



**BOARD OF DIRECTORS
ENGINEERING, OPERATIONS AND PLANNING COMMITTEE
STAFF REPORT**

DATE: September 8, 2021
TO: Engineering, Operations and Planning Committee
FROM: Shamindra Manbahal, General Manager
SUBJECT: CONSIDER REIMBURSEMENT AGREEMENT WITH LENNAR HOMES OF CALIFORNIA, INC FOR MONTERADO TRACT 20224 (OFF-SITE CITRUS AVENUE)

BACKGROUND:

Lennar Homes of California. (“Developer”) is the owner of land located north of Duncan Canyon Road, and east of Citrus Avenue in the City of Fontana, known as Monterado Tract 20224 (“Development”), as shown in Exhibit A. The proposed Development includes the installation of approximately 1,557-feet of water main within Citrus Ave to provide water service to the project. West Valley Water District (“District”) is requesting that the off-site facilities that are to be constructed in Citrus Avenue with the Development be 16-inches to conform with the system requirements of the District’s 2020 Water Facilities Master Plan (“WFMP”).

DISCUSSION:

Based on the recommendations of the WFMP, the District is requiring the Developer to upsize the water line to accommodate the future increased development in the Zone-7 service area. As outlined in the Reimbursement Agreement (“Agreement”), attached as Exhibit B, the District will reimburse the Developer for half (50%) of the cost of the 16-inch waterline in Citrus Avenue, from the intersection of Duncan Canyon Road and Citrus Avenue to the northern most property line of the Development. When the land on the west side of Citrus Avenue (north of Duncan Canyon Road) is developed, that developer will be assessed a front footage charge equal to the amount that the District paid as part of this Agreement.

In accordance with the Agreement, the Developer will solicit (3) bids from the District’s approved contractors list for the construction of the new water main. The lowest responsible bid will be reviewed and approved by the District prior to construction.

FISCAL IMPACT:

The fiscal impact will be based on the actual construction cost from the successful bidder for the construction of the reimbursable facilities. This is a budgeted item in the Fiscal Year 2021/2022 Capital Improvement Budget with a budget of \$200,000.

STAFF RECOMMENDATION:

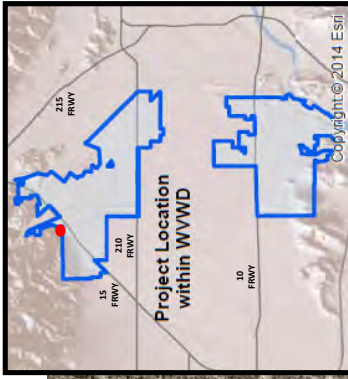
Staff recommends that this item be submitted for consideration, and that the Board of Directors approve this item and authorize the General Manager to execute the necessary documents.

BP:ls

ATTACHMENT(S):

1. Exhibit A - Aerial Map
2. Exhibit B - Reimbursement Agreement

EXHIBIT A



16" Ductile Iron Pipe Water Main (from the intersection of Duncan Canyon Rd and Citrus Ave to the norther most property line of Tract 20224).

Citrus Ave

Duncan Canyon Rd

TRACT
20224



Exhibit A
Tract 20224 (Off-Site Citrus Ave)

EXHIBIT B

REIMBURSEMENT AGREEMENT

THIS REIMBURSEMENT AGREEMENT (“Agreement”) is entered into as of the date upon which this Agreement has been executed and delivered by both Parties (“Effective Date”), by and between **LENNAR HOMES OF CALIFORNIA, INC** (“Applicant”), and West Valley Water District (“District”). Applicant and District are sometimes individually referred to herein as a “Party” and collectively referred to herein as the “Parties.”

RECITALS

WHEREAS, the Applicant is the owner of and/or beneficiary interested in certain real property in the County of San Bernardino, State of California, described as **Monterado Tract No. 20224 (Off-site Citrus Ave)** in the City of Fontana, north of the intersection of Duncan Canyon Road and Citrus Ave located at APN 0239-081-35, as shown in “Exhibit A”; and

WHEREAS, Applicant desires to extend the District’s water distribution pipelines and facilities to said real property and to provide and maintain domestic water service to said property; and

WHEREAS, the District has identified these facilities in its Water Facilities Master Plan as requiring to be a specific size to meet the District’s overall hydraulic needs in the distribution system, and the Developer has agreed to upsize its required piping to accommodate the District’s requirements; and

WHEREAS, the District has agreed to reimburse the Applicant for applicable costs associated with the installation of water facilities as described in “Exhibit B” and contained in this Agreement and provide domestic water service to such real property under its applicable rates, rules, and regulations as the same are now in effect or may hereafter be amended; and

WHEREAS, by approval of the Board of Directors at a regular scheduled meeting, has authorized Applicant to construct and contract the installation of water facilities, including off-site facilities that are subject to reimbursement; and

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, and in consideration of other valuable consideration, the receipt and adequacy of which is hereby acknowledged, the Parties agree as follows:

1. Reimbursable Facilities. Applicant agrees to undertake the engineering, design, and construction of the Reimbursable Facilities shown in “Exhibit B” in accordance with the terms and conditions of the Water System Infrastructure Installation and Conveyance Agreement attached hereto as “Exhibit C” (“Conveyance Agreement”). To the extent there are any conflicts between this Agreement and the Conveyance Agreement, the Conveyance Agreement shall control. Applicant shall initially pay for all costs associated with the Reimbursable Facilities; however, within thirty (30) days upon substantial completion of the Reimbursable Facilities to the reasonable approval of the District, which approval shall not be unreasonably conditioned, withheld or delayed, the District shall reimburse the Applicant for fifty percent (50%) of all costs paid by Applicant associated with the

Reimbursable Facilities, which shall include only materials and installation of the pipe, fittings and related appurtenances as described in “Exhibit B”, to exclude design, permits, bonding, insurance, excavation, plan check, construction administration and project management, backfill, traffic control, survey, asphalt, disinfection/chlorination, service laterals and hydrant assemblies. The Applicant and the District shall reasonably cooperate to complete the construction of said facilities.

2. Prevailing Wage. The Applicant agrees to the payment of prevailing wages, and other public works requirements pursuant to the California Labor Code, the California Government Code and the California Public Contracts Code for the Reimbursable Facilities described in “Exhibit B”.
3. Bids. The Applicant shall obtain a minimum of three (3) bids from the District’s approved list of contractors and shall furnish to the District true and accurate copies of bids received. Applicant shall award the contract to the lowest bidder for the construction of the Reimbursable Facilities and the District shall have the right to review and approve the bids and the successful bidder.
4. Change Orders. Applicant will not issue a change order with respect to the Reimbursable Facilities without the prior written consent of the District, which consent shall not be unreasonably withheld. Subject to the foregoing, District shall have no obligation to pay any cost increases for changes to the work for the Reimbursable Facilities unless District has approved the same in writing.
5. Invoice. Upon the completion of the Reimbursable Facilities and the acceptance thereof, the Applicant shall submit an invoice reflecting any District approved change orders or deviations for the Reimbursable Facilities. This invoice shall include an itemized accounting of the construction of Reimbursable Facilities. The invoice shall be subject to the review and approval by District, which approval shall not be unreasonably withheld. District shall use this amount for the establishment of the frontage fee for future connections.
6. Dispute Resolution. Any dispute, claim or controversy arising out of, resulting from or relating to this Agreement or the breach, termination, enforcement, interpretation or validity thereof, including any dispute, claim or controversy arising out of, resulting from or relating to the Water Line Extension, and the determination of the scope or applicability of this agreement to arbitrate, shall be determined by binding arbitration in San Bernardino, California, before a JAMS arbitrator (as agreed among the parties, or appointed pursuant to JAMS procedures). The Parties shall submit arbitration briefs not to exceed three pages for the arbitrator’s consideration and shall make themselves available for a hearing at the discretion of the arbitrator. Judgment on the award may be entered in any court having jurisdiction. This clause shall not preclude the Parties from seeking provisional remedies in aid of arbitration from a court of appropriate jurisdiction.
7. Binding Effect. This Agreement shall be binding on and inure to the benefit of the heirs, executors, administrators, successors, assigns, agents, legal representatives, and bankruptcy trustees of the Parties, including without limitation their successors-in-interest.

8. Attorneys' Fees. Each Party to this Agreement will bear its own costs, expenses, and attorneys' fees in connection with this Agreement, including its negotiation and the performance or satisfaction of its obligations, liabilities and/or duties under or pursuant this Agreement, subject, however, to the following: In the event of any dispute between the Parties concerning the terms or provisions of this Agreement, including enforcement of such terms or provisions, the Party prevailing in such dispute shall be entitled to collect from the other Party all costs incurred in connection with such dispute, including reasonable attorneys' fees.
9. Non-waiver. No failure or delay in exercising any right under this Agreement shall operate as a waiver thereof or of any other right.
10. Amendments and Waivers. This Agreement constitutes the entire agreement of settlement and release between the Parties, and there are no other agreements expanding or modifying its terms. This Agreement may not be amended or modified except by a written instrument signed by the Parties which expressly states that modification of this Agreement is intended.
11. Severability. If any provision or portion of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions and/or portions will nevertheless continue in full force without being impaired or invalidated in any way.
12. Counterparts. This Agreement may be executed and delivered in any number of counterparts, including e-mail or facsimile counterparts, all of which shall be deemed to constitute one and the same instrument, and each of which shall be deemed an original.
13. Additional Acts and Documents. Each Party agrees to do all such things and take all such actions, and to make, execute, and deliver such other documents and instruments as shall be reasonably required to carry out the provisions, intent, and purposes of this Agreement.
14. Governing Law. This Agreement will be governed by and construed in accordance with the laws of the State of California.
15. Recitals. The Parties hereby agree that the Recitals above are true and accurate and are incorporated herein.
16. Authorization. Each individual signing this Agreement represents and warrants that he or she is duly authorized to execute this Agreement in their individual or representative capacity as indicated.
17. No Consents Required. Each Party represents and warrants that the consent or approval of no third party, including, without limitation, a lender, is required with respect to the execution of this Agreement, or if any such third party consent or approval is required, the Party who requires such consent or approval has obtained any and all such consents or approvals and that no other consent, authorization or approval is required by any other party for full execution on such Party's behalf.

[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the Parties have executed this Agreement effective as of the Effective Date.

LENNAR HOMES OF CALIFORNIA, INC

By: _____

Name: _____

Title: _____

Date: _____

WEST VALLEY WATER DISTRICT

By: _____

Name: Shamindra Manbahal

Title: General Manager

Date: _____

Exhibit A: Development Location

Exhibit B: Description of Reimbursable Facilities

Exhibit C: Water System Infrastructure Installation and Conveyance Agreement

EXHIBIT A (Development Location)



West Valley Water District

Exhibit A
Tract 20224 (Monterado)



EXHIBIT B (Description of Reimbursable Facilities)

Reimbursable Facilities			
Bid Item	Description	Unit	Quantity
1	Remove Existing 16" Plug and Connect to Existing Water Line	EA	1
2	16" Ductile Iron Pipe Class 250 - Fully Restrained	LF	1557
3	16" - 45 Degree Elbow	EA	2
4	16" Butterfly Valve	EA	6
5	4" Air-Valve	EA	2
6	4" Blow-Off	EA	1
7	4" Dead-End Flush Out	EA	1
8	16" Blind Flange or MJ Cap	EA	1

*** All quantities are estimates. Only field verified and installed facilities will be reimbursed.

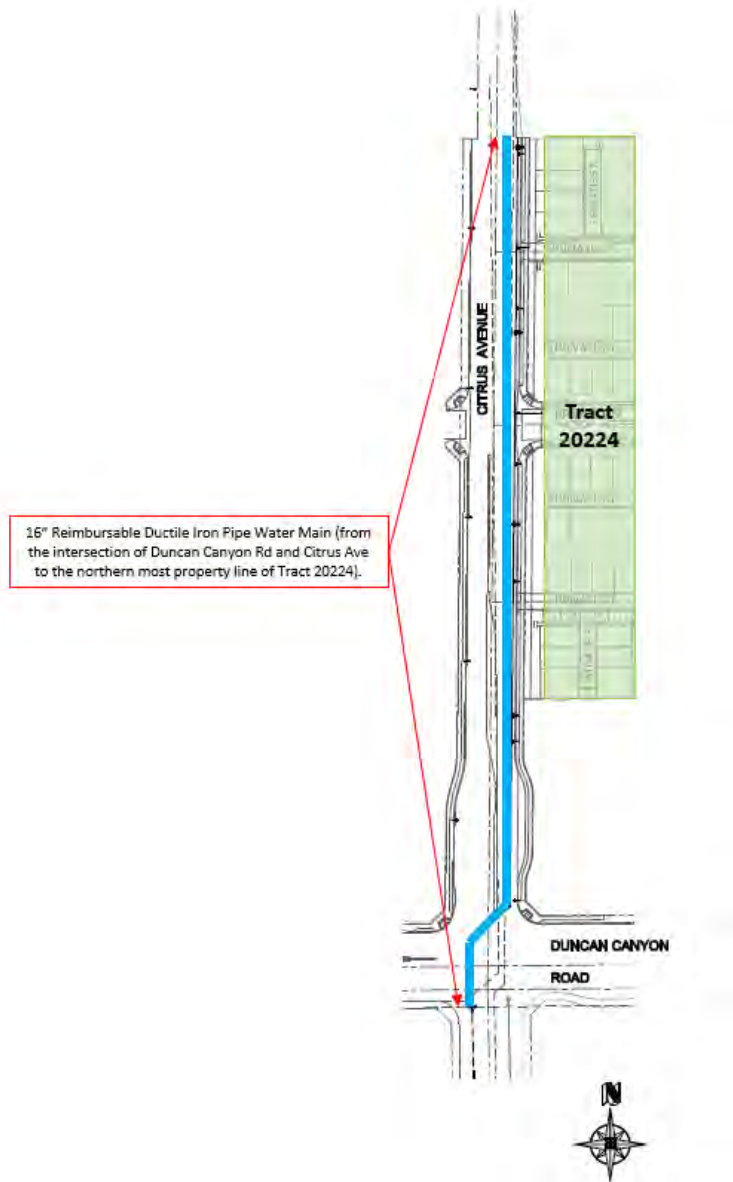


EXHIBIT C
(Water System Infrastructure Installation and Conveyance Agreement)

WATER SYSTEM INFRASTRUCTURE INSTALLATION AND CONVEYANCE AGREEMENT

This water system infrastructure installation and conveyance agreement (“Agreement”) is entered into and effective as of _____ by and between **LENNAR HOMES OF CALIFORNIA, INC** (“Developer”), and **WEST VALLEY WATER DISTRICT** (“District”) who agree as follows:

The Developer is the owner of certain land described as **TRACT 20224** and as more fully (or further) shown on Exhibit "A". In developing this land, the Developer is desirous of obtaining a public water supply adequate for domestic uses and public fire protection purposes and is desirous of integrating that water system into the District’s public water system.

In order to provide facilities for a water supply to said land, it is the intention of the parties to this Agreement that the Developer shall furnish and install those water mains, fire hydrants, service laterals, water meters and valves, valve boxes, and all other appurtenant fittings and facilities required for a complete water system to serve the land shown on Exhibit "A".

In order to implement the foregoing and in consideration of the terms and conditions herein contained, the parties further agree as follows:

1. DESIGN

1.1. Developer shall design and construct, at the Developer's own expense, the water facilities and appurtenances required to serve the development in accordance with final District approved plans known as **TRACT 20224 (OFF-SITE CITRUS AVENUE) WATER IMPROVEMENT PLANS**, as approved and attached herein as Exhibit "B" and in accordance with District-approved design standards and specifications, and the terms and conditions of this Agreement.

1.2. The water system design shall be by a Professional Engineer registered in the State of California, and in accordance with the District's most recent Rules and Regulations (the “Rules and Regulations”), the District's Standards for Domestic Water Facilities and Standard Drawings herein included by reference, all applicable District ordinances and policies and all City, County of San Bernardino, State of California, and Federal laws, ordinances, rules, regulations, codes and other legal requirements of all government bodies having jurisdiction over said construction and property (all of the foregoing requirements in this paragraph being collectively referred to herein at times as “Legal Requirements”).

1.3. The District, at Developer's expense, shall review Developer's plans for the purpose of ensuring the adequacy of the design and conformance with the District's standards and specifications. The District reserves the right to add, delete, modify, change or amend any or all the plans and specifications.

1.4. In the event that the property to be developed includes multiple residential, condominiums, commercial or industrial uses, all site plans, grading plans, and any available plumbing plot plans shall be furnished to the District by Developer.

1.5. The District makes no warranties as to the correctness, accuracy or completeness of the plans and specifications. The accuracy, adequacy, suitability, and correctness of the water system design shall be the sole responsibility of the Developer.

2. CONSTRUCTION

2.1. Developer shall perform, or caused to be performed, all construction of the water system infrastructure installation pursuant to the approved water system plans, and all Legal Requirements.

2.2 The performance of this Agreement shall commence within ninety (90) calendar days from the date of this Agreement and shall be completed within one (1) year from the estimated construction start date.

2.3. Time is of the essence in this Agreement; provided that, in the event good cause is shown therefore, the general manager of the District ("General Manager") may extend the time for completion of the water system installation. Any such extension may be granted without the notice to Developer's surety, and extensions so granted shall not relieve the surety's liability on the bond to secure faithful performance of this Agreement. The General Manager shall be the sole and final judge as to whether or not good cause has been shown to entitle Developer to an extension.

2.4. The Developer and its contractor and subcontractors shall attend a preconstruction meeting with the District at the District's headquarters no less than five (5) working days prior to commencement of construction.

2.5. No work on water facilities shall commence prior to the completion of all required curbs and gutters.

3. LICENSES AND PERMITS

3.1. Developer, and all of Developer's contractors and subcontractors warrants it possesses, or shall obtain, and maintain during the term of this Agreement any and all licenses, permits, qualifications, insurance and approval of whatever nature that are legally required of Developer, its contractors, and all subcontractors to practice its profession, skill or business.

3.2. The work to be performed under this Agreement, except meter installations, shall be performed by Developer, or a contractor or subcontractor who is pre-approved by the District and is licensed under the laws of the State of California in the specialty Class of "C-34" Pipeline or Class "A" General Engineering. A copy of the contract between Developer and the selected pre-approved contractor and all subcontractors shall be submitted to the District for review and approval.

3.3. Excavation/resurfacing permits shall be secured by Developer at Developer's expense. Permits/easements to install, maintain and operate water system facilities in private property shall be secured by Developer at Developer's own expense prior to construction.

3.4. Developer shall, at Developer's own expense, be responsible for obtaining and adhering to a National Pollution Discharge Elimination System (NPDES) permit from the Regional Water Quality Board as required for construction or pipeline flushing and disinfection.

4. INSURANCE REQUIREMENTS

4.1. The following insurance requirements have been adopted by the District and shall be applicable to this Agreement. These requirements supersede the insurance requirements set forth in any other reference of the District, and to the extent of any conflict, the specified requirements herein shall prevail.

4.2. Developer shall ensure that Developer's contractors conform to the following insurance requirements and that all required documents are submitted to the District at the time of Agreement submittal: Developer shall ensure that its contractors and all subcontractors shall purchase and maintain insurance in amounts equal to the requirements set forth in (a) through (d) below, and shall not commence work under this Agreement until all insurance required under this heading is obtained in a form acceptable to the District, nor shall Developer allow any contractor or subcontractor to commence construction pursuant to a contract or subcontract until all insurance required of the contractor and any subcontractors has been obtained.

a. General Liability: Developer shall ensure that its contractor and all subcontractors shall maintain during the life of this Agreement, a standard form of either Comprehensive General Liability insurance or Commercial General Liability insurance ("General Liability Insurance") providing the following minimum limits of liability: Combined single limit of \$1.0 million per occurrence for bodily injury, including death, personal injury, and property damage with \$2.0 million minimum aggregate, separate for this project as evidenced by endorsement. The insurance shall include coverage for each of the following hazards: Premises-Operations; Owners and Contractors Protective; Broad Form Property Damage contractual for Specific Contract; Severability of Interest or Cross-Liability; XCU Hazards; and Personal Injury – With the "Employee" Exclusive Deleted.

b. Automotive/Vehicle Liability Insurance: Developer shall ensure that its contractor and all subcontractors shall maintain a policy of automotive/vehicle liability insurance on a commercial auto liability form covering owned, non-owned and hired automobiles providing the following minimum limits of liability: Combined single limit of liability of \$1.0 million per accident for Bodily Injury, Death and Property Damage ("Automotive/Vehicle Liability Insurance").

c. Workers' Compensation Insurance: Developer shall ensure that its contractor and all subcontractors shall provide such workers' compensation insurance with statutory minimum amounts of coverage, as required by the California *Labor Code* and other applicable law, and including employer's liability insurance with a minimum limit of \$1,000,000.00 ("Workers' Compensation Insurance"). Such Workers' Compensation Insurance shall be endorsed to provide for a waiver of subrogation against the District.

d. Excess Liability: Developer shall ensure that its contractor and all subcontractors shall provide a policy providing excess coverage in a face amount necessary when

combined with the primary insurance, to equal the minimum requirements for General Liability Insurance and Automotive/Vehicle Liability Insurance.

4.3. The insurances provided for in Section 4.2 and its subsections above are subject to all of the following conditions:

a. The insurance shall be issued and underwritten by insurance companies acceptable to the District, and shall be licensed by the State of California to do business on the lines of insurance specified. The insurers must also have an "A-" Policyholder's rating" and a "financial rating" of at least Class VII in accordance with the most current A.M. Best's Rating Guide.

b. Developer's contractor and subcontractors may satisfy the limit requirements in a single policy or multiple policies. Any such additional policies written as excess insurance shall not provide any less coverage than that provided by the first or primary policy.

c. Any costs associated with a self-insured program, deductibles, or premium rating programs that determine premium based on loss experience shall be for the account of Developer, Developer's contractor and subcontractors, and the District shall not be required to participate in any such loss. If any such programs exist, Developer, Developer's contractor and subcontractors, agree to protect and defend the District in the same manner as if such cost provisions were not applicable.

d. Developer shall ensure that its contractor and all subcontractors shall have presented at the time of execution of the Agreement, the original policies of insurance and a certificate of insurance naming the District as the certificate holder and that such coverage is in force and complies with the terms and conditions outlined herein.

e. If an insurance policy contains a general policy aggregate of less than the minimum limits specified, then the policy coverage shall be written with limits applicable solely to this Agreement, as specified, and shall not be reduced by or impaired by any other claims arising against Developer. These policy limits shall be set forth by separate endorsement to the policy.

4.4. Each such policy of General Liability Insurance and Automotive/Vehicle Liability Insurance shall contain endorsements providing the following:

a. The District, their board members, officers, agents, employees, consultants, and engineers, are hereby declared to be additional insureds under the terms of this policy, but only with respect to the operations of the Developer at or upon any of the premises of the District in connection with the Agreement with the District, or acts or omissions of the additional insureds in connection with, but limited to its general supervision or inspection of said operations and save for any claims arising from the sole negligence or sole willful misconduct the District.

b. No policy shall be canceled, limited, materially altered, or non-renewed by the insurer until thirty (30) days after receipt by the District of a written notice of such cancellation or reduction in coverage.

c. This insurance policy is primary insurance and no insurance held or owned by the designated additional insureds shall be called upon to cover a loss under this policy.

5. BONDING REQUIREMENTS

5.1. Developer shall generate an engineer's cost estimate based on the water system plans provided to the District. The estimated costs, attached herein as Exhibit "C", will be submitted to the District for review and approval, and shall be used as the basis for bonding requirements for the water system described in the plans provided to the District by the Developer and approved for construction by the District. The sole intent and purpose of the engineer's estimate is to establish a cost valuation for bonding purposes only.

5.2. Performance Bond: The Developer's engineers estimate for the **TRACT 20224 (OFF-SITE CITRUS AVENUE) WATER IMPROVEMENT PLANS**, is **TWO HUNDRED EIGHTY-NINE THOUSAND SIXTY-SIX DOLLARS and 00/100 (\$289,066.00)**. Developer shall and by this Agreement does guarantee the Developer's faithful performance of this Agreement and all of its terms and conditions by providing the following: Developer shall provide the District with either an irrevocable letter of credit from a recognized financial institution acceptable to the District or a performance bond, from a surety institution licensed by the State of California and authorized to do and doing business in said State, valid and renewable until such improvements are accepted by the District. The irrevocable letter of credit or performance bond shall be in the amount of **TWO HUNDRED EIGHTY-NINE THOUSAND SIXTY-SIX DOLLARS and 00/100 (\$289,066.00)**, equal to 100 percent of the approved Developer's estimate.

5.3. Warranty Bond: The Developer's pre-approved contractor shall furnish a two-year warranty bond for all work completed in accordance with the approved plans (Exhibit "B"). Before District's acceptance of the completed water facilities and appurtenances, such facilities and appurtenances shall be free from any and all liens and encumbrances and free from any and all defects in the materials or construction thereof. The two-year warranty shall be either an irrevocable letter of credit from a recognized financial institution acceptable to the District or a warranty bond beginning on the date of acceptance of the water facilities by the District.

6. MATERIALS

6.1. The water system facilities to be installed pursuant to this Agreement shall become an extension of the distribution system of the District. All materials used must conform to District specifications for such materials pursuant to all applicable Legal Requirements.

7. NOTICES

7.1. All notices herein required shall be in writing, and delivered in person or sent by registered mail, postage prepaid.

7.2. Notices required shall be given to the **District** addressed as follows:

WEST VALLEY WATER DISTRICT
Attn: General Manager
Post Office Box 920
Rialto, CA 92377
RE: TRACT 20224 (OFF-SITE CITRUS AVE) WATER IMPROVEMENT PLANS

7.3. Notices required shall be given to **Developer** addressed as follows:

LENNAR HOMES OF CALIFORNIA, INC
ATTENTION: GREG MENDOZA
980 MONTECITO, SUITE 302
CORONA, CA
RE: TRACT 20224 (OFF-SITE CITRUS AVE) WATER IMPROVEMENT PLANS

7.4. Notices required shall be given to **Surety** addressed as follows:

SURETY NAME:
ADDRESS
RE: TRACT 20224 (OFF-SITE CITRUS AVE) WATER IMPROVEMENT PLANS

7.5. Provided that any party or Surety may change such address by notice in writing to the other party, and thereafter, notices shall be addressed and transmitted to the new address.

7.6. The Developer or its contractor shall provide the District forty-eight (48) hours advance notice of request for inspection or testing.

7.7. The District is closed on the holidays listed in Exhibit "D".

8. NOTICE TO PROCEED TO CONSTRUCT WATER SYSTEM FACILITIES

8.1. Upon acceptance of the insurance and aforementioned bonds and/or irrevocable letters of credit in the amounts provided herein and approval by the District and upon payment of all applicable charges, the Agreement shall be signed by Developer and the District. The District shall return an original copy of the signed Agreement with a letter to Developer giving notice to proceed to construct the water system facilities.

9. INSPECTION

9.1. It is understood that the sole purpose and intent of the District's inspection and testing is to validate that the materials, workmanship, and construction of the water facilities are in compliance with the District-approved final plans, the District's Rules and Regulations, the Standards for Domestic Water Facilities, the Standard Drawings, and all other applicable District requirements. Developer acknowledges and represents that it assumes full and sole responsibility for the safety and management of the project.

9.2. Developer shall at all times maintain proper facilities and provide safe access for inspection by the District to all parts of the work and to the shops wherein the work is in preparation. Additionally, in connection with the performance of this Agreement, the District shall have the authority to enter the work site at any time for the purpose of identifying the existence of conditions, either actual or threatened, that may present a danger of hazard to any and all employees. Developer agrees that the District, in its sole authority and discretion, may order the immediate abatement of any and all conditions that may present an actual or threatened danger or hazard to any and all employees at the work site. Furthermore, Developer acknowledges the provisions of California *Labor Code* Section 6400 et seq., which requires that employers shall

furnish employment and a place of employment that is safe and healthful for all employees working therein. In the event the District identifies the existence of any condition that presents an actual or threatened danger or hazard to any or all employees at the work site, the District is hereby authorized to order an immediate abatement of that condition.

9.3. All work and materials shall be subject to inspection, testing, and acceptance by the District at Developer's expense. In the event Developer arranges to have materials fabricated for the project, Developer may be required to arrange for the District to inspect that material during fabrication at Developer's expense.

9.4. All material fabrications shall be preapproved by the District and must conform to District standards and specifications.

9.5. The District's inspectors shall have full, unlimited access to perform continuous inspection and have the authority to stop work at any time, by written notice, without any liability whatsoever to the District, if, in the inspectors' judgment, the work called for by this Agreement, or the District approved plans, or the specifications is not being installed or performed in a satisfactory and workmanlike manner according to District's standards and specifications and/or in the event the materials do not comply with the District's standards and specifications.

9.6. Final acceptance of all material to be purchased or fabricated by Developer under this Agreement shall be made only with the prior approval of the District. Approval by the District, however, shall not operate to relieve the material supplier or Developer of any guarantees, warranties, or the duty of compliance with any of the requirements of the approved plans and specifications or of this Agreement. All construction pursuant to this Agreement shall be inspected pursuant for conformity with District requirements. Developer shall pay actual costs for inspections.

10. TESTING AND DISINFECTION

10.1. All water system facilities and components constructed pursuant to this Agreement shall adhere to all requirements for testing, disinfection, and flushing pursuant to District standards and Legal Requirements.

11. RELOCATIONS, RECONSTRUCTIONS, AND DAMAGES

11.1. Developer accepts the responsibility for and the costs occasioned by any reconstruction, relocation, damages to, or changes of water services or facilities caused or contributed to directly or indirectly by any subsequent changes in the location of any of said facilities or water meters or water services.

12. AS-CONSTRUCTED DOCUMENTATION

12.1. In order for the District to accept the facilities, Developer shall provide all required documentation as specified in the Standards for Domestic Water Facilities, including As-Built drawings.

13. INDEMNIFICATION

13.1. Developer hereby agrees to and shall protect, defend, indemnify and hold the District and its board members, officers, agents, employees, and engineers free and harmless from any and all liability losses, damages, claims, liens, demands and cause of action of every kind and character including, but not limited to, the amounts of judgments, penalties, interests, court costs, attorney's/legal fees, and all other expenses incurred by the District arising in favor of any party, including claims, liens, debts, demands for lost wages or compensation, personal injuries, including employees or the District, death or damages to property (including property of the District) and without limitation by enumeration, all other claims or demands of every character occurring or in any way incident to, in connection with or arising directly or indirectly out of the obligations herein undertaken or out of the operations conducted by Developer save and except claims or litigation arising through the sole negligence or sole willful misconduct of the District or the District's agents and employees. Developer shall investigate, handle, respond to, provide defense for and defend any such claims, demand, or suit at the sole expense of Developer even if the claim or claims alleged are groundless, false or fraudulent. Developer agrees to, and shall defend the District and its members, directors, officers, agents, employees, and engineers from any suits or actions at law or in equity for damages caused, or alleged to have been caused, by reason of any of the aforesaid operations, provided as follows:

a. That the District does not and shall not waive any rights against Developer which it may have by reason of the aforesaid hold harmless agreement, because of the acceptance by the District, or the deposit with District by Developer, or any of the insurance policies described in this Agreement.

b. That the aforesaid hold harmless agreement by Developer shall apply to all damages and claims for damages of every kind suffered, or alleged to have been suffered, by reason of any or the aforesaid operations referred to in this subsection, regardless of whether or not District has prepared, supplied water system installation, or regardless of whether or not such insurance policies shall have been determined to be applicable to any such damages or claims for damages.

This provision is not intended to create any cause of action in favor of any third party against Developer or the District or to enlarge in any way Developer's liability but is intended solely to provide for indemnification of the District from liability for damage or injuries to third persons or property arising from Developer's performance hereunder.

13.2. Neither Developer nor any of Developer's agents, contractors or subcontractors are, or shall be, considered to be agents of the District in connection with the performance of Developer's obligations under this Agreement.

14. REPAIR OR RECONSTRUCTION OF DEFECTIVE WORK

14.1. If, within a period of two years after final acceptance of the work performed under this Agreement, any structure or part of any structure furnished and/or installed or constructed, or caused to be installed or constructed by Developer, or any of the work done under this Agreement, fails to fulfill any of the requirement of this Agreement or the specifications referred to herein, Developer shall, without delay and without any cost to District, repair or replace or reconstruct

any defective or otherwise unsatisfactory part or parts of the work structure. Should Developer fail to act promptly or in accordance with this requirement, or should the exigencies of the situation as determined by the District in the exercise of its sole discretion require repair, replacement or reconstruction before Developer can be notified, District may, at its option, make the necessary repairs or replacements or perform the necessary work, and Developer shall pay to the District the actual cost of such repairs.

15. COSTS AND FEES

15.1. Developer shall be responsible for all fees and deposits as required by the District. All fees and deposits shall be paid in full prior to the execution of this Agreement and before construction can take place.

15.2. Any additional costs and fees shall be paid in full prior to conveyance and acceptance of the water system.

16. CONVEYANCE AND ACCEPTANCE OF WATER SYSTEM

16.1. Upon completion of the water system in accordance with the approved water plans and submission of the required documentation, the Developer shall convey the water system to the District.

16.2. The Developer shall be responsible for insuring the pre-approved contractor furnish an irrevocable letter of credit to the District or a warranty bond (One Hundred (100%) of Developer's estimate) for a period of two years as stated in Sections 5.3 of this Agreement, as-built drawings with contractor redlines and AutoCAD files, materials list with quantities, labor, equipment, and materials, water system cost breakouts, compaction test report signed and sealed by a California Registered Engineer, notice of completion filed with San Bernardino County Recorder, fire flow tests of all hydrants, all required easements for water facilities and unconditional financial release from subcontractors and material providers, Upon compliance with all the terms and conditions of this Agreement, the District shall prepare the conveyance agreement accepting the water facilities and forward same to the address provided herein. Title to the ownership of said facilities and appurtenances shall thereby be conveyed to the District. The District shall thereafter operate and maintain said facilities so as to furnish water service to the development (Exhibit "A") in accordance with the District's ordinances, policies and Rules and Regulations.

17. PERMANENT WATER SERVICE

17.1. In no event shall permanent water services be provided to Developer's installed system until all applicable charges and fees have been paid by Developer and all facilities have been conveyed, free of all encumbrances, to the District, including any easements which may be required. Such conveyance shall occur in a timely manner in accordance with the terms of this Agreement.

18. BREACH OR DEFAULT OF AGREEMENT

18.1. If Developer refuses or fails to obtain prosecution of the work, or any severable part thereof, with such diligence as will insure its completion within the time specified, or any extension thereof, or fails to obtain completion of said work within such time, or if Developer should be adjudged as bankrupt, or Developer should make a general assignment for the benefit of Developer's creditors, or if a receiver should be appointed in the event of Developer's insolvency, or if Developer, or any of Developer's contractors, subcontractors, agents or employees, should violate any of the provisions of this Agreement, the District's General Manager or the General Manager's designee may serve written notice upon Developer and Developer's surety of breach of this Agreement, or of any portion therefore, and default of Developer.

18.2. In the event of any such notice, Developer's surety shall have the duty to take over and complete the work and the improvement herein specified; provided, however, that if the surety, within five (5) days after the serving upon of such notice of breach, does not give the District written notice of its intention to take over the performance of the contract, and does not commence performance thereof within five (5) days after notice to the District of such election, District may take over the work and prosecute the same to completion, by contract or by any other method District may deem advisable, for the account and at the expense of Developer, and Developer's surety shall be liable to the District for any excess cost or damages occasioned District thereby; and, in such event, District, without liability for so doing, may take possession of, and utilize in completing the work, such materials, appliances, plant and other property belonging to Developer as may be on the site of the work and necessary therefore.

19. SUCCESSORS BOUND

19.1. This Agreement shall be binding upon and inure to the benefit of each of the parties and their respective legal representatives, successors, heirs, and assigns.

20. ENFORCEMENT OF PROVISIONS

20.1. The District's failure to enforce any provisions of this Agreement or the waiver thereof in any instance shall not be construed as a general waiver or relinquishment on its part of any such provision, but the same shall nevertheless be and remain in full force and effect.

[SIGNATURES ON NEXT PAGE]

IN WITNESS WHEREOF, the parties hereto execute this Agreement.

WEST VALLEY WATER DISTRICT

By: _____
Shamindra Manbahal, General Manager

Date: _____

DEVELOPER:

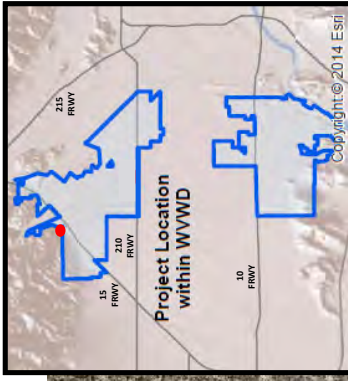
**Lennar Homes of California, Inc
a California Corporation**

By: **LENNAR HOMES OF CALIFORNIA, INC
a California Corporation, Its Manager:**

By: _____
Authorized Agent

Date: _____

Exhibit A



16" Ductile Iron Pipe Water Main (from the intersection of Duncan Canyon Rd and Citrus Ave to the norther most property line of Tract 20224).



Exhibit A
Tract 20224 (Off-Site Citrus Ave)

Exhibit B

Exhibit C

Subcontractor: Kana Pipeline, Inc.
 Address: 12620 Magnolia Ave
 Riverside, CA 92503
 Phone No.: 714-986-1400
 Date: May 27, 2021

EXHIBIT "D-2"
CHANGE ORDER TO CONTRACT
Lennar Communities, Inc., Monterey
980 Montecito Drive, Suite 302
Corona, CA 92879

Invoice No.:
 Billing Period: From: 7585161 To:
 Vendor No.: 3152503
 Job No.:
 Contract No./ JDE No.: **67396119**

ITEM No.	COST CODE	DESCRIPTION	UNIT	QTY	UNIT PRICE	CONTRACT TOTAL	PREVIOUS REQUESTS QTY	PREVIOUS REQUESTS AMOUNT	AMOUNT THIS REQUEST QTY	AMOUNT THIS REQUEST AMOUNT	TOTAL BILLED TO DATE QTY	TOTAL BILLED TO DATE AMOUNT
		ORIGINAL CONTRACT BR# 28240										
		OFFSITE WATER										
1	2851	MOBILIZATION	EA	1	\$2,460.00	\$2,460.00						
2	2851	NOTE 1 16" REMOVE PLUG AND CONNECT	EA	1	\$3,562.00	\$3,562.00						
3	2851	NOTE 2A 16" DUCTILE IRON CLASS 50 (INCLUDES SCREENING) (ASPHALT CONDITION)	LF	125	\$232.00	\$29,000.00						
4	2851	NOTE 2B 16" DUCTILE IRON CLASS 50 (INCLUDES SCREENING)	LF	1,228	\$108.00	\$132,624.00						
5	2851	NOTE 3 12" DUCTILE IRON CLASS 350 (INCLUDES SCREENING)	LF	61	\$79.00	\$4,819.00						
6	2851	NOTE 4 16" MJ 45 ELBOW	EA	2	\$1,510.00	\$3,020.00						
7	2851	NOTE 6 16" BUTTERFLY VALVE STD W-11	EA	4	\$5,626.00	\$22,504.00						
8	2851	NOTE 7 12" BUTTERFLY VALVE STD W-11	EA	2	\$2,955.00	\$5,910.00						
9	2851	NOTE 8 16" PLUG (STATION 23+36)	EA	1	\$1,188.00	\$1,188.00						
10	2851	NOTE 10 12" MJ CAP	EA	2	\$663.00	\$1,326.00						
11	2851	NOTE 12 FIRE HYDRANT ASSY STD W-2 (W/16"x6" MJXFL TEE / 6" GV / THRUST BLOCKS)	EA	4	\$9,537.00	\$38,148.00						
12	2851	NOTE 13 THRUST BLOCK STD W-3A	EA	5	\$724.00	\$3,620.00						
13	2851	NOTE 15 16X16X12 TEE	EA	2	\$1,851.00	\$3,702.00						
14	2851	RAISE VALVE CANS PER STD W-11	EA	10	\$333.00	\$3,330.00						
15	2851	SAWCUT & REMOVE ASPHALT INCLUDES HAUL OFF PAVE BACK PER TRENCH DETAIL NO GRIND AND OVERLAY	LS	1	\$2,900.00	\$2,900.00						
16	2851		SF	500	\$24.00	\$12,000.00						
17	2851	TEST AND CHLORINATE WATER LINE	LS	1	\$6,718.00	\$6,718.00						
18	2851	TRAFFIC CONTROL PER WATCH MANUAL	LS	1	\$8,210.00	\$8,210.00						
19	2851	HAUL OFF SCREENED ROCK	LS	1	\$4,025.00	\$4,025.00						
						Change Order Subtotal						
						\$289,066.00						

FOR REFERENCE PURPOSES ONLY - ALL BILLING SHOULD BE DONE THROUGH SUPPLY PRO

CHANGE ORDER APPROVAL

INVOICE APPROVAL

File: c:\users\lreed\box2\internal operations (lennar only)\09.0 forward planning\communities\fortitara - monterado, purchasing\1 billing sheets\67396119 kana pipeline_monterado_vvwd water installation.citrus & intract.xls\original

Exhibit D



ESTABLISHED AS A PUBLIC AGENCY IN 1952

WEST VALLEY WATER DISTRICT'S MISSION IS TO PROVIDE A RELIABLE,
SAFE-DRINKING WATER SUPPLY TO MEET OUR CUSTOMERS' PRESENT
AND FUTURE NEEDS AT A REASONABLE COST AND TO PROMOTE
WATER-USE EFFICIENCY AND CONSERVATION.

2021 HOLIDAY LIST

FRIDAY, JANUARY 1	NEW YEAR'S DAY
MONDAY, JANUARY 18	MARTIN LUTHER KING, JR.
MONDAY, FEBRUARY 15	PRESIDENT'S DAY
TUESDAY, MAY 25	MEMORIAL DAY
MONDAY, JULY 5	INDEPENDENCE DAY
MONDAY, SEPTEMBER 6	LABOR DAY
THURSDAY, NOVEMBER 11	VETERANS DAY (OBSERVED)
THURSDAY, NOVEMBER 25	THANKSGIVING
FRIDAY, NOVEMBER 26	DAY AFTER THANKSGIVING
THURSDAY, DECEMBER 23	CHRISTMAS EVE
FRIDAY, DECEMBER 24	CHRISTMAS
FRIDAY, DECEMBER 30	NEW YEAR'S EVE
THURSDAY, DECEMBER 31	NEW YEAR'S DAY



**BOARD OF DIRECTORS
ENGINEERING, OPERATIONS AND PLANNING COMMITTEE
STAFF REPORT**

DATE: September 8, 2021
TO: Engineering, Operations and Planning Committee
FROM: Shamindra Manbahal, General Manager
SUBJECT: CONSIDER DRAFT INITIAL STUDY/MITIGATED NEGATIVE
 DECLARATION FOR THE OLIVER P. ROEMER WATER FILTRATION
 FACILITY EXPANSION PROJECT

DISCUSSION:

West Valley Water District (District) currently operates the Oliver P. Roemer Water Filtration Facility (RWFF) at a rated capacity of 14.4 million gallons per day (mgd) with water sources from both Lytle Creek and California's State Water Project (SWP). Due to rising peak summer usage, the need to continue to responsibly manage groundwater basins, to provide water supply reliability and resiliency for existing customers, to make needed facility upgrades and for projected development growth, the District is planning to expand treatment capacity at the RWFF by 7.2 mgd. This expansion in capacity is necessary to enable the District the ability to utilize additional SWP water and relax pumping of groundwater wells. This operational flexibility will allow groundwater levels to recover and ensure that the District can continue to provide water to meet the region's growing water needs.

The California Environmental Quality Act (CEQA), Public Resources Code Section 21000, et seq., and the State CEQA Guidelines, 14 California Code of Regulations Section 15000, et seq., is a statute that requires state and local agencies within California to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. As the Lead agency, the District is responsible for conducting CEQA review for projects undertaken by the District.

The CEQA process involves a series of procedural and substantive steps to determine if CEQA applies to a given activity and if CEQA applies, to identify potential environmental impacts and methods of mitigating such impacts. Attached as Exhibit A is the draft Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the RWFF Expansion Project. An Initial Study is a preliminary analysis prepared to determine if the project may have a significant effect on the environment and a Mitigated Negative Declaration outlines ways to avoid or mitigate any potential effects.

A notice of WVWD's Board of Directors intent to adopt an IS/MND has been posted on the District's website, in the newspaper and has been submitted to the State Clearinghouse pursuant to State Guidelines Section 15105, to allow the public a 30 day review period (August 9,2021 through

September 9, 2021). Prior to approval, the WVWD Board of Directors shall consider the draft IS/MND together with any comments received during the public review process. Attached as Exhibit B is Resolution No. 2021-22 adopting the IS/MND for the RWFF Expansion Project.

FISCAL IMPACT:

No fiscal impact.

STAFF RECOMMENDATION:

Staff recommends that this item be submitted for consideration, and that the Board of Directors approve this item, adopt Resolution No. 2021-22, adopting the Initial Study/Mitigated Negative Declaration for the Oliver P. Roemer Water Filtration Facility Expansion Project and authorize the General Manager to execute the necessary documents.

LJ:ls

ATTACHMENT(S):

1. Exhibit A - WVWD Draft ISMND
2. Exhibit B - Resolution 2021-22, ISMND for Roemer WFF Expansion Project

EXHIBIT A

Oliver P. Roemer Water Filtration Facility Expansion Project

Draft IS/MND

West Valley Water District

August 9, 2021



Draft IS/MND Oliver P. Roemer Water Filtration Facility Expansion Project

This document has been prepared by:



West Valley Water District
855 W. Base Line Road
Rialto, California 92377

In collaboration with:



GHD

2235 Mercury Way, Suite 150
Santa Rosa, CA 95407, United States
T +1 707 523 1010 | E info-northamerica@ghd.com | ghd.com

August 9, 2021

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Appendix A	Air Quality
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1. Project Information

Project Title	West Valley Water District Oliver P. Roemer Water Filtration Facility Expansion Project
Lead Agency Name & Address	West Valley Water District 855 W. Base Line Road Rialto, CA 92377
Contact Person & Phone Number	Linda Jadeski, Engineering Services Manager (909) 820-3713
Project Location	3010 N. Cedar Avenue Rialto, CA 92377
Project Sponsor's Name & Address	West Valley Water District 855 W. Base Line Road Rialto, CA 92377
General Plan Land Use Designation	Single Family Residential (R-1).
Zoning	Single Family Residential (R-1)

1.1 Introduction

West Valley Water District (District), serving as the California Environmental Quality Act (CEQA) Lead Agency, has prepared this Initial Study to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the Oliver P Roemer Water Filtration Facility Expansion Project (Project). West Valley Water District is a local government agency that manages the public water supply for a portion of southwestern San Bernardino County and a portion of northwestern Riverside County. The District serves about 82,000 customers in the communities of Bloomington, Colton, Fontana, Rialto, and parts of unincorporated areas in San Bernardino, and Jurupa Valley in Riverside County.

1.2 Project Background and Purpose

The District currently operates the Oliver P. Roemer Water Filtration Facility (RWFF) at a capacity of 14.4 million gallons per day (mgd) with water sources from both Lytle Creek and California's State Water Project (SWP).

West Valley Water District's (WVWD or District) 2020 Water Facilities Master Plan calculates that approximately 34% of the land within the District's service area boundary is undeveloped and projects that over 21,000 additional connections, (equivalent dwelling units) will be constructed by buildout of the water supply system. By 2046, the average day demand is projected to increase from 19.1 mgd to 31.7 mgd and peak day demand (which is 1.7 times the average day demand) is projected to reach 53.8 mgd.

Current demands are met through various water supply sources available to the District. These currently include:

- Groundwater pumped from District wells from up to 5 different groundwater basins;
- Purchased groundwater through the Base Line Feeder; and
- Surface water from Lytle Creek and the State Water Project (SWP).

The RWFF, which provides 41% of the District’s water, treats surface water from both Lytle Creek and the State Water Project (SWP) to meet local demand. The remaining 59% comes from local ground water wells. The RWFF does not currently treat water from any source other than Lytle Creek or the SWP, nor will the Project allow it to.

Due to projected development growth, rising peak summer usage, and the need to continue to responsibly manage groundwater basins, the District is planning to expand treatment capacity at the RWFF by 7.2 mgd. This expansion in capacity is also necessary to allow the District the ability to utilize additional SWP water and relax pumping of their groundwater wells. This operational shift will allow groundwater levels to recover and ensure that the District can continue to provide water to meet the region’s growing water needs.

1.3 CEQA Requirements

The purpose of this Initial Study is to provide a basis for deciding whether to prepare an Environmental Impact Report, a Mitigated Negative Declaration, or a Negative Declaration. This Initial Study has been prepared to satisfy the requirements of CEQA (Public Resources Code, Div 13, Sec 21000-21177) and the CEQA Guidelines (California Code of Regulations, Title 14, Sec 15000-15387).

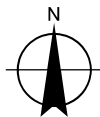
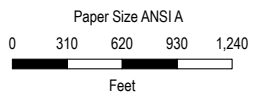
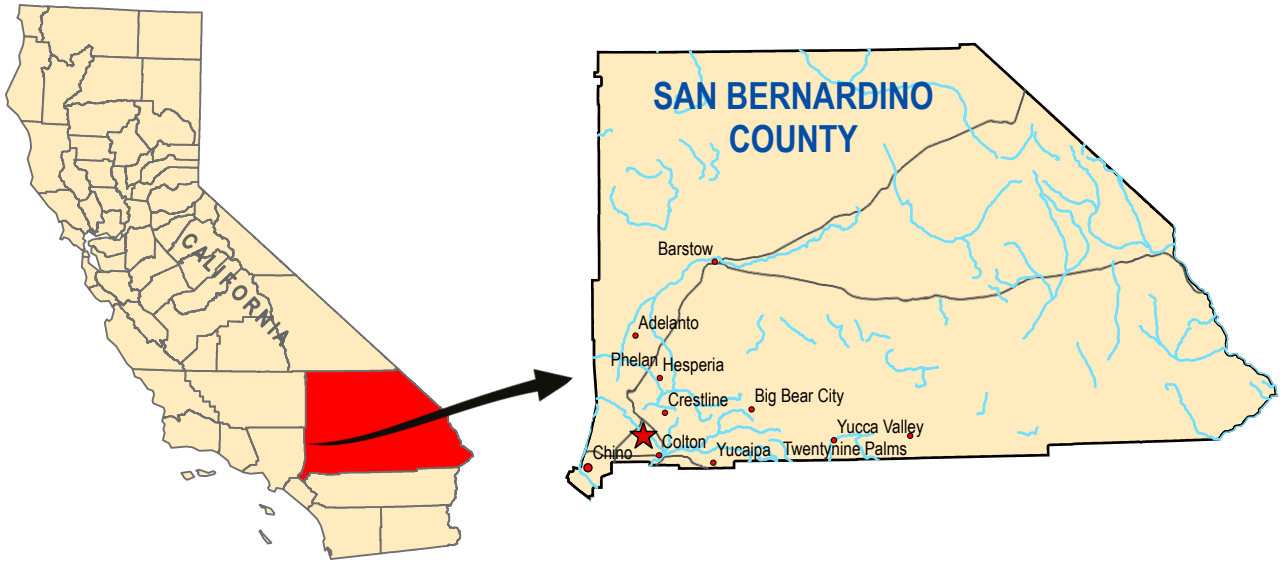
Section 15063(d) of the State CEQA Guidelines states the content requirements of an Initial Study as follows:

1. A description of the project including the location of the project;
2. An identification of the environmental setting;
3. An identification of environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries;
4. A discussion of the ways to mitigate the significant effects identified, if any;
5. An examination of whether the project would be consistent with existing zoning, plans, and other applicable land use controls; and
6. The name of the person or persons who prepared or participated in the Initial Study.

1.4 Project Location and Surrounding Land Uses

The proposed Project site is located within the City of Rialto, in San Bernardino County (Figure 1). The majority of the improvements would occur within the existing RWFF located on the south side of Riverside Drive, generally bound by Riverside Avenue to the north, Cedar Avenue to the east, and Linden Avenue to the west. A new water pipeline would extend from the RWFF through Open Space, to North Linden Drive, to existing water storage reservoirs located at the end of West Via Bello Drive.

Surrounding land uses include detached single-family homes to the west and east. Land to the north and northeast on the opposite side of Riverside Avenue, directly across from the RWFF, is vacant except for a hydroelectric generating plant. Land further to the north consists of a rock and gravel excavation site. Property to the south is the Sandhill Water Treatment Plant. The proposed pipeline would generally border single-family detached homes until it reaches the existing reservoirs.








