area. To date, no response has been received. Follow-up correspondence will be conducted once the NAHC responds.

A pedestrian cultural resources survey of the project area was conducted on September 9, 2015. An opportunistic survey was conducted, which focused on examining the ground surface visibility. Approximately 30 percent of the eastern one-third and 70 percent of the western two-thirds of the project area were surveyed. Areas with visible ground surface included densely vegetated areas (0-40 percent

visibility) and basin floor (60-80 percent visibility). No evidence of the resource P-36-00002H was observed during the survey and no cultural resources were documented within the project area during the survey.

One pending historic-built resource (P-36-00002H-historic period road) was identified within the project area as a result of the records search; however, no evidence of this resource was identified during the survey. No cultural resources were identified in the project area as a result of this study. As such, the project would result in No Historic Properties Affected under Section 106 of the NHPA.

- a-d. *No Impact* – The whole of the project area consists of highly disturbed, man-made landscapes that were constructed for flood control purposes in the 1970's. Because of this past disturbance and the ongoing maintenance of the Basins, including all operational features, a dam system, and pipelines, the potential for encountering subsurface cultural resources does not exist. These basins have been excavated from the natural landscape to depths well below the pre-historic period of human occupation. Within the project area of potential (APE) there are no natural landscapes that could support cultural resources of any type of contextual integrity. Though there is one pending historic-period built resource was identified within the project APE as a result of the records search, no evidence of this resource was identified, and thus the project would result in No Historical Properties Affected under section 106 of the National Historic Preservation Act(NHPA). Thus, with no potential for impact, no mitigation is required.

During the AB 52 consultation with Native American tribes, a response was received from the Gabrieleno Band of Mission Indians - Kizh Nation. Based on the AB 52 interaction with the Band, the following mitigation measure will be implemented by IEUA in conjunction with the Lower Day Basin Project.

- V-1** *During ground disturbing activities (including but not limited to pavement removal, pot-holing or auguring, boring, grading, excavation and trenching) at least one Native American Monitor will be present at the project site. The Native American Monitor will compile monitoring logs on a daily basis. The logs will provide descriptions of the daily activities, including construction activities, locations, soil characteristics and any cultural materials identified. The Monitor will photo-document the ground disturbing activities. If any cultural materials are identified, the Monitor shall have the authority to redirect construction activities until the extent and importance of the materials are assessed. Subsequent management of any Native American cultural materials shall be determined through consultation between IEUA and the Native American Band supplying the monitor. Any human remains encountered shall be handled through the County Coroner's office and, if necessary, in conjunction with the Native American Heritage Commission and Native American Band.*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VI. GEOLOGY AND SOILS – Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
<ul style="list-style-type: none"> Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. 				X
<ul style="list-style-type: none"> Strong seismic ground shaking? 				X
<ul style="list-style-type: none"> Seismic-related ground failure, including liquefaction? 				X
<ul style="list-style-type: none"> Landslides? 				X
b) Result in substantial soil erosion or the loss of topsoil?		X		
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X

SUBSTANTIATION

- a. *No Impact* – The proposed project at Lower Day Basin is located in an urban area. Habitable structures are not part of the proposed project. The project will not subject populations to potential substantial adverse geologic constraints/effects, including risk, loss, injury or death involving: rupture of a known earthquake fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides.

The proposed infrastructure improvements are located within a seismically active area. Although no active faults occur within the project area, it is surrounded by a few active faults: the Chino-Central Avenue Fault is located approximately 13 miles southwest of the City's boundaries; the San

Jose Fault is located to the west of the City of Upland; the Cucamonga Fault extends in an east-west direction north of the City of Rancho Cucamonga; and the San Andreas Fault, the San Bernardino segment, is located about 14 miles east of the City boundary.

The proposed project site is not located within or adjacent to an Alquist-Priolo Earthquake Fault Zone. The nearest Zone is located about two miles north at the base of the San Gabriel Mountains. The entire IEUA service area is generally within an area potentially subject to strong ground-shaking, such that the most stringent building code seismic standards and safety requirements apply to all projects within the service area. Regardless, the proposed basin modifications will not create substantial hazards to humans or to any structures. The proposed project is not located on steep slopes and is also not subject to landslides.

- b. *Less Than Significant With Mitigation Incorporated* – Project activities will involve substantial ground disturbance, which will expose the soil to erosive forces such as wind and water. Use of Best Available Control Measures (BACMs) to control fugitive dust will fully mitigate potential erosion impacts. Potential water erosion impacts to soils include accelerated erosion and down slope deposition and increased potential for surficial sliding and slumping. Compaction of soils by heavy equipment may reduce the infiltration capacity of onsite soils thereby depriving the onsite soil of water, which increases the potential for runoff and erosion. The Lower Day Basin cells are essentially excavated holes in the ground with shallow side slopes. Any erosion or runoff from these slopes is captured in the basins, and annual maintenance activities remove such sediment and remediate eroded slopes.

Construction activities in and out of the basins must be conducted in a manner that will provide the maximum feasible sediment control. Sediment control is important for a variety of reasons (1) eroded soils can enter bodies and channels, raising water levels and blocking culverts, and increasing the chances for flooding of surrounding properties; (2) sediment can get deposited onto streets and roadways by vehicles leaving the site or by stormwater runoff, thereby making travel on these roadways more dangerous; (3) sediment carries petroleum and other pollutants into streams, lakes, and other water bodies, thereby affecting water quality; and (4) sediment reduce light penetration into aquatic areas, which makes photosynthesis more difficult for water plants and affects other forms of aquatic life.

An NPDES General Construction Permit must be obtained prior to the commencement of grading and a Storm Water Pollution Prevention Plan (SWPPP) must be compiled and implemented with best management practices for erosion control. Long-term erosion impacts for disturbed areas will be controlled by directing any flows from disturbed areas into the basins to capture sediment, and through use of adequate drainage control devices. Compliance with local and state regulations in conjunction with the following mitigation measures is considered adequate to control potential erosion impacts.

VI-1 *The SWPPP will include appropriate best management practices (BMPs) to prevent surface runoff with excessive sediment from leaving the project site and to address the potential for remediating any accidental spills of petroleum products that occur during construction activities. The final SWPPP shall be compiled prior to initiating construction. BMPs to be implemented in the SWPPP may include but not be limited to:*

- *The use of silt fences;*
- *The use of temporary stormwater desilting or retention basins;*
- *The use of water bars to reduce the velocity of stormwater runoff;*
- *The use of wheel washers on construction equipment leaving the site*

- *The washing or sweeping of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from the site onto public roads.*
- *The storage of excavated material shall be kept to the minimum necessary to efficiently perform the construction activities required. Excavated or stockpiled material shall not be stored in water courses or other areas subject to the flow of surface water.*
- *Where feasible, stockpiled material shall be covered with water proof material during rain events to control erosion of soil from the stockpiles.*

VI-2 *Prior to completing the proposed project, project-related disturbed areas shall be stabilized to prevent the discharge of runoff from the project sites in a manner that could initiate erosion or sedimentation. A variety of stabilization measures may be used including: grading the site so all runoff is delivered to the basins, chemical stabilizers, gravel cover, mulch or other means to prevent the site from becoming a source of polluted surface runoff shall be installed.*

With implementation of these measures the potential for degradation of surface runoff water quality can be controlled to a less than significant impact level.

- c. *No Impact* – The proposed project is not located on geologic units or soils that are unstable, or soils that would become unstable as a result of the project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse.
- d. *No Impact* – The proposed facilities are not located on expansive soils, as defined in Table 18 1B of the Uniform Building Code (1994), and will not create substantial risks to life or property. The soils at this location are coarse to fine alluvial deposits with no clays or other materials that would be considered expansive.
- e. *No Impact* – The proposed project does not include the use of septic tanks or alternative wastewater disposal systems. No potential for any impacts to such facilities exists from implementing the proposed project.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

DISCUSSION

Gases that trap heat in the atmosphere are referred to as greenhouse gases (GHGs) because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHGs has been implicated as a driving force for global climate change. Definitions of climate change vary between and across regulatory authorities and the scientific community, but in general can be described as the changing of the earth's climate caused by natural fluctuations and anthropogenic activities, which alter the composition of the global atmosphere.

The principal GHGs are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Because different GHGs have different warming potential and CO₂ is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO₂ equivalents (CO₂e). For example, SF₆ is a GHG commonly used in the utility industry as an insulating gas in circuit breakers and other electronic equipment. SF₆, while comprising a small fraction of the total GHGs emitted annually world-wide, is a much more potent GHG with 22,800 times the global warming potential as CO₂. Therefore, an emission of one metric ton (MT) of SF₆ could be reported as an emission of 22,800 MT of CO₂e.³

There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming, although there is uncertainty concerning the magnitude and rate of the warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years. Secondary effects are likely to include global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.

In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill No. 32; California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32), which requires CARB to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020.

On March 18, 2010, the California Office of Planning and Research (OPR) submitted amendments to the *CEQA Guidelines* for GHG emissions, as required by Public Resources Code section 21083.05. These *CEQA Guideline* amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in draft CEQA documents. The amendments are relatively modest changes to various portions of the existing *CEQA Guidelines*.

³ A metric ton is 1,000 kilograms; it is equal to approximately 1.1 U.S. tons and approximately 2,240.6 pounds.

SUBSTANTIATION

- a. *Less than Significant Impact* – The proposed project would contribute to global climate change as a result of emissions of GHGs, primarily CO₂, emitted during construction activities associated with the installation of a pipeline conveyance system, turnout structures and Basin berm repairs. As discussed under Question 3(b) in the Air Quality Analysis, once construction activities have been completed, no new operational activities would be associated with the proposed project.

GHG impacts are considered to be exclusively cumulative impacts (CAPCOA, 2008), thus the purpose of this GHG analysis is to determine whether the contribution of GHG emissions by the proposed project would be cumulatively considerable.

The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (CBWM) are proposing the Lower Day Basin Improvement Project. The Inland Empire Utilities Agency and the Chino Basin Watermaster have not adopted any significance criteria or guidelines for GHG analysis. While SCAQMD has issued proposed standards and guidelines, there is no adopted state or local standard for determining the cumulative significance of the proposed project's GHG emissions on global climate change.

In the absence of an adopted threshold that is applicable to the proposed project, which is a Basin infrastructure improvement project that would primarily generate GHG emissions during construction, the use of a screening threshold would be appropriate to determine whether the project would require further analysis and mitigation with regard to climate change. The California Air Pollution Control Officers Association (CAPCOA) has recommended a conservative screening criterion of 900 MT/year CO₂e (CAPCOA 2008) for determining which projects would require further analysis and mitigation with regard to climate change. For the purpose of this analysis, the project's total annual GHG emissions resulting from construction activities have been quantified and evaluated against the 900 MT/year CO₂e screening criteria. As CalEEMod currently uses the Intergovernmental Panel on Climate Change's (IPCC) 1996 Second Assessment Report (SAR) to assign the GWPs for CH₄ and N₂O, the emissions for these two GHGs were taken from the CalEEMod outputs and converted to CO₂e emissions outside of CalEEMod using the updated GWPs from IPCC's Fourth Assessment Report (AR4).

As was conducted for the proposed project's air quality analysis in Question 3 (Air Quality), the project's construction-related GHG emissions were estimated for equipment exhaust, truck trips, and worker commute trips using CalEEMod. The construction of the entire project is anticipated to occur over an approximately nineteen month period.

The project's estimated annual GHG emissions during construction are shown in Table VII-1. With respect to construction GHG emissions, SCAQMD recommends that the total construction emissions for a project be amortized over a 30-year period and added to its operational emission estimates (SCAQMD, 2008). Total construction-related GHG emissions was calculated to be 1,542.3682 CO₂e MT/yr. Amortized over 30 years, the proposed project construction-related GHG emissions would be 51.75 CO₂e MT/yr.

**Table VII-1
ESTIMATED PROJECT CONSTRUCTION GHG EMISSIONS**

Emission Source	Proposed Project Emissions CO₂e (MT/yr)
Construction Annual Project Construction (Amortized over 30 years) ^a	52.75
CAPCOA Screening Threshold	900
Significant Impact?	No

Note: CO₂e= carbon dioxide equivalent; MT/yr = metric tons per year; see Appendix A for CalEEMod model outputs.

As shown in Table VII-1, the proposed project's total annual GHG emissions resulting from construction activities would be approximately 51.75 MT CO₂e per year. Thus, the project's total annual GHG emissions would not exceed the 900 MT of CO₂e per year screening threshold recommended by CAPCOA. Therefore, the proposed project would not result in the generation of substantial levels of GHG emissions and would not result in emissions that would adversely affect the statewide attainment of GHG emission reduction goals of AB 32. This impact would be less than significant.

- b. *Less than Significant Impact* – As the proposed project only involves the installation of Basin improvement infrastructure, implementation of the project would not result in a modification of the existing land use and the continuation of a land use that would not contribute to greenhouse gas emissions (such as residential or commercial development). In addition, the proposed project would increase the recharge capacity as a way to enhance water storage within the Chino Groundwater Basin.

The City of Rancho Cucamonga, along with twenty other cities, participated in the San Bernardino Association of Governments' *San Bernardino County Regional Greenhouse Gas Reduction Plan* (SCAG, 2014). The GHG reduction plan was developed in order to comply with California Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006, which requires CARB to establish a statewide GHG emissions cap for 2020 based on 1990 emission levels. As part of the County Plan, the City of Rancho Cucamonga selected a goal of reducing GHG emissions to 15% below 2008 levels by 2020. The City of Rancho Cucamonga adopted reduction strategy Water-1, which requires that new construction adopt the voluntary CalGreen water efficiency measures. One of these measures is to reduce outdoor potable water use by 55 to 60 percent. The project, which expands the delivery of recycled water and expands storm water capture, would provide increased capacity for the new construction to comply with this measure. Therefore, as implementation of the proposed project would further the City's ability to comply with the goals of the Regional Greenhouse Gas Reduction Plan it would also further the region's ability to comply with the required reductions under AB 32.

Overall, implementation of the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Therefore, this impact would be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VIII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X		
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?		X		
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	

SUBSTANTIATION

- a-c *No Impact / Less Than Significant With Mitigation Incorporated* – The proposed basin modifications are located within the Lower and Upper Day Basins which comprise a totally modified environment. The proposed project will not involve the use of hazardous materials or substances, except during construction. The surrounding land uses include a mix of low-medium residential, flood control/utility control areas, neighborhood commercial, and school. One school exists within one-fourth mile of the project site: Rancho Cucamonga High School. Over the long-term there will be no routine

transport of hazardous materials or hazardous wastes. In the short term, petroleum products will be used onsite by powered construction equipment. Unmanaged releases of such materials during construction are readily controlled to a less than significant level of hazard through control or remediation of accidental releases. The following mitigation measure will be implemented to prevent any significant hazard through “the routine transport, use or disposal” of petroleum products during construction.

VIII-1 If petroleum products or other hazardous materials are accidentally released to the environment during any phase of construction, IEUA shall require the area of contamination to be defined; shall require the removal of any contaminated soil or material from the contaminated area; and ensure that any area exposed to accidentally released contaminants are remediated to a threshold that meets regulatory requirements established by law or agencies overseeing the remediation.

- d. *No Impact* – The proposed project site is located within completely disturbed and developed areas that were excavated and re-contoured about 50 years ago. The project will not be located on a site that is included on a list of hazardous materials sites. The Geotracker records were reviewed (consistent with Government Code Section 65962.5) and no contaminated sites are located within the Upper and Lower Day Basin boundary. The closest contaminated site, the Rancho Cucamonga Fire Station #174, a LUST Cleanup Site—is an estimated two and a half miles to the south of the proposed project. Additionally, the proposed improvements have no potential to create a significant hazard to the population or to the environment from their implementation.
- e. *No Impact* – The proposed project is located approximately five miles north of Ontario International Airport. The project site is located well north of the Ontario Airport Influence Area and it is also not located within an airport operation zone. Only random overflights can occur over the project area, as the sites are not located with an approach or departure zone to the airport. No routine or substantial adverse impact from exposure to airport operations is forecast to occur from implementing the proposed project.
- f. *No Impact* – The proposed project is not located within the vicinity of any private air strip. No potential exists to expose facilities or humans to any private air strip operational impacts.
- g. *Less than Significant Impact* – The proposed project will be confined to the project site and is not anticipated to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Ingress and egress of trucks onto the site will come from Rochester Avenue, Victoria Park Lane, or Highland Avenue. The volume of traffic on these local roadways (estimated to be about 50 roundtrips trips per day) is not forecast to cause any interference with emergency plans.
- h. *Less Than Significant Impact* – The proposed project does not include habitable structures, and is not located in or near a wildland fire hazard area. The project site contains a mix of vegetation and disturbed area, but the fuel load is limited and does not pose a significant wildland fire hazard. No potential exists for this project to be exposed to significant wildland fire hazards or to cause any such hazards in the project vicinity.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IX. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements?		X		
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation onsite or offsite?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite?			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j) Inundation by seiche, tsunami, or mudflow?				X

SUBSTANTIATION

- a. *Less Than Significant With Mitigation Incorporated* – The process of installing improvements at the Lower Day Basin will result in construction activities that could result in erosion and sedimentation impacts due to future runoff from the disturbed areas of the Basin. Compliance with the following mitigation measure will control future pollutant discharges from the project site. Implementation of this measure in conjunction with the State Water Resources Control Board and National Pollutant Discharge Elimination System program would reduce the impact to this issue to less than significant. The most critical component of the Storm Water Pollution Prevention Plan (SWPPP) that will be implemented is to control all runoff during construction and operation to ensure that no sediment or any pollutant discharges are released into the general environment. The following shall be implemented in conjunction with the mitigation identified in the Geology/Soil Section, Measure VI-1. These measures are intended to be complementary, not incremental.

IX-1 The construction contractor shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), which specifies Best Management Practices that will be implemented to prevent construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving offsite. The SWPPP shall be developed with the goal of achieving a reduction in pollutants both during and following construction to control storm water runoff to the maximum extent practicable based on available, feasible best management practices. The SWPPP and the monitoring program for the construction project shall be consistent with the requirements of the latest version of the Santa Ana Regional Board's NPDES Permit No. CAS618036, Order No. R8-2002-0012 for San Bernardino County.

The following items should be included in the SWPPP:

- ***Stockpiled material should not be stored in areas which are subject to the erosive flows of water.***
- ***Measures such as the use of straw bales, sandbags, silt fencing or detention basins shall be used to capture and hold eroded material for future cleanup.***
- ***Rainfall will be prevented from entering material and waste storage areas and pollution-laden surfaces.***
- ***Construction-related contaminants will be prevented from leaving the site and polluting waterways.***
- ***A spill prevention control and countermeasures and remediation plan shall be in place and implemented to control release of hazardous substances.***

With implementation of the preceding measure, the proposed project will not cause any violation of water quality standards or waste discharge requirements.

- b. *Less Than Significant Impact* – The proposed project will not adversely impact groundwater resources. Excavation will require small quantities of water to control fugitive dust and this can be provided from recycled water sources or at the nearest potable water outlets. In the short term, if any potable water must be used it will be such a small quantity (5,000-10,000 gallons per day over a period of up to 100 days) that no significant effect on the Chino Groundwater Basin will occur. In the long term, the proposed Basin improvements would be a benefit to groundwater resources and the modified Basin will increase recharge capacity of recycled water and stormwater recharging into

the Chino Groundwater Basin. The quality of the water recharged within the Basin must meet the Regional Board's maximum Total Dissolved Solids (TDS) and nitrate requirements for this portion of the Chino Groundwater Basin; Title 22 requirements for recycled water recharge; and the recharge groundwater must also meet the California Department of Public Health's detention and distance requirements for recharge of the Basin using recycled water. By meeting these requirements the proposed increase in recharge at the Lower Day Basin will not cause significant degradation of groundwater quality, nor will it result in premature extraction of the recycled water from the Basin. Impacts to groundwater are considered less than significant.

- c. *Less Than Significant Impact* – The proposed project will not substantially alter the existing drainage patterns of the project site in a manner that could result in substantial erosion or siltation onsite or downstream. As previously noted, construction of the project would require compliance with the California State Water Resources Board General Construction Permit. Commencement of construction activities would require the implementation of an effective combination of erosion and sediment control BMPs through the development of a Storm Water Pollution Prevention Plan (SWPPP). BMP implementation would maintain soil stability and potential water quality of any storm water discharges within the project site. Further, the internal drainage pattern within Lower Day Basin areas proposed for modification will remain essentially the same as at the present, which consists of discharge into the Basin from Day Creek and surrounding roadways. Therefore, with implementation of the SWPPP, impacts from erosion are considered less than significant.
- d. *Less Than Significant Impact* – Please refer to issue c above.
- e. *Less Than Significant Impact* – The proposed project will capture additional runoff by diversion from the adjacent stream channels (specifically Day Creek) to facilitate recharge in the Basin. The proposed project site modifications allow for increased capacity for stormwater and runoff capture. Thus, based on the proposed design of the Basin, the proposed project would not create or contribute additional runoff water which would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Please refer to a, c, d, and h.
- f. *Less Than Significant Impact* – Please refer to a above. There are no other activities associated with the proposed project that should contribute to degradation of future surface runoff water quality. The required mitigation will ensure that both short and long-term water quality can be enhanced or not substantially degraded within the project area.
- g. *No Impact* – The project sites are shown on FEMA Flood Insurance Rate Map (FIRM) Panel 06071C7895J. According to the FIRM Panels, the project basins are not located within a 100-year flood hazard zone; they are located in Zone X, which has a 0.02% chance of experiencing flooding per year. Thus, no potential exists to expose the proposed facility improvements to significant flood hazards and there is no housing including in this project, so no adverse impact can occur.
- h. *No Impact* – There are no 100-year flood hazard area structures included within this project's boundaries, so no adverse impacts can occur.
- i. *No Impact* – The proposed project does not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam. This is because there are no upstream bodies of water that could generate such a flood hazard within this managed Basin.
- j. *No Impact* – The proposed project is not exposed to any inundation by seiche, tsunami, or mudflow at the proposed basin sites. There is no source of water to support inundation by any of these mechanisms.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
X. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

SUBSTANTIATION:

- a. *No Impact* – The proposed Lower Day basin improvements will be placed on property that is owned by the County of San Bernardino and that is currently managed by the County Flood Control District and IEUA. The whole of the project footprint is already developed with flood control and water recharge facilities, including support facilities such as access roadways. The proposed project consists of improvements in the overall Basin that will allow more recycled water and imported water to be recharged at the existing basins. The project site designated for public open space: flood control/utility corridor uses. Since the proposed project facilitates the expansion of the existing water recharge facilities within the Lower Day Basin, no potential exists for the proposed facilities to physically divide an existing community. No impact will result and no mitigation is required.
- b. *No Impact* – The City of Rancho Cucamonga General Plan land use designation for the project site is Open Space: Flood Control/Utility Corridor. This designation is intended to accommodate public facilities, including the existing flood control/recharge basins. The proposed modifications to the basins are consistent with existing facilities and future uses envisioned by the General Plan for such land use designations. No adverse impacts will result and no mitigation is required.
- c. *No Impact* – Please refer to the discussion under issue IV – Biological Resources. There are no habitat conservation or natural community conservation plans that encompass the project area.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XI. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

SUBSTANTIATION

a&b. *No Impact* – The California Mineral Land Classification System identifies four major mineral land classifications: (1) Areas of Identified Mineral Resource Significance (MRZ-1); (2) Areas of Undetermined Mineral Resource Significance (MRZ-2); (3) Areas of Unknown Mineral Resource Significance (MRZ-3); and (4) Areas of No Mineral Resource Significance (MRZ-4). In addition, Aggregate Resources Areas (ARAs) are areas classified as MRZ-2 for construction aggregate that have current land uses that are similar to those areas that have been mined in the past.

The proposed project site is classified as MRZ-2 and is located just south and west of ARA designated areas. Classification of a mineral resource as MRZ-2 by the State Geologist will ordinarily “constitute adequate evidence that an area contains significant mineral deposits.”

However, the project site is an excavated flood and water management basin that was created by excavating a substantial volume of material. Additionally, the project site is designated for the existing public open space: flood control/utility corridor and is already developed with existing water recharge facilities. The proposed project consists of the improvement of the Lower Day Basin, an existing water recharge and flood control facility. Implementation of the proposed project will allow the expansion of the existing uses. The proposed project is not anticipated to result in any new impacts to mineral resources or affect the availability of resources locally. Although the use of the site is no longer focused on the potential for mineral resource extraction, the proposed project does not preclude future use for mining activities should any residual materials in the Basin be judged of higher value to society than the current flood control and water resource management use.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XII. NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			X	
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

SUBSTANTIATION:

- a. *Less Than Significant With Mitigation Incorporated* – The Noise Element of the City of Rancho Cucamonga General Plan establishes noise quality standards for land use categories based on the State of California Office of Noise Control land use compatibility recommendations. The Noise Element shows the community exposure to noise recommended as normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable for various classes of land use sensitivity. The City of Rancho Cucamonga guidelines recommend an exterior noise exposure of 65-85 dB CNEL for residential and commercial uses between the hours of 7:00 am and 10:00 pm. The freeway on one side and the school on another side dominate the noise at the project site. The project site is not currently a source of any man-made noise except when it is being maintained. Even the recharge activities are relatively quiet.

Short-term construction noise impacts associated with the proposed project will occur in phases dominated by earth moving equipment and small structural construction equipment. The earth-moving sources are the noisiest type of equipment typically ranging from 75 to 90 dB at 50 feet from the source.

The closest noise-sensitive land uses to the project site include residences to the east, south, and west of the Lower and Upper Day Basins. Discretionary scheduling of noisiest activities may be

required to minimize possible construction noise intrusion. Noise can also be mitigated by locating all stationary noise generating construction equipment as far as is practical from occupied residences or other noise-sensitive uses or within existing high noise environments at the project sit.

The noise generated by the proposed project would be limited to construction activities, and would not result in any new, substantial long-term noise source associated with the proposed water recharge basins. The City of Rancho Cucamonga Development Code restricts construction activities to the weekday hours of 7:00 AM to 6:00 PM and 9:00 AM to 6:00 PM on Saturday and Sunday. The proposed project would be constructed in compliance with the City's noise ordinance, and, therefore would result in less than significant impact. However, to minimize noise generated on the site to the extent feasible, the following mitigation measures will be implemented.

XII-1 All construction vehicles and fixed or mobile equipment shall be equipped with properly operating and maintained mufflers.

XII-2 All employees that will be exposed to noise levels greater than 75 dB over an 8-hour period shall be provided with adequate hearing protection devices to ensure no hearing damage will result from construction activities.

XII-3 If equipment is being used that can cause hearing damage at adjacent noise receptor locations (distance attenuation shall be taken into account), portable noise barriers shall be installed that are demonstrated to be adequate to reduce noise levels at receptor locations below hearing damage thresholds.

XII-4 Construction staging areas shall be located as far from adjacent sensitive receptor locations as possible at each facility, for example adjacent to the southern end of Basin 5.

XII-5 Good relations with the local community shall be maintained where construction is scheduled, such as by keeping the community informed of the schedule, duration, and progress of the construction to minimize the public objections of unavoidable noise. Communities (City of Rancho Cucamonga and San Bernardino County) should be notified in advance of the construction and the expected temporary and intermittent noise increases during the construction period.

XII-6 IEUA will establish a noise complaint/response program and will respond to any noise complaints received for this project by measuring noise levels at the affected receptor. A sign shall be placed where nearby residents can read it and identify a point of contact at IEUA to make a noise complaint. If the noise level exceeds an Ldn of 65 dBA exterior or an Ldn of 45 dBA interior at the receptor, IEUA will implement adequate measures to reduce noise levels to the acceptable thresholds, including scheduling specific construction activities to avoid conflict with adjacent sensitive receptors.

- b. *Less Than Significant Impact* – Due to the type of construction proposed (no use of pile driving activities or explosives), it is anticipated that the construction equipment to be utilized during project construction activities will not result in excessive groundborne vibration or noise. In addition, operational activities would not generate excessive groundborne vibration or noise.
- c. *No Impact* – The proposed project will not cause any permanent increase in ambient noise levels in the vicinity of the project above levels existing without the project. Existing noise onsite is dominated by traffic noise generated by the interstate freeway. The project will not result in any

new stationary noise sources adjacent to sensitive receptors, or any new other noise sources when the excavation and other construction activities are completed. No mitigation is required.

- d. *Less Than Significant With Mitigation Incorporated* – During construction, the proposed project would cause a temporary increase in ambient noise levels in the project vicinity. Refer to the discussion under a above. Peak short-term construction noise levels for construction equipment to be used during project construction would range from 70 to 90 dBA at a distance of 50 feet from the source. Sensitive noise receptors—residential developments—exist in the vicinity of the project site. However, since construction noise activities are restricted to the hours from 7:00 AM to 6:00 PM on weekdays and 9:00 AM to 6:00 PM on Saturday and Sunday. As the proposed project would be constructed in compliance with the City's noise ordinance and mitigation will be implemented as outlined under a above, the impacts to this issue are considered less than significant.
- e. *No Impact* – The proposed project is located more than five miles north of Ontario International Airport. Due to distance from the Airport the project site will not be exposed to any substantial airport noise. Therefore, the project's forecasted impacts due to airport background, noise is no impact.
- f. *No Impact* – The proposed project is not within the vicinity of a private airstrip. No potential for exposure to any noise impacts from such airport operations exists at the project location.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIII. POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

SUBSTANTIATION:

- a. *No Impact* – The proposed improvements to the basins will not induce substantial population growth. The purpose of the basin improvements is to increase the groundwater recharge capacity in the Chino Basin as part of a comprehensive effort to reverse the groundwater overdraft condition in the Chino Basin and to support the groundwater demands of the population within the Agency's service area. The proposed project is considered an essential infrastructure improvement and is considered growth "facilitating," rather than growth "inducing."
- b&c. *No Impact* – No housing exists within the proposed project site. Implementation of the proposed project would not displace any housing or people such that construction of replacement housing elsewhere would be necessary. No impact can be identified, and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIV. PUBLIC SERVICES – Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?				X
d) Recreation/Parks?				X
e) Other public facilities?				X

SUBSTANTIATION:

- a. *Less Than Significant Impact* – The proposed basins improvement project would not substantially increase the demand for fire protection or emergency services at the project site. Because construction activities will occur on the project site, a random potential exists for accidents and random demand for emergency services. As indicated, such demand is random and not forecast to be significant in the overall context of demand for fire and emergency protection services within the community. Project implementation over the long term would not result in additional people onsite, so the long-term demand for emergency service is forecast to be less than significant impact.
- b. *Less Than Significant Impact* – The proposed project is not the kind of use that would likely attract criminal activity, except for random trespass and theft. The proposed facilities would not be readily accessible to the public as the project sites is fenced, but a less than significant potential exists for demand for police protection or expansion of police infrastructure. Due to the project's location at already existing water recharge facilities (basins) and the lack of new people associated with operation of the proposed facility, implementation of the proposed project would not substantially increase the demand for law enforcement services beyond that already existing at the project site.
- c-e. *No Impact* – The proposed basin modifications would not increase the population on the site or result directly in additional people in the area creating demand for schools, parks, or other public services. No impact is forecast to occur and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XV. RECREATION –				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

SUBSTANTIATION

a&b *No Impact* – The proposed project will not result in any direct impacts to recreational facilities because none occur within the project area and no indirect effects on recreational facilities will be generated because the proposed project will not increase population or general demand for such facilities. Implementation of the proposed project will not generate any population growth; therefore, it will not increase the demand for recreational facilities beyond that already allowed by current planning. The proposed project sites are currently designated for non-recreational open space use; however, the basins are presently used for flood control and water recharge

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVI. TRANSPORTATION / TRAFFIC – Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?		X		
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				X

SUBSTANTIATION:

a&b. *Less Than Significant Impact* – During the excavation phase of the construction activities, the proposed project is forecast to generate a maximum of 1,000 temporary truck trips over a period of about 23 working days. The number of temporary truck trips will be minimized by using 15 cubic yard material haulers instead of 10 cubic yard trucks to haul material onto and off of the site. Additionally, the same trucks that haul material onto the site could also carry the material off of the site. If this scenario is not feasible, the proposed project has the potential to generate 2,000 temporary truck trips in a span of about 46 work days. Regardless, the total number of truck roundtrips per day is estimated to be 30 trips, plus 20 employee roundtrips per day. Once constructed, the only traffic that would be generated by this project would be the continued occasional visits to the project site by IEUA personnel to inspect and maintain facilities. Construction equipment, material and employee access can be taken off of Rochester Ave, Victoria Park Lane, or Highland Avenue. Based on the range of available roadways accessing the project

site, the proposed project has no potential to cause a direct or cumulative significant effect on the local and regional circulation system.

- c. *No Impact* – The proposed project site is located approximately five miles north of the Ontario International Airport. It does not involve the use of aircraft nor will it have an effect on traffic or air traffic patterns.
- d&e. *No Impact / Less Than Significant With Mitigation Incorporated* – The proposed project will occur entirely within the project site boundaries. Construction activities will not occur within the roadways adjacent to the project site boundaries. Large trucks delivering equipment will be removing large quantities of materials as well as hauling large quantities of materials off of the site. These construction activities could potentially cause conflicts to the flow of traffic so a Traffic Management Plan should be created and implemented to mitigate the impacts to traffic. Features of the traffic plan include flag persons and other features to control the interaction of the truck traffic and the flow of vehicles on these roadways. To minimize traffic flow impacts from the site to the extent feasible, the following mitigation measures will be implemented.

XV-1 The construction contractor will provide adequate traffic management resources, as determined by the City of Rancho Cucamonga. The City shall require a construction traffic management plan for work in public roads that complies with the Work Area Traffic Control Handbook, or other applicable standard, to provide adequate traffic control and safety during excavation activities. The traffic management plan shall be prepared and approved by the City prior to initiation of excavation activities. At a minimum this plan shall include how to minimize the amount of time spent on construction activities; how to minimize disruption of vehicle and alternative modes of transport traffic at all times, but particularly during periods of high traffic volumes; how to maintain safe traffic flow on local streets affected by construction at all times, including through the use of adequate signage, protective devices, flag persons or police assistance to ensure that traffic can flow adequately during construction; the identification of alternative routes that can meet the traffic flow requirements of a specific area, including communication (signs, web-pages, etc.) with drivers and neighborhoods where construction activities will occur; and at the end of each construction day roadways shall be prepared for continued utilization without any significant roadway hazards remaining.

- f. *No Impact* – This temporary construction project will not generate a substantial amount of new traffic and will not conflict with any adopted plans, policies or programs supporting alternative transportation. No impact to such plans will result and no mitigation is required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVII. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
f) Be served by a landfill(s) with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	

SUBSTANTIATION:

- a. *Less Than Significant Impact* – No discharge that could exceed treatment requirements of the Santa Ana Regional Water Quality Control Board (RWQCB) is associated with the proposed project. Mitigation Measures VI-1, VIII-1, and IX-1 identify specific requirements to ensure that any discharged storm water will meet the water quality standards of the RWQCB during construction and that no significant degradation of surface water quality will result from the proposed project in the short or long-term. Use of recycled water for recharge is authorized by the Santa Ana Regional Water Quality Control Board under Permit No. CAS618036, Order No. R8-2002-0012.
- b. *No Impact* – This project will consist of improvements to existing water recharge basins. The proposed project will result in the expansion of water recharge facilities; however, the project will not result in the construction of other new facilities or expansion of existing water or wastewater facilities that could cause significant adverse environmental impacts on their own. No mitigation is required.

- c. *No Impact* – The proposed project will generate surface runoff but it will be captured within the existing storm runoff system into the basins. With the basin modifications more surface runoff can be diverted from the Day Creek channel, which can actually reduce downstream flows more than can occur at present in these off-channel basins. No off-site or downstream increases in surface runoff are forecast to occur from implementing the proposed project.
- d. *No Impact* – Implementation of the proposed project will be conducted within the existing water entitlements of the involved agencies. The proposed project is designed to optimize future availability of water supplies within the Chino Basin. The expansion and improvement of the basins is considered to be a beneficial impact, not an adverse impact.
- e. *No Impact* – This project has no potential to adversely impact any wastewater facility. The proposed project will be served by portable toilets during construction. The project does not include any substantial wastewater generation that would require expansion of any existing wastewater treatment plan. No mitigation is required.
- f&g. *Less Than Significant Impact* – The proposed project consists of the expansion and improvement of existing water recharge basins. Excavated material will be will be transported off-site. The proposed project is forecast to generate a modest amount of solid waste requiring management (including trash generated by onsite employees). Some quantity of green waste (estimated to be about 500 cubic yards) will be generated but this waste will be required to be shredded and processed through a green waste composting or comparable facility. All solid waste impacts are expected to be less than significant.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE –				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		X		
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

SUBSTANTIATION:

The analysis in this Initial Study and the findings reached indicate that the proposed project can be implemented without causing any new project specific or cumulative unavoidable significant adverse environmental impacts. Mitigation is required to control potential environmental impacts of the proposed project to a less than significant impact level. The following findings are based on the detailed analysis of the Initial Study of all environmental topics and the implementation of the mitigation measures identified in the previous text and summarized following this section.

- a. *Less Than Significant with Mitigation Implementation* – This project has no potential to adversely impact any cultural resources. No mitigation was identified or required. There are no sensitive species located within the project area, but a preliminary jurisdictional delineation indicated that the California Department of Fish and Wildlife, Corps of Engineers and Regional Board may regulate these basins as waters of the State of California. Mitigation is provided to address this issue if these agencies assume jurisdiction and require the acquisition of regulatory permits. Additional measures are required to protect nesting birds and burrowing owls, if necessary.
- b. *Less than Significant With Mitigation Implementation* – Based on the analysis in this Initial Study, the Basin modifications and overall recycled water system improvements have a potential to cause impacts that are individually or cumulatively considerable. The issues of air quality, hydrology, and water quality, noise, and transportation and traffic require the implementation of mitigation measures to reduce impacts to a less than significant level and ensure that cumulative effects are not cumulatively considerable. All other environmental issues were found to have no significant impacts without implementation of mitigation. The potential cumulative environmental effects of

implementing the proposed project have been determined to be less than considerable and thus, less than significant impacts.

- c. *Less Than Significant With Mitigation Implementation* – The proposed project includes activities that have a potential to cause direct substantial adverse effects on human beings. The issues of air quality, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, and transportation and traffic require the implementation of mitigation measures to reduce human impacts to a less than significant level. All other environmental issues were found to have no significant impacts on humans without implementation of mitigation. The potential for direct human effects from implementing the proposed project have been determined to be less than significant impacts.

Conclusion

This document evaluated all CEQA issues contained in the latest Initial Study Checklist form. The evaluation determined that either no impact or less than significant impacts would be associated with the issues aesthetics, agriculture, land use and planning, mineral resources, population and housing, recreation and utilities and services. The issues of air quality, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, and transportation and traffic require the implementation of mitigation measures to reduce impacts to a less than significant level. The required mitigation has been proposed in this Initial Study to reduce impacts for these issues to a less than significant impact level.

Based on the findings in this Initial Study, the Inland Empire Utilities Agency (IEUA) proposes to adopt a Mitigated Negative Declaration (MND) for the Lower Day Basin Development Project. A Notice of Intent to Adopt a Mitigation Negative Declaration (NOI) will be issued for this project by IEUA. The Initial Study and NOI will be circulated for 30 days of public comment because of potential future permits that may have to be obtained from the California Department of Fish and Wildlife. At the end of the 30-day review period, a final MND package will be prepared and it will be reviewed by the IEUA for possible adoption at a future Board meeting, the date for which has yet to be determined. If you or your agency comment on the MND/NOI for this project, you will be notified about the meeting date in accordance with the requirements in Section 21092.5 of CEQA (statute).

SUMMARY OF MITIGATION MEASURES

Air Quality

- III-1 Using best available control measures during soil disturbance. The menu of enhanced dust control measures includes the following:
- Limit the disturbance “footprint” to as small an area as practical.
 - Water all active construction areas at least twice daily.
 - Cover all off-site haul trucks or maintain at least 2 feet of freeboard.
 - Pave or apply water four times daily to all unpaved parking or staging areas.
 - Sweep or wash any site access points within 30 minutes of any visible dirt deposition on any public roadway.
 - Cover or water twice daily any on-site stockpiles of debris, dirt or other dusty material.
 - Suspend all operations on any unpaved surface if winds exceed 25 mph.
- III-2 Limit allowable idling to 5 minutes for trucks and heavy equipment before shutting the equipment down.
- III-3 Utilize Tier 3 rated diesel engines for off-road construction equipment.

Biological Resources

- IV-1 Burrowing Owl. In compliance with the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012) the Project proponent shall ensure that a pre-construction burrowing owl survey is conducted at least 30 days prior to construction activities. A qualified Biologist shall conduct the survey to determine if there are any active burrowing owl burrows within or adjacent to (within 300 feet) the impact area. If an active burrow is observed outside the nesting season (September 1 to January 31) and the burrow is within the impact area, a Burrowing Owl Exclusion Plan shall be prepared and submitted to CDFW for approval, outlining standard burrowing owl burrow closing procedures used to exclude burrowing owls (e.g., using passive relocation with one-way doors). The loss of any active burrowing owl burrow territory shall be mitigated through replacement of habitat and burrows at no less than a 1:1 ratio. If an active burrow is observed outside the nesting season (i.e., between September 1 and January 31) and the burrow is not within the impact area, construction work shall be restricted within 160 to 1,605 feet of the burrow depending on the time of year and level of disturbance near the site in accordance with guidelines specified by the CDFW.
- IV-2 Nesting Birds. A migratory nesting bird survey of the Project’s impact footprint shall be conducted by a qualified biologist within 2 weeks and 3 days prior to initiating vegetation clearing or ground disturbance. If active nests are found during the pre-construction nesting bird surveys, a Nesting Bird Plan (NBP) will be prepared and implemented. At a minimum the NBP will include guidelines for addressing active nests, establishing buffers, monitoring, and reporting. The NBP will include a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be determined by the biologist in consultation with the CDFW, and shall be based on the nesting species, its sensitivity to disturbance, and expected types of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be visually marked in the field, which no vegetation clearing or ground disturbance shall commence until the qualified biologist has determined the nest in question has become inactive (failed or successful with fledged young birds) and a monitoring report has been submitted to the CDFW for review and approval. Construction within the designated buffer area shall not proceed until approved by the site biologist.

Cultural Resources

V-1 During ground disturbing activities (including but not limited to pavement removal, pot-holing or auguring, boring, grading, excavation and trenching) at least one Native American Monitor will be present at the project site. The Native American Monitor will compile monitoring logs on a daily basis. The logs will provide descriptions of the daily activities, including construction activities, locations, soil characteristics and any cultural materials identified. The Monitor will photo-document the ground disturbing activities. If any cultural materials are identified, the Monitor shall have the authority to redirect construction activities until the extent and importance of the materials are assessed. Subsequent management of any Native American cultural materials shall be determined through consultation between IEUA and the Native American Band supplying the monitor. Any human remains encountered shall be handled through the County Coroner's office and, if necessary, in conjunction with the Native American Heritage Commission and Native American Band.

Geology and Soils

VI-1 The SWPPP will include appropriate best management practices (BMPs) to prevent surface runoff with excessive sediment from leaving the project site and to address the potential for remediating any accidental spills of petroleum products that occur during construction activities. The final SWPPP shall be compiled prior to initiating construction. BMPs to be implemented in the SWPPP may include but not be limited to:

- The use of silt fences;
- The use of temporary stormwater desilting or retention basins;
- The use of water bars to reduce the velocity of stormwater runoff;
- The use of wheel washers on construction equipment leaving the site
- The washing or sweeping of silt from public roads at the access point to the site to prevent the tracking of silt and other pollutants from the site onto public roads.
- The storage of excavated material shall be kept to the minimum necessary to efficiently perform the construction activities required. Excavated or stockpiled material shall not be stored in water courses or other areas subject to the flow of surface water.
- Where feasible, stockpiled material shall be covered with water proof material during rain events to control erosion of soil from the stockpiles.

VI-2 Prior to completing the proposed project, project-related disturbed areas shall be stabilized to prevent the discharge of runoff from the project sites in a manner that could initiate erosion or sedimentation. A variety of stabilization measures may be used including: grading the site so all runoff is delivered to the basins, chemical stabilizers, gravel cover, mulch or other means to prevent the site from becoming a source of polluted surface runoff shall be installed.

Hazards and Hazardous Materials

VIII-1 If petroleum products or other hazardous materials are accidentally released to the environment during any phase of construction, IEUA shall require the area of contamination to be defined; shall require the removal of any contaminated soil or material from the contaminated area; and ensure that any area exposed to accidentally released contaminants are remediated to a threshold that meets regulatory requirements established by law or agencies overseeing the remediation.

Hydrology and Water Quality

IX-1 The construction contractor shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), which specifies Best Management Practices that will be implemented to prevent

construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving offsite. The SWPPP shall be developed with the goal of achieving a reduction in pollutants both during and following construction to control storm water runoff to the maximum extent practicable based on available, feasible best management practices. The SWPPP and the monitoring program for the construction project shall be consistent with the requirements of the latest version of the Santa Ana Regional Board's NPDES Permit No. CAS618036, Order No. R8-2002-0012 for San Bernardino County.

The following items should be included in the SWPPP:

- Stockpiled material should not be stored in areas which are subject to the erosive flows of water.
- Measures such as the use of straw bales, sandbags, silt fencing or detention basins shall be used to capture and hold eroded material for future cleanup.
- Rainfall will be prevented from entering material and waste storage areas and pollution-laden surfaces.
- Construction-related contaminants will be prevented from leaving the site and polluting waterways.
- A spill prevention control and countermeasures and remediation plan shall be in place and implemented to control release of hazardous substances.

Noise

- XII-1 All construction vehicles and fixed or mobile equipment shall be equipped with properly operating and maintained mufflers.
- XII-2 All employees that will be exposed to noise levels greater than 75 dB over an 8-hour period shall be provided with adequate hearing protection devices to ensure no hearing damage will result from construction activities.
- XII-3 If equipment is being used that can cause hearing damage at adjacent noise receptor locations (distance attenuation shall be taken into account), portable noise barriers shall be installed that are demonstrated to be adequate to reduce noise levels at receptor locations below hearing damage thresholds.
- XII-4 Construction staging areas shall be located as far from adjacent sensitive receptor locations as possible at each facility, for example adjacent to the southern end of Basin 5.
- XII-5 Good relations with the local community shall be maintained where construction is scheduled, such as by keeping the community informed of the schedule, duration, and progress of the construction to minimize the public objections of unavoidable noise. Communities (City of Rancho Cucamonga and San Bernardino County) should be notified in advance of the construction and the expected temporary and intermittent noise increases during the construction period.
- XII-6 IEUA will establish a noise complaint/response program and will respond to any noise complaints received for this project by measuring noise levels at the affected receptor. A sign shall be placed where nearby residents can read it and identify a point of contact at IEUA to make a noise complaint. If the noise level exceeds an Ldn of 65 dBA exterior or an Ldn of 45 dBA interior at the receptor, IEUA will implement adequate measures to reduce noise levels to the acceptable

thresholds, including scheduling specific construction activities to avoid conflict with adjacent sensitive receptors.

Transportation / Traffic

- XV-1 The construction contractor will provide adequate traffic management resources, as determined by the City of Rancho Cucamonga. The City shall require a construction traffic management plan for work in public roads that complies with the Work Area Traffic Control Handbook, or other applicable standard, to provide adequate traffic control and safety during excavation activities. The traffic management plan shall be prepared and approved by the City prior to initiation of excavation activities. At a minimum this plan shall include how to minimize the amount of time spent on construction activities; how to minimize disruption of vehicle and alternative modes of transport traffic at all times, but particularly during periods of high traffic volumes; how to maintain safe traffic flow on local streets affected by construction at all times, including through the use of adequate signage, protective devices, flag persons or police assistance to ensure that traffic can flow adequately during construction; the identification of alternative routes that can meet the traffic flow requirements of a specific area, including communication (signs, webpages, etc.) with drivers and neighborhoods where construction activities will occur; and at the end of each construction day roadways shall be prepared for continued utilization without any significant roadway hazards remaining.

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FIGURES

FIGURE 1 Regional Location

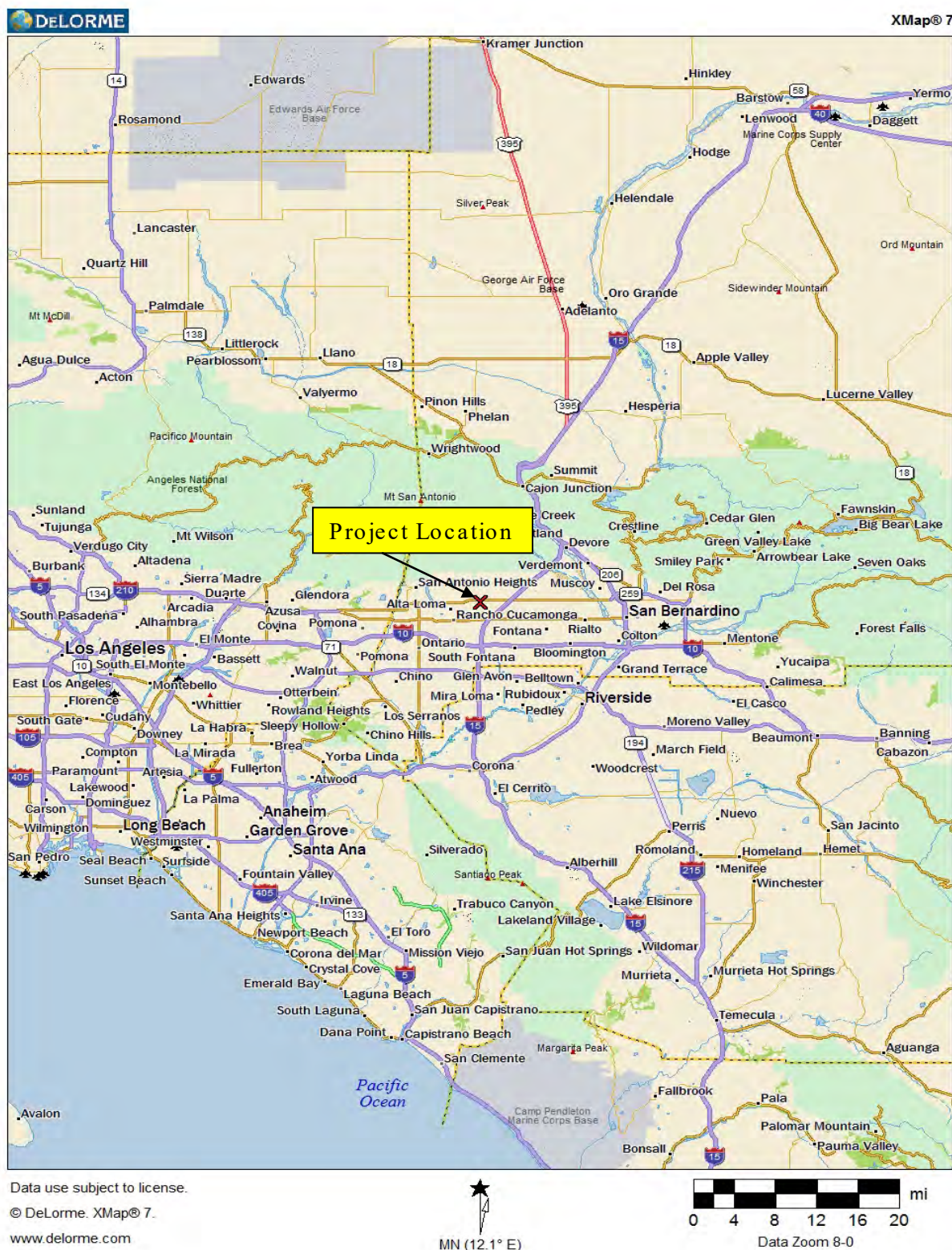


FIGURE 2
Site Location

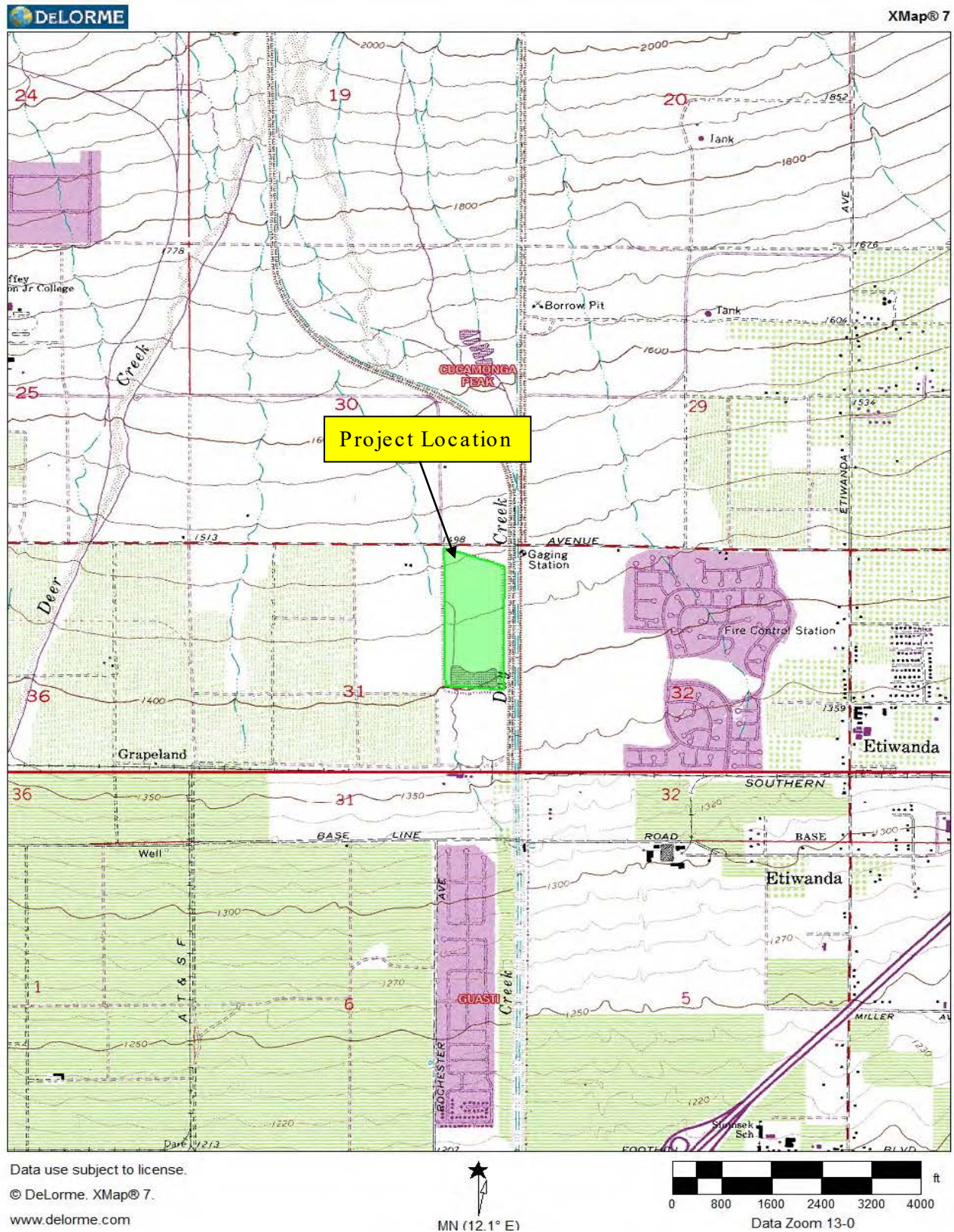


FIGURE 3
Lower Day Basin Location Map

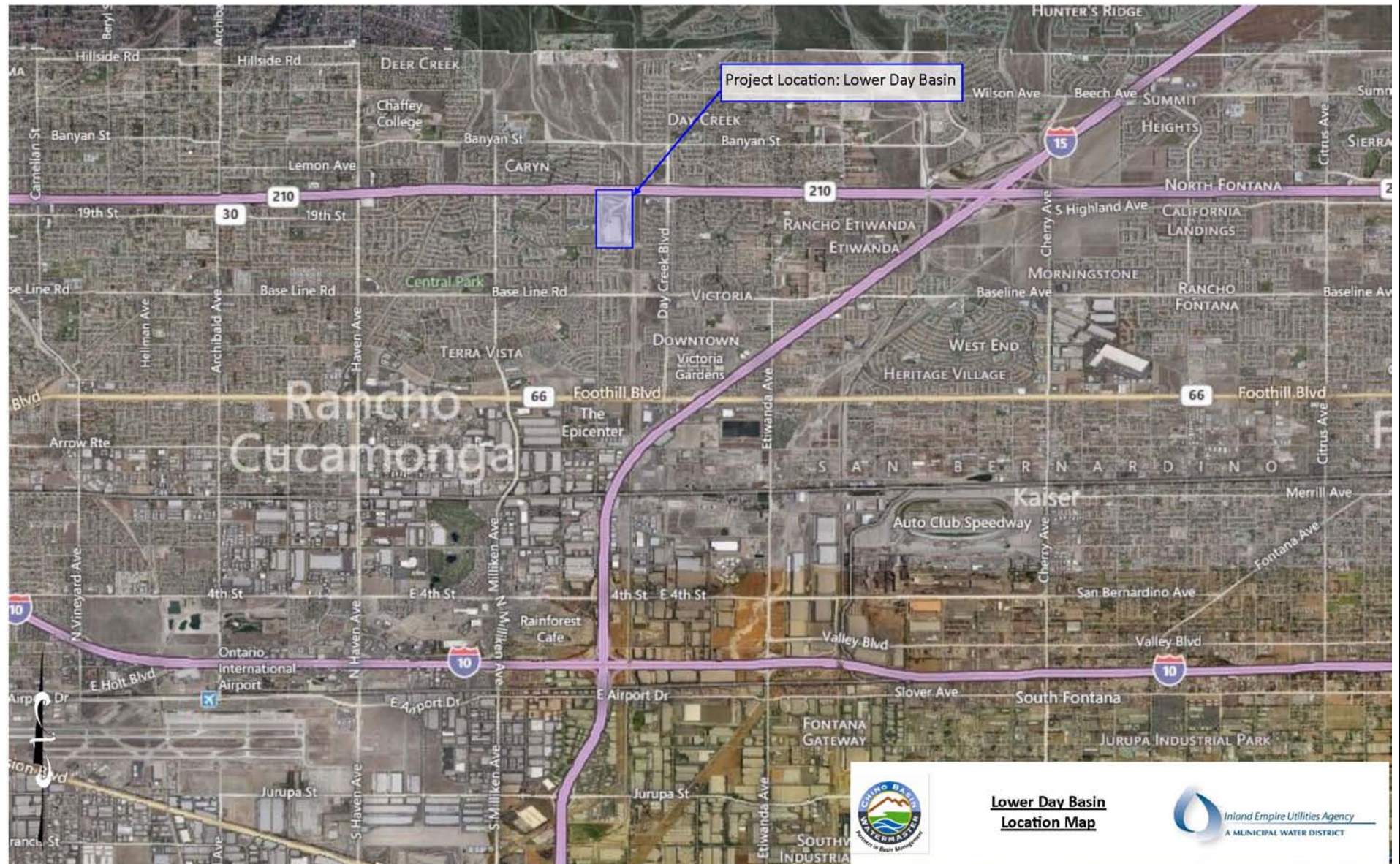


FIGURE 4
Proposed Capital Improvements



APPENDIX 1

Lower Day Basin
San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	0.00	User Defined Unit	22.60	984,456.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project site is 22.6 acres

Construction Phase - Total days of Site Prep, grading and building const.