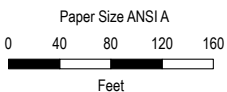
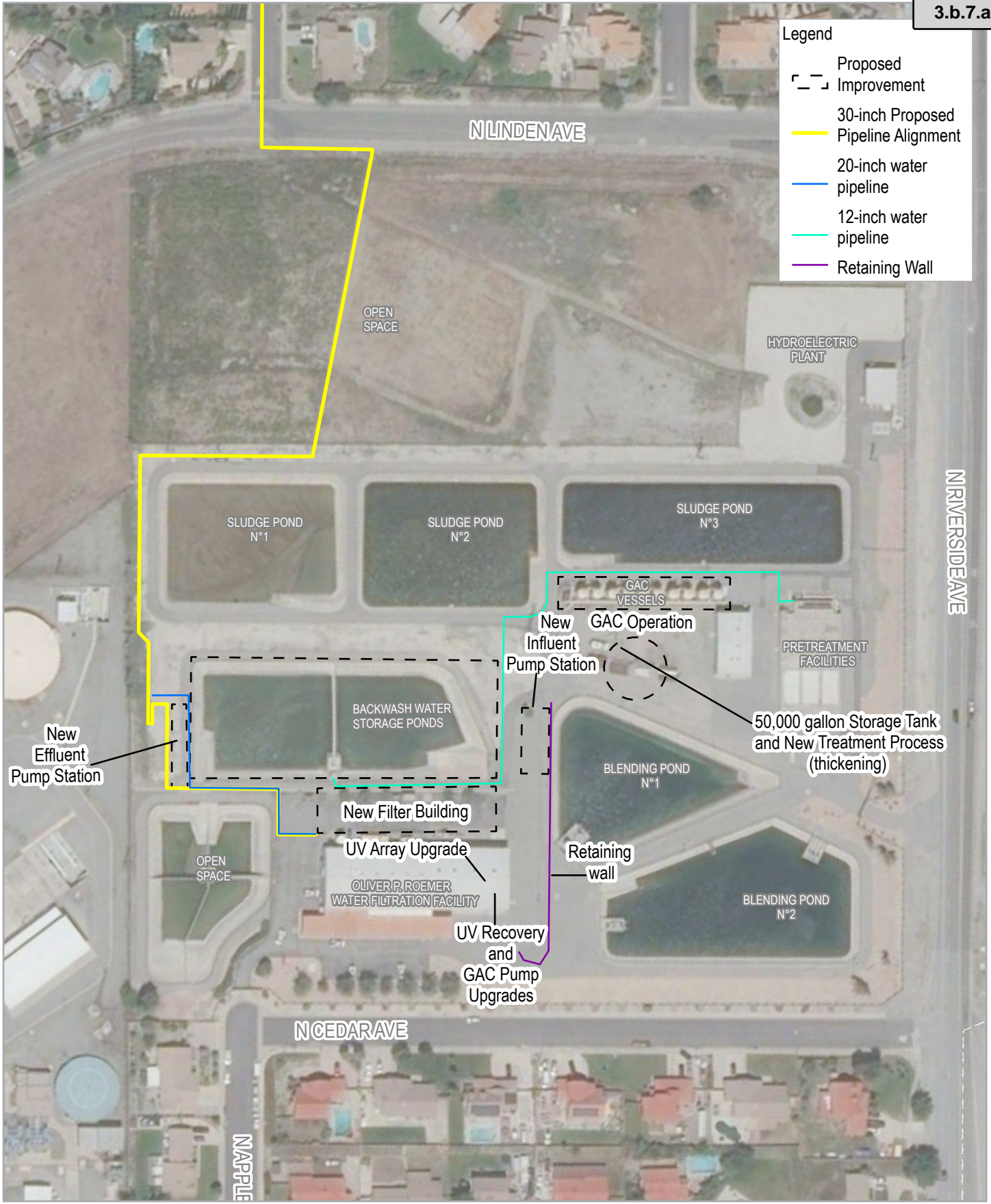
**WEST VALLEY WATER DISTRICT
16 MGD OLIVER P. ROEMER WATER FILTRATION
FACILITY EXPANSION PROJECT**

Project No. 11214029
Revision No. -
Date 3/5/2021

PROJECT LOCATION

FIGURE 1

- Legend
-  Proposed Improvement
 -  30-inch Proposed Pipeline Alignment
 -  20-inch water pipeline
 -  12-inch water pipeline
 -  Retaining Wall



Map Projection: Lambert Conformal Conic
 Horizontal Datum: North American 1983
 Grid: NAD 1983 StatePlane California V FIPS 0405 Feet



WEST VALLEY WATER DISTRICT
16 MGD OLIVER P. ROEMER WATER FILTRATION
FACILITY EXPANSION PROJECT

Project No. 11214029
 Revision No. -
 Date 3/12/2021

PROPOSED IMPROVEMENTS
WITHIN THE RWFF

FIGURE 2

1.5 Project Description

1.5.1 Proposed Improvements

The Project would expand the RWFF capacity by 16 mgd through a two-phase project implementation strategy to meet future demands and better manage limited groundwater resources. Expansion of the RWFF will allow maximizing the use of surface supplies (California's SWP and Lytle Creek flows) when available to allow groundwater sources to recharge. This conjunctive use strategy is critical for long term, sustainable water management for the region.

Project improvements would expand the RWFF from the current 14.4 mgd to 21.6 mgd to treat additional SWP water, and includes the following Project elements:

- Trident Filter Expansion - Install three new Trident filtration units.
- Improved Ultraviolet (UV) System - Replace the existing UV reactors with new 4L24 reactors, with space allocation for future expansion.
- Granular Activated Carbon (GAC) Modifications - Adjust GAC system from series to parallel mode for higher capacity.
- Backwash Settling Ponds Enhancements - Optimize to decrease algae growth potential.
- Treated Water Booster Pumps.
- Influent Pumps Station.
- 30-inch treated water conveyance pipeline.
- Repair, Rehabilitation, and Improvements of Existing Infrastructure:
 - Upgrade of UV recovery and GAC influent pumps.
 - Electrical, mechanical, and other appurtenances.
 - Replace 6-inch water recycling line from ponds with new 12-inch pipeline.

The components of the proposed Project are described in more detail below.

Trident Filter Expansion

Trident filtration systems are currently in place at the RWFF in order to treat raw water routed to the RWFF. The Trident system is considered an “Alternative Filtration Technology” by the Department of Drinking Water (DDW). The Project would expand the existing building housing the existing six Trident pumps and install three new Trident filtration units alongside them. The building dimensions would be approximately 63 feet long by 184 feet wide by 36 feet, 11 inches high.

Ultraviolet Disinfection System

The UV facility would be upgraded by replacing the existing reactors with newer and more efficient lamps, which are used to disinfect the water. There are currently three 24-inch UV reactors with six lamps each. The existing reactors represent first generation technology and are approaching the end of their usable life. The existing Trojan SWIFTM 6L24 UV Disinfection reactors would be replaced by new Trojan SWIFTM 4L24 reactors to achieve target expansion capacity and reduce power consumption.

Granular Activated Carbon

The GAC is designed to remove additional total organic compounds (TOC) to enhance Disinfection Byproducts (DBPs) controls in the WVWD distribution system and to improve the taste of the treated water.

Currently a partial stream from the Trident and UV treated water passes through a 20-inch line to the existing 10 GAC absorbers, which operate in series mode. The Project proposes an operational shift from series to parallel mode. This shift would only double the capacity without any additional capital investment. The operation of the GAC would be staggered (sequence of flow distribution among vessels would be kept) in order to simplify GAC changeouts.

Backwash Settling Ponds

The current operation of the Backwash Settling Ponds indicate areas for operational improvement as plant capacity is increased. A 50,000-gallon storage tank would be constructed behind the GAC distribution area. The Project proposes an operational change where a thickening agent, such as Dissolved Air Flootation, would be added to the ponds to discourage algae growth.

Treated Water Booster Pumps

Currently six pumps at the outlet of the chlorine contact basin pump the treated water to the reservoirs located at the end of West Via Bello Drive. The Project would install three additional effluent pumps to handle the extra 7.2-mgd capacity near the backwash settling ponds. These pumps would be installed within concrete wet walls. The wet walls would be composed of 16-inch thick concrete walls.

Influent Water Pumps

Currently there are five pumps near the chlorine contact basin that pump water through the treatment facility. Three new influent water pumps would be installed to handle the extra 7.2-mgd capacity. These pumps would be installed between the expanded Trident Filter building and the Blending Pond 1. The pumps would be installed approximately 17.5-feet underground.

Treated Water Conveyance Pipeline

A new 30-inch treated water pipeline would be installed from the RWFF to the WVWD Reservoirs to the north. The pipeline would be constructed from the RWFF through existing open space that is contingent to the RWFF, then along North Linden Avenue for approximately 140 linear feet until it reaches West Via Bello Drive. The pipeline would be routed in street right-of-way through West Via Bello Drive for approximately 1,950 linear feet until it reaches the existing reservoirs. An existing water utility in Via Bello Drive may need to be relocated within the excavated trench of the roadway right-of-way to accommodate installation of the new water pipeline.

Repair, Rehabilitation, and Improvements to Existing Infrastructure

The Project would upgrade the UV Disinfection Facility pumps and the GAC pumps. A total of 4 UV pumps and three GAC pumps would replace the existing pumps at the main treatment facility. The Project would also replace approximately 286 linear feet of the 6-inch water recycling line from the treatment ponds to the pre-treatment facility with a new 12-inch pipeline. The majority of the facility would also be repaved to rehabilitate the existing pavement. The paving would cover the existing parking lot, and around each of the exiting components of the facility. Restriping of the parking lot would occur once repaving is completed. A new retaining wall would be constructed southwest of the Blending Pond 2 and extend approximately 313 linear feet northwest to the western edge of Blending Pond 1.

Tree Removal and Landscaping

The Project would remove five ornamental trees located within the parking lot area in the southern portion of the RWFF. Landscaping is also proposed along the border of the RWFF on North Riverside Avenue and North Cedar Avenue. The landscaping would consist of a mix of trees and shrubs that would help to screen the RWFF from view along these roadways. A total of 61 trees and 187 shrubs are proposed for installation along North Riverside Avenue and North Cedar Avenue.

1.5.2 Project Operation and Maintenance

The proposed RWFF improvements would operate similar to existing conditions. The new pumps would operate intermittently throughout any 24-hour period. Once operational, it is anticipated that maintenance trips to and from the RWFF would be similar to those for the existing RWFF.

Hauling of generated maximum daily solids are anticipated to increase from approximately 2,600 pounds per day (lbs./day) to approximately 3,900 lbs/day. Similar to existing conditions the sludge would be stored in the storage ponds on-site for approximately six months to dry prior to hauling off-site. Hauling to an approved landfill would take place twice a year and would require up to 18 truck trips bi-annually. This would result in an additional 12 trips per year.

1.5.3 Project Construction

Construction Schedule

Construction of the Project is expected to begin in March 2022 and require approximately 21 months to complete. Between October 1st and April 30th of a given year, construction activities would generally occur between 7:00 a.m. and 5:30 p.m. on weekdays, and between 8:00 a.m. and 5:00 p.m. on Saturdays. Between May 1st and September 30th of a given year, construction activities would occur between 6:00 a.m. and 7:00 p.m. on weekdays, and between 8:00 a.m. and 5:00 p.m. on Saturdays.

Construction Staging and Equipment

Prior to and during construction, the contractor would mobilize resources to a staging area that would be located on the adjacent District-owned Open Space (See Figure 2, Proposed RWFF Improvements). A variety of construction equipment would be used to build the Project, including various sized cranes, excavators, loaders, backhoe, small dozer, loader, backhoe, worker trucks, super dumps, water truck, rollers, pavers, AB import trucking, and AC haulers.

The primary construction-related vehicle and haul truck route to the Project site is anticipated to be North Riverside Avenue to Linden Road. The number of construction-related vehicles traveling to and from the Project areas would vary on a daily basis. It is anticipated that up to 8 round trip haul truck trips could occur during peak construction periods. In addition, it is anticipated that construction crew trips would require up to 8 round trips vehicle trips per day.

Pipeline Construction

Pipeline construction for the proposed new water pipeline from the RWFF to the reservoirs and the two pipelines within the existing facility would be constructed via open trench methods. These methods would typically include excavating the trench, preparing and installing pipeline sections and other pipeline components, backfilling the trench with non-expansive fills, and restoring and re-paving the pipeline alignment. The depth of excavation for the 30-inch water main to the reservoirs would average

approximately 7 feet deep with a maximum depth of approximately 15 feet deep in certain areas. The new water main would be installed within the City road right-of-way within Linden Avenue and West Via Bello Road. Relocation of an existing water utility in Via Bello Drive, if found necessary, would be accommodated within the excavated trench. The two pipelines to be installed within the existing RWFF would require a depth of excavation of approximately 7 feet. In total, approximately 5,600 cubic yards of material would be required to be off-hauled to a regional disposal facility.

Construction Traffic Control

Construction of the new water pipeline within Linden Avenue and West Via Bello Drive would take place generally within the City of Rialto right-of-way requiring a temporary partial lane closure and encroachment permit. As part of the encroachment permit process, the District and its construction contractor would be required to prepare traffic control plans for review and acceptance of planned work within the City right-of-way. This would include information on the lengths and widths of work zones, tapers and sign spacing, and all lanes to be temporarily used, reduced, or left open. The development and implementation of traffic control plans may also include, but not necessarily be limited to:

- Traffic controls, signs, and flaggers required for conformance with the current California Manual of Uniform Traffic Control Devices;
- Pedestrian and bicycle control devices;
- Notifications/arrangements for any driveway access restrictions; and
- Notifications to emergency responders and public transit agencies.

1.6 Environmental Protection Actions

The following actions are included as part of the Project to reduce or avoid potential adverse effects that could result from construction or operation of the Project. Additional mitigation measures are presented in the following analysis sections in Chapter 3, Environmental Analysis. Environmental protection actions and mitigation measures, together, will be included in a Mitigation Monitoring Program at the time that the Project is considered for approval.

1.6.1 Environmental Protection Action 1 – Implement Geotechnical Design Recommendations

As part of the Project design process, the WVWD would engage a California-registered Geotechnical Engineer to conduct a design-level geotechnical study for the Project. The WVWD will design the Project to comply with the site-specific recommendations made in the Project's geotechnical report. This will include design in accordance with the seismic and foundation design criteria, open-cut trenching, pipeline foundation material, trench backfill material, site preparation, and grading recommendations included in the report. The geotechnical recommendations will be incorporated into the final plans and specifications for the Project and will be implemented during construction.

1.6.2 Environmental Protection Action 2 – Implement Air Quality Control Measures during Construction

To limit dust, criteria pollutants, and precursor emissions associated with the construction activity, the following Basic Construction Measures will be included in construction contract specifications and required during implementation of the Project:

- All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas and unpaved access roads) shall be watered two times per day;
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered or shall have at least two feet of freeboard;
- All visible mud or dirt tracked-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping shall be prohibited;
- All vehicle speeds on unpaved areas shall be limited to 15 miles per hour;
- All paving shall be completed as soon as possible after trenching work is finished;
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points;
- All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation;
- A publicly visible sign shall be posted with the telephone number and person to contact at the District regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District’s phone number shall also be visible to ensure compliance with applicable regulations.

1.7 Required Agency Approvals

The following City of Rialto entitlements may be required for the Project:

- Encroachment Permit for work within the City right-of-way
- State Water Resources Control Board Division of Financial Assistance: If the District pursues State Revolving Fund (SRF) funding for the Project, the Project would require approval of an SRF application and initiation of consultation with applicable federal agencies.

1.8 Tribal Consultation

The District has received requests for notification of proposed projects from California Native American tribes pursuant to Public Resources Code Section 21080.3.1. These California Native American Tribes include the Torres Martinez Desert Cahuilla Indians, San Manuel Band of Mission Indians, Morongo Band of Mission Indians, and the Gabrieleno Band of Mission Indians-Kizh Nation. The District initiated contact with these Native American tribes as part of preparing this environmental review document. Please refer to Section 3.18, Tribal Cultural Resources, for additional information

2. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. Where checked below, the topic with a potentially significant impact will be addressed in an environmental impact report:

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

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION would be prepared.
- I find that although the proposed project could have a significant effect on the environment, there would 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 would be prepared.
- I find that the proposed MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that 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.
- I find that 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 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.


LEAD AGENCY Signature

8/3/21
Date

3. Environmental Analysis

3.1 Aesthetics

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?				✓
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public view of the site and its surroundings? (Public Views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			✓	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				✓

a) Have a substantial adverse effect on a scenic vista? (No Impact)

The City of Rialto General Plan identified the views of the San Gabriel and San Bernardino Mountains and the foothills as scenic vistas (Rialto 2010). The proposed Project would improve the existing RWFF and construct a new pipeline within the right-of-way of a portion of North Linden Drive and Via Bello Drive. Any structural improvements, including new buildings, would occur within the perimeter of the RWFF adjacent to existing structures. Additionally, the proposed pipeline would be located below ground. Therefore, it is not anticipated that the Project would impact a scenic vista. No impact would result.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (No Impact)

The Project site is not located near an officially designated scenic highway. The nearest officially designated scenic highway is Route 2, approximately 30 miles away. Therefore, the Project would have no impact on scenic resources within a State Scenic Highway.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public view of the site and its surroundings? (Public Views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the

project conflict with applicable zoning and other regulations governing scenic quality? (Less than Significant)

The Project is located within a fairly urban area within the City of Rialto. The City of Rialto General Plan has a Community Design section that provides guidelines for the physical characteristics of the built environment, neighborhood appearance, and streets. Since the Project would occur within and adjacent to a residential area the following General Plan goals and Policies apply:

- Goal 2-8:** Preserve and improve established residential neighborhoods in Rialto.
- Policy 2-8.1:** Promote neighborhood identity and preservation of individual neighborhood character by preserving or creating neighborhood gateway features. This includes the Las Colinas Core Group and the North End (Pepper Avenue) Neighborhood Group.
- Policy 2-8.4:** Discourage extreme changes in scale between adjacent structures (i.e., multi-story building walls immediately adjacent to single-unit residences). Encourage appropriate setbacks and other architectural features that provide a gradual change in scale.

The proposed above-ground improvements would be located within the existing RWFF adjacent to existing infrastructure. Once constructed, the above-ground improvements would not be readily distinguishable from the existing infrastructure currently present at the facility. The RWFF is already set back from the roadway and adjacent residents and roadways and therefore the above-ground improvement would have a less-than-significant impact on the visual character of the site. The proposed pipeline installation would temporarily require the presence of construction equipment within the existing neighborhood; however, the presence of construction equipment would be short-term and temporary. Once constructed, the pipeline would be located underground and would not affect the existing visual character of the Project Area. A less-than-significant impact would occur.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? (No Impact)

The Project would install new UV light arrays; however, these would be installed inside one of the existing buildings on the RWFF site and directed downwards. No other site lighting would be installed for operational purpose, nor would any lighting be needed for construction. Therefore, the Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. No impact would occur.

3.2 Agriculture and Forest Resources

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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?				✓
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
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))?				✓
d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓
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?				✓

a-e) Convert farmland or forest land? (No Impact)

The Project would not be located on lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide importance (CDC 2016), nor on land under a Williamson Act contract (County of San Bernardino 2020). The Project would not be constructed on land zoned for agricultural or forestland uses. Thus, the Project would not convert Important Farmland, land under a Williamson Act contract, or forest land to other uses, nor conflict with zoning for agricultural or forestry uses. No impact to agriculture or forestry resources would result.

3.3 Air Quality

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district 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?				✓
b) Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			✓	
c) Expose sensitive receptors to substantial pollutant concentrations?			✓	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			✓	

a) Conflict with or obstruct implementation of the applicable air quality plan? (No Impact)

The Project site is located within the South Coast Air Basin and within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The South Coast Air Basin is designated nonattainment for the Federal and State ozone and PM2.5 standards, and the State PM10 standard.

In order to reduce emissions, the SCAQMD prepared the 2016 Air Quality Management Plan (AQMP). The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving State and federal air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, the California Air Resources Board, Southern California Association of Governments (SCAG), and the US Environmental Protection Agency (USEPA). The 2016 AQMP’s pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG’s 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); updated emission inventory methodologies for various source categories; and SCAG’s latest growth forecasts.

The SCAQMD’s CEQA Handbook identifies two key indicators of consistency with the AQMP:

1. Whether the project would result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations; or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
2. Whether the project would exceed the assumptions in the AQMP based on the year of project buildout and phase.

According to the SCAQMD’s CEQA Air Quality Handbook, the purpose of the consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and thus if it would interfere with the region’s ability to comply with federal and state AAQS.

With respect to the first criterion, based on the air quality modeling analysis conducted for the proposed Project summarized in Impacts AIR-2 and AIR-3 and provided in Appendix A, Air Quality/GHG Calculations, the Project would not result in emissions of pollutants exceeding the SCAQMD’s regional significance

thresholds during construction. Additionally, operation of the Project would not result in significant impacts based on the SCAQMD thresholds of significance. Therefore, Project operation would not increase the frequency or severity of existing air quality violations and would be consistent with the first assessment criterion.

Concerning the second criterion, the 2016 AQMP contains air pollutant reduction strategies based on SCAG’s latest growth forecasts, and SCAG’s growth forecasts are defined in consultation with local governments and with reference to local general plans. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Therefore, the SCAQMD’s second criterion for determining project consistency focuses on whether the proposed Project exceeds the assumptions used in preparing the forecasts presented in the 2016 AQMP. In the case of the 2016 AQMP, several sources of data form the basis for the projections of air pollutant emissions including the City of Rialto General Plan, County of San Bernardino General Plan, SCAG’s Growth Management Chapter of the Regional Comprehensive Plan (RCP), and SCAG’s RTP/SCS. The RTP/SCS also provides socioeconomic forecast projections of regional population growth.

The Project’s potential to induce substantial unplanned population growth is assessed in Section 3.14 of this Initial Study. As detailed in that section, the Project does not propose to expand the boundaries of the service area, nor does it call for changes or intensification of land uses. Because the Project merely supports the planned land uses and development potential established by local governments, the Project is not anticipated to induce substantial unplanned population growth. Therefore, the Project would be not exceed the assumptions used in preparing the forecasts presented in the 2016 AQMP. The Project would be consistent with the SCAQMD’s recommended second assessment criterion. As a result, the Project would not conflict with or obstruct implementation of the 2016 AQMP. No impact would result.

b) Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? (Less than Significant)

As stated in Air Quality Impact a), above, the Project is located in an area that is nonattainment for ozone, PM10, and PM2.5. To determine whether a Project would result in a cumulatively considerable increase in nonattainment criteria pollutants or exceed the quantitative thresholds for ozone precursors, Project emissions may be evaluated based on the quantitative emission thresholds established by the SCAQMD in its CEQA Air Quality Handbook (SCAQMD 1993, as amended).

Construction

Construction criteria pollutant emissions were calculated by using CalEEMod 2016.3.2. Details regarding the source equipment inventory, assumptions, and all data used to calculate construction-related air quality emissions are available in Appendix A, Air Quality/GHG Calculations.

Construction emissions for the Project were calculated for each phase and separated into on-site and off-site categories. On-site emissions are defined as the exhaust and fugitive emissions generated by stationary, mobile, and area sources at the various construction sites. Off-site emissions are referred to as the emissions from mobile sources that travel to/from the various construction sites. In general, due to the Project construction timeframe, it is unlikely that there would be construction activity from all phases occurring on the same day. However, to be conservative, the emissions from all phases of construction were combined, and compared to the appropriate construction significance thresholds.

As shown in Table 3.2-1, Construction Air Emissions below, the Project would not result in emissions of pollutants exceeding the SCAQMD’s regional significance thresholds during construction. Therefore, the impact from construction related emissions would be less than significant.

Table 3.2-1 Construction Air Emissions Associated with Project

Project Construction Activity	Maximum Daily Emissions (pounds/day)					
	ROG	NOx	CO	PM10	PM2.5	SOx
Pipeline Trenching	1.8	21.3	22.1	1.5	0.9	0.1
Pipeline Paving/Restoration	1.2	9.5	12.3	0.6	0.5	0.0
Facility Paving	1.7	9.4	12.3	0.7	0.5	0.0
Facility Improvements	1.9	13.3	15.1	1.2	0.7	0.0
All Construction	6.5	53.6	61.8	4.0	2.6	0.1
<i>SCAQMD Regional Thresholds</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>55</i>	<i>150</i>
<i>Significant Impact?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Operation

Following construction, the Project would not result in a nominal increase in traffic. As described in Section 1.5.2, Project operations would result in an additional 12 hauling trips per year. The increase in operational trips would not generate a significant air quality impact. The WVWD currently operates the treatment facility under a SCAQMD air quality permit (Facility ID 31919). The Project would require WVWD to either amend existing permits or apply for new permits for SCAQMD-regulated stationary and area sources of air pollutants. SCAQMD regulation requirements, permitting processes, and CEQA compliance actions ensure that new and modified permitted sources of air pollutants would not generate a significant quantity of air pollutants. Therefore, Project operations emissions would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations? (Less than Significant)

Sensitive receptors are members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. The Project’s proposed pipeline alignment within West Via Bello Drive would be located within 25 feet of multiple existing residences. The Project’s proposed improvements at the treatment facility would also be located approximately 60 feet from the nearest sensitive receptor located south from the Project site.

Construction LST

Local Significance Thresholds (LSTs) were developed in response to the SCAQMD Governing Board’s environmental justice (EJ) initiatives (EJ initiative I-4) in recognition of the fact that criteria pollutants such as CO, NOx, and PM10 and PM2.5 in particular, can have local impacts as well as regional impacts. The goal of significance thresholds is to ensure that no source creates, or receptor endures, a significant adverse impact from any project. The evaluation of localized air quality impacts determines the potential of the Project to violate any air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. LSTs represent the maximum emissions or air concentrations from a project that would not cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard, at any nearby sensitive or worker receptor. LSTs are defined separately for construction and operational activities.

Parameters necessary for LST analysis include the Source Receptor Area (SRA) that the project is located within, the size of the daily activity footprint, and the distance to the nearest sensitive receptor. The Project is located in SRA 34 (Central San Bernardino Valley). Therefore, the LSTs for this SRA were selected for the LST assessment.

The Project size is generally represented as the maximum area disturbed during a day from which emissions are calculated. Only some pieces of equipment generate fugitive dust in CalEEMod. The CalEEMod manual identifies various equipment and the acreage disturbed in an 8-hour day:

- Crawler tractors, graders, and rubber-tired dozers: 0.5 acres per 8-hour day
- Scrapers: 1 acre per 8-hour day

The acreages below do not reflect Project-footprint, but instead show a calculation based on the number and use of certain types of equipment. SCAQMD’s LST methodology bases the acreage disturbed on the daily activity for crawler tractors, graders, rubber-tired dozers, and scrapers. The Project construction is not anticipated to have this equipment. Therefore, the daily construction area is estimated based on the project type and known footprint to be less than 0.25 acre per day. The smallest look-up acreage under the SCAQMD’s LST methodology is 1 acre.

Each Project component (pipeline and facility improvements) is located within 25 meters of their respective nearest sensitive receptor. In general, due to the distances that separate each construction activity, it is unlikely that potential impacts from the pipeline construction and facility improvements would combine to cause a localized significant impact. As shown in Table 3.2-3 and Table 3.2-3, the Project would not exceed the SCAQMD’s LST. Therefore, the project’s localized criteria pollutant impact would be less than significant.

Table 3.2-2 Localized Significance Analysis (Construction-Pipeline)

Project Construction Activity	Onsite Emissions (pounds per day)			
	NOx	CO	PM10	PM2.5
Pipeline Trenching	14.0	20.3	0.7	0.7
Pipeline Paving/Restoration	9.5	12.3	0.5	0.4
Maximum Daily Emissions⁽¹⁾	23.5	32.6	1.2	1.1
<i>SCAQMD LST Thresholds</i>	<i>118</i>	<i>667</i>	<i>4</i>	<i>2</i>
<i>Significant Impact?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Notes: 1. The maximum daily emissions refer to the maximum emissions that would occur in one day; it was assumed trenching and pipeline paving could occur simultaneously in close proximity to each other. Therefore, maximum emissions would be the sum of both phases.

Table 3.2-3 Localized Significance Analysis (Construction-Treatment Facility)

Project Construction Activity	Onsite Emissions (pounds per day)			
	NOx	CO	PM10	PM2.5
Facility Paving	9.3	11.7	0.5	0.5
Facility Improvements	11.5	12.9	0.6	0.6
Maximum Daily Emissions⁽¹⁾	20.8	24.6	1.1	1.1
<i>SCAQMD LST Thresholds</i>	<i>118</i>	<i>667</i>	<i>4</i>	<i>2</i>
<i>Significant Impact?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Notes:1. The maximum daily emissions refer to the maximum emissions that would occur in one day; it was assumed that the paving and facility improvements could occur on the same day. Therefore, maximum emissions would be the sum of both phases.

Construction Toxic Air Contaminants

Construction equipment and heavy-duty truck traffic generate diesel particulate matter (DPM) exhaust, which is a known toxic air contaminant. DPM from equipment exhaust and PM2.5 pose potential health impacts to nearby receptors if those receptors have prolonged exposure to substantial emissions.

As required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR], construction contractors would be required to minimize idling times for trucks and equipment to five minutes, as well as to ensure that construction equipment is maintained in accordance with manufacturer's specifications. Given the limited daily activity for construction and continuous shifting of the construction activities, prolonged exposure of sensitive receptors to substantial pollutant concentrations would not occur. Therefore, the impact of construction-related emissions on sensitive receptors would be less than significant.

Operation

As described in Impact c) above, the WVWD currently operates the treatment facility under a SCAQMD air quality permit (Facility ID 31919). The Project would require WVWD to either amend existing permits or apply for new permits for SCAQMD-regulated stationary and area sources of air pollutants. SCAQMD regulation requirements, permitting process, and CEQA compliance actions ensure that new and modified permitted sources of air pollutants would not generate a significant impact on nearby sensitive receptors. Therefore, Project operations would be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? (Less than Significant)

Implementation of the Project would not result in major sources of odor. The Project type is not one of the common types of facilities known to produce odors (e.g., landfill, coffee roaster, wastewater treatment facility). Minor odors from the use of equipment during construction activities would be intermittent and temporary, and would dissipate rapidly from the source with an increase in distance. The impact would be less than significant.

3.4 Biological Resources

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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?		✓		
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 US Fish and Wildlife Service?				✓
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✓
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?				✓
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
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?				✓

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? (Less than Significant with Mitigation Incorporated)

The existing biological setting on and near the Project site was evaluated to determine the potential for any special-status plants or animal species to occur. A reconnaissance-level site visit was also conducted by a qualified biologist on March 2, 2021 to evaluate on-site and adjacent habitat types (Appendix B). Information on special-status species was compiled through a review of the literature and database searches. The following sources were reviewed to determine which special-status plant and wildlife species have been documented in the vicinity of the Project site:

- California Department of Fish and Wildlife Natural Diversity Database (CNDDB)
- California Native Plant Society (CNPS) Rare and Endangered Plant Inventory
- United States Fish and Wildlife (USFWS) Information for Planning and Conservation (IPaC)

The Project site is comprised of existing hardscapes, landscaped areas, disturbed areas, and roadways. Based on the existing conditions at the Project site and observed during the site reconnaissance, no

suitable habitat for special-status plants is present, therefore, no special-status plants are expected to occur. No impact to special-status plant species would result.

A total of ten federally listed wildlife species and seven state listed or candidate listed species were identified as being within a 1-quad search area of the Project site. No occurrences of special-status wildlife species have been recorded on the Project site, and none were identified during the site reconnaissance. The Project site is primarily surrounded by residential single-family homes. No remaining natural or high-quality habitat exists in the immediate Project vicinity. Vegetation is limited to landscaped lawns within the residential areas, ornamental trees around the RWFF and weedy roadside vegetation. This is also the case in terms of the “open space” area just to the west of the RWFF. Because of the lack of suitable habitat and the location of the Project in a developed environment, no special-status wildlife species are expected to occur within the Project area (GHD 2021).

However, the ornamental trees and structures within the Project site may provide some nesting habitat for common avian species protected under the Migratory Bird Treaty Act (MBTA) and Fish and Game Code (FGC). During construction, the Project has the potential to disturb nesting birds if any are utilizing the ornamental trees or structures within the Project site to nest. This impact is therefore potentially significant.

Mitigation

Implementation of Mitigation Measure BIO-1 below would reduce impacts to these bird species to a less-than-significant level.

Mitigation Measure BIO-1: Minimize Impacts to Nesting Bird Species

There is potential for common avian species, protected under the MBTA and FGC, to nest in the Project Area. Potential Project impacts to special status birds during construction may include visual disturbance, habitat destruction, and noise disturbance. The following measures are proposed to avoid potential impacts.

- Ground disturbance and vegetation clearing shall be conducted, if possible, during the fall and/or winter months and outside of the avian nesting season (generally March 1 – August 30 in southern California) to avoid any direct effects to protected birds. If ground disturbance cannot be confined to work outside of the nesting season, a qualified ornithologist shall conduct pre-construction surveys within the vicinity of the Project Area, to check for nesting activity of native birds and to evaluate the site for presence of raptors and special status bird species. The ornithologist shall conduct at minimum a one-day pre-construction survey within the 7-day period prior to vegetation removal and ground-disturbing activities. If ground disturbance or vegetation removal work lapses for seven days or longer during the breeding season, a qualified ornithologist shall conduct a supplemental avian pre-construction survey before Project work is reinitiated.
- If active nests are detected within the construction footprint or up to 500 feet from construction activities, the ornithologist shall flag a buffer around each nest (assuming property access). Construction activities shall avoid nest sites until the ornithologist determines that the young have fledged or nesting activity has ceased. If nests are documented outside of the construction (disturbance) footprint, but within 500 feet of the construction area, buffers would be implemented as needed (buffer size dependent on species). Buffer sizes for common species would be determined on a case-by-case basis in consultation with the CDFW and, if applicable, with USFWS. Buffer sizes would take into account factors such as (1) noise and human disturbance levels at the construction site at the time of the survey and the noise and

disturbance expected during the construction activity; (2) distance and amount of vegetation or other screening between the construction site and the nest; and (3) sensitivity of individual nesting species and behaviours of the nesting birds.

- If active nests are detected during the survey, the qualified ornithologist shall monitor all nests at least once per week to determine whether birds are being disturbed. Activities that might, in the opinion of the qualified ornithologist, disturb nesting activities (e.g., excessive noise), shall be prohibited within the buffer zone until such a determination is made. If signs of disturbance or distress are observed, the qualified ornithologist shall immediately implement adaptive measures to reduce disturbance. These measures may include, but are not limited to, increasing buffer size, halting disruptive construction activities in the vicinity of the nest until fledging is confirmed or nesting activity has ceased, placement of visual screens or sound dampening structures between the nest and construction activity, reducing speed limits, replacing and updating noisy equipment, queuing trucks to distribute idling noise, locating vehicle access points and loading and shipping facilities away from noise-sensitive receptors, reducing the number of noisy construction activities occurring simultaneously, and/or reorienting and/or relocating construction equipment to minimize noise at noise-sensitive receptors

b,c) 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 US Fish and Wildlife Service, including wetlands? (No Impact)

The Project site is comprised of existing hardscapes, landscaped areas, and roadways. The Project site does not include riparian habitat or other sensitive natural communities, such as grasslands or wetlands (including marsh or vernal pools) (GHD 2021). No impact would result.

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? (No Impact)

The Project site does not include waterways or other sensitive natural communities that provide wildlife movement corridors. The Project site and general vicinity does not provide high quality wildlife habitat and is limited to residential neighborhoods, as well as disturbed and developed areas. Above-ground physical changes to the Project Area would be minimal and limited to the existing RWFF. Given the location of the Project and its relatively small above-ground footprint, the Project would not interfere with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or nursery sites. No impact would result.

Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (No Impact)

The Project would remove five ornamental trees within the confines of the RWFF during Project implementation. The City of Rialto has a street tree ordinance (Section 11.08.100 of the Municipal Code), however does not have an ordinance related to trees located within a facility or on private property, therefore, no conflict would occur. Additionally, the City of Rialto General Plan includes several policies to

protect biological resources. These policies include: protecting endangered, threatened, rare, and other special-status habitat and wildlife species along Lytle Creek (Policy 2-39.1); pursue open space, wildlife corridors, or conservation easements to protect sensitive species and their habits (Policy 2-39.2); and continue working with the United States Fish and Wildlife Service to adopt a habitat conservation plan to protect the viability of the Delhi Sands Flowering-loving Fly (Policy 2-39.3) (Rialto 2010). The Project is located within a developed area and would not conflict or obstruct implementation of these policies. Therefore, the Project will not result in any impacts to locally protected biological resources and no conflict would result. No impact would result.

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? (No Impact)

The Project site is not located within the boundaries of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. As such, the Project would not conflict with the provisions of an adopted habitat conservation plan. No impact would result.

3.5 Cultural Resources

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?				✓
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		✓		
c) Disturb any human remains, including those interred outside of formal cemeteries?		✓		

A Historic Properties Identification Report was prepared for the project by Paleo Solutions (Paleo Solutions 2021). The study assessed the potential for the Project to impact cultural resources in the proposed improvement area through the completion of the following:

- Records and literature search at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information Center (CHRIS);
- Review of the Built Environment Resources Directory (BERD);
- Communication with the Native American Heritage Commission (NAHC) to request a review of the Sacred Lands File and contact information for the appropriate tribal communities;
- Contact with the appropriate local Native American Tribes; and
- Pedestrian archaeological survey of the project area.

Study results were used as a technical basis for evaluating potential impacts to historic and cultural resources under CEQA.

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? (No Impact)

The Project would include improvements to the existing RWFF and install a new water pipeline within existing roadways. A review of the BERD indicates that no NRHP or CRHR-listed or eligible resources, California Historical Landmarks, or California Points of Historical Interest are located within the Project Area and no historic properties were identified during the pedestrian survey. Therefore, no impact would result.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (Less than Significant with Mitigation)

The Historic Properties Identification Report conducted for the Project found two cultural resources investigations overlapped with two previous cultural resources investigations but did not identify any cultural resources within the current Project Area. A total of 15 previously-recorded sites are located within 1.0 mile of the Project area, including one prehistoric campsite and 14 historic-age resources. None of these 15 resources are located within the Project area and no cultural resources were identified during the pedestrian survey. Furthermore, the Project area has been extensively disturbed from previous development of the water retention basins, construction of the RWFF, and the residential development along West Via Bello Drive. Therefore, there is low potential for intact cultural resources (Paleo Solutions

2021). Although no known archaeological resources were identified within the Project area, the potential exists for encountering previously undiscovered archaeological resources during Project construction. Therefore, the impact is considered potentially significant.

Mitigation

Implementation of Mitigation Measure CR-1 would reduce the potential impact to previously undiscovered archaeological resources to a less than significant level by outlining procedures to be taken in the event of inadvertent discovery.

Mitigation Measure CR-1: Minimize Impacts to Unknown Archaeological Resources

Monitoring by a qualified archaeologist shall be conducted during initial ground-disturbing activities within native (i.e., undisturbed, non-fill) sediments. Monitoring shall be supervised by a qualified Principal Investigator who meets the U.S. Secretary of Interior professional qualification standards for archaeology. Initial monitoring shall be conducted to identify subsurface archaeological resources and to assess the potential of the sediments within the APE to contain buried resources. If the native subsurface sediments are assessed as having a low or no potential to contain buried resources, archaeological monitoring may be reduced or eliminated, as determined appropriate by the Principal Investigator in consultation with the WVWD. At the conclusion of all monitoring activities, a monitoring report shall be prepared by the Principal Investigator to document the methods and results of the monitoring, including detailed descriptions of all resources encountered and the measures taken to evaluate the resource(s) and to avoid or mitigate impacts to significant resources. The report shall be submitted to the WVWD and the SCCIC.

In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within TCR-1, regarding any pre-contact and/or post-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

If significant pre-contact and/or post-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to SMBMI for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly

c) Disturb any human remains, including those interred outside of formal cemeteries? (Less than Significant with Mitigation)

No human remains are known to exist within the Project area. However, there is potential for earthwork and grading to result in the disturbance of previously unrecorded human remains, if present. Therefore, the impact is considered potentially significant.

Mitigation

Implementation of Mitigation Measure CR-2 would reduce the potential impact to a less than significant level by outlining procedures to be taken in the event of inadvertent discovery of human remains.

Mitigation Measure CR-2: Protect Human Remains if Encountered

In the event that any human remains are discovered within the project area, ground disturbing activities shall be suspended 100 feet around the resource(s) and an Environmentally Sensitive Area (ESA) physical demarcation/barrier constructed. The on-site lead/foreman shall then immediately notify SMBMI, the applicant/developer, and the WVWD. The WVWD and the applicant/developer shall then immediately contact the County Coroner regarding the discovery. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code § 7050.5 (c). The NAHC-identified Most Likely Descendant (MLD), shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and funerary objects shall be treated and disposed of with appropriate dignity. The MLD, Lead Agency, and landowner agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes. The MLD shall complete its inspection and make recommendations within forty-eight (48) hours of the site visit, as required by California Public Resources Code § 5097.98.

Reburial of human remains and/or funerary objects (those artifacts associated with any human remains or funerary rites) shall be accomplished in compliance with the California Public Resources Code § 5097.98 (a) and (b). The MLD in consultation with the landowner, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains and funerary objects. All parties are aware that the MLD may wish to rebury the human remains and associated funerary objects on or near the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The applicant/developer/landowner should accommodate on-site reburial, to the extent feasible, in a location mutually agreed upon by the Parties.

It is understood by all Parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, parties, and Lead Agencies will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r).

3.6 Energy Resources

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			✓	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				✓

a) Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? (Less than Significant)

Construction of the project would involve grading, excavation, and use of heavy machinery as discussed in Section 3.3 (Air Quality). Construction would require the use of fuels, primarily gas, diesel, and motor oil. The precise amount of construction-related energy consumption that would occur is uncertain. However, construction would not require a large amount of fuel or energy usage because of the moderate number of construction vehicles and equipment, worker trips, and truck trips that would be required for a project of this scale. Construction equipment would remain staged in the Project area once mobilized. Use of fuels would not be wasteful or unnecessary because their use is necessary to complete the project. Excessive idling and other inefficient site operations would be prohibited. Equipment idling times would be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes or less (as required by the California airborne toxics control measure (Title 13, Section 2485 of the CCR). Therefore, construction would not result in the use of large amounts of fuel and energy in a wasteful manner, and the impact would be less than significant.

Following construction, the RWFF would operate more efficiently due to the replacement of aging equipment and technology with updated versions. However, additional energy would also be needed to process the additional water capacity. The energy utilized to treat the additional water capacity would not be wasteful, inefficient, or unnecessary as the RWFF would utilize the least amount of energy necessary to treat the water. Therefore, the operational impact on energy consumption would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? (No Impact)

In 2003, the California Energy Commission (CEC), the California Power Authority (CPA), and the California Public Utilities Commission (CPUC) jointly adopted an Energy Action Plan (EAP) that listed goals for California’s energy future and set forth a commitment to achieve these goals through specific actions (CEC 2003). In 2005, the CPUC and the CEC jointly prepared the EAP II to identify the further actions necessary to meet California’s future energy needs. Additionally, the CEC prepared the State Alternative Fuels Plan in partnership with the California Air Resources Board and in consultation with other state, federal, and local agencies. The alternative fuels plan presents strategies and actions California must take to increase the

use of alternative non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production (CEC 2007).

Locally, the City of Rialto General Plan includes goals to promote green building and other sustainable building practices (Goal 2-30) and to conserve energy resources (2-31).

Construction and operation of the project would not conflict with or obstruct implementation of either the EAP, EAP II, the State Alternative Fuels Plan or local City general plan goals. Project construction would not require a large amount of fuel or energy usage because of the limited extent and nature of the proposed improvements and the minimal number of construction vehicles and equipment, worker trips, and truck trips that would be required for a project of this small scale. Project operation would similarly utilize the minimum necessary energy to treat the water within the RWFF. No conflicts with a state or local plan for renewable energy or energy efficiency have been identified. Therefore, no impact would result.

3.7 Geology and Soils

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?				✓
ii. Strong seismic ground shaking?			✓	
iii. Seismic related ground failure, including liquefaction?			✓	
iv. Landslides?				✓
b) Result in substantial soil erosion or the loss of topsoil?		✓		
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 on, or off, site landslide, lateral spreading, subsidence, liquefaction or collapse?			✓	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			✓	
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?				✓
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		

a, a.i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. (No Impact)

The Project site is not located within a designated Alquist-Priolo Earthquake Fault Zone. The nearest active fault is the Rodgers Creek Fault located approximately 1.5 miles east of the site (City of Rialto 2010). The project would not change the exposure of people or structures to risk of loss, injury, or death from fault rupture. Thus, no impact would result.

a.ii) Strong seismic ground shaking? (Less than Significant)

Due to the proximity of the Project site to the San Jacinto, Cucamonga, Lytle Creek, and San Andreas Faults, the Project site is expected to experience strong seismic ground shaking over the life of the Project. The proposed Project would not alter the seismic environment or affect the risk of seismically-induce

ground shaking. Therefore, there would be no change regarding the exposure of people or structures to substantial adverse effects related to the risk of property loss, injury, or death due to seismically-induced ground shaking compared to existing conditions. If strong seismic ground shaking were to damage the proposed facilities, it is unlikely that human lives would be put at risk because the Project does not involve the construction of habitable structures. The Project would be constructed to the seismic standards of the most recent California Building Code, as applicable. Therefore, the impact to people and structures from strong seismic ground shaking would be less than significant.

a.iii) Seismic related ground failure, including liquefaction? (Less than Significant)

The Project site and surrounding properties are not mapped as being susceptible to liquefaction (Rialto 2010). The project would not alter the seismic environment or affect the risk of seismically-induced ground failure, including liquefaction. There would be no change regarding the exposure of people or structures related to the risk of property loss, injury, or death due to seismically-induced ground failure compared to existing conditions. Therefore, the impact related to seismic-related ground failure, including liquefaction, would be less than significant.

a.iv) Landslides? (No Impact)

The proposed improvements would be located on relatively level, previously developed and/or paved land. There are no significant slopes or mountains at or near the proposed Project that could result in landslides on- or off-site. No impact would result.

b) Result in substantial soil erosion or the loss of topsoil? (Less than Significant with Mitigation)

Areas to be disturbed during construction would consist predominantly of hardscapes and underlying soils that have been highly altered from their original, natural state. As a result, the Project would result in little disturbance to native soils.

The Project includes grading, cuts, and fills that have the potential to cause erosion. As addressed through Mitigation Measure HWQ-1 identified below, to mitigate potential impacts from construction trenching and other ground disturbance, the Project would be required to prepare a Storm Water Pollution Prevention Plan (SWPPP) under the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order No. 2009-0009, as amended by Order No. 2012-0006), which includes best management practices to prevent soil erosion. Compliance with the NPDES permit requirements would further ensure that potential impacts from soil erosion or loss of topsoil during construction would be less than significant.

Mitigation

Implementation of Mitigation Measure HWQ-1 identified below would reduce the impact from potential erosion to a less than significant level.

Mitigation Measure HWQ-1: Manage Construction Storm Water

See Section 3.10, Hydrology and Water Quality, for the full text of the Mitigation Measure.

Following construction, the Project would not result in soil erosion or loss of topsoil, as disturbed areas would be restored to general pre-construction conditions and no additional ground disturbance would occur. Therefore, no operational impact would occur.

c, d) Be located on a geologic unit or soil that is unstable or expansive? (Less than Significant)

As described in Section 1.6.1, Environmental Protection Actions incorporated into the Project, as part of the Project design process the WVWD would engage a California-registered Geotechnical Engineer to conduct a design-level geotechnical study for the Project. The City would design the Project to comply with the site-specific recommendations made in the Project's geotechnical report. This will include design in accordance with the seismic and foundation design criteria, as well as site preparation and grading recommendations included in the report. The geotechnical recommendations would be incorporated into the final plans and specifications for the Project, and would be implemented during construction. The project would not otherwise alter the properties of the soils at the project site nor cause or worsen the risks associated with unstable or expansive soils. Therefore, impacts would be less than significant.

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? (No Impact)

The project would not install nor require the installation of septic tanks or alternative wastewater disposal systems requiring infiltration to soils would be constructed. No impact would result.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (Less than Significant with Mitigation Incorporated)

No paleontological resources are known to be on or adjacent to the Project site. It is assumed that if these resources were located in these areas, they would have been discovered during original or subsequent ground disturbing activities. Should evidence of paleontological resources be encountered during grading and construction, operations would be required to cease, and the District would be required to be contacted for determination of appropriate procedures. Compliance with the District's standard conditions would preclude significant impacts to paleontological resources. While fossils are not expected to be discovered during construction, it is possible that significant fossils could be discovered during excavation activities, even in areas with a low likelihood of occurrence. Fossils encountered during excavation could be inadvertently damaged. If a unique paleontological resource is discovered, the impact to the resource would be significant.

Mitigation

Implementation of Mitigation Measure GEO-1 would reduce impacts to a less-than-significant level by addressing discovery of unanticipated buried resources and preserving and/or recording those resources consistent with appropriate laws and requirements.

Mitigation Measure GEO-1: Protection of Paleontological Resources

In the event that fossils are encountered during construction (i.e., bones, teeth, or unusually abundant and well-preserved invertebrates or plants), construction activities shall be diverted away from the discovery within 50 feet of the find, and a professional paleontologist shall be notified to

document the discovery as needed, to evaluate the potential resource, and to assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the material, if it is determined that the find cannot be avoided. The paleontologist shall make recommendations for any necessary treatment that is consistent with currently accepted scientific practices. Any fossils collected from the area shall then be deposited in an accredited and permanent scientific institution where they will be properly curated and preserved.

3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				✓

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (Less than Significant)

On December 5, 2008, the SCAQMD Governing Board adopted an interim greenhouse gas significance threshold for stationary sources, rules, and plans where the SCAQMD is lead agency (SCAQMD 2008b and 2010). The SCAQMD permit threshold consists of five tiers. However, the SCAQMD is not the lead agency for this project. Therefore, the five permit threshold tiers do not apply to the project.

The SCAQMD is in the process of preparing recommended significance thresholds for greenhouse gases for local lead agency consideration (SCAQMD draft local agency thresholds); however, the SCAQMD Board has not approved the thresholds.

The current draft thresholds consist of the following tiered approach:

Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.

Tier 2 consists of determining whether the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.

Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to a project's operational emissions. If a project's emissions are under one of the following screening thresholds, then the project is less than significant:

- All land use types: 3,000 metric tons of carbon dioxide equivalent (MTCO_{2e}) per year
- Based on land use type: residential: 3,500 MTCO_{2e} per year; commercial: 1,400 MTCO_{2e} per year; or mixed use: 3,000 MTCO_{2e} per year

Tier 4 has the following options:

- Option 1: Reduce emissions from business as usual by a certain percentage; this percentage is currently undefined
- Option 2: Early implementation of applicable AB 32 Scoping Plan measures
- Option 3, 2020 target for service populations (SP), which includes residents and employees: 4.8 MTCO₂e /SP/year for projects and 6.6 MTCO₂e /SP/year for plans
- Option 3, 2035 target: 3.0 MTCO₂e/SP/year for projects and 4.1 MTCO₂e/SP/year for plans

Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD’s draft threshold uses the Executive Order S-3-05 goal as the basis for the Tier 3 screening level. Achieving the Executive Order’s objective would contribute to worldwide efforts to cap carbon dioxide concentrations at 450 ppm, thus stabilizing global climate. No applicable standard or significance threshold has been established pertaining to construction-related greenhouse gas emissions.

Construction GHG emissions were calculated by using CalEEMod 2016.3.2. Details regarding the construction schedule, construction activities, equipment inventory, assumptions, and data used to calculate construction-related GHG emissions are available in Appendix A, Air Quality/GHG Calculations. Project construction is estimated to generate 121.4 metric tons of carbon dioxide equivalent (MTCO₂e). Pursuant to SCAQMD methodology, these construction emissions are annualized over an assumed 30-year operational life of the Project and are included in the operational emissions to assess the Project’s potential GHG impact.

Following construction, the Project would result in a nominal increase in traffic. As described in Section 1.5.2, Project operations would result in an additional 12 hauling trips per year. The treatment facility would operate more efficiently due to the replacement of aging equipment and technology with updated versions. However, additional energy would also be needed to process the additional water capacity. The amount of energy reduction associated with increased efficiency, and additional energy for processing additional water capacity, is currently unknown. Therefore, because the Project would result in a nominal number (12 trips per year) of new on-road mobile emissions (the main emissions source category for most development projects), and the energy consumption demand is unknown, the operational emissions were not quantified, but are reasonably assumed to be small in magnitude. Annualized construction emissions would be 4.0 MTCO₂e per year. The Project’s GHG emissions are less than the SCAQMD’s draft screening threshold of 3,000 MTCO₂e per year for all land uses. Therefore, the Project’s GHG impact would be less than significant.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (No Impact)

This analysis uses the California Air Resources Board (CARB) 2017 Climate Change Scoping Plan as the applicable greenhouse gas reduction strategy (CARB 2017). The City of Rialto Climate Adaptation Plan is currently under development, and is not an adopted greenhouse gas reduction strategy.

The 2017 Climate Change Scoping Plan provides strategies for meeting the mid-term 2030 greenhouse gas reduction target set by Senate Bill (SB) 32. The 2017 Climate Change Scoping Plan also identifies how the State can substantially advance toward the 2050 greenhouse gas reduction target of Executive Order S-3-05, which consists of reducing greenhouse gas emissions to 80 percent below 1990 levels. The recommendations cover several key sectors, including: energy and industry; transportation; natural and working lands; waste management; and water. The recommended measures in the 2017 Scoping Plan are

broad policy and regulatory initiatives that will be implemented at the State level and do not relate to the construction and operation of individual projects. The project would not impede the State developing or implementing the greenhouse gas reduction measures identified in the Scoping Plan. Therefore, the project would not conflict with AB 32 or the 2017 Climate Change Scoping Plan. No impact would result.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
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?			✓	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			✓	
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?			✓	
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 or excessive noise for people residing or working in the project area?				✓
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?			✓	

a, b) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or 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? (Less than Significant)

Small amounts of common hazardous materials such as construction-related truck and heavy equipment fuel, solvents, and lubricants would be used during construction of the project. During construction activities, any on-site hazardous materials that may be used, stored, or transported would be required to follow standard protocols (as determined by the U.S. EPA, California Department of Health and Safety, and the City of Rialto) for maintaining health and safety. In California, Caltrans and the California Highway Patrol regulate the transportation of hazardous materials and wastes, including container types and packaging requirements, as well as licensing and training for truck operators, chemical handlers, and hazardous waste haulers. The California Division of Occupational Safety and Health (Cal-OSHA) also enforces hazard communication program regulations which contain worker safety training and hazard information requirements, such as procedures for identifying and labeling hazardous substances, communicating hazard information related to hazardous substances and their handling, and preparing health and safety plans to protect workers and employees. Because WVWD and its contractors would be

required to comply with existing and future hazardous materials laws and regulations and applicable best management practices addressing the transport, storage, use, and disposal of hazardous materials, the potential to create a significant hazard to the public or the environment during construction of the project would be less than significant.