Off-road Equipment - equipment for building const.

Off-road Equipment - equipment for grading

Off-road Equipment - Equipment for site prep

Trips and VMT - CalEEMod defaults were used here

Grading - Acres

Construction Off-road Equipment Mitigation - Rule 403 mitigation measures

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	370.00	346.00

tblConstructionPhase	NumDays	35.00	26.00
tblConstructionPhase	PhaseEndDate	6/19/2017	7/1/2017
tblConstructionPhase	PhaseEndDate	2/19/2016	2/20/2016
tblConstructionPhase	PhaseStartDate	2/21/2016	3/4/2016
tblGrading	AcresOfGrading	29.25	22.60
tblLandUse	LandUseSquareFeet	0.00	984,456.00
tblLandUse	LotAcreage	0.00	22.60
tblOffRoadEquipment	OffRoadEquipmentType		Other Material Handling Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2016

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.6599	4.4699	6.4648	0.0119	0.6997	0.1905	0.8902	0.2114	0.1777	0.3891	0.0000	987.0622	987.0622	0.0856	0.0000	988.8598
2017	0.3296	2.1379	3.3939	6.8600e-003	0.3591	0.0876	0.4467	0.0967	0.0820	0.1787	0.0000	551.8938	551.8938	0.0417	0.0000	552.7699
Total	0.9895	6.6078	9.8588	0.0188	1.0587	0.2781	1.3369	0.3081	0.2596	0.5677	0.0000	1,538.9560	1,538.9560	0.1273	0.0000	1,541.6297

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2016	0.6599	4.4699	6.4648	0.0119	0.6362	0.1905	0.8267	0.1798	0.1777	0.3575	0.0000	987.0620	987.0620	0.0856	0.0000	988.8596
2017	0.3296	2.1379	3.3939	6.8600e-003	0.3591	0.0876	0.4467	0.0967	0.0820	0.1787	0.0000	551.8937	551.8937	0.0417	0.0000	552.7698
Total	0.9895	6.6078	9.8588	0.0188	0.9953	0.2781	1.2734	0.2765	0.2596	0.5362	0.0000	1,538.9557	1,538.9557	0.1273	0.0000	1,541.6294

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	5.99	0.00	4.75	10.24	0.00	5.56	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Area	4.6981	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.6981	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.6981	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.6981	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2016	1/14/2016	5	10	
2	Grading	Grading	1/15/2016	2/20/2016	5	26	
3	Building Construction	Building Construction	3/4/2016	7/1/2017	5	346	

Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 22.6****Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Forklifts	1	8.00	89	0.20
Grading	Excavators	1	4.00	162	0.38
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Site Preparation	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Graders	1	6.00	174	0.41
Grading	Scrapers	1	6.00	361	0.48
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Grading	Other Material Handling Equipment	1	6.00	167	0.40
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	413.00	161.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Soil Stabilizer
- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0301	0.0000	0.0301	0.0166	0.0000	0.0166	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-003	0.1019	0.0766	8.0000e-005		5.7300e-003	5.7300e-003		5.2700e-003	5.2700e-003	0.0000	7.1250	7.1250	2.1500e-003	0.0000	7.1701
Total	9.6000e-003	0.1019	0.0766	8.0000e-005	0.0301	5.7300e-003	0.0358	0.0166	5.2700e-003	0.0218	0.0000	7.1250	7.1250	2.1500e-003	0.0000	7.1701

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	2.3000e-004	2.4500e-003	1.0000e-005	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3920	0.3920	2.0000e-005	0.0000	0.3924
Total	1.5000e-004	2.3000e-004	2.4500e-003	1.0000e-005	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3920	0.3920	2.0000e-005	0.0000	0.3924

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0112	0.0000	0.0112	6.1300e-003	0.0000	6.1300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-003	0.1019	0.0766	8.0000e-005		5.7300e-003	5.7300e-003		5.2700e-003	5.2700e-003	0.0000	7.1250	7.1250	2.1500e-003	0.0000	7.1701
Total	9.6000e-003	0.1019	0.0766	8.0000e-005	0.0112	5.7300e-003	0.0169	6.1300e-003	5.2700e-003	0.0114	0.0000	7.1250	7.1250	2.1500e-003	0.0000	7.1701

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	2.3000e-004	2.4500e-003	1.0000e-005	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3920	0.3920	2.0000e-005	0.0000	0.3924

Total	1.5000e-004	2.3000e-004	2.4500e-003	1.0000e-005	4.4000e-004	0.0000	4.4000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3920	0.3920	2.0000e-005	0.0000	0.3924
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3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0707	0.0000	0.0707	0.0336	0.0000	0.0336	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0436	0.4967	0.3193	3.8000e-004		0.0235	0.0235		0.0216	0.0216	0.0000	36.1184	36.1184	0.0109	0.0000	36.3471
Total	0.0436	0.4967	0.3193	3.8000e-004	0.0707	0.0235	0.0942	0.0336	0.0216	0.0552	0.0000	36.1184	36.1184	0.0109	0.0000	36.3471

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	9.8000e-004	0.0103	2.0000e-005	1.8500e-003	1.0000e-005	1.8700e-003	4.9000e-004	1.0000e-005	5.1000e-004	0.0000	1.6561	1.6561	9.0000e-005	0.0000	1.6579
Total	6.5000e-004	9.8000e-004	0.0103	2.0000e-005	1.8500e-003	1.0000e-005	1.8700e-003	4.9000e-004	1.0000e-005	5.1000e-004	0.0000	1.6561	1.6561	9.0000e-005	0.0000	1.6579

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0262	0.0000	0.0262	0.0124	0.0000	0.0124	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0436	0.4967	0.3193	3.8000e-004		0.0235	0.0235		0.0216	0.0216	0.0000	36.1183	36.1183	0.0109	0.0000	36.3471
Total	0.0436	0.4967	0.3193	3.8000e-004	0.0262	0.0235	0.0497	0.0124	0.0216	0.0341	0.0000	36.1183	36.1183	0.0109	0.0000	36.3471

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	9.8000e-004	0.0103	2.0000e-005	1.8500e-003	1.0000e-005	1.8700e-003	4.9000e-004	1.0000e-005	5.1000e-004	0.0000	1.6561	1.6561	9.0000e-005	0.0000	1.6579
Total	6.5000e-004	9.8000e-004	0.0103	2.0000e-005	1.8500e-003	1.0000e-005	1.8700e-003	4.9000e-004	1.0000e-005	5.1000e-004	0.0000	1.6561	1.6561	9.0000e-005	0.0000	1.6579

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	0.2784	2.0216	1.2999	1.8400e-003		0.1323	0.1323		0.1241	0.1241	0.0000	161.9609	161.9609	0.0465	0.0000	162.9366
Total	0.2784	2.0216	1.2999	1.8400e-003		0.1323	0.1323		0.1241	0.1241	0.0000	161.9609	161.9609	0.0465	0.0000	162.9366

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1558	1.5895	2.0299	3.7700e-003	0.1075	0.0252	0.1328	0.0308	0.0232	0.0540	0.0000	342.7297	342.7297	2.5100e-003	0.0000	342.7824
Worker	0.1717	0.2590	2.7264	5.7900e-003	0.4891	3.7000e-003	0.4928	0.1299	3.4000e-003	0.1333	0.0000	437.0803	437.0803	0.0235	0.0000	437.5733
Total	0.3275	1.8485	4.7563	9.5600e-003	0.5966	0.0289	0.6255	0.1607	0.0266	0.1873	0.0000	779.8100	779.8100	0.0260	0.0000	780.3556

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2784	2.0216	1.2999	1.8400e-003		0.1323	0.1323		0.1241	0.1241	0.0000	161.9607	161.9607	0.0465	0.0000	162.9364
Total	0.2784	2.0216	1.2999	1.8400e-003		0.1323	0.1323		0.1241	0.1241	0.0000	161.9607	161.9607	0.0465	0.0000	162.9364

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1558	1.5895	2.0299	3.7700e-003	0.1075	0.0252	0.1328	0.0308	0.0232	0.0540	0.0000	342.7297	342.7297	2.5100e-003	0.0000	342.7824
Worker	0.1717	0.2590	2.7264	5.7900e-003	0.4891	3.7000e-003	0.4928	0.1299	3.4000e-003	0.1333	0.0000	437.0803	437.0803	0.0235	0.0000	437.5733
Total	0.3275	1.8485	4.7563	9.5600e-003	0.5966	0.0289	0.6255	0.1607	0.0266	0.1873	0.0000	779.8100	779.8100	0.0260	0.0000	780.3556

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1517	1.1288	0.7589	1.1100e-003		0.0720	0.0720		0.0675	0.0675	0.0000	96.3083	96.3083	0.0273	0.0000	96.8817
Total	0.1517	1.1288	0.7589	1.1100e-003		0.0720	0.0720		0.0675	0.0675	0.0000	96.3083	96.3083	0.0273	0.0000	96.8817

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0865	0.8694	1.1660	2.2700e-003	0.0647	0.0136	0.0783	0.0185	0.0125	0.0310	0.0000	202.8765	202.8765	1.4600e-003	0.0000	202.9072
Worker	0.0913	0.1397	1.4691	3.4900e-003	0.2944	2.1400e-003	0.2965	0.0782	1.9800e-003	0.0802	0.0000	252.7090	252.7090	0.0130	0.0000	252.9810
Total	0.1779	1.0091	2.6350	5.7600e-003	0.3591	0.0157	0.3748	0.0967	0.0144	0.1111	0.0000	455.5856	455.5856	0.0144	0.0000	455.8882

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1517	1.1288	0.7589	1.1100e-003		0.0720	0.0720		0.0675	0.0675	0.0000	96.3082	96.3082	0.0273	0.0000	96.8816
Total	0.1517	1.1288	0.7589	1.1100e-003		0.0720	0.0720		0.0675	0.0675	0.0000	96.3082	96.3082	0.0273	0.0000	96.8816

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0865	0.8694	1.1660	2.2700e-003	0.0647	0.0136	0.0783	0.0185	0.0125	0.0310	0.0000	202.8765	202.8765	1.4600e-003	0.0000	202.9072
Worker	0.0913	0.1397	1.4691	3.4900e-003	0.2944	2.1400e-003	0.2965	0.0782	1.9800e-003	0.0802	0.0000	252.7090	252.7090	0.0130	0.0000	252.9810

Total	0.1779	1.0091	2.6350	5.7600e-003	0.3591	0.0157	0.3748	0.0967	0.0144	0.1111	0.0000	455.5856	455.5856	0.0144	0.0000	455.8882
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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.473353	0.065861	0.172473	0.156037	0.055870	0.009076	0.016433	0.039903	0.001120	0.001336	0.004897	0.000716	0.002924

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
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Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

[illegible]

6.2 Area by SubCategory

Unmitigated

[illegible]

Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.6981	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.1407					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.5573					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.6981	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

Lower Day Basin
San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	0.00	User Defined Unit	22.60	984,456.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project site is 22.6 acres

Construction Phase - Total days of Site Prep, grading and building const.

Off-road Equipment - equipment for building const.

Off-road Equipment - equipment for grading

Off-road Equipment - Equipment for site prep

Trips and VMT - CalEEMod defaults were used here

Grading - Acres

Construction Off-road Equipment Mitigation - Rule 403 mitigation measures

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	370.00	346.00

tblConstructionPhase	NumDays	35.00	26.00
tblConstructionPhase	PhaseEndDate	6/19/2017	7/1/2017
tblConstructionPhase	PhaseEndDate	2/19/2016	2/20/2016
tblConstructionPhase	PhaseStartDate	2/21/2016	3/4/2016
tblGrading	AcresOfGrading	29.25	22.60
tblLandUse	LandUseSquareFeet	0.00	984,456.00
tblLandUse	LotAcreage	0.00	22.60
tblOffRoadEquipment	OffRoadEquipmentType		Other Material Handling Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2016

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	5.7185	38.2731	56.4601	0.1101	6.1115	1.8104	7.3940	3.3339	1.6655	4.3895	0.0000	9,986.4546	9,986.4546	0.9313	0.0000	10,006.0125
2017	5.1731	32.0877	52.3863	0.1100	5.6280	1.3475	6.9755	1.5131	1.2602	2.7733	0.0000	9,719.7231	9,719.7231	0.7072	0.0000	9,734.5739
Total	10.8916	70.3608	108.8465	0.2201	11.7395	3.1579	14.3695	4.8470	2.9257	7.1628	0.0000	19,706.1777	19,706.1777	1.6385	0.0000	19,740.5864

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	5.7185	38.2731	56.4601	0.1101	5.6279	1.8104	7.1196	1.5131	1.6655	2.9080	0.0000	9,986.4546	9,986.4546	0.9313	0.0000	10,006.0125
2017	5.1731	32.0877	52.3863	0.1100	5.6280	1.3475	6.9755	1.5131	1.2602	2.7733	0.0000	9,719.7231	9,719.7231	0.7072	0.0000	9,734.5739
Total	10.8916	70.3608	108.8465	0.2201	11.2558	3.1579	14.0950	3.0262	2.9257	5.6813	0.0000	19,706.1777	19,706.1777	1.6385	0.0000	19,740.5864

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	4.12	0.00	1.91	37.57	0.00	20.68	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2016	1/14/2016	5	10	

2	Grading	Grading	1/15/2016	2/20/2016	5	26
3	Building Construction	Building Construction	3/4/2016	7/1/2017	5	346

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 22.6

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Forklifts	1	8.00	89	0.20
Grading	Excavators	1	4.00	162	0.38
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Site Preparation	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Graders	1	6.00	174	0.41
Grading	Scrapers	1	6.00	361	0.48
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Grading	Other Material Handling Equipment	1	6.00	167	0.40
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	413.00	161.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Use Soil Stabilizer
- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	1.9194	20.3808	15.3102	0.0151		1.1466	1.1466		1.0549	1.0549		1,570.7866	1,570.7866	0.4738		1,580.7365
Total	1.9194	20.3808	15.3102	0.0151	6.0221	1.1466	7.1687	3.3102	1.0549	4.3651		1,570.7866	1,570.7866	0.4738		1,580.7365

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Worker	0.0344	0.0418	0.5511	1.1200e-003	0.0894	6.6000e-004	0.0901	0.0237	6.1000e-004	0.0243		93.4222	93.4222	4.6400e-003		93.5197
Total	0.0344	0.0418	0.5511	1.1200e-003	0.0894	6.6000e-004	0.0901	0.0237	6.1000e-004	0.0243		93.4222	93.4222	4.6400e-003		93.5197

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2312	0.0000	2.2312	1.2264	0.0000	1.2264			0.0000			0.0000
Off-Road	1.9194	20.3808	15.3102	0.0151		1.1466	1.1466		1.0549	1.0549	0.0000	1,570.7866	1,570.7866	0.4738		1,580.7365
Total	1.9194	20.3808	15.3102	0.0151	2.2312	1.1466	3.3778	1.2264	1.0549	2.2814	0.0000	1,570.7866	1,570.7866	0.4738		1,580.7365

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0344	0.0418	0.5511	1.1200e-003	0.0894	6.6000e-004	0.0901	0.0237	6.1000e-004	0.0243		93.4222	93.4222	4.6400e-003		93.5197
Total	0.0344	0.0418	0.5511	1.1200e-003	0.0894	6.6000e-004	0.0901	0.0237	6.1000e-004	0.0243		93.4222	93.4222	4.6400e-003		93.5197

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4384	0.0000	5.4384	2.5822	0.0000	2.5822			0.0000			0.0000
Off-Road	3.3556	38.2051	24.5600	0.0295		1.8093	1.8093		1.6645	1.6645		3,062.5893	3,062.5893	0.9238		3,081.9888
Total	3.3556	38.2051	24.5600	0.0295	5.4384	1.8093	7.2477	2.5822	1.6645	4.2467		3,062.5893	3,062.5893	0.9238		3,081.9888

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0559	0.0680	0.8955	1.8300e-003	0.1453	1.0800e-003	0.1464	0.0385	9.9000e-004	0.0395		151.8111	151.8111	7.5400e-003		151.9695
Total	0.0559	0.0680	0.8955	1.8300e-003	0.1453	1.0800e-003	0.1464	0.0385	9.9000e-004	0.0395		151.8111	151.8111	7.5400e-003		151.9695

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					2.0149	0.0000	2.0149	0.9567	0.0000	0.9567			0.0000			0.0000
Off-Road	3.3556	38.2051	24.5600	0.0295		1.8093	1.8093		1.6645	1.6645	0.0000	3,062.5893	3,062.5893	0.9238		3,081.9888
Total	3.3556	38.2051	24.5600	0.0295	2.0149	1.8093	3.8242	0.9567	1.6645	2.6212	0.0000	3,062.5893	3,062.5893	0.9238		3,081.9888

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0559	0.0680	0.8955	1.8300e-003	0.1453	1.0800e-003	0.1464	0.0385	9.9000e-004	0.0395		151.8111	151.8111	7.5400e-003		151.9695
Total	0.0559	0.0680	0.8955	1.8300e-003	0.1453	1.0800e-003	0.1464	0.0385	9.9000e-004	0.0395		151.8111	151.8111	7.5400e-003		151.9695

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5774	18.7189	12.0361	0.0170		1.2247	1.2247		1.1494	1.1494		1,653.0680	1,653.0680	0.4742		1,663.0267
Total	2.5774	18.7189	12.0361	0.0170		1.2247	1.2247		1.1494	1.1494		1,653.0680	1,653.0680	0.4742		1,663.0267

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3645	14.0610	15.9749	0.0350	1.0115	0.2327	1.2442	0.2888	0.2140	0.5028		3,510.4646	3,510.4646	0.0253		3,510.9953
Worker	1.7766	2.1591	28.4492	0.0581	4.6164	0.0343	4.6506	1.2243	0.0315	1.2558		4,822.9220	4,822.9220	0.2396		4,827.9539
Total	3.1411	16.2201	44.4240	0.0931	5.6279	0.2670	5.8949	1.5131	0.2455	1.7586		8,333.3866	8,333.3866	0.2649		8,338.9493

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5774	18.7189	12.0361	0.0170		1.2247	1.2247		1.1494	1.1494	0.0000	1,653.0680	1,653.0680	0.4742		1,663.0267
Total	2.5774	18.7189	12.0361	0.0170		1.2247	1.2247		1.1494	1.1494	0.0000	1,653.0680	1,653.0680	0.4742		1,663.0267

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3645	14.0610	15.9749	0.0350	1.0115	0.2327	1.2442	0.2888	0.2140	0.5028		3,510.4646	3,510.4646	0.0253		3,510.9953
Worker	1.7766	2.1591	28.4492	0.0581	4.6164	0.0343	4.6506	1.2243	0.0315	1.2558		4,822.9220	4,822.9220	0.2396		4,827.9539
Total	3.1411	16.2201	44.4240	0.0931	5.6279	0.2670	5.8949	1.5131	0.2455	1.7586		8,333.3866	8,333.3866	0.2649		8,338.9493

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3341	17.3660	11.6755	0.0170		1.1069	1.1069		1.0388	1.0388		1,633.2571	1,633.2571	0.4631		1,642.9822
Total	2.3341	17.3660	11.6755	0.0170		1.1069	1.1069		1.0388	1.0388		1,633.2571	1,633.2571	0.4631		1,642.9822

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.2604	12.7859	15.1564	0.0350	1.0116	0.2076	1.2192	0.2888	0.1909	0.4798		3,452.7028	3,452.7028	0.0244		3,453.2157
Worker	1.5786	1.9358	25.5545	0.0580	4.6164	0.0330	4.6494	1.2243	0.0304	1.2547		4,633.7631	4,633.7631	0.2197		4,638.3761

Total	2.8390	14.7217	40.7108	0.0930	5.6280	0.2406	5.8685	1.5131	0.2214	1.7345		8,086.4659	8,086.4659	0.2441		8,091.5918
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3341	17.3660	11.6755	0.0170		1.1069	1.1069		1.0388	1.0388	0.0000	1,633.2571	1,633.2571	0.4631		1,642.9822
Total	2.3341	17.3660	11.6755	0.0170		1.1069	1.1069		1.0388	1.0388	0.0000	1,633.2571	1,633.2571	0.4631		1,642.9822

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.2604	12.7859	15.1564	0.0350	1.0116	0.2076	1.2192	0.2888	0.1909	0.4798		3,452.7028	3,452.7028	0.0244		3,453.2157
Worker	1.5786	1.9358	25.5545	0.0580	4.6164	0.0330	4.6494	1.2243	0.0304	1.2547		4,633.7631	4,633.7631	0.2197		4,638.3761
Total	2.8390	14.7217	40.7108	0.0930	5.6280	0.2406	5.8685	1.5131	0.2214	1.7345		8,086.4659	8,086.4659	0.2441		8,091.5918

Lower Day Basin
San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	0.00	User Defined Unit	22.60	984,456.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2016
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	630.89	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Project site is 22.6 acres

Construction Phase - Total days of Site Prep, grading and building const.

Off-road Equipment - equipment for building const.

Off-road Equipment - equipment for grading

Off-road Equipment - Equipment for site prep

Trips and VMT - CalEEMod defaults were used here

Grading - Acres

Construction Off-road Equipment Mitigation - Rule 403 mitigation measures

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	370.00	346.00

tblConstructionPhase	NumDays	35.00	26.00
tblConstructionPhase	PhaseEndDate	6/19/2017	7/1/2017
tblConstructionPhase	PhaseEndDate	2/19/2016	2/20/2016
tblConstructionPhase	PhaseStartDate	2/21/2016	3/4/2016
tblGrading	AcresOfGrading	29.25	22.60
tblLandUse	LandUseSquareFeet	0.00	984,456.00
tblLandUse	LotAcreage	0.00	22.60
tblOffRoadEquipment	OffRoadEquipmentType		Other Material Handling Equipment
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2016

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	5.6979	38.2777	54.7114	0.1046	6.1115	1.8104	7.3940	3.3339	1.6655	4.3895	0.0000	9,527.3312	9,527.3312	0.9313	0.0000	9,546.8891
2017	5.1516	32.5548	50.9874	0.1045	5.6280	1.3495	6.9775	1.5131	1.2620	2.7751	0.0000	9,277.2297	9,277.2297	0.7079	0.0000	9,292.0965
Total	10.8494	70.8325	105.6987	0.2091	11.7395	3.1599	14.3715	4.8470	2.9276	7.1646	0.0000	18,804.5609	18,804.5609	1.6393	0.0000	18,838.9856

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2016	5.6979	38.2777	54.7114	0.1046	5.6279	1.8104	7.1219	1.5131	1.6655	2.9102	0.0000	9,527.3312	9,527.3312	0.9313	0.0000	9,546.8891
2017	5.1516	32.5548	50.9874	0.1045	5.6280	1.3495	6.9775	1.5131	1.2620	2.7751	0.0000	9,277.2297	9,277.2297	0.7079	0.0000	9,292.0965
Total	10.8494	70.8325	105.6987	0.2091	11.2558	3.1599	14.0994	3.0262	2.9276	5.6853	0.0000	18,804.5609	18,804.5609	1.6393	0.0000	18,838.9856

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	4.12	0.00	1.89	37.57	0.00	20.65	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Area	25.7429	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	25.7429	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	25.7429	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	25.7429	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2016	1/14/2016	5	10	
2	Grading	Grading	1/15/2016	2/20/2016	5	26	

3	Building Construction	Building Construction	3/4/2016	7/1/2017	5	346
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Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 22.6

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	7.00	226	0.29
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Forklifts	1	8.00	89	0.20
Grading	Excavators	1	4.00	162	0.38
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Site Preparation	Rubber Tired Dozers	1	8.00	255	0.40
Grading	Graders	1	6.00	174	0.41
Grading	Scrapers	1	6.00	361	0.48
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Grading	Other Material Handling Equipment	1	6.00	167	0.40
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	413.00	161.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Site Preparation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	1.9194	20.3808	15.3102	0.0151		1.1466	1.1466		1.0549	1.0549		1,570.7866	1,570.7866	0.4738		1,580.7365
Total	1.9194	20.3808	15.3102	0.0151	6.0221	1.1466	7.1687	3.3102	1.0549	4.3651		1,570.7866	1,570.7866	0.4738		1,580.7365

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0323	0.0447	0.4713	1.0200e-003	0.0894	6.6000e-004	0.0901	0.0237	6.1000e-004	0.0243		85.0990	85.0990	4.6400e-003		85.1965

Total	0.0323	0.0447	0.4713	1.0200e-003	0.0894	6.6000e-004	0.0901	0.0237	6.1000e-004	0.0243		85.0990	85.0990	4.6400e-003		85.1965
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2312	0.0000	2.2312	1.2264	0.0000	1.2264			0.0000			0.0000
Off-Road	1.9194	20.3808	15.3102	0.0151		1.1466	1.1466		1.0549	1.0549	0.0000	1,570.7866	1,570.7866	0.4738		1,580.7365
Total	1.9194	20.3808	15.3102	0.0151	2.2312	1.1466	3.3778	1.2264	1.0549	2.2814	0.0000	1,570.7866	1,570.7866	0.4738		1,580.7365

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0323	0.0447	0.4713	1.0200e-003	0.0894	6.6000e-004	0.0901	0.0237	6.1000e-004	0.0243		85.0990	85.0990	4.6400e-003		85.1965
Total	0.0323	0.0447	0.4713	1.0200e-003	0.0894	6.6000e-004	0.0901	0.0237	6.1000e-004	0.0243		85.0990	85.0990	4.6400e-003		85.1965