Following construction, operation of the project would continue to involve the use of hazardous materials including chlorine, aluminum chlorohydrate (ACH) and Earth Tec. Even though the project would result in an increase in water treatment capacity of 7.2 mgd, the quantity of these chemicals would remain the same. WVWD will increase the frequency of chemical deliveries. No new hazardous materials would be used in the water treatment process as a result of the Project. Both existing and future quantities of hazardous materials to be stored and used at the water treatment facility are subject to state (SWRCB) and federal (EPA) safety regulations. The operational impact would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (Less than Significant)

Wilmer Amina Carter High School and Trap Elementary School are the nearest schools to the proposed construction area, located approximately 0.4 mile to the southeast and south, respectively. Both schools are located on arterial roadways and/or on a designated truck routes, indicating that construction-related truck traffic would likely pass by the schools. Hazardous materials associated with construction-related trucks and heavy equipment include fuels and petroleum-based lubricants. It is not anticipated that the trucks would contain hazardous materials as cargo. Operationally, the existing water treatment facility current uses hazardous materials including chlorine, aluminum chlorohydrate (ACH) and Earth Tec., which are used in the water treatment process as a disinfectant, coagulant and algicide, respectively. The amount of chemicals stored would be the same, but because the Project would result in an increase in water treatment capacity of 7.2 mgd, the rate that the chemicals will be consumed will increase proportionally with the increase in capacity. Both existing and future quantities of hazardous materials to be stored and used at the water treatment facility are subject to state (SWRCB) and federal (EPA) safety regulations. The impact would be less than significant.

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? (Less than Significant)

The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List." A search of the Cortese List search (DTSC 2021) was completed to determine if any known hazardous waste sites have been recorded on or adjacent to the project construction area. There are two sites located approximately 1/3 mile west of the Project site that are listed as "active" in the California Department of Toxic Substances Control EnviroStor Database.

The National Construction Rentals site (ID# 60001069) is located at 2824 North Locust Avenue in Rialto and is described as having soil contaminated by 1,1 Dichloroethane, HMX, Perchlorate, and RDX (Cyclonite). From 1981 to 2001, the site was also used for hazardous waste/hazardous materials operations that involved use of explosives (fireworks manufacturing).

The BF Goodrich site (ID#60001389) is located at 3196 North Locust Avenue in Rialto and is described as having soil and groundwater contaminated by Volatile Organic Compounds (VOCs) and Perchlorate.

Beginning in the 1940's, the 160-acre area has been used for ordnance storage, fireworks manufacture that used potassium perchlorate, and solid fuel rocket propellant manufacture that use ammonium perchlorate.

Construction of the Project would involve the excavation of soils within the existing boundaries of the water treatment facility and within the West Via Bello Drive street right-of-way. However, given the distance between the Project site and the above-described hazardous materials sites and the absence of know hazardous materials in the Project site itself, it is unlikely that Project-related excavation would involve contaminated soils. During the operation phase of the Project, the underground water pipeline would be unaffected by any soil contaminants that may or may not be present. The Project does not involve groundwater pumping. The impact would be less than significant.

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 or excessive noise for people residing or working in the project area? (No Impact)

The Project site is not located within two miles of a public use airport. The nearest public use airport is the San Bernardino International Airport, located approximately ten miles to the southeast of the Project site. No impact would result.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (No Impact)

The Project would not impair or physically interfere with implementation of the City of Rialto Emergency Operations Plan (Multi-Hazard Function Plan). The Project would not change existing circulation patterns, would not generate new traffic, and would not affect emergency response routes. No impact would result.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? (Less than Significant)

The Project site is located within the Local Resource Area (LRA), approximately 1,300 feet from the State Responsibility Area (SRA). LRA is the area within the local agency jurisdiction, in this case the City of Rialto, where the local agency is responsible for the prevention and suppression of wildfires. The SRA is the area of the state that the State of California is financially responsible for prevention and suppression of wildfires. Approximately seven acres of the 37-acre water treatment facility and approximately 350 lineal feet of the approximately 1,800 lineal feet of proposed underground water pipe within West Via Bello Drive are located in the Very High Fire Hazard Severity Zone (VHFHSZ)(CALFIRE 2021). The Project site is comprised of existing hardscapes, landscaped areas, and roadways, and the potential for construction activities to result in fires would be low. The Project would not otherwise increase exposure to wildland fire above existing conditions. The impact would be less than significant.

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		✓		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			✓	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site?				✓
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				✓
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				✓
iv. Impede or redirect flood flows?				✓
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				✓
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				✓

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? (Less than Significant with Mitigation Incorporated)

Areas to be disturbed during construction would consist predominantly of hardscapes and underlying soils that have been highly altered from their original, natural state. The Project site does not include waterways. However, the Project would include grading, cuts, and fills that have the potential to cause erosion. Project construction activities could also be a source of chemical contamination from use of alkaline construction materials (e.g., concrete) and hazardous or toxic materials (e.g., fuels, solvents, and asphalt).

State Water Resources Control Board NPDES Order No. 2009-0009, as amended by Order No. 2012-0006, applies to public and private construction projects that include one or more acres of soil disturbance. Construction of the Project would disturb more than one acre of land and has the potential to degrade water quality as a result of erosion caused by earthmoving activities during construction, discharge of groundwater from dewatering, or the accidental release of hazardous construction chemicals. The installation of the new 30-inch pipeline from the RWFF to the reservoirs would be installed using an open-trench method. Exposed soil from stockpiles, excavated areas, and other areas where ground cover would

be removed could be transported elsewhere by wind or water. If not properly managed, this could increase sediment loads in receiving water bodies, thereby adversely affecting water quality. As required by the NPDES permit, a Storm Water Pollution Prevention Plan (SWPPP) would be developed as part of the Project. The SWPPP would identify the best management practices necessary to prevent adverse impact to water quality including violation of water quality standards and waste discharge requirements. The treatment provided by the storm water management measures would reduce the potential for degradation of water quality in surface waters to a less-than-significant level.

Mitigation

Implementation of Mitigation Measure HWQ-1 would reduce impacts to a less-than-significant level by identifying and implementing best management practices to treat runoff during construction.

Mitigation Measure HWQ-1: Manage Construction Storm Water

The WVWD shall obtain coverage under State Water Resources Control Board Order No. 2009-0009-DWQ, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities, as amended by Order No. 2012-0006. The WVWD shall submit permit registration documents (notice of intent, risk assessment, site maps, Storm Water Pollution Prevention Plan, annual fee, and certifications) to the State Water Resources Control Board. The Storm Water Pollution Prevention Plan shall address pollutant sources, drilling fluids, non-storm water discharges resulting from construction dewatering, best management practices, and other requirements specified in the above-mentioned Order. The Storm Water Pollution Prevention Plan shall also include dust control practices to prevent wind erosion, sediment tracking, and dust generation by construction equipment. A Qualified Storm Water Pollution Prevention Plan Practitioner shall oversee implementation of the Plan, including visual inspections, sampling and analysis, and ensuring overall compliance.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? (Less than Significant)

The proposed Project improvements would be located in the Rialto-Colton groundwater basin (8-002). The 2019 priority ranking for this groundwater basin was low and the basin is not critically over drafted (DWR 2019). Project excavations are anticipated to be shallower than the underlying groundwater table. Such temporary dewatering would have, at most, a very small effect on localized water levels in the immediate vicinity of the excavation, and no substantial deficit in aquifer volume or lowering of water levels would occur. Following construction, the capacity of the RWFF would be increased by 7.2 mgd, meaning additional surface water could be treated at the Project site. The

District utilizes several sources of supply including existing wells to extract groundwater from the Lytle Creek Basin, Bunker Hill Basin, Rialto-Colton Basin, Chino Basin, and Riverside Basin, as well as surface water from Lytle Creek and the SWP (AKEL 2020).

The current metering and transmission facilities would allow the District to import 20 mgd of the SWP water. Based on the projected flows from Lytle Creek, it is anticipated that the District could purchase approximately 16.8 mgd of SWP water in order to utilize the full treatment capacity of the expanded RWFF (AKEL 2020). Purchasing of additional SWP water would eliminate the need to draw from the existing groundwater wells.

As stated in the District’s Water Master Plan, the groundwater basins are governed and protected by several judgments and ordinances, including the 1924 Judgment for Lytle Creek Region, City of San Bernardino Municipal Water Department’s Basin Management Ordinance, and 1961 Rialto Basin Decree, which implements certain restrictions to protect sustainability of the groundwater supply. The District would abide by all relevant restrictions and regulations to ensure sustainability of the groundwater basins. The expanded facility would merely maximize the use of the SWP water. It is not anticipated that the additional capacity at the RWFF would result in a decrease of available groundwater recharge or impediment of sustainable groundwater management of the groundwater basins. A less than significant impact would result.

c i-civ) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site? (No Impact)

The Project site is not located within a 100-year flood zone (FEMA 2020). Project improvements would be located within existing hardscapes, and areas disturbed during construction would be restored to pre-construction conditions. The Project would not result in a substantial increase in new impervious surfaces and would not result in a change to drainage patterns. The Project would not alter the course of a stream or river, would not increase surface runoff, nor create substantial additional sources of polluted runoff. No impact to existing drainage patterns would result.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (No Impact)

The Project site is not located within a 100-year flood zone (FEMA 2020). The Project site is also located inland and is not located within the proximity of a water body that could be impacted by a tsunami. No other large bodies of water are located in the vicinity that may be affected by a seiche. No impact would result.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (No Impact)

Erosion control BMPs would be required to be implemented during construction to prevent erosion and to protect overall water quality. Therefore, the Project is not anticipated to conflict or obstruct a water quality control plan. As mentioned above under item (b), additional SWP water that was previously allocated to the District would be purchased to utilize the increased capacity of the RWFF. Therefore, continued sustainable use of the existing groundwater basins would continue. No conflicts with an existing or foreseeable sustainable groundwater management plan have been identified. No impact would result.

3.11 Land Use and Planning

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?				✓
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				✓

a) Physically divide an established community? (No Impact)

The Project would include improvements within the boundaries of the existing approximately 35-acre water treatment facility located at 3010 N. Cedar Avenue and a new water line within the existing, fully developed West Via Bello Drive. The surrounding land uses are primary single family residential. The operation of the Project would not limit the movement of people beyond existing conditions. The Project does not include new features that would divide an established community. No impact would result.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? (No Impact)

The property at 3010 N. Cedar Avenue is an active water treatment facility. The site is located within the corporate limits of the City of Rialto. The site has a Single Family Residential (R-1) land use designation and a Single Family Residential zoning designation (R-1). However, per California Government Code Section 53091, "Building ordinances of a county or city shall not apply to the location, or construction for the production, generation, storage, or transmission of water wastewater, or electrical energy by a local agency." In addition, the same Code section provides that "Zoning ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, or transmission of water, or for the production or generation of electrical energy." Therefore, the land use and zoning designations do not apply and no conflicts with land use plans, policies, or regulations have been identified and no exceptions or reductions to standards would be necessary to approve the Project. No impact would result.

3.12 Mineral Resources

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
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?				✓
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?				✓

a,b) 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, or a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (No Impact)

The Project site is not located within an area classified as Mineral Resources Zone 2 (MRZ-2) in the California Geologic Survey Special Report 206, Plate 2 (CGS 2010). MRZ-2 is defined as, "Areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists." No locally-important mineral resources are known to occur at the site. No impact would result.

3.13 Noise

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				✓
b) Result in generation of excessive groundborne vibration or noise levels?		✓		
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓

a) Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (No Impact)

Because community noise fluctuates over time, a single measure called the Equivalent Sound Level (Leq) is often used to describe the time-varying character of community noise. The Leq is the energy-averaged A-weighted sound level during a measured time interval, and is equal to the level of a continuous steady sound containing the same total acoustical energy over the averaging time period as the actual time-varying sound.

Another sound measure known as the Community Noise Equivalent Level (CNEL) is an adjusted average A-weighted sound level for a 24-hour day. It is calculated by adding a 5 dB adjustment to sound levels during evening hours (7:00 p.m. to 10:00 p.m.) and a 10 dB adjustment to sound levels during nighttime hours (10:00 p.m. to 7:00 a.m.). These adjustments compensate for the increased sensitivity to noise during the typically quieter evening and nighttime hours. The CNEL is used by the State of California and the City to evaluate land use compatibility with respect to transportation noise.

According to the City’s Land Use Compatibility for Community Noise Exposure, noise-sensitive land uses such as residences and schools are normally acceptable with exterior noise levels below 60 dBA CNEL and conditionally acceptable with noise levels below 70 dBA CNEL. Industrial, Manufacturing, Utilities, and Agriculture land uses are normally acceptable with exterior noise levels below 75 dBA CNEL and conditionally acceptable with exterior noise levels below 80 dBA CNEL. These guidelines also include a maximum exterior noise level of 65 dBA CNEL for noise-sensitive receptors.

In addition, the City’s Code of Ordinances include requirements that pertain to noise during construction and operation. Section 9.50.060 Exemptions, states: The following activities and noise sources shall be exempt from the provisions of this chapter (9.50):

9.50.070 Disturbances from Construction Activity

The City of Rialto has set exterior noise limits to control noise impacts associated with the construction of the proposed Project. According to Section 9.50.070 of the City’s Municipal Code, Disturbances from Construction Activity, the appropriate construction hours are as follows:

October 1st through April 30th:

- Monday through Friday: 7:00 a.m. to 5:30 p.m.
- Saturday: 8:00 a.m. to 5:00 p.m.
- Sundays and State Holidays: No permissible hours

May 1st through September 30th:

- Monday through Friday: 6:00 a.m. to 7:00 p.m.
- Saturday: 8:00 a.m. to 5:00 p.m.
- Sundays and State Holidays: No permissible hours.

The hours above shall apply to all persons that are engaged in any work of construction, erection, alternation, repair, addition, movement, demolition, or improvement to any building or structure. The Project, as stated in Section 1.5.3 (Project Construction), would abide by the above listed hours of operation of construction equipment. Therefore, construction activities would be consistent with the City Noise Ordinance and no impact would result.

Following construction, the Project would result in the operation of additional mechanical equipment, including new effluent and influent pumps within the confines of the RWFF. Residential properties are located to the east and west of the RWFF. Residential property lines would be as close as 300 feet away from the newly operating pumps.

The influent pumps would have a power rating of 50 horsepower. The effluent pumps would have a power rating of 150 horsepower. The three influent pumps would be installed approximately 17.5-feet underground. The three effluent pumps would be housed within a concrete wet well structure with 16-inch concrete walls. The pumps located underground are anticipated to attenuate well below the threshold. The wet well would account for approximately 20 decibels of attenuation. Noise levels due to the operation of the effluent pumps would be 73 decibels unhoused, therefore, they would be approximately 53 decibels attenuated due to the wet well structure. Operational noise level would not exceed the City’s Noise Ordinance thresholds. No impact would occur.

b) Result in generation of excessive groundborne vibration or noise levels? (Less than Significant with Mitigation Incorporated)

The City of Rialto General Plan and Municipal Code do not establish a maximum vibration level for construction activities. For structural damage, the California Department of Transportation (Caltrans) recommends a vibration limit of 0.5 in/sec Peak Particle Velocity (PPV) for new residential and modern commercial/industrial structures, 0.3 in/sec PPV for older residential structures, and a limit of 0.25 in/sec PPV for historic and some old buildings. The proposed construction areas would not be located in the vicinity of fragile structures. Therefore, based on Caltrans guidance, this analysis establishes 0.3 in/sec PPV as the significance threshold for construction vibration to avoid damage to buildings from vibration sources.

Table 3.13-1 presents typical vibration levels that could be expected from construction equipment at a distance of 25 feet. Construction activities, such as drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may generate substantial vibration in the immediate vicinity. Vibration levels would vary depending on soil conditions, construction methods, and equipment used.

Table 3.13-1 Vibration Source Levels for Construction Equipment

Equipment		PPV at 25 feet (in/sec)	Approximate L _v at 25 feet (VdB)
Pile Driver (impact)	upper range	1.158	112
	typical	0.644	104
Pile Driver (sonic)	upper range	0.734	105
	typical	0.170	93
Clam shovel drop		0.202	94
Hydromill (slurry wall)	in soil	0.008	66
	in rock	0.017	75
Vibratory Roller		0.210	94
Hoe Ram		0.089	87
Large Bulldozer		0.089	87
Caisson Drilling		0.089	87
Loaded Trucks		0.076	86
Jackhammer		0.035	79
Small Bulldozer		0.003	58

Source: Federal Transit Administration 2006

The vibration levels provided in Table 3.12-1 are the values projected at 25 feet. This distance reflects the closest distance from the existing residential structures to the construction area; most structures are farther away. Vibratory pile driving may be required to shore the excavated areas (e.g., open trenches) rams near residential buildings. Vibration levels would typically be below 0.3 in/sec PPV when located at a distance of 25 feet or more from sensitive structures, but if the upper range of vibration levels from vibratory pile driving occurs, the vibration levels would exceed the 0.3 in/sec PPV threshold level within a distance of approximately 75 feet. At a distance of 25 feet, a vibratory pile driver would typically generate vibration levels of 0.09 in/sec PPV (FTA 2006), which is substantially below the 0.3 in/sec PPV threshold. The construction equipment that would generate the highest vibration levels would be pile drivers which may be used to install shoring systems. At a distance of 25 feet, vibration levels produced by a pile driver would range from 0.17 to 1.16 in/sec PPV (FTA 2006), which could exceed the 0.3 in/sec PPV threshold. The impact would be significant.

During operation, no groundborne vibration would occur, and the Project would not result in exposure of persons to or generation of excessive groundborne vibration levels. No operational impact would occur.

Mitigation

Mitigation Measure NOI-1 would reduce vibration impacts to less than significant by determining the sensitivity of nearby structures and requiring the use of alternate construction equipment.

Mitigation Measure NOISE-1: Manage Vibration Levels

The District shall not use heavy vibration-generating construction equipment to the extent feasible. Where heavy vibration-generating equipment must be used, the District shall prepare a vibration study conducted by a qualified acoustic scientist prior to the start of construction. The study will determine the age and sensitivity of potentially affected structures, determine whether a threshold of 0.3 or 0.5 inch/sec PPV is appropriate for each of them, and estimate the projected vibration impact at each structure. The District shall use alternate construction equipment such that the projected Project vibration impact at each structure is less than the appropriate threshold established by the study.

- c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? (No Impact)**

The Project site is not located within the vicinity of a private airstrip, airport land use plan, or within two miles of a public airport. Therefore, no impact would result.

3.14 Population and Housing

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned 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)?			✓	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓

a) Induce substantial unplanned 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) (Less than Significant)

The proposed Project would result in an increase in capacity at the water treatment facility. The RWFF currently is able to treat up to 14.4 million gallons per day (mgd). Following Project completion, the RWFF would be able to treat 21.6 mgd – a 50% increase in capacity from existing conditions. The Project is one of seven Capital Improvement Projects identified in the 2020 West Valley Water District Water Facilities Master Plan. The purpose of the Water Facilities Master Plan is to estimate the future water demands and supply requirements for the District and to identify the water facilities needed to produce, deliver, store, and transport this supply to its customers. The facilities are based on the projected highest water usage day when the District is fully developed. In order to estimate future water needs, the Plan examined existing lands, lands planned for redevelopment, and undeveloped lands planned for development. Existing and future land uses were taken from current City and County General Plans within the District’s service area.

The Project does not propose to expand the boundaries of the service area, nor does it call for changes or intensification of land uses. Because the Project merely supports the planned land uses and development potential established by local governments, the Project is not anticipated to induce substantial unplanned population growth. The impact would be less than significant.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? (No Impact)

No housing or people would be displaced by the Project and no replacement housing would be required. No impact would result

3.15 Public Services

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire Protection?				✓
Police protection?				✓
Schools?				✓
Parks?				✓
Other public facilities?				✓

a) 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 public services? (No Impact)

As discussed in Section 3.14, Population and Housing, implementation of the Project would not induce population growth and, therefore, would not require expanded fire or police protection facilities to maintain acceptable service ratios, response times, or other performance objectives. The Project would not result in an increase in student population, and therefore, no new or expanded schools would be required. The Project would not result in the increased use of existing parks and other public facilities as it would not induce population growth. The Project would not require the expansion of recreational facilities to maintain acceptable service ratios in parks, and would not require the expansion of other public facilities. No impact on public services would result.

3.16 Recreation

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) 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?				✓
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				✓

a, b) 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, or include or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment? (No Impact)

As discussed in Section 3.14, Population and Housing, implementation of the Project would not induce population growth. The use of existing neighborhood and regional parks or other recreational facilities would not change as a result of the Project. The Project would not include construction activities within an existing recreational property or require new or expanded recreational facilities. No impact would result.

3.17 Transportation

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			✓	
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				✓
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	
d) Result in inadequate emergency access?			✓	

a,d) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, or result in inadequate emergency access? (Less than Significant)

Construction of the Project would result in a short-term increase in vehicle trips on local roadways, including North Riverside Avenue, North Cedar Avenue, North Apple Avenue, West Summit Avenue, and West Via Bello Drive. The addition of construction-related vehicles would not substantially affect congestion on local roadway segments because trips would occur at differing periods of the day and would represent a small percentage of the capacity of the roadways. Construction-related truck traffic would access the site via North Riverside Avenue, a designated truck route (City of Rialto 2010). Because the underground water pipe will be installed in West Via Bello Drive, this street will likely experience the longest disruption to local access. Approximately 36 single family homes are provided access by West Bello Drive. For these homes, there are no alternative access routes due to the limited connectivity of the curvilinear suburban street design. As described in the Project Description, the WVWD and its construction contractor(s) would be required to prepare and implement a Traffic Control Plan in accordance with City requirements for work conducted within the public right-of-way. Implementation of traffic controls would be required during construction in accordance with City requirements, which would include the use of traffic controls, signs, and flaggers; scheduling of major street/lane closures during off-peak hours, establishment of detour routes, message boards, pedestrian and bicycle control measures, and other measures. Through required compliance with City of Rialto traffic control requirements and implementation of the Traffic Control Plan, construction activities would not result in substantial adverse effects or conflicts with the local roadway system. The impact would be less than significant.

Omnitrans, the public transit agency that serves the San Bernardino Valley, provides transit service to the Project site via Route 22. Buses arrive every 60 minutes to the bus stop located at North Linden Avenue and West Sunny View Drive. The street width at the location of the bus stop is 80 feet, sufficient width to allow both transit buses and construction-related truck traffic to move freely. Likewise, the street width and overall design should not impede emergency vehicles from accessing the site. The sidewalk network in this area is fully developed to allow pedestrian access throughout the neighborhood. There are no marked bike lanes or paths. Therefore, the potential impact on the performance or safety of pedestrian, bicycle, and public transit facilities would be less than significant.

Following construction, the Project would not result in an increase in traffic because the Project would not necessitate additional staffing at the water treatment facility nor substantially increase the number of deliveries of materials or supplies. Operation and maintenance of the Project would not conflict with existing transit routes or stops or bicycle and pedestrian facilities, and would not introduce new users of alternative modes of transportation into the area. Operation and maintenance would not affect emergency services or response times in the area. No operational impact would result.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? (No Impact)

In November 2017, the Governor’s Office of Planning and Research (OPR) released a technical advisory containing recommendations regarding the assessment of vehicle miles travelled (VMT). VMT refers to the amount and distance of automobile travel attributable to a Project. The term “automobile” refers to on-road passenger vehicles, specifically cars and light trucks. The movement of heavy trucks and equipment associated with the construction of the Project is not considered for the purposes of determining transportation impacts under this section. Project operation is not expected to increase VMT because the upgrades to the water treatment facility would not necessitate increasing the number of staff nor would they result in greater numbers of visitors to the site. Therefore, the Project would not conflict with or be inconsistent with an applicable threshold of significance adopted per CEQA Guidelines section 15064.3, subdivision (b). No impact would result.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (Less than Significant)

The Project would not alter the existing alignment of the surrounding streets. The new pipeline would be located below ground, and existing conditions along the temporarily impacted roads would be restored to pre-existing conditions. Construction traffic would access the site via North Riverside Avenue, a designated truck route (City of Rialto 2010). The surrounding streets are fully developed with signalized intersections and a comprehensive sidewalk network. As such, the surrounding street network can adequately accommodate the car and light truck traffic related to the construction and operation of the site. The impact would be less than significant.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historic Resources, or in a local register of historic resources as defined in Public Resources Code section 5020.1(k)?		✓		
b) Cause a substantial adverse change in the significance of a tribal cultural resource that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1? In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.		✓		

a,b) Cause a substantial adverse change in the significance of a tribal cultural resource? (Less than Significant with Mitigation)

CEQA requires lead agencies to determine if a proposed project would have a significant effect on tribal cultural resources. The CEQA Guidelines define tribal cultural resources as: (1) a site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American Tribe that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or (2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code Section 5024.1(c), and considering the significance of the resource to a California Native American tribe.

Efforts to identify tribal cultural resources that could be affected by the Project included a records search at the South Central Coastal Information Center, literature review, a sacred lands search through the Native American Heritage Commission (NAHC), contact with appropriate local Native American Tribes, and a pedestrian archaeological survey of the Project site. To date, the WVWD has received four requests from California Native American tribes for notifications under Assembly Bill 52, including the Torres Martinez Desert Cahuilla Indians, San Manuel Band of Mission Indians, Morongo Band of Mission Indians, and the Gabrieleno Band of Mission Indians-Kizh Nation.

The Native American Heritage Commission Sacred Lands File search results were positive, indicating that a Sacred Site may be located in the Project vicinity and to contact the Gabrieleno Band of Mission Indians - Kizh Nation for more information. The NAHC also provided a list of other tribes culturally affiliated with the area. On May 12, 2021, Paleo Solutions contacted California Native American tribes culturally affiliated with the Project area via email and sent hard copies of the consultation letters via certified mail. Paleo Solutions contacted each of the tribes who requested formal consultation under AB 52, as well as those tribes listed on the NAHC list. On May 12, 2021, the Quechan Tribe responded saying they have no comments on the Project and defer to more local Tribes. On May 13, 2021, a response was sent by the San Manuel Band of Mission Indians, requesting the cultural study, geotechnical report (if required), and Project plans showing

depth of disturbance and stated that if the information cannot be provided within the Tribe’s 30-day response window, the Tribe automatically elects to be a consulting party. On May 20, 2021, the Gabrieleno Band of Mission Indians- Kizh Nation responded stating that they would like to consult on the proposed Project. On June 16, 2021, Paleo Solutions provided the Project plans and the draft cultural report to both the San Manuel Band of Mission Indians and the Gabrieleno Band of Mission Indians-Kizh Nation. On June 22, 2021, a response was sent by the San Manuel Band of Mission Indians requesting that the potential exists to encounter Tribal Cultural Resources and requested specific mitigation language be incorporated into the IS/MND (See Section 3.5 and below). The language has been incorporated as requested.

On July 6, 2021, Paleo Solutions emailed the Gabrieleno Band of Mission Indians a follow-up note confirming they received the cultural report and Project plans. To date no response has been received. Based on the responses from the tribes, there is potential for tribal cultural resources to be encountered during construction. Therefore, a potentially significant impact could occur.

Mitigation

Implementation of Mitigation Measure TCR-1 would reduce the potential impact to tribal cultural resources to a less-than-significant level by implementing a construction monitoring procedure to address discovery of any previously unrecorded resources consistent with appropriate laws and requirements.

Mitigation Measure TCR-1: Protect Tribal Cultural Resources during Construction Activities

The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in CR-1, of any pre-contact and/or post-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with SMBMI, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of the project, should SMBMI elect to place a monitor on-site.

Any and all archaeological/cultural documents created as a part of the Project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to SMBMI. The WVWD shall, in good faith, consult with SMBMI throughout the duration of Project construction activities.

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			✓	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			✓	
c) 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?			✓	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			✓	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				✓

a, c) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electrical power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects, or 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? (Less than Significant)

The Project would expand the treatment capacity of WVWD's water system. Project components to be constructed within the boundaries of the existing facility would not require the relocation of any existing infrastructure or utilities. The underground water line to be installed within the street right-of-way would likely be located near existing utilities but would not require their relocation. The new water line would be installed using conventional cut-and-cover construction.

WVWD provides water to customers located in the cities of Rialto, Fontana, Bloomington, Colton, and Jurupa Valley. Small areas of unincorporated San Bernardino County are also served (WVWD 2016). A large portion of this water is converted to wastewater by residents of these cities, after which the wastewater enters various City and County wastewater systems. These wastewater systems are expanded over time to accommodate new development and redevelopment within their service areas. The planned capacity of the wastewater systems, like that of the water systems, reflect the land use plans of local governments. Therefore, the Project will not directly or indirectly (i.e., by inducing growth) exceed the capacity of the wastewater treatment provider. The impact would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? (Less than Significant)

The capacity of the existing water treatment facility would increase from the current 14.4 mgd to 21.6 mgd as a result of the Project. The Project would allow the water treatment facility to treat an additional 7.2 mgd, which would continue to be drawn from the two existing surface water sources: Lytle Creek and the State Water Project (SWP). The existing facility treats up to 6.7 mgd drawn from Lytle Creek and up to 20 mgd from the SWP. The District, City of Rialto, and City of San Bernardino have a combined capacity of 6.7 mgd of Lytle Creek surface water rights. Existing metering and transmission facilities allow the District to import up to 20 mgd of the SWP water. Therefore, the Project would result in an increased amount of water (approximately double) being imported from the SWP. No additional water would be taken from Lytle Creek due to limited water rights.

The project would not result in an increase in groundwater use, though it would facilitate the importation of additional water from the SWP. The SWP is operated and maintained by the California Department of Water Resources (DWR) and has conveyed an annual average of 2.9 million acre-feet (maf) of water over the past ten years. The water supply of the SWP ultimately depends on rainfall, snowpack, and runoff. The water supply and distribution are actively managed on an ongoing basis by DWR (CDWR 2019). It is considered an interruptible water supply because it varies from year-to-year depending on the amount of precipitation that the state receives (GHD 2021). The amount of water currently used and post-Project by the WVWD represents a tiny fraction of the total SWP water supply. It is unlikely that the Project would have any noticeable effect on the overall ability of the SWP to provide sufficient water to customers throughout the state. The Project would not directly result in an increase in population growth or a new high water demand land use. No new regional water supplies or facilities would be required. The impact would be less than significant.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? (Less than Significant)

Construction of the project would result in a temporary increase in solid waste disposal needs associated with demolition and construction wastes, such as demolished asphalt pavement, concrete, and excavated soils. Construction waste with no practical reuse or that cannot be salvaged or recycled would be disposed of at a local transfer station or solid waste facility. The closest active permitted regional landfill is the Mid-Valley Sanitary Landfill (62 million cubic yards remaining capacity) (CalRecycle 2021). Solid waste generated by the project would represent a small fraction of the daily permitted tonnage of these facilities, therefore, the project’s construction-related solid waste disposal needs would be sufficiently accommodated by existing landfills. The impact would be less than significant. Following construction, project operation would generate additional sludge to be disposed of at a permitted landfill. The additional sludge associated with Project operation would contribute only a marginal percentage of the daily waste hauled to the local landfill. Therefore, it is not anticipated to exceed the capacity of the local infrastructure or impair the attainment of solid waste reduction goals. The potential impact would be less than significant.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? (No Impact)

No applicable federal solid waste regulations would apply to the project. At the State level, the Integrated Waste Management Act mandates a reduction of waste being disposed and establishes an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. The project would not conflict with or impede implementation of such programs. No impact would result.

3.20 Wildfire

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				✓
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?			✓	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				✓
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes?				✓

a) Substantially impair an adopted emergency response plan or emergency evacuation plan or exacerbate wildfire risks? (No Impact)

The Project site is located within the Local Resource Area (LRA), approximately 1,300 feet from the State Responsibility Area (SRA). Approximately seven acres of the 37-acre water treatment facility and approximately 350 lineal feet of the approximately 1,800 lineal feet of proposed underground water pipe within West Via Bello Drive are located in the Very High Fire Hazard Severity Zone (VHFHSZ) (CALFIRE 2021). The City of Rialto Emergency Operations Plan and Multi-Hazard Mitigation Plan do not specify emergency evacuation routes or other issues directly pertinent to the Project site. There would be no impact.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? (Less than Significant)

The Project site is located on generally flat land immediately southwest of the Lytle Creek Floodway. The floodway contains a large expanse of low grasses and scrub brush. Due to this proximity to wildfire fuel, the Project site is already at risk of wildfire. However, the proposed Project components would be located underground (waterpipe), within existing structures, or within the graveled perimeter of the water treatment site grounds. The low-fuel existing site conditions would limit wildfire risk. The water treatment plant has a tile roof and the grounds of the developed portion of the sites are almost entirely surfaced in gravel. Small amounts of landscaping are located near the southeast corner of the site. Immediately west of the water treatment facility is a grassy, undeveloped area approximately 11 acres in size. The undeveloped area is easily accessible by existing surface streets, appears to be maintained by regular mowing, and is unlikely to present wildfire risks. Therefore, the impacts would be less than significant.

- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? (No Impact)**

The Project does not include components that would exacerbate wildfire risks. The Project comprises infrastructure upgrades to increase capacity within the site of the existing water treatment facility and underground within an existing developed street right-of-way. There would be no impact.

- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides as a result of runoff, post-fire slope instability, or drainage changes? (No Impact)**

The Project site is located on flat terrain and within existing developed areas. No on-site or off-site alternations to drainage are proposed. There would be no impact.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less-than-Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Does the project:				
a) Have the potential to substantially 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, substantially 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?		✓		
b) 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)?			✓	
c) Have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?		✓		

a) Does the project have the potential to substantially 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, substantially 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? (Less than Significant with Mitigation)

Potential project impacts to biological and cultural resources are addressed in Section 3.4, Biological Resources and Section 3.5, Cultural Resources, respectively. With implementation of the recommended mitigation measures identified in this IS/MND, the potential for project-related activities to degrade the quality of the environment, including fish or wildlife species or their habitat, plant or animal communities, or important examples of California history or prehistory would be reduced to less-than-significant levels.

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)? (Less than Significant)

Cumulative impacts are defined as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines Section 15355). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Efforts to identify cumulative projects included contact with the District and review of active City of Rialto construction and planning permits. Projects identified and considered for cumulative impacts include:

- Cactus Trail Improvement Project: improvement of pedestrian and bicycle facilities along the west side of Cactus Road, between Baseline Road and Rialto Avenue, located approximately 2.4 miles southeast of the project site.
- CapRock Distribution Center III Warehouse Project, demolition of existing structures and construction of new warehouse, located approximately 7 miles southeast of the project site.

As summarized in Section 3 of this Initial Study, the project would not result in impacts on agriculture and forestry resources, mineral resources, land use and planning, public services, or recreational facilities. Therefore, implementation of the project would not contribute to any related cumulative impact on those resources.

The distance between the Project site and the identified cumulative projects would preclude the potential for cumulative impacts in the Project area related to aesthetics, air quality, biological resources, noise, and traffic. None of the cumulative projects are located adjacent to the Project site or the affected project roadways. Moreover, based on current schedules, the construction of the cumulative projects are not anticipated to overlap with the proposed Project. Given the distance and dissimilarity between the Project site and the identified cumulative projects, the Project impacts summarized in this Initial Study would not add appreciably to any existing or foreseeable future significant cumulative impact. Incremental impacts, if any, would be very small, and the cumulative impact would be less than significant.

c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly? (Less than Significant with Mitigation)

With implementation of the recommended mitigation measures identified in this Initial Study, the potential for project-related activities to cause substantial adverse effects on human beings would be reduced to less-than-significant levels.

4. References

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5. Report Preparers

5.1 West Valley Water District

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5.3 Subconsultants

Paleo Solutions

Appendices

Appendix A

Air Quality

Roemer Water Project - Facility Improvements - San Bernardino-South Coast County, Annual

**Roemer Water Project - Facility Improvements
San Bernardino-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	2.68	Acre	2.68	116,740.80	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2022
Utility Company	Statewide Average				
CO2 Intensity (lb/MW hr)	1001.57	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Construction Only

Land Use - Parking Lot for Facility Paving.

Construction Phase - Default Paving Duration. Assumed 40 working days for facility upgrades

Off-road Equipment - Default 'building' equipment and activity, with Crane use decreased to 2 hrs/day.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	40.00
tblOffRoadEquipment	UsageHours	8.00	2.00

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					
2022	0.0452	0.3143	0.3586	7.1000e-004	0.0140	0.0140	0.0280	3.7600e-003	0.0134	0.0172	0.0000	60.5122	60.5122	8.8800e-003	0.0000	60.7342
Maximum	0.0452	0.3143	0.3586	7.1000e-004	0.0140	0.0140	0.0280	3.7600e-003	0.0134	0.0172	0.0000	60.5122	60.5122	8.8800e-003	0.0000	60.7342

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/22/2022	6/16/2022	5	40	
2	Paving	Paving	2/24/2022	3/9/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.68

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	2.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	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
Building Construction	8	49.00	19.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction - 2022

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	0.0315	0.2293	0.2587	4.1000e-004		0.0114	0.0114		0.0111	0.0111	0.0000	33.9316	33.9316	5.5500e-003	0.0000	34.0704
Total	0.0315	0.2293	0.2587	4.1000e-004		0.0114	0.0114		0.0111	0.0111	0.0000	33.9316	33.9316	5.5500e-003	0.0000	34.0704

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	9.4000e-004	0.0350	6.9600e-003	1.0000e-004	2.4000e-003	5.0000e-005	2.4500e-003	6.9000e-004	5.0000e-005	7.4000e-004	0.0000	9.5720	9.5720	6.3000e-004	0.0000	9.5877
Worker	4.2200e-003	3.0600e-003	0.0320	1.0000e-004	0.0108	7.0000e-005	0.0108	2.8500e-003	6.0000e-005	2.9200e-003	0.0000	8.5957	8.5957	2.2000e-004	0.0000	8.6013
Total	5.1600e-003	0.0381	0.0390	2.0000e-004	0.0132	1.2000e-004	0.0133	3.5400e-003	1.1000e-004	3.6600e-003	0.0000	18.1677	18.1677	8.5000e-004	0.0000	18.1890

3.3 Paving - 2022

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	4.7100e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165
Paving	3.5100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.2200e-003	0.0467	0.0585	9.0000e-005		2.4400e-003	2.4400e-003		2.2500e-003	2.2500e-003	0.0000	7.7550	7.7550	2.4600e-003	0.0000	7.8165

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	3.2000e-004	2.3000e-004	2.4500e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6578	0.6578	2.0000e-005	0.0000	0.6583
Total	3.2000e-004	2.3000e-004	2.4500e-003	1.0000e-005	8.2000e-004	1.0000e-005	8.3000e-004	2.2000e-004	0.0000	2.2000e-004	0.0000	0.6578	0.6578	2.0000e-005	0.0000	0.6583

Roemer Water Project - Facility Improvements - San Bernardino-South Coast County, Summer

Roemer Water Project - Facility Improvements
San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	2.68	Acre	2.68	116,740.80	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2022
Utility Company	Statewide Average				
CO2 Intensity (lb/MWhr)	1001.57	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Construction Only

Land Use - Parking Lot for Facility Paving.

Construction Phase - Default Paving Duration. Assumed 40 working days for facility upgrades

Off-road Equipment - Default 'building' equipment and activity, with Crane use decreased to 2 hrs/day.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	220.00	40.00
tblOffRoadEquipment	UsageHours	8.00	2.00

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					
2022	1.8541	13.3420	15.1163	0.0310	0.6694	0.5779	1.2473	0.1803	0.5589	0.7392	0.0000	2,923.2981	2,923.2981	0.5460	0.0000	2,932.1178
Maximum	1.8541	13.3420	15.1163	0.0310	0.6694	0.5779	1.2473	0.1803	0.5589	0.7392	0.0000	2,923.2981	2,923.2981	0.5460	0.0000	2,932.1178

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	4/22/2022	6/16/2022	5	40	
2	Paving	Paving	2/24/2022	3/9/2022	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.68

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction	Cranes	1	2.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	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
Building Construction	8	49.00	19.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
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3.1 Mitigation Measures Construction

3.2 Building Construction - 2022

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	1.5758	11.4658	12.9340	0.0207		0.5719	0.5719		0.5532	0.5532		1,870.1585	1,870.1585	0.3061		1,877.8114
Total	1.5758	11.4658	12.9340	0.0207		0.5719	0.5719		0.5532	0.5532		1,870.1585	1,870.1585	0.3061		1,877.8114

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	0.0458	1.7378	0.3188	5.0800e-003	0.1217	2.6400e-003	0.1243	0.0350	2.5200e-003	0.0376		536.3844	536.3844	0.0330		537.2091
Worker	0.2325	0.1384	1.8635	5.1900e-003	0.5477	3.4000e-003	0.5511	0.1453	3.1300e-003	0.1484		516.7552	516.7552	0.0137		517.0973
Total	0.2783	1.8761	2.1823	0.0103	0.6694	6.0400e-003	0.6754	0.1803	5.6500e-003	0.1860		1,053.1396	1,053.1396	0.0467		1,054.3065

3.3 Paving - 2022

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	0.9412	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419		1,723.2356
Paving	0.7022					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.6433	9.3322	11.6970	0.0179		0.4879	0.4879		0.4500	0.4500		1,709.6892	1,709.6892	0.5419		1,723.2356

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	0.0712	0.0424	0.5705	1.5900e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		158.1904	158.1904	4.1900e-003		158.2951
Total	0.0712	0.0424	0.5705	1.5900e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		158.1904	158.1904	4.1900e-003		158.2951

Roemer Water Project - Pipeline - San Bernardino-South Coast County, Annual

**Roemer Water Project - Pipeline
San Bernardino-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.25	Acre	0.25	10,890.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2022
Utility Company	Statewide Average				
CO2 Intensity (lb/MWhr)	1001.57	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics - Construction of Pipeline Component
- Land Use - Pipeline footprint of approximately 0.25 acre
- Construction Phase - Assume trenching at rate of 100 ft/day = 20 days. Default duration for repaving.
- Off-road Equipment - Site repave and restoration
- Off-road Equipment - Pipeline Trenching and Pipe Installation
- Grading - 5,600 cy materials haul from pipeline component.
- Off-road Equipment - Grading Phase Used to Estimate Materials Hauling emissions

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	2.00	20.00
tblGrading	MaterialExported	0.00	5,600.00
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	6.00	10.00
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	7.00	10.00

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					
2022	0.0210	0.2389	0.2524	6.7000e-004	8.3400e-003	8.4000e-003	0.0168	2.2300e-003	8.0400e-003	0.0103	0.0000	60.4624	60.4624	8.2900e-003	0.0000	60.6696
Maximum	0.0210	0.2389	0.2524	6.7000e-004	8.3400e-003	8.4000e-003	0.0168	2.2300e-003	8.0400e-003	0.0103	0.0000	60.4624	60.4624	8.2900e-003	0.0000	60.6696

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	1/10/2022	2/4/2022	5	20	
2	Paving	Paving	1/24/2022	1/28/2022	5	5	
3	Grading	Grading	1/10/2022	2/4/2022	5	20	Soils Hauling from Pipeline

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.25

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Trenching	Tractors/Loaders/Backhoes	1	10.00	97	0.37
Trenching	Excavators	2	10.00	158	0.38
Trenching	Generator Sets	2	10.00	84	0.74
Paving	Cement and Mortar Mixers	1	10.00	9	0.56
Paving	Pavers	1	10.00	130	0.42
Trenching	Skid Steer Loaders	1	1.00	65	0.37
Paving	Rollers	1	10.00	80	0.38
Paving	Paving Equipment	1	10.00	132	0.36
Paving	Tractors/Loaders/Backhoes	1	10.00	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
Trenching	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	700.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Trenching - 2022

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	0.0155	0.1397	0.2030	3.4000e-004		6.9900e-003	6.9900e-003		6.7200e-003	6.7200e-003	0.0000	29.1136	29.1136	5.5200e-003	0.0000	29.2515
Total	0.0155	0.1397	0.2030	3.4000e-004		6.9900e-003	6.9900e-003		6.7200e-003	6.7200e-003	0.0000	29.1136	29.1136	5.5200e-003	0.0000	29.2515

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	4.7000e-004	4.9000e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3157	1.3157	3.0000e-005	0.0000	1.3165

Total	6.5000e-004	4.7000e-004	4.9000e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3157	1.3157	3.0000e-005	0.0000	1.3165
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3.3 Paving - 2022

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	2.4200e-003	0.0238	0.0307	5.0000e-005		1.2100e-003	1.2100e-003		1.1200e-003	1.1200e-003	0.0000	4.1265	4.1265	1.3000e-003	0.0000	4.1591
Paving	3.3000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.7500e-003	0.0238	0.0307	5.0000e-005		1.2100e-003	1.2100e-003		1.1200e-003	1.1200e-003	0.0000	4.1265	4.1265	1.3000e-003	0.0000	4.1591

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	1.4000e-004	1.0000e-004	1.0600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2851	0.2851	1.0000e-005	0.0000	0.2853
Total	1.4000e-004	1.0000e-004	1.0600e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	9.0000e-005	0.0000	1.0000e-004	0.0000	0.2851	0.2851	1.0000e-005	0.0000	0.2853

3.4 Grading - 2022

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					3.2000e-004	0.0000	3.2000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	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	3.2000e-004	0.0000	3.2000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	2.0000e-003	0.0748	0.0127	2.7000e-004	6.0200e-003	1.9000e-004	6.2100e-003	1.6500e-003	1.8000e-004	1.8300e-003	0.0000	25.6216	25.6216	1.4200e-003	0.0000	25.6572
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	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
Total	2.0000e-003	0.0748	0.0127	2.7000e-004	6.0200e-003	1.9000e-004	6.2100e-003	1.6500e-003	1.8000e-004	1.8300e-003	0.0000	25.6216	25.6216	1.4200e-003	0.0000	25.6572

Roemer Water Project - Pipeline - San Bernardino-South Coast County, Summer

Roemer Water Project - Pipeline
San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.25	Acre	0.25	10,890.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2022
Utility Company	Statewide Average				
CO2 Intensity (lb/MWhr)	1001.57	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Construction of Pipeline Component
 Land Use - Pipeline footprint of approximately 0.25 acre
 Construction Phase - Assume trenching at rate of 100 ft/day = 20 days. Default duration for repaving.
 Off-road Equipment - Site repave and restoration
 Off-road Equipment - Pipeline Trenching and Pipe Installation
 Grading - 5,600 cy materials haul from pipeline component.
 Off-road Equipment - Grading Phase Used to Estimate Materials Hauling emissions
 Trips and VMT -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	2.00	20.00
tblGrading	MaterialExported	0.00	5,600.00
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Skid Steer Loaders
tblOffRoadEquipment	OffRoadEquipmentType		Paving Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	6.00	10.00
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	7.00	10.00

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					
2022	2.9747	30.8826	34.8579	0.0824	0.9571	1.2052	2.1623	0.2557	1.1402	1.3960	0.0000	8,180.0664	8,180.0664	1.3417	0.0000	8,213.6092
Maximum	2.9747	30.8826	34.8579	0.0824	0.9571	1.2052	2.1623	0.2557	1.1402	1.3960	0.0000	8,180.0664	8,180.0664	1.3417	0.0000	8,213.6092

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Trenching	Trenching	1/10/2022	2/4/2022	5	20	
2	Paving	Paving	1/24/2022	1/28/2022	5	5	
3	Grading	Grading	1/10/2022	2/4/2022	5	20	Soils Hauling from Pipeline

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.25

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	1	10.00	97	0.37
Trenching	Excavators	2	10.00	158	0.38
Trenching	Generator Sets	2	10.00	84	0.74
Paving	Cement and Mortar Mixers	1	10.00	9	0.56
Paving	Pavers	1	10.00	130	0.42
Trenching	Skid Steer Loaders	1	1.00	65	0.37
Paving	Rollers	1	10.00	80	0.38
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Paving	Paving Equipment	1	10.00	132	0.36
Paving	Tractors/Loaders/Backhoes	1	10.00	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
Trenching	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	0	0.00	0.00	700.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Trenching - 2022

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	1.5456	13.9737	20.2985	0.0335		0.6990	0.6990		0.6725	0.6725		3,209.2222	3,209.2222	0.6082			3,224.4265
Total	1.5456	13.9737	20.2985	0.0335		0.6990	0.6990		0.6725	0.6725		3,209.2222	3,209.2222	0.6082			3,224.4265

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	0.0712	0.0424	0.5705	1.5900e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		158.1904	158.1904	4.1900e-003			158.2951
Total	0.0712	0.0424	0.5705	1.5900e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		158.1904	158.1904	4.1900e-003			158.2951

3.3 Paving - 2022

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	0.9686	9.5078	12.2958	0.0190		0.4855	0.4855		0.4481	0.4481		1,819.4818	1,819.4818	0.5746			1,833.8465
Paving	0.1310					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	1.0996	9.5078	12.2958	0.0190		0.4855	0.4855		0.4481	0.4481		1,819.4818	1,819.4818	0.5746			1,833.8465

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	0.0617	0.0367	0.4944	1.3800e-003	0.1453	9.0000e-004	0.1462	0.0385	8.3000e-004	0.0394		137.0983	137.0983	3.6300e-003			137.1891
Total	0.0617	0.0367	0.4944	1.3800e-003	0.1453	9.0000e-004	0.1462	0.0385	8.3000e-004	0.0394		137.0983	137.0983	3.6300e-003			137.1891

3.4 Grading - 2022

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					0.0317	0.0000	0.0317	4.7900e-003	0.0000	4.7900e-003			0.0000			0.0000
Off-Road	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	0.0317	0.0000	0.0317	4.7900e-003	0.0000	4.7900e-003		0.0000	0.0000	0.0000		0.0000

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	0.1966	7.3220	1.1987	0.0269	0.6125	0.0187	0.6312	0.1679	0.0179	0.1858		2,856.0738	2,856.0738	0.1511		2,859.8519
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	0.0000	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	0.1966	7.3220	1.1987	0.0269	0.6125	0.0187	0.6312	0.1679	0.0179	0.1858		2,856.0738	2,856.0738	0.1511		2,859.8519

Appendix B

Biological Resources Report



Biological Resources Evaluation

Oliver P. Roemer Water Filtration Facility Expansion Project

Prepared for West Valley Water District

GHD | 718 Third Street, Eureka, California, 95501 USA

11214029 | Report No 1 | April 28, 2021



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List of Acronyms

°	degrees
BRE	Biological Resources Evaluation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
DBPs	Disinfection Byproducts
DWW	Department of Drinking Water
EPA	Environmental Protection Agency
ESA	Endangered Species Act
F	Fahrenheit
FGC	Fish and Game Code
GAC	Granular Activated Carbon
HCP	Habitat Conservation Plan
MBTA	Migratory Bird Treaty Act
mgd	millions of gallons per day
NCCP	Natural Community Conservation Planning
NEPA	National Environmental Policy Act
	National Oceanic and Atmospheric
NOAA	Administration
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
ROW	Right of Way
RWFF	Roemer Water Filtration Facility
SC	State Candidate
SE	State Endangered
SNC	Sensitive Natural Community
SR	State Rare
SRF	Clean Water State Revolving Fund
ST	State Threatened
SWP	State Water Project
TOCs	total organic compounds
USC	United States Code
USGS	U.S. Geological Survey
UV	ultraviolet
WVWD	West Valley Water District



1. Executive Summary

The purpose of this Biological Resources Evaluation (BRE) is to investigate and determine which sensitive biological resources (if any), including plant and wildlife species and their habitat, may occur in the footprint or vicinity of the Oliver P. Roemer Water Filtration Facility Expansion Project (hereafter “Project,” described below) and address any potential effects of the Project on these sensitive biological resources. The BRE is also designed to provide supporting biological information for the Project’s California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) processes. The Project proponent, West Valley Water District (“WVWD” or “District”), is pursuing Clean Water State Revolving Fund (SRF) funding for this Project, which requires any environmental review to meet NEPA requirements.

Based on the GHD site visit on March 2, 2021, as well as a thorough database and literature search, the Project occurs within the range of several federally listed and state special status wildlife and plant species, as well as sensitive natural communities. This submittal represents an initial analysis, to determine whether consultation is required with the U.S. Fish and Wildlife Service (USFWS) under Section 7 of the Endangered Species Act (16 U.S.C. §§ 1536) for the proposed Project and to support NEPA. This report also addresses impacts to state special status species and habitats to inform the Project’s CEQA document.

Based on the analysis herein, the Project will have no effect on federally listed species or federally designated critical habitat. Further consultation is not expected. In addition, no potential Project impacts on sensitive state and other protected biological resources are expected.

2. Project Description

2.1 Project Location

The Project is located in Rialto, an urban-residential city in San Bernardino County, California. The physical location of the Roemer Water Filtration Facility is at 3010 N Cedar Ave (see Appendix A, Figure 1). The Project is bordered to the south, east, and west by residential communities, and to the north by North Riverside Avenue, open space (empty lot characterized by disturbance-associated vegetation species), and an industrial area (sand and gravel mining operation). Project improvements, as described further below, will occur at the facility. In addition, a new pipeline will be constructed as part of this Project. The pipeline will run northwest from the facility and cross an undeveloped parcel to North Linden Avenue, where it will proceed approximately 100 feet south before turning northwest again up West Via Bello Drive (primarily through a residential area). The pipeline will terminate at the WVWD Reservoirs, located at the western end of West Via Bellow Drive. Any Project staging areas are expected to occur within the City of Rialto’s right of way (ROW) along North Linden Avenue and West Via Bello Drive and the open area located directly west of the facility.