3.3 Grading - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.4384	0.0000	5.4384	2.5822	0.0000	2.5822			0.0000			0.0000
Off-Road	3.3556	38.2051	24.5600	0.0295		1.8093	1.8093		1.6645	1.6645		3,062.5893	3,062.5893	0.9238		3,081.9888
Total	3.3556	38.2051	24.5600	0.0295	5.4384	1.8093	7.2477	2.5822	1.6645	4.2467		3,062.5893	3,062.5893	0.9238		3,081.9888

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0726	0.7659	1.6600e-003	0.1453	1.0800e-003	0.1464	0.0385	9.9000e-004	0.0395		138.2859	138.2859	7.5400e-003		138.4443
Total	0.0525	0.0726	0.7659	1.6600e-003	0.1453	1.0800e-003	0.1464	0.0385	9.9000e-004	0.0395		138.2859	138.2859	7.5400e-003		138.4443

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					2.0149	0.0000	2.0149	0.9567	0.0000	0.9567			0.0000			0.0000
Off-Road	3.3556	38.2051	24.5600	0.0295		1.8093	1.8093		1.6645	1.6645	0.0000	3,062.5893	3,062.5893	0.9238		3,081.9888
Total	3.3556	38.2051	24.5600	0.0295	2.0149	1.8093	3.8242	0.9567	1.6645	2.6212	0.0000	3,062.5893	3,062.5893	0.9238		3,081.9888

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0726	0.7659	1.6600e-003	0.1453	1.0800e-003	0.1464	0.0385	9.9000e-004	0.0395		138.2859	138.2859	7.5400e-003		138.4443
Total	0.0525	0.0726	0.7659	1.6600e-003	0.1453	1.0800e-003	0.1464	0.0385	9.9000e-004	0.0395		138.2859	138.2859	7.5400e-003		138.4443

3.4 Building Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5774	18.7189	12.0361	0.0170		1.2247	1.2247		1.1494	1.1494		1,653.0680	1,653.0680	0.4742		1,663.0267
Total	2.5774	18.7189	12.0361	0.0170		1.2247	1.2247		1.1494	1.1494		1,653.0680	1,653.0680	0.4742		1,663.0267

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4517	14.4404	18.3443	0.0347	1.0115	0.2351	1.2466	0.2888	0.2162	0.5050		3,481.0256	3,481.0256	0.0260		3,481.5721
Worker	1.6688	2.3069	24.3309	0.0528	4.6164	0.0343	4.6506	1.2243	0.0315	1.2558		4,393.2376	4,393.2376	0.2396		4,398.2695
Total	3.1204	16.7473	42.6753	0.0876	5.6279	0.2693	5.8972	1.5131	0.2477	1.7607		7,874.2632	7,874.2632	0.2656		7,879.8416

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5774	18.7189	12.0361	0.0170		1.2247	1.2247		1.1494	1.1494	0.0000	1,653.0680	1,653.0680	0.4742		1,663.0267
Total	2.5774	18.7189	12.0361	0.0170		1.2247	1.2247		1.1494	1.1494	0.0000	1,653.0680	1,653.0680	0.4742		1,663.0267

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4517	14.4404	18.3443	0.0347	1.0115	0.2351	1.2466	0.2888	0.2162	0.5050		3,481.0256	3,481.0256	0.0260		3,481.5721
Worker	1.6688	2.3069	24.3309	0.0528	4.6164	0.0343	4.6506	1.2243	0.0315	1.2558		4,393.2376	4,393.2376	0.2396		4,398.2695
Total	3.1204	16.7473	42.6753	0.0876	5.6279	0.2693	5.8972	1.5131	0.2477	1.7607		7,874.2632	7,874.2632	0.2656		7,879.8416

3.4 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3341	17.3660	11.6755	0.0170		1.1069	1.1069		1.0388	1.0388		1,633.2571	1,633.2571	0.4631		1,642.9822
Total	2.3341	17.3660	11.6755	0.0170		1.1069	1.1069		1.0388	1.0388		1,633.2571	1,633.2571	0.4631		1,642.9822

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3399	13.1223	17.5233	0.0347	1.0116	0.2096	1.2212	0.2888	0.1928	0.4816		3,423.6698	3,423.6698	0.0252		3,424.1986
Worker	1.4776	2.0665	21.7886	0.0528	4.6164	0.0330	4.6494	1.2243	0.0304	1.2547		4,220.3028	4,220.3028	0.2197		4,224.9157

Total	2.8175	15.1888	39.3119	0.0875	5.6280	0.2426	5.8705	1.5131	0.2232	1.7363		7,643.9726	7,643.9726	0.2449		7,649.1144
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3341	17.3660	11.6755	0.0170		1.1069	1.1069		1.0388	1.0388	0.0000	1,633.2571	1,633.2571	0.4631		1,642.9822
Total	2.3341	17.3660	11.6755	0.0170		1.1069	1.1069		1.0388	1.0388	0.0000	1,633.2571	1,633.2571	0.4631		1,642.9822

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3399	13.1223	17.5233	0.0347	1.0116	0.2096	1.2212	0.2888	0.1928	0.4816		3,423.6698	3,423.6698	0.0252		3,424.1986
Worker	1.4776	2.0665	21.7886	0.0528	4.6164	0.0330	4.6494	1.2243	0.0304	1.2547		4,220.3028	4,220.3028	0.2197		4,224.9157
Total	2.8175	15.1888	39.3119	0.0875	5.6280	0.2426	5.8705	1.5131	0.2232	1.7363		7,643.9726	7,643.9726	0.2449		7,649.1144

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-...	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.473353	0.065861	0.172473	0.156037	0.055870	0.009076	0.016433	0.039903	0.001120	0.001336	0.004897	0.000716	0.002924

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
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6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	25.7429	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	25.7429	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.2506					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	19.4922					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	25.7429	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.2506					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	19.4922					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	25.7429	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Vegetation

APPENDIX 2

BIOLOGICAL RESOURCES REPORT FOR LOWER DAY BASIN DEVELOPMENT PROJECT

LOCATED WITHIN CITY OF RANCHO CUCAMONGA
USGS – “CUCAMONGA PEAK” IN SECTION 32, TOWNSHIP 1 NORTH, RANGE 6 WEST,
SAN BERNARDINO BASELINE MERIDIAN, SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for:

Inland Empire Utilities Agency
6075 Kimball Avenue
Chino, California 91708

Prepared by:

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San Bernardino, California 92405

September 2015

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1. Summary

1.1 Project Summary

Inland Empire Utilities Agency (IEUA) is proposing to develop additional groundwater recharge capacity within Lower Day Basin (project site). The purpose of the proposed basin modifications is to increase IEUA's groundwater recharge capacity which is part of a comprehensive effort to reverse the groundwater overdraft condition in the Chino Basin and to support the groundwater demands (potable water supply) of the population within the Chino Basin Water Conservation District's service area.

The Purpose and intended use of this Biological Resources Report (BRR) is to evaluate the onsite biological resources and determine the potential for occurrence of common and special-status species, their habitat, and other regulated habitats such as Waters of the United States including Wetlands, Waters of the State, and Streambed/Riparian resources within Project's Area of Potential Effect (APE). The APE is defined as the Project's proposed physical ground disturbance footprint, plus a buffer zone where indirect impacts may result from construction. Impacts within the Project's footprint and the APE are detailed in Section 5.0 of this document.

Lower Day Basin is owned by the San Bernardino County Flood Control District (SBCFCD). It was originally constructed for flood control mitigation to attenuate peak storm flows, but are now operated as multipurpose basins under a Four-Party Agreement between SBCFCD, IEUA, Chino Basin Watermaster (CBWM), and the Chino Basin Water Conservation District (CBWCD) (stakeholders). The stakeholders previously invested in improvements of the Basins to allow them to be used for groundwater recharge. They were modified to allow the capture and recharge of stormwater and supplemental water (supplemental water consists of imported water and recycled water) in a conjunctive use program.

IEUA presently performs the actual operation and maintenance of the Basin for recharge purposes in cooperation with CBWM and San Bernardino County Flood Control District (SBCFCD). Through recent operations and data collection afforded by the initial improvement project, IEUA and CBWM have identified several possible opportunities to further enhance and optimize the use of this facility for additional groundwater recharge.

The Day Creek Basin Complex is considered a "flow" through basin built along the Day Creek. Because the Basin system has inlets and outlets from and two a Water of the United States, the basins are considered jurisdictional traditional navigable waters. Construction of structures below the level of the basin spillway to the west could be subject to permit requirements from the U.S. Army Corps of Engineers (Corps), California Department of Fish and Wildlife (CDFW), and the State Regional Water Quality Control Board (RWQCB).

1.2 Vegetation / Habitat Removal Information

The bottom of the basins are excavated and engineered fill floors. The floor of the Upper Sub-basin is predominantly characterized by non-native grass and herbaceous weedy species except along a low-flow channel that traverses the center of the basin. This channel is characterized by ponding with cattails (*Typha* sp.) and mulefat (*Baccharis salicifolia*) beginning to become established. With the exception of these wetter areas, species common in the ruderal adjacent areas include stork's bill (*Erodium cicutarium*), brome grasses (*Bromus* spp.),

mustard (*Hirschfeldia incana*), common mallow (*Malva neglecta*), bull thistle (*Cirsium vulgare*), common sunflower (*Helianthus annuus*), spiny sowthistle (*Sonchus asper*), perennial sowthistle (*Sonchus arvensis*), and western ragweed (*Ambrosia acanthicarpa*).

The walls of both sub basins, the walls of the cells, and the areas in between the basins are characterized by well-developed coastal sage scrub (CSS). This vegetation community is found in diverse habitat mosaics and is dominated by a suite of shrub species with low moisture content. Shrub cover is dense, continuous and steep, xeric slopes with quickly draining soils. The CSS vegetation community occurring in the Lower Day Basin is characterized by buckwheat (*Eriogonum fasciculatum*), California sage (*Artemisia californica*), black sage (*Salvia mellifera*), deerweed (*Lotus scoparius*), brittlebrush (*Encelia farinosa*), white sage (*Salvia alba*), yerba santa (*Eriodictyon trichocalyx* va. *trichocalyx*), and scale broom (*Lepidospartum squamatum*).

Figure 1 – Regional Location Map

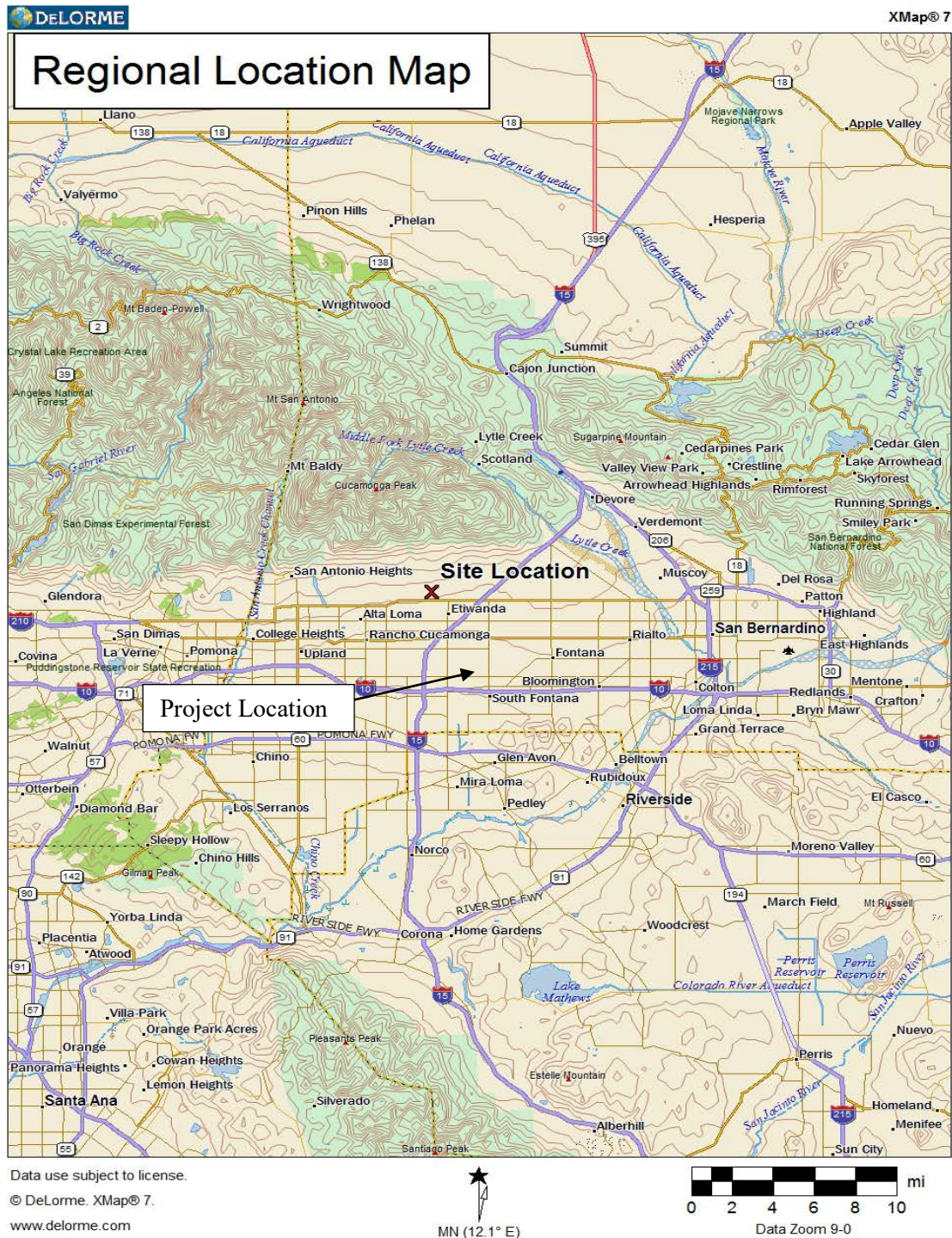
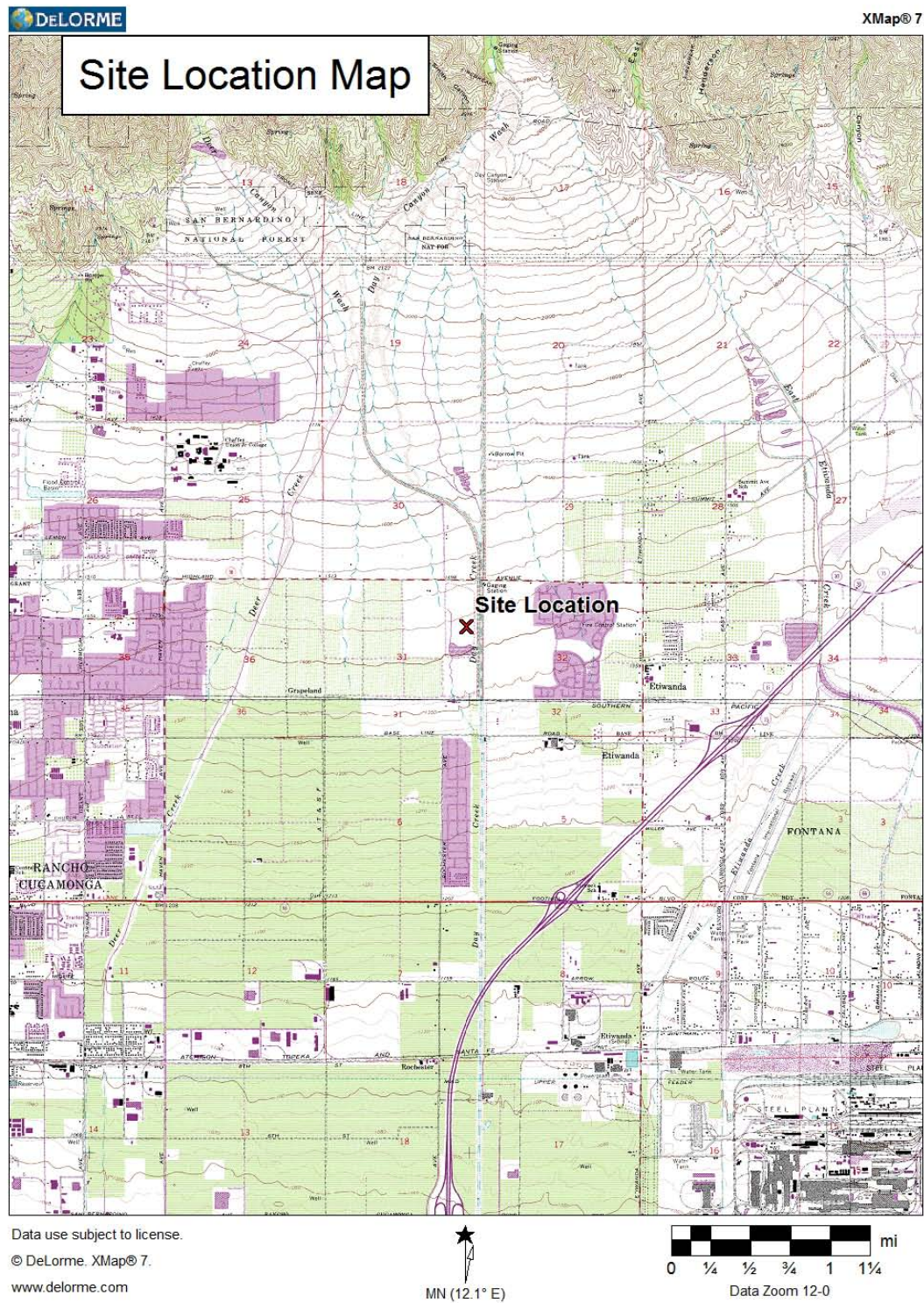


Figure 2 – Site Location Map



2. Introduction

The Inland Empire Utilities Agency (IEUA) was formed by popular vote of its residents in June of 1950, for the purpose of importing supplemental water supplies from Metropolitan Water District of Southern California (MWD). IEUA, as a member of the MWD, distributes imported water, and provides municipal and industrial wastewater collection and treatment services and other related utility services for the mid-portion of the Upper Santa Ana River watershed in the southwestern-most portion of San Bernardino County, California. In its wastewater management role, the IEUA serves the cities of Chino, Chino Hills, Fontana, Montclair, Ontario and Upland, and the Cucamonga Valley Water District (which generally encompasses the City of Rancho Cucamonga as well as some unincorporated areas of San Bernardino County). Approximately 800,000 people are currently estimated to reside in the IEUA service area, which encompasses approximately 242 square miles.

The proposed project includes the expansion of delivery of recycled water produced by IEUA Water Reclamation Facilities (WRFs) to the existing Lower Day Basin located just south of the Interstate 215 in the City of Rancho Cucamonga. The site is mapped on USGS 7.5 minute Quads, "Cucamonga Peak" in Section 32 of T1N, R6W SBBM, San Bernardino County, California. The purpose of the proposed basin modifications is to increase the Agency's groundwater recharge capacity as part of a comprehensive effort to reverse the groundwater overdraft condition in the Chino Basin and to support the groundwater demands (potable water supply) of the population within the CBWCD's service area.

The Basin is owned by the San Bernardino County Flood Control District (SBCFCD). It was originally constructed for flood control mitigation to attenuate peak storm flows, but are now operated as multipurpose basins under a Four Party Agreement between SBCFCD, IEUA, CBWM, and the Chino Basin Water Conservation District (stakeholders). The stakeholders previously invested in improvements of the Basins to allow them to be used for groundwater recharge. They were modified to allow the capture and recharge of stormwater and supplemental water (supplemental water consists of imported water and recycled water) in a conjunctive use program.

IEUA presently performs the actual operation and maintenance of the Basins for recharge purposes in cooperation with CBWM and SBCFCD. Through recent operations and data collection afforded by the initial improvement project, IEUA and CBWM have identified several possible opportunities to further enhance and optimize the use of this facility for additional groundwater recharge. In order to fully utilize the recharge potential of the Basins, improvements should be implemented to have the ability to deliver RW and/or additional stormwater in the Lower Day Basin.

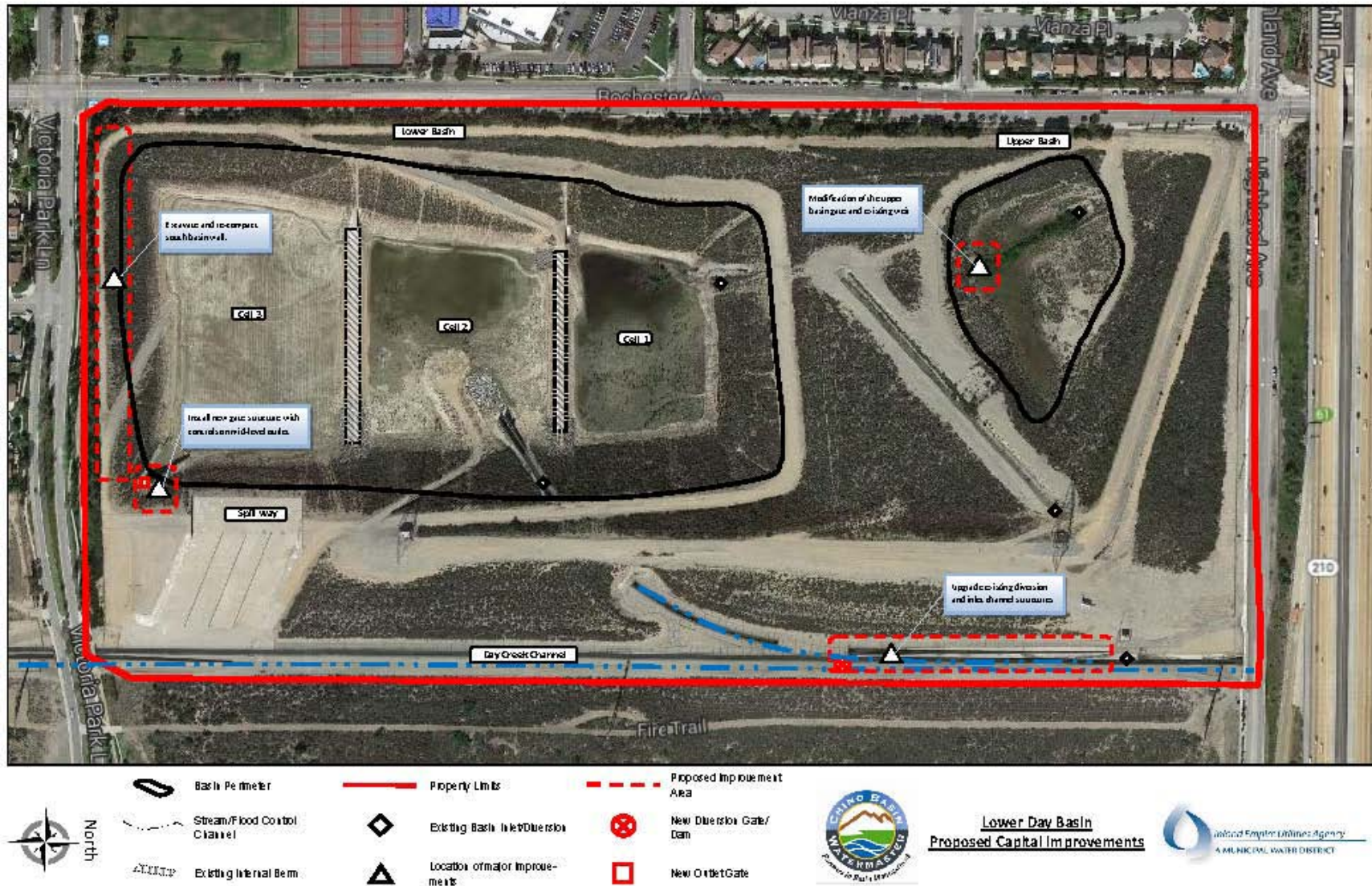
The new Lower Day Basin will be able to store and recharge an additional 789 acre-ft./yr of storm water in addition to the existing baseline storm water recharge of 395 acre-ft./yr. In order to accomplish this objective, the following criteria were considered when choosing the best project components that would meet the objective with the least impacts to the environment.

- Increasing capture and recharge of RW and stormwater
- Maximizing infiltration rates
- Minimizing environmental impacts

- Reducing construction costs
- Enhancing operational flexibility

The Purpose and intended use of this Biological Resource Study is to evaluate the onsite biological resources and determine the potential for occurrence of common and special-status species, their habitat, and other regulated habitats such as Waters of the United States including Wetlands, Waters of the State, and Streambed/Riparian resources within Project's APE.

Figure 3 – Site Aerial Map



3. Regulatory Setting and Study Methods

This chapter presents the methods used to identify biological resources on the project site. In addition, this chapter provides an overview of the various regulatory requirements, definitions of terms used, background review conducted, field surveys, post-field data processing, personnel and survey dates, and coordination efforts with agency and professional contacts. It also summarizes the study limitations and how they may influence the results presented in this report.

Before conducting field surveys, existing background information was reviewed to identify the locations of jurisdictional waters, special-status plant and wildlife species, special-status plant communities, natural lands, and federally designated or proposed critical habitat units recorded or potentially occurring in the proposed infrastructure improvement areas. This section summarizes the background information that was reviewed.

3.1 Regulatory Requirements

3.1.1 Federal

3.1.1.1 Clean Water Act

The purpose of the Clean Water Act (CWA) (1977) is to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” Section 404 of the CWA prohibits the discharge of dredged or fill material into “waters of the United States” without a permit from the United States Army Corps of Engineers (USACE). The definition of waters of the United States includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas “that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 Code of Federal Regulations [CFR] 328.3 7b). The U.S. Environmental Protection Agency (EPA) also has authority over wetlands and may override a USACE permit. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; in California this certification or waiver is issued by the RWQCB.

3.1.1.2 Section 10 of the Rivers and Harbors Act

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the USACE for the construction of any structure in or over any navigable waters of the United States.

3.1.1.3 Endangered Species Act

The Federal Endangered Species Act (FESA) (1973) protects plants and wildlife that are listed by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) as endangered or threatened. Section 9 of FESA (USA) prohibits the taking of endangered wildlife, where taking is defined as any effort to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct” (50 CFR 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying

any endangered plant on non-federal land in knowing violation of state law (16 United States Code [USC] 1538). Under Section 7 of FESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect an endangered species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity, provided the action will not jeopardize the continued existence of the species. FESA specifies that the USFWS designate habitat for a species at the time of its listing in which are found the physical or biological features “essential to the conservation of the species,” or which may require “special Management consideration or protection...” (16 USC § 1533[a][3].2; 16 USC § 1532[a]). This designated Critical Habitat is then afforded the same protection under the FESA as individuals of the species itself, requiring issuance of an Incidental Take Permit prior to any activity that results in “the destruction or adverse modification of habitat determined to be critical” (16 USC § 1536[a][2]).

Interagency Consultation and Biological Assessments

Section 7 of ESA provides a means for authorizing the “take” of threatened or endangered species by federal agencies, and applies to actions that are conducted, permitted, or funded by a federal agency. The statute requires federal agencies to consult with the USFWS or NMFS, as appropriate, to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species. If a proposed project “may affect” a listed species or destroy or modify critical habitat, the lead agency is required to prepare a biological assessment evaluating the nature and severity of the potential effect.

Habitat Conservation Plans

Section 10 of the federal ESA requires the acquisition of an Incidental Take Permit (ITP) from the USFWS by non-federal landowners for activities that might incidentally harm (or “take”) endangered or threatened wildlife on their land. To obtain a permit, an applicant must develop a Habitat Conservation Plan that is designed to offset any harmful impacts the proposed activity might have on the species.

3.1.1.4 Fish and Wildlife Coordination Act

The Fish and Wildlife Coordination Act (16 U.S.C. Sections 661 to 667e et seq.) applies to any federal project where any body of water is impounded, diverted, deepened, or otherwise modified. Project proponents are required to consult with the USFWS and the appropriate state wildlife agency.

3.1.1.5 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. Section 1801 et seq.) requires all federal agencies to consult with the NMFS on all actions or proposed actions (permitted, funded, or undertaken by the agency) that may adversely affect fish habitats. It also requires cooperation among NMFS, the councils, fishing participants, and federal and state agencies to protect, conserve, and enhance essential fish habitat, which is defined as those waters and substrates needed by fish for spawning, breeding, feeding, and growth to maturity.