2.2 Proposed Project

2.2.1 Facility Improvements

The WWWD currently treats surface water from Lytle Creek and State Water Project (SWP). The Project improvements would expand the Roemer Water Filtration Facility (RWFF) from the current 14.4 millions of gallons per day (mgd) to 21.6 mgd to treat additional State Water Project (SWP) water, and includes the following elements:

- Trident Filter Expansion - Install three new Trident filtration units.
- Improved Ultraviolet (UV) System - Replace the existing UV reactors with new 4L24 reactors, with space allocation for future expansion.
- Granular Activated Carbon (GAC) Modifications - Adjust GAC system from series to parallel mode for higher capacity.
- Backwash Settling Ponds Enhancements - Optimize to decrease algae growth potential.
- Treated Water Booster Pumps.
- 30-inch treated water conveyance pipeline.
- Repair, Rehabilitation, and Improvements of Existing Infrastructure:
 - Upgrade of UV recovery and GAC influent pumps.
 - Electrical, mechanical, and other appurtenances.
 - Replace 6-inch water recycling line from ponds with new 12-inch pipeline.

The components of the proposed Project are described in more detail below.

2.2.1.1 Trident Filter Expansion

Trident filtration systems are currently in place at the RWFF in order to treat raw water routed to the RWFF. The Trident system is considered an “Alternative Filtration Technology” by the Department of Drinking Water (DDW). The Project would expand the existing building housing the existing six Trident pumps and install three new Trident filtration units alongside them. The building dimensions would be approximately 63 feet long by 184 feet wide by 36 feet, 11 inches high.

2.2.1.2 Ultraviolet Disinfection System

The UV facility would be upgraded by replacing the existing reactors with newer and more efficient lamps, which are used to disinfect the water. There are currently three 24-inch UV reactors with six lamps each. The existing reactors represent the first generation technology and are approaching the end of their usable life. The existing Trojan SWIFTM 6L24 UV Disinfection reactors would be replaced by new Trojan SWIFTM 4L24 reactors to achieve target expansion capacity and reduce power consumption.



2.2.1.3 Granular Activated Carbon

The GAC is designed to remove additional total organic compounds (TOC) to enhance Disinfection Byproducts (DBPs) controls in the WVWD distribution system and to improve the taste of the treated water. Currently a partial stream from the Trident and UV treated water passes through a 20-inch line to the existing 10 GAC absorbers, which operate in series mode. The Project proposes an operational shift from series to parallel mode. This shift would only double the capacity without any additional capital investment. The operation of the GAC would be staggered (sequence of flow distribution among vessels would be kept) in order to simplify GAC changeouts.

2.2.1.4 Backwash Settling Ponds

The current operation of the Backwash Settling Ponds indicate areas for operational improvement as plant capacity is increased. A 50,000 gallon storage tank would be constructed behind the GAC distribution area. The Project proposes an operational change where a thickening agent, such as Dissolved Air Flootation, would be added to the ponds to discourage algae growth.

2.2.1.5 Treated Water Booster Pumps

Currently five pumps (4 with 1 standby) at the outlet of the chlorine contact basin pump the treated water to the reservoirs located at the end of West Via Bello Drive. The Project would install three additional pumps to handle the extra 7.2-mgd capacity near the backwash settling ponds.

2.2.1.6 Treated Water Conveyance Pipeline

A new 30-inch treated water pipeline would be installed from the RWFF to the WVWD Reservoirs to the north. The pipeline would be constructed from the RWFF through existing open space that is contingent to the RWFF, then along North Linden Avenue for approximately 140 linear feet until it reaches West Via Bello Drive. The pipeline would be routed in West Via Bello Drive for approximately 1,950 linear feet until it reaches the existing reservoirs. An existing water utility in Via Bello Drive may need to be relocated within the current roadway right-of-way to accommodate installation of the new water pipeline.

2.2.1.7 Repair, Rehabilitation, and Improvements to Existing Infrastructure

The Project would upgrade the UV Disinfection Facility pumps and the GAC pumps. A total of 4 UV pumps and three GAC pumps would replace the existing pumps at the main treatment facility. The Project would also replace approximately 286 linear feet of the 6-inch water recycling line from the treatment ponds to the pre-treatment facility with a new 12-inch pipeline. Repaving of the majority of the facility would also occur to rehabilitate the existing pavement. The paving would cover the existing parking lot, and around each of the exiting components of the facility. Restriping of the parking lot would occur once repaving has occurred. A new retaining wall would be constructed southwest of the Blending Pond 2 and extend approximately 313 linear feet northwest to the western edge of Blending Pond 1.



2.2.2 New Pipeline

2.2.2.1 Pipeline Construction

Pipeline construction for the proposed new water pipeline from the RWFF to the reservoirs and the two pipelines within the existing facility would be constructed via open trench methods. These methods would typically include excavating the trench, preparing and installing pipeline sections and other pipeline components, backfilling the trench with non-expansive fills, and restoring and re-paving the pipeline alignment. The depth of excavation would be approximately eight feet deep for the 30-inch effluent water main to the reservoirs. The new water main would be installed within the City road right-of-way within Linden Avenue and West Via Bello Road (see Appendix A, Figure 3). Relocation of an existing water utility in Via Bello Drive, if found necessary, would be accommodated within the excavated trench. The two pipelines to be installed within the existing RWFF would require a depth of excavation of approximately seven feet. In total, approximately 5,600 cubic yards of material would be required to be off-hauled to a regional disposal facility.

2.2.2.2 Construction Traffic Control

Construction of the new water pipeline within Linden Avenue and West Via Bello Drive would take place generally within the City of Rialto ROW requiring a temporary partial lane closure and encroachment permit. As part of the encroachment permit process, the District and its construction contractor would be required to prepare traffic control plans for review and acceptance of planned work within the City ROW. This would include information on the lengths and widths of work zones, tapers and sign spacing, and all lanes to be temporarily used, reduced, or left open. The development and implementation of traffic control plans may also include, but not necessarily be limited to:

- Traffic controls, signs, and flaggers required for conformance with the current California Manual of Uniform Traffic Control Devices;
- Pedestrian and bicycle control devices;
- Notifications/arrangements for any driveway access restrictions; and
- Notifications to emergency responders and public transit agencies.

2.2.2.3 Groundwater Dewatering (If Required)

If needed, temporary groundwater dewatering would be conducted to provide a dry work area during construction-related excavations. Dewatering would involve pumping water out of a trench into a Baker tank (or other similar type of settling tank). Following the settling process provided by a tank, groundwater would typically be pumped to a bag and cartridge filter system (or similar system) before being discharged to the sanitary sewer system.

2.3 Construction Staging and Equipment

Prior to and during construction, the contractor would mobilize resources to a staging area that would be located on the adjacent City-owned Open Space (See Appendix A Figure 2, Proposed RWFF Improvements). A variety of construction equipment would be used to build the project,



including various sized cranes, excavators, loaders, backhoe, small dozer, loader, backhoe, worker trucks, super dumps, water truck, rollers, pavers, AB import trucking, and AC haulers.

The primary construction-related vehicle and haul truck route to the project site is anticipated to be North Riverside Avenue to Linden Road. The number of construction-related vehicles traveling to and from the project areas would vary on a daily basis. It is anticipated that up to 8 round trip haul truck trips could occur during peak construction periods. In addition, it is anticipated that construction crew trips would require up to 8 round trips vehicle trips per day.

2.4 Project Purpose and Goals

West Valley Water District's 2020 Water Facilities Master Plan calculates that approximately 34 percent of the land within the District's service area boundary is undeveloped and projects over 21,000 additional connections, (equivalent dwelling units) will be constructed by buildout of the system. The average day demand is projected to increase from 19.1 mgd to 31.7 mgd by 2046 and peak day demand (which is 1.7 times the average day demand) is projected to reach 53.8 mgd.

Current demands are met through various water supply sources available to the District including groundwater pumped from District wells in 4 different groundwater basins, from purchased groundwater through the Base Line Feeder and surface water treated at the District's Oliver P. Roemer Water Filtration Facility (Roemer WFF). The Roemer WFF, which provides 41 percent of the District's water, treats surface water from both Lytle Creek and the SWP to meet local demand. The other 59 percent comes from local ground water wells. Due to projected development growth, rising peak summer usage, and the need to continue to responsibly manage groundwater basins, the District is planning to expand treatment capacity at the Roemer WFF.

The Project would expand the RWFF capacity by 7.2 million gallons per day mgd to meet future demands and better manage limited groundwater resources. Expansion of the RWFF would allow maximizing the use of surface supplies (California's State Water Project and Lytle Creek flows) when available to allow groundwater sources to recharge. This conjunctive use strategy is critical for long term, sustainable water management for the region.

2.5 Construction Schedule

Construction of the project is expected to begin in January 2022 and require approximately 21 months to complete. Between October 1st and April 30th of a given year, construction activities would generally occur between 7:00 a.m. and 5:30 p.m. on weekdays, and between 8:00 a.m. and 5:00 p.m. on Saturdays. Between May 1st and September 30th of a given year, construction activities would occur between 6:00 a.m. and 7:00 p.m. on weekdays, and between 8:00 a.m. and 5:00 p.m. on Saturdays.

2.6 Other Public Agencies Whose Approval is Required

The following City of Rialto entitlements may be required for the project:

- Encroachment Permit for work within the City right-of-way



2.7 Definition of the Project Area

The Project Area encompasses the construction areas, staging areas, access road, and pipeline alignment (see Appendix A, Figure 4). The Project Area is synonymous with all areas of proposed ground disturbance for the Project.

2.8 Definition of the Federal Endangered Species Act (ESA) Action Area

The Action Area serves as the “study area” for the purposes of a Section 7 Biological Assessment. The Action Area includes the Project Area, as defined in Section 2.7, buffered by an area of 50 feet. Federally listed species were evaluated at the level of the Action Area. This large buffer around the Project Area is designed to account for any construction-related auditory and visual disturbance to wildlife in the vicinity, vegetation clearing, and other potential impacts such as increased dust. The Project is within a developed residential landscape with construction impacts largely confined to existing developed or disturbed areas. The Action Area is shown in Appendix A, Figures 5.

2.9 Definition of the Project Study Boundary

For the purposes of this BRE, the Project Study Boundary (PSB) includes the Project Area as defined in Section 2.7, buffered by an area of 50 feet. The extent of the PSB is the same as that of the Action Area. Different terminology referencing the same study area extent is related to regulatory requirements (i.e., “Action Area” is the study area terminology for the purpose of an ESA analysis/NEPA, and “PSB” is the study area terminology for a non-ESA analysis). State special status wildlife species with no federal status were evaluated at the level of the PSB. The PSB is shown in Appendix A, Figure 5.

2.10 Known Ongoing and Previous Projects in the Area

Since its construction in 1993, the RWFF has undergone two expansions to meet the needs of the community (WVWD 2018). No additional information is available for previous projects in the immediate Project vicinity.

3. Regulatory Background

The following is an overview of agencies that have potential oversight of the proposed Project related to biological resources. The regulatory setting is divided into sections on federal, state, and local jurisdiction.

3.1 Federal Jurisdiction

3.1.1 National Environmental Policy Act

The National Environmental Policy Act of 1969 requires federal agencies to prepare environmental documentation that discloses to decision-makers and the interested public a clear, accurate description of potential environmental effects resulting from proposed federal actions and



reasonable alternatives to those actions. Through NEPA, the U.S. Congress directed federal agencies to integrate environmental factors in their planning and decision-making processes and encourage and facilitate public involvement in decisions that affect the quality of the human environment. Federal agencies are required to consider the environmental effects of a Proposed Action, alternatives to the Proposed Action, and a No Action alternative (assessing the potential environmental effects of not undertaking the Proposed Action).

3.1.2 Endangered Species Act

The ESA of 1973 (16 United States Code [USC] 1531 et seq.) establishes a national policy that all federal departments and agencies provide for the conservation of threatened and endangered species and their ecosystems. The Secretary of the Interior and the Secretary of Commerce are designated in the ESA as responsible for: (1) maintaining a list of species likely to become endangered within the foreseeable future throughout all or a significant portion of its range (threatened) and that are currently in danger of extinction throughout all or a significant portion of its range (endangered); (2) carrying out programs for the conservation of these species; and (3) rendering opinions regarding the impact of proposed federal actions on listed species. The ESA also outlines what constitutes unlawful taking, importation, sale, and possession of listed species and specifies civil and criminal penalties for unlawful activities.

Pursuant to the requirements of the ESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed or proposed species may be present in the project region, and whether the proposed project would result in a “take” of such species. The ESA prohibits “take” of a single threatened and endangered species except under certain circumstances and only with authorization from the USFWS or the National Oceanic and Atmospheric Administration (NOAA) Fisheries through a permit under Section 7 (for federal entities or federal actions) or 10(a) (for non-federal entities) of the Act. “Take” under the ESA includes activities such as “harass, harm, pursue, hunt shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” USFWS regulations define harm to include “significant habitat modification or degradation.” On June 29, 1995, a U.S. Supreme Court ruling further defined harm to include habitat modification “...where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.”

In addition, the agency is required to determine whether the project is likely to jeopardize the continued existence of any species proposed to be listed under the ESA or result in the destruction or adverse modification of critical habitat for such species (16 USC 1536[3][4]). If it is determined that a project may result in the “take” of a federally listed species, consultation would be required under Section 7 or Section 10 of the ESA.

Critical habitat is defined by the ESA as a specific geographic area containing features essential for the conservation of an endangered or threatened species. Under Section 7 of the ESA, critical habitat should be evaluated if designated for federally listed species that may be present in the project Action Area (federally designated term for a “Project Study Boundary”).

Habitat Conservation Plans (HCPs)

Conservation plans were incorporated into the ESA in 1982 (sections 10(a)(1)(B) and 10(a)(2)(A) of the ESA, as amended) to create a pathway for take exemptions under the Act for federal and non-



federal entities (previously prohibited under Section 9 of the Act). HCPs are planning documents that provide measures to minimize or mitigate project impacts to listed or candidate species (as well as eagles, following 2011 guidance) at an ecosystem versus single-species level. An HCP provides a degree of assurance for private entities that measures agreed upon in the HCP by federal regulators and the entity would be upheld and not altered for the lifespan of the document, and no additional obligations (financial, land use, or other) would be required at a later date with respect to the species covered in the HCP (referred to as the “No Surprises Rule”; 63 FR 8859). Requirements for issuance of an HCP require that all take is incidental, take would be minimized and mitigated to the maximum extent practical, adequate funds are available to implement the plan, and the incidental take would not appreciably reduce the survival and recovery potential of the species, among others. HCPs are also must comply with the Five Point Policy (65 FR 35242) that requires the incorporation of biological goals and objectives for each species in the document, adaptive management, monitoring, a set time frame for implementation, and public participation through the NEPA process.

Habitat Conservation Plans (HCPs) That Overlap the Project

The Project Area, PSB, and Action Area do not overlap any existing active HCPs according to a current list from the USFWS Carlsbad Office, the USFW ECOS website (USFWS 2021a, USFWS Carlsbad 2021), and the CDFW list of HCPs and NCCPs (CDFW 2021b). However, the Project does overlap a historic HCP as well as an in-progress HCP. Projects in the vicinity outside the coverage of HCPs or NCCPs previously mitigated for effects to listed species via mitigation bank credits (Ortega 2017).

The WVWD HCP (inactive HCP; 72 FR 31603) covered a previous project’s effects to the San Bernardino Merriam’s Kangaroo Rat and associated critical habitat in nearby Lyle Creek Wash. The coverage area of this HCP was quite small, and effects were limited. This HCP had a two-year coverage period (from 2007-2009).

There is an HCP in progress that overlaps with the Project Area, PSB, and Action Area, The Upper Santa Ana River Habitat Conservation Plan. This HCP has a thirty-year coverage period. The WVWD is a stakeholder in this HCP. Species covered by the plan include the San Bernardino Merriam’s Kangaroo Rat, among others. A stakeholder administrative draft of the HCP was published in October 2020 (Upper Santa Ana River Sustainable Resources Alliance 2021). Approval of a final draft is expected to be imminent (Scauzillo 2021).

3.1.3 Executive Order 13112, Invasive Species

Executive Order 13112 was issued in 1999 to enhance federal coordination and response to the complex and accelerating problem of invasive species. It provides policy direction to promote coordinated efforts of federal, state, and local agencies in monitoring, detecting, preventing, evaluating, managing, and controlling the spread of invasive species and increasing the effectiveness of scientific research and public outreach affecting the spread and impacts of invasive species.



3.1.4 Migratory Bird Treaty Act (MBTA)

The MBTA of 1918 (16 USC 703-712) as amended established federal responsibilities for the protection of nearly all species of birds, their eggs, and nests. A migratory bird is defined as any species or family of birds that live, reproduce, or migrate within or across international borders at some point during their annual life cycle. The MBTA prohibits the take, possession, buying, selling, purchasing, or bartering of any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Only exotic species such as Rock Pigeons (*Columba livia*), House Sparrows (*Passer domesticus*), and European Starlings (*Sturnus vulgaris*) are exempt from protection.

3.2 State Jurisdiction

3.2.1 California Environmental Quality Act (CEQA)

CEQA applies to certain activities of state and local public agencies. A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity which must receive some discretionary approval. Under CEQA, a variety of technical studies including biological, cultural, traffic, and air quality studies as well as research and professional knowledge are considered to determine whether the project may have an "adverse effect" on the environment. Lead agencies are charged with evaluating the best available data when determining what specifically should be considered an "adverse effect" to the environment.

3.2.2 California Endangered Species Act (CESA)

The CESA includes provisions for the protection and management of species listed by the State of California as endangered, threatened, or designated as candidates for such listing (California Fish and Game Code (FGC) Sections 2050 through 2085). The CESA generally parallels the main provisions of the ESA and is administered by the CDFW, who maintains a list of state threatened and endangered species as well as candidate species. The CESA prohibits the "take" of any species listed as threatened or endangered unless authorized by the CDFW in the form of an Incidental Take Permit. Under FGC, "take" is defined as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

3.2.3 Other State Special Status Species and Communities

The CDFW maintains a list of species of special concern. These are broadly defined as species that are of concern to the CDFW because of population declines and restricted distributions, and/or they are associated with habitats that are declining in California. The criteria used to define special status species are described by the CDFW. Impacts to special status plants, animals, and sensitive natural communities may be considered significant under CEQA.

State Species of Special Concern include those plants and wildlife species that have not been formally listed yet are proposed or may qualify as endangered or threatened. In addition, USFWS Birds of Conservation Concern, and CDFW special status invertebrates are considered special status species by CDFW.



3.2.4 Sensitive Natural Communities

CDFW provides oversight of habitats (i.e., plant communities) listed as Sensitive in the California Natural Diversity Database (CNDDDB) and on the California Sensitive Natural Communities List, based on global and state rarity rankings. The natural communities are broken down to alliance and association levels for vegetation types affiliated with ecological sections in California. The alliances on the California Sensitive Natural Communities List coincide with A Manual of California Vegetation (Sawyer et al. 2009). CDFW considers alliances and associations with a state rank of S1 to S3 to be Sensitive. The application of ranking for determination of Sensitive Communities is summarized as follows in Table 1 (NatureServe 2020):

Table 3.1 NatureServe Conservation Status Ranks

Name	Calculated Status Rank	Status Description
Score ≤ 1.5	G1, N1, S1	Critically Imperiled
1.5 ≤ Score ≤ 2.5	G2, N2, S2	Imperiled
2.5 ≤ Score ≤ 3.5	G3, N3, S3	Vulnerable
3.5 ≤ Score ≤ 4.5	G4, N4, S4	Apparently Secure
Score > 4.5	G5, N5, S5	Secure

3.2.5 California Fish and Game Code (FGC)

Natural Community Conservation Planning Act

The Natural Community Conservation Act (Sections 2800-2835 of the FGC, as amended) is administered by the CDFW through their Natural Community Conservation Planning (NCCP) program. The program involves broad-based conservation planning for regions (multispecies and multihabitat coverage that serve as an alternative to project-by-project mitigation), while allowing for compatible economic activity and development. The Act's conservation requirements are more stringent than existing state and federal requirements for mitigation, as it requires that plan preparers actively participate in the recovery of sensitive species and habitats (while conserving ecosystem function, biological diversity, and ecological integrity of habitats). NCCPs are developed in coordination with landowners, regulatory agencies (including the USFWS and NMFS, as appropriate), and environmental organizations. The purpose of NCCPs are to provide a clear framework for project proponents to avoid, minimize, and mitigate impacts to sensitive resources within the coverage area of the NCCP and allow for an adaptive management approach to conservation. NCCPs and HCPs are often combined into one planning document for particular geographic regions of California.

The Project Area, PSB, and Action Area do not overlap any existing NCCPs.

Native Plant Protection Act

The CDFW administers the Native Plant Protection Act (Sections 1900–1913 of the FGC). These sections allow the California Fish and Game Commission to designate endangered and rare plant species and to notify landowners of the presence of such species. Plant species on California Native Plant Society's (CNPS) California Rare Plant Ranking (CRPR) Lists 1 and 2 are considered



eligible for state listing as Endangered or Threatened pursuant to the California Fish and Game Code and CDFW has oversight of these special status plant species as a trustee agency. As part of the CEQA process, such species should be considered as they meet the definition of Threatened or Endangered under Sections 2062 and 2067 of the California Fish and Game Code. CRPR List 3 and 4 plants may warrant protection under CEQA Guidelines 15380 only in special circumstances. CDFW publishes and periodically updates lists of special status species which include, for the most part, the above categories. Additionally, there are 64 plant species designated as “rare” which is a special designation created before plants were rolled into CESA in the 1980s. The CESA and the Native Plant Protection Act (NPPA) required a project to have a “Scientific, Educational, or Management Permit” from CDFW for activities that would result in “take,” possession, import, or export of state-listed plant species including research, seed banking, reintroduction efforts, habitat restoration, and other activities relating to any plant designated SE (State endangered), ST (State threatened), SR (State rare), or SC (State candidate for listing).

Birds of Prey and Native Nesting Birds

Sections 3503 and 3513 of the FGC prohibits the take, possession, or needless destruction of the nest or eggs of any bird. Subsection 3503.5 specifically prohibits the take, possession, or destruction of any birds in the orders Falconiformes (hawks and eagles) or Strigiformes (owls) and their eggs or nests. These provisions, along with the federal MBTA, essentially serve to protect nesting native birds. Non-native species, including the European Starling, Rock Dove, and House Sparrow, are not afforded protection under the MBTA or FGC.

Fully Protected Species

The CDFW enforces the FGC, which provides protection for “fully protected birds” (Section 3511), “fully protected mammals” (Section 4700), “fully protected reptiles and amphibians” (Section 5050), and “fully protected fish” (Section 5515). As fully protected species, the CDFW cannot authorize any project or action that would result in “take” of these species, even with an incidental take permit.

Migratory Bird Protection Act (MBPA)

The California Migratory Bird Protection Act (MBPA; FGC Section 3513, as amended) was introduced in the California State Assembly 2019 by Assembly Member Ash Kalra and co-sponsored by the National Audubon Society. The text of the Act specifies that it is unlawful to take or possess any migratory nongame bird as designated in the federal Migratory Bird Treaty Act (16 USC 703-712) before January 1, 2017. This upholds the interpretation of the MBTA under Clinton’s EO 13166, where “take” was defined as both “unintentional as well as intentional.” Governor Gavin Newsom signed the Act into law on September 27, 2019. The MBPA effectively closes the federal MBTA loophole on incidental take of migratory birds in California.

3.3 Local Jurisdiction

The City of Rialto municipal code contains several environmental regulations. However, only one potentially pertains to this Project (reprinted below from the municipal code; Municode 2021).



11.08.100 - Protection of Public Trees During Construction Work

“During the erection, repair, alteration or removal of any building house or structure in the city, no person in charge of such work shall leave any tree, in any street, park, parkway or public place of the city in the vicinity of such building or structure without such good and sufficient guards or protectors as shall prevent injury to such tree, arising out of or by reason of such erection, repair, alteration or removal” (Ord. 1081 § 1 (part), 1989).

4. Baseline Conditions

4.1 General Environmental Baseline within the PSB and Action Area

The Project is located within Rialto, California, an urban-residential community. Rialto is located approximately 50 miles east of Los Angeles and is bounded by San Bernardino National Forest Land to the north and Riverside County to the south. The Project Area, PSB, and Action Area are located in northeastern Rialto and bordered by Riverside Avenue to the north, Cedar Avenue to the east, Linden Avenue to the west, and Summit Avenue to the south. Property use surrounding the facility is primarily comprised of single-family residences, with the exception of a rock and gravel mine (Cemex Lytle Creek) and hydroelectric generating plant (Fontana Power House) to the north. Within the RRWF, there is no natural habitat; the site is completely developed and comprised of hardscape (pavement, buildings, retention ponds, and ornamental landscaping etc.). The proposed pipeline alignment, which runs from the RRWF to a water storage tank to the west, passes entirely through a residential neighborhood within a paved ROW. Habitat immediately adjacent is limited to landscaped front yards. The potential for sensitive biological resources to occur was investigated during the reconnaissance field survey (see Section 5.3.).

4.2 Topography and Soils

The elevation of the PSB and Action Area is approximately 1,505 feet, and topography is characterized by a generally flat landscape. Soils are alluvial in nature (part of a large alluvial fan that extends south of San Bernardino National Forest and east of Lytle Creek) (PZI, Inc. 2006). The Natural Resources Conservation Service (NRCS) reports the following soils from the Project vicinity: Tujunga gravelly loamy sand, 0 to 9 percent slopes; Soboba gravelly loamy sand, 0 to 9 percent slopes (NRCS 2021; Appendix E).

4.3 Habitat Elements

The PSB and Action Area are bordered by urban or industrial areas. High quality natural habitat of any kind is not present within the PSB and Action Area. Instead, available habitat includes landscaped residential yards or highly degraded empty lots. Existing habitat is not expected to support anything but the most urban-adapted species.



4.4 Habitat Access, Connectivity, and Migratory Corridors

The PSB and Action Area are located within the Pacific Flyway for migratory birds. However, no natural habitat exists that would support migratory species stopover use, breeding, or wintering within the PSB or Action Area. The Lytle Creek Wash and Cajon Washes (north of, but not within the Project Area, PSB, or Action Area) are mapped as a “essential connectivity area” identified in the California Essential Habitat Connectivity Project (CDFW 2021a). It is assumed that many taxonomic groups move through the landscape within these washes. However, there are no movement corridors that would funnel species specifically through the Project Area, PSB, or Action Area.

4.5 Hydrology and Climate

The PSB and Action Area are located within the Lytle Creek watershed. The watershed is within the Upper Santa Ana River Basin. There is an unnamed drainage located just east of the PSB and Action Area (on the north side of North Riverside Avenue). Lytle Creek is located east of this drainage feature (not mapped as hydrologically connected, based on the USGS 24K topo map) (USGS 2018). The Lytle Creek Wash and Cajon Wash meet at the confluence with Lytle Creek (to the southeast of the PSB and Action Area). Lytle Creek is a tributary to the Santa Ana River (confluence near Colton) (Palencia and Starr 2018). The only hydrological features present with the PSB and Action are retention ponds associated with the RWFF.

The climate of the Project region is considered Mediterranean, with hot, dry summers and warm, wet winters. Average annual min and max temperatures range from 48.2 degrees (°) Fahrenheit (F) to 79.9 ° F, respectively. The region receives an average of 16.12 inches of precipitation (which falls as rain) (WRCC 2004).

5. Methods

5.1 Project Area, Project Study Boundary, and Action Area

Investigations were conducted at various spatial scales to meet the requirements of both CEQA and Section 7 of the ESA. For federally listed species, the Project was evaluated at the level of the ESA Action Area (as defined in Section 2.8). For state special status wildlife species, the Project was evaluated at the level of the PSB (as defined in Section 2.9). For state special status plant species and Sensitive Natural Communities, the Project was evaluated at the level of the Project Area (as defined in Section 2.7).

5.2 Preliminary Investigation

5.2.1 Database Searches (CNDDDB, CNPS, IPaC, and NMFS)

A database search for sensitive plant and wildlife species that may occur in the Project vicinity was conducted by GHD on April 8, 2021. Database searches included the CNDDDB (CDFW 2021a), CNPS Inventory of Rare and Endangered Vascular Plants (CNPS 2021), USFWS Information for Planning and Conservation (IPaC; USFWS 2021b), and the NOAA Fisheries West Coast Region



California Species List Tools (NOAA Fisheries 2021). The search encompassed the U.S. Geological Survey (USGS) quadrangle (quad) centered on the Project Area (Devore). In addition, citizen science databases were reviewed for additional local wildlife and botanical information (BAMVT 2021, Bumble Bee Watch 2021, eBird 2021, iNaturalist 2021).

Plant species on CNPS CRPR Lists 1 and 2 are considered eligible for state listing as endangered or threatened pursuant to the California Fish and Game Code. The CDFW has oversight of these special status plant species as a trustee agency. As part of the CEQA process, such species should be considered as they meet the definition of threatened or endangered under Sections 2062 and 2067 of the California Fish and Game Code. Scoping for special status plant species included any state or federally listed plants as well as plant species on CNPS CRPR Lists 1 and 2. These database searches are included in Appendix B.

5.2.2 National Wetlands Inventory (NWI)

A search of the USFWS NWI was conducted on April 12, 2021 for the immediate Project vicinity. The NWI mapping for the Project can be found in Appendix D.

5.3 Field Surveys

5.3.1 Special Status Plants

No surveys for special status plants were conducted prior to document preparation. A botanist would typically conduct seasonally appropriate floristic surveys for special status plants prior to Project-related ground disturbance. However, considering the complete lack of natural habitat present within the Project Area, floristic surveys are not recommended at this time.

5.3.2 Sensitive Natural Communities (SNCs)

SNCs were assessed during the reconnaissance level Project field survey on March 2, 2021 (primarily through binoculars), as complete pedestrian access to the Project Area was not available during this time. See Section 6.3 for survey results in regards to SNCs.

5.3.3 Wetland Methods

No formal wetland delineation or aquatic resources survey has been conducted to date for the project. However, the reconnaissance level survey generally investigated the potential presence for aquatic resources.

5.3.4 Reconnaissance Level Survey and Habitat Evaluation Methods

A reconnaissance-level biological field survey was conducted by Genevieve Rozhon, GHD Wildlife Biologist (hereafter surveyor), on March 2, 2021 from 1100 to 1300. Weather was sunny, in the mid 70s (degrees Fahrenheit), with winds less than 5 miles per hour (Beaufort scale 1 to 2). The surveyor headed west along W Via Bello drive, investigating the pipeline alignment to the WVWD water tanks at the termination of the road. The surveyor then examined the alignment along Linden Avenue and the pipeline crossing through “open space” (overgrown grassy field) to the east. Finally, the surveyor investigated the perimeter of the RWFF (access to the RWFF was not available at this time) from N Riverside Avenue, N Cedar Avenue, and Summit Avenue.



The survey methods were intended to identify sensitive habitat and detect wildlife activity. Where the habitat allowed the surveyor to walk without risk of damaging nests or dens and surrounding vegetation, the survey included a physical search of the area. This included inspecting the ground, shrubs, culverts, holes, etc. for the presence of any wildlife species. Additionally, the ground layer under vegetation was inspected for evidence of wildlife species, such as feathers, pellets, whitewash, scat, tracks, etc. This reconnaissance-level survey was conducted to identify general wildlife resources and habitat in the PSB and Action Area. No protocol-level surveys for special status wildlife were conducted at this time.

5.3.5 Agency Coordination

Official species lists for the Project 24k quadrangle (Devore) were obtained from the USFWS and NMFS. No further agency coordination has occurrence at this time.

6. Results

6.1 Summary of General Biological Resources

Based on occurrence records, field surveys, and habitat availability, no special status plants, no SNCs, and no jurisdictional aquatic resources have potential to occur in the Project Area or PSB. In addition, no special status wildlife species have potential to occur in the Project Area, PSB, or Action Area, as described further below. However, common, urban-adapted species may occur (but are not addressed herein).

6.2 Special Status Plants

6.2.1 Federally listed Plant Species

Five federally listed plant species (four endangered, and one threatened) that are regulated by the USFWS under the ESA were identified as being previously recorded within the vicinity of the Project Area (i.e., within the 1 quad search area): slender-horned spineflower (*Dodecahema leptoceras*; endangered), Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*; endangered), Gambel's watercress (*Rorippa gambellii*; endangered), San Diego ambrosia (*Ambrosia pumila*; endangered), and thread-leaved brodiaea (*Brodiaea filifolia*; threatened). None of these records overlapped with the Project Area or occurred in the immediate Project vicinity (nearest occurrences all associated with SNCs around washes/water features such as Riversidian Alluvial Fan Sage Scrub, and many occurrences historical/believed extirpated). All of these species were excluded from further consideration based on a lack of suitable habitat within the Action Area.

6.2.2 California State Listed or Special Status Plant Species

A total of ten plant species protected by CDFW under the CESA or the FGC were identified during scoping in the vicinity of the Project Area (i.e., within the 1 quad search area). Two of these species are listed as endangered under CESA (i.e., slender-horned spineflower and Santa Ana River woollystar; also federally listed as described above). The remaining eight species are rare plants (rank 1 and 2) tracked by the CNDDDB or CNPS.



None of these records overlapped with the Project Area or were documented in the immediate Project vicinity (i.e., nearest occurrences all associated with SNCs around washes/water features such as Riversidian Alluvial Fan Sage Scrub, and many occurrences historical/believed extirpated). These species were deemed to have no potential to occur in the Project Area (which is comprised almost entirely of hardscape) based on the lack of potential habitat and are excluded from further consideration. See Appendix B for database search results.



6.3 Sensitive Natural Communities and Environmentally Sensitive Habitat Area Mapping

Three SNCs have been documented in the vicinity of the Project Area (i.e., within the 1 quad search area): Southern Riparian Forest, Southern Sycamore Alder Riparian Woodland, and Riversidian Alluvial Fan Sage Scrub (see Appendix B). Their potential to occur in the Project Area was visually assessed during the site visit on May 2, 2021. The Project Area is almost entirely developed, with no remaining natural habitat. No SNCs were observed during the site visit and there is no potential for occurrence based on existing habitat.

6.4 Wetlands

The National Wetlands Inventory (NWI) identified freshwater ponds within the Project Area (i.e., the retention ponds at the RWFF) (**Appendix D**). Under the Navigable Waters Protection Rule (85 FR 22250), retention ponds are currently not considered Waters of the US and are not jurisdictional. No other aquatic resources are mapped within the Project Area or PSB, and none were observed during the reconnaissance level survey.

6.5 Special Status Wildlife

6.5.1 Wildlife Reconnaissance Survey and Habitat Evaluation Results

The Project is primarily surrounded by residential single-family homes (with some industrial areas to the northeast; sand and gravel mining). No remaining natural or high-quality habitat exists in the immediate Project vicinity. Vegetation is limited to landscaped lawns within the residential areas, ornamental trees around the RWFF, and weedy roadside vegetation. This is the case in terms of the “open space” just to the west of the RWFF; based on aerial imagery, this area contains dirt roads and appears to have been used as a stockpile/staging area in the recent past and potentially as retention pond areas in the early 2000s. The area is now dominated by non-native, disturbance-loving weedy species. Ornamental trees and structures such as buildings in the Project Area and PSB may provide some nesting habitat for common avian species protected under the MBTA and FGC. However, no habitat suitable for special status species is present. See photos of the Project vicinity in Appendix C.

6.5.2 Federally listed Wildlife Species

The following ten federally listed wildlife species (including eight endangered and two threatened) that are regulated by the USFWS under the ESA were identified during scoping in the vicinity of the Action Area (i.e., the 1-quad search area): Stephens' Kangaroo Rat (*Dipodomys stephensi* [incl. *D. cascus*]; endangered), San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*; endangered), California Condor (*Gymnogyps californianus*; endangered), Southwestern Willow Flycatcher (*Empidonax traillii extimus*; endangered), Least Bell's Vireo (*Vireo bellii pusillus*; endangered), coastal California gnatcatcher (*Polioptila californica californica*; threatened), Arroyo (=arroyo Southwestern) Toad (*Anaxyrus californicus*; endangered), Southern Mountain Yellow-Legged Frog (*Rana muscosa*; endangered), San Gabriel Slender Salamander (*Batrachoseps gabrieli*), Santa Ana Sucker (*Catostomus santaanae*; threatened), and Delhi Sands Flower-loving Fly (*Rhaphiomidas terminatus*



abdominalis; endangered). Occurrences of these species (if any) from the Project vicinity were clustered around the nearby Lytle Creek and Cajon washes or on San Bernardino National Forest property (i.e., where natural habitat still occurs in the Project vicinity). The San Bernardino Kangaroo Rat occurrences in the vicinity were notable in that they are recent and close (i.e., just northeast of the Action Area, on the northeast side of North Riverside Avenue, where suitable habitat, including federally designated critical habitat exists) (CDFW 2021a).

Many of these federally listed species occurrences were flagged as historical/believed extirpated due to intense development in the Project vicinity over the last few decades. No federally listed wildlife records occurred within the Action Area itself. Based on the reconnaissance site visit conducted on March 2, 2021, and a database and literature review, it was determined that the Action Area does not provide suitable habitat for any of these species. These species are excluded from further consideration and further analysis of Project effects to ESA-listed is not included in this document

6.5.3 California State Listed or Special Status Wildlife Species

Seven state listed or candidate wildlife species (including four endangered, one threatened, and two candidate species) that are regulated by the CDFW under the CESA were identified during scoping in the vicinity of the PSB (i.e., the 1-quad search area). These include the Crotch Bumble Bee (*Bombus crotchii*; state candidate), as well as the following species described above in Section 6.5.2 (which are also state listed or state candidates for listing): San Bernardino Kangaroo Rat, Stephens' Kangaroo Rat, Least Bell's Vireo, California Condor, Southwestern Willow Flycatcher, and Southern Mountain Yellow-Legged Frog. In addition, occurrences for 13 other wildlife species with special state protections (or tracked via the CNDDDB) were identified within the 1-quad search area.

The majority of these occurrences were from the nearby Lytle Creek and Cajon washes or San Bernardino National Forest property (i.e., where natural habitat still occurs in the Project vicinity). Many of these occurrences were flagged as historical/believed extirpated due to intense development in the Project vicinity over the last few decades. No special status wildlife records occurred within the Project Area or PSB. All of these species were excluded from analysis due to the lack of suitable habitat (or the fact that the Project Area and PSB are outside the current range of these species). See Appendix B for a full list of all special status species considered during scoping.

6.6 Critical Habitat

There is no designated critical habitat within the Project Area (area of construction disturbance, as defined in Section 2.3) or Action Area. However, the Action Area (area of all potential effects, as defined in Section 2.4) is located approximately 50 feet southwest of critical habitat for the San Bernardino Merriam's Kangaroo Rat (see Appendix A, Figure 6).

Critical habitat was designated for San Bernardino Merriam's Kangaroo Rat, effective November 17, 2008. Critical habitat includes primarily washes and alluvial fans in San Bernardino and Riverside counties.

6.7 Limitations That May Influence Results

Conclusions for this BRE were drawn from historic surveys and studies, as well as web-based sensitive species database and literature searches. No protocol-level surveys or studies were



conducted to determine the presence or absence of listed species within the PSB or Action Area; only a relatively brief reconnaissance-level site visit. As historic studies/surveys may not accurately reflect actual occurrence of species presence in the Project vicinity at this time, conclusions have been based more on the assumption of their presence or non-presence given existing habitat in the PSB and Action Area, and impact minimization measures have been developed accordingly. In addition, all determinations herein were based on the current Project footprint (Appendix A, Figures 2 and 3) and proposed Project description. If the Project footprint or construction methods change significantly prior to Project implementation, determinations herein would need to be revisited, to ensure that they are still accurate.

7. Future Actions

7.1.1 Reasonably Foreseeable Potential Non-Federal Actions

There are no known, reasonably certain to occur, non-federal actions proposed within the Action Area, with the exception of routine RWFF maintenance and potential future facility upgrades and expansions.

7.1.2 Reasonably Foreseeable Potential Federal Actions

No foreseeable potential federal actions are expected or known for the Action Area at this time.

8. Recommended Avoidance and Minimization Measures

8.1 Proposed Avoidance and Minimization Measures

Potential impacts (if any) would be addressed in detail in CEQA and NEPA environmental compliance documents and associated permit applications. Project activities are localized and temporary and are not expected to result in any long term or significant impacts to sensitive biological resources. No impacts to plants, SNCs, or special status wildlife are expected. However general Best Management Practices are recommended.

8.1.1 General

8.1.1.1 Best Management Practice (BMPs)

- Silt fences and other erosion control measures shall be deployed along construction areas to prevent any sediment from leaving the site. If the silt fences are not adequately containing sediment, construction activity shall cease until remedial measures are implemented.

8.1.2 Plants

Due to a lack of natural habitat within the Project Area, no pre-construction rare plant surveys are proposed at this time.



8.1.3 Wildlife

8.1.3.1 Nesting Birds

There is potential for common avian species, protected under the MBTA and FGC to nest in the PSB. Potential Project impacts to special status birds during construction may include visual disturbance, habitat destruction, and noise disturbance. The following measures are proposed to avoid potential impacts.

- Ground disturbance and vegetation clearing shall be conducted, if possible, during the fall and/or winter months and outside of the avian nesting season (generally March 1 – August 30 in southern California) to avoid any direct effects to protected birds. If ground disturbance cannot be confined to work outside of the nesting season, a qualified ornithologist shall conduct pre-construction surveys within the vicinity of the Project Area, to check for nesting activity of native birds and to evaluate the site for presence of raptors and special status bird species. The ornithologist shall conduct at minimum a one-day pre-construction survey within the 7-day period prior to vegetation removal and ground-disturbing activities. If ground disturbance or vegetation removal work lapses for seven days or longer during the breeding season, a qualified ornithologist shall conduct a supplemental avian pre-construction survey before Project work is reinitiated.
- If active nests are detected within the construction footprint or up to 500 feet from construction activities, the ornithologist shall flag a buffer around each nest (assuming property access). Construction activities shall avoid nest sites until the ornithologist determines that the young have fledged or nesting activity has ceased. If nests are documented outside of the construction (disturbance) footprint, but within 500 feet of the construction area, buffers would be implemented as needed (buffer size dependent on species). Buffer sizes for common species would be determined on a case-by-case basis in consultation with the CDFW and, if applicable, with USFWS. Buffer sizes would take into account factors such as (1) noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity; (2) distance and amount of vegetation or other screening between the construction site and the nest; and (3) sensitivity of individual nesting species and behaviors of the nesting birds.
- If active nests are detected during the survey, the qualified ornithologist shall monitor all nests at least once per week to determine whether birds are being disturbed. Activities that might, in the opinion of the qualified ornithologist, disturb nesting activities (e.g., excessive noise), shall be prohibited within the buffer zone until such a determination is made. If signs of disturbance or distress are observed, the qualified ornithologist shall immediately implement adaptive measures to reduce disturbance. These measures may include, but are not limited to, increasing buffer size, halting disruptive construction activities in the vicinity of the nest until fledging is confirmed or nesting activity has ceased, placement of visual screens or sound dampening structures between the nest and construction activity, reducing speed limits, replacing and updating noisy equipment, queuing trucks to distribute idling noise, locating vehicle access points and loading and shipping facilities away from noise-sensitive receptors, reducing the number of noisy construction activities occurring simultaneously, and/or



reorienting and/or relocating construction equipment to minimize noise at noise-sensitive receptors.

9. Effects Determinations

This BRE has been prepared in compliance with Section 7(c) of the ESA to evaluate the potential adverse effects of the proposed action on federally listed endangered or threatened species. The proposed Project is described in Section 2. Of the 15 federally listed species with potential to occur in the Action Area (five plants and 10 wildlife species), all were excluded from further analysis due to the lack of suitable habitat in the Action Area and/or because the Action Area lies outside of the species' known current geographic range.

9.1 ESA Listed Species Determinations

The Project **would have no effect** on the following species:

- Stephens' Kangaroo Rat
- San Bernardino Kangaroo Rat
- Southwestern Willow Flycatcher
- Coastal California Gnatcatcher
- California Condor
- Least Bell's Vireo
- Arroyo (=arroyo Southwestern) Toad
- Southern Mountain Yellow-Legged Frog
- Santa Ana Sucker
- Delhi Sands Flower-loving Fly
- slender-horned spineflower
- Santa Ana River woollystar
- Gambel's watercress
- San Diego Ambrosia
- Thread-leaved Brodiaea

9.2 Critical Habitat Determinations

The Project would have no effect on federally designated critical habitat for any wildlife or plant species.



10. Conclusion

Based on the analysis herein:

- The Project would result in no impacts to terrestrial or aquatic wildlife movement, habitat connectivity, or migration. Construction would be of short-term duration and no permanent barriers would be constructed. Migration routes would not be impacted by operation of the Project. No impacts to aquatic habitat connectivity and migration for fish species is expected as no in-water work would occur.
- The Project does not conflict with any local policies or ordinances and the Project does not overlap any existing HCPs or NCCPs.
- No potential Project impacts on any plant or wildlife species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS are expected. Impacts to common avian species, protected under the MBTA and FGC would be avoided with implementation of measure 8.1.3.1. described above.
- The proposed Project would have no effect on any federally listed species identified during Project scoping. The proposed Project would have no effect on designated critical habitat. Further consultation under the ESA is not required.
- Seasonally appropriate floristic surveys are not proposed at this time due to the lack of natural habitat present in the Project Area.
- No impacts to SNCs are expected as none are present in the Project Area.
- No aquatic resources were documented within the Project Area and no impacts are expected.

Given this evaluation, the Project is expected to have no effect on sensitive biological resources.



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12. List of Preparers

Prepared by:

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Ken Mierzwa, Senior Environmental Scientist, Eureka, CA

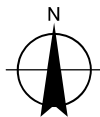
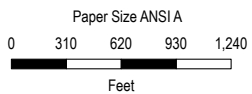
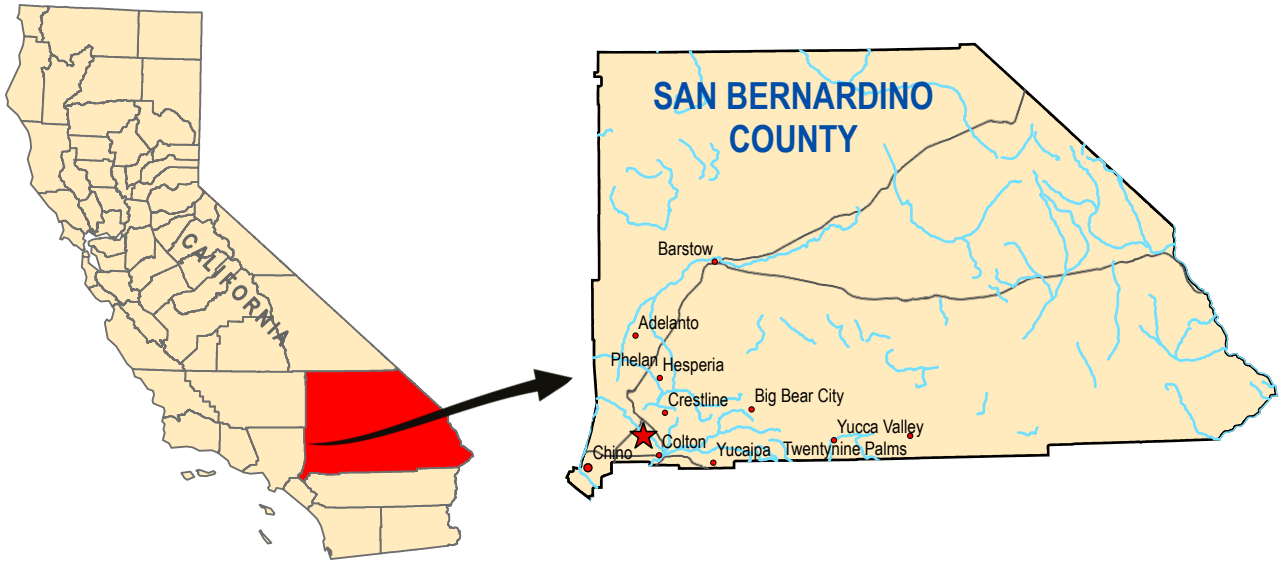
Haley Cahill, Environmental Planner, GHD Inc., Santa Rosa, CA



Appendices



Appendix A Figures








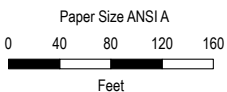
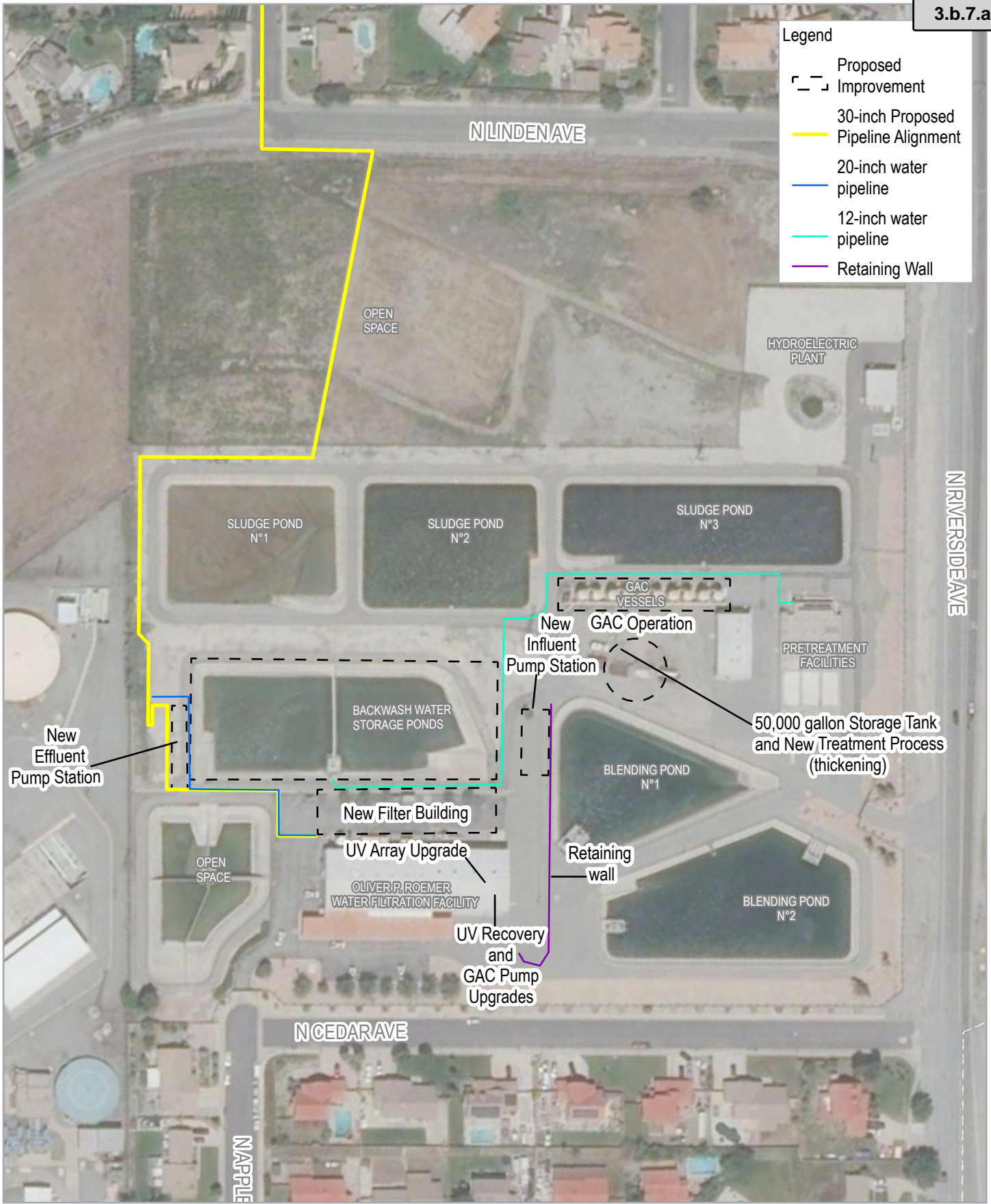
**WEST VALLEY WATER DISTRICT
16 MGD OLIVER P. ROEMER WATER FILTRATION
FACILITY EXPANSION PROJECT**

Project No. 11214029
Revision No. -
Date 3/5/2021

PROJECT LOCATION

FIGURE 1

- Legend**
-  Proposed Improvement
 -  30-inch Proposed Pipeline Alignment
 -  20-inch water pipeline
 -  12-inch water pipeline
 -  Retaining Wall






WEST VALLEY WATER DISTRICT
16 MGD OLIVER P. ROEMER WATER FILTRATION
FACILITY EXPANSION PROJECT

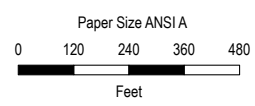
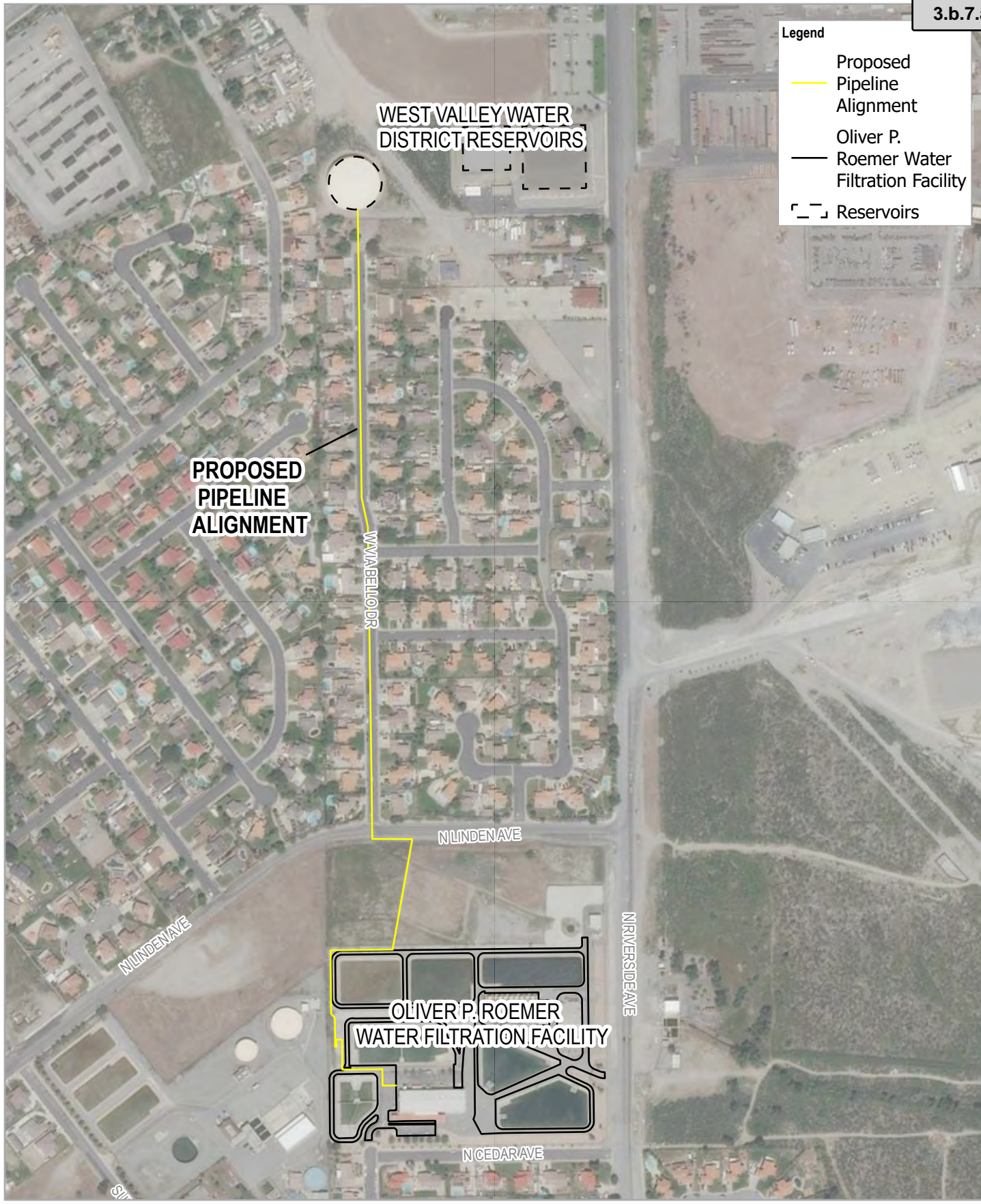
Project No. **11214029**
 Revision No. **-**
 Date **3/12/2021**

PROPOSED IMPROVEMENTS
WITHIN THE RWFF

FIGURE 2

Legend

-  Proposed Pipeline Alignment
-  Oliver P. Roemer Water Filtration Facility
-  Reservoirs



Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California V FIPS 0405 Feet



**WEST VALLEY WATER DISTRICT
16 MGD OLIVER P. ROEMER WATER FILTRATION
FACILITY EXPANSION PROJECT**

Project No. 11214029
Revision No. -
Date 2/26/2021

PROPOSED PIPELINE ALIGNMENT

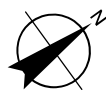
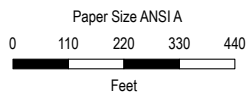
FIGURE 3

Legend

- Project Area
- ⌈ _ ⌋ Reservoirs

WEST VALLEY WATER DISTRICT RESERVOIRS

OLIVER P. ROEMER WATER FILTRATION FACILITY



WEST VALLEY WATER DISTRICT
16 MGD OLIVER P. ROEMER WATER FILTRATION
FACILITY EXPANSION PROJECT

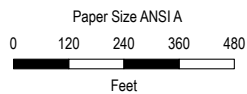
Project No. 11214029
 Revision No. -
 Date 4/12/2021

PROJECT AREA

FIGURE 4

Legend

- Project Area
- Project Study Boundary/ Action Area
- ⌈ ⌋ Reservoirs



Map Projection: Lambert Conformal Conic
 Horizontal Datum: North American 1983
 Grid: NAD 1983 StatePlane California V FIPS 0405 Feet



WEST VALLEY WATER DISTRICT
16 MGD OLIVER P. ROEMER WATER FILTRATION
FACILITY EXPANSION PROJECT

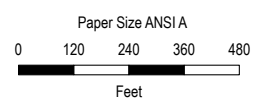
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 Revision No. -
 Date 4/9/2021

PROJECT STUDY
BOUNDARY / ACTION AREA

FIGURE 5

Legend

- Project Area
- San Bernardino Merriam's Kangaroo Rat Critical Habitat
- Project Study Boundary/ Action Area
- Reservoirs



Map Projection: Lambert Conformal Conic
Horizontal Datum: North American 1983
Grid: NAD 1983 StatePlane California V FIPS 0405 Feet



WEST VALLEY WATER DISTRICT
16 MGD OLIVER P. ROEMER WATER FILTRATION
FACILITY EXPANSION PROJECT

Project No. 11214029
Revision No. -
Date 4/12/2021

SAN BERNARDINO MERRIAM'S
KANGAROO RAT CRITICAL HABITAT

FIGURE 6



Appendix B CNDDDB, CNPS, IPaC, and NMFS Database Search Results



United States Department of the Interior



FISH AND WILDLIFE SERVICE
 Carlsbad Fish And Wildlife Office
 2177 Salk Avenue - Suite 250
 Carlsbad, CA 92008-7385
 Phone: (760) 431-9440 Fax: (760) 431-5901
<http://www.fws.gov/carlsbad/>

In Reply Refer To:

April 08, 2021

Consultation Code: 08ECAR00-2021-SLI-0844

Event Code: 08ECAR00-2021-E-01891

Project Name: WEST VALLEY WATER DISTRICT 16 MGD OLIVER P. ROEMER WATER
 FILTRATION FACILITY EXPANSION PROJEC

Subject: List of threatened and endangered species that may occur in your proposed project
 location 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://](http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html)

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(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2021-SLI-0844

Event Code: 08ECAR00-2021-E-01891

Project Name: WEST VALLEY WATER DISTRICT 16 MGD OLIVER P. ROEMER
WATER FILTRATION FACILITY EXPANSION PROJEC

Project Type: WASTEWATER FACILITY

Project Description: TBD

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@34.1879263,-117.43681266868609,14z>



Counties: San Bernardino County, California

Endangered Species Act Species

There is a total of 14 threatened, endangered, or candidate species on this 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.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
San Bernardino Merriam's Kangaroo Rat <i>Dipodomys merriami parvus</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2060	Endangered
Stephens' Kangaroo Rat <i>Dipodomys stephensi</i> (incl. <i>D. cascus</i>) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3495	Endangered

Birds

NAME	STATUS
California Condor <i>Gymnogyps californianus</i> Population: U.S.A. only, except where listed as an experimental population There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8193	Endangered
Coastal California Gnatcatcher <i>Polioptila californica californica</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

Amphibians

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad <i>Anaxyrus californicus</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3762	Endangered

Fishes

NAME	STATUS
Santa Ana Sucker <i>Catostomus santaanae</i> Population: 3 CA river basins There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/3785	Threatened

Insects

NAME	STATUS
Delhi Sands Flower-loving Fly <i>Rhaphiomidas terminatus abdominalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1540	Endangered

Flowering Plants

NAME	STATUS
Gambel's Watercress <i>Rorippa gambellii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4201	Endangered
San Diego Ambrosia <i>Ambrosia pumila</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8287	Endangered
Santa Ana River Woolly-star <i>Eriastrum densifolium ssp. sanctorum</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6575	Endangered
Slender-horned Spineflower <i>Dodecahema leptoceras</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4007	Endangered
Thread-leaved Brodiaea <i>Brodiaea filifolia</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6087	Threatened

Critical habitats

There are 2 critical habitats wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad <i>Anaxyrus californicus</i> https://ecos.fws.gov/ecp/species/3762#crithab	Final
San Bernardino Merriam's Kangaroo Rat <i>Dipodomys merriami parvus</i> https://ecos.fws.gov/ecp/species/2060#crithab	Final

From: [Genevieve Rozhon](#)
To: nmfswcrca.specieslist@noaa.gov
Bcc: [849999999](#)
Subject: NMFS official species list - West Valley Water District 16 Mgd Oliver P. Roemer Water Filtration Facility Expansion Project
Date: Thursday, April 8, 2021 1:53:00 PM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Hello there,

I am emailing to request an official NMFS species list for the Devore 7.5" Quadrangle for the West Valley Water District 16 Mgd Oliver P. Roemer Water Filtration Facility Expansion Project in Rialto, California. Thank you in advance for your time.

Non-federal agency name and address: GHD Inc., 718 Third Street, Eureka, CA 95501
Contact: Genevieve Rozhon, Genevieve.rozhon@ghdcom, 650-773-9881

Quad Name **Devore**

Quad Number **34117-B4**

ESA Anadromous Fish

- SONCC Coho ESU (T) -
- CCC Coho ESU (E) -
- CC Chinook Salmon ESU (T) -
- CVSR Chinook Salmon ESU (T) -
- SRWR Chinook Salmon ESU (E) -
- NC Steelhead DPS (T) -
- CCC Steelhead DPS (T) -
- SCCC Steelhead DPS (T) -
- SC Steelhead DPS (E) -
- CCV Steelhead DPS (T) -
- Eulachon (T) -
- sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

- SONCC Coho Critical Habitat -
- CCC Coho Critical Habitat -
- CC Chinook Salmon Critical Habitat -
- CVSR Chinook Salmon Critical Habitat -
- SRWR Chinook Salmon Critical Habitat -
- NC Steelhead Critical Habitat -
- CCC Steelhead Critical Habitat -
- SCCC Steelhead Critical Habitat -
- SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -
 Eulachon Critical Habitat -
 sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -
 Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
 Olive Ridley Sea Turtle (T/E) -
 Leatherback Sea Turtle (E) -
 North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
 Fin Whale (E) -
 Humpback Whale (E) -
 Southern Resident Killer Whale (E) -
 North Pacific Right Whale (E) -
 Sei Whale (E) -
 Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -
 Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
 Chinook Salmon EFH -
 Groundfish EFH -
 Coastal Pelagics EFH -
 Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

**See list at left and consult the NMFS Long Beach office
 562-980-4000**

MMPA Cetaceans -
 MMPA Pinnipeds -

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Appendix B. CNRS 1-Quad Database Search (Devore) 04/09/2021

Scientific Name	Common Name	Family	Lifeform	CHPR	GRank	SRank	CESA	FESA	Blooming Period	Habitat	Micro Habitat	Elevation Low (m)	Elevation Low (ft)	Elevation High (m)	Elevation High (ft)	CA Endemic	States	Counties	Quads	EO Total	EO A	EO B	EO C	EO D	EO X	EO U	EO Historical	EO Recent	EO Extant	EO Possibly Extirpated	EO Extirpated	Notes	Full Scientific Name	Synonym s	Excerpt Code	USDA PLANTS Symbol	Flora Status	CR Reason	Date Added	Date Changed	Last Update					
<i>Artemisia monogyra</i>	singlehoof tuberosh	Asteraceae	perennial shrub	2B.2	G5	S2	None	None	Aug-Nov	Chaparral, Sonoran desert scrub	sandy	10	30	500	1640	F	AZ, BA, NM, NV, SD, TX	RRV, SBD, SDO	San Mateo (321627), Clay Mesa (321657), Javal Mountains (321666), Descanso (321675), Coyamocav Peak (321685), Imperial Beach (321751), National City (321761), La Mesa (321771), La Jolla (321772), Mecca (321651), Palm Springs (331675), San Jacinto Peak (331676), Devore (341724)	30	0	2	4	0	0	24	14	16	30	0	0	0	0	0	0	Probably threatened by trail maintenance and non-native plants. See Hymenoclea monogyra in T.M. (1993). See Matrone 49: 143 (2000) for taxonomic treatment.	<i>Artemisia monogyra</i> Torr. & Gray		PHS35 0010	HYMO				2/21/2007		6/12/2013
<i>Calochortus plummerae</i>	Plummer's mariposa fly	Liliaceae	perennial bulbiferous herb	4.2	G4	S4	None	None	May-Jul	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland	granitic, rocky	100	325	1700	5575	T		LAX, ORA, SBD, VEN	Ilywell (331656), Redburn Canyon (331667), Lake Furner (331677), San Jacinto (331678), Cabazon (331687), Beaumont (331688), Beebecker Mts. (331751), Sison Peak (331754), Lava Escoria (331763), Corona South (331775), Black Star Canyon (331776), El Cacho (331781), Sunnymead (331792), Riverside East (331783), Riverside West (331794), La Habra (331788), Whittier (331881), San Geronimo Mts. (341617), Forest Falls (341618), Moorridge (341622)	230	4	37	25	12	8	144	79	151	222	7	1	1	0	0	Previously on list as 192 more common than originally known. Threatened by development, fire suppression, foot traffic, mining, powerline construction, and recreational activities. Possibly threatened by vegetation clearing, collecting, road maintenance, and non-native plants. Less common at higher elevations. Hybrids with <i>C. weberi</i> var. <i>plummerae</i> .	<i>Calochortus plummerae</i> Greene		PHL150 100	CAPL2				1/1/1994		10/2/2017	
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spinniflower	Polygonaceae	annual herb	1B.1	G3T2	S2	None	None	Apr-Jun	Chaparral, Cismontane woodland, Coastal scrub, valley and foothill grassland	sandy or rocky, openings	275	900	1200	4005	T		LAX, RRV, SBD	Val Lake (331668), Canella Mills (331667), Sage (331626), Redburn Canyon (331667), Hamet (331668), Palm Springs (331675), Lake Furner (331677), San Jacinto (331678), White Water (331688), Cabazon (331687), Beaumont (331688), Beebecker Mts. (331751), Marietta (331752), Mebanar (331753), Winchester (331761), Romoland (331762), Lava Escoria (331763), Albarril (331764), Jalfone (331771), Shale Peak (331772)	150	8	14	5	3	13	107	61	89	137	5	8	8	0	0	Threatened by altered flood regime, development, mining, non-native plants, and vehicles. See Proceedings of the American Academy of Arts and Sciences 12:271 (1977) for original description, and Phytologia 66(2): 427-449 (1969) for taxonomic treatment.	<i>Chorizanthe parryi</i> S. Watson var. <i>parryi</i>		PDGNO 402	CHPAP2				1/1/1994		3/15/2010	
<i>Chorizanthe xanthi</i> var. <i>leucotheca</i>	White-backed spinniflower	Polygonaceae	annual herb	1B.1	G4T3	S3	None	None	Apr-Jun	Coastal scrub, saltwater fans, Mojavean desert scrub, piñon and juniper woodland	sandy or gravelly	300	980	1200	3935	T		LAX, RRV, SBD, SDO	La Matrona (331645), Toro Peak (331654), Canella Mills (331655), Palm Vista Peak (331657), Palm Vista Peak (331660), Ilywell (331660), Redburn Canyon (331667), Palm Springs (331675), Desert Hot Springs (331686), White Water (331686), Cabazon (331687), Corona South (331775), Morongo Valley (341615), Caliche Flat (341616), Dry Peak (341620), Old Whinn Springs (341646), Yucapa (341711), Devore (341724), Lake Arrowhead (341725), Capon (341734), Telescope Peak (341735)	59	10	3	0	0	0	46	14	45	59	0	0	0	0	0	Threatened by development, flood control projects, mining and vehicles. See Annual of the Missouri Botanical Garden 2:90 (1934) for original description, and Phytologia 66(2): 160-163 (1969) for taxonomic treatment.	<i>Chorizanthe xanthi</i> Wats. var. <i>leucotheca</i> Gooden.		PDGNO 4021	CHKAL				1/1/1994		3/15/2010	
<i>Dioscorea leptoceras</i>	slender horned spinniflower	Polygonaceae	annual herb	1B.1	G1	S1	CE	FE	Apr-Jun	Chaparral, Cismontane woodland, Coastal scrub (saltwater fan)	sandy	200	655	760	2495	T		LAX, RRV, SBD	Val Lake (331668), Redburn Canyon (331667), Hamet (331668), San Jacinto (331678), White Water (331688), Cabazon (331687), Corona South (331775), Morongo Valley (341615), Caliche Flat (341616), Dry Peak (341620), Old Whinn Springs (341646), Yucapa (341711), Devore (341724), Lake Arrowhead (341725), Capon (341734), Telescope Peak (341735)	41	0	12	3	0	0	14	12	27	14	27	6	8	8	0	0	Many historical localities lost to urbanization and stream channelization; currently threatened by alteration of fire regimes, development, sand and gravel mining, flood control, foot traffic, proposed reservoir construction, recreational activities, vehicles, and non-native plants. See Proceedings of the American Academy of Arts and Sciences 12:269 (1977)	<i>Dioscorea leptoceras</i> (Gray) Rea & Hardham	<i>Crotocarya leptoceras</i> S.	PDGNO V010	DOLE				1/1/1980		3/15/2010

Appendix B. CNDDB 1-Quad Database Search (Devore): 04/08/2021														
SciName	ComName	TaxonGroup	ElmCode	TotalOccs	FedList	CallList	GRank	SRank	RPlantRank	OthrStatus	Habitats	GenHab	MicroHab	ReturnOccs
<i>Ambrosia monogyra</i>	singlewhorl burrobrush	Dicots	PDAST50010	30	None	None	G5	S2	2B.2		Chaparral Sonoran desert scrub	Chaparral, Sonoran desert scrub	Sandy soils. 5-475 m.	1
<i>Anniella stebbinsi</i>	Southern California legless lizard	Reptiles	ARACC01060	417	None	None	G3	S3		CDFW_SS C-Species of Special Concern USFS_S-Sensitive	Broadleaved upland forest Chaparral Coastal dunes Coastal scrub	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County.	Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	6
<i>Arizona elegans occidentalis</i>	California glossy snake	Reptiles	ARADB01017	260	None	None	G5T2	S2		CDFW_SS C-Species of Special Concern		Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California.	Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	4
<i>Artemisiospiza belli belli</i>	Bell's sage sparrow	Birds	ABPBX97021	61	None	None	G5T2T3	S3		CDFW_WL Watch List USFWS_BC C-Birds of Conservation Concern	Chaparral Coastal scrub	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.	1
<i>Athene cucularia</i>	burrowing owl	Birds	ABNSB10010	2011	None	None	G4	S3		BLM_S-Sensitive CDFW_SS C-Species of Special Concern IUCN_LC-Least Concern USFWS_BC C-Birds of Conservation Concern	Coastal prairie Coastal scrub Great Basin grassland Great Basin scrub Mojavean desert scrub Sonoran desert scrub Valley & foothill grassland	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	3
<i>Batrachoseps gabrieli</i>	San Gabriel slender salamander	Amphibians	AAAAD02110	8	None	None	G2G3	S2S3		IUCN_DD-Data Deficient USFS_S-Sensitive	Talus slope	Known only from the San Gabriel Mtns. Found under rocks, wood, and fern fronds, and on soil at the base of talus slopes.	Most active on the surface in winter and early spring.	1
<i>Bombus crotchii</i>	Crotch bumble bee	Insects	IIHYM24480	437	None	Candidate Endangered	G3G4	S1S2				Coastal California east to the Sierra-Cascade crest and south into Mexico.	Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	2
<i>Calochortus plummerae</i>	Plummer's mariposa-lily	Monocots	PMLIL0D150	230	None	None	G4	S4	4.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral Cismontane woodland Coastal scrub Lower montane coniferous forest Valley & foothill grassland	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest.	Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m.	14
<i>Chaetodipus fallax fallax</i>	northwestern San Diego pocket mouse	Mammals	AMAFD05031	101	None	None	G5T3T4	S3S4		CDFW_SS C-Species of Special Concern	Chaparral Coastal scrub	Coastal scrub, grasslands, sagebrush, etc. in western San Diego County.	Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	4
<i>Chaetodipus fallax pallidus</i>	pallid San Diego pocket mouse	Mammals	AMAFD05032	79	None	None	G5T3T4	S3S4		CDFW_SS C-Species of Special Concern	Desert wash Pinon & juniper woodlands Sonoran desert scrub	Desert border areas in eastern San Diego County in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc.	Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	1

<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	Dicots	PDPGN040J2	150	None	None	G3T2	S2	1B.1	BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	Chaparral Cismontane woodland Coastal scrub Valley & foothill grassland	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland.	Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90-1220 m.	8
<i>Chorizanthe xanti</i> var. <i>leucotheca</i>	white-bracted spineflower	Dicots	PDPGN040Z1	59	None	None	G4T3	S3	1B.2	BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture USFS_S-Sensitive	Coastal scrub Mojavean desert scrub Pinon & juniper woodlands	Mojavean desert scrub, pinyon and juniper woodland, coastal scrub (alluvial fans).	Sandy or gravelly places. 365-1630 m.	4
<i>Dipodomys merriami parvus</i>	San Bernardino kangaroo rat	Mammals	AMAFD03143	81	Endangered	Candidate Endangered	G5T1	S1		CDFW_SS C-Species of Special Concern	Coastal scrub	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains.	Needs early to intermediate seral stages.	25
<i>Dodecahema leptoceras</i>	slender-horned spineflower	Dicots	PDPGN0V010	41	Endangered	Endangered	G1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral Cismontane woodland Coastal scrub	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub).	Flood deposited terraces and washes; associates include <i>Encelia</i> , <i>Dalea</i> , <i>Lepidospartum</i> , etc. Sandy soils. 200-765 m.	4
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Santa Ana River woollystar	Dicots	PDPLM03035	31	Endangered	Endangered	G4T1	S1	1B.1	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral Coastal scrub	Coastal scrub, chaparral.	In sandy soils on river floodplains or terraced fluvial deposits. 180-705 m.	4
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	Dicots	PDR0S0W045	103	None	None	G4T1	S1	1B.1	USFS_S-Sensitive	Chaparral Cismontane woodland Coastal scrub	Chaparral, cismontane woodland, coastal scrub.	Sandy or gravelly sites. 15-1645 m.	1
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	Mammals	AMAE03051	103	None	None	G5T3T4	S3S4		CDFW_SS C-Species of Special Concern	Coastal scrub	Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges.	Coastal sage scrub habitats in Southern California.	1
<i>Lilium parryi</i>	lemon lily	Monocots	PMLL1A0J0	160	None	None	G3	S3	1B.2	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	Lower montane coniferous forest Meadow & seep Riparian forest Upper montane coniferous forest Wetland	Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest.	Wet, mountainous terrain; generally in forested areas; on shady edges of streams, in open boggy meadows & seeps. 625-2930 m.	1
<i>Lycium parishii</i>	Parish's desert-thorn	Dicots	PDSOLOG0D0	21	None	None	G4	S1	2B.3		Coastal scrub Sonoran desert scrub	Coastal scrub, Sonoran desert scrub.	-3-570 m.	1
<i>Malacothamnus parishii</i>	Parish's bush-mallow	Dicots	PDMAL0Q0C0	1	None	None	GXQ	SX	1A		Chaparral Coastal scrub	Chaparral, coastal sage scrub.	In a wash. 305-455 m.	1
<i>Neolarra alba</i>	white cuckoo bee	Insects	IIHYM81010	8	None	None	GH	SH				Known only from localities in Southern California.	Cleptoparasitic in the nests of perdita bees.	1
<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat	Mammals	AMACD04010	90	None	None	G5	S3		CDFW_SS C-Species of Special Concern IUCN_LC-Least Concern WBWG_M-Medium Priority	Joshua tree woodland Pinon & juniper woodlands Riparian scrub Sonoran desert scrub	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc.	Rocky areas with high cliffs.	1
<i>Opuntia basilaris</i> var. <i>brachyclada</i>	short-joint beavertail	Dicots	PDCAC0D053	199	None	None	G5T3	S3	1B.2	BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	Chaparral Joshua tree woodland Mojavean desert scrub Pinon & juniper woodlands	Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland.	Sandy soil or coarse, granitic loam. 425-2015 m.	1

<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse	Mammals	AMAFD01041	70	None	None	G5T2	S1S2		CDFW_SS C-Species of Special Concern	Coastal scrub	Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin.	Open ground with fine, sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	1
<i>Phrynosoma blainvillii</i>	coast horned lizard	Reptiles	ARACF12100	784	None	None	G3G4	S3S4		BLM_S-Sensitive CDFW_SS C-Species of Special Concern IUCN_LC-Least Concern	Chaparral Cismontane woodland Coastal bluff scrub Coastal scrub Desert wash Pinon & juniper woodlands Riparian scrub Riparian woodland Valley & foothill grassland	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	9
<i>Polioptila californica californica</i>	coastal California gnatcatcher	Birds	ABPB08081	967	Threatened	None	G4G5T3Q	S2		CDFW_SS C-Species of Special Concern NABCI_YW L-Yellow Watch List	Coastal bluff scrub Coastal scrub	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California.	Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	5
<i>Rana muscosa</i>	southern mountain yellow-legged frog	Amphibians	AAABH01330	186	Endangered	Endangered	G1	S1		CDFW_WL Watch List IUCN_EN-Endangered USFS_S-Sensitive	Aquatic	Federal listing refers to populations in the San Gabriel, San Jacinto and San Bernardino mountains (southern DPS). Northern DPS was determined to warrant listing as endangered, Apr 2014, effective Jun 30, 2014.	Always encountered within a few feet of water. Tadpoles may require 2 - 4 yrs to complete their aquatic development.	1
<i>Rhinichthys osculus ssp. 3</i>	Santa Ana speckled dace	Fish	AFCJB3705K	13	None	None	G5T1	S1		AFS_TH-Threatened CDFW_SS C-Species of Special Concern USFS_S-Sensitive	Aquatic South coast flowing waters	Headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the Los Angeles River system.	Requires permanent flowing streams with summer water temps of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	2
<i>Riversidian Alluvial Fan Sage Scrub</i>	Riversidian Alluvial Fan Sage Scrub	Scrub	CTT32720CA	30	None	None	G1	S1.1			Coastal scrub			3
<i>Southern Riparian Forest</i>	Southern Riparian Forest	Riparian	CTT61300CA	20	None	None	G4	S4			Riparian forest			1
<i>Southern Sycamore Alder Riparian Woodland</i>	Southern Sycamore Alder Riparian Woodland	Riparian	CTT62400CA	230	None	None	G4	S4			Riparian woodland			4
<i>Streptanthus bernardinus</i>	Laguna Mountains jewelflower	Dicots	PDBRA2G060	22	None	None	G3G4	S3S4	4.3	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	Chaparral Lower montane coniferous forest Upper montane coniferous forest	Chaparral, lower montane coniferous forest.	Clay or decomposed granite soils; sometimes in disturbed areas such as streamsidess or roadcuts. 1440-2500 m.	1
<i>Vireo bellii pusillus</i>	least Bell's vireo	Birds	ABPBW01114	503	Endangered	Endangered	G5T2	S2		IUCN_NT-Near Threatened NABCI_YW L-Yellow Watch List	Riparian forest Riparian scrub Riparian woodland	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	2



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad IS (Devore (3411724))

Map Index Number: 43808	EO Index: 43808
Key Quad: Cucamonga Peak (3411725)	Element Code: AAAAD02110
Occurrence Number: 7	Occurrence Last Updated: 2000-09-19

Scientific Name: <i>Batrachoseps gabrieli</i>	Common Name: San Gabriel slender salamander
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: IUCN_DD-Data Deficient USFS_S-Sensitive
CNDDDB Element Ranks:	
Global: G2G3	
State: S2S3	

General Habitat: KNOWN ONLY FROM THE SAN GABRIEL MTNS. FOUND UNDER ROCKS, WOOD, AND FERN FRONDS, AND ON SOIL AT THE BASE OF TALUS SLOPES.	Micro Habitat: MOST ACTIVE ON THE SURFACE IN WINTER AND EARLY SPRING.
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Last Date Observed: 1998-04-15	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1998-04-15	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
WEST OF HIGHWAY 395, ABOUT 1.3 MI WSW OF SCOTLAND, ABOUT 1.5 MILES SOUTH OF THE TOWN OF LYTLE CREEK.

Detailed Location:
ONE COLLECTION SITE IS ABOUT 1.5 KM S OF THE TOWN OF LYTLE CREEK AT ELEVATION 3750 FT, ON THE S SLOPE OF THE MIDDLE FORK OF LYTLE CANYON. ONE COLLECTION SITE IS ABOUT 3 KM SOUTH OF THE TOWN OF LYTLE CREEK IN THE S FORK OF LYTLE CANYON.

Ecological:

Threats:

General:

MVZ #'S 228299-228302 COLLECTED 11 & 15 APRIL 1998 BY D. WAKE, R. GOODMAN JR. & M. BENTON.

PLSS: T02N, R06W, Sec. 22 (S)	Accuracy: 3/5 mile	Area (acres): 0
UTM: Zone-11 N3789010 E453400	Latitude/Longitude: 34.24115 / -117.50604	Elevation (feet): 3,600

County Summary:

San Bernardino

Quad Summary:

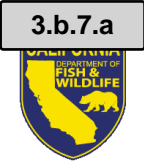
Devore (3411724), Cucamonga Peak (3411725), Telegraph Peak (3411735)

Sources:

MVZ00S0005 MUSEUM OF VERTEBRATE ZOOLOGY (UNIVERSITY OF CALIFORNIA, BERKELEY) - AUGUST 15, 2000 PRINT OUT OF A QUERY OF THE MVZ DATABASE FOR BATRACHOSEPS GABRIELI 2000-08-15



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 42436	EO Index: 42436
Key Quad: Devore (3411724)	Element Code: AAABH01330
Occurrence Number: 20	Occurrence Last Updated: 2014-07-08

Scientific Name: <i>Rana muscosa</i>	Common Name: southern mountain yellow-legged frog
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Endangered	Other Lists: CDFW_WL-Watch List
CNDDDB Element Ranks:	IUCN_EN-Endangered
Global: G1	USFS_S-Sensitive
State: S1	

General Habitat:	Micro Habitat:
FEDERAL LISTING REFERS TO POPULATIONS IN THE SAN GABRIEL, SAN JACINTO AND SAN BERNARDINO MOUNTAINS (SOUTHERN DPS). NORTHERN DPS WAS DETERMINED TO WARRANT LISTING AS ENDANGERED, APR 2014, EFFECTIVE JUN 30, 2014.	ALWAYS ENCOUNTERED WITHIN A FEW FEET OF WATER. TADPOLES MAY REQUIRE 2 - 4 YRS TO COMPLETE THEIR AQUATIC DEVELOPMENT.

Last Date Observed: 1958-08-02	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2001-XX-XX	Occurrence Rank: None
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Possibly Extirpated	

Location:
 LYTLE CREEK, 2 MILES SOUTH OF GLENN RANCH, SAN GABRIEL MOUNTAINS.

Detailed Location:

Ecological:

Threats:

General:

OCCURRENCE KNOWN FROM COLLECTIONS FROM 2 MI S OF GLENN RANCH IN 1950 AND FROM LYTLE CANYON IN 1958. JENNINGS CONSIDERS THIS POPULATION EXTIRPATED. USGS SURVEYED THIS AREA IN 2000 & 2001 AND NO FROGS WERE FOUND.

PLSS: T02N, R06W, Sec. 26 (S)	Accuracy: non-specific area	Area (acres): 451
UTM: Zone-11 N3787710 E456150	Latitude/Longitude: 34.22954 / -117.47611	Elevation (feet): 2,600

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:

- BAC10D0001 BACKLIN, A. (U.S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION) - EXCEL SPREADSHEET OF CNDDDB OCCURRENCES WITH EVALUATION OF THE CURRENT STATUS OF RANA MUSCOSA AT EACH SITE. 2010-04-22
- JEN94R0001 JENNINGS, M. & M. HAYES - AMPHIBIAN AND REPTILE SPECIES OF SPECIAL CONCERN IN CALIFORNIA. FINAL REPORT SUBMITTED TO DFG, INLAND FISHERIES DIVISION, RANCHO CORDOVA. 255 PP. 1994-11-01
- NOK58S0005 NOKES, J. - SDNHM #19546-19553 COLLECTED FROM LYTLE CANYON 1958-08-02
- NOR50S0002 NORRIS & ZWEIFEL - NORRIS #2925 LACM #13760, FROM LYTLE CREEK, 2 MI S OF GLENN RANCH 1950-05-27



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 69265	EO Index: 70046
Key Quad: Devore (3411724)	Element Code: ABNSB10010
Occurrence Number: 927	Occurrence Last Updated: 2007-07-13

Scientific Name: <i>Athene cunicularia</i>	Common Name: burrowing owl
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDDB Element Ranks:	BLM_S-Sensitive
Global: G4	CDFW_SSC-Species of Special Concern
State: S3	IUCN_LC-Least Concern
	USFWS_BCC-Birds of Conservation Concern

General Habitat: OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS, AND SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.	Micro Habitat: SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.
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Last Date Observed: 2006-11-08	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2006-11-08	Occurrence Rank: Good
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
WEST OF RIALTO, ABOUT 0.5 MILE NE OF INTERSECTION OF BASE LINE RD AND LINDEN AVE.

Detailed Location:
MAPPED ACCORDING TO UTM COORDINATES PROVIDED BY SOURCE.

Ecological:
DISKED FIELD DOMINATED BY BARE GROUND. TO WEST IS RIALTO AIRPORT. SURROUNDING HABITAT CONSISTS OF RUDERAL AREAS, GRASSLANDS, AND LOW-GROWING RIVERSIDEAN SAGE SCRUB.

Threats:
PROPOSED FOR DEVELOPMENT, DISKING.

General:
WINTERING AND BURROW SITE. 1 ADULT OBSERVED ON 8 NOV 2006.

PLSS: T01N, R05W, Sec. 34, SW (S)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-11 N3776299 E463593	Latitude/Longitude: 34.12691 / -117.39482	Elevation (feet): 1,407

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
ROM06F0005 ROMICH, M. (MICHAEL BRANDMAN ASSOCIATES) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA (BURROW SITE) 2006-11-08



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 81901	EO Index: 82874
Key Quad: Devore (3411724)	Element Code: ABNSB10010
Occurrence Number: 1793	Occurrence Last Updated: 2011-03-01

Scientific Name: <i>Athene cucularia</i>	Common Name: burrowing owl
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDB Element Ranks:	BLM_S-Sensitive
Global: G4	CDFW_SSC-Species of Special Concern
State: S3	IUCN_LC-Least Concern
	USFWS_BCC-Birds of Conservation Concern

General Habitat: OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS, AND SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.	Micro Habitat: SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.
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Last Date Observed: 2007-05-15	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2007-05-15	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
0.2 MI NNE MIRO WAY AT N LINDEN AVE, RIALTO MUNICIPAL AIRPORT.

Detailed Location:
BLOCK CODE 3755-460 - LOCATION CODE A. MAPPED TO PROVIDED COORDINATES.

Ecological:
LOWLAND ELEVATION SUBREGION.

Threats:

General:
1 ADULT OBSERVED AND 1 BREEDING PAIR ESTIMATED TO OCCUR IN AREA ON 15 MAY 2007.

PLSS: T01N, R05W, Sec. 34, SW (S)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-11 N3776376 E463179	Latitude/Longitude: 34.12760 / -117.39930	Elevation (feet): 1,425

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
WIL09D0003 WILKERSON, R. & R. SIEGEL - DATABASE AND DATA DICTIONARY FOR IBP'S 2006-2007 STATEWIDE BURROWING OWL SURVEY 2009-09-29



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 81902	EO Index: 82875
Key Quad: Devore (3411724)	Element Code: ABNSB10010
Occurrence Number: 1794	Occurrence Last Updated: 2011-03-01

Scientific Name: <i>Athene cunicularia</i>	Common Name: burrowing owl
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDB Element Ranks:	BLM_S-Sensitive
Global: G4	CDFW_SSC-Species of Special Concern
State: S3	IUCN_LC-Least Concern
	USFWS_BCC-Birds of Conservation Concern

General Habitat: OPEN, DRY ANNUAL OR PERENNIAL GRASSLANDS, DESERTS, AND SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.	Micro Habitat: SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.
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Last Date Observed: 2009-11-04	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2009-11-04	Occurrence Rank: Excellent
Owner/Manager: SBD COUNTY	Trend: Unknown
Presence: Presumed Extant	

Location:
0.5 MI NNE WILSON AVE (SUMMIT AVE) AT SAN SEVAINE RD, FONTANA.

Detailed Location:
MAPPED TO PROVIDED COORDINATES.

Ecological:
ALONG THE SAN SEVAINE CREEK DRAINAGE. CONSISTS OF RIVERSIDIAN ALLUVIAL FAN SAGE SCRUB.

Threats:
THREATENED BY FLOOD CONTROL OPERATIONS.

General:
1 OWL OBSERVED AT LOOSE ROCK LEVEE ON THE EAST LEVEE.

PLSS: T01N, R06W, Sec. 22, SE (S)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-11 N3779635 E454934	Latitude/Longitude: 34.15667 / -117.48888	Elevation (feet): 1,590

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
ULR09F0004 ULRICH, B. (SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS) - FIELD SURVEY FORM FOR ATHENE CUNICULARIA 2009-11-04



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	24160	EO Index:	25918
Key Quad:	San Bernardino North (3411723)	Element Code:	ABPB08081
Occurrence Number:	451	Occurrence Last Updated:	1996-11-26

Scientific Name:	<i>Polioptila californica californica</i>	Common Name:	coastal California gnatcatcher
Listing Status:	Federal: Threatened	Rare Plant Rank:	
	State: None	Other Lists:	CDFW_SSC-Species of Special Concern NABCI_YWL-Yellow Watch List
CNDDB Element Ranks:	Global: G4G5T3Q		
	State: S2		

General Habitat:	Micro Habitat:
OBLIGATE, PERMANENT RESIDENT OF COASTAL SAGE SCRUB BELOW 2500 FT IN SOUTHERN CALIFORNIA.	LOW, COASTAL SAGE SCRUB IN ARID WASHES, ON MESAS AND SLOPES. NOT ALL AREAS CLASSIFIED AS COASTAL SAGE SCRUB ARE OCCUPIED.

Last Date Observed:	1990-09-06	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1994-XX-XX	Occurrence Rank:	None
Owner/Manager:	UNKNOWN	Trend:	Unknown
Presence:	Extirpated		

Location:
 NEAR THE CONFLUENCE OF LYTLE WASH AND CAJON WASH, BETWEEN EL RANCHO VERDE GOLF COURSE (IN RIALTO) AND MUSCOY.

Detailed Location:
Ecological:
 HABITAT CONSISTS OF MATURE ALLUVIAL SAGE SCRUB, ON A HIGH, STABILIZED BENCH IN THE CENTER OF THE WASH; DOMINANT SPECIES INCLUDE OPEN CHAMISE, BUCKWHEAT, MALOSMA, PRUNUS, AND YUCCA WHIPLEYI.

Threats:
 THIS SITE WAS DESTROYED IN 1994 BY GRAVEL MINING OPERATIONS.

General:
 A SINGLE BIRD WITH FEMALE/IMMATURE PLUMAGE WAS OBSERVED IN 1990. SITE WAS VISITED REPEATEDLY DURING FALL AND WINTER, BUT NO FURTHER CALIFORNIA GNATCATCHERS WERE OBSERVED; A PAIR OF BLUE-GRAY GNATCATCHERS WERE OBSERVED IN SPRING 1991.

PLSS: T01N, R05W (S)	Accuracy: 2/5 mile	Area (acres): 0
UTM: Zone-11 N3779644 E465859	Latitude/Longitude: 34.15717 / -117.37038	Elevation (feet): 1,440

County Summary:	Quad Summary:
San Bernardino	San Bernardino North (3411723), Devore (3411724)

Sources:

DAV96R0001	DAVIS, L.H., R.L. MCKERNAN & J.S. BURNS - CURRENT STATUS AND HISTORY OF THE CALIFORNIA GNATCATCHER (POLIOPTILA CALIFORNICA CALIFORNICA) IN SAN BERNARDINO COUNTY (DRAFT) 1996-XX-XX
WIL90F0014	WILLICK, D. - FIELD SURVEY FORM FOR POLIOPTILA CALIFORNICA CALIFORNICA 1990-09-06



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	30071	EO Index:	5019
Key Quad:	Devore (3411724)	Element Code:	ABPB08081
Occurrence Number:	463	Occurrence Last Updated:	2010-11-09

Scientific Name:	<i>Polioptila californica californica</i>	Common Name:	coastal California gnatcatcher
Listing Status:	Federal: Threatened	Rare Plant Rank:	
	State: None	Other Lists:	CDFW_SSC-Species of Special Concern NABCI_YWL-Yellow Watch List
CNDDB Element Ranks:	Global: G4G5T3Q		
	State: S2		

General Habitat:	Micro Habitat:
OBLIGATE, PERMANENT RESIDENT OF COASTAL SAGE SCRUB BELOW 2500 FT IN SOUTHERN CALIFORNIA.	LOW, COASTAL SAGE SCRUB IN ARID WASHES, ON MESAS AND SLOPES. NOT ALL AREAS CLASSIFIED AS COASTAL SAGE SCRUB ARE OCCUPIED.

Last Date Observed:	1993-03-16	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1993-03-16	Occurrence Rank:	None
Owner/Manager:	PVT	Trend:	Unknown
Presence:	Possibly Extirpated		

Location:
NORTH SIDE OF LYTLE CREEK WASH, 0.2 MILE SOUTH OF I-15 AND 1 MILE EAST OF NEALEYS CORNER, NW OF RIALTO.

Detailed Location:

Ecological:
1993: HABITAT CONSISTS OF RIVERSIDEAN SAGE SCRUB ON ALLUVIUM. VEGETATIVE COVER 60-70%; DOMINANT PLANTS INCLUDE SALVIA APIANA AND LOTUS SCOPARIUS, ON NEARLY LEVEL TOPOGRAPHY. 2009 AERIAL PHOTOS SHOW THAT THE SITE IS BEING DEVELOPED.

Threats:

General:
1 INDIVIDUAL OBSERVED ON 16 MARCH 1993. SOME DISTURBANCE FROM WILDFIRE WITHIN THE PAST 5 YEARS.

PLSS:	T01N, R05W, Sec. 08, NE (S)	Accuracy:	80 meters	Area (acres):	0
UTM:	Zone-11 N3783183 E461035	Latitude/Longitude:	34.18891 / -117.42287	Elevation (feet):	1,960

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
NEL93F0001 NELSON, S.G. (MICHAEL BRANDMAN ASSOCIATES) - FIELD SURVEY FORM FOR POLIOPTILA CALIFORNICA CALIFORNICA 1993-03-16



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 53459	EO Index: 53459
Key Quad: Devore (3411724)	Element Code: ABPB08081
Occurrence Number: 822	Occurrence Last Updated: 2008-06-12

Scientific Name: <i>Polioptila californica californica</i>	Common Name: coastal California gnatcatcher
Listing Status:	Rare Plant Rank:
Federal: Threatened	
State: None	Other Lists: CDFW_SSC-Species of Special Concern NABCI_YWL-Yellow Watch List
CNDDB Element Ranks:	
Global: G4G5T3Q	
State: S2	

General Habitat: OBLIGATE, PERMANENT RESIDENT OF COASTAL SAGE SCRUB BELOW 2500 FT IN SOUTHERN CALIFORNIA.	Micro Habitat: LOW, COASTAL SAGE SCRUB IN ARID WASHES, ON MESAS AND SLOPES. NOT ALL AREAS CLASSIFIED AS COASTAL SAGE SCRUB ARE OCCUPIED.
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Last Date Observed: 2000-01-20	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2000-01-20	Occurrence Rank: Unknown
Owner/Manager: SBD COUNTY RP	Trend: Unknown
Presence: Presumed Extant	

Location:
GLEN HELEN REGIONAL PARK, MIDWAY BETWEEN I-15 AND I-215, 3.5 MILES NNW OF RIALTO.

Detailed Location:
LONE MALE OBSERVED JUST SE OF WATER TANK AT BEGINNING OF FIRE ROAD. PAIR OBSERVED ON NORTH SIDE OF TRAIL ABOUT 0.75 MILE DOWN TRAIL FROM LONE MALE.

Ecological:

Threats:

General:

A LONE MALE AND 1 PAIR OBSERVED ON 20 JAN 2000.

PLSS: T01N, R05W, Sec. 03, SW (S)	Accuracy: non-specific area	Area (acres): 33
UTM: Zone-11 N3784345 E463360	Latitude/Longitude: 34.19947 / -117.39768	Elevation (feet): 2,000

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

BRA00U0002	CRAWFORD, S. (MICHAEL BRANDMAN ASSOCIATES) - CALIFORNIA GNATCATCHER OBSERVATION AT GLEN HELEN 2000-04-24
FWS07D0001	U.S. FISH AND WILDLIFE SERVICE-CARLSBAD - USFWS CARLSBAD SPECIAL STATUS SPECIES DATABASE, AUGUST 2007 VERSION 2007-08-09



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 71280	EO Index: 72184
Key Quad: Devore (3411724)	Element Code: ABPB08081
Occurrence Number: 877	Occurrence Last Updated: 2008-06-12

Scientific Name: <i>Polioptila californica californica</i>	Common Name: coastal California gnatcatcher
Listing Status:	Rare Plant Rank:
Federal: Threatened	
State: None	Other Lists: CDFW_SSC-Species of Special Concern NABCI_YWL-Yellow Watch List
CNDDB Element Ranks:	
Global: G4G5T3Q	
State: S2	

General Habitat: OBLIGATE, PERMANENT RESIDENT OF COASTAL SAGE SCRUB BELOW 2500 FT IN SOUTHERN CALIFORNIA.	Micro Habitat: LOW, COASTAL SAGE SCRUB IN ARID WASHES, ON MESAS AND SLOPES. NOT ALL AREAS CLASSIFIED AS COASTAL SAGE SCRUB ARE OCCUPIED.
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Last Date Observed: 1991-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1991-XX-XX	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
ADJACENT TO THE SOUTHEAST SIDE OF I-15 ON THE SOUTHWEST SIDE OF LYTLE CREEK WASH, SOUTH OF NEALEYS CORNER, RIALTO.

Detailed Location:
MAPPED IN RELATION TO FSW 500 M DIGITAL POLYGON; SITE NAME: FONTANA.

Ecological:
Threats:

General:
UNKNOWN NUMBER DETECTED IN 1991 BY UNKNOWN OBSERVER. SOURCE: SAN BERNARDINO COUNTY MUSEUM.

PLSS: T01N, R05W, Sec. 08, SW (S)	Accuracy: 1/5 mile	Area (acres): 0
UTM: Zone-11 N3782361 E460192	Latitude/Longitude: 34.18146 / -117.43198	Elevation (feet): 1,975

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
FWS07D0001 U.S. FISH AND WILDLIFE SERVICE-CARLSBAD - USFWS CARLSBAD SPECIAL STATUS SPECIES DATABASE, AUGUST 2007 VERSION 2007-08-09



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 71281	EO Index: 72185
Key Quad: Devore (3411724)	Element Code: ABPB08081
Occurrence Number: 878	Occurrence Last Updated: 2008-06-12

Scientific Name: <i>Polioptila californica californica</i>	Common Name: coastal California gnatcatcher
Listing Status:	Rare Plant Rank:
Federal: Threatened	
State: None	Other Lists: CDFW_SSC-Species of Special Concern NABCI_YWL-Yellow Watch List
CNDDDB Element Ranks:	
Global: G4G5T3Q	
State: S2	

General Habitat: OBLIGATE, PERMANENT RESIDENT OF COASTAL SAGE SCRUB BELOW 2500 FT IN SOUTHERN CALIFORNIA.	Micro Habitat: LOW, COASTAL SAGE SCRUB IN ARID WASHES, ON MESAS AND SLOPES. NOT ALL AREAS CLASSIFIED AS COASTAL SAGE SCRUB ARE OCCUPIED.
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Last Date Observed: 1997-05-01	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1997-05-01	Occurrence Rank: None
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Possibly Extirpated	

Location:
WEST SIDE OF ALDER AVE, BETWEEN CASA CRANDE DR. & SUMMIT AVE. (CARLOS AVE.), RIALTO.

Detailed Location:
MAPPED IN RELATION TO FWS DIGITAL POLYGONS: TWO 500 M DIAMETER, ONE 160 M DIAMETER; SITE NAMES MID-VALLEY SANITARY LANDFILL EXPANSION SITE, AND FONTANA.

Ecological:
PROBABLY EXTIRPATED. WAREHOUSE BUILDING AND PARKING LOT PRESENT IN 2007 AERIAL PHOTOS.

Threats:
DEVELOPMENT.

General:
2 DETECTED IN 1996 BY UNKNOWN OBSERVER. 2 DETECTED IN APR 1997 BY E. CARDIFF & G. BRADEN, AND 2 DETECTED ON 1 MAY 1997 BY UNKNOWN OBSERVER. SOURCES: SAN BERNARDINO COUNTY MUSEUM.

PLSS: T01N, R05W, Sec. 20, SE (S)	Accuracy: non-specific area	Area (acres): 103
UTM: Zone-11 N3779244 E461143	Latitude/Longitude: 34.15339 / -117.42152	Elevation (feet): 1,675

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
FWS07D0001 U.S. FISH AND WILDLIFE SERVICE-CARLSBAD - USFWS CARLSBAD SPECIAL STATUS SPECIES DATABASE, AUGUST 2007 VERSION 2007-08-09



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 84531	EO Index: 85551
Key Quad: Devore (3411724)	Element Code: ABPBW01114
Occurrence Number: 329	Occurrence Last Updated: 2011-12-22

Scientific Name: <i>Vireo bellii pusillus</i>	Common Name: least Bell's vireo
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Endangered	Other Lists: IUCN_NT-Near Threatened NABCI_YWL-Yellow Watch List
CNDDB Element Ranks:	
Global: G5T2	
State: S2	

General Habitat:	Micro Habitat:
SUMMER RESIDENT OF SOUTHERN CALIFORNIA IN LOW RIPARIAN IN VICINITY OF WATER OR IN DRY RIVER BOTTOMS; BELOW 2000 FT.	NESTS PLACED ALONG MARGINS OF BUSHES OR ON TWIGS PROJECTING INTO PATHWAYS, USUALLY WILLOW, BACCHARIS, MESQUITE.

Last Date Observed: 2007-07-17	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2007-07-30	Occurrence Rank: Good
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
SYCAMORE FLAT, 0.3 MI S OF GLEN HELEN PKWY AT HWY 15, ABOUT 2.7 MI W OF VERDEMONT.

Detailed Location:
MAPPED TO PROVIDED COORDINATES AND MAP.

Ecological:
DOMINANT PLANT SPECIES INCLUDED BLACK AND ARROYO WILLOW, MULEFAT AND COTTONWOOD. CANOPY HEIGHT WAS 5 METERS. SURFACE WATER OR SATURATED SOIL PRESENT AT SITE. SURROUNDING LAND WAS DEVELOPED. AREA WAS BEING PRESERVED BY DEVELOPER.

Threats:
POSSIBLY THREATENED BY DEVELOPMENT AND BROWN-HEADED COWBIRD PARASITISM.

General:
2 PAIRS AND 1 NEST OBSERVED 10 APR-22 JUN 2006. 2 BIRDS OBSERVED 10 APR 2007. 1 NEST OBSERVED 14 JUN 2007. 1 PAIR OBSERVED 25 JUN, 5 JUL & 17 JUL 2007. 4 PAIRS OF BROWN-HEADED COWBIRDS WERE OBSERVED IN THE AREA.

PLSS: T01N, R05W, Sec. 04, SW (S)	Accuracy: specific area	Area (acres): 18
UTM: Zone-11 N3784128 E461785	Latitude/Longitude: 34.19746 / -117.41477	Elevation (feet): 1,950

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:

BER06F0012	BERKLEY, J. (PCR SERVICES CORPORATION) - FIELD SURVEY FORM FOR VIREO BELLII PUSILLUS 2006-04-10
BER07F0002	BERKLEY, J. - FIELD SURVEY FORM FOR VIREO BELLII PUSILLUS 2007-07-30
BER07R0001	BERKLEY, J. & S. ANON (PCR SERVICES CORPORATION) - RESULTS OF FOCUSED LEAST BELL'S VIREO SURVEYS FOR LYTLE CREEK RANCH, SAN BERNARDINO COUNTY, CALIFORNIA 2007-12-14



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 84541	EO Index: 85561
Key Quad: Devore (3411724)	Element Code: ABPBW01114
Occurrence Number: 330	Occurrence Last Updated: 2011-12-21

Scientific Name: <i>Vireo bellii pusillus</i>	Common Name: least Bell's vireo
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Endangered	Other Lists: IUCN_NT-Near Threatened NABCI_YWL-Yellow Watch List
CNDDB Element Ranks:	
Global: G5T2	
State: S2	

General Habitat:	Micro Habitat:
SUMMER RESIDENT OF SOUTHERN CALIFORNIA IN LOW RIPARIAN IN VICINITY OF WATER OR IN DRY RIVER BOTTOMS; BELOW 2000 FT.	NESTS PLACED ALONG MARGINS OF BUSHES OR ON TWIGS PROJECTING INTO PATHWAYS, USUALLY WILLOW, BACCHARIS, MESQUITE.