3.1.1.6 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (The Eagle Act) (1940), amended in 1962, was originally implemented for the protection of bald eagles (*Haliaeetus leucocephalus*). In 1962, Congress amended the Eagle Act to cover golden eagles (*Aquila chrysaetos*), a move that was partially an attempt to strengthen protection of bald eagles, since the latter were often killed by people mistaking them for golden eagles. This act makes it illegal to import, export, take (molest or disturb), sell, purchase, or barter any bald eagle or golden eagle or part thereof. The golden eagle, however, is accorded somewhat lighter protection under the Eagle Act than that of the bald eagle.

3.1.1.7 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (1918) implements international treaties between the United States and other nations created to protect migratory birds, any of their parts, eggs, and nests from activities, such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code (CFGC).

3.1.1.8 Executive Orders (EO)

3.1.1.8.1 Invasive Species—Executive Order 13112 (1999)

Issued on February 3, 1999, promotes the prevention and introduction of invasive species and provides for their control and minimizes the economic, ecological, and human health impacts that invasive species cause through the creation of the Invasive Species Council and Invasive Species Management Plan.

3.1.1.8.2 Protection of Wetlands—Executive Order 11990 (1977)

Issued on May 24, 1977, helps avoid the long-term and short-term adverse impacts associated with destroying or modifying wetlands and avoiding direct or indirect support of new construction in wetlands when there is a practicable alternative.

3.1.1.8.3 Migratory Bird—EO 13186 (2001)

Issued on January 10, 2001, promotes the conservation of migratory birds and their habitats and directs federal agencies to implement the Migratory Bird Treaty Act. Protection and Enhancement of Environmental Quality—EO 11514 (1970a), issued on March 5, 1970, supports the purpose and policies of the National Environmental Policy Act (NEPA) and directs federal agencies to take measures to meet national environmental goals.

Migratory Bird Treaty Reform Act: The Migratory Bird Treaty Reform Act (Division E, Title I, Section 143 of the Consolidated Appropriations Act, 2005, PL 108–447) amends the Migratory Bird Treaty Act (16 U.S.C. Sections 703 to 712) such that nonnative birds or birds

that have been introduced by humans to the United States or its territories are excluded from protection under the Act. It defines a native migratory bird as a species present in the United States and its territories as a result of natural biological or ecological processes. This list excluded two additional species commonly observed in the United States, the rock pigeon (*Columba livia*) and domestic goose (*Anser domesticus*).

3.1.2 State

3.1.2.1 California Fish and Game Code (CFGF)

3.1.2.1.1 Sections 1600 through 1606 of the CFGF

This section requires that a Streambed Alteration Application be submitted to the CDFW for “any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.” The CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by the Department and the applicant is the Streambed Alteration Agreement. Often, projects that require a Streambed Alteration Agreement also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the Streambed Alteration Agreement may overlap.

3.1.2.1.2 California Endangered Species Act

The California Endangered Species Act (CESA) (Sections 2050 to 2085) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats by protecting “all native species of fishes, amphibians, reptiles, birds, mammals, invertebrates, and plants, and their habitats, threatened with extinction and those experiencing a significant decline which, if not halted, would lead to a threatened or endangered designation.” Animal species are listed by the CDFW as threatened or endangered, and plants are listed as rare, threatened, or endangered. However, only those plant species listed as threatened or endangered receive protection under the California ESA.

CESA mandates that state agencies do not approve a project that would jeopardize the continued existence of these species if reasonable and prudent alternatives are available that would avoid a jeopardy finding. There are no state agency consultation procedures under the California ESA. For projects that would affect a species that is federally and state listed, compliance with ESA satisfies the California ESA if the California Department of Fish and Wildlife (CDFW) determines that the federal incidental take authorization is consistent with the California ESA under Section 2080.1. For projects that would result in take of a species that is state listed only, the project sponsor must apply for a take permit, in accordance with Section 2081(b).

3.1.2.1.3 Fully Protected Species

Four sections of the California Fish and Game Code (CFGF) list 37 fully protected species (CFGF Sections 3511, 4700, 5050, and 5515). These sections prohibit take or possession “at any time” of the species listed, with few exceptions, and state that “no provision of this code or any other law will be construed to authorize the issuance of permits or licenses to ‘take’ the species,” and that no previously issued permits or licenses for take of the species “shall have any force or effect” for authorizing take or possession.

3.1.2.1.4 Bird Nesting Protections

Bird nesting protections (Sections 3503, 3503.5, 3511, and 3513) in the CFGC include the following:

- Section 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird.
- Section 3503.5 prohibits the take, possession, or needless destruction of any nests, eggs, or birds in the orders Falconiformes (new world vultures, hawks, eagles, ospreys, and falcons, among others), or Strigiformes (owls).
- Section 3511 prohibits the take or possession of fully protected birds.
- Section 3513 prohibits the take or possession of any migratory nongame bird or part thereof, as designated in the MBTA. To avoid violation of the take provisions, it is generally required that project-related disturbance at active nesting territories be reduced or eliminated during the nesting cycle.

3.1.2.1.5 Native Plant Protection Act

The Native Plant Protect Act (NPPA) (1977) (CFGC Sections 1900-1913) was created with the intent to “preserve, protect, and enhance rare and endangered plants in this State.” The NPPA is administered by CDFW. The Fish and Game Commission has the authority to designate native plants as endangered or rare and to protect endangered and rare plants from take. CESA (CFGC 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the Fish and Game Code.

3.1.2.1.6 Natural Communities Conservation Planning Act

This act was enacted to encourage broad-based planning to provide for effective protection and conservation of the state’s wildlife resources while continuing to allow appropriate development and growth (CFGC Sections 2800 to 2835). Natural Community Conservation Plans (NCCP) may be implemented, which identify measures necessary to conserve and manage natural biological diversity within the planning area, while allowing compatible and appropriate economic development, growth, and other human uses.

3.1.2.1.7 Senate Concurrent Resolution No. 17 – Oak Woodlands

State Senate Concurrent Resolution No. 17 is legislation that requests state agencies having land use planning duties and responsibilities to assess and determine the effects of their decisions or actions within any oak woodlands containing Blue, Engleman, Valley, or Coast Live Oak. The measure requests those state agencies to preserve and protect native oak woodlands to the maximum extent feasible or provide replacement plantings where designated oak species are removed from oak woodlands. The mitigation measures, as described above, will ensure that impacts to oak woodlands are less than significant.

3.1.3 Local

General, Specific, or Rural Community Plans or Municipal Codes for each local jurisdiction through which the Project passes were reviewed for regulations pertaining to biological resources. Most of the local jurisdictions have few regulations relating to biological resources due to the low-density population nature of the land. Local regulations are listed below:

3.1.3.1 San Bernardino

3.1.3.1.1 Adopted Ordinance 4011 (2007); Amended Ordinance 4067 (2009) Development Code 88.01.010

This Ordinance provides regulations and guidelines for the management of plant resources in the unincorporated areas of the County on property or combinations of property under private or public ownership. The intent is to:

- (a) Promote and sustain the health, vigor and productivity of plant life and aesthetic values within the County through appropriate management techniques.
- (b) Conserve the native plant life heritage for the benefit of all, including future generations.
- (c) Protect native trees and plants from indiscriminate removal and to regulate removal activity.
- (d) Provide a uniform standard for appropriate removal of native trees and plants in public and private places and streets to promote conservation of these valuable natural resources.
- (e) Protect and maintain water productivity and quality in local watersheds.
- (f) Preserve habitats for rare, endangered, or threatened plants and to protect animals with limited or specialized habitats.

3.2 Studies Required

Prior to beginning the field surveys, available information was reviewed from resource management plans and other relevant documents to determine locations and types of biological resources that have the potential to exist within and adjacent to the APE.

The 2015 California Natural Diversity Database (CDFW, 2015), U.S. Fish and Wildlife Service Quad lists and IPac (USFWS, 2015 Attached), California Native Plant Society Electronic Inventory of Rare and Endangered Plants of California, and National Wetlands Inventory (USFWS, 2015) were queried for occurrence of special status species and habitats within the San Joaquin Rail Corridor. CDFW Bios database was also queried for general habitat types and potential features subject to environmental regulations (e.g., Clean Water Act [CWA], Porter-Cologne Water Quality Control Act [Porter-Cologne] and California Department of Fish and Wildlife's Fish and Game Code 1600 et seq. jurisdictional features) that may exist within or adjacent to the APE. Areas potentially suspected of being special aquatic resources were documented during field surveys

In addition to the aforementioned literature reviews, field surveys of the APE were performed to assess general and dominant vegetation types, habitat types, and the potential for special status wildlife and plant species to occur within the project area. Community types were based on observed dominant vegetation composition and density. Vegetation classifications of plant communities in the APE were derived from the criteria and definitions of Holland (1986). Follow-on focused protocol surveys for coastal California gnatcatcher (*Polioptila californica californica*), burrowing owl (*Athene cunicularia*), and San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*) were conducted.

3.3 Personnel and Survey Dates

General Biological, Focused Burrowing Owl Survey, and focused coastal California Gnatcatcher Surveys were conducted between April 9, and June 5, 2015 by Lisa Patterson. Focused San Bernardino Kangaroo Rat surveys were conducted June 7-12, 2015 by Shay Lawrey.

3.4 Habitat Assessment

The APE was also assessed in the field for the potential to support special-status plant and animal species based on habitat suitability comparisons with reported occupied habitats. The following potential for occurrences definitions were utilized to assess the Project-related effects to species with the Project's footprint. Potential for occurrence designations were derived from Caltrans' standard environmental reference (Caltrans 2005):

Absent [A] - Species distribution is restricted by substantive habitat requirements, which do not occur or are negligible within the Project's physical disturbance footprint, and no further survey or study is necessary to determine the likely presence or absence of this species.

Habitat Present [HP] - Species distribution is restricted by substantive habitat requirements, which occur within the Project's physical disturbance footprint, and further survey or study may be necessary to determine the likely presence or absence of this species.

Present [P] - Species or species sign were observed within the Project's physical disturbance footprint.

Critical Habitat [CH] - The Project's footprint is located within a designated critical habitat unit.

Focused Surveys for Burrowing Owl, San Bernardino Kangaroo Rat, and Coastal California Gnatcatcher were conducted.

3.5 Limitations That May Influence Results

Surveys were conducted during the appropriate time of year and conditions to detect any sensitive or listed species within the APE. Typically, biological surveys are valid for one year. Estimations and assumptions regarding the potential for jurisdictional waters and special-status species were based on assessments from previous projects, and existing IEUA permits and resource information.

4. Environmental Setting

The general Rancho Cucamonga area lies within the northern/northwestern portion of the Peninsular Geomorphic Province of southern California, which is characterized by northwest-southwest-trending faults, folds, and mountain ranges. The Site is situated on a broad alluvial fan, which extends from the southern flank of the San Gabriel Mountains and dips gradually southward to the confluence of San Antonio Channel, Cucamonga Channel/Mill Creek, and the Santa Ana River at the Prado Dam Flood Control Basin in Riverside County. Elevation ranges from 1,150 feet above mean sea level (amsl) in the northwest portion to 650 feet amsl in the south-central portion of the City (USGS 1978).

Climate

The proposed Project is located in the non-desert portion of San Bernardino County within the South Coast Air Basin (Basin). The regional climate within the Basin is considered semiarid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and year-round moderate temperatures and low humidity. The average maximum temperature within the local vicinity is 90.9°F (Fahrenheit) in July while the average minimum temperature is reported at 40.5°F in December. Almost all rain falls from November through April and averages 21.64 inches per year. The area also experiences a typical daily wind pattern that is a daytime onshore sea breeze from the west and a nighttime land breeze. This regime is broken only by occasional winter storms and infrequent strong northeasterly Santa Ana winds from the mountains and deserts north of the Basin.

Geology

Recent (quaternary) alluvium underlies the entire valley. The western portion of the proposed Project area is underlain by young alluvial-fan deposits. The eastern portion is primarily underlain with young eolian (wind driven) deposits with small areas of young alluvial-fan deposits, artificial fill, and young alluvial-valley deposits.

Soils

The Site is located in a region that is made of the alluvial valley floors, fans, and terraces that cover broad areas of southwest San Bernardino County, extending eastward from Chino to the general vicinity of Yucaipa. The Soil Conservation Service Soil Survey of San Bernardino County, Southwestern Part (USDA 1980) identifies 4 soil types mapped for the City area include:

- Psammments and Fluyvents, Frequently Flooded (Ps) consists of sandy and gravelly material in intermittent streambeds of the Santa Ana River, Mill, Warm, and Cajon Creeks, large creeks and their major tributaries. During each flood, alluvium is freshly deposited and reworked. These areas have no value for farming and are mainly used as a source of sand and gravel for construction. Historically, vegetation was limited to scanty grasses and forbs and a few willows and cottonwood trees.
- The Soboba series consists of excessively drained, nearly level to moderately sloping soils formed on alluvial fans in granitic alluvium. These soils historically supported chamise, annual grasses, and forbs. These soils are rapidly permeable and are used mainly for irrigated citrus and dryfarmed seeded pasture.

- The Tujunga series consists of somewhat excessively drained, nearly level to moderately sloping soils that formed on alluvial fans in granitic alluvium. Tujunga soils are rapidly permeable. These soils historically supported thin strands of chamise, some big sagebrush, and annual grasses and forbs. These soils are used mainly for irrigated crops including citrus, grapes, small grains and potatoes. Tujunga loamy sand (TuB) is a gently sloping soil on broad alluvial fans. It is one of the predominant soils and is mapped throughout the approximate western half of the City. Tujunga gravelly loamy sand (TvC) is nearly level to moderately sloping soils occurring on long, broad, smooth alluvial fans.
- The Hanford series consists of well-drained, nearly level to strongly sloping soils that formed in recent granitic alluvium on valley floors and alluvial fans. These soils are moderately rapidly permeable. Historically, vegetation was mainly annual grasses and forbs. These soils are used regionally for irrigated crops such as citrus, alfalfa, grapes, pasture plants, and small grains. Some areas are used for home sites. Hanford coarse sandy loam (HaC) occupies alluvial fans and is mapped near the western edge of the City and in the vicinity of Ontario International Airport. Hanford sandy loam (HbA) is on valley floors and toe slopes of alluvial fans. Small areas along the westernmost portion of the City are mapped as HbA.

4.1 Description of the Existing Biological and Physical Conditions

Lower Day Basin was graded out of a predominantly upland area that had dry channels traversing the site. The bottoms of the basin cells are excavated and engineered fill floors, constructed more than 50 feet below the original ground surface. The sides of basin and basin cells consist of well-developed coastal sage scrub. Water enters the upper and lower basin by direct precipitation, urban runoff, and IEUA directing water into the basin for recharge. The central portion of the upper basin as well as Cell 1 of the Lower basin have developed wetland herbaceous vegetation as well as riparian shrubs and trees. These riparian trees occur sporadically and in small clump in the sub-basin bottom.

4.1.1 Vegetation Communities

4.1.1.1 Urban/ Disturbed

This community occurs at the top and sides of the sub-basins 1-4 slopes and in disturbed areas. The community is characterized by storksbill (*Erodium cicutarium*), foxtail chess (*Bromus madritensis*), wild oats (*Avena barbata*), ripgut brome grass (*Bromus diandris*), and foxtail fescue (*Vulpia myuros*). Other species occurring in this community are short-pod mustard (*Brassica geniculata*), barley (*Hordium vulgare*), *Amsinkia* sp., and star thistle (*Centaurea melitensis*).

Due to the chronic disturbances as well as flood control maintenance activities, this area does not support a diverse fauna. The most common animal species observed on the site were dogs (*Canis lupus familiaris*) and beachy ground squirrels (*Otospermophilus beecheyi*). Other common species include western meadowlark (*Sturnella magna*), cottontail rabbits (*Sylvalegus audobonii*), and mourning doves (*Zenaida macroura*).

4.1.1.2 Wetlands in the Upper Basin and Cell 1 of the Lower Basin

Bulrush and cattails have the potential to be temporarily impacted within the Project's APE. They are typically dominated by erect, rooted, herbaceous hydrophytic plant species adapted to growing in conditions of prolonged inundation. Common plant species present in this wetland type include cattails (*Typha* spp.) and bullrush (*Scirpus* sp.). The wetlands are freshwater wetlands that support ponded or saturated soil conditions during winter and spring and are dry through the summer and fall until the first substantial rainfall. The vegetation is composed of wetland generalists, such as hyssop loosestrife (*Lythrum hyssopifolia*), cocklebur (*Xanthium* spp.), and Italian ryegrass (*Lolium multiflorum*) that typically occur in frequently disturbed sites, such as along streams.

Riparian/Streambed in the north-central portion of sub-basin 5. This channel is characterized as a highly disturbed drainage ditch that has spotty areas of mulefat (bacchari.) and willow trees (*Salix* sp.), and then other patches of non-native grasses and little or no vegetation.

Well-developed coastal sage scrub occurs on wall of sub-basin 5 and in patchy distribution on the walls of sub-basin 4. This vegetation community found in diverse habitat mosaics and is dominated by a suite of shrub species with low moisture content. Annual herbs, including weedy grasses and forbs and native wildflowers, are common in openings and disturbed areas. Dominant plant species found occurring within the coastal sage scrub on site include California sagebrush, black sage, ceanothus (*Ceanothus* sp.), brittlebush, California buckwheat, Palmer's goldenbush (*Ericameria palmeri*), snapdragon penstemon (*Keckiella breviflora*), and scalebroom (*Lepidospartum squamatum*).

Wildlife species common in this habitat type on site include western fence lizard (*Sceloporus occidentalis*), common side-blotched lizard, Anna's hummingbird, western scrub-jay (*Aphelocoma californica*), California towhee (*Melospiza crissalis*), Audubon's cottontail, and coyote (*Canis latrans*).

4.1.2 Animals

Due to the chronic disturbances, surrounding industrial uses, major arterial and highway road features, and adjacent construction, this area does not support a diverse fauna. The most common species observed on the site were dogs (*Canis lupus familiaris*) and beachy ground squirrels (*Otospermophilus beecheyi*). Other common species include western meadowlark (*Sturnella magna*), cottontail rabbits (*Sylvagus audubonii*), and mourning doves (*Zenaidura macroura*). A complete list of species observed on site is included as Appendix A

4.1.3 Disturbances

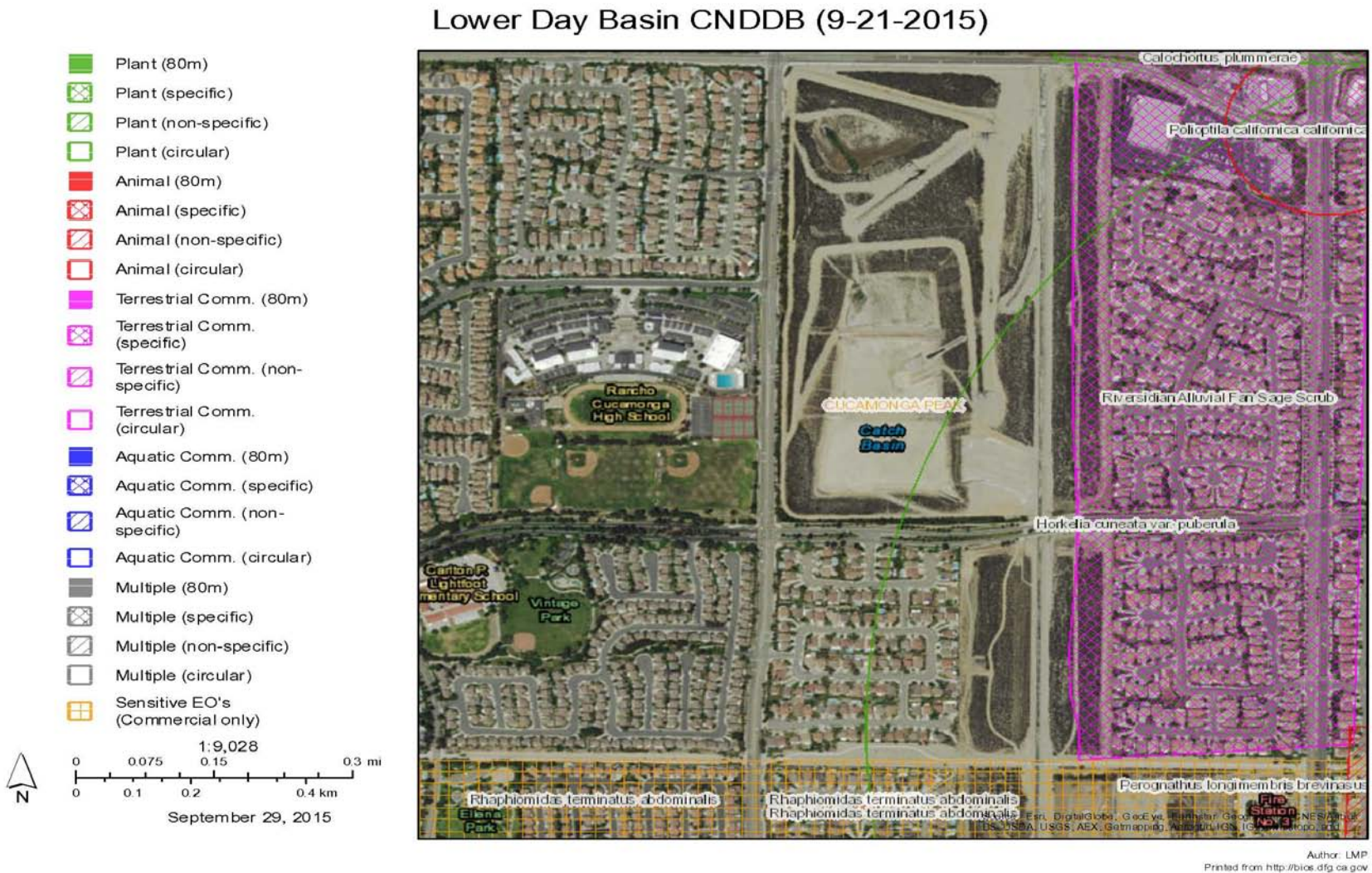
Typically the level of disturbance with the Project APE is severe. The majority of the adjacent areas along the proposed facilities pipeline alignment ranges from native CSS habitat to completely disturbed asphalt roads.

4.1.4 Jurisdictional Determination

The result of the jurisdictional determination is that Lower Day Basin is subject to regulatory jurisdiction by the US Army Corps of Engineers under Section 404 of the Clean Water Act; the State Water Quality Control Board under Section 401 of the Clean Water Act, and California Department of Fish and Wildlife under Section 1600 of the Fish and Game Code.

The limits of the jurisdiction vary between the agencies. The limit of jurisdiction for Sections 404 and 401 of the Clean Water Act extend to the spillway height for the entire basin complex. The limits of jurisdiction for Section 1600 of the Fish and Game Code is the top of bank for each sub-basin and the cells.

Figure 4 – CNDDDB Occurrences



4.2 Potentially Occurring Listed or Protected Species

4.2.1 Burrowing Owl Habitat Assessment and Surveys

Burrowing owl (*Athene cunicularia*) surveys were conducted in the APE within suitable habitat. The 2015 surveys consisted of a habitat assessment and comprehensive burrow surveys.

Burrowing owl is federally protected under the MBTA and by California Fish and Game Code Sections 3503, 3503.5, and 3800. In addition, the burrowing owl is a State Species of Special Concern and is covered under both the WR-MSHCP and CV-MSHCP. The California Fish and Game Commission rejected a proposal for State listing because of relatively high population levels in some parts of the State. However, because the species has declined in other parts of California, and it is particularly vulnerable to incidental take due to its unique utilization of burrows, the burrowing owl has been the focus of specific CDFW management recommendations since the 1990s.

Burrowing owls inhabit open country in North and South America. These owls are known to occupy and modify former ground squirrel burrows in grasslands, agricultural fields, rangelands, and other open habitat types including those in railroad rights-of-ways, margins of highways, golf courses, and airports. They often utilize structures such as earthen berms, concrete culverts, pipes, and concrete, asphalt, rock, or wood debris piles. Burrowing owls are active year-round and forage both diurnally and nocturnally for insects, scorpions, amphibians, reptiles, birds, and small mammals (Poulin et al. 2011).

Focused surveys for burrowing owls were conducted during the breeding season in 2015. The result of this survey is that no burrowing owls, burrowing owl sign, or evidence of historic use by burrowing owls was observed within the project site.

4.2.2 Coastal California Gnatcatcher Assessment and Surveys

Focused coastal California gnatcatcher surveys were conducted by permitted biologists on all potentially suitable habitat within the Lower Day Basin. The result of this focused protocol survey was this species is absent from this site. The focused survey report is attached as Appendix D.

4.2.3 Small Mammal Habitat Assessment and Surveys

Habitat assessments for San Bernardino kangaroo rat (*Dipodomys merriami parvus*)(SBKR) was conducted in 2015 prior to conducting small mammal trapping within the APE. Examination of aerial images to locate suitable habitat was followed up by ground visits to many areas to identify the most promising trapping sites for the target species. Protocol surveys consisted of five consecutive nights of trapping. USFWS protocol states that trapping may be terminated if the target species is captured. Each trap was opened and baited at dusk, checked near midnight, and checked and closed at dawn. All animals were identified and released unharmed where they were captured.

Lower Day Creek Basins are not mapped within SBKR critical habitat. In fact, the USFWS excluded these flood control facilities from critical habitat because they understood that these basin systems would be maintained annually for flood control purposes and would therefore not retain habitat value for SBKR that they may have held in the past. Although the Lower Day Creek Basins are located within the historic range of the SBKR, none have been found here in

over a decade. The bottom of the basins are wet most of the year they do not possess the soil characteristics or vegetation types suitable for SBKR. The basin floors have soils that are fine grained, moist and compacted which do not typically support SBKR. No small mammal burrows were found on the floors and the vegetation here is riparian with a heavy non-native grass component. A focused survey was conducted and the result of that survey is this species is absent from the site. The focused survey report is attached as Appendix E.

4.3 Other Species with Potential to Occur within the Project APE

California Department of Fish and Wildlife's CNDDDB for the Cucamonga Peak USGS 7.5 Minute Quadrangles, and surrounding areas was searched as well as the U.S. Fish and Wildlife Service's Official List of Threatened and Endangered Species with the potential to occur on the Cucamonga Peak USGS 7.5 Minute Quadrangles, and the U.S. Fish and Wildlife Service's IPac Results. The following is a discussion of the species listed by the databases as occurring within the vicinity of the Project. Note the Species on the U.S. Fish and Wildlife Service's list are in bolded text.

TABLE 1: SPECIAL STATUS PLANT AND ANIMAL SPECIES KNOWN TO OCCUR OR POTENTIALLY OCCUR WITHIN THE PROJECT APE

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
<i>Abronia villosa</i> var. <i>aurita</i> Chaparral sand-verbena	N / N	Grows in sandy, bare areas of chaparral and coastal sage scrub.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
<i>Accipiter cooperi</i> (nesting3) Cooper's hawk	N/N	Oak and riparian woodlands, windrows, open fields. Known to use urban areas, occupying trees among residential and commercial uses.	Suitable foraging habitat occurs within the APE, Observed on site during field surveys.
<i>Accipiter striatus</i> (nesting) sharp-shinned hawk	N/N	Variety of residential, chaparral, grassland, sage scrub, crop land, riparian, and oak woodland, windrows, open fields.	Suitable foraging habitat, however uncommon in the area. Probability of occurrence is low to moderate.
<i>Agelaius tricolor</i> <i>Tricolored blackbird</i>	N/N	Marshes and grasslands. Breeding colonies requires nearby water, nesting substrate, and open range foraging habitat of natural grassland, woodland, or agricultural cropland.	Suitable nesting habitat occurs at the west end of sub-basin 5. Redwing blackbird observed, however this species was not observed during any of the field surveys. Therefore, probability of occurrence is very low.
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	N / N	Inhabits steep rocky hillsides with grass and forb patches in coastal sage scrub and sparse chaparral.	Suitable habitat for this species occurs on the site. Species has been observed on this site in the past. Therefore probability of occurrence is high.