Last Date Observed: 2007-07-31	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2007-07-31	Occurrence Rank: Good
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
ALONG CABLE CREEK, 1.25 MI OF ENE DEVORE (BM2022), 2.2 MI SW OF MONUMENT PEAK.

Detailed Location:
MAPPED TO PROVIDED MAP.

Ecological:
SOUTHERN SYCAMORE-ALDER RIPARIAN WOODLAND AND SOUTHERN WILLOW SCRUB. RECOVERING FROM 2003 FIRE AND FLOODS; WAS EXPECTED TO PROVIDE MORE SUITABLE HABITAT AS IT MATURES. HABITAT RUNS ALONG PROPOSED SECONDARY ACCESS ROAD.

Threats:
THREATENED BY DEVELOPMENT THAT MAY REMOVE 1 ACRE OF HABITAT.

General:
1 TERRITORY OBSERVED ON 16 & 31 JUL 2007.

PLSS: T02N, R05W, Sec. 26, SW (S)	Accuracy: non-specific area	Area (acres): 31
UTM: Zone-11 N3787299 E464706	Latitude/Longitude: 34.22616 / -117.38320	Elevation (feet): 2,200

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
ROM07R0002 ROMICH, M. (MICHAEL BRANDMAN ASSOCIATES) - LEAST BELL'S VIREO AND SOUTHWESTERN WILLOW FLYCATCHER FOCUSED SURVEY REPORT, MARTIN RANCH 2007-08-27



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 44035	EO Index: 44035
Key Quad: Devore (3411724)	Element Code: ABPBX97021
Occurrence Number: 3	Occurrence Last Updated: 2010-11-09

Scientific Name: <i>Artemisiospiza belli belli</i>	Common Name: Bell's sage sparrow
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_WL-Watch List
CNDDB Element Ranks:	USFWS_BCC-Birds of Conservation Concern
Global: G5T2T3	
State: S3	

General Habitat:	Micro Habitat:
NESTS IN CHAPARRAL DOMINATED BY FAIRLY DENSE STANDS OF CHAMISE. FOUND IN COASTAL SAGE SCRUB IN SOUTH OF RANGE.	NEST LOCATED ON THE GROUND BENEATH A SHRUB OR IN A SHRUB 6-18 INCHES ABOVE GROUND. TERRITORIES ABOUT 50 YDS APART.

Last Date Observed: 1997-05-24	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1997-05-24	Occurrence Rank: None
Owner/Manager: PVT	Trend: Unknown
Presence: Possibly Extirpated	

Location:
JUST NORTH OF LYTLE CREEK WASH & EAST OF I-15, 1 MILE EAST OF NEALYS CORNER, ABOUT 2 MILES SW OF DEVORE.

Detailed Location:
BIRDS OBSERVED DURING BREEDING SEASON AND IN AREA OF SUITABLE HABITAT.

Ecological:
1997: HABITAT CONSISTS OF SAGE SCRUB, DOMINATED BY WHITE SAGE. 2009 AERIAL PHOTOS SHOW THAT THE SITE IS BEING DEVELOPED.

Threats:
THREATENED BY DEVELOPMENT.

General:
17 BIRDS OBSERVED DURING A 5-DAY SURVEY PERIOD DURING MAY 1997.

PLSS: T01N, R05W, Sec. 08 (S)	Accuracy: non-specific area	Area (acres): 231
UTM: Zone-11 N3783051 E461312	Latitude/Longitude: 34.18773 / -117.41985	Elevation (feet): 920

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
RAM97F0015 RAMIREZ, JR., R.S. - FIELD SURVEY FORM FOR AMPHISPIZA BELLI BELLI (BELL'S SAGE SPARROW) 1997-05-20



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 41475	EO Index: 41475	
Key Quad: Cajon (3411734)	Element Code: AFCJB3705K	
Occurrence Number: 4	Occurrence Last Updated: 2003-02-04	

Scientific Name: <i>Rhinichthys osculus ssp. 3</i>	Common Name: Santa Ana speckled dace
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: AFS_TH-Threatened
CNDDDB Element Ranks:	CDFW_SSC-Species of Special Concern
Global: G5T1	USFS_S-Sensitive
State: S1	

General Habitat: HEADWATERS OF THE SANTA ANA AND SAN GABRIEL RIVERS. MAY BE EXTIRPATED FROM THE LOS ANGELES RIVER SYSTEM.	Micro Habitat: REQUIRES PERMANENT FLOWING STREAMS WITH SUMMER WATER TEMPS OF 17-20 C. USUALLY INHABITS SHALLOW COBBLE AND GRAVEL RIFFLES.
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Last Date Observed: 2000-09-20	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2000-09-20	Occurrence Rank: Fair
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
CAJON CREEK, CAJON WASH, KEENBROOK, ABOUT 4 MILES (NW) UP CANYON FROM DEVORE.

Detailed Location:
4 SAMPLE SECTIONS: #1, 1A, 2, & 3. STREAM BOTTOM CONSISTED OF VARYING PERCENTAGES OF BOLDERS, COBBLES, GRAVEL, & SAND. ANOTHER POSSIBLE SAMPLE SITE WAS SHOWN ON THE MAP, LABELED "1993 USFS", BUT NO DATA WAS GIVEN FOR THIS SITE.

Ecological:
LITTLE AQUATIC VEGETATION: WATERCRESS, ALGAE, MOSS. DOMINANT VEGETATION (PERCENTAGES CHANGE AT EACH LOCATION) IN ORDER OF DOMINANCE: MULEFAT, WILLOW, COTTONWOOD, MISC SHRUBS, HERBS AND GRASSES.

Threats:
RESIDENTIAL DEVELOPMENT. ILLIGAL DUMP SITE UPSTREAM OF SAMPLE SECTIONS. RAILROAD, THREAT OF TOXIC OR HAZARDOUS SPILL.

General:
9/20/00: 169 OBS IN SITE #2. 1996: 1776 DACE OBSERVED SITE #3; 1834 AT SITE #1A; 4715 AT SITE #1; 326 AT SITE #2. 1995: 86 OBSERVED SITE #1; 158 AT SITE #2. FISH PRESENT 1970 TO 1993.

PLSS: T02N, R06W, Sec. 13 (S)	Accuracy: specific area	Area (acres): 100
UTM: Zone-11 N3790173 E457693	Latitude/Longitude: 34.25182 / -117.45948	Elevation (feet): 2,500

County Summary: San Bernardino	Quad Summary: Devore (3411724), Cajon (3411734)
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Sources:

BUR00F0034	BURTON, C. - FIELD SURVEY FORM FOR RHINICHTHYS OSCULUS SSP. 3 (SANTA ANA SPECKLED DACE) 2000-09-20
ROD95F0001	RODRIGUEZ, R. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - 2 FIELD SURVEY FORMS FOR RHINICHTHYS OSCULUS (SANTA ANA SPECKLED DACE) 1995-08-01
ROD96F0002	RODRIGUEZ, R. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - 5 FIELD SURVEY FORMS FOR RHINICHTHYS OSCULUS (SANTA ANA SPECKLED DACE) 1996-10-24
SWI93R0001	SWIFT, C, ET AL. - THE STATUS AND DISTRIBUTION OF THE FRESHWATER FISHES OF SOUTHERN CALIFORNIA. BULLETIN OF THE SOUTHERN CALIFORNIA ACADEMY OF SCIENCE 92(3):101-167. 1993-12-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 41476	EO Index: 41476
Key Quad: Devore (3411724)	Element Code: AFCJB3705K
Occurrence Number: 5	Occurrence Last Updated: 2000-04-25

Scientific Name: <i>Rhinichthys osculus ssp. 3</i>	Common Name: Santa Ana speckled dace
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: AFS_TH-Threatened
CNDDB Element Ranks:	CDFW_SSC-Species of Special Concern
Global: G5T1	USFS_S-Sensitive
State: S1	

General Habitat: HEADWATERS OF THE SANTA ANA AND SAN GABRIEL RIVERS. MAY BE EXTIRPATED FROM THE LOS ANGELES RIVER SYSTEM.	Micro Habitat: REQUIRES PERMANENT FLOWING STREAMS WITH SUMMER WATER TEMPS OF 17-20 C. USUALLY INHABITS SHALLOW COBBLE AND GRAVEL RIFFLES.
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Last Date Observed: 1996-10-18	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1996-10-18	Occurrence Rank: Fair
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
LYTLE CREEK, MILLER NARROWS, 0.4 MILE WSW OF LYTLE CREEK RANGER STATION, 1 MILE SE OF SCOTLAND, ~5 MILES WNW OF DEVORE.

Detailed Location:
CHANNEL TYPE: 80% RUN AND 20% POOL. BOTTOM TYPE: BOULDERS, 10%; COBBLES, 30%; GRAVEL, 30%; SAND, 30%.

Ecological:
VEGETATION: MULEFAT, 70%; WILLOW, 30%.

Threats:
WATER DIVERSION BY SOUTHERN CALIFORNIA EDISON FOR POWERHOUSE, HEAVY PUBLIC USE.

General:
41 DACE OBSERVED IN OCTOBER, AND 17 DACE OBSERVED ON 11 JULY 1996. FISH PRESENT 1970 TO 1993.

PLSS: T02N, R06W, Sec. 26, NW (S)	Accuracy: specific area	Area (acres): 8
UTM: Zone-11 N3787972 E455140	Latitude/Longitude: 34.23186 / -117.48709	Elevation (feet): 2,780

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

ROD96F0003	RODRIGUEZ, R. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - 2 FIELD SURVEY FORMS FOR RHINICHTHYS OSCULUS (SANTA ANA SPECKLED DACE) 1996-10-18
SWI93R0001	SWIFT, C, ET AL. - THE STATUS AND DISTRIBUTION OF THE FRESHWATER FISHES OF SOUTHERN CALIFORNIA. BULLETIN OF THE SOUTHERN CALIFORNIA ACADEMY OF SCIENCE 92(3):101-167. 1993-12-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 68464	EO Index: 68724
Key Quad: San Bernardino South (3411713)	Element Code: AMACD04010
Occurrence Number: 23	Occurrence Last Updated: 2007-03-14

Scientific Name: <i>Nyctinomops femorosaccus</i>	Common Name: pocketed free-tailed bat
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	IUCN_LC-Least Concern
Global: G5	WBWG_M-Medium Priority
State: S3	

General Habitat: VARIETY OF ARID AREAS IN SOUTHERN CALIFORNIA; PINE-JUNIPER WOODLANDS, DESERT SCRUB, PALM OASIS, DESERT WASH, DESERT RIPARIAN, ETC.	Micro Habitat: ROCKY AREAS WITH HIGH CLIFFS.
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Last Date Observed: 1985-11-15	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1985-11-15	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
SAN BERNARDINO.

Detailed Location:
MAPPED ACCORDING TO LAT/LONG COORDINATES PROVIDED BY MANIS, WITH UNCERTAINTY OF 14,858 M (9.2 MILES).

Ecological:
Threats:

General:
1 FEMALE SPECIMEN (MVZ #181965) COLLECTED AT "SAN BERNARDINO" BY DENNY G. CONSTANTINE ON 15 NOV 1985.

PLSS: T01S, R04W, Sec. 04 (S)	Accuracy: 5 miles	Area (acres): 0
UTM: Zone-11 N3775328 E472422	Latitude/Longitude: 34.11843 / -117.29904	Elevation (feet): 1,200

County Summary:	Quad Summary:
San Bernardino	Redlands (3411712), San Bernardino South (3411713), Fontana (3411714), Harrison Mtn. (3411722), San Bernardino North (3411723), Devore (3411724)

Sources:
MAN05S0014 MAMMAL NETWORKED INFORMATION SYSTEM (MANIS) - PRINTOUT OF NYCTINOMOPS FEMOROSACCUS SPECIMEN RECORDS FROM MANIS. INCLUDES RECORDS FROM LACM, MVZ, FMNH AND KU. 2005-01-06



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 57348	EO Index: 57364
Key Quad: Devore (3411724)	Element Code: AMAEB03051
Occurrence Number: 53	Occurrence Last Updated: 2010-11-09

Scientific Name: <i>Lepus californicus bennettii</i>	Common Name: San Diego black-tailed jackrabbit
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern
CNDDB Element Ranks:	
Global: G5T3T4	
State: S3S4	

General Habitat:	Micro Habitat:
INTERMEDIATE CANOPY STAGES OF SHRUB HABITATS & OPEN SHRUB / HERBACEOUS & TREE / HERBACEOUS EDGES.	COASTAL SAGE SCRUB HABITATS IN SOUTHERN CALIFORNIA.

Last Date Observed: 2001-10-18	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2001-10-18	Occurrence Rank: None
Owner/Manager: PVT	Trend: Unknown
Presence: Possibly Extirpated	

Location:
 LOCATED IN FONTANA, BETWEEN HIGHLAND AVE & SUMMIT AVE, ABUTING THE GILFILLAN AIRPORT & INTERSTATE 15.

Detailed Location:

Ecological:

2001: DISTURBED/FORMER AGRICULTURAL LAND, MAY HAVE BEEN USED FOR OLIVE AND GRAPE PRODUCTION. 2009: AERIAL PHOTOS SHOW THAT THE SITE HAS BEEN COMPLETELY DEVELOPED.

Threats:
 AREA SURROUNDING SITE UNDERGOING SUBURBAN DEVELOPMENT. RESIDENTIAL HOUSING ON WEST, UNDEVELOPED LAND ON NORTH & EAST.

General:
 ONE INDIVIDUAL OBSERVED ON 18 OCT 2001.

PLSS: T01N, R06W, Sec. 26 (S)	Accuracy: non-specific area	Area (acres): 248
UTM: Zone-11 N3778248 E456577	Latitude/Longitude: 34.14423 / -117.47099	Elevation (feet): 1,500

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
 TER01F0002 TERACOR RESOURCE MANAGEMENT - FIELD SURVEY FORM FOR LEPUS CALIFORNICUS BENNETTII 2001-10-18



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 57768	EO Index: 58197
Key Quad: Devore (3411724)	Element Code: AMAFD01041
Occurrence Number: 47	Occurrence Last Updated: 2004-11-19

Scientific Name: <i>Perognathus longimembris brevinasus</i>	Common Name: Los Angeles pocket mouse
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T2	
State: S1S2	

General Habitat:	Micro Habitat:
LOWER ELEVATION GRASSLANDS AND COASTAL SAGE COMMUNITIES IN AND AROUND THE LOS ANGELES BASIN.	OPEN GROUND WITH FINE, SANDY SOILS. MAY NOT DIG EXTENSIVE BURROWS, HIDING UNDER WEEDS AND DEAD LEAVES INSTEAD.

Last Date Observed: 2002-03-30	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2002-03-30	Occurrence Rank: Good
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
 ABUTTING INTERSTATE 215 ON SW, ABOUT 1.25 MILES WSW OF DEVORE.

Detailed Location:
 CABLE CREEK RUNS THROUGH SW PORTION OF SITE.

Ecological:
 HABITAT CONSISTS OF DENSE RIVERSIDEAN SAGE SCRUB, DENSE MATURE PHASE ALLUVIAL FAN SAGE SCRUB, RIPARIAN SPECIES, AGRICULTURAL, RUDERAL/DISTURBED FIELDS, EUCALYPTUS GROVE. OPEN PATCHES ARE WELL COVERED WITH EXOTIC SPECIES.

Threats:
 THREATENED BY THE PROXIMITY OF I-215 AND RESIDENTIAL DEVELOPMENT.

General:
 18 INDIVIDUALS TRAPPED WHILE SURVEYING PROPOSED SECONDARY ACCESS ROUTE FOR MARTIN RANCH PROJECT ON 25-30 MAR 2002. TWO TRAP LINES OF 100 AND 120 TRAPS WERE SET (FOR A TOTAL OF 1100 TRAP-NIGHTS).

PLSS: T02N, R05W, Sec. 35 (S)	Accuracy: non-specific area	Area (acres): 82
UTM: Zone-11 N3786214 E464855	Latitude/Longitude: 34.21638 / -117.38154	Elevation (feet): 2,000

County Summary:	Quad Summary:
San Bernardino	San Bernardino North (3411723), Devore (3411724)

Sources:

DOD02F0012	DODD, S. (S.C. DODD BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR PEROGNATHUS LONGIMEMBRIS BREVINASUS 2002-05-30
DOD02R0008	DODD, S. (S.C. DODD BIOLOGICAL CONSULTING) - RESULTS OF A LIVE-TRAPPING SURVEY FOR THE FEDERALLY-LISTED ENDANGERED SAN BERNARDINO KANGAROO RAT ON THE SECONDARY ACCESS ROUTE FOR THE PROPOSED MARTIN RANCH PROJECT. 2002-04-02



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: A9814	EO Index: 33010
Key Quad: San Bernardino North (3411723)	Element Code: AMAFD03143
Occurrence Number: 2	Occurrence Last Updated: 2018-06-27

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2017-11-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2017-11-XX	Occurrence Rank: Good
Owner/Manager: PVT-CALMAT PROPERTIES	Trend: Unknown
Presence: Presumed Extant	

Location:
AT THE CONFLUENCE OF CAJON AND LYTLE CREEK WASHES, BETWEEN MUSCOY AND RIALTO NORTH OF HWY 210.

Detailed Location:
MAPPED TO COORDINATES AND LOCATIONS WHEN PROVIDED FOR 1994-2015 DETECTIONS.

Ecological:
ALLUVIAL FAN SAGE SCRUB ON RAISED BENCHES OF LAND ABOVE THE ACTIVE DRAINAGE BOTTOM & EXCAVATED PORTIONS OF DRAINAGE. AT LEAST PART OF OCCURRENCE PROTECTED AS CONSERVATION BANK. DISTURBANCE FROM MINING, SURROUNDING DEVELOPMENT, DIRT ROADS.

Threats:
THREATENED BY EXPANSION OF SAND & GRAVEL MINING (1994).

General:
DETECTED, 1987-96. 143 CAPTURES, JUN 1994. AT LEAST 10 CAPTURED & 15 RELOCATED HERE, 1998. 22 CAPTURES IN 1999, 36 IN 2000, 22 IN 2001, 5 IN 2003, 3 IN 2004, 55 IN 2005, 83 IN 2006, 68 IN 2007, 44 IN 2008, 4 IN 2009, 4 IN 2015, 18 IN 2017.

PLSS: T01N, R05W, Sec. 23 (S)	Accuracy: non-specific area	Area (acres): 487
UTM: Zone-11 N3779664 E465667	Latitude/Longitude: 34.15734 / -117.37246	Elevation (feet): 1,464

County Summary: San Bernardino	Quad Summary: San Bernardino North (3411723), Devore (3411724)
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Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Sources:

BRA01U0001	BRADEN, G. - EMAIL EXCHANGE BETWEEN G. BRADEN, T. MCKINNEY, AND S. LOVE ON ONGOING TRAPPING OF SAN BERNARDINO KANGAROO RATS. 2001-XX-XX
BRY09D0001	BRYLSKI, P. - SCIENTIFIC COLLECTING REPORT OF SPECIMENS CAPTURED OR SALVAGED [SC-008469]. 2009-XX-XX
BRY09R0001	BRYLSKI, P. - SAN BERNARDINO KANGAROO RAT LIVE-TRAPPING SURVEY SOUTHERN CALIFORNIA EDISON ARROWHEAD PROJECT. 2009-07-28
JER15U0001	JERICO SYSTEMS - 45-DAY PRESENCE/ABSENCE SURVEY REPORT FOR LYTLE CREEK TURN OUT PROJECT SAN BERNARDINO KANGAROO RAT. 2015-09-07
LAR05R0001	LARRY MUNSEY INTERNATIONAL - DRAFT REPORT OF PRESENCE/ABSENCE TRAPPING SURVEY FOR SAN BERNARDINO KANGAROO RAT ON APPROXIMATE 90-ACRE SITE COMMUNITY OF MUSCOY. 2005-06-XX
MCK15F0006	MCKERNAN, M. - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMI PARVUS 2015-10-11
MCK15F0007	MCKERNAN, M. - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMI PARVUS 2015-10-11
MCK15F0008	MCKERNAN, M. - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMI PARVUS 2015-10-11
MCK15U0001	MCKERNAN, M. - SAN BERNARDINO KANGAROO RAT PRESENCE/ABSENCE TRAPPING SURVEYS, LYTLE CREEK CONSERVATION BANK, SAN BERNARDINO COUNTY 2015-11-XX
MCK97U0002	MCKERNAN, R. - THE STATUS AND KNOWN DISTRIBUTION OF THE SAN BERNARDINO KANGAROO RAT (DIPODOMYS MERRIAMI PARVUS): FIELD SURVEYS CONDUCTED BETWEEN 1987 AND 1996 1997-09-XX
MEA06U0002	MEAD, P. (SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS) - U.S. FISH AND WILDLIFE SERVICE 45-DAY SURVEY REPORT. 2006-05-13
MEANDF0003	MEAD, P. (SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS) - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMI PARVUS XXXX-05-13
MON04U0001	MONTGOMERY, S. (SJM BIOLOGICAL CONSULTANTS) - RESULTS OF FOCUSED SAN BERNARDINO KANGAROO RAT SURVEYS ON THE SANTA ANA RIVER WATER RIGHT APPLICATION FOR SUPPLEMENTAL WATER SUPPLY PROJECT CONSTRUCTION SITES. 2004-08-26
OFA04R0002	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - SAN BERNARDINO MERRIAM'S KANGAROO RAT SURVEY, LYTLE CREEK TURNOUT PROJECT, RIALTO, SAN BERNARDINO COUNTY, CA 2004-10-14
OFA07R0002	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - LIVE-TRAPPING SURVEY FOR THE SAN BERNARDINO MERRIAM'S KANGAROO RAT AT LYTLE CREEK RANCH. 2007-08-31
OFA07U0001	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - LIVE TRAPPING SURVEY AT LYTLE CREEK RANCH PROJECT SITE. 2007-11-12
OFA94F0001	O'FARRELL, M.J. - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMI PARVUS 1994-06-XX
OFA94R0001	O'FARRELL, M.J. - UNPUBLISHED REPORT ON THE SURVEY FOR SAN BERNARDINO MERRIAM'S KANGAROO RAT ON A CALMAT PROJECT SITE. 1994-06-15
OFA95U0001	O'FARRELL, M.J. - SCIENTIFIC COLLECTING PERMIT REPORT FOR SMALL MAMMALS TRAPPED DURING 1993-94. 1995-04-07
OFA98U0002	O'FARRELL, M. - INFORMATION SUMMARY, SAN BERNARDINO MERRIAM'S KANGAROO RAT TRAP OUT AND TRANSLOCATION - CALMAT AREA "M" SHORT-TERM MONITORING 1998-09-04
OFA99F0004	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMI PARVUS 1999-08-12
OFA99U0003	O'FARRELL, M. - SCIENTIFIC COLLECTING REPORT OF SPECIMENS COLLECTED, PERMIT #802010-01 1999-02-26
PBS09R0001	PBS&J (PBS&J) - REVISTED SAN BERNARDINO KANGAROO RAT PRESENCE/ABSENCE TRAPPING SURVEYS ON THE PROPOSED BBC CONSERVATION SITE, RIALTO. 2009-01-28
WAN18D0001	WANG, T. - EXCEL TABLE OF SAN BERNARDINO KANGAROO RAT DETECTION DATA, 2012-2017 2018-06-18



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 45085	EO Index: 45085
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 5	Occurrence Last Updated: 2018-05-25

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2000-11-18	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2000-11-18	Occurrence Rank: Unknown
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
NE OF THE INTERSECTION OF RIVERSIDE AVENUE AND SIERRA AVENUE, SOUTH OF I-15, RIALTO.

Detailed Location:
BOTH CAPTURES WERE MADE EAST OF THE ELEVATED DIRT ROAD, EAST OF THE SCE TRANSMISSION TOWER.

Ecological:
HABITAT CONSISTS OF RIVERSIDEAN ALLUVIAL FAN SCRUB, DOMINATED BY CHAMISE (ADENSOTOMA FASCICULATUM). SAN DIEGO POCKET MOUSE WAS ALSO CAPTURED AT THIS SITE.

Threats:
General:
1 FEMALE WAS CAPTURED ON 3 OCCASIONS, 14-15 NOV 2000, AND 1 MALE WAS CAPTURED ON THE MORNING OF 18 NOV 2000 (1000 TRAPNIGHTS OF EFFORT).

PLSS: T01N, R05W, Sec. 8, SW (S)	Accuracy: 80 meters	Area (acres): 5
UTM: Zone-11 N3782517 E460026	Latitude/Longitude: 34.18286 / -117.4338	Elevation (feet): 2,004

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
LSA00U0001 LSA ASSOCIATES, INC. - MEMO FROM RICHARD ERICKSON AND LEO SIMONE TO USFWS REGARDING RIALTO SAN BERNARDINO KANGAROO RAT SURVEY, NOVEMBER 2000. 2000-11-27



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 71076	EO Index: 71995	
Key Quad: Devore (3411724)	Element Code: AMAFD03143	
Occurrence Number: 27	Occurrence Last Updated: 2018-07-16	

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2013-08-01	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2013-08-01	Occurrence Rank: Good
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
LYTLE CREEK WASH FROM ABOUT 0.3 MI UPSTREAM (NW) TO 1.2 MI DOWNSTREAM (SE) OF I-15, MUSCUIPIABE.

Detailed Location:
INCLUDES LEVEE EXTENSION SITES (N OF I-15 & ADJACENT TO SUNWEST PROPERTY AT S END OF OCC) & LYTLE CREEK SBKR CONSERVATION AREA (S OF I-15). THE LATTER IS A 217.2-AC MITIGATION SITE FOR THE CONSTRUCTION OF SUBDIVISIONS ON N SIDE OF WASH.

Ecological:
WASH W/ISLANDS OF ALLUVIAL FAN/RIVERSIDEAN SAGE SCRUB. CONSERVATION AREA INCLUDED UNTREATED CONTROL PLOTS & TREATED MITIGATION PLOTS (SHRUBS/GRASS REMOVED); SBKR FAVORED TREATED PLOTS. BAD FIRES IN 2003, BAD FLOODING IN 2004-05.

Threats:
PROPOSED EXTENSION OF LYTLE CREEK LEVEE (1998). FIRE (2003). FLOODING (2004-05). ADJACENT TO MINING & DEVELOPMENT.

General:
DETECTED, 1987-96. 11 DETECTED, 1997. 15+ TRAPPED IN 1998. 3 IN 2000. 34 IN 2002. 106 IN 2003 (INCL. 4 KILLED BY FIRE). 163 IN 2004. 26 IN 2005. 13 IN 2006. 68 IN 2007. 30 IN 2008. 65 IN 2009. 62 IN 2010. 31 IN 2011. 18 IN 2012. 14 IN 2013.

PLSS: T01N, R05W, Sec. 17 (S)	Accuracy: non-specific area	Area (acres): 309
UTM: Zone-11 N3782042 E461253	Latitude/Longitude: 34.17862 / -117.42046	Elevation (feet): 1,892

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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- Sources:**
- BAI09F0015 BAILEY, T. - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMII PARVUS 2009-08-12
 - BAI10F0001 BAILEY, T. - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMII PARVUS 2010-09-13
 - BAI10R0001 BAILEY, T. (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - MEMORANDUM OF UNDERSTANDING FOR STEPHENS' KANGAROO RAT, SAN BERNARDINO KANGAROO RAT, MORRO BAY KANGAROO RAT, LOS ANGELES POCKET MOUSE, AND MOHAVE GROUND SQUIRREL-2010 ANNUAL REPORT 2010-10-25
 - BAI11F0001 BAILEY, T. - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMII PARVUS 2011-09-05
 - BAI12F0001 BAILEY, T. - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMII PARVUS 2012-05-18
 - BAI12F0002 BAILEY, T. - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMII PARVUS 2012-08-25
 - BAI13F0001 BAILEY, T. - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMII PARVUS 2013-08-01
 - BAI13F0002 BAILEY, T. - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMII PARVUS 2013-04-08
 - BRA01U0001 BRADEN, G. - EMAIL EXCHANGE BETWEEN G. BRADEN, T. MCKINNEY, AND S. LOVE ON ONGOING TRAPPING OF SAN BERNARDINO KANGAROO RATS. 2001-XX-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



KIR98R0004	KIRTLAND BIOLOGICAL SERVICES - PRESENCE/ABSENCE TRAPPING STUDIES FOR THE SAN BERNARDINO KANGAROO RAT, CAJON FIBRE OPTICS, SAN BERNARDINO COUNTY, CALIFORNIA. 1998-07-25
MCK97U0002	MCKERNAN, R. - THE STATUS AND KNOWN DISTRIBUTION OF THE SAN BERNARDINO KANGAROO RAT (DIPODOMYS MERRIAM PARVUS): FIELD SURVEYS CONDUCTED BETWEEN 1987 AND 1996 1997-09-XX
MON98R0003	MONTGOMERY, S. (SJM BIOLOGICAL CONSULTANTS) - RESULTS OF A LIVE-TRAPPING SURVEY FOR THE SAN BERNARDINO MERRIAM'S KANGAROO RAT ON THE LYTLE CREEK PROJECT IN THE COUNTY OF SAN BERNARDINO 1998-07-01
MON99U0001	MONTGOMERY, S. (SJM BIOLOGICAL CONSULTANTS) - SURVEY RESULTS SUMMARY SHEET 1999-03-05
OFA02R0001	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - LIVE-TRAPPING SURVEY FOR SAN BERNARDINO MERRIAM'S KANGAROO RAT, DIPODOMYS MERRIAM PARVUS, AT THE LYTLE CREEK NORTH PROJECT SITE 2002-12-09
OFA04F0005	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR DIPODOMYS MERRIAM PARVUS 2004-06-23
OFA04F0007	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR DIPODOMYS MERRIAM PARVUS 2004-09-21
OFA04R0001	O'FARRELL, M.J. (O'FARRELL BIOLOGICAL CONSULTING) - RESTORATION AND ENHANCEMENT OF HABITAT FOR THE SBKR CONSERVATION AREA, LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, SAN BERNARDINO COUNTY, CALIFORNIA, FINAL ANNUAL REPORT FOR 2003. 2004-02-XX
OFA05R0001	O'FARRELL, M.J. (O'FARRELL BIOLOGICAL CONSULTING) - RESTORATION AND ENHANCEMENT OF HABITAT FOR THE SBKR CONSERVATION AREA, LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, SAN BERNARDINO COUNTY, CALIFORNIA, FINAL ANNUAL REPORT FOR 2004. 2005-01-XX
OFA06R0001	O'FARRELL, M.J. (O'FARRELL BIOLOGICAL CONSULTING) - RESTORATION AND ENHANCEMENT OF HABITAT FOR THE SBKR CONSERVATION AREA, LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, SAN BERNARDINO COUNTY, CALIFORNIA, FINAL ANNUAL REPORT FOR 2005. 2006-08-XX
OFA07F0002	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR DIPODOMYS MERRIAM PARVUS 2007-09-17
OFA07R0001	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - RESTORATION AND ENHANCEMENT OF HABITAT FOR THE SBKR CONSERVATION AREA, LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, SAN BERNARDINO COUNTY, CALIFORNIA, FINAL ANNUAL REPORT FOR 2006 2007-02-XX
OFA07R0002	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - LIVE-TRAPPING SURVEY FOR THE SAN BERNARDINO MERRIAM'S KANGAROO RAT AT LYTLE CREEK RANCH. 2007-08-31
OFA07U0001	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - LIVE TRAPPING SURVEY AT LYTLE CREEK RANCH PROJECT SITE. 2007-11-12
OFA08R0001	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - RESTORATION AND ENHANCEMENT OF HABITAT FOR THE SBKR CONSERVATION AREA, LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, SAN BERNARDINO COUNTY, CALIFORNIA, FINAL ANNUAL REPORT FOR 2007 2008-01-XX
OFA09R0001	O'FARRELL, M.J. (O'FARRELL BIOLOGICAL CONSULTING) - RESTORATION AND ENHANCEMENT OF HABITAT FOR THE SBKR CONSERVATION AREA, LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, SAN BERNARDINO COUNTY, CALIFORNIA, FINAL ANNUAL REPORT FOR 2008 2009-05-XX
OFA10U0001	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - EMAIL FROM M. O'FARRELL REGARDING SBKR TRAPPING AT LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, FROM 2003 TO 2007. 2010-02-03
OFA11R0001	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - RESTORATION AND ENHANCEMENT OF HABITAT FOR THE SBKR CONSERVATION AREA, LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, SAN BERNARDINO COUNTY, CALIFORNIA, FINAL ANNUAL REPORT FOR 2010 2011-03-XX
PCR00R0002	RAMIREZ, R. (PCR SERVICES CORPORATION) - SAN BERNARDINO KANGAROO RAT PROPOSED LEVEE EXTENSION TRAPPING PROGRAM. LYTLE CREEK NORTH VILLAGE PROPERTY, SAN BERNARDINO COUNTY, CALIFORNIA. 2000-07-XX
RAM97R0001	RAMIREZ, R. (PLANNING CONSULTANTS RESEARCH) - POPULATION DENSITIES OF THE SAN BERNARDINO KANGAROO RAT AND LOS ANGELES POCKET MOUSE FOR THE LYTLE CREEK NORTH VILLAGE PROJECT 1997-09-06
SJM98R0001	SJM BIOLOGICAL CONSULTANTS - RESULTS OF A PRESENCE/ABSENCE TRAPPING STUDY FOR THE SAN BERNARDINO KANGAROO RAT FOR THE NORTHERN EXTENSION OF THE NORTH LEVEE ON THE LYTLE DEVELOPMENT COMPANY PROPERTY 1998-08-30



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 71080	EO Index: 71998
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 28	Occurrence Last Updated: 2018-07-26

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2002-02-17	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2005-08-14	Occurrence Rank: Unknown
Owner/Manager: SBD COUNTY	Trend: Unknown
Presence: Presumed Extant	

Location:
SAN SEVAINE BASIN, 0.40 MI NNW OF THE INTERSECTION OF INTERSTATE 15 AND CALIFORNIA STATE HIGHWAY 30.

Detailed Location:
MAPPED TO LOCATIONS GIVEN FOR 2002 DETECTIONS IN BASIN #5. 2004-2005 SURVEYS IMMEDIATELY TO N AND SW; INCLUDED SAN SEVAINE BASINS #4 & 5.

Ecological:
HABITAT CONSISTS OF ALLUVIAL FAN SAGE SCRUB (AFSS) AND HIGHLY DISTURBED SUBSTRATE, NEARLY DEVOID OF VEGETATION. SBKR WERE CAUGHT IN HABITAT WITH A VEGETATION COVER DOMINATED BY CALIFORNIA BUCKWHEAT.

Threats:
AIR PHOTOS INDICATE DISTURBANCE FROM FLOOD CONTROL PROJECT CONSTRUCTION AND MAINTENANCE.

General:
1 SCROTAL ADULT MALE & 1 NON-LACTATING ADULT FEMALE TRAPPED IN 500 TRAPNIGHTS, 16-17 FEB 2002. NONE DETECTED AT BASIN #4 IN 600 TRAPNIGHTS, 1-6 AUG; OR N OF BASINS IN DEC 2004. NONE DETECTED AT BASIN #5 IN 500 TRAPNIGHTS, 9-14 AUG 2005.

PLSS: T01N, R06W, Sec. 27 (S)	Accuracy: 1/10 mile	Area (acres): 0
UTM: Zone-11 N3777841 E453819	Latitude/Longitude: 34.14044 / -117.50089	Elevation (feet): 1,440

County Summary: San Bernardino	Quad Summary: Devore (3411724), Cucamonga Peak (3411725)
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Sources:

KIN05R0001	KINDT, K. & T. FAY (SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS) - 2004 REPORT FOR SMALL MAMMAL TRAPPING FOR THE SAN SEVAINE CREEK WATER PROJECT MITIGATION MEASURES. 2005-04-05
LAW02R0001	LAWREY, S. (SAN BERNARDINO COUNTY) - PRESENCE/ABSENCE TRAPPING STUDY FOR THE SAN BERNARDINO KANGAROO RAT IN SAN SAVAIN BASIN NO. 5, SAN BERNARDINO COUNTY, CALIFORNIA. 2002-02-XX
ROM07U0001	ROMICH, K. (SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS) - EMAILS AND TABLE REGARDING SAN BERNARDINO KANGAROO RAT TRAPPING LOCATIONS. 2007-08-14



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 71081	EO Index: 71999
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 29	Occurrence Last Updated: 2008-03-26

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2002-04-28	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2002-04-28	Occurrence Rank: Unknown
Owner/Manager: SBD COUNTY	Trend: Unknown
Presence: Presumed Extant	

Location:
SAN SEVAINE DRAINAGE, ABOUT 0.75 MILE NNE OF THE INTERSECTION OF I-15 AND HWY 30.

Detailed Location:
BASIN 3 OF THE SAN SEVAINE DRAINAGE.

Ecological:
SITE IS USED AS WATER STORAGE AND PERCOLATION BASIN. OTHER SENSITIVE SPECIES IN AREA: CHAETODIPUS FALLAX FALLAX AND NEOTOMA LEPIDA INTERMEDIA.

Threats:
BASIN IS SCHEDULED FOR IMPROVEMENT TO INCREASE WATER STORAGE AND PERCOLATION CAPACITY.

General:
2 CAPTURES IN 1 OUT OF 5 TRANSECTS (975 TRAP NIGHTS) FROM 23-28 APR 2002.

PLSS: T01N, R06W, Sec. 27 (S)	Accuracy: non-specific area	Area (acres): 16
UTM: Zone-11 N3778438 E454739	Latitude/Longitude: 34.14586 / -117.49094	Elevation (feet): 1,470

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
NRA02R0003 NATURAL RESOURCES ASSESSMENT, INC. - SAN BERNARDINO KANGAROO RAT PRESENCE/ABSENCE TRAPPING STUDIES FOR THE SAN SEVAINE BASINS 1-4 IMPROVEMENT PROJECT. 2002-07-23



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 71094	EO Index: 72006
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 31	Occurrence Last Updated: 2008-03-27

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2002-01-11	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2002-01-11	Occurrence Rank: Fair
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
SOUTHWEST OF THE INTERSECTION OF WEST CASA GRANDE DR AND SIERRA AVE.

Detailed Location:

Ecological:
HABITAT CONSISTS OF RIVERSIDEAN ALLUVIAL FAN SCRUB.

Threats:

General:
3 INDIVIDUALS CAPTURED DURING 2 TRAPPING SESSIONS: 2-7 DEC 2001 AND 6-11 JAN 2002.

PLSS: T01N, R05W, Sec. 19 (S)	Accuracy: non-specific area	Area (acres): 61
UTM: Zone-11 N3779547 E459437	Latitude/Longitude: 34.15606 / -117.44004	Elevation (feet): 1,750

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
BRA02R0004 MICHAEL BRANDMAN ASSOCIATES - SAN BERNARDINO KANGAROO RAT PRESENCE/ABSENCE TRAPPING STUDIES ON NORTH FONTANA PROPERTIES. 2002-02-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 78094	EO Index: 78975
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 37	Occurrence Last Updated: 2018-06-26

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2004-07-31	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2004-07-31	Occurrence Rank: None
Owner/Manager: PVT-LYTL E DEVELOPMENT	Trend: Unknown
Presence: Possibly Extirpated	

Location:
LYTLE CREEK NORTH COMMUNITY, 0.6 MI ESE OF I-15 AND VERDEMONT RANCH ROAD JUNCTION, ABOUT 2.4 MILES SSW OF DEVORE.

Detailed Location:
ALONG AND TO THE NORTH OF VERDEMONT RANCH ROAD. MAPPED ACCORDING TO PROVIDED MAPS.

Ecological:
REMOVAL TRAPPING CONDUCTED PRIOR TO RESIDENTIAL DEVELOPMENT. WHOLE AREA SURVEYED; SBKR WERE ONLY FOUND IN THIS 21 ACRE PLOT. 2009: AERIAL IMAGE SHOWS THAT AREA HAS BEEN GRADED FOR DEVELOPMENT & THE SPECIES IS LIKELY EXTIRPATED FROM SITE.

Threats:
DEVELOPMENT.

General:
6 TRAPPED, NOV 2002. REMOVAL TRAPPING CONDUCTED 24-31 JUL 2004; 1 ADULT MALE, 3 MALE & 2 FEMALE JUVENILES WERE RELOCATED TO THE 24-ACRE MITIGATION PLOT TO THE SOUTH (OCC #27).

PLSS: T01N, R05W, Sec. 8, E (S)	Accuracy: non-specific area	Area (acres): 31
UTM: Zone-11 N3782829 E461284	Latitude/Longitude: 34.18572 / -117.42016	Elevation (feet): 1,928

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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- Sources:**
- OFA02R0001 O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - LIVE-TRAPPING SURVEY FOR SAN BERNARDINO MERRIAM'S KANGAROO RAT, DIPODOMYS MERRIAMII PARVUS, AT THE LYTLE CREEK NORTH PROJECT SITE 2002-12-09
 - OFA05R0001 O'FARRELL, M.J. (O'FARRELL BIOLOGICAL CONSULTING) - RESTORATION AND ENHANCEMENT OF HABITAT FOR THE SBKR CONSERVATION AREA, LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, SAN BERNARDINO COUNTY, CALIFORNIA, FINAL ANNUAL REPORT FOR 2004. 2005-01-XX
 - OFA10U0001 O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - EMAIL FROM M. O'FARRELL REGARDING SBKR TRAPPING AT LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, FROM 2003 TO 2007. 2010-02-03



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 78137	EO Index: 79028
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 42	Occurrence Last Updated: 2018-08-14

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2002-03-12	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2002-03-12	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:

CAJON WASH, ABOUT 1.25-1.6 MI SE OF THE I-15/I-215 INTERCHANGE, GLEN HELEN REGIONAL PARK AREA, SE OF DEVORE.

Detailed Location:

SPECIMENS FROM "CAJON WASH," "DEVORE, 0.5 MI S OF" "6 MI N SAN BERNARDINO" OR SIMILAR ATTRIBUTED HERE. 1987-96 DETECTIONS IN NE1/4 SEC 3. MAPPED TO CENTERPOINTS GIVEN FOR 2000-01 DETECTIONS AT TRAP SITE "GH" & LEVEL 3 FIBER OPTICS SITE.

Ecological:

GOOGLE EARTH AIR PHOTOS SHOW THAT THE VICINITY OF THE 12 JUN 2000 DETECTIONS HAS BEEN DEVELOPED.

Threats:

DEVELOPMENT HAS REDUCED THE AMOUNT OF AVAILABLE HABITAT.

General:

14 COLLECTED IN 1908; 37 IN 1931; 3 IN 1932; 1 IN 1939 & 1951; 2 IN 1956. DETECTED IN VICINITY, 1987-1996. UP TO 33 CAUGHT & RELEASED MAR-DEC; 7 DETECTED ON 12 JUN 2000. UP TO 17 TRAPPED JAN-NOV 2001. 14 TRAPPED JAN-MAR 2002.

PLSS: T01N, R05W, Sec. 3 (S)	Accuracy: non-specific area	Area (acres): 65
UTM: Zone-11 N3785302 E463884	Latitude/Longitude: 34.20813 / -117.39204	Elevation (feet): 1,931

County Summary:

San Bernardino

Quad Summary:

Devore (3411724)



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Sources:

ANO32S0012	ANONYMOUS - SBMNH #7040 COLLECTED FROM CAJON WASH. 1932-04-19
BRA01U0001	BRADEN, G. - EMAIL EXCHANGE BETWEEN G. BRADEN, T. MCKINNEY, AND S. LOVE ON ONGOING TRAPPING OF SAN BERNARDINO KANGAROO RATS. 2001-XX-XX
CAR03R0001	CARTER, K. & G. BRADEN (SAN BERNARDINO COUNTY MUSEUM) - SURVEY RESULTS FOR THE SAN BERNARDINO KANGAROO RAT IN THE SAN BERNARDINO NATIONAL FOREST (LYTLE CREEK, CAJON CREEK, BAUTISTA CANYON) WITH SUPPLEMENTAL SURVEY RESULTS. 2003-02-XX
HAR56S0037	HARDY, R. - CSULB #1630 COLLECTED 6 MILES NORTH OF SAN BERNARDINO 1956-10-28
HAR56S0038	HARDY, R. - CSULB #2392 COLLECTED 6 MILES NORTH OF SAN BERNARDINO ON US 91 1956-10-28
MCK97U0002	MCKERNAN, R. - THE STATUS AND KNOWN DISTRIBUTION OF THE SAN BERNARDINO KANGAROO RAT (DIPODOMYS MERRIAMI PARVUS): FIELD SURVEYS CONDUCTED BETWEEN 1987 AND 1996 1997-09-XX
OFA00U0004	O'FARRELL, M. - INFORMATION SUMMARY, LEVEL 3 FIBER OPTICS PROJECT. 2000-07-09
SWA08S0013	SWARTH, H. - MVZ #2540, 2541, 2542, 2543 COLLECTED FROM CAJON WASH, SAN BERNARDINO. 1908-10-02
SWA08S0014	SWARTH, H. - MVZ #2545 COLLECTED FROM CAJON WASH, SAN BERNARDINO. 1908-10-04
SWA08S0015	SWARTH, H. - MVZ #2546 & 2547 COLLECTED FROM CAJON WASH, SAN BERNARDINO 1908-10-05
SWA08S0016	SWARTH, H. - MVZ #2544 COLLECTED FROM CAJON WASH, SAN BERNARDINO. 1908-10-03
VAU51S0001	VAUGHAN, T. - KU #45269 COLLECTED FROM DEVORE, 0.5 MI S OF, CAJON WASH 1951-11-26
VAU54A0001	VAUGHAN, T. - MAMMALS OF THE SAN GABRIEL MOUNTAINS OF CALIFORNIA. UNIVERSITY OF KANSAS PUBLICATIONS, MUSEUM OF NATURAL HISTORY 7(9):513-582 1954-XX-XX
WIL08S0015	WILDER, H. - MVZ #2550 COLLECTED FROM CAJON WASH, SAN BERNARDINO. 1908-10-03
WIL08S0016	WILDER, H. - MVZ #2551 COLLECTED FROM CAJON WASH, SAN BERNARDINO. 1908-10-04
WIL08S0017	WILDER, H. - MVZ #2548 & 2549 COLLECTED FROM CAJON WASH, SAN BERNARDINO. 1908-10-02
WIL08S0018	WILDER, H. - MVZ #9377 COLLECTED FROM CAJON WASH, SAN BERNARDINO. 1908-10-05
WIL08S0026	WILDER, H. - MVZ #9377 COLLECTED FROM CAJON WASH, SAN BERNARDINO 1908-10-05
WIL31S0004	WILLETT, G. - LACM #002305, 002306, 002307, 002308 COLLECTED FROM CAJON WASH. 1931-03-08
WIL31S0005	WILLETT, G. - LACM #002355, 002356, 002357, 002362, 002363, 002364, 002365, 002366, 002367, 002368, 002369, 002370, 002371 COLLECTED FROM CAJON WASH. 1931-03-22
WIL31S0006	WILLETT, G. - LACM #002152, 002153, 002154, 002155, 002156, 002157, 002158, 002159 COLLECTED FROM CAJON WASH 1931-01-18
WIL31S0007	WILLETT, G. - LACM #2160 COLLECTED FROM CAJON WASH 1931-01-18
WIL31S0008	WILLETT, G. - LACM #002574, 002575, 002576 COLLECTED FROM CAJON WASH 1931-05-08
WIL31S0009	WILLETT, G. - LACM #002760, 002761, 002762, 002763, 002764, 002765, 002766, 002767 COLLECTED FROM CAJON WASH. 1931-09-13
WIL32S0002	WILLETT, G. - LACM #003126 COLLECTED FROM CAJON WASH. 1932-04-03
WIL39S0031	WILLETT, G. - LACM #52839 COLLECTED FROM CAJON WASH. 1939-08-06



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 78150	EO Index: 79041
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 47	Occurrence Last Updated: 2018-05-29

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 1982-06-14	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1982-06-14	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF, UNK	Trend: Unknown
Presence: Presumed Extant	

Location:
CAJON CANYON, 1 MILE NNE OF SYCAMORE CANYON, 1 MILE WEST OF DEVORE.

Detailed Location:
MSB RECORD LOCALITY STATES "1 MILE W OF DEVORE." EXACT COLLECTION LOCATIONS UNKNOWN.

Ecological:

Threats:

General:

MSB SPECIMEN #47562-47564 COLLECTED BY JOSEPH COOK AND #47569 & 47570 COLLECTED BY ROBERT M. SULLIVAN ON 14 JUN 1982.

PLSS: T02N, R05W, Sec. 32 (S)	Accuracy: 2/5 mile	Area (acres): 0
UTM: Zone-11 N3786316 E461423	Latitude/Longitude: 34.21718 / -117.41880	Elevation (feet): 2,212

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

COO82S0001	COOK, J. - MSB #47562, 47563, 47564 COLLECTED 1 MI W DEVORE. 1982-06-14
SUL82S0001	SULLIVAN, R. - MSB #47569 & 47570 COLLECTED 1 MI W DEVORE. 1982-06-14



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 78457	EO Index: 79380
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 51	Occurrence Last Updated: 2018-06-06

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2016-02-01	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2016-02-01	Occurrence Rank: Fair
Owner/Manager: PVT-CEMEX	Trend: Unknown
Presence: Presumed Extant	

Location:
LYTLE CREEK WASH, ABOUT 0.75 MI SE OF LAPIS LN AT RUBELLITE CT & 0.8 MI NNE OF RIVERSIDE AVE AT LOCUST AVE.

Detailed Location:
FORMER SUNWEST MATERIALS SITE, NOW OWNED BY CEMEX. EXACT LOCATION OF 2000 DETECTION NOT KNOWN. MAPPED TO SPECIFIC LOCATIONS GIVEN FOR DETECTIONS IN 2015 AT "AREA B" LEVEE REPAIR PROJECT STUDY SITE & IN 2016 AT RIPRAP INSTALLATION SITE.

Ecological:
2000: QUARRY PIT & ADJACENT UNDEVELOPED AREA; LEVEL TERRAIN W/ANNUAL GRASSLAND & REEMERGENT DISTURBED SAGE SCRUB VEG IN LOAMY-SANDY SOILS. 2015: RIVERSIDEAN ALLUVIAL FAN SAGE SCRUB IN LYTLE CREEK ADJACENT TO CEMEX MINING PIT.

Threats:
MINING (2000). LEVEE REPAIR PROJECT (2015). FLOOD EROSION/DEPOSITION, SAND/GRAVEL MINING, RIPRAP INSTALLATION (2016).

General:
2 INDIVIDUALS DETECTED, 6 MAR 2000. DETECTED IN AREA, 2012. 3 TRAPPED, 6-9 JAN 2015. 1 TRAPPED 5 DEC 2015, HELD DURING CONSTRUCTION, & RETURNED TO ARTIFICIAL BURROW ADJACENT TO WORKSITE 1 FEB 2016; CAPTURE RATE INDICATED UNCOMMON AT SITE.

PLSS: T01N, R05W, Sec. 16, E (S)	Accuracy: specific area	Area (acres): 12
UTM: Zone-11 N3781318 E462964	Latitude/Longitude: 34.17216 / -117.40186	Elevation (feet): 1,702

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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- Sources:**
- LAW15U0001 LAWREY, S. - LETTER REPORT OF THE FOCUSED SAN BERNARDINO KANGAROO RAT PRESENCE OR ABSENCE SURVEYS FOR THE CEMEX LYTLE CREEK SOUTH LEVEE REPAIR PROJECT. 2015-01-22
 - MON00F0009 MONTGOMERY, S.J. (SJM BIOLOGICAL CONSULTANTS) - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMII PARVUS 2000-03-06
 - MON15F0018 MONTGOMERY, S. & L. SIMPSON (SJM BIOLOGICAL CONSULTANTS) - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMII PARVUS 2015-03-12
 - MON16R0002 MONTGOMERY, S. (SJM BIOLOGICAL CONSULTANTS) - RESULTS OF A TRAPPING SURVEY FOR THE SAN BERNARDINO KANGAROO RAT AT THREE LOCATIONS AT THE LYTLE CREEK INTERIM PROTECTION PROJECT SITE AT THE CEMEX PLANT ALONG RIVERSIDE AVENUE. 2016-02-26



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: A9525	EO Index: 111375
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 58	Occurrence Last Updated: 2018-05-23

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2010-10-07	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2010-10-07	Occurrence Rank: Unknown
Owner/Manager: SBD COUNTY FLOOD CONTROL DIST	Trend: Unknown
Presence: Presumed Extant	

Location:
EAST SIDE OF SAN SEVAINE RD, FROM ABOUT 0.3 TO 0.6 MILES NNW OF ITS INTERSECTION WITH WILSON AVE, RANCHO CUCAMONGA.

Detailed Location:
MAPPED TO PROVIDED MAP AND DESCRIPTION. SAN SEVAINE SPREADING GROUNDS. DETECTED IN TRAP LINES A AND C.

Ecological:
DETECTED ON UPLANDS ADJACENT TO ACTIVE WASH. GOOD QUALITY ALLUVIAL FAN SCRUB HABITAT PRESENT. SURROUNDING LAND USES INCLUDED OPEN SPACE, FLOOD CONTROL, RESIDENTIAL. DISTURBANCE FROM TRAILS, ROADS, POWERLINES, FLOOD CONTROL, FENCES.

Threats:
DEVELOPMENT, STREAMBED (WASH) ALTERATION, FLOOD CONTROL ACTIVITIES (2010).

General:
2 ADULT MALES CAUGHT AND RELEASED DURING 1230 TRAP NIGHTS, 2-7 OCT 2010.