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
<i>Anaxyrus californicus</i> Arroyo Toad	E/N	Anaxyrus californicus prefers sandy or cobbly washes with swift currents and associated upland and riparian habitats, in Southern California and Baja California. An arroyo is also called a wash; it is a dry creek or stream bed. It fills and flows after sufficient rain, but only temporarily during specific seasons. The arroyo toad inhabits these areas alongside rivers with shallow pebble-like rocks near sandy terrains.	No suitable habitat for this species occurs within the APE. Therefore probability of occurrence is zero.
<i>Antrozous pallidus</i> pallid bat	N/N	Oak and grassland ecotones. Prefers foraging in the open Roosts in attics or rock cracks; in the open, near foliage at night..	Marginally suitable habitat occurs adjacent to the APE. Potential for occurrence within the APE is low.
<i>Aquila chrysaetos</i> golden eagle	N / DFG fully protected species	Nests in cliff-walled canyons or large trees and nests and winters in rolling foothills mountain areas, sage-juniper flats and desert.	There is no suitable nesting substrate within the project APE, however there is potential foraging within the APE
<i>Ardea alba</i> [<i>Casmerodius albus</i>] (rookery) great egret	N/N	Wet areas, fields, margins of open water.	This species was observed within sub-basin 5.
<i>Ardea herodias</i> (rookery) great blue heron	N/N	Wet areas, fields, margins of open water.	This species was observed within sub-basin 5.
<i>Asio flammeus</i> short-eared owl	N / N	Nests in riparian bottomlands of tall willows and cotton- woods and in belts of live oak paralleling stream courses. Requires adjacent open lands for foraging and the presence of old nests of crows, hawks, or magpies for nests.	No suitable habitat occurs within the project APE, therefore, occurrence potential is low.
<i>Aspidoscelis tigris stejnegeri</i> [<i>Cnemidophorus tigris multiscutatus</i>] coastal (western) whiptail	N/N	Open, often rocky areas with little vegetation or sunny microhabitats within shrub or grassland associations	Limited to no suitable habitat. Probability of this species occurring within the APE is low..

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
<i>Astragalus brauntonii</i> Braunton's Milk-vetch	E/N	<i>Astragalus brauntonii</i> is a plant of the coastal prairie grasslands, coastal sage scrub, and chaparral plant communities of the region. It is often found growing in disturbed areas, especially in carbonate soils areas.[The 16 known remaining populations are found in the southwestern Transverse Ranges (eastern Santa Monica Mountains, east end Simi Hills, south base San Gabriel Mountains), northern Peninsular Ranges (northwest side Santa Ana Mountains) — within Los Angeles, Orange, and Ventura Counties. The site is outside the known range of this species and there are no suitable soils within the APE. Therefore the probability occurrence is zero.
<i>Athene cunicularia</i> burrowing owl	N/N	Subterranean nester, dependent upon burrowing animals such as ground squirrels and desert tortoise for burrow sites. Inhabits open, dry annual or perennial grasslands as well as deserts and scrublands characterized by low-growing vegetation. Shortgrass prairies, grasslands lowland scrub, agricultural lands, coastal dunes, desert floors, and some artificial open areas. Uses abandoned ground squirrel burrows and artificial structures such as berms, culverts, and underpasses.	Surveys for this species have been on going in this basin since 2000. None have been observed. Therefore this species is considered absent from the site.
<i>Atriplex coulteri</i> Coulter's saltbush	N / N	Grows on ocean bluffs, dunes and ridgetops, as well as in alkaline low places in coastal scrub, valley and foothill grassland between 10 and 440 meters.	The site is extremely marginal habit for this species. Due to the highly disturbed nature of the site, occurrence potential for this species is very low.
<i>Baeolophus inornatus</i> Oak Titmouse	N/N	It prefers open woodlands of warm, dry oak and oak-pine at low to mid-elevations but can also be found in forests as long as adequate oak trees are present.	No suitable habitat for this species occurs within the APE. Therefore probability of occurrence is zero.
<i>Buteo regalis</i> (wintering) ferruginous hawk	N/N	Grasslands and other open terrain of the plains and foothills. Wintering species. Primarily open fields with low vegetation.	Moderate. Suitable foraging, limited nesting habitat. Expected occasionally. Observed.
<i>Buteo swainsoni</i> Swainson's Hawk	N/N	Grasslands and other open terrain.	Low. Potential for foraging. None for nesting. Expected only rarely.
California Walnut Woodland	N / N		This habitat does not occur on the site.
<i>Calochortus weedii</i> var. <i>intermedius</i> intermediate mariposa lily	N / N	Grows on dry, rocky open slopes and rock outcrops between 120-850meters in coastal scrub, chaparral, valley and foothill grassland.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
<i>Carduelis lawrencei</i> Lawrence's Goldfinch	N/N	The typical nesting habitat is dry and open woods that are near both brushy areas and fields of tall annual weeds, usually within 0.5 mi (0.80 km) of a small body of water. It may nest in other habitats, including rural residential areas, but not in deserts or dense forests. Outside the nesting season it occurs in many open habitats including deserts, suburbs, and city parks	This species is not likely to occur during nesting season, however may utilize the area during migration or in winter. Probability of occurrence within the APE is low to moderate.
<i>Carpodacus cassinii</i> Cassin's Finch	N/N	Their breeding habitat is coniferous forest in mountains of western North America as far south as northern New Mexico and Arizona; also Southern California near Baja California. They nest in large conifers. They move to lower elevations in winter.	This species is not likely to occur during nesting season, however may utilize the area during migration or in winter. Probability of occurrence within the APE is low to moderate.
<i>Calypte costae</i> Costa's Hummingbird	N/N	Arid brushy deserts and any nearby gardens of the Southwestern United States and the Baja California Peninsula of Mexico.	This species has been observed within the project APE.
<i>Catostomus santaanae</i> Santa Ana sucker	T / SC	This species is typically found in small to medium sized streams with width less than 7 meters and depths of a few centimeters to over a meter. Suckers prefer clear water but can tolerate seasonal turbidity and severe periodic flooding. Adults prefer gravel and cobble substrates, but may tolerate sand. Juveniles may prefer sandy substrates. They appear intolerant of highly polluted or highly modified streams. It is endemic to Los Angeles basin south coastal streams.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
<i>Chaetodipus [Perognathus] fallax fallax</i> northwestern San Diego pocket mouse	None/None	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral communities Moderately gravelly and rocky substrates, disturbed grassland and open sage scrub vegetation with sandy-loam to loam soils.	There is suitable habitat for this species within the APE. This species was observed on site during the focused SBKR surveys.
<i>Charadrius montanus</i> mountain plover	N/N	Dry upland prairies and plains, semi-desert, bare dirt fields.	Limited suitable foraging habitat. Probability of occurrence within the APE is very low.
<i>Circus cyaneus</i> (nesting) northern harrier	N/N	Grasslands and other open terrain. Soars over open fields, low perches.	Limited suitable foraging habitat. Probability of occurrence within the APE is very low.
<i>Clemmys marmorata pallida</i> southwestern pond turtle	SC / SC	This species inhabits permanent or nearly permanent bodies of water in many habitat types below 6000 ft elevation. Requires basking sites such as partially submerged logs, vegetation mats, or open mud banks and suitable nesting sites.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
<i>Cnemidophorus hyperythrus</i> orange-throated whiptail	N / SC	Inhabits washes and other sandy areas with patches of brush and rocks with sufficient perennial plants to sustain termite populations in low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats.	Only extremely marginal habitat for this species occurs on the site. Due to the highly disturbed nature of the site, occurrence potential for this species is low.
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	C / E	Nests in riparian thickets of willow and cottonwood with blackberry, nettles, or wild grape understory along the broad, lower flood-bottoms of larger river systems.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
<i>Contopus cooperi</i> <i>Olive-sided Flycatcher</i>	N/N	Breeding habitat is coniferous woods across Canada, Alaska and the northeastern and western United States, and other types of wooded area in California. Olive-sided flycatchers are abundant in early post fire landscapes that have burned at high severity. This species migrates to Central America and the Andes region of South America.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	N/N	A wide variety of habitats including woodlands and arid grasslands. Roosts in mines and caves.	Limited to no suitable habitat. Not expected to occur within the APE.
<i>Dendroica petechia brewsteri</i> yellow warbler	N / SC	Most often nests in riparian areas with willows, cotton- woods, aspens, sycamores and alders but also in montane shrubbery in open conifer forests.	Only extremely marginal habitat for this species occurs on the site. Due to the highly disturbed nature of the site, occurrence potential for this species is low.
<i>Diadophus punctatus modestus</i> San Bernardino ringneck snake	N/N	Chaparral, coastal sage scrub, grassland, riparian, and woodlands	Only extremely marginal habitat for this species occurs on the site. Due to the highly disturbed nature of the site, occurrence potential for this species is low.
<i>Dodechahema leptoceras</i> Slendar-horned Spineflower	E/E	This plant grows in the silt-rich floodplains and washes of the foothills of the Transverse Ranges and the Peninsular Ranges of southern California. It is known from fewer than 40 reported sightings, many of which were in locations that have since been claimed for development or otherwise altered. About 19 occurrences are believed to exist now.[1] This plant has been recorded in only a few general areas, including Tujunga Wash and the flood lands surrounding the Santa Ana and San Jacinto Rivers	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
<i>Dudleya multicaulis</i> many-stemmed dudleya	N/N	Grows in heavy, often clayey soil in chaparral, coastal scrub, valley and foothill grassland between 0 and 790 meters. Endemic to Southern California.	No suitable habitat occurs on the site. Occurrence potential is very low.
<i>Dipodomys merriammi parvus</i> San Bernardino kangaroo rat	E/N	Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and flood plains, and along washes with nearby sage scrub. Prefers sandy loam substrates. Santa Ana River, Cajon Creek Wash, Lytle Creek Wash, City Creek, and upper Etiwanda Wash in San Bernardino County, and sites in western Riverside County	Focused Protocol Surveys were conducted for this species. The result of this survey is that this species is absent from this site.
<i>Egretta thula</i> (rookery) snowy egret	N/N	Wet areas, fields, margins of open water.	Probability of this species occurring within the APE is moderate to high. Fairly common resident
<i>Elanus leucurus</i> (nesting) white-tailed kite	N/N	Open woodlands and grasslands, windrows. Hovers over open fields.	Suitable foraging, limited nesting habitat. Species has been observed within the project APE.
<i>Empidonax traillii</i> willow flycatcher	E / E	Inhabits extensive thickets of low, dense willows on edges of wet meadows, ponds, or backwaters between 2000-8000 elevation.	Only extremely marginal habitat for this species occurs on the site. Due to the highly disturbed nature of the site, occurrence potential for this species is low.
<i>Eremophila alpestris actia</i> California horned lark	N/N	Variety of open habitats, usually where trees and large shrubs are absent.	Only extremely marginal habitat for this species occurs on the site. Due to the highly disturbed nature of the site, occurrence potential for this species is low.
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Santa Ana River woollystar	E / E	Grows on sandy soils of riparian floodplains and terraced fluvial deposits between 150 and 610 meters. Formerly known from Orange and San Bernardino Counties but has been extirpated by much of its former range.	The site does not contain flood deposited terraces, and therefore, no suitable habitat occurs on the site. There is no potential for this species to occur on the site.
<i>Euderma maculatum</i> spotted bat	N/N	Arid deserts, grasslands, and mixed conifer forests. Roosts in rock crevices.	Only extremely marginal habitat for this species occurs on the site. Due to the highly disturbed nature of the site, occurrence potential for this species is low.
<i>Eumops perotis californicus</i> California mastiff bat	N/N	Open areas with high cliffs.	Only extremely marginal habitat for this species occurs on the site. Due to the highly disturbed nature of the site, occurrence potential for this species is low.
<i>Falco columbarius</i> (wintering) merlin	N/N	Grasslands, coastal sage scrub and estuaries, windrows, open fields.	Suitable foraging habitat, no nesting habitat. Expected only rarely. Winter visitor.
<i>Falco mexicanus</i> (nesting) prairie falcon	N/N	Grasslands, coastal sage scrub and estuaries.	Potential habitat for foraging, none for nesting. Expected only rarely. Winter visitor

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
<i>Falco peregrinus anatum</i> (nesting peregrine falcon)	Delisted/SE	Estuaries, wetlands, and coastal bluffs. Breeding habitat in high cliffs along the coast.	Suitable foraging, no nesting habitat. Potential for this species is low.
<i>Gila orcutti</i> Arroyo chub	N / N	Inhabits slow moving streams with mud or sand bottoms and emergent vegetation. Feeds on aquatic vegetation and associated invertebrates.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
<i>Gymnogyps Californianus</i> California Condor	E/E	Its range includes rocky, open-country scrubland, coniferous forest and oak savanna. Cliffs, rocky outcrops or large trees are used as nest sites (USFWS 1996). It scavenges on the carcasses of large mammals and also feeds on the carcasses of small mammals, but perhaps only where there are sufficient numbers at one site (L. Kiff in litt. 2009). Released birds have become increasingly independent in finding food and may range more than 400 km from release sites (Anon. 1998).	Although the APE is within 400 Km of foraging Condors, none have been observed in the area. Further there is no suitable sized carrion for forage within the urbanized area of the project site. The probability of this species occurring within the project APE is zero.
<i>Haliaeetus leucocephalus</i> Bald Eagle	Delisted/N	The bald eagle typically requires old-growth and mature stands of coniferous or hardwood trees for perching, roosting, and nesting. Tree species reportedly is less important to the eagle pair than the tree's height, composition and location.[29] Perhaps of paramount importance for this species is an abundance of comparatively large trees surrounding the body of water.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
<i>Icteria virens</i> Yellow-breasted chat	N / N	A summer resident that nests in low, dense riparian growth consisting of willow, black- berry and wild grape. It forages and nests within 10 feet of the ground.	Suitable habitat for this species occurs in the riparian growth in sub-basin 5. This species as observed during the field surveys.
<i>Ixobrychus exilis</i> <i>Least Bittern</i>	N/N	These birds nest in large marshes with dense vegetation from southern Canada to northern Argentina. The nest is a well-concealed platform built from cattails and other marsh vegetation.	There is no suitable habitat for this species within the APE. Further the APE is outside the known range for this species. There is no potential for this species to occur within the project APE
<i>Lanius ludovicianus</i> loggerhead shrike	N/N	Grasslands and open scrub. Forages in open country, using low perches (fences etc.) for scanning, and nests in dense scrub and brush.	Suitable foraging and nesting habitat. Probability of occurrence within the APE is moderate.
<i>Larus californicus</i> (nesting colony California gull)	N/N	Nearly all types of fresh and salt water, cropland, landfills, refuse areas, open lawns.	Common in winter. Occasional in summer. Probability of occurrence within the APE is moderate to high.

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
<i>Lasiurus xanthinus</i> western yellow bat	N/N	Desert regions of the southwestern U.S., southern California. Capture sites are often associated with water features; open grassy areas and scrub, canyons and riparian areas, orchards. Particular association with palms in oases and ornamental palms in landscaping.	There is no suitable habitat for this species within the APE. Further the APE is outside the known range for this species. There is no potential for this species to occur within the project APE
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	N/N	Coastal sage scrub and on the margins between shrub and herbaceous areas. Also know to occur in agricultural and ruderal areas.	Probability of this species occurring within the APE is moderate to high.
<i>Melanerpes lewis</i> Lewis's Woodpecker	N/N	Three principal habitats are open ponderosa pine forest, open riparian woodland dominated by cottonwood, and logged or burned pine forest Breeding: From interior southern British Columbia and southwestern Alberta south to Lewis's Woodpecker range: Arizona and New Mexico, and from coastal California east to Colorado. Virtually the entire Canadian population occurs in British Columbia. Winter: Interior southern British Columbia (casually) south through the western states to northern Mexico, but mainly in the southwestern United Sta	The site is outside the known range of this species and there are no suitable soils within the APE. Therefore the probability occurrence is zero.
<i>Myotis ciliolabrum</i> small-footed myotis	N/N	Feeds among trees or over brush. Roosts in caves, mines, and in cliff or rock openings.	Probability of this species occurring within the APE is moderate to high.
<i>Myotis yumanensis</i> Yuma myotis	N/N	Water and wooded canyon bottoms. Roosts in caves and abandoned buildings.	Probability of this species occurring within the APE is moderate to high.
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	N/N	Riversidean and coastal sage scrub, chaparral and nonnative grasslands. Shrub and desert habitats, primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth	Probability of this species occurring within the APE is moderate.
<i>Nolina cismontana</i> chaparral nolina	N / N	Grows primarily on sand- stone and shale and occasionally gabbro substrates in chaparral and coastal scrub habitats between 140 and 1,275 meters.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
<i>Numenius americanus</i> long-billed curlew	N/N	Coastal estuaries, upland herbaceous areas, croplands, wet areas, open fields, shores of open water.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
<i>Nyctinomops Macrotis</i> big free-tailed bat	N/N	Desert habitats. Roosts in rock crevices in cliffs.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
<i>Nyctinomops</i> <i>Femorosaccus</i> pocketed free-tailed bat	N/N	Desert habitats. Roosts in rock crevices in cliffs.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
<i>Otus flammeolus</i> <i>Flammulated Owl</i>	N/N	This species is generally associated with montane forested habitats often with brushy understory. This owl may also occur in forests with mixes of oak, Douglas Fir, white fir, incense cedar, or sugar pine.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
<i>Passerella iliaca</i> <i>Fox Sparrow</i>	N/N	Fox sparrows commonly breed in coniferous or mixed forests, which have dense undergrowth and shrub. They also breed in woodland thickets, scrub, chaparral, and riparian woodland. During the winter months, fox sparrows are commonly found in forests, forest edges, woodlots, and other woodland habitats that have dense undergrowth	Suitable foraging and nesting habitat. Probability of occurrence within the APE is moderate.
<i>Perognathus longimembris brevinasus</i> Los Angeles pocket mouse	N/N	Inhabits open ground of fine sandy composition. Probably prefers sparsely vegetated habitats.	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
<i>Phalacrocorax auritus</i> double-crested cormorant	N/N	Lakes, fresh, salt, and estuarine waters	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
<i>Picoides albolarvatus</i> <i>White headed woodpecker</i>	N/N	Found on mountaintops of the San Gabriel Mountains to San Diego County	No suitable habitat for this species occurs on the site. Due to the highly disturbed nature of the site, there is no potential for this species to occur.
<i>Picoides nuttalli</i> <i>Nuttall's Woodpecker</i>	N/N	Preferred habitat is arid to mesic woodlands. In particular, these woodpeckers prefer oak woodlands, although they also occur in riparian sites and chaparral in the most southern parts of its range because of the decrease in oak abundance.	No suitable habitat for this species occurs on the site. Probability of occurrence adjacent to the APE is very low.
<i>Plegadis chihi</i> (rookery site) white-faced ibis	N/N	Freshwater marshes and brackish areas.	There is no suitable habitat for this species within the APE. There is no potential for this species to occur within the project APE
<i>Pipilo chlorurus</i> Green-tailed Towhee	N/N	Breeding range covers most of the interior Western United States, with a winter range in Mexico and the southern edge of the Southwestern United States.	The site is outside the known range of this species and there are no suitable soils within the APE. Therefore the probability occurrence is zero

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
<i>Poliioptila californica californica</i> Coastal California gnatcatcher	T / N	Inhabits various successional stages of the sage scrub communities characterized by <i>Artemisia californica</i> , <i>Eriogonum fasciculatum</i> , <i>Encelia farinosa</i> , <i>Salvia</i> spp., and <i>Opuntia</i> spp. CAGN will also utilize chaparral, grassland, and riparian plant communities where they occur adjacent to or intermixed with sage scrub.	The site is not within proposed or designated critical habitat for this species. Focused Protocol Survey was conducted for CAGN. The result of this survey it there CAGN is absent from the site.
<i>Rhaphiomidas terminatus abdominalis</i> Delhi Sands flower- loving fly.	E/N	Wholly or partially consolidated dunes (Delhi soils series), open sand. Fine, sandy soils with sparse vegetation cover of California buckwheat, croton, deerweed, and evening primrose	No Suitable habitat occurs within the Project APE. Therefore the probability of occurrence is zero
<i>Rana muscosa</i> Mountain Yellow-legged frog	E/E	The frog occurs in mountain creeks, lakes and lakeshores, streams, and pools, preferring sunny areas. It rarely strays far from water. The tadpoles require a permanent water habitat for at least two years while they develop. The frog has been noted at elevations of between about 1,214 and 7,546 feet (370 and 2,300 meters) in Southern California	No suitable habitat for this species occurs on the site. Therefore there is no potential for this species to occur.
<i>Sidalcea neomexicana</i> Salt Spring Checkerbloom	N / N	Grows in alkali springs and marshes in alkali playas, brackish marshes, chaparral, coastal scrub, lower montane coniferous forest and Mojavean desert scrub between 0-1500 meters in elevation.	No Suitable habitat occurs within the Project APE. Therefore the probability of occurrence is zero
<i>Spea [Scaphiopus] hammondi</i> western spadefoot toad	N/N	Seasonal pools in coastal sage scrub, chaparral, and grasslands.	Marginally suitable habitat occurs within the APE. Therefore the probability of occurrence is low.
<i>Sphyrapicus thyroideus</i> Williamson's Sapsucker	N/N	Breeding habitat is open forested areas with conifers, mainly ponderosa pine, douglas fir, and grand fir. Subalpine fir and western larch may also be important components of good habitat for these birds.[2] Partially migratory, they breed in western North America from northern Mexico as far north as British Columbia	No Suitable habitat occurs within the Project APE. Therefore the probability of occurrence is zero
<i>Spizella atrogularis</i> Black-chinned Sparrow	N/N	Common in open chaparral in the mountain and foothills of Los Angeles and Santa Barbara Counties. Transient in San Bernardino County.	The APE is outside the typical range for this species. Probability of occurrence is very low.

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
<i>Spizella breweri</i> Brewer's Sparrow	N/N	This species breeds on sagebrush flats and other open scrubby areas. It winters from just south of the breeding range in south-western USA to central Mexico	The APE is outside the typical range for this species. Probability of occurrence is very low.
<i>Stellula calliope</i> Calliope Hummingbird	N/N	The breeding habitat of calliope hummingbird is varied among open shrub habitats and altitudes. Nesting usually occurs at higher altitudes in the Rocky Mountains. Nests have been observed from as low as 300 m (980 ft) in Washington elevation to the tree line at over 3,000 m (9,800 ft). In Montana, the minimum elevation observed for breeding is 1,200 m (3,900 ft).[4][5] Open montane forest, mountain meadows, and willow and alder thickets may variously serve as breeding grounds. During migration and winter, they also occur in chaparral, lowland brushy areas, deserts and semi-desert regions	The APE is outside the typical range for this species. Probability of occurrence is very low.
<i>Strix occidentalis occidentalis</i> California Spotted Owl	Review/N	California spotted owls occur in hardwood, coniferous, and coniferous-hardwood forests. Occupied coniferous habitats include mixed coniferous forests. California red fir and eastside pine forests which are composed of ponderosa pine and/or Jeffrey pine (<i>Pinus jeffreyi</i>). Redwood/California bay (<i>Umbellularia californica</i>), ponderosa pine/hardwood,[20] and live oak-bigcone Douglas-fir (<i>Quercus chrysolepis</i> or <i>Q. agrifolia</i> - <i>Pseudotsuga macrocarpa</i>) are hardwood-mixed coniferous forests used by California spotted owls. They also occur in hardwood habitats including riparian and oak (<i>Quercus</i> sp.) woodlands. For example, in the Tehachapi Mountains of southern California they occurred in stands dominated by canyon live oak (<i>Q. chrysolepis</i>).[No suitable habitat for this species occurs on the site. Therefore there is no potential for this species to occur.
<i>Toxostoma lecontei</i> Le Conte's Thrasher	N/N	The typical desert habitat consists of dunes, alluvial fans, and flat to gently rolling hills with shallow washes with sparse vegetation. The vegetation that it may utilize includes low vegetation such as saltbush, creosote, cholla cacti, and Mojave yucca. The range of altitude spans as low as 80 m below sea level (in Death Valley) to as high as 1,600 m, although 500 m above sea level is the average	No suitable habitat for this species occurs on the site. Therefore there is no potential for this species to occur.

Scientific and Common Name	Status Federal/State	Typical Habitat	Occurrence Potential
<i>Vireo bellii pusillus</i> least Bell's vireo	E / E	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite. In low riparian, in vicinity of water or in dry river bottoms below 2000 ft.	Occupied suitable habitat for this species occurs in 1000 feet of the project. However no suitable habitat occurs on site, and the project will be constructed during the time when this species is absent from southern California. Therefore occurrence potential is very low.

Bold Indicates the species occurs on the U.S. Fish and Wildlife Service's List

4.4 Animals

Due to the chronic disturbances, surrounding industrial uses, major arterial and highway road features, and adjacent construction, this area does not support a diverse fauna. The most common species observed on the site were dogs (*Canis lupus familiaris*) and beachy ground squirrels (*Otospermophilus beecheyi*). Other common species include western meadowlark (*Sturnella magna*), cottontail rabbits (*Sylvalegus audobonii*), and mourning doves (*Zenaida macroura*). A complete list of species observed on site is included as Appendix A

5. Conclusions and Recommendations

The project will likely have temporary impacts to California streambeds and may have temporary impacts to jurisdictional waters. The extent of these temporary impacts will be identified once the plans are finalized. Depending upon the extent of temporary impacts, a CWA Section 404 permit, CWA Section 401 Certification, and CDFG Code Section 1600 Streambed Alteration Agreement may be required for those impacts.

Based on information presented above in the results section, this BRA concludes that coastal California gnatcatcher, San Bernardino kangaroo rat, and burrowing owl are absent from the site and there is no risk of the project resulting in a “taking” of any of these species. Incidental take authority from the CDFG or the USFWS is not required.

According to protocol and standard practices, the results of this survey will remain valid for the period of one year, or until July 2016, after which time, if the site has not been disturbed in the interim, another survey may be required to determine the persisting absence of the above referenced species. Regardless of survey results and conclusions given herein, these species are protected by applicable State and/or federal laws, including but not exclusive to the California Endangered Species Act and Federal Endangered Species Act. As such, if a one is subsequently found on-site or at the time of construction, all activities likely to affect the animal(s) should cease immediately and regulatory agencies should be contacted to determine appropriate management actions. Importantly, nothing given in this report, including recommended mitigation measures, is intended to authorize the incidental take of any listed species during project construction. Such authorization must come from the appropriate regulatory agencies, including CDFG (i.e., authorization under section 2081 of the Fish and Game Code) and USFWS.

A minimal loss of potential foraging and nesting habitat for local and migratory bird species may occur from the project construction. These impacts for these bird species however, are not considered regionally or locally significant and therefore, no compensatory mitigation is proposed.

Due to either the lack of suitable habitat, or the absence of observations during any of the field surveys, none of the special-status species reported from the CNDDB or the IPAC will be adversely affected by the proposed project.

6. Proposed Avoidance and Minimization Measures

6.1 San Bernardino Kangaroo Rat

SBKR are considered absent from this site and as such no specific avoidance or minimization measures are proposed for this species.

6.2 Coastal California Gnatcatcher

The CAGN occurs in coastal sage scrub plant community. This species has been recorded historically in the vicinity of the project site. Although no CAGN were detected during surveys, habitat on site is suitable for this species. If a CAGN is encountered during construction, all construction activity will cease until the USFWS is contacted and concurrence regarding the next measure is established.

6.3 Burrowing Owl

The BUOW is a state Species of Special Concern. The BUOW is typically found in grassland, scrubland and desert habitats with numerous small mammal burrows (Coulombe 1971). Burrowing owls nest and roost in modified, expanded burrows originally created by fossorial animals including ground squirrels, rabbits, and badgers. They are also known to make use of human-created structures such as cement culverts and pipes for burrows. Within 30 days of the start of any land disturbance activities, a qualified biologist should survey the site to determine if burrowing owls are present and nesting in the construction area. If BUOW are encountered and determined to not be nesting, land disturbance activities shall not commence until the biologist has implemented the required measures according to the CDFW to clear the site for construction. No disturbance to an active BUOW nest will be permitted and all work within a 500-foot buffer zone radius will cease until the hatchlings have fledged. If the nest is not occupied by eggs or chicks then CDFW may agree to a passive relocation plan. This type of relocation requires the construction of artificial burrows in the near vicinity and collapsing of the old burrows once the owls have clearly flushed out of the site. If burrowing owls are encountered during construction, construction activities shall be halted in the vicinity of the find and the biologist/monitor called to the site. The contractor shall implement the recommendations of the biological monitor.

6.4 Nesting Birds

The State of California prohibits the “take” of active bird nests. To avoid an illegal take of active bird nests, any grubbing, brushing or tree removal should be conducted outside of the State identified nesting season (nesting season is February 15 through September 1). Alternatively, the site can be evaluated by a qualified biologist prior to initiation of ground disturbance to determine the presence or absence of nesting birds. Active bird nests MUST be avoided during the nesting season. If an active nest is located in the project construction area it will be flagged and a 300-foot buffer placed around it. No activity will occur within the 300 foot buffer until the young have fledged the nest.

6.5 Jurisdictional Waters

All project activities should be limited to a well-defined and visually delineated area. Prior to grading and construction activities, the limits of disturbance will be clearly marked with flagging, stakes, or fencing. Additionally, should regulatory permits be necessary, once obtained, any and all measures identified in these permits shall be included in the monitoring program.

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APPENDIX A

SPECIES LIST

APPENDIX A

SPECIES LIST

PLANT SPECIES LIST

Angiosperms

Asteraceae

Artemisia californica
Artemisia douglasiana
Ambrosia acanthicarpa
Anthemis sp.
Baccharis glutinosa
Centaurea melitensis
**Carduus pycnocephalus*
Gnaphalium californicum
Haploppus squarrosus
Hemizonia fasciculata
**Helminthotheca echioides*
Heterotheca grandiflora
**Lactuca seriola*
Lepidosartum squamatum
Nemizonia pugensis
**Sonchus oleraceus*
Xanthium strumarium

Boraginaceae

Amsinckia intermedia
Criptantha sp.
plagiobothrys californicus

Brassicaceae

Brassica geniculata

Chenopodiaceae

Salsola iberica

Fabaceae

Lotus scoparius
Lupinus bicolor
**Melilotus indicus*

Geraneaceae

Erodium cicutarium

Flowering Plants

Composites

California Sage
Mugwort
Ann. Bur-sage
Mayweed
Mulefat
Star thistle
Italian thistle
Everlasting
Common Sunflower
Tarweed
Ox Tongue
Telegraph weed
Prickly lettuce
Scalebroom
Spikeweed
Sow-thistle
Cocklebur

Borage Family

Fiddleneck
Popcorn Flower

Mustard Family

Short-pod Mustard

Pig Weed Family

Russian Thistle

Pea Family

Deerweed
Lupine
Yellow sweet clover

Geranium Family

Filaree

Lamiaceae
Marrubium vulgare
Salvia mellifera

Mint Family
Horehound
Black sage

Hydrophyllaceae
Eriodictyon trichocalyx

Waterlily Family
Yerba Santa

Polygonaceae
Eriogonum fasciculatum
Rumex crispus

Buckwheat Family
California Buckwheat
Curly Dock

Salicaceae
Salix sp.

Willow Family
Willow

Solanaceae
Datura meteloides
Nicotiana glauca

Nightshade Family
Jimson weed
Tobacco tree

Monocots

Poaceae
Avena barbata
Bromus diandris
Bromus rubens
Hordium vulgare
Vulpia myuros

Grass Family
Oats
Ripgut
Red Brome Grass
Barley
Fescue

Typhaceae
Typha latifolia

Cattail Family
Cattails

ANIMAL SPECIES LIST

Mammalia

Mammals

Canidae
Canis latrans
Canis lupus familiaris

Canines
Coyote
Dog

Leporidae
Sylvilagus audubonii

Rabbits, Hares
Cotton-tail rabbit

Geomysidae

Gophers

Thomomys bottae

Pocket gopher

Sciuridae

Squirrels

Otospermophilus beecheyi

Beechey ground squirrel

Reptilia

Reptiles

Teiidae

Whiptails

Cnemidophorus tigris multiscutatus

Coastal whiptail

Avian Species Observed

Common Name	Species Code	Common Name	Species Code
American Crow	AMCR	Lesser goldfinch	LEGO
American Goldfinch	AMGO	Lincoln's sparrow	LISP
American kestrel	AMKE	Mallard	MALL
Anna's hummingbird	ANHU	Mourning dove	MODO
		Northern mockingbird	NOMO
Barn swallow	BASW	Northern rough-winged swallow	NRWS
Bewick's wren	BEWR		
Black phoebe	BLPH	Red-tailed hawk	RTHA
Bushtit	BUSH	Rock dove	RODO
California quail	CAQU	Say's phoebe	SAPH
California towhee	CATO	Song sparrow	SOSP
Cliff swallow	CLSW	Spotted towhee	SPTO
Common raven	CORA	Turkey vulture	TUVU
		Western bluebird	WEBL
Costa's hummingbird	COHU	Western kingbird	WEKI
European starling	EUST	Western meadowlark	WEME
House finch	HOFI		
House Sparrow	HOSP	Yellow-rumped warbler	YRWA
House wren	HOWR		
Killdeer	KILL		

APPENDIX B

IPAC REPORT

My project

IPaC Trust Resource Report

Generated June 12, 2015 02:06 PM MDT



US Fish & Wildlife Service

IPaC Trust Resource Report



Project Description

NAME

My project

PROJECT CODE

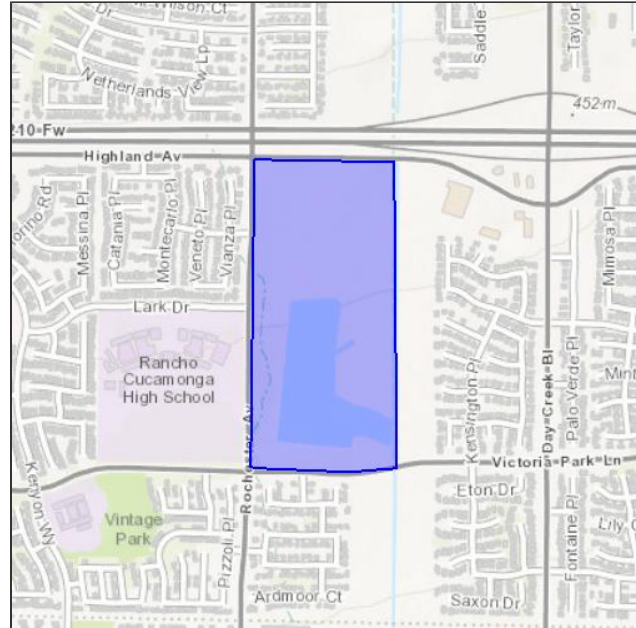
WMZMN-GE7WN-FMZC7-YGNKZ-R4BZR4

LOCATION

San Bernardino County, California

DESCRIPTION

No description provided



U.S. Fish & Wildlife Contact Information

Species in this report are managed by:

Carlsbad Fish And Wildlife Office

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

(760) 431-9440

Endangered Species

Proposed, candidate, threatened, and endangered species that are managed by the [Endangered Species Program](#) and should be considered as part of an effect analysis for this project.

Amphibians

Mountain Yellow-legged Frog *Rana muscosa***Endangered**

CRITICAL HABITAT

No critical habitat has been designated for this species.<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spscode=D02H>

Birds

California Condor *Gymnogyps californianus*

Endangered**CRITICAL HABITAT**

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B002>

Coastal California Gnatcatcher *Poliophtila californica californica*

Threatened**CRITICAL HABITAT**

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B08X>

Least Bell's Vireo *Vireo bellii pusillus*

Endangered**CRITICAL HABITAT**

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B067>

Southwestern Willow Flycatcher *Empidonax traillii extimus*

Endangered**CRITICAL HABITAT**

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B094>

Flowering Plants

Braunton's Milk-vetch *Astragalus brauntonii*

Endangered**CRITICAL HABITAT**

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=Q05E>

Mammals

San Bernardino Merriam's Kangaroo Rat *Dipodomys merriami parvus*

Endangered**CRITICAL HABITAT**

There is **final** critical habitat designated for this species.

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=A0G8>

Critical Habitats

Potential effects to critical habitat(s) within the project area must be analyzed along with the endangered species themselves.

There is no critical habitat within this project area

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the Bald and Golden Eagle Protection Act.

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service ([1](#)). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

You are responsible for complying with the appropriate regulations for the protection of birds as part of this project. This involves analyzing potential impacts and implementing appropriate conservation measures for all project activities.

Bald Eagle *Haliaeetus leucocephalus*

Season: Wintering

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B008>

Bird of conservation concern

Brewer's Sparrow *Spizella breweri*

Year-round

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HA>

Bird of conservation concern

Burrowing Owl *Athene cunicularia*

Year-round

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0NC>

Bird of conservation concern

Cactus Wren *Campylorhynchus brunneicapillus*

Year-round

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FZ>

Bird of conservation concern

California Spotted Owl *Strix occidentalis occidentalis*

Year-round

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B08L>

Bird of conservation concern

Calliope Hummingbird *Stellula calliope*

Season: Breeding

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0K3>

Bird of conservation concern

Cassin's Finch *Carpodacus cassinii*

Year-round

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0J6>

Bird of conservation concern

Costa's Hummingbird *Calypte costae*

Season: Breeding

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0JE>

Bird of conservation concern

Flammulated Owl *Otus flammeolus*

Season: Breeding

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0DK>

Bird of conservation concern

Fox Sparrow *Passerella iliaca*

Year-round

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0NE>

Bird of conservation concern

Green-tailed Towhee <i>Pipilo chlorurus</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0IO	Bird of conservation concern
Lawrence's Goldfinch <i>Carduelis lawrencei</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0J8	Bird of conservation concern
Least Bittern <i>Ixobrychus exilis</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0JW	Bird of conservation concern
Lewis's Woodpecker <i>Melanerpes lewis</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HQ	Bird of conservation concern
Loggerhead Shrike <i>Lanius ludovicianus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FY	Bird of conservation concern
Mountain Plover <i>Charadrius montanus</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B078	Bird of conservation concern
Nuttall's Woodpecker <i>Picoides nuttallii</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HT	Bird of conservation concern
Oak Titmouse <i>Baeolophus inornatus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0MJ	Bird of conservation concern
Olive-sided Flycatcher <i>Contopus cooperi</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0AN	Bird of conservation concern
Peregrine Falcon <i>Falco peregrinus</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FU	Bird of conservation concern
Short-eared Owl <i>Asio flammeus</i> Season: Wintering https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HD	Bird of conservation concern
Swainson's Hawk <i>Buteo swainsoni</i> Season: Breeding https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B070	Bird of conservation concern
Tricolored Blackbird <i>Agelaius tricolor</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B06P	Bird of conservation concern
White Headed Woodpecker <i>Picoides albolarvatus</i> Year-round https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0HU	Bird of conservation concern

Williamson's Sapsucker *Sphyrapicus thyroideus*

Bird of conservation concern

Season: Wintering

<https://ecos.fws.gov/speciesProfile/profile/speciesProfile.action?spcode=B0FX>

Refuges

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. If your project overlaps or otherwise impacts a Refuge, please contact that Refuge to discuss the authorization process.

There are no refuges within this project area

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes.

Project proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate [U.S. Army Corps of Engineers District](#).

DATA LIMITATIONS

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

DATA EXCLUSIONS

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Freshwater Emergent Wetland

PEMCx 0.162 acre

Freshwater Pond

PUBFh 12.7 acres

PUSCx 3.34 acres

PUSCh 0.105 acre

Riverine

R4SBCr 19 acres

R4SBAr 2.74 acres

R4SBAx 0.508 acre

APPENDIX C

U.S. FISH AND WILDLIFE USGS QUADRANGLE REPORT



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Carlsbad Fish and Wildlife Office
2177 SALK AVENUE - SUITE 250
CARLSBAD, CA 92008

PHONE: (760)431-9440 FAX: (760)431-5901

URL: www.fws.gov/carlsbad/



Consultation Code: 08ECAR00-2015-SLI-0480

June 12, 2015

Event Code: 08ECAR00-2015-E-00928

Project Name: Day Creek Basin

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: Day Creek Basin

Official Species List

Provided by:

Carlsbad Fish and Wildlife Office
2177 SALK AVENUE - SUITE 250
CARLSBAD, CA 92008
(760) 431-9440
<http://www.fws.gov/carlsbad/>

Consultation Code: 08ECAR00-2015-SLI-0480

Event Code: 08ECAR00-2015-E-00928

Project Type: WATER SUPPLY / DELIVERY

Project Name: Day Creek Basin

Project Description: Ground water recharge improvements to Day Creek Basin

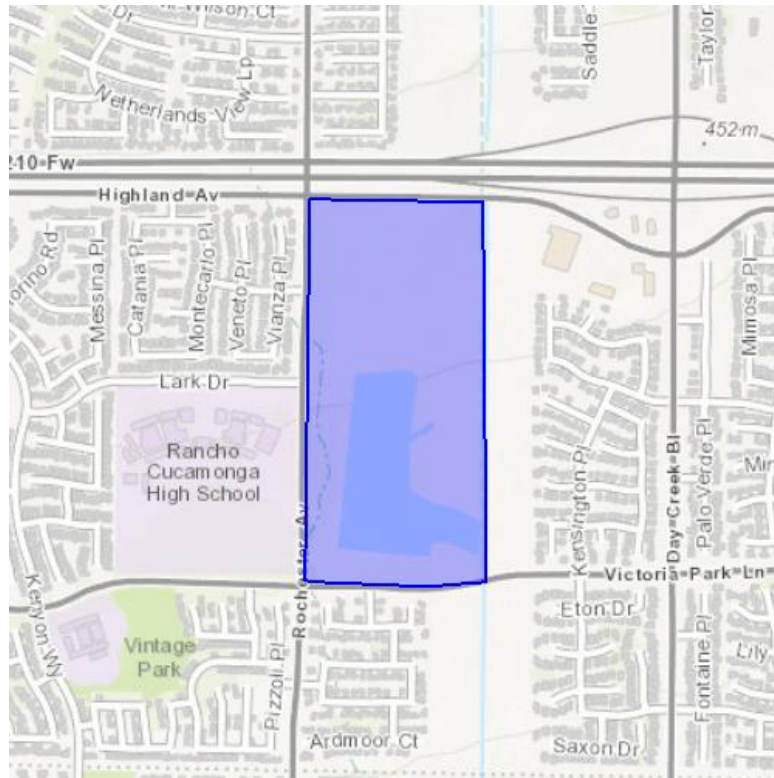
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Day Creek Basin

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-117.54519224166872 34.13598030999981, -117.54115819931029 34.13592702791567, -117.54107236862181 34.128627064847265, -117.54244565963744 34.128538253629095, -117.54504203796387 34.128627064847265, -117.54527807235718 34.128662589308405, -117.54519224166872 34.13598030999981)))

Project Counties: San Bernardino, CA



United States Department of Interior
Fish and Wildlife Service

Project name: Day Creek Basin

Endangered Species Act Species List

There are a total of 7 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Amphibians	Status	Has Critical Habitat	Condition(s)
Mountain Yellow-Legged frog (<i>Rana muscosa</i>) Population: Southern California DPS	Endangered		
Birds			
California condor (<i>Gymnogyps californianus</i>) Population: Entire, except where listed as an experimental population	Endangered	Final designated	
Coastal California gnatcatcher (<i>Poliophtila californica californica</i>) Population: Entire	Threatened	Final designated	
Least Bell's vireo (<i>Vireo bellii pusillus</i>) Population: Entire	Endangered	Final designated	
Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Entire	Endangered	Final designated	
Flowering Plants			



United States Department of Interior
Fish and Wildlife Service

Project name: Day Creek Basin

Braunton's milk-vetch (<i>Astragalus brauntonii</i>)	Endangered	Final designated	
Mammals			
San Bernardino Merriam's kangaroo rat (<i>Dipodomys merriami parvus</i>) Population: Entire	Endangered	Final designated	



United States Department of Interior
Fish and Wildlife Service

Project name: Day Creek Basin

Critical habitats that lie within your project area

There are no critical habitats within your project area.

APPENDIX D

COASTAL CALIFORNIA GNATCATCHER FOCUSED SURVEY REPORT

**Focused Coastal California Gnatcatcher
(*Polioptila californica californica*) Survey
for
Inland Empire Utilities Agency
Lower Day Basin Improvement Project**

Prepared by:

Lisa M. Patterson

On Behalf Of:

Tom Dodson & Associates
2150 N. Arrowhead Avenue
San Bernardino, CA 92405

July 2015

Certification: I hereby certify that the statements furnished herein and in the attached exhibits present data and information required for this Biological Survey to the best of my ability, and the facts, statements and information presented are true and correct to the best of my knowledge and belief.



Lisa M. Patterson

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APPENDICES

Appendix A – Data Sheets
Appendix B – 15-Day Notice

INTRODUCTION AND SUMMARY OF FINDINGS

Tom Dodson & Associates (TDA) was contracted by Inland Empire Utilities Agency (IEUA) to conduct a focused coastal California gnatcatcher (*Polioptila californica californica*) (CAGN) for the proposed groundwater recharge improvements.

The proposed project site is outside of, but tributary to, Day Creek. The project site is located, south of Interstate 215; and northeast of the intersection of Victoria Park Lane and Rochester Avenue. Figure 1 is the Regional Location Map, and Figure 2 is the Site Location Map that depicts the project site on USGS 7.5 minute quadrangle maps. Specifically, the project is mapped on the "Cucamonga Peak" USGS 7.5 Minute Quadrangle within Section 32, Township 1 North, Range 6 West, San Bernardino Baseline and Meridian.

Habitat suitability evaluations were conducted for the federally listed as threatened California gnatcatcher (*Polioptila californica californica*). The result of this assessment was that the proposed project site has approximately 63.23 acres of habitat with characteristics and species composition that could support CAGN. Breeding season protocol surveys were conducted between April 9, 2015 and June 5, 2015.

The result of this survey is that no CAGN were observed during this survey.

J.L. PATTERSON & ASSOCIATES



FIGURE 2 – Project Area Map

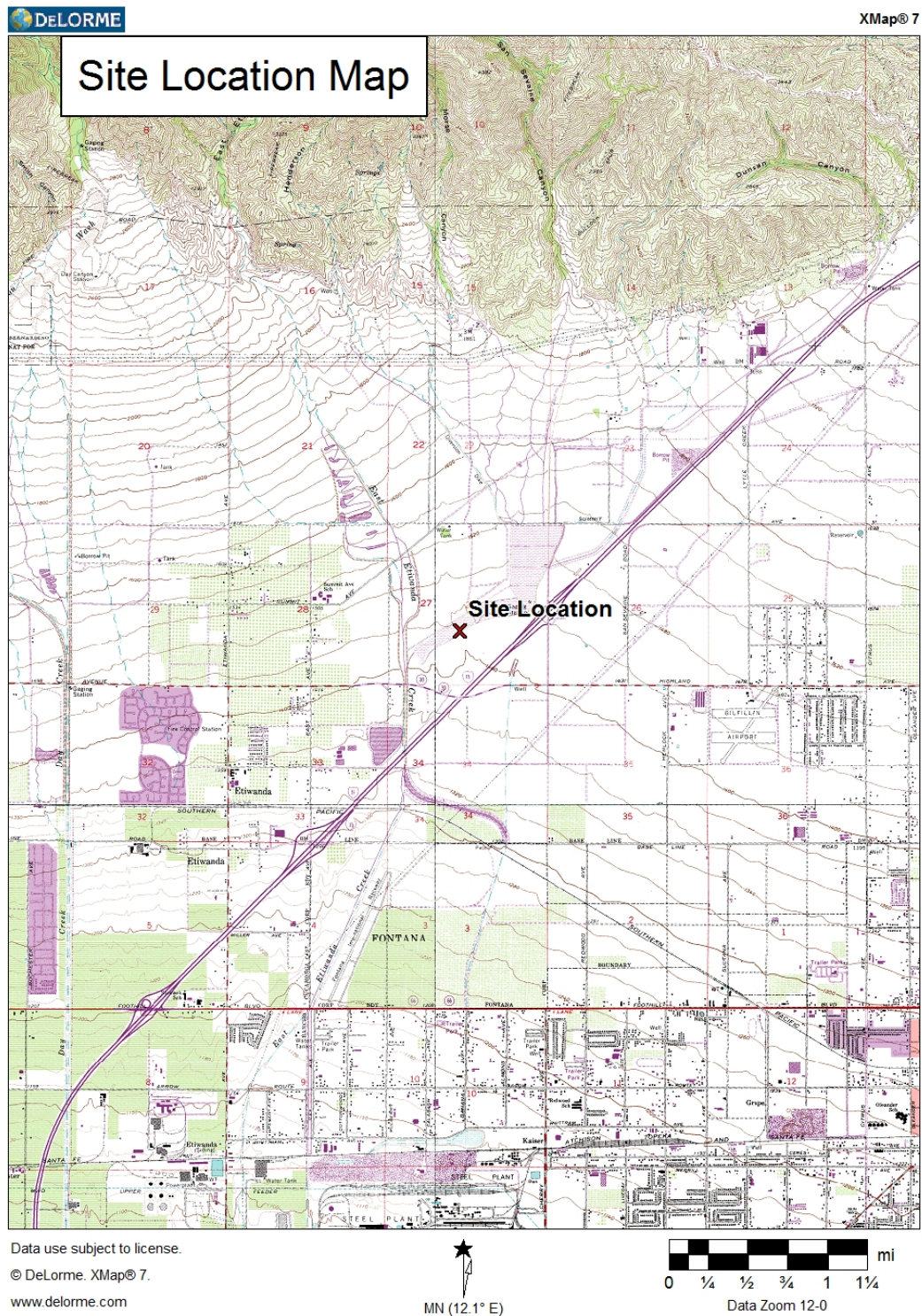


FIGURE 3 – Survey Area



SITE DESCRIPTION

The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (CBWM) are proposing San Sevaine Basin Improvements Project. This project would increase the amount of recycled water (RW) and stormwater recharged into the Chino Groundwater Basin. The new Lower Day Basin will be able to store and recharge an additional 789 acre-ft./yr of storm water in addition to the existing baseline storm water recharge of 395 acre-ft./yr

Lower Day Creek Basins are not mapped within CAGN critical habitat. In fact, the USFWS excluded these flood control facilities from critical habitat because they understood that these basin systems would be maintained annually for flood control purposes and would therefore not retain habitat value for sensitive speices that they may have held in the past. Although the Lower Day Creek Bains are located within the historic range of the CAGN, none have been found here in over a decade, and presumed extirpated in the CNDDB. The bottom of the basins are wet most of the year they do not possess the soil characteristics or vegetation types suitable for CAGN.

The native alluvial fan sage scrub habitat growing on the basin slopes is mature with dense cover and is even aged. Floodplain bench/terraces subject to dynamic geomorphological and hydrological processes typical of fluvial systems are lacking throughout the Lower Day Creek Basins.

The slopes are the only areas within the basin systems containing potentially suitable habitat to support CAGN. characterized by well develeoped coastal cage crub (CSS). This vegetation community is found in diverse habitat mosaics and is dominated by a suite of shrub species with low moisture content. Shrub cover is dense and continuous, and steep, xeric slopes with quickly draining soils. The CSS vegetation community occurring in the San Sevaine Basin is characterized by buckwheat (*Eriogonum fasciculatum*), California sage (*Artemisia californica*), black sage (*Salvia mellifera*), deerweed (*Lotus scoparus*), brittlebrus (*Encelia farinosa*), white sage (*Salvia alba*), yerba santa (*Eriodictyon trichocalyx* va. *trichocalyx*), and scale broom (*Lepidospartum squamatum*). Swaths of willows (*Salix* sp) and mule fat (*Bacharris pilularis*) are growing in bottom of the basin.

METHODOLOGY

Approximately 50-percent of the land adjacent to the Project alignment is comprised of RAFSS which provides habitat for a myriad of regionally sensitive flora and fauna, unique to this region. Listed species identified to have a potential to occur within the vicinity of the project area include the coastal California gnatcatcher (CAGN) [*Polioptila californica californica*]. The project is not mapped within CAGN critical habitat however there is suitable habitat within and adjacent to the project site.

The accepted CAGN focused survey protocol during the breeding season (March 15 to June 30) requires 6 visits not less than 7 days apart. The methodology for this breeding survey was conducted in accordance with the protocol for a breeding season survey.

A 15-day notice was sent to the U.S. Fish and Wildlife Service advising them of the intent to conduct the modified CAGN surveys on the project site (Notice attached as Appendix B). Field

surveys were conducted by Lisa Patterson (#TE 832945-4) and begun on April 9, 2015 extended until June 5, 2015. Each survey was conducted by walking the site and visually and audibly identifying birds within the coastal sage scrub vegetation community. Bird species observed were recorded during each visit.

Table 1 is a summary of the survey visits.

Table 1
SURVEY DATA SUMMARY

Date	Survey Time		Temperature (°F)		Results CAGN
	Start	End	Start	End	
04/9/2015	0615	1010	52°F	65°F	None Detected
04/21/2015	0600	0945	55°F	68°F	None Detected
04/29/2015	0605	1040	67°F	83°F	None Detected
05/12/2015	0630	1015	57°F	72°F	None Detected
05/29/2015	0645	1200	61°F	78°F	None Detected
06/5/2015	0700	1200	61°F	70°F	None Detected

Background Information for *Polioptila californica californica* (CAGN)

This bird species is a federally listed Threatened Species that occurs in Coastal Sage Scrub (CSS) in southern California. The CAGN are year-round residents of the CSS vegetative community in southern California. As late as the mid-1940s the CAGN was considered locally common and by the mid-1960s, a noticeable decline had begun. The CAGN was listed as Threatened in 1992.

Breeding pairs become highly territorial by late February or early March. The CAGN is a small thrush-like songbird approximately 4 to 5 inches in length with dark, blue-gray plumage above and gray-white plumage below. Nest building begins during the second or third week of March.

RESULTS

Observations of wildlife included scat, tracks, burrows, nest, calls, and individual animals. The reptile and amphibian species observed include the western fence lizard, western toad, and gopher snake. The most common mammal species detected include individuals or sign of cottontail rabbit and coyote. The most common bird species observed were Bushtits, house finch, California tohee, mourning dove, and common raven. See Appendix A for a Data Sheets.

Coastal California Gnatcatcher

The result of this survey is that no CAGN were observed during this survey. According to the "Final Critical Habitat mapping Unit #12" for San Bernardino County, this site is not located within designated critical habitat for the CAGN.

Typical Site Photographs

Photo #1 Lower Basin (Southeast End)



View of the typical habitat on Basin walls

Photo #2 Upper Basin looking North



CONCLUSION

The result of this survey is that no CAGN were observed during this survey. Further, the site is not within designated critical habitat which has been established by the U.S. Fish and Wildlife Service as part of their recovery efforts for this species.

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- Stokes, Donald and Lillian. 1996. Stokes Field Guide to Birds: Western Region. Boston and New York: Little, Brown and Company.