PLSS: T01N, R06W, Sec. 22, SE (S)	Accuracy: specific area	Area (acres): 10
UTM: Zone-11 N3779517 E454467	Latitude/Longitude: 34.15558 / -117.49396	Elevation (feet): 1,576

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
ENV10R0003 ENVIRA (ENVIRA) - PRESENCE/ABSENCE TRAPPING STUDIES FOR THE SAN BERNARDINO KANGAROO SAN SEVAINE SPREADING GROUNDS. 2010-10-26



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: A9552	EO Index: 111405
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 59	Occurrence Last Updated: 2018-06-27

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2003-11-06	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2003-11-06	Occurrence Rank: Fair
Owner/Manager: PVT, CITY OF FONTANA	Trend: Unknown
Presence: Presumed Extant	

Location:
ABOUT 0.5 TO 0.8 MI SW OF SIERRA AVE AT SEGOVIA LN AND 0.7 MI E TO 1.1 MI ENE OF I-15 AT DUNCAN CANYON RD, FONTANA.

Detailed Location:
MAPPED TO LOCATION GIVEN FOR 2002 DETECTIONS AT TRAP SITE 27, NORTH FONTANA PROPERTIES, & SITE 6F, DUNCAN CANYON WATER LINE PROJECT. 2003 DETECTION LOCATION ONLY GIVEN AS SE 1/4 SE 1/4 SEC 18 AND NE 1/4 NE 1/4 SEC 19; ATTRIBUTED HERE.

Ecological:
2002: REMNANT POPULATION PERSISTED ON FRAGMENTS OF MATURE AND DISTURBED ALLUVIAL SAGE FAN SCRUB IN THE FONTANA FAN. 2003: PUBLIC RIGHT-OF-WAY THROUGH PRIVATE LAND (DUNCAN CANYON WATER LINE?); DISTURBANCE FROM VEHICLES, DUMPING, & FIRE.

Threats:
DEVELOPMENT AND INCREASING URBANIZATION OF REGION.

General:
2 ADULT MALES CAUGHT DURING 250 TRAP NIGHTS IN 2002. 1 ADULT DETECTED ON 6 NOV 2003.

PLSS: T01N, R05W, Sec. 18, S (S)	Accuracy: specific area	Area (acres): 10
UTM: Zone-11 N3780716 E459184	Latitude/Longitude: 34.16659 / -117.44285	Elevation (feet): 1,835

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

MCG03R0002	MCGILL, T. (MICHAEL BRANDMAN ASSOCIATES) - SAN BERNARDINO KANGAROO RAT PRESENCE/ABSENCE TRAPPING STUDIES ON NORTH FONTANA PROPERTIES 2003-02-XX
NRA03R0002	NATURAL RESOURCES ASSESSMENT, INC. (NATURAL RESOURCES ASSESSMENT, INC.) - FOCUSED BIOLOGICAL ASSESSMENT DUNCAN CANYON (ZONES 6 AND 7) V6 WATERLINE PROJECT. 2003-04-14
VER03F0002	VERGNE, P. - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMII PARVUS 2003-11-06



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: A9554	EO Index: 111408
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 60	Occurrence Last Updated: 2018-05-24

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat:	Micro Habitat:
ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	NEEDS EARLY TO INTERMEDIATE SERAL STAGES.

Last Date Observed: 2002-12-15	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2002-12-15	Occurrence Rank: None
Owner/Manager: PVT	Trend: Unknown
Presence: Possibly Extirpated	

Location:
 ABOUT 1.2 MI SW OF SIERRA AVE AT SEGOVIA LN AND 1.0 MI SE OF I-15 AT DUNCAN CANYON RD, FONTANA.

Detailed Location:
 MAPPED TO LOCATION GIVEN FOR DETECTION AT TRAP SITE 6, NORTH FONTANA PROPERTIES.

Ecological:
 REMNANT POPULATION PERSISTED ON FRAGMENTS OF MATURE AND DISTURBED ALLUVIAL SAGE FAN SCRUB IN THE FONTANA FAN.

Threats:
 GOOGLE EARTH AIR PHOTOS SHOW THAT SITE HAS BEEN DEVELOPED.

General:
 1 ADULT MALE & 2 ADULT FEMALES CAUGHT DURING 150 TRAP NIGHTS IN 2002.

PLSS: T01N, R05W, Sec. 19, SW (S)	Accuracy: 80 meters	Area (acres): 5
UTM: Zone-11 N3779657 E458747	Latitude/Longitude: 34.15702 / -117.44754	Elevation (feet): 1,723

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
 MCG03R0002 MCGILL, T. (MICHAEL BRANDMAN ASSOCIATES) - SAN BERNARDINO KANGAROO RAT PRESENCE/ABSENCE TRAPPING STUDIES ON NORTH FONTANA PROPERTIES 2003-02-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	A9555	EO Index:	111409
Key Quad:	Devore (3411724)	Element Code:	AMAFD03143
Occurrence Number:	61	Occurrence Last Updated:	2018-05-24

Scientific Name:	<i>Dipodomys merriami parvus</i>	Common Name:	San Bernardino kangaroo rat
Listing Status:	Federal: Endangered	Rare Plant Rank:	
	State: Candidate Endangered	Other Lists:	CDFW_SSC-Species of Special Concern
CNDDB Element Ranks:	Global: G5T1		
	State: S1		

General Habitat:	ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat:	NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed:	2002-12-15	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	2002-12-15	Occurrence Rank:	Unknown
Owner/Manager:	PVT	Trend:	Unknown
Presence:	Presumed Extant		

Location:
 ABOUT 0.5 MI NW OF SIERRA AVE AT SEGOVIA LN AND 1.3 MI NE OF I-15 AT DUNCAN CANYON RD, FONTANA.

Detailed Location:
 MAPPED TO LOCATION GIVEN FOR DETECTION AT TRAP SITE 16, NORTH FONTANA PROPERTIES.

Ecological:
 REMNANT POPULATION PERSISTED ON FRAGMENTS OF MATURE AND DISTURBED ALLUVIAL SAGE FAN SCRUB IN THE FONTANA FAN.

Threats:
 DEVELOPMENT.

General:
 2 ADULT MALES CAUGHT DURING 150 TRAP NIGHTS IN 2002.

PLSS: T01N, R05W, Sec. 18, NE (S)	Accuracy: 80 meters	Area (acres): 5
UTM: Zone-11 N3781762 E459167	Latitude/Longitude: 34.17602 / -117.44308	Elevation (feet): 1,945

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
 MCG03R0002 MCGILL, T. (MICHAEL BRANDMAN ASSOCIATES) - SAN BERNARDINO KANGAROO RAT PRESENCE/ABSENCE TRAPPING STUDIES ON NORTH FONTANA PROPERTIES 2003-02-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: A9558	EO Index: 111412
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 62	Occurrence Last Updated: 2018-05-25

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 1997-10-10	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1997-10-10	Occurrence Rank: None
Owner/Manager: PVT, UNKNOWN	Trend: Unknown
Presence: Possibly Extirpated	

Location:
EAST SIDE OF SIERRA AVE, FROM ABOUT 0.4 TO 0.9 MILES SSE OF THE RIVERSIDE AVE INTERSECTION, FONTANA.

Detailed Location:
MAPPED TO PROVIDED LOCATIONS.

Ecological:

Threats:
AIR PHOTOS SHOW THAT AREA HAS BEEN MOSTLY DEVELOPED SINCE DATES OF DETECTIONS.

General:
DETECTED ON 16 MAY 1994, 8 JUL 1996, AND 10 OCT 1997.

PLSS: T01N, R05W, Sec. 17, SW (S)	Accuracy: specific area	Area (acres): 15
UTM: Zone-11 N3781071 E459955	Latitude/Longitude: 34.16983 / -117.4345	Elevation (feet): 1,872

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
MCK97M0001 MCKERNAN, R. - MAP OF SAN BERNARDINO KANGAROO RAT AND CALIFORNIA GNATCATCHER NEST LOCATIONS. 1997-XX-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: A9568	EO Index: 111422
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 63	Occurrence Last Updated: 2018-06-26

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 1999-12-02	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1999-12-02	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
CAJON WASH, ABOUT 0.3 MILES SW OF I-15 OVER KENWOOD AVE, NW OF MUSCOY.

Detailed Location:
MAPPED TO COORDINATES GIVEN FOR 1999 DETECTION AT "CAJON WASH APPROX 1 MI NORTH OF 15 FWY BRIDGE," STATION KW8-4 (KENWOOD AVE IN 2003 REPORT). UNDATED FIELD SURVEY FORM RECORDS NEGATIVE/ZERO DATA RESULTS 0.1 MI TO NE OF 1999 DETECTION.

Ecological:
SCALEBROOM, BUCKWHEAT, CROTON SURROUNDED BY DISPERSED RESIDENTIAL. SOME DISTURBANCE FROM OHVS. A LONG-TERM STUDY SITE ESTABLISHED OCT 1998 & SURVEYED QUARTERLY THROUGH MAR 2001. PIONEER ALLUVIAL FAN SAGE SCRUB ON SANDY SUBSTRATE.

Threats:
General:
DETECTED IN TRS SEC 29 DURING SURVEYS CONDUCTED 1987-1996. NONE DETECTED DURING 5 SURVEYS, 29 APR-3 MAY (YEAR UNKNOWN). 1 ADULT MALE DETECTED ON 2 DEC 1999.

PLSS: T02N, R05W, Sec. 29, NW (S)	Accuracy: 1/10 mile	Area (acres): 18
UTM: Zone-11 N3788157 E460455	Latitude/Longitude: 34.23374 / -117.4294	Elevation (feet): 2,226

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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- Sources:**
- BRA01U0001 BRADEN, G. - EMAIL EXCHANGE BETWEEN G. BRADEN, T. MCKINNEY, AND S. LOVE ON ONGOING TRAPPING OF SAN BERNARDINO KANGAROO RATS. 2001-XX-XX
 - CAR03R0001 CARTER, K. & G. BRADEN (SAN BERNARDINO COUNTY MUSEUM) - SURVEY RESULTS FOR THE SAN BERNARDINO KANGAROO RAT IN THE SAN BERNARDINO NATIONAL FOREST (LYTLE CREEK, CAJON CREEK, BAUTISTA CANYON) WITH SUPPLEMENTAL SURVEY RESULTS. 2003-02-XX
 - MCK97U0002 MCKERNAN, R. - THE STATUS AND KNOWN DISTRIBUTION OF THE SAN BERNARDINO KANGAROO RAT (DIPODOMYS MERRIAMI PARVUS): FIELD SURVEYS CONDUCTED BETWEEN 1987 AND 1996 1997-09-XX
 - ROMNDF0001 ROMICH, K. (SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS) - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMI PARVUS XXXX-05-03



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: A9614	EO Index: 111473
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 64	Occurrence Last Updated: 2018-06-26

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2015-06-05	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2015-06-05	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
CAJON WASH, ON THE SW SIDE OF THE I-15/I-215 INTERCHANGE, NW OF DEVORE.

Detailed Location:
1987-1996 DETECTION IN NW 1/4 OF SEC 33. SITE "FW" OR "15 FREEWAY" IN 2000-2002; EXACT COORDINATES NOT GIVEN. MAPPED TO LOCATIONS GIVEN FOR 2015 DETECTIONS IN TRAPPING AREA #4.

Ecological:
2000-2002: LONG-TERM STUDY SITE SURVEYED MONTHLY; PIONEER ALLUVIAL FAN SAGE SCRUB COMMUNITY WITH SANDY SUBSTRATE. 2015: ALLUVIAL FAN SAGE SCRUB, SANDY SOILS ON HIGH BENCHES ADJACENT TO CAJON WASH.

Threats:
PROPOSED CONSTRUCTION AND INSTALLATION OF NATURAL GAS PIPELINE (2015).

General:
DETECTED IN VICINITY DURING SURVEYS 1987-1996. UP TO 37 CAUGHT & RELEASED, FEB-NOV 2000. UP TO 13 CAUGHT & RELEASED, JAN-DEC 2001. 4 INDIVIDUALS CAUGHT & RELEASED IN 1600 TRAPNIGHTS 26 MAY - 5 JUN 2015.

PLSS: T02N, R05W, Sec. 28, SW (S)	Accuracy: specific area	Area (acres): 13
UTM: Zone-11 N3787088 E461927	Latitude/Longitude: 34.22416 / -117.41337	Elevation (feet): 2,115

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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- Sources:**
- BON15U0002 BONTERRA PSOMAS - RESULTS OF FOCUSED TRAPPING SURVEYS FOR SAN BERNARDINO KANGAROO RAT FOR THE SOCALGAS NORTH-SOUTH PROJECT, SAN BERNARDINO AND RIVERSIDE COUNTIES, CALIFORNIA 2015-07-15
 - BRA01U0001 BRADEN, G. - EMAIL EXCHANGE BETWEEN G. BRADEN, T. MCKINNEY, AND S. LOVE ON ONGOING TRAPPING OF SAN BERNARDINO KANGAROO RATS. 2001-XX-XX
 - CAR03R0001 CARTER, K. & G. BRADEN (SAN BERNARDINO COUNTY MUSEUM) - SURVEY RESULTS FOR THE SAN BERNARDINO KANGAROO RAT IN THE SAN BERNARDINO NATIONAL FOREST (LYTLE CREEK, CAJON CREEK, BAUTISTA CANYON) WITH SUPPLEMENTAL SURVEY RESULTS. 2003-02-XX
 - MCK97U0002 MCKERNAN, R. - THE STATUS AND KNOWN DISTRIBUTION OF THE SAN BERNARDINO KANGAROO RAT (DIPDOMYS MERRIAM PARVUS): FIELD SURVEYS CONDUCTED BETWEEN 1987 AND 1996 1997-09-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: A9615	EO Index: 111475
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 65	Occurrence Last Updated: 2018-06-07

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2015-06-12	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2015-06-12	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
CAJON WASH, ALONG GLEN HELEN PARKWAY FROM ABOUT 0.2 TO 0.7 MILES SSE OF THE I-15/I-215 INTERCHANGE, DEVORE.

Detailed Location:
1987-1996 DETECTIONS IN NE & SE 1/4 SEC 33. INCLUDES LOCATIONS GIVEN FOR CENTER OF SITE #152 IN 2000 SURVEY, 2010 TRAP SITES, & 2015 DETECTION IN TRAPPING AREA 5.

Ecological:
2015: ALLUVIAL FAN SAGE SCRUB AND RIVERSIDEAN SCRUB WITH SANDY TO SANDY-LOAM SOILS ON BENCH JUST ABOVE CAJON WASH, WITH SOME FINE SANDY SOILS AND COARSE COBBLE.

Threats:
DISTURBANCE FROM OHVS, FLOOD CONTROL PROJECTS (2010). PLANNED INSTALLATION OF NATURAL GAS PIPELINE (2015).

General:
DETECTED, 1987-1996. 7 CAUGHT & RELEASED 27-29 MAR 2000. 0 CAUGHT IN 500 TRAPNIGHTS 12-17 JUL 2006. 2 OBSERVED ON 26 APR; 2 FEMALES CAUGHT & RELEASED 3-8 MAY 2010. 1 CAUGHT & RELEASED IN 425 TRAP NIGHTS 8-12 JUN 2015.

PLSS: T02N, R05W, Sec. 33, NE (S)	Accuracy: non-specific area	Area (acres): 30
UTM: Zone-11 N3786257 E462605	Latitude/Longitude: 34.21669 / -117.40597	Elevation (feet): 2,043

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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- Sources:**
- BON15U0002 BONTERRA PSOMAS - RESULTS OF FOCUSED TRAPPING SURVEYS FOR SAN BERNARDINO KANGAROO RAT FOR THE SOCALGAS NORTH-SOUTH PROJECT, SAN BERNARDINO AND RIVERSIDE COUNTIES, CALIFORNIA 2015-07-15
 - BRA01U0001 BRADEN, G. - EMAIL EXCHANGE BETWEEN G. BRADEN, T. MCKINNEY, AND S. LOVE ON ONGOING TRAPPING OF SAN BERNARDINO KANGAROO RATS. 2001-XX-XX
 - DAV10F0010 DAVENPORT, A. - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMII PARVUS 2010-04-26
 - DAV10R0005 DAVENPORT, A. (DAVENPORT BIOLOGICAL SERVICES) - ENDANGERED SPECIES SURVEY SAN BERNARDINO KANGAROO RAT GLEN HELEN PARKWAY GRADE SEPARATION PROJECT. 2010-06-18
 - MCK97U0002 MCKERNAN, R. - THE STATUS AND KNOWN DISTRIBUTION OF THE SAN BERNARDINO KANGAROO RAT (DIPODOMYS MERRIAMII PARVUS): FIELD SURVEYS CONDUCTED BETWEEN 1987 AND 1996 1997-09-XX
 - ROM07U0001 ROMICH, K. (SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS) - EMAILS AND TABLE REGARDING SAN BERNARDINO KANGAROO RAT TRAPPING LOCATIONS. 2007-08-14



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: A9616	EO Index: 111476	
Key Quad: Devore (3411724)	Element Code: AMAFD03143	
Occurrence Number: 66	Occurrence Last Updated: 2018-06-26	

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2017-04-28	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2017-04-28	Occurrence Rank: Fair
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
ABOUT 0.4-0.6 MI WSW OF I-215 AT LITTLE LEAGUE DR & 0.6-0.8 MI SSE OF CAJON BLVD AT KENDALL DR, NW OF SAN BERNARDINO.

Detailed Location:
1990 DETECTION LOCATION DESCRIBED AS "CAJON WASH NEAR VERDEMONT, NW OF THE INTERSECTION OF CAJON BLVD AND INSTITUTION RD. T1N R5W SEC 2." EXACT LOCATIONS UNKNOWN. MAPPED TO LOCATIONS GIVEN FOR 2017 DETECTIONS. 2017: VULCAN PROPERTY.

Ecological:
1990: VEG INCLUDED CERCOCARPUS BETULOIDES, CEANOTHUS LEUCODERMIS, ERIOGONUM FASCICULATUM, OPUNTIA LITTORALIS, PRUNUS ILICIFOLIA. 2017: SANDY DRY RIVERBED ADJACENT TO INDUSTRIAL BUILDINGS; DISTURBANCE FROM LAND USE CHANGE & ROAD.

Threats:
INVASIVE PLANTS (2017). GOOGLE EARTH AIR PHOTOS SHOW DEVELOPMENT IN VICINITY; UNKNOWN IF 1990 SITE STILL EXTANT.

General:
52 CAPTURED, 5 SPECIMENS SENT TO SBCM 17-19 & 24 SEP 1990. 2 CAUGHT & RELEASED ON 28 FEB, 4 ON 26 APR & 1 ON 28 APR 2017.

PLSS: T01N, R05W, Sec. 2, SW (S)	Accuracy: specific area	Area (acres): 15
UTM: Zone-11 N3784128 E464738	Latitude/Longitude: 34.19757 / -117.38273	Elevation (feet): 1,819

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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- Sources:**
- TMC94U0001 TIERRA MADRE CONSULTANTS - MEMO TO RAY VIZGIRDAS (USFWS) FROM STEPHEN J. MYERS REGARDING CAPTURE RECORDS OF DIPODOMYS MERRIAMII PARVUS. 1994-02-17
 - WAN17F0001 WANG, T. - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMII PARVUS [SC-008825]. 2017-02-28
 - WAN17F0003 WANG, T. - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMII PARVUS [SC-008825]. 2017-02-28
 - WAN17F0004 WANG, T. - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMII PARVUS [SC-008825]. 2017-04-28
 - WAN18D0001 WANG, T. - EXCEL TABLE OF SAN BERNARDINO KANGAROO RAT DETECTION DATA, 2012-2017 2018-06-18
 - WAN18U0001 WANG, T. - EMAIL REGARDING SAN BERNARDINO KANGAROO RAT DETECTION LOCATIONS IN CAJON WASH. 2018-06-05



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: A9617	EO Index: 111477
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 67	Occurrence Last Updated: 2018-06-05

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2001-09-13	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2001-09-13	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
CAJON WASH, ABOUT 0.6-0.75 MI SW OF CAJON BLVD AT SHELTER WAY & 0.7 -0.9 MI NNE OF VERDEMONT RANCH RD AT INSTITUTION RD.

Detailed Location:
1987-1996 DETECTIONS IN EAST 1/2 OF TRS SEC 10, EXACT LOCATIONS UNKNOWN. MAPPED TO INCLUDE COORDINATES GIVEN FOR CENTERPOINTS OF TRAP SITES CI, CP, AND "CAJON WASH BETWEEN CI AND CP," 1998-2001.

Ecological:
CAJON WASH, NE OF MOTORCYCLE PARK PARKING LOT.

Threats:
General:
DETECTED, 1987-1996. 26 CAUGHT AND RELEASED IN 1998, 34 IN 1999, 39 IN 2000, AND 31 IN 2001.

PLSS: T01N, R05W, Sec. 11, NW (S)	Accuracy: non-specific area	Area (acres): 45
UTM: Zone-11 N3783194 E464745	Latitude/Longitude: 34.18914 / -117.38261	Elevation (feet): 1,752

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

BRA01U0001	BRADEN, G. - EMAIL EXCHANGE BETWEEN G. BRADEN, T. MCKINNEY, AND S. LOVE ON ONGOING TRAPPING OF SAN BERNARDINO KANGAROO RATS. 2001-XX-XX
MCK97U0002	MCKERNAN, R. - THE STATUS AND KNOWN DISTRIBUTION OF THE SAN BERNARDINO KANGAROO RAT (DIPODOMYS MERRIAMII PARVUS): FIELD SURVEYS CONDUCTED BETWEEN 1987 AND 1996 1997-09-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: A9637	EO Index: 111495
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 71	Occurrence Last Updated: 2018-06-07

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2015-12-08	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2015-12-08	Occurrence Rank: Unknown
Owner/Manager: PVT-CEMEX	Trend: Unknown
Presence: Presumed Extant	

Location:
LYTLE CREEK WASH, ABOUT 0.8 MI NE OF RIVERSIDE AVE AT LOCUST AVE & 1.2 MI SE OF LAPIS LN AT RUBELLITE CT.

Detailed Location:
CEMEX PLANT SITE. MAPPED TO GIVEN DETECTION LOCATIONS.

Ecological:
SOUTH END OF CEMEX SOUTH PIT, AN ACTIVE MINING AREA. SITE HAD ABUNDANT DEEP SAND WITH MIX OF RIPARIAN SCRUB/WOODLAND, SAGE SCRUB, AND BARE GROUND WITH EVIDENT K-RAT BURROWS AND SIGN.

Threats:
FLOOD EROSION/DEPOSITION; PROPOSED MAINTENANCE ACTIVITIES WOULD DISRUPT SUBSTRATES & DISTURB EXTANT POPULATION (2016).

General:
8 TRAPPED IN 65 TRAPNIGHTS, 8 DEC 2015; CAPTURE RATE INDICATED THAT THE SPECIES IS COMMON AT THIS SITE.

PLSS: T01N, R05W, Sec. 15, SW (S)	Accuracy: specific area	Area (acres): 14
UTM: Zone-11 N3780758 E463440	Latitude/Longitude: 34.16712 / -117.39668	Elevation (feet): 1,644

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
MON16R0003 MONTGOMERY, S. (SJM BIOLOGICAL CONSULTANTS) - RESULTS OF A TRAPPING SURVEY FOR THE SAN BERNARDINO KANGAROO RAT AT THE SOUTH PIT LOCATION AT THE CEMEX PLANT ALONG RIVERSIDE AVENUE. 2016-02-25



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: A9841	EO Index: 111708
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 85	Occurrence Last Updated: 2018-07-27

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2004-08-06	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2004-08-06	Occurrence Rank: Unknown
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
ABOUT 0.5-0.6 MILES SE OF I-215 AT DEVORE RD & 1.0 MILES WNW OF W MEYERS RD AT MARTIN RANCH RD, MUSCOY.

Detailed Location:
MAPPED TO LOCATIONS PROVIDED FOR TRAP LINES 11 & 12 (2004).

Ecological:
ANNUAL GRASSLAND AND ALLUVIAL FAN SCRUB IN WASH OF CABLE CREEK, FLOODPLAIN, AND ADJACENT FOOTHILLS. PRIVATE PROPERTY WAS PROPOSED FOR DEVELOPMENT AS OF 2004.

Threats:
DEVELOPMENT (2004). OHVS, VANDALISM (2012).

General:
1 SUBADULT FEMALE AND 1 ADULT FEMALE TRAPPED BETWEEN 27 JUL & 6 AUG 2004. NONE FOUND IN NEARBY SURVEYS ON 2-6 OCT 2010 & 27 NOV 2012.

PLSS: T02N, R05W, Sec. 34, NW (S)	Accuracy: specific area	Area (acres): 10
UTM: Zone-11 N3786550 E463606	Latitude/Longitude: 34.21936 / -117.39511	Elevation (feet): 2,011

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

MCG04R0001	MCGILL, T. (MICHAEL BRANDMAN ASSOCIATES) - SAN BERNARDINO KANGAROO RAT PRESENCE/ABSENCE TRAPPING STUDIES ON THE 280 ACRE ROLLING HILLS RANCH, CITY OF SAN BERNARDINO, CALIFORNIA 2004-08-XX
MON10R0006	MONTGOMERY, S. (SJM BIOLOGICAL CONSULTANTS) - RESULTS OF A TRAPPING SURVEY FOR THE FEDERALLY ENDANGERED SAN BERNARDINO KANGAROO RAT AND THE LOS ANGELES POCKET MOUSE ALONG A PROPOSED AT&T TELEPHONE LINE CORRIDOR. 2010-11-04
MON12F0006	MONTGOMERY, S. (SJM BIOLOGICAL CONSULTANTS) - FIELD SURVEY FORM FOR DIPODOMYS MERRIAMII PARVUS 2012-11-27



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: A9842	EO Index: 111709
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 86	Occurrence Last Updated: 2018-07-26

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 2004-08-06	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2005-07-15	Occurrence Rank: Unknown
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
ABOUT 0.5 MILES E OF CAJON BLVD AT KENDALL DR & 0.6 MILES NW OF I-215 AT N LITTLE LEAGUE DR, MUSCOY.

Detailed Location:
MAPPED TO LOCATIONS PROVIDED FOR TRAP LINE 5 (2004).

Ecological:
ANNUAL GRASSLAND AND ALLUVIAL FAN SCRUB IN WASH OF CABLE CREEK, FLOODPLAIN, AND ADJACENT FOOTHILLS. PRIVATE PROPERTY WAS PROPOSED FOR DEVELOPMENT AS OF 2004.

Threats:
DEVELOPMENT.

General:
NONE FOUND IN VICINITY DURING TRAPPING SURVEY 20-25 MAY 2003. 1 ADULT MALE TRAPPED BETWEEN 27 JUL & 6 AUG 2004. NONE WERE FOUND DURING 3 TRAPPING SESSIONS MAY-JUL 2005.

PLSS: T01N, R05W, Sec. 2, NW (S)	Accuracy: 80 meters	Area (acres): 5
UTM: Zone-11 N3785169 E465352	Latitude/Longitude: 34.20697 / -117.3761	Elevation (feet): 1,843

County Summary: San Bernardino	Quad Summary: San Bernardino North (3411723), Devore (3411724)
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Sources:

KIR03R0001	KIRTLAND, K. (NATURAL RESOURCES ASSESSMENT, INC.) - SAN BERNARDINO KANGAROO RAT PRESENCE/ABSENCE TRAPPING STUDIES VERDEMONT 100 ACRE DEVELOPMENT SITE. 2003-06-10
MBA05R0003	MICHAEL BRANDMAN ASSOCIATES (MICHAEL BRANDMAN ASSOCIATES) - SAN BERNARDINO KANGAROO RAT RESULTS OF PROTOCOL PRESENCE/ABSENCE TRAPPING SURVEYS ON THE ROLLING HILLS RANCH COUNTRY VIEW ESTATES. 2005-07-XX
MCG04R0001	MCGILL, T. (MICHAEL BRANDMAN ASSOCIATES) - SAN BERNARDINO KANGAROO RAT PRESENCE/ABSENCE TRAPPING STUDIES ON THE 280 ACRE ROLLING HILLS RANCH, CITY OF SAN BERNARDINO, CALIFORNIA 2004-08-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: A9843	EO Index: 111712
Key Quad: Devore (3411724)	Element Code: AMAFD03143
Occurrence Number: 87	Occurrence Last Updated: 2018-06-27

Scientific Name: <i>Dipodomys merriami parvus</i>	Common Name: San Bernardino kangaroo rat
Listing Status:	Rare Plant Rank:
Federal: Endangered	
State: Candidate Endangered	Other Lists: CDFW_SSC-Species of Special Concern
CNDDB Element Ranks:	
Global: G5T1	
State: S1	

General Habitat: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed: 1996-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1996-XX-XX	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
VICINITY OF N RIVERSIDE AVE AT N LOCUST AVE, FONTANA.

Detailed Location:
MAPPED TO GIVEN TRS QUARTER SECTIONS. EXACT DETECTION LOCATIONS UNKNOWN.

Ecological:

Threats:
JUDGING FROM AERIAL PHOTOS, DEVELOPMENT HAS REDUCED THE AMOUNT OF AVAILABLE HABITAT SINCE THE TIME OF SURVEY.

General:
DETECTED DURING SURVEYS 1987-1996.

PLSS: T01N, R05W, Sec. 21, N (S)	Accuracy: non-specific area	Area (acres): 348
UTM: Zone-11 N3780046 E462232	Latitude/Longitude: 34.16066 / -117.40975	Elevation (feet): 1,685

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
MCK97U0002 MCKERNAN, R. - THE STATUS AND KNOWN DISTRIBUTION OF THE SAN BERNARDINO KANGAROO RAT (DIPODOMYS MERRIAMI PARVUS): FIELD SURVEYS CONDUCTED BETWEEN 1987 AND 1996 1997-09-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	B0143	EO Index:	112000
Key Quad:	Devore (3411724)	Element Code:	AMAFD03143
Occurrence Number:	100	Occurrence Last Updated:	2018-07-26

Scientific Name:	<i>Dipodomys merriami parvus</i>	Common Name:	San Bernardino kangaroo rat
Listing Status:	Federal: Endangered	Rare Plant Rank:	
	State: Candidate Endangered	Other Lists:	CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	Global: G5T1		
	State: S1		

General Habitat:	ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.	Micro Habitat:	NEEDS EARLY TO INTERMEDIATE SERAL STAGES.
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Last Date Observed:	199X-XX-XX	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	199X-XX-XX	Occurrence Rank:	Unknown
Owner/Manager:	UNKNOWN	Trend:	Unknown
Presence:	Presumed Extant		

Location:
SE CORNER OF HWY 210 AND CHERRY AVE, FONTANA.

Detailed Location:
MAPPED TO PROVIDED TRS, NW 1/4 T1S R6W SEC 35.

Ecological:
SINCE THIS LOCALITY WAS SURVEYED (SOME TIME BETWEEN 1987 & 1996), THE SURROUNDING AREA HAS BEEN EXTENSIVELY DEVELOPED. AIR PHOTOS GOING BACK TO 1994 INDICATE THAT LAND USE IN THIS TRS QUARTER SECTION HAS REMAINED AGRICULTURAL/FALLOW.

Threats:
DEVELOPMENT.

General:
DETECTED DURING SURVEYS 1987-1996.

PLSS: T01N, R06W, Sec. 35, NW (S)	Accuracy: non-specific area	Area (acres): 164
UTM: Zone-11 N3776923 E455344	Latitude/Longitude: 34.13223 / -117.48432	Elevation (feet): 1,394

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
MCK97U0002 MCKERNAN, R. - THE STATUS AND KNOWN DISTRIBUTION OF THE SAN BERNARDINO KANGAROO RAT (DIPDOMYS MERRIAM PARVUS); FIELD SURVEYS CONDUCTED BETWEEN 1987 AND 1996 1997-09-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 57768	EO Index: 57784
Key Quad: Devore (3411724)	Element Code: AMAFD05031
Occurrence Number: 77	Occurrence Last Updated: 2004-10-28

Scientific Name: <i>Chaetodipus fallax fallax</i>	Common Name: northwestern San Diego pocket mouse
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T3T4	
State: S3S4	

General Habitat:	Micro Habitat:
COASTAL SCRUB, CHAPARRAL, GRASSLANDS, SAGEBRUSH, ETC. IN WESTERN SAN DIEGO COUNTY.	SANDY, HERBACEOUS AREAS, USUALLY IN ASSOCIATION WITH ROCKS OR COARSE GRAVEL.

Last Date Observed: 2002-03-30	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2002-03-30	Occurrence Rank: Good
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
LOCATED ABOUT 1.25 MILES WSW OF DEVORE. ABUTTING INTERSTATE 215 ON SW. CABLE CREEK RUNS THROUGH SW PORTION OF SITE.

Detailed Location:

Ecological:

HABITAT CONSISTS OF: DENSE RIVERSIDEAN SAGE SCRUB, DENSE MATURE PHASE ALLUVIAL FAN SAGE SCRUB, RIPARIAN SPECIES, AGRICULTURAL, RUDERAL/DISTURBED FIELDS, EUCALYPTUS GROVE. OPEN PATCHES ARE WELL COVERED WITH EXOTIC SPECIES.

Threats:

INTERSTATE 215, RESIDENTIAL DEVELOPMENT.

General:

152 INDIVIDUALS TRAPPED WHILE SURVEYING PROPOSED SECONDARY ACCESS ROUTE FOR MARTIN RANCH PROJECT ON 25-30 MAR 2002. TWO TRAP LINES OF 100 AND 120 TRAPS WERE SET (FOR A TOTAL OF 1100 TRAP-NIGHTS).

PLSS: T02N, R05W, Sec. 35 (S)	Accuracy: non-specific area	Area (acres): 82
UTM: Zone-11 N3786214 E464855	Latitude/Longitude: 34.21638 / -117.38154	Elevation (feet): 2,000

County Summary:

San Bernardino

Quad Summary:

San Bernardino North (3411723), Devore (3411724)

Sources:

DOD02F0011	DODD, S. (S.C. DODD BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR CHAETODIPUS FALLAX FALLAX 2002-03-30
DOD02R0008	DODD, S. (S.C. DODD BIOLOGICAL CONSULTING) - RESULTS OF A LIVE-TRAPPING SURVEY FOR THE FEDERALLY-LISTED ENDANGERED SAN BERNARDINO KANGAROO RAT ON THE SECONDARY ACCESS ROUTE FOR THE PROPOSED MARTIN RANCH PROJECT. 2002-04-02



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 57787	EO Index: 57803
Key Quad: Devore (3411724)	Element Code: AMAFD05031
Occurrence Number: 88	Occurrence Last Updated: 2004-11-01

Scientific Name: <i>Chaetodipus fallax fallax</i>	Common Name: northwestern San Diego pocket mouse
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern
CNDDB Element Ranks:	
Global: G5T3T4	
State: S3S4	

General Habitat: COASTAL SCRUB, CHAPARRAL, GRASSLANDS, SAGEBRUSH, ETC. IN WESTERN SAN DIEGO COUNTY.	Micro Habitat: SANDY, HERBACEOUS AREAS, USUALLY IN ASSOCIATION WITH ROCKS OR COARSE GRAVEL.
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Last Date Observed: 2002-04-28	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2002-04-28	Occurrence Rank: Unknown
Owner/Manager: SBD COUNTY	Trend: Unknown
Presence: Presumed Extant	

Location:
ABOUT 0.75 MILE NNE OF INTERSECTION BETWEEN INTERSTATE 15 AND CALIFORNIA STATE HIGHWAY 30 AND JUST NORTHWEST OF I-15.

Detailed Location:

Ecological:

SITE IS USED AS WATER STORAGE AND PERCOLATION BASIN. OTHER SENSITIVE SPECIES IN AREA: DIPODOMYS MERRIAMII PARVUS AND NEOTOMA LEPIDA INTERMEDIA.

Threats:

BASIN IS SCHEDULED FOR IMPROVEMENT TO INCREASE WATER STORAGE AND PERCOLATION CAPACITY.

General:

10 CAPTURES OVER 5 TRANSECTS (975 TRAP NIGHTS) FROM 23-28 APR 2002.

PLSS: T01N, R06W, Sec. 27, NW (S)	Accuracy: non-specific area	Area (acres): 80
UTM: Zone-11 N3778594 E454791	Latitude/Longitude: 34.14727 / -117.49039	Elevation (feet): 1,470

County Summary:

San Bernardino

Quad Summary:

Devore (3411724)

Sources:
NRA02R0003 NATURAL RESOURCES ASSESSMENT, INC. - SAN BERNARDINO KANGAROO RAT PRESENCE/ABSENCE TRAPPING STUDIES FOR THE SAN SEVAINE BASINS 1-4 IMPROVEMENT PROJECT. 2002-07-23



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 57788	EO Index: 57804
Key Quad: Devore (3411724)	Element Code: AMAFD05031
Occurrence Number: 89	Occurrence Last Updated: 2004-11-01

Scientific Name: <i>Chaetodipus fallax fallax</i>	Common Name: northwestern San Diego pocket mouse
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern
CNDDB Element Ranks:	
Global: G5T3T4	
State: S3S4	

General Habitat:	Micro Habitat:
COASTAL SCRUB, CHAPARRAL, GRASSLANDS, SAGEBRUSH, ETC. IN WESTERN SAN DIEGO COUNTY.	SANDY, HERBACEOUS AREAS, USUALLY IN ASSOCIATION WITH ROCKS OR COARSE GRAVEL.

Last Date Observed: 2000-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2000-XX-XX	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
 LYTLE CREEK BASIN, ABOUT 0.5 MI N OF INTERSECTION BETWEEN SIERRA AVENUE AND INTERSTATE 15. I-15 BISECTS SITE.

Detailed Location:

Ecological:

HABITAT CONSISTS OF RIVERSIDEAN SAGE SCRUB, RIVERSIDEAN SAGE SCRUB/BURN AND ALLUVIAL FAN SAGE SCRUB. DIPODOMYS MERRIAMII PARVUS ALSO FOUND IN AREA.

Threats:

SITE IS PROPOSED FOR AN EXTENSION OF LYTLE CREEK LEVEE.

General:

UNKNOWN NUMBER OF CAPTURES WHILE TRAPPING FOR DIPODOMYS MERRIAMII PARVUS IN 2000 FOR THE LYTLE CREEK LEVEE EXTENSION.

PLSS: T01N, R05W, Sec. 08 (S)	Accuracy: non-specific area	Area (acres): 52
UTM: Zone-11 N3782982 E460376	Latitude/Longitude: 34.18707 / -117.43001	Elevation (feet): 2,000

County Summary:

San Bernardino

Quad Summary:

Devore (3411724)

Sources:
 PCR00R0002 RAMIREZ, R. (PCR SERVICES CORPORATION) - SAN BERNARDINO KANGAROO RAT PROPOSED LEVEE EXTENSION TRAPPING PROGRAM. LYTLE CREEK NORTH VILLAGE PROPERTY, SAN BERNARDINO COUNTY, CALIFORNIA. 2000-07-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 57810	EO Index: 57826
Key Quad: Devore (3411724)	Element Code: AMAFD05031
Occurrence Number: 93	Occurrence Last Updated: 2004-11-01

Scientific Name: <i>Chaetodipus fallax fallax</i>	Common Name: northwestern San Diego pocket mouse
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern
CNDDB Element Ranks:	
Global: G5T3T4	
State: S3S4	

General Habitat: COASTAL SCRUB, CHAPARRAL, GRASSLANDS, SAGEBRUSH, ETC. IN WESTERN SAN DIEGO COUNTY.	Micro Habitat: SANDY, HERBACEOUS AREAS, USUALLY IN ASSOCIATION WITH ROCKS OR COARSE GRAVEL.
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Last Date Observed: 2002-01-11	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2002-01-11	Occurrence Rank: Fair
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
LOCATED IN NORTH FONTANA. BORDERED ON THE NORTH BY DUNCAN CANYON ROAD, EAST BY CYPRUS AVENUE AND SOUTH BY SUMMIT AVENUE.

Detailed Location:
Ecological:
HABITAT CONSISTS OF RIVERSIDEAN ALLUVIAL FAN SCRUB.

Threats:
General:
9 TOTAL CAPTURES (NUMBER OF INDIVIDUALS UNKNOWN) DURING 2 TRAPPING SESSIONS: 2-7 DEC 2001 AND 6-11 JAN 2002.

PLSS: T01N, R05W, Sec. 19, E (S)	Accuracy: non-specific area	Area (acres): 278
UTM: Zone-11 N3779778 E459465	Latitude/Longitude: 34.15814 / -117.43974	Elevation (feet): 1,750

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
BRA02R0004 MICHAEL BRANDMAN ASSOCIATES - SAN BERNARDINO KANGAROO RAT PRESENCE/ABSENCE TRAPPING STUDIES ON NORTH FONTANA PROPERTIES. 2002-02-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 60520	EO Index: 60556
Key Quad: Devore (3411724)	Element Code: AMAFD05032
Occurrence Number: 47	Occurrence Last Updated: 2005-03-14

Scientific Name: <i>Chaetodipus fallax pallidus</i>	Common Name: pallid San Diego pocket mouse
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern
CNDDB Element Ranks:	
Global: G5T3T4	
State: S3S4	

General Habitat:	Micro Habitat:
DESERT BORDER AREAS IN EASTERN SAN DIEGO COUNTY IN DESERT WASH, DESERT SCRUB, DESERT SUCCULENT SCRUB, PINYON-JUNIPER, ETC.	SANDY, HERBACEOUS AREAS, USUALLY IN ASSOCIATION WITH ROCKS OR COARSE GRAVEL.

Last Date Observed: 1976-09-21	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1976-09-21	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
 ABOUT 0.5 MILE WEST OF DEVORE.

Detailed Location:
 EXACT LOCATION NOT KNOWN. MAPPED ACCORDING TO LAT/LONG COORDINATES PROVIDED BY MANIS WITH AN UNCERTAINTY OF 1328 METERS (ABOUT 0.83 MILES).

Ecological:

Threats:

General:

ONE MALE SPECIMEN COLLECTED 21 SEP 1976 BY M. HAFNER ET AL. AT "DEVORE, 0.5 MI W" (MVZ #158943).

PLSS: T02N, R05W, Sec. 33 (S)	Accuracy: 1 mile	Area (acres): 0
UTM: Zone-11 N3786226 E462208	Latitude/Longitude: 34.21640 / -117.41026	Elevation (feet): 2,100

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
 MAN04S0020 MAMMAL NETWORKED INFORMATION SYSTEM (MANIS) - PRINTOUT OF CHAETODIPUS FALLAX PALLIDUS SPECIMEN RECORDS FROM MANIS. THIS INCLUDES RECORDS FROM LACM, MVZ, KU, CAS, TTU, & FMNH. 2004-12-10



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 79359	EO Index: 80341
Key Quad: Devore (3411724)	Element Code: ARACC01060
Occurrence Number: 9	Occurrence Last Updated: 2018-09-06

Scientific Name: <i>Anniella stebbinsi</i>	Common Name: Southern California legless lizard
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	USFS_S-Sensitive
Global: G3	
State: S3	

General Habitat:	Micro Habitat:
GENERALLY SOUTH OF THE TRANSVERSE RANGE, EXTENDING TO NORTHWESTERN BAJA CALIFORNIA. OCCURS IN SANDY OR LOOSE LOAMY SOILS UNDER SPARSE VEGETATION. DISJUNCT POPULATIONS IN THE TEHACHAPI AND PIUTE MOUNTAINS IN KERN COUNTY.	VARIETY OF HABITATS; GENERALLY IN MOIST, LOOSE SOIL. THEY PREFER SOILS WITH A HIGH MOISTURE CONTENT.

Last Date Observed: 1992-04-22	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1992-04-22	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
VICINITY OF LYTLE CREEK NORTH OF HIGHLAND AVENUE, RIALTO.

Detailed Location:
FORMERLY A. P. PULCHRA EO #87. LOCATION STATED AS "OLIVE WOODLAND, ON BENCH WEST OF LYTLE CREEK, NORTH OF HIGHLAND AVE; SAN BERNARDINO COUNTY".

Ecological:

Threats:

General:

1 COLLECTED FROM THE FOOTHILLS NORTH OF FONTANA IN 1967 AND ATTRIBUTED HERE. 1 CAPTURED AND RELEASED ON 22 APR 1992.

PLSS: T01N, R05W, Sec. 22 (S)	Accuracy: 1 mile	Area (acres): 0
UTM: Zone-11 N3778895 E464420	Latitude/Longitude: 34.15036 / -117.38596	Elevation (feet): 1,530

County Summary:	Quad Summary:
San Bernardino	San Bernardino North (3411723), Devore (3411724)

Sources:

FUL93U0001	FULLER, M.M. - SCIENTIFIC COLLECTING PERMIT REPORT [SC-000215] 1993-XX-XX
WEL67S0005	WELBOURN - LACM #52611 COLLECTED FROM FOOTHILLS N OF FONTANA 1967-05-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: B0561	EO Index: 112428
Key Quad: Devore (3411724)	Element Code: ARACC01060
Occurrence Number: 126	Occurrence Last Updated: 2018-09-06

Scientific Name: <i>Anniella stebbinsi</i>	Common Name: Southern California legless lizard
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern
CNDDB Element Ranks:	USFS_S-Sensitive
Global: G3	
State: S3	

General Habitat:	Micro Habitat:
GENERALLY SOUTH OF THE TRANSVERSE RANGE, EXTENDING TO NORTHWESTERN BAJA CALIFORNIA. OCCURS IN SANDY OR LOOSE LOAMY SOILS UNDER SPARSE VEGETATION. DISJUNCT POPULATIONS IN THE TEHACHAPI AND PIUTE MOUNTAINS IN KERN COUNTY.	VARIETY OF HABITATS; GENERALLY IN MOIST, LOOSE SOIL. THEY PREFER SOILS WITH A HIGH MOISTURE CONTENT.

Last Date Observed: 1996-11-08	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1996-11-08	Occurrence Rank: Good
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
ABOUT 0.3 MILES EAST OF CITRUS AVE AT DUNCAN CANYON RD, 0.75 MILES EAST OF I-15 AT DUNCAN CANYON ROAD, FONTANA.

Detailed Location:
SSW OF NEALEYS CORNER AND LYTLE CREEK AT I-15.

Ecological:

Threats:

General:
1 COLLECTED FROM THE FOOTHILLS NORTH OF FONTANA IN 1967 AND ATTRIBUTED HERE. 1 COLLECTED ON 8 NOV 1996.

PLSS: T01N, R05W, Sec. 18, SW (S)	Accuracy: 1/5 mile	Area (acres): 70
UTM: Zone-11 N3780578 E458704	Latitude/Longitude: 34.16532 / -117.44804	Elevation (feet): 1,800

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:

SIN96S0001 SINCLAIR, T. - CM #146025 COLLECTED CA 2 MI N ST 30 AND 0.7 MI E I-15 NEAR FONTANA 1996-11-08

WEL67S0005 WELBOURN - LACM #52611 COLLECTED FROM FOOTHILLS N OF FONTANA 1967-05-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	B0563	EO Index:	112429
Key Quad:	Devore (3411724)	Element Code:	ARACC01060
Occurrence Number:	127	Occurrence Last Updated:	2018-09-05

Scientific Name:	<i>Anniella stebbinsi</i>	Common Name:	Southern California legless lizard
Listing Status:	Federal: None State: None	Rare Plant Rank:	
CNDDB Element Ranks:	Global: G3 State: S3	Other Lists:	CDFW_SSC-Species of Special Concern USFS_S-Sensitive

General Habitat:	Micro Habitat:
GENERALLY SOUTH OF THE TRANSVERSE RANGE, EXTENDING TO NORTHWESTERN BAJA CALIFORNIA. OCCURS IN SANDY OR LOOSE LOAMY SOILS UNDER SPARSE VEGETATION. DISJUNCT POPULATIONS IN THE TEHACHAPI AND PIUTE MOUNTAINS IN KERN COUNTY.	VARIETY OF HABITATS; GENERALLY IN MOIST, LOOSE SOIL. THEY PREFER SOILS WITH A HIGH MOISTURE CONTENT.

Last Date Observed:	2005-03-20	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	2005-03-20	Occurrence Rank:	Unknown
Owner/Manager:	UNKNOWN	Trend:	Unknown
Presence:	Presumed Extant		

Location:
 ALONG CABLE CANYON ROAD JUST E OF I-215, 0.8 MILES SE OF OF I-215 & I-15 INTERCHANGE, DEVORE.

Detailed Location:
 MAPPED ACCORDING TO PROVIDED COORDINATES, EAST OF CAJON WASH.

Ecological:

Threats:

General:

1 COLLECTED ON 20 MAR 2005 AND EXPERTLY IDENTIFIED AS NEWLY DESCRIBED SPECIES A. STEBBINSI BY T. PAPENFUSS.

PLSS:	T02N, R05W, Sec. 34, NW (S)	Accuracy:	1/10 mile	Area (acres):	18
UTM:	Zone-11 N3786526 E463447	Latitude/Longitude:	34.21915 / -117.39684	Elevation (feet):	2,016

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:

PAP05S0018 PAPENFUSS, T. - MVZ #250544 COLLECTED AT 34 13.15' N, 117 23.81' W, CABLE CANYON, DEVORE 2005-03-20



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: B0564	EO Index: 112430
Key Quad: Devore (3411724)	Element Code: ARACC01060
Occurrence Number: 128	Occurrence Last Updated: 2018-11-28

Scientific Name: <i>Anniella stebbinsi</i>	Common Name: Southern California legless lizard
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern USFS_S-Sensitive
CNDDDB Element Ranks:	
Global: G3	
State: S3	

General Habitat: GENERALLY SOUTH OF THE TRANSVERSE RANGE, EXTENDING TO NORTHWESTERN BAJA CALIFORNIA. OCCURS IN SANDY OR LOOSE LOAMY SOILS UNDER SPARSE VEGETATION. DISJUNCT POPULATIONS IN THE TEHACHAPI AND PIUTE MOUNTAINS IN KERN COUNTY.	Micro Habitat: VARIETY OF HABITATS; GENERALLY IN MOIST, LOOSE SOIL. THEY PREFER SOILS WITH A HIGH MOISTURE CONTENT.
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Last Date Observed: 2000-02-27	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2000-02-27	Occurrence Rank: Good
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
ALONG CABLE CREEK, 1.2 MILES WEST OF THE I-15 AND I-215 INTERCHANGE, IN THE AREA OF DEVORE, NW OF SAN BERNARDINO.

Detailed Location:

Ecological:
IT APPEARS THAT THIS AREA EXPERIENCED A SEVERE FLOODING EVENT AROUND 2004-2005 AFTER THE VEGETATION WAS STRIPPED AWAY UP-CANYON BY FOREST FIRE (OLD FIRE) IN 2003.

Threats:

General:
2 COLLECTED ON 27 FEB 2000 AND ONE USED AS A GENETIC REFERENCE REPRESENTING CLADE E IN PARHAM & PAPENFUSS 2009, NOW DESCRIBED AS NEW SPECIES A. STEBBINSI.

PLSS: T02N, R05W, Sec. 34, NE (S)	Accuracy: 1/10 mile	Area (acres): 18
UTM: Zone-11 N3786807 E464226	Latitude/Longitude: 34.22171 / -117.38839	Elevation (feet): 2,077

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

PAP00S0022	PAPENFUSS, T. - MVZ #230671 & 230672 COLLECTED AT CABLE CANYON, 0.8 MI NE (BY AIR) OF DEVORE, ALSO 1.2 MI E (BY AIR) OF JUNCTION OF HWY 15 WITH HWY 215 2000-02-27
PAR09A0001	PARHAM, J. & T. PAPENFUSS - EVIDENCE FOR HIGH GENETIC DIVERSITY AMONG FOSSORIAL LIZARD POPULATIONS (ANNIELLA PULCHRA) IN A RAPIDLY DEVELOPING LANDSCAPE. CONSERVATION GENETICS 10: 169-176. 2009-XX-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: B0565	EO Index: 112431
Key Quad: Devore (3411724)	Element Code: ARACC01060
Occurrence Number: 129	Occurrence Last Updated: 2018-09-05

Scientific Name: <i>Anniella stebbinsi</i>	Common Name: Southern California legless lizard
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern USFS_S-Sensitive
CNDDDB Element Ranks:	
Global: G3	
State: S3	

General Habitat: GENERALLY SOUTH OF THE TRANSVERSE RANGE, EXTENDING TO NORTHWESTERN BAJA CALIFORNIA. OCCURS IN SANDY OR LOOSE LOAMY SOILS UNDER SPARSE VEGETATION. DISJUNCT POPULATIONS IN THE TEHACHAPI AND PIUTE MOUNTAINS IN KERN COUNTY.	Micro Habitat: VARIETY OF HABITATS; GENERALLY IN MOIST, LOOSE SOIL. THEY PREFER SOILS WITH A HIGH MOISTURE CONTENT.
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Last Date Observed: 2017-01-28	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2017-01-28	Occurrence Rank: Good
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
SOUTH SIDE OF CABLE CREEK AND NE OF I-215, ABOUT 0.8 MILE NNW OF KENDALL DRIVE AT LITTLE LEAGUE DRIVE, SAN BERNARDINO

Detailed Location:
SITE APPEARS TO BE ACCESSIBLE FROM FRONTAGE ROAD ON NE SIDE OF I-215.

Ecological:
HABITAT DESCRIBED AS COASTAL SAGE SCRUB AT A ROCKY/SANDY WASH IN AN OHV AREA.

Threats:
POSSIBLY THREATENED BY OFF HIGHWAY VEHICLE USE ALONG CABLE CREEK WASH.

General:
2 FOUND BY ROCK FLIPPING AND PHOTOGRAPHED ON 4 MAR 2006. 1 FOUND BY FLIPPING ARTIFICIAL COVER AND PHOTOGRAPHED ON 18 FEB 2014. 1 COLLECTED ON 28 JAN 2017 AND EXPERTLY IDENTIFIED AS NEWLY DESCRIBED SPECIES A. STEBBINSI.