APPENDIX A
DATA SHEETS

SURVEY TYPE: CAGN Breeding SITE VISIT NO. 123456789
 SURVEYING BIOLOGIST: Lisa Patterson DATE: 4/9/2015
 PROJECT NAME: Lower Day Ca. Basin TOTAL SITE ACRES: 65
 STATE: Ca COUNTY: San Bernardino

Time (24 hr)	Sky	Wind (Beaufort)	Temp °F or °C
Begin <u>0615</u>	clear / partly cloudy / overcast / fog / drizzle / shower	<1 (1-3) 4-7 8-12 >12	<u>52°F</u>
End <u>1010</u>	clear / partly cloudy / overcast / fog / drizzle / shower	<1 (1-3) 4-7 8-12 >12	<u>65°F</u>

FINDINGS:

Plant sp.	Birds Observed	Other
<u>CA Sage</u> <u>Buckwheat</u> <u>Yucca schottii</u> <u>Lotus</u> <u>Scale</u> <u>Yucca whipplei</u> <u>Buck Sage</u> <u>Wine Sage</u> <u>WPA</u> <u>CRW</u> <u>Carnegie</u>	<u>CLSW</u> <u>POW</u> <u>POW</u> <u>KILL</u> <u>HOWL</u> <u>BLPH</u> <u>AWHB</u> <u>CATO</u> <u>LEGF</u> <u>SPTD</u> <u>COEA</u>	<u>BEACHY</u> <u>COYONS</u> <u>CTR-MUL</u>

Surrounding land uses (including adjoining properties):

Residential, school, FLD CRW / POWS
Grassland

Habitat onsite (circle): open soils hilltop ridge Plantago Castilleja soil crusts old roads
 nectar clay soils rock outcrops

Conditions: (e.g., grazing agricultural sowbugs/carwigs recent fire grading)

Other:

SURVEY TYPE: CAGN - Breeding SITE VISIT NO. 123456789
 SURVEYING BIOLOGIST: Lisa Patterson DATE: 4/21/2015
 PROJECT NAME: Lower Day Ca. Basin TOTAL SITE ACRES: 65
 STATE: Ca COUNTY: San Bernardino

Time (24 hr)	Sky	Wind (Beaufort)	Temp °F or °C
Begin <u>0600</u>	clear / partly cloudy / overcast / fog / drizzle / shower	<1 (1-3) 4-7 8-12 >12	<u>55°F</u>
End <u>0815</u>	clear / partly cloudy / overcast / fog / drizzle / shower	<1 (1-3) 4-7 8-12 >12	<u>68°F</u>

FINDINGS:

Plant sp.	Birds Observed	Other
	<u>MODO</u> <u>BUSH</u> <u>MALL</u> <u>CATO</u> <u>COEA</u> <u>HOPI</u> <u>LEGF</u> <u>AWHB</u> <u>BLPH</u> <u>POW</u> <u>SPTD</u> <u>SOXP</u> <u>POWL</u> <u>HOWL</u>	<u>BEACHY</u> <u>COYONS</u> <u>POWERS</u> <u>CRW</u>

Surrounding land uses (including adjoining properties):

Habitat onsite (circle): open soils hilltop ridge Plantago Castilleja soil crusts old roads
 nectar clay soils rock outcrops

Conditions: (e.g., grazing agricultural sowbugs/carwigs recent fire grading)

Other:

SURVEY TYPE: CAGN - Breeding SITE VISIT NO. 1 2 3 4 5 6 7 8 9
 SURVEYING BIOLOGIST: Lisa Patterson DATE: 5/12/2015
 PROJECT NAME: Lower Day Ca. Basin TOTAL SITE ACRES: 4.5
 STATE: CA COUNTY: San Bernardino

Time (24 hr)	Sky	Wind (Beaufort)	Temp °F or °C
Begin <u>0630</u>	clear / partly cloudy / overcast / fog / drizzle / shower	<u><1</u> 1-3 4-7 8-12 >12	<u>57°F</u>
End <u>0015</u>	clear / partly cloudy / overcast / fog / drizzle / shower	<u><1</u> 1-3 4-7 8-12 >12	<u>62°F</u>

FINDINGS:

Plant sp.	Birds Observed	Other
	AWHG MALL BPHI PTHA CARO BAWR BAWR CARO MODO WOFF HOSP CARO VEGF RLAW	COGOTO ENW-TAL

Surrounding land uses (including adjoining properties):

Habitat onsite (circle): open soils hilltop ridge Plantago Castilleja soil crusts old roads
 nectar clay soils rock outcrops

Conditions: (e.g., grazing agricultural sowbugs/earwigs recent fire grading)

Other:

SURVEY TYPE: CAGN Breeding SITE VISIT NO. 1 2 3 4 5 6 7 8 9
 SURVEYING BIOLOGIST: Lisa Patterson DATE: 4/29/2015
 PROJECT NAME: Lower Day Ca. Basin TOTAL SITE ACRES: 4.5
 STATE: CA COUNTY: San Bernardino

Time (24 hr)	Sky	Wind (Beaufort)	Temp °F or °C
Begin <u>0605</u>	clear / partly cloudy / overcast / fog / drizzle / shower	<u><1</u> 1-3 4-7 8-12 >12	<u>67°F</u>
End <u>1040</u>	clear / partly cloudy / overcast / fog / drizzle / shower	<u><1</u> 1-3 4-7 8-12 >12	<u>83°F</u>

FINDINGS:

Plant sp.	Birds Observed	Other
various aca central white willow vine willow Lotus sp Pterocarp	COBA BASW HOFF MODO CARO LATH LATH AWHG MALL KILL LARG LETH ALTH BPHI PTHA	COGOTO + POPS ENW-TAL WIGGERS WHITOTAL

Surrounding land uses (including adjoining properties):

Habitat onsite (circle): open soils hilltop ridge Plantago Castilleja soil crusts old roads
 nectar clay soils rock outcrops

Conditions: (e.g., grazing agricultural sowbugs/earwigs recent fire grading)

Other:

SURVEY TYPE: CAGN - Breeding SITE VISIT NO. 1 2 3 4 5 6 7 8 9
SURVEYING BIOLOGIST: Lisa Patterson DATE: 6/5/2015
PROJECT NAME: Lower Day Bc Basin TOTAL SITE ACRES: 2.65
STATE: Ca COUNTY San Bernardino

Time (24 hr)	Sky	Wind (Beaufort)	Temp °F or °C
Begin <u>800</u>	clear / partly cloudy / overcast / fog / drizzle / shower	< 1 <u>3</u> 4-7 8-12 >12	<u>61°F</u>
End <u>1200</u>	clear / partly cloudy / overcast / fog / drizzle / shower	< 1 <u>3</u> 4-7 8-12 >12	<u>70°F</u>

FINDINGS:

Plant sp.	Birds Observed	Other
	RTAA NOMB HOFI SOP LEAF BAPT MODO BAPT CASA SAP ROAD ANAB BAPT	

Surrounding land uses (including adjoining properties):

Habitat onsite (circle): open soils hilltop ridge Plantago Castilleja soil crusts old roads
nectar clay soils rock outcrops

Conditions: (e.g., grazing agricultural sowbugs/earwigs recent fire grading)

Other: NO CAGN

SURVEY TYPE: CAGN Breeding SITE VISIT NO. 1 2 3 4 5 6 7 8 9
SURVEYING BIOLOGIST: Lisa Patterson DATE: 5/29/2015
PROJECT NAME: Lower Day Bc Basin TOTAL SITE ACRES: 2.65
STATE: Ca COUNTY San Bernardino

Time (24 hr)	Sky	Wind (Beaufort)	Temp °F or °C
Begin <u>0645</u>	clear / partly cloudy / overcast / fog / drizzle / shower	< 1 <u>3</u> 4-7 8-12 >12	<u>61°F</u>
End <u>1200</u>	clear / partly cloudy / overcast / fog / drizzle / shower	< 1 <u>3</u> 4-7 8-12 >12	<u>78°F</u>

FINDINGS:

Plant sp.	Birds Observed	Other
	MODO ANAB CASA LEAF HOFI NOMB MODO CASA CASA SOP RTAA BAPT	COTYB

Surrounding land uses (including adjoining properties):

Habitat onsite (circle): open soils hilltop ridge Plantago Castilleja soil crusts old roads
nectar clay soils rock outcrops

Conditions: (e.g., grazing agricultural sowbugs/earwigs recent fire grading)

Other:

APPENDIX B
15-DAY NOTICE



March 25, 2015

Stacy Love
Recovery Permit Coordinator
Carlsbad Fish and Wildlife Office
6010 Hidden Valley road, Suite 101

**Subject: 15-Day Notification to conduct coastal California gnatcatcher
Breeding period survey for Lower Day Basin, San Bernardino County, CA.**

**The surveys will be conducted along CSS areas within the basin. The area of
CSS within the basin is approximately 63.23 acres.**

Dear Ms. Love,

This letter is a notification of my intent to conduct focused breeding season surveys for the coastal California gnatcatcher on those areas identified on the attached graphics. The site is located in the vicinity of Rancho Cucamonga, San Bernardino County, California.

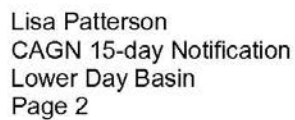
The pipeline alignment has been identified as suitable CAGN habitat depicted on the attached graphics..

The site is mapped on USGS 7.5 minute Quads, "Cucamonga Peak" in Section 32 of T1N, R6W SBBM, San Bernardino County, California
Lat: N34.1289425° Lon: W117.5431923°

If you have any questions regarding this request or would like any additional information, please call or email.

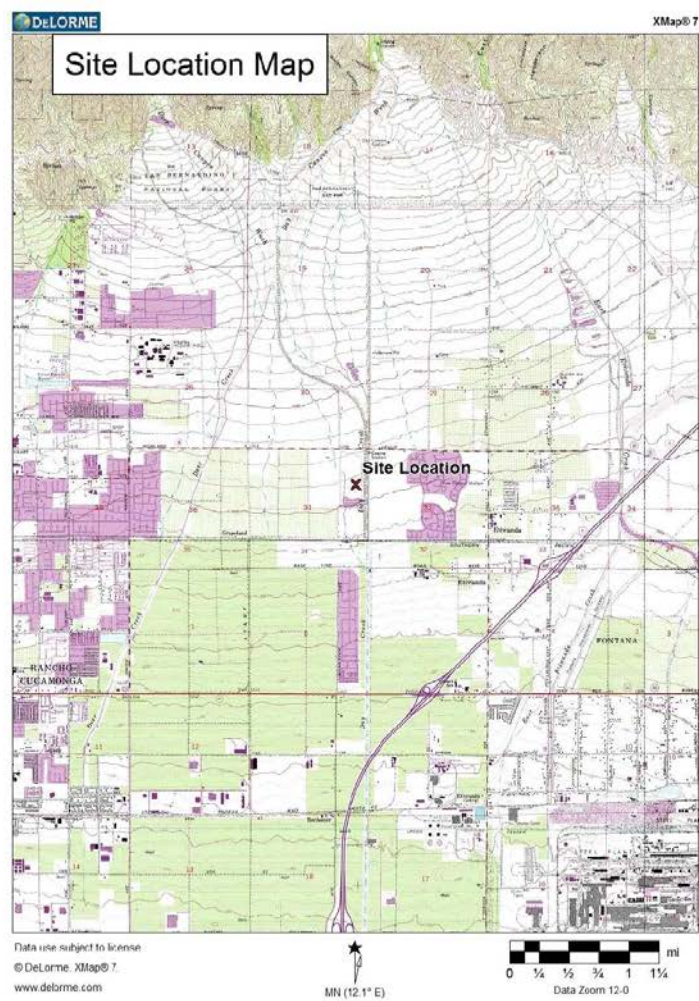
Sincerely,

Lisa Patterson
TE832945-5
Sr. Environmental Manager
Ecologist/Regulatory Specialist/QSP





Lisa Patterson
CAGN 15-day Notification
Lower Day Basin
Page 3



725 Town & Country Road, Suite 300 - Orange, CA 92868 - Telephone (909) 838-1333; Fax (714) 835-6671 www.jlpatterson.com



Lisa Patterson
CAGN 15-day Notification
Lower Day Basin
Page 4



725 Town & Country Road, Suite 300 - Orange, CA 92868 - Telephone (909) 838-1333; Fax (714) 835-6671 www.jlpatterson.com

APPENDIX E

SAN BERNARDINO KANGAROO RAT FOCUSED SURSVEY REPORT



July 01, 2015

Stacey Love
Recovery Permit Coordinator
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, CA 92008

RE: USFWS permit No. TE-094308-3
45-Day Presence/Absence Survey Report Lower Day Creek Basins
San Bernardino kangaroo rat (SBKR) [*Dipodomys merriami parvus*]

Dear Ms. Love,

This letter report contains the findings of my June 2015 San Bernardino kangaroo rat (*Dipodomys merriami parvus* [SBKR]) presence/absence survey on an approximate 40-acre area Lower Day Basin located on the western side of the Day Creek channel, South of the 210 freeway, west on the 15 freeway and north of Baseline Avenue in the City of Rancho Cucamonga, in western San Bernardino County. The study area can be found on the USGS – Cucamonga Peak Quadrangle, 7.5 Minute Series topographic map in Section 31, Township 1 North, Range 6 West (see Figures 1-2).

The habitat contained along the slopes of the Lower Day Basin system is potentially suitable for SBKR, as such presence/absence surveys were warranted for this project. Following a 15-Day Notification to the U. S. Fish and Wildlife Service (USFWS), the subject property was surveyed for the federally-listed as endangered SBKR by permitted biologist Shay Lawrey on June 08-13, 2015. **No SBKR** were trapped during the survey and the negative finding indicates that SBKR are absent from the study area.

Project Description

The Inland Empire Utilities Agency (IEUA) and the Chino Basin Watermaster (CBWM) are proposing San Seavine Basin Improvements Project. This project would increase the amount of recycled water (RW) and stormwater recharged into the Chino Groundwater Basin. The new Lower Day Basin will be able to store and recharge an additional 789 acre-ft./yr of storm water in addition to the existing baseline storm water recharge of 395 acre-ft./yr.

Species Background

There are 19 subspecies of Merriam's k-rat (*D. merriami*), three of which occur in California, including the SBKR. Of the three California subspecies, SBKR are the smallest. The historic range of the subspecies SBKR lies west of the desert divide of the San Jacinto and San Bernardino mountains and extends from the San Bernardino Valley in San Bernardino County to the Menifee Valley in Riverside County (Lidicker 1960; Hall 1981). The historical range of SBKR is thought to have encompassed an area of approximately 326,467 acres. Currently SBKR occupies approximately 3,247 acres of suitable habitat in about seven general locations (USFWS 1998), including the Santa

Ana River, Cajon Creek Wash, Lytle Creek Wash, City Creek, and upper Etiwanda Wash in San Bernardino County, and sites in western Riverside County. Of these primary occupied locations in the San Bernardino and San Jacinto Valleys, only three sites (Santa Ana River and its tributaries, Cajon and Lytle creeks, and San Jacinto and Bautista creeks) support sustaining populations of SBKR and large contiguous patches of occupied habitat.

SBKR are found primarily on well drained, sandy loam substrates, characteristic of alluvial fan and floodplains, where they are able to dig simple, shallow burrows. They are primarily nocturnal animals, but they also exhibit crepuscular behavior around dusk and dawn. They emerge from their burrows around dusk to engage in foraging and other activities. Animals may be active any hour of the night, but the heaviest concentration of activity tends to occur in the three- to four-hour time span just after dusk. They usually return permanently to their burrows before dawn (Behrends et al. 1986a).

Factors affecting the amount and patterns of surface activity of individuals include: (1) sex and reproductive condition, with reproductive active males traveling farther than female or males with regressed testes (Behrends et al. 1996a); and (2) moonlight, with animals reducing surface activity and shifting activity toward places with relatively dense cover (Lockard and Owings 1974; Price et al. 1984). Daly et al. (1992b) found that *D. merriami* shifted from nocturnal activity during full moon to more crepuscular activity during dawn and dusk periods, suggesting a more complex and fine-grain compensatory behavioral response to moonlight rather than simply reducing overall surface activity to avoid moonlight.

The USFWS emergency listed the SBKR on January 27, 1998 and subsequently listed them as federally endangered later that same year on September 24, 1998 (63 FR 3837) under the Endangered Species Act of 1973 (63 FR 3877), as amended. The USFWS also designated critical habitat units for the SBKR on April 23, 2002 (67 FR 19811). The units included reaches of the Santa Ana, Lytle and Cajon creeks, San Jacinto River and Bautista creek, and the Etiwanda alluvial fan (65 FR 77178). Identified threats to the San Bernardino kangaroo rat include the loss of habitat, habitat fragmentation, urban and industrial development, highway construction, flood control and water conservation projects, sand and gravel mining, grazing, and vandalism (USFWS 1998). Additional threats to the species likely include farming and discing of habitat for weed abatement, heavy grazing, and off-road vehicles. Although this species is associated with sandy washes and drainages, they occur in habitat supporting sparse alluvial fan sage scrub on benches above creek channels.

Methods

Ms. Lawrey has over a decade of experience with SBKR and is a biologist permitted (USFWS permit number TE 094308-3) by the USFWS to trap and handle SBKR. Ms. Lawrey initiated the survey on the evening of Sunday, June 07, 2015 and ended the survey on the morning of Friday, June 12, 2015. The survey concentrated on the north basin and south and southeastern embankments. These areas are where the most suitable habitat exists on site.

A total of 140 traps, 12-inch Sherman live traps (product number SLK; H.B. Sherman Traps, Tallahassee, FL) were set within trap-lines within the targeted habitat with spacing between each trap at approximately 10 meters. Each trap was baited after dusk with mixture of rolled oats and commercially-formulated small mammal feed (seed) that included a millet seed. Traps were inspected at midnight and again at dawn. All animals were identified and released unharmed at the point of capture. Daily notes included weather conditions such as temperature, wind speed, cloud

cover, precipitation and moon phase. Site characteristics such as soils, topography, the condition of the plant communities, and evidence of human use of the site were also noted.

Results

Lower Day Creek Basins are not mapped within SBKR critical habitat. In fact, the USFWS excluded these flood control facilities from critical habitat because they understood that these basin systems would be maintained annually for flood control purposes and would therefore not retain habitat value for SBKR that they may have held in the past. Although the Lower Day Creek Basins are located within the historic range of the SBKR, none have been found here in over a decade. The bottom of the basins are wet most of the year they do not possess the soil characteristics or vegetation types suitable for SBKR. The basin floors have soils that are fine grained, moist and compacted which do not typically support SBKR. No small mammal burrows were found on the floors and the vegetation here is riparian with a heavy non-native grass component.

The native alluvial fan sage scrub habitat growing on the basin slopes is mature with dense cover and is even aged. Floodplain bench/terraces subject to dynamic geomorphological and hydrological processes typical of fluvial systems are lacking throughout the Lower Day Creek Basins.

The slopes are the only areas within the basin systems containing potentially suitable habitat to support SBKR. The soils and substrate on the slopes are composed of sandy loam which is friable and conducive for small mammal burrow construction and maintenance. Vegetation is characterized by, buckwheat (*Eriogonum fasciculatum*), yerba santa (*Eriodictyon trichocalyx* va. *trichocalyx*), white sage (*Salvia apiana*), black sage (*S. melifera*), chamise (*Adenostema fasciculatum*) and scale broom (*Lepidospartum squamatum*). Swaths of willows (*Salix* sp) and mule fat (*Baccharis pilularis*) are growing in bottom of the basin.

SBKR are typically found on either flat or gently sloping alluvial fans, floodplains, along washes, in adjacent uplands and in areas with historical braided channels. They typically occupy areas that support alluvial sage scrub and chaparral vegetation. As stated above SBKR tend to prefer the more open areas seen in pioneer and intermediate type alluvium, but can also be found in mature RAFSS depending on its distance to pioneer RAFSS.

Temperatures were warm with overnight low temperatures ranging between 63°F and 65°F. The moon was full and the skies were clear. Weather was ideal for trapping and winds were calm.

Table 1. Survey dates of trap night, weather conditions, and moon phases

Survey Dates	% Cloud Cover	Wind (BFT)	Overnight Low Temp (°F)	Precipitation	Moon Phase
6/07	75	1	73	0	Waning gibbous
6/08	80	2	73	0	Waning gibbous
6/09	100	1	72	0.01	3 rd quarter
6/10	20	2	63	0	Waning crescent
6/11	10	1	61	0	Waning crescent

On the surface, sign typically indicative of kangaroo rat species (tracks, scat, tail drags, sand bath sites, or burrows) was absent. Scat and tracks of various other small mammals species was observed however. Five (5) native rodent species were trapped in the survey area. No animals were marked as

part of this survey, so determining unique individuals versus recaptured individuals was not possible. The term “trap night” is used to relay how many individuals, per species were caught over the 5-night session. Each trap is counted as a trap night, so with 140 traps surveyed over five nights there was a total of 700 trap nights. (Table 2). The fifth survey night had the highest trapping success with 57 animals being caught; whereas, the first survey night had the lowest trapping success of 28 animals captured. **No SBKR** were trapped during the survey.

Table 2. Species captured

Species	Trap night
Deer mouse (<i>Peromyscus maniculatus</i>)	107
Cactus mouse (<i>Peromyscus eremicus</i>)	89
San Diego pocket mouse (<i>Chaetodipus fallax</i>)	81
California mouse (<i>Peromyscus californicus</i>)	10
wood rat (<i>Neotoma lepida</i>)	12

(Phylogenetic listing per Jameson & Peters, California Mammals, 1988)

Conclusions

The Lower Day Creek Basins encompasses a sizable area of land that is mostly undisturbed by the daily habits found in a suburban area. Within the basins there are no direct impacts by lighting, traffic, noise, recreational vehicles, pedestrians, or house hold pets such as dogs and cats. There are, however, indirect impacts from the adjacent roads and residential developments. A high diversity of common wildlife is found in the basins. Historically, the Etiwanda fan and the local vicinity supported sustainable breeding populations of SBKR within the sage scrub habitat community. SBKR can be found in all habitat types within the species’ historic distribution. Furthermore, trapping surveys conducted in the last decade have shown SBKR to occupy highly disturbed areas in a range of soil and vegetation types in various states of alteration and degradation. They have been captured in dirt parking lots and dirt roads as well as RAFSS, Coastal sage scrub, and chaparral. As such, it was appropriate to trap these basins to provide a updated data to the USFWS. The trapping results indicate that SBKR are **absent** from the study site and will not be adversely affected by the facilities proposed by IEUA.

Please do not hesitate to contact at 909-915-5900 should you have any questions or require further information.

Sincerely,



Shay Lawrey,

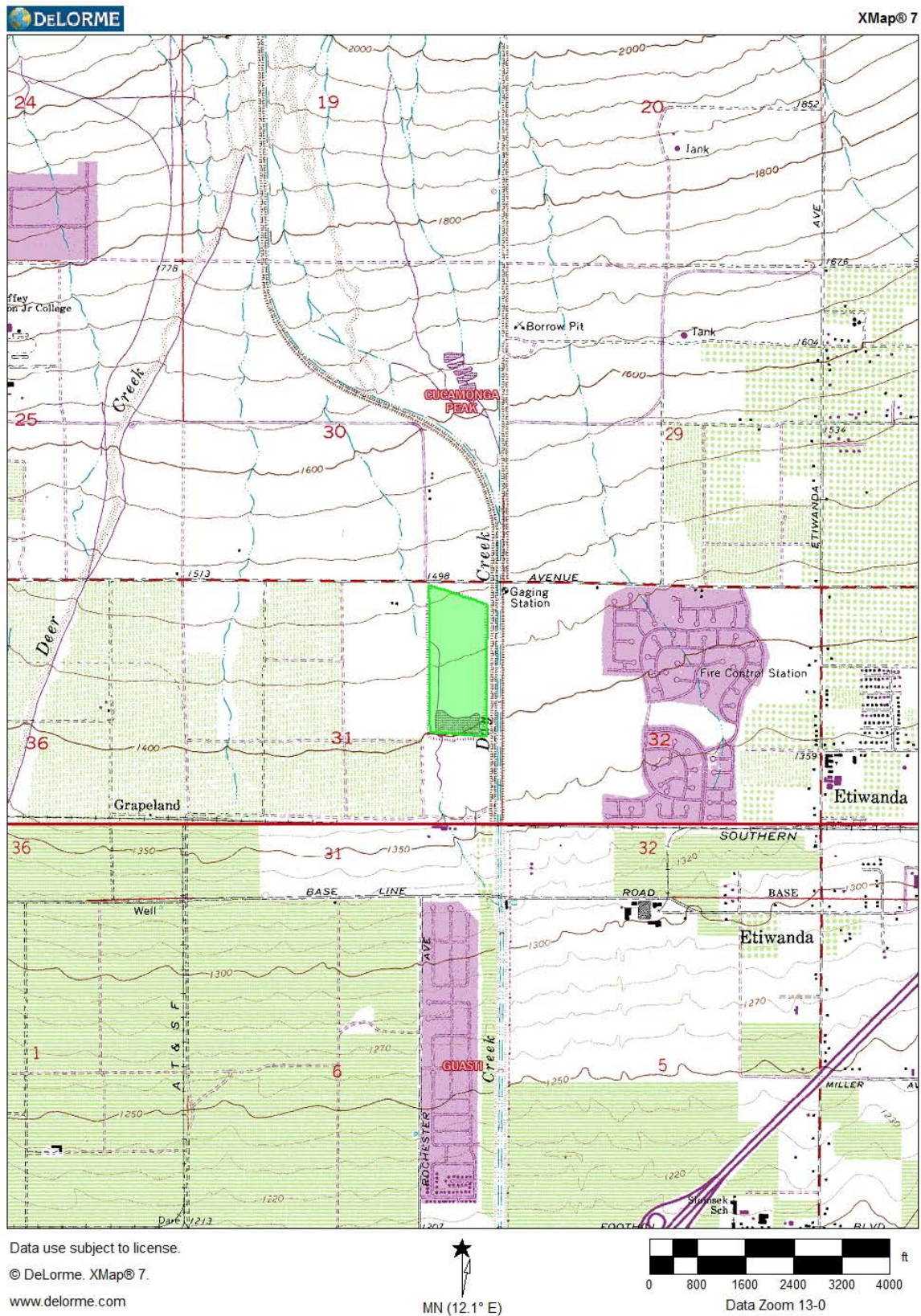
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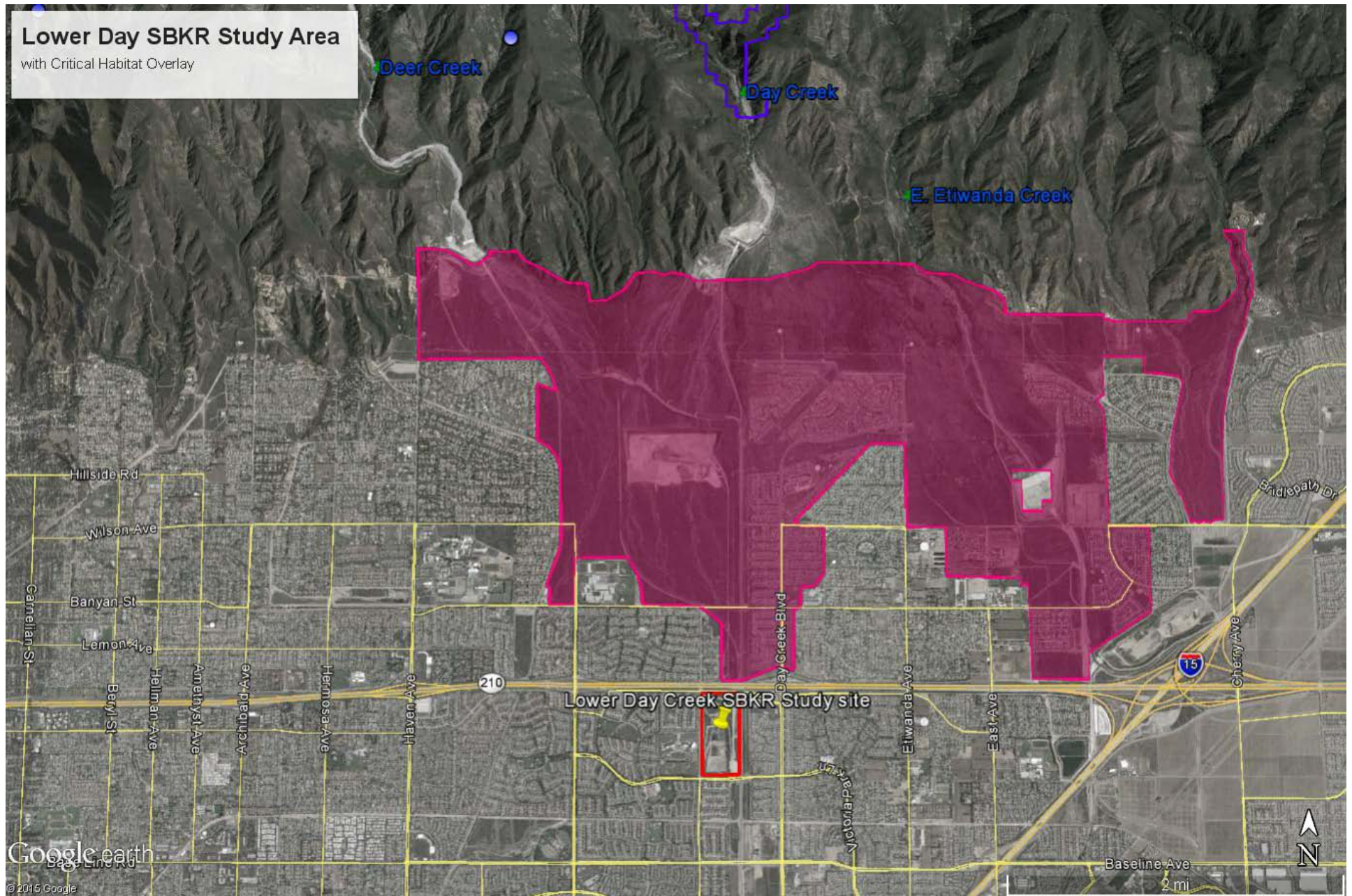
Vicinity Map
Site Location Map
2015 SBKR Study Area

Figure 1. Vicinity Map



Figure 2. Site Location Map





Lower day Creek Basin SBKR Sutdy Area



Photo 1. Overall view of site conditions at Lower Day Creek Basins



Photo 2. View across trapping area looking north.



Photo 3. View across trapping area looking east.



Photo 4. Photos showing basin floor conditions