PLSS: T01N, R05W, Sec. 2, NW (S)	Accuracy: specific area	Area (acres): 16
UTM: Zone-11 N3785307 E465106	Latitude/Longitude: 34.20821 / -117.37878	Elevation (feet): 1,857

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

HAN17S0005	HANSEN, R. ET AL. - CAS #261584 COLLECTED AT E SIDE OF INTERSTATE 215, CABLE CANYON WASH, 34 12 25.38 N, 117 22 45.228 W 2017-01-28
HER16D0001	HERP, INC. - HERPETOLOGICAL EDUCATION AND RESEARCH PROJECT (HERP) DATABASE. FORMERLY A PROJECT OF THE NORTH AMERICAN FIELD HERPING ASSOCIATION. 2016-10-11



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: B1647	EO Index: 113560
Key Quad: Devore (3411724)	Element Code: ARACC01060
Occurrence Number: 394	Occurrence Last Updated: 2018-12-13

Scientific Name: <i>Anniella stebbinsi</i>	Common Name: Southern California legless lizard
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern
CNDDB Element Ranks:	USFS_S-Sensitive
Global: G3	
State: S3	

General Habitat: GENERALLY SOUTH OF THE TRANSVERSE RANGE, EXTENDING TO NORTHWESTERN BAJA CALIFORNIA. OCCURS IN SANDY OR LOOSE LOAMY SOILS UNDER SPARSE VEGETATION. DISJUNCT POPULATIONS IN THE TEHACHAPI AND PIUTE MOUNTAINS IN KERN COUNTY.	Micro Habitat: VARIETY OF HABITATS; GENERALLY IN MOIST, LOOSE SOIL. THEY PREFER SOILS WITH A HIGH MOISTURE CONTENT.
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Last Date Observed: 2018-11-24	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2018-11-24	Occurrence Rank: Good
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
VICINITY OF SIERRA HEIGHTS, 1 MI ENE OF I-15 AT DUNCAN CANYON RD AND 0.8 MI SSW OF I-15 AT SIERRA AVE, N OF FONTANA.

Detailed Location:

Ecological:

Threats:

General:

1 FOUND AND PHOTOGRAPHED ON 24 NOV 2018.

PLSS: T01N, R05W, Sec. 18, SE (S)	Accuracy: 1/10 mile	Area (acres): 18
UTM: Zone-11 N3781187 E459148	Latitude/Longitude: 34.17084 / -117.44325	Elevation (feet): 1,885

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
INA18U0030 INATURALIST & B. HINDS - OBSERVATION 18968190 FROM HTTP://WWW.INATURALIST.ORG. ACCESSED 2018-12-13. 2018-11-24



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	03119	EO Index:	28126
Key Quad:	Cucamonga Peak (3411725)	Element Code:	ARACF12100
Occurrence Number:	37	Occurrence Last Updated:	2012-02-22

Scientific Name:	<i>Phrynosoma blainvillii</i>	Common Name:	coast horned lizard
Listing Status:	Federal: None State: None	Rare Plant Rank:	
CNDDB Element Ranks:	Global: G3G4 State: S3S4	Other Lists:	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern

General Habitat:	Micro Habitat:
FREQUENTS A WIDE VARIETY OF HABITATS, MOST COMMON IN LOWLANDS ALONG SANDY WASHES WITH SCATTERED LOW BUSHES.	OPEN AREAS FOR SUNNING, BUSHES FOR COVER, PATCHES OF LOOSE SOIL FOR BURIAL, AND ABUNDANT SUPPLY OF ANTS AND OTHER INSECTS.

Last Date Observed:	1959-07-28	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1959-07-28	Occurrence Rank:	Unknown
Owner/Manager:	USFS-SAN BERNARDINO NF	Trend:	Unknown
Presence:	Presumed Extant		

Location:
 ETIWANDA CANYON, 4.5 MI W OF NEALEYS CORNER, SAN GABRIEL MTNS.

Detailed Location:
 MAPPED TO STATED LOCALITY OF "SAN GABRIEL MTS; W SLOPE ETIWANDA."

Ecological:
Threats:

General:
 1 COLLECTED BY A. SCHOENHERR ON 28 JUL 1959 (LACM #26957).

PLSS: T01N, R06W, Sec. 04 (S)	Accuracy: 1 mile	Area (acres): 0
UTM: Zone-11 N3784093 E452337	Latitude/Longitude: 34.19676 / -117.51731	Elevation (feet): 3,800

County Summary:	Quad Summary:
San Bernardino	Devore (3411724), Cucamonga Peak (3411725)

Sources:
 SCH59S0001 SCHOENHERR, A. - LACM #26957 1959-07-28



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 03292	EO Index: 27960
Key Quad: Devore (3411724)	Element Code: ARACF12100
Occurrence Number: 292	Occurrence Last Updated: 1995-11-02

Scientific Name: <i>Phrynosoma blainvillii</i>	Common Name: coast horned lizard
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDDB Element Ranks:	BLM_S-Sensitive
Global: G3G4	CDFW_SSC-Species of Special Concern
State: S3S4	IUCN_LC-Least Concern

General Habitat: FREQUENTS A WIDE VARIETY OF HABITATS, MOST COMMON IN LOWLANDS ALONG SANDY WASHES WITH SCATTERED LOW BUSHES.	Micro Habitat: OPEN AREAS FOR SUNNING, BUSHES FOR COVER, PATCHES OF LOOSE SOIL FOR BURIAL, AND ABUNDANT SUPPLY OF ANTS AND OTHER INSECTS.
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Last Date Observed: 1988-05-26	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1992-04-10	Occurrence Rank: None
Owner/Manager: SBD COUNTY	Trend: Decreasing
Presence: Extirpated	

Location:
CAJON WASH, 2.5 MILES SE OF DEVORE, NORTH SIDE OF INSTITUTION ROAD.

Detailed Location:

Ecological:
HABITAT IS RIVERSIDEAN ALLUVIAL SAGE SCRUB. ORANGE-THROATED WHIPTAIL ALSO OCCURS AT THIS SITE.

Threats:
AREA HAS BEEN DEVELOPED AS A POLICE DRIVING COURSE (COMPLETELY GRADED & RESTRUCTURED FOR STREET/HIGHWAY SIMULATION).

General:
ONE INDIVIDUAL OBSERVED IN 1988; IN 1992, HABITAT HAD BEEN DESTROYED AND NO HORNED LIZARDS OBSERVED.

PLSS: T01N, R05W, Sec. 11 (S)	Accuracy: 1/5 mile	Area (acres): 0
UTM: Zone-11 N3782427 E464671	Latitude/Longitude: 34.18222 / -117.38338	Elevation (feet): 1,680

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

MIL92F0006	MILROY III, L.G. - FIELD SURVEY FORM FOR PHRYNOSOMA CORONATUM (BLAINVILLII POPULATION) 1992-04-10
PEN88F0004	PENDLETON, M.H. - FIELD SURVEY FORM FOR PHRYNOSOMA CORONATUM (BLAINVILLII POPULATION) 1988-05-26



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 20511	EO Index: 9880
Key Quad: San Bernardino North (3411723)	Element Code: ARACF12100
Occurrence Number: 321	Occurrence Last Updated: 1991-12-03

Scientific Name: <i>Phrynosoma blainvillii</i>	Common Name: coast horned lizard
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDDB Element Ranks:	BLM_S-Sensitive
Global: G3G4	CDFW_SSC-Species of Special Concern
State: S3S4	IUCN_LC-Least Concern

General Habitat: FREQUENTS A WIDE VARIETY OF HABITATS, MOST COMMON IN LOWLANDS ALONG SANDY WASHES WITH SCATTERED LOW BUSHES.	Micro Habitat: OPEN AREAS FOR SUNNING, BUSHES FOR COVER, PATCHES OF LOOSE SOIL FOR BURIAL, AND ABUNDANT SUPPLY OF ANTS AND OTHER INSECTS.
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Last Date Observed: 1990-08-23	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1990-08-23	Occurrence Rank: Good
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
BETWEEN MEYERS CANYON AND CABLE CANYON, NORTH OF I-15 AND EAST OF THE CITY OF DEVORE.

Detailed Location:

Ecological:
HABITAT IS COASTAL SCRUB, DOMINATED BY ERIOGONUM FASCICULATUM SSP. FOLIOSUM, SALVIA APIANA, AND ERIODICTYON TRICOCALYX.

Threats:
MAIN THREAT IS CONVERSION OF THIS OPEN SPACE TO RESIDENTIAL DEVELOPMENT.

General:
3 ADULT AND 2 JUVENILE LIZARDS OBSERVED.SITE COULD BE PROTECTED BY ANNEXATION TO SAN BERNARDINO NATIONAL FOREST, WHICH SURROUNDS IT ON 3 SIDES.

PLSS: T02N, R05W, Sec. 35 (S)	Accuracy: 3/5 mile	Area (acres): 0
UTM: Zone-11 N3786922 E465949	Latitude/Longitude: 34.22281 / -117.36968	Elevation (feet): 2,500

County Summary: San Bernardino	Quad Summary: San Bernardino North (3411723), Devore (3411724)
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Sources:
PHI90F0016 PHILLIPS, J.R. - FIELD SURVEY FORM FOR PHRYNOSOMA CORONATUM (BLAINVILLII POPULATION) - (SAN DIEGO HORNED LIZARD) 1990-08-23



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 20069	EO Index: 9882
Key Quad: Devore (3411724)	Element Code: ARACF12100
Occurrence Number: 322	Occurrence Last Updated: 1991-12-03

Scientific Name: <i>Phrynosoma blainvillii</i>	Common Name: coast horned lizard
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: BLM_S-Sensitive
CNDDDB Element Ranks:	CDFW_SSC-Species of Special Concern
Global: G3G4	IUCN_LC-Least Concern
State: S3S4	

General Habitat:	Micro Habitat:
FREQUENTS A WIDE VARIETY OF HABITATS, MOST COMMON IN LOWLANDS ALONG SANDY WASHES WITH SCATTERED LOW BUSHES.	OPEN AREAS FOR SUNNING, BUSHES FOR COVER, PATCHES OF LOOSE SOIL FOR BURIAL, AND ABUNDANT SUPPLY OF ANTS AND OTHER INSECTS.

Last Date Observed: 1988-02-06	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1988-02-06	Occurrence Rank: Fair
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
JUST EAST OF THE JUNCTION OF AYALA DRIVE AND FITZGERALD, BETWEEN RIALTO MUNICIPAL AIRPORT AND THE CITY OF RIALTO.

Detailed Location:
SPECIMEN WAS FOUND AT THE NORTH EXTENT OF THE GRAVEL PITS.

Ecological:
HABITAT IS AN OPEN, COBBLY/SANDY AREA, LOCATED ADJACENT TO 80 ACRES OF ALLUVIAL SAGE SCRUB, DOMINATED BY ERIOGONUM FASCICULATUM, PENSTEMON SPECTABILIS, SCHISMUS BARBATUS, ARTEMISIA CALIFORNICA, BRASSICA GENICULATA, BROMUS RUBENS, ETC.

Threats:
THREATENED BY A PROPOSAL TO ESTABLISH THIS AREA AS A FLOOD CONTROL RETENTION BASIN.

General:
ONE LIZARD OBSERVED, APPROXIMATELY 6.5 CM IN LENGTH.

PLSS: T01N, R05W, Sec. 34, SE (S)	Accuracy: 2/5 mile	Area (acres): 0
UTM: Zone-11 N3776362 E464148	Latitude/Longitude: 34.12751 / -117.38880	Elevation (feet): 1,400

County Summary:	Quad Summary:
San Bernardino	Fontana (3411714), Devore (3411724)

Sources:
BRA88F0001 BRAMLET, D. - FIELD SURVEY FORM FOR PHRYNOSOMA CORONATUM (BLAINVILLII POPULATION) - (SAN DIEGO HORNED LIZARD) 1988-02-06



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 20071	EO Index: 9886
Key Quad: Devore (3411724)	Element Code: ARACF12100
Occurrence Number: 323	Occurrence Last Updated: 1991-12-03

Scientific Name: <i>Phrynosoma blainvillii</i>	Common Name: coast horned lizard
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: BLM_S-Sensitive
CNDDDB Element Ranks:	CDFW_SSC-Species of Special Concern
Global: G3G4	IUCN_LC-Least Concern
State: S3S4	

General Habitat:	Micro Habitat:
FREQUENTS A WIDE VARIETY OF HABITATS, MOST COMMON IN LOWLANDS ALONG SANDY WASHES WITH SCATTERED LOW BUSHES.	OPEN AREAS FOR SUNNING, BUSHES FOR COVER, PATCHES OF LOOSE SOIL FOR BURIAL, AND ABUNDANT SUPPLY OF ANTS AND OTHER INSECTS.

Last Date Observed: 1990-08-27	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1990-08-27	Occurrence Rank: Good
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
BETWEEN AMES CANYON AND CABLE CANYON, 0.75 MI EAST OF THE JCT OF I-15 AND I-215, DEVORE.

Detailed Location:

Ecological:
HABITAT IS RIVERSIDEAN ALLUVIAL FAN SAGE SCRUB, DOMINATED BY ARTEMISIA CALIFORNICA AND ERIOGONUM FASCICULATUM SSP. FOLIOSUM.

Threats:
POSSIBLE THREAT OF RESIDENTIAL DEVELOPMENT.

General:
TWO ADULT AND ONE JUVENILE LIZARD OBSERVED. CURRENT LAND USE IS UNDEVELOPED OPEN SPACE.

PLSS: T02N, R05W, Sec. 34, NW (S)	Accuracy: 2/5 mile	Area (acres): 0
UTM: Zone-11 N3787082 E463666	Latitude/Longitude: 34.22417 / -117.39448	Elevation (feet): 2,000

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
PHI90F0017 PHILLIPS, J.R. - FIELD SURVEY FORM FOR PHRYNOSOMA CORONATUM (BLAINVILLII POPULATION) - (SAN DIEGO HORNED LIZARD) 1990-08-27



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	20072	EO Index:	9885
Key Quad:	Devore (3411724)	Element Code:	ARACF12100
Occurrence Number:	324	Occurrence Last Updated:	2012-05-29

Scientific Name:	<i>Phrynosoma blainvillii</i>	Common Name:	coast horned lizard
Listing Status:	Federal: None State: None	Rare Plant Rank:	
CNDDDB Element Ranks:	Global: G3G4 State: S3S4	Other Lists:	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern

General Habitat:	Micro Habitat:
FREQUENTS A WIDE VARIETY OF HABITATS, MOST COMMON IN LOWLANDS ALONG SANDY WASHES WITH SCATTERED LOW BUSHES.	OPEN AREAS FOR SUNNING, BUSHES FOR COVER, PATCHES OF LOOSE SOIL FOR BURIAL, AND ABUNDANT SUPPLY OF ANTS AND OTHER INSECTS.

Last Date Observed:	2008-08-07	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	2008-08-07	Occurrence Rank:	Good
Owner/Manager:	PVT	Trend:	Unknown
Presence:	Presumed Extant		

Location:
CAJON WASH, SE OF THE JUNCTION OF I-15 AND I-215, DEVORE.

Detailed Location:
SAN DIEGO HORNED LIZARDS ARE LIKELY FOUND THROUGHOUT THIS ENTIRE SITE. MAPPED TO PROVIDED COORDINATES AND MAP. 1964 SPECIMEN LOCALITY AT "6.4 MI W SAN BERNARDINO ON KENDALL DR"; EXACT LOCATION UNKNOWN, BUT INCLUDED HERE.

Ecological:
HABITAT IS RIVERSIDEAN ALLUVIAL FAN SAGE SCRUB. PORTIONS OF OCCURRENCE IN THE NORTH DEVELOPED AFTER 2005 AND BEFORE 2009.

Threats:
THREATENED BY A PLANNED DEVELOPMENT, AGGREGATE MINING, OHVS, AND NON-NATIVE GRASSES.

General:
1 COLLECTED 16 MAY 1964 (LACM #101451) BY D.E. HARVEY. 2 ADULT LIZARDS AND A FEW HORNED LIZARD SCATS OBSERVED IN 1990. 1 JUVENILE WAS OBSERVED IN WASH ENE OF GLEN HELEN REHAB FACILITY IN 7 AUG 2008, 0.25 MILE NORTH OF INSTITUTION ROAD.

PLSS:	T01N, R05W (S)	Accuracy:	non-specific area	Area (acres):	2,097
UTM:	Zone-11 N3783362 E465195	Latitude/Longitude:	34.19067 / -117.37773	Elevation (feet):	1,700

County Summary:	Quad Summary:
San Bernardino	San Bernardino North (3411723), Devore (3411724)

Sources:

HAR64S0012	HARVEY, D. - LACM #101451 1964-05-16
WHI08F0064	WHITE, S. & J. WOOD (SCOTT WHITE BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR PHRYNOSOMA CORONATUM (BLAINVILLII POPULATION) 2008-08-07
WHI90F0006	WHITE, S. - FIELD SURVEY FORM FOR PHRYNOSOMA CORONATUM BLAINVILLII 1990-XX-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	20365	EO Index:	23986
Key Quad:	Devore (3411724)	Element Code:	ARACF12100
Occurrence Number:	378	Occurrence Last Updated:	2011-02-28

Scientific Name:	<i>Phrynosoma blainvillii</i>	Common Name:	coast horned lizard
Listing Status:	Federal: None State: None	Rare Plant Rank:	
CNDDDB Element Ranks:	Global: G3G4 State: S3S4	Other Lists:	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern

General Habitat:	Micro Habitat:
FREQUENTS A WIDE VARIETY OF HABITATS, MOST COMMON IN LOWLANDS ALONG SANDY WASHES WITH SCATTERED LOW BUSHES.	OPEN AREAS FOR SUNNING, BUSHES FOR COVER, PATCHES OF LOOSE SOIL FOR BURIAL, AND ABUNDANT SUPPLY OF ANTS AND OTHER INSECTS.

Last Date Observed:	1991-06-30	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1991-06-30	Occurrence Rank:	Excellent
Owner/Manager:	UNKNOWN	Trend:	Unknown
Presence:	Presumed Extant		

Location:
 AREA OF NW, SE, AND NE OF THE INTERSECTION OF I-15 AND FOOTHILL FREEWAY (SR 210), RANCHO CUCAMONGA.

Detailed Location:

Ecological:

HABITAT CONSISTED OF LOOSE, SANDY SOIL IN ALLUVIAL SCRUB/DRY WASH. MILROY OBS BREEDING, FORAGING, WINTERING ACTIVITIES OF LIZARD-HE RECOMMENDED PROTECTION OF AREA AS RESERVE, ESP ON NW SITE (1991). SOME RESIDENTIAL IN NW, NE (2009 AERIAL).

Threats:

SURROUNDING AREAS OF RESIDENTIAL DEVELOPMENT AND SOME VACANT VINEYARDS.

General:

MILROY ESTIMATED MINIMUM POPULATION OF 27 LIZARDS (20+ ADULTS & 7+ JUVENILES) AT SE & NE SITES, AND MINIMUM 63 LIZARDS (47+ ADULTS & 16+ JUVENILES) AT NW SITE BASED ON HIS FIELD SURVEY FOR 18 MONTHS.

PLSS:	T01N, R06W, Sec. 26 (S)	Accuracy:	non-specific area	Area (acres):	1,986
UTM:	Zone-11 N3777468 E455017	Latitude/Longitude:	34.13713 / -117.48787	Elevation (feet):	1,400

County Summary:

San Bernardino

Quad Summary:

Fontana (3411714), Devore (3411724), Cucamonga Peak (3411725)

Sources:

MIL91F0005	MILROY III, L.G. - FIELD SURVEY FORM FOR PHRYNOSOMA CORONATUM (BLAINVILLII POPULATION) 1991-06-30
MIL91F0006	MILROY III, L.G. - FIELD SURVEY FORM FOR PHRYNOSOMA CORONATUM (BLAINVILLII POPULATION) 1991-06-30



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 78372	EO Index: 79293
Key Quad: Devore (3411724)	Element Code: ARACF12100
Occurrence Number: 696	Occurrence Last Updated: 2010-03-18

Scientific Name: <i>Phrynosoma blainvillii</i>	Common Name: coast horned lizard
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDDB Element Ranks:	BLM_S-Sensitive
Global: G3G4	CDFW_SSC-Species of Special Concern
State: S3S4	IUCN_LC-Least Concern

General Habitat:	Micro Habitat:
FREQUENTS A WIDE VARIETY OF HABITATS, MOST COMMON IN LOWLANDS ALONG SANDY WASHES WITH SCATTERED LOW BUSHES.	OPEN AREAS FOR SUNNING, BUSHES FOR COVER, PATCHES OF LOOSE SOIL FOR BURIAL, AND ABUNDANT SUPPLY OF ANTS AND OTHER INSECTS.

Last Date Observed: 2009-06-30	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2009-06-30	Occurrence Rank: Poor
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
CAJON CANYON, ABOUT 0.5 MI NNE OF GLEN HELEN REGIONAL PARK, SOUTHEAST OF I-215 & I-15 JUNCTION, DEVORE.

Detailed Location:
BY FIRE STATION ADJACENT TO CAJON CREEK. MAPPED ACCORDING TO COORDINATES/MAP PROVIDED.

Ecological:
FOUND IN DISTURBED ALLUVIAL SCRUB VEGETATION. SANDY, GRAVEL SOILS WITH NUMEROUS ANTS PRESENT. LOTS OF WEEDY HERBACEOUS ANNUALS WITH YERBA SANTA, RHUS TRILOBATA, AND YUCCA. SITE COMPLETELY SURROUNDED BY DEVELOPMENT, TRAIN TRACKS, AND ROADS.

Threats:
DEVELOPMENT, OHV USE, AND TRASH.

General:
ONE OBSERVED BEHIND FIRE STATION IN AREA ON 30 JUNE 2009.

PLSS: T02N, R05W, Sec. 33, NE (S)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-11 N3786694 E462709	Latitude/Longitude: 34.22064 / -117.40485	Elevation (feet): 2,077

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
KIP09F0001 KIPPER, J. & P. BRENNER (ULTRASYSTEMS) - FIELD SURVEY FORM FOR PHRYNOSOMA BLAINVILLII 2009-06-30



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 87015	EO Index: 83029
Key Quad: Devore (3411724)	Element Code: ARACF12100
Occurrence Number: 770	Occurrence Last Updated: 2012-10-24

Scientific Name: <i>Phrynosoma blainvillii</i>	Common Name: coast horned lizard
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDB Element Ranks:	BLM_S-Sensitive
Global: G3G4	CDFW_SSC-Species of Special Concern
State: S3S4	IUCN_LC-Least Concern

General Habitat: FREQUENTS A WIDE VARIETY OF HABITATS, MOST COMMON IN LOWLANDS ALONG SANDY WASHES WITH SCATTERED LOW BUSHES.	Micro Habitat: OPEN AREAS FOR SUNNING, BUSHES FOR COVER, PATCHES OF LOOSE SOIL FOR BURIAL, AND ABUNDANT SUPPLY OF ANTS AND OTHER INSECTS.
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Last Date Observed: 1938-04-03	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1938-04-03	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF, UNK	Trend: Unknown
Presence: Presumed Extant	

Location:
LYTLE CREEK, NEAR LYTLE CREEK CANYON MOUTH, ABOUT 6.5 MILES NW OF MUSCOY.

Detailed Location:
1903 SPECIMEN FROM "LYTLE CREEK, SAN BERNADINO COUNTY" MAY BE FROM ANYWHERE ALONG CRK; LOCALITY GIVEN FOR SPECIMEN STEPHENS TOOK 3 DAYS EARLIER: "NORTH FORK LYTLE CREEK." MAPPED TO 1938 LOCALITY "ONTARIO, NEAR, MOUTH OF LYTLE CREEK CANYON."

Ecological:

Threats:

General:

SDNHM #11223 COLLECTED BY F. STEPHENS ON 21 JUL 1903. USNM #312967 TAKEN BY ANONYMOUS COLLECTOR ON 3 APR 1938.

PLSS: T01N, R05W, Sec. 06 (S)	Accuracy: 1 mile	Area (acres): 0
UTM: Zone-11 N3784814 E458589	Latitude/Longitude: 34.20352 / -117.44949	Elevation (feet): 2,300

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

ANO38S0003	ANONYMOUS (U.S. NATIONAL MUSEUM OF NATURAL HISTORY) - USNM #312967, COLLECTED AT MOUTH OF LYTLE CREEK CANYON. 1938-04-03
STE03S0001	STEPHENS, F. (SAN DIEGO NATURAL HISTORY MUSEUM) - SDNHM SPECIMEN #11223 1903-07-21



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: A3375	EO Index: 104990
Key Quad: Devore (3411724)	Element Code: ARADB01017
Occurrence Number: 85	Occurrence Last Updated: 2017-01-17

Scientific Name: <i>Arizona elegans occidentalis</i>	Common Name: California glossy snake
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern
CNDDB Element Ranks:	
Global: G5T2	
State: S2	

General Habitat: PATCHILY DISTRIBUTED FROM THE EASTERN PORTION OF SAN FRANCISCO BAY, SOUTHERN SAN JOAQUIN VALLEY, AND THE COAST, TRANSVERSE, AND PENINSULAR RANGES, SOUTH TO BAJA CALIFORNIA.	Micro Habitat: GENERALIST REPORTED FROM A RANGE OF SCRUB AND GRASSLAND HABITATS, OFTEN WITH LOOSE OR SANDY SOILS.
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Last Date Observed: 1973-05-27	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1973-05-27	Occurrence Rank: Unknown
Owner/Manager: SBD COUNTY	Trend: Unknown
Presence: Presumed Extant	

Location:
GLEN HELEN REGIONAL PARK, SE OF GLEN HELEN PKWY (DEVORE RD), SOUTH DEVORE.

Detailed Location:
ATTRIBUTED SPECIMEN COLLECTED FROM "DEVORE," EXACT LOCATION UNKNOWN.

Ecological:

Threats:

General:

1 COLLECTED ON 24 MAY 1968 AND 1 ON 27 MAY 1973.

PLSS: T01N, R05W, Sec. 4, NE (S)	Accuracy: 2/5 mile	Area (acres): 280
UTM: Zone-11 N3784958 E462618	Latitude/Longitude: 34.20498 / -117.40578	Elevation (feet): 2,009

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

COH68S0001	COHEN, S. - LACM #102119 COLLECTED FROM DEVORE 1968-05-24
JON73S0001	JONES, R. - LACM #102120 COLLECTED FROM GLEN HELEN REGIONAL PARK, 0.3 MI FROM DEVORE RD 1973-05-27



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: A3357	EO Index: 104991
Key Quad: Devore (3411724)	Element Code: ARADB01017
Occurrence Number: 86	Occurrence Last Updated: 2017-01-12

Scientific Name: <i>Arizona elegans occidentalis</i>	Common Name: California glossy snake
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern
CNDDDB Element Ranks:	
Global: G5T2	
State: S2	

General Habitat: PATCHILY DISTRIBUTED FROM THE EASTERN PORTION OF SAN FRANCISCO BAY, SOUTHERN SAN JOAQUIN VALLEY, AND THE COAST, TRANSVERSE, AND PENINSULAR RANGES, SOUTH TO BAJA CALIFORNIA.	Micro Habitat: GENERALIST REPORTED FROM A RANGE OF SCRUB AND GRASSLAND HABITATS, OFTEN WITH LOOSE OR SANDY SOILS.
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Last Date Observed: 2016-03-12	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2016-03-12	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
SW SIDE OF KENDALL DR, 0.3 MI NW OF INTERSECTION WITH N LITTLE LEAGUE DR, SOUTHEAST OF DEVORE.

Detailed Location:
MAPPED TO PROVIDED COORDINATES.

Ecological:
HABITAT WAS ALLUVIAL FAN, SCRUB, GRASS, SAGE, PLOWED.

Threats:

General:
1 YEARLING FOUND UNDER ARTIFICIAL COVER ON 12 MAR 2016.

PLSS: T01N, R05W, Sec. 2, SW (S)	Accuracy: 80 meters	Area (acres): 5
UTM: Zone-11 N3784412 E465248	Latitude/Longitude: 34.20014 / -117.37721	Elevation (feet): 1,815

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
HER16D0001 HERP, INC. - HERPETOLOGICAL EDUCATION AND RESEARCH PROJECT (HERP) DATABASE. FORMERLY A PROJECT OF THE NORTH AMERICAN FIELD HERPING ASSOCIATION. 2016-10-11



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: A3358	EO Index: 104992
Key Quad: Devore (3411724)	Element Code: ARADB01017
Occurrence Number: 87	Occurrence Last Updated: 2017-01-12

Scientific Name: <i>Arizona elegans occidentalis</i>	Common Name: California glossy snake
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern
CNDDB Element Ranks:	
Global: G5T2	
State: S2	

General Habitat:	Micro Habitat:
PATCHILY DISTRIBUTED FROM THE EASTERN PORTION OF SAN FRANCISCO BAY, SOUTHERN SAN JOAQUIN VALLEY, AND THE COAST, TRANSVERSE, AND PENINSULAR RANGES, SOUTH TO BAJA CALIFORNIA.	GENERALIST REPORTED FROM A RANGE OF SCRUB AND GRASSLAND HABITATS, OFTEN WITH LOOSE OR SANDY SOILS.

Last Date Observed: 2007-04-03	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2007-04-03	Occurrence Rank: Unknown
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
 KENDALL DR, ABOUT 0.3 MI SE OF INTERSECTION WITH CAJON BLVD, SOUTHEAST DEVORE.

Detailed Location:
 MAPPED TO COORDINATES PROVIDED.

Ecological:
 HABITAT WAS RESIDENTIAL, COASTAL SCRUB/GRASSY. LARGE RESIDENTIAL LOTS ON ONE SIDE OF ROAD AND PLOWED FIELDS ON THE OTHER.

Threats:
 FOUND DEAD ON ROAD.

General:
 1 JUVENILE FOUND DEAD ON ROAD ON 3 APR 2007.

PLSS: T01N, R05W, Sec. 2, NW (S)	Accuracy: 80 meters	Area (acres): 5
UTM: Zone-11 N3784965 E464755	Latitude/Longitude: 34.20512 / -117.38258	Elevation (feet): 1,866

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
 HER16D0001 HERP, INC. - HERPETOLOGICAL EDUCATION AND RESEARCH PROJECT (HERP) DATABASE. FORMERLY A PROJECT OF THE NORTH AMERICAN FIELD HERPING ASSOCIATION. 2016-10-11



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: A3379	EO Index: 105012
Key Quad: Devore (3411724)	Element Code: ARADB01017
Occurrence Number: 90	Occurrence Last Updated: 2017-01-17

Scientific Name: <i>Arizona elegans occidentalis</i>	Common Name: California glossy snake
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists: CDFW_SSC-Species of Special Concern
CNDDB Element Ranks:	
Global: G5T2	
State: S2	

General Habitat:	Micro Habitat:
PATCHILY DISTRIBUTED FROM THE EASTERN PORTION OF SAN FRANCISCO BAY, SOUTHERN SAN JOAQUIN VALLEY, AND THE COAST, TRANSVERSE, AND PENINSULAR RANGES, SOUTH TO BAJA CALIFORNIA.	GENERALIST REPORTED FROM A RANGE OF SCRUB AND GRASSLAND HABITATS, OFTEN WITH LOOSE OR SANDY SOILS.

Last Date Observed: 2013-05-28	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2013-05-28	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
I-15, SOUTHBOUND RAMP FROM SIERRA AVE, SOUTH NEALEYS CORNER.

Detailed Location:
MAPPED TO PROVIDED COORDINATES.

Ecological:
HABITAT WAS ALLUVIAL FAN/FREEWAY ON RAMP. LOCAL HABITAT RECENTLY BULLDOZED AND BURNED.

Threats:
FOUND DEAD ON ROAD.

General:
1 ADULT DOR FOUND ON 28 MAY 2013.

PLSS: T01N, R05W, Sec. 7, SE (S)	Accuracy: 80 meters	Area (acres): 5
UTM: Zone-11 N3782350 E459643	Latitude/Longitude: 34.18134 / -117.43794	Elevation (feet): 1,998

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
HERP16D0001 HERP, INC. - HERPETOLOGICAL EDUCATION AND RESEARCH PROJECT (HERP) DATABASE. FORMERLY A PROJECT OF THE NORTH AMERICAN FIELD HERPING ASSOCIATION. 2016-10-11



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 03283	EO Index: 24427	
Key Quad: Devore (3411724)	Element Code: CTT32720CA	
Occurrence Number: 3	Occurrence Last Updated: 1998-07-13	

Scientific Name: <i>Riversidian Alluvial Fan Sage Scrub</i>	Common Name: Riversidian Alluvial Fan Sage Scrub
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDDB Element Ranks:	
Global: G1	
State: S1.1	

General Habitat:	Micro Habitat:
<input type="checkbox"/>	<input type="checkbox"/>

Last Date Observed: 1985-02-12	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1985-02-12	Occurrence Rank: Good
Owner/Manager: FLOOD CONTROL DIST, PVT, USFS	Trend: Decreasing
Presence: Presumed Extant	

Location:
WASHES ON EITHER SIDE OF GLEN HELEN REHABILITATION FACILITY: LYTLE CREEK & CAJON CANYON. SAN BERNARDINO NATIONAL FOREST.

Detailed Location:
BOUNDARY PER 1985 AERIAL PHOTOS.

Ecological:
LARGE AREA W/ VARIED FAN SCRUB VEG. NEAR STREAM BEDS, ABUNDANT ERIOGONUM FASCIC, ERICAMERIA PINIFOLIA & LEPIDOSPARTUM SQUAMATUM. SITES LESS FREQUENTLY FLOODED: SYCAMORES, MTN MAHOGANY, YUCCA WHIPPLEI. LGE AREAS REWORKED BY ANNUAL FLOODING.

Threats:
DISTURBED BY GRAVEL PITS, LEVEES. CONSTRUCTION OF HWY 30 MAY DESTROY 129 PLANTS. PART PROPOSED FOR DEVELOPMENT.

General:
MORE SPECIES INFO IN GMF FOR THIS OCCURRENCE. ALSO SEE BIT89R01 IN NC ELF 32720. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS: T01N, R05W, Sec. 15 (S)	Accuracy: specific area	Area (acres): 9,219
UTM: Zone-11 N3781667 E463276	Latitude/Longitude: 34.17532 / -117.39848	Elevation (feet): 2,000

County Summary:	Quad Summary:
San Bernardino	San Bernardino South (3411713), San Bernardino North (3411723), Devore (3411724)

Sources:

HAN80U0002	HANES, T. & D. JENSEN - REPORT OF MEETING WITH TED HANES ON ALLUVIAL FAN COASTAL SAGE, CNERIDIUM STANDS, COMAROSTAPHYLIS & XYLOCOCCUS, TECATE CYPRESS, KNOBCONE PINE, ENGELMANN OAK, AND REDSHANK.. 1980-10-28
HOL85F0033	HOLLAND, R.F. - FIELD SURVEY FORM FOR RIVERSIDIAN ALLUVIAL FAN SAGE SCRUB (NC32720) 1985-02-12
HOL88M0001	HOLLAND, R.F. - FIELD MAPS OF LOS ANGELES RIPARIAN COMMUNITIES (SEE ALSO HOL88U0001). QUAD #3411727, 3411728, 3411438, 3411748, 3411821, 3411831, 3411841, 3411855, 3411864, 3411865, 3411866) 1988-04-XX
LAP83M0001	LAPRE, L. - MAP OF RIVERSIDIAN ALLUVIAL FAN SAGE SCRUB SITE NORTH OF HIGHLAND AVE., RIALTO. 1983-09-17
MAR88F0007	MARSH, K. - FIELD SURVEY FORM FOR RIVERSIDIAN ALLUVIAL FAN SAGE SCRUB & ERIASTRUM DENSIFOLIUM SSP. SANCTORUM 1988-07-07
ZIP90F0006	ZIPPIN, D. - FIELD SURVEY FORM FOR RIVERSIDIAN ALLUVIAL FAN SAGE SCRUB (NC32720) 1990-07-08



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	03149	EO Index:	24359
Key Quad:	Devore (3411724)	Element Code:	CTT32720CA
Occurrence Number:	16	Occurrence Last Updated:	1998-07-13

Scientific Name:	<i>Riversidian Alluvial Fan Sage Scrub</i>	Common Name:	Riversidian Alluvial Fan Sage Scrub
Listing Status:	Federal: None	Rare Plant Rank:	
	State: None	Other Lists:	
CNDDDB Element Ranks:	Global: G1		
	State: S1.1		

General Habitat:	<input type="checkbox"/>	Micro Habitat:	<input type="checkbox"/>
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Last Date Observed:	1985-02-13	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1985-11-15	Occurrence Rank:	Unknown
Owner/Manager:	PVT	Trend:	Unknown
Presence:	Presumed Extant		

Location:
SAN SEVAINE CANYON WASH, NW OF RIALTO.

Detailed Location:
BOUNDARY CHANGED PER INTERPRETATION OF 1978 AERIAL PHOTOS.

Ecological:
SALVIA APIANA, ERIOGONUM FASCICULATUM, LEPIDOSPARTUM SQUAMATUM, ARTEMISIA CALIFORNICA AND CERCOCARPUS BETULOIDES PER WIESLANDER SURVEY (1935).

Threats:
SHEEP GRAZING. SAN SEVAINE MAY SERVE AS OFF-SITE MITIGATION FOR OTHER SITES BEING DEVELOPED.

General:
NEEDS VERIFICATION OF VEGETATION CONDITION, COMPOSITION. SEE WWW.DFG.CA.GOV/BIOGEO/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS: T01N, R06W, Sec. 22 (S)	Accuracy: specific area	Area (acres): 253
UTM: Zone-11 N3780105 E454806	Latitude/Longitude: 34.16090 / -117.49031	Elevation (feet): 1,660

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
HOL88M0001 HOLLAND, R.F. - FIELD MAPS OF LOS ANGELES RIPARIAN COMMUNITIES (SEE ALSO HOL88U0001). QUAD #3411727, 3411728, 3411438, 3411748, 3411821, 3411831, 3411841, 3411855, 3411864, 3411865, 3411866) 1988-04-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 03286	EO Index: 24431	
Key Quad: Devore (3411724)	Element Code: CTT32720CA	
Occurrence Number: 17	Occurrence Last Updated: 1998-07-13	

Scientific Name: <i>Riversidian Alluvial Fan Sage Scrub</i>	Common Name: Riversidian Alluvial Fan Sage Scrub
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDDB Element Ranks:	
Global: G1	
State: S1.1	

General Habitat:	Micro Habitat:
<input type="checkbox"/>	<input type="checkbox"/>

Last Date Observed: 1985-02-13	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1985-02-13	Occurrence Rank: Unknown
Owner/Manager: PVT	Trend: Decreasing
Presence: Presumed Extant	

Location:
WEST OF RIALTO, EAST OF RIALTO MUNICIPAL AIRPORT.

Detailed Location:
MAPPED BY INTERPRETATION OF 1985 AERIAL PHOTOS.

Ecological:
Threats:
OFF-ROAD VEHICLE DAMAGE.

General:
NEEDS VERIFICATION OF VEGETATION CONDITION, COMPOSITION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS: T01N, R05W, Sec. 34 (S)	Accuracy: specific area	Area (acres): 106
UTM: Zone-11 N3776682 E464019	Latitude/Longitude: 34.13039 / -117.39021	Elevation (feet): 1,420

County Summary:	Quad Summary:
San Bernardino	Fontana (3411714), Devore (3411724)

Sources:
HOL88M0001 HOLLAND, R.F. - FIELD MAPS OF LOS ANGELES RIPARIAN COMMUNITIES (SEE ALSO HOL88U0001). QUAD #3411727, 3411728, 3411438, 3411748, 3411821, 3411831, 3411841, 3411855, 3411864, 3411865, 3411866) 1988-04-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 03233	EO Index: 16032
Key Quad: Devore (3411724)	Element Code: CTT61300CA
Occurrence Number: 17	Occurrence Last Updated: 1998-07-23

Scientific Name: <i>Southern Riparian Forest</i>	Common Name: Southern Riparian Forest
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat: <input type="checkbox"/>	Micro Habitat: <input type="checkbox"/>
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Last Date Observed: 1980-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1980-XX-XX	Occurrence Rank: Unknown
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
TRIBUTARY TO CAJON CANYON, ORIGINATING FROM DEVORE HEIGHTS.

Detailed Location:
BOUNDARY REPRESENTS EXTENT AS INTERPRETED FROM 1980 AERIAL PHOTOS.

Ecological:
UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

Threats:

General:

NEEDS FIELD VERIFICATION OF VEGETATION CONDITION, COMPOSITION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS: T02N, R05W, Sec. 29 (S)	Accuracy: specific area	Area (acres): 24
UTM: Zone-11 N3788340 E461440	Latitude/Longitude: 34.23543 / -117.41870	Elevation (feet): 2,360

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
HOL88M0001 HOLLAND, R.F. - FIELD MAPS OF LOS ANGELES RIPARIAN COMMUNITIES (SEE ALSO HOL88U0001). QUAD #3411727, 3411728, 3411438, 3411748, 3411821, 3411831, 3411841, 3411855, 3411864, 3411865, 3411866) 1988-04-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 03150	EO Index: 15405	
Key Quad: Devore (3411724)	Element Code: CTT62400CA	
Occurrence Number: 158	Occurrence Last Updated: 1998-07-22	

Scientific Name: <i>Southern Sycamore Alder Riparian Woodland</i>	Common Name: Southern Sycamore Alder Riparian Woodland
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat: <input type="checkbox"/>	Micro Habitat: <input type="checkbox"/>
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Last Date Observed: 1985-02-13	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1985-02-13	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF, PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
SAN SEVAINE CANYON, NW OF RIALTO, SAN BERNARDINO NATIONAL FOREST.

Detailed Location:
1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOS; INCREASED EXTENT RELATIVE TO 1935.

Ecological:
CLOSED CANOPY QUERCUS CHRYSOLEPIS & ALNUS RHOMBIFOLIA U/S AND ALNUS & PLATANUS RACEMOSA D/S ACCORDING TO WIESLANDER SURVEY.

Threats:

General:
NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEO/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS: T01N, R06W, Sec. 10 (S)	Accuracy: specific area	Area (acres): 147
UTM: Zone-11 N3782654 E454800	Latitude/Longitude: 34.18389 / -117.49050	Elevation (feet): 2,500

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

HOL88M0001 HOLLAND, R.F. - FIELD MAPS OF LOS ANGELES RIPARIAN COMMUNITIES (SEE ALSO HOL88U0001). QUAD #3411727, 3411728, 3411438, 3411748, 3411821, 3411831, 3411841, 3411855, 3411864, 3411865, 3411866) 1988-04-XX

USF35M0001 U.S. FOREST SERVICE - VEGETATION MAP, SAN DIEGO COUNTY, WIESLANDER MAP. 1935-XX-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 03186	EO Index: 12467
Key Quad: Devore (3411724)	Element Code: CTT62400CA
Occurrence Number: 159	Occurrence Last Updated: 1998-07-22

Scientific Name: <i>Southern Sycamore Alder Riparian Woodland</i>	Common Name: Southern Sycamore Alder Riparian Woodland
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat: <input type="checkbox"/>	Micro Habitat: <input type="checkbox"/>
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Last Date Observed: 1985-02-13	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1985-02-13	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF, PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
MEYER CANYON & TRIBUTARY, FROM JUNCTION WITH LYTLE CREEK TO 2 MILES U/S.

Detailed Location:
1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOS; MAY EXTEND FURTHER UP CANYON.

Ecological:
CLOSED CANOPY PLATANUS RACEMOSA ACCORDING TO WIESLANDER SURVEY.

Threats:
General:
NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS: T02N, R05W, Sec. 31 (S)	Accuracy: specific area	Area (acres): 227
UTM: Zone-11 N3785736 E459282	Latitude/Longitude: 34.21187 / -117.44202	Elevation (feet): 2,300

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

HOL88M0001	HOLLAND, R.F. - FIELD MAPS OF LOS ANGELES RIPARIAN COMMUNITIES (SEE ALSO HOL88U0001). QUAD #3411727, 3411728, 3411729, 3411730, 3411731, 3411732, 3411733, 3411734, 3411735, 3411736, 3411737, 3411738, 3411739, 3411740, 3411741, 3411742, 3411743, 3411744, 3411745, 3411746, 3411747, 3411748, 3411749, 3411750, 3411751, 3411752, 3411753, 3411754, 3411755, 3411756, 3411757, 3411758, 3411759, 3411760, 3411761, 3411762, 3411763, 3411764, 3411765, 3411766, 3411767, 3411768, 3411769, 3411770, 3411771, 3411772, 3411773, 3411774, 3411775, 3411776, 3411777, 3411778, 3411779, 3411780, 3411781, 3411782, 3411783, 3411784, 3411785, 3411786, 3411787, 3411788, 3411789, 3411790, 3411791, 3411792, 3411793, 3411794, 3411795, 3411796, 3411797, 3411798, 3411799, 3411800, 3411801, 3411802, 3411803, 3411804, 3411805, 3411806, 3411807, 3411808, 3411809, 3411810, 3411811, 3411812, 3411813, 3411814, 3411815, 3411816, 3411817, 3411818, 3411819, 3411820, 3411821, 3411822, 3411823, 3411824, 3411825, 3411826, 3411827, 3411828, 3411829, 3411830, 3411831, 3411832, 3411833, 3411834, 3411835, 3411836, 3411837, 3411838, 3411839, 3411840, 3411841, 3411842, 3411843, 3411844, 3411845, 3411846, 3411847, 3411848, 3411849, 3411850, 3411851, 3411852, 3411853, 3411854, 3411855, 3411856, 3411857, 3411858, 3411859, 3411860, 3411861, 3411862, 3411863, 3411864, 3411865, 3411866, 3411867, 3411868, 3411869, 3411870, 3411871, 3411872, 3411873, 3411874, 3411875, 3411876, 3411877, 3411878, 3411879, 3411880, 3411881, 3411882, 3411883, 3411884, 3411885, 3411886, 3411887, 3411888, 3411889, 3411890, 3411891, 3411892, 3411893, 3411894, 3411895, 3411896, 3411897, 3411898, 3411899, 3411900, 3411901, 3411902, 3411903, 3411904, 3411905, 3411906, 3411907, 3411908, 3411909, 3411910, 3411911, 3411912, 3411913, 3411914, 3411915, 3411916, 3411917, 3411918, 3411919, 3411920, 3411921, 3411922, 3411923, 3411924, 3411925, 3411926, 3411927, 3411928, 3411929, 3411930, 3411931, 3411932, 3411933, 3411934, 3411935, 3411936, 3411937, 3411938, 3411939, 3411940, 3411941, 3411942, 3411943, 3411944, 3411945, 3411946, 3411947, 3411948, 3411949, 3411950, 3411951, 3411952, 3411953, 3411954, 3411955, 3411956, 3411957, 3411958, 3411959, 3411960, 3411961, 3411962, 3411963, 3411964, 3411965, 3411966, 3411967, 3411968, 3411969, 3411970, 3411971, 3411972, 3411973, 3411974, 3411975, 3411976, 3411977, 3411978, 3411979, 3411980, 3411981, 3411982, 3411983, 3411984, 3411985, 3411986, 3411987, 3411988, 3411989, 3411990, 3411991, 3411992, 3411993, 3411994, 3411995, 3411996, 3411997, 3411998, 3411999, 3412000
USF35M0001	U.S. FOREST SERVICE - VEGETATION MAP, SAN DIEGO COUNTY, WIESLANDER MAP. 1935-XX-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 03234	EO Index: 15404
Key Quad: Devore (3411724)	Element Code: CTT62400CA
Occurrence Number: 160	Occurrence Last Updated: 1998-07-22

Scientific Name: <i>Southern Sycamore Alder Riparian Woodland</i>	Common Name: Southern Sycamore Alder Riparian Woodland
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat:	Micro Habitat:
<input type="checkbox"/>	<input type="checkbox"/>

Last Date Observed: 1985-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1985-XX-XX	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
PORTION OF UNNAMED TRIBUTARY TO CAJON WASH, WEST OF DEVORE.

Detailed Location:
1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.

Ecological:
UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

Threats:
General:
NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS: T02N, R05W, Sec. 32, SE (S)	Accuracy: specific area	Area (acres): 26
UTM: Zone-11 N3785889 E461394	Latitude/Longitude: 34.21333 / -117.41910	Elevation (feet): 2,300

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
HOL88M0001 HOLLAND, R.F. - FIELD MAPS OF LOS ANGELES RIPARIAN COMMUNITIES (SEE ALSO HOL88U0001). QUAD #3411727, 3411728, 3411438, 3411748, 3411821, 3411831, 3411841, 3411855, 3411864, 3411865, 3411866) 1988-04-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 03221	EO Index: 15402
Key Quad: Devore (3411724)	Element Code: CTT62400CA
Occurrence Number: 161	Occurrence Last Updated: 1998-07-22

Scientific Name: <i>Southern Sycamore Alder Riparian Woodland</i>	Common Name: Southern Sycamore Alder Riparian Woodland
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat:	Micro Habitat:
<input type="checkbox"/>	<input type="checkbox"/>

Last Date Observed: 1980-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1980-XX-XX	Occurrence Rank: Unknown
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
UNNAMED TRIBUTARY TO CAJON WASH, NW OF DEVORE HEIGHTS.

Detailed Location:
MAPPED FROM INTERPRETATION OF 1980 AERIAL PHOTOS.

Ecological:
UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

Threats:
General:
NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

PLSS: T02N, R05W, Sec. 20, SW (S)	Accuracy: specific area	Area (acres): 26
UTM: Zone-11 N3789195 E460892	Latitude/Longitude: 34.24313 / -117.42470	Elevation (feet): 2,650

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
HOL88M0001 HOLLAND, R.F. - FIELD MAPS OF LOS ANGELES RIPARIAN COMMUNITIES (SEE ALSO HOL88U0001). QUAD #3411727, 3411728, 3411438, 3411748, 3411821, 3411831, 3411841, 3411855, 3411864, 3411865, 3411866) 1988-04-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	97669	EO Index:	99033
Key Quad:	San Bernardino North (3411723)	Element Code:	IIHYM24480
Occurrence Number:	182	Occurrence Last Updated:	2015-10-01

Scientific Name:	<i>Bombus crotchii</i>	Common Name:	Crotch bumble bee
Listing Status:	Federal: None	Rare Plant Rank:	
	State: Candidate Endangered	Other Lists:	
CNDDDB Element Ranks:	Global: G3G4		
	State: S1S2		

General Habitat:	Micro Habitat:
COASTAL CALIFORNIA EAST TO THE SIERRA-CASCADE CREST AND SOUTH INTO MEXICO.	FOOD PLANT GENERA INCLUDE ANTIRRHINUM, PHACELIA, CLARKIA, DENDROMECON, ESCHSCHOLZIA, AND ERIOGONUM.

Last Date Observed:	1945-06-28	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1945-06-28	Occurrence Rank:	Unknown
Owner/Manager:	UNKNOWN	Trend:	Unknown
Presence:	Presumed Extant		

Location:
VERDEMONT.

Detailed Location:
EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN THE VICINITY OF THE COMMUNITY OF VERDEMONT, IN THE CITY OF SAN BERNARDINO.

Ecological:
Threats:

General:
COLLECTED 28 JUN 1945.

PLSS: T01N, R05W, Sec. 11 (S)	Accuracy: 1 mile	Area (acres): 0
UTM: Zone-11 N3783624 E466133	Latitude/Longitude: 34.19307 / -117.36755	Elevation (feet): 1,800

County Summary:	Quad Summary:
San Bernardino	San Bernardino North (3411723), Devore (3411724)

Sources:
MEL45S0002 MELANDER, A. - UCRC ENT #289313 COLLECTED FROM VERDEMONT 1945-06-28



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	97676	EO Index:	99038
Key Quad:	Devore (3411724)	Element Code:	IIHYM24480
Occurrence Number:	186	Occurrence Last Updated:	2015-10-01

Scientific Name:	<i>Bombus crotchii</i>	Common Name:	Crotch bumble bee
Listing Status:	Federal: None	Rare Plant Rank:	
	State: Candidate Endangered	Other Lists:	
CNDDDB Element Ranks:	Global: G3G4		
	State: S1S2		

General Habitat:	Micro Habitat:
COASTAL CALIFORNIA EAST TO THE SIERRA-CASCADE CREST AND SOUTH INTO MEXICO.	FOOD PLANT GENERA INCLUDE ANTIRRHINUM, PHACELIA, CLARKIA, DENDROMECON, ESCHSCHOLZIA, AND ERIOGONUM.

Last Date Observed:	1953-05-08	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1953-05-08	Occurrence Rank:	Unknown
Owner/Manager:	PVT	Trend:	Unknown
Presence:	Presumed Extant		

Location:
3 MILES NORTH OF FONTANA.

Detailed Location:
EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB ABOUT 3 ROAD MILES NORTH OF THE CENTER OF THE CITY OF FONTANA, WEST OF SAN BERNARDINO.

Ecological:
Threats:

General:
COLLECTED 8 MAY 1953.

PLSS:	T01N, R05W, Sec. 29 (S)	Accuracy:	1 mile	Area (acres):	0
UTM:	Zone-11 N3778103 E459806	Latitude/Longitude:	34.14305 / -117.43597	Elevation (feet):	1,600

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
DEN53S0001 DENOBLE, R. - EMEC #554372 COLLECTED FROM 3 MI N OF FONTANA 1953-05-08



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 97669	EO Index: 119066
Key Quad: San Bernardino North (3411723)	Element Code: IHHYM81010
Occurrence Number: 6	Occurrence Last Updated: 2020-08-14

Scientific Name: <i>Neolarra alba</i>	Common Name: white cuckoo bee
Listing Status:	Rare Plant Rank:
Federal: None	
State: None	Other Lists:
CNDDDB Element Ranks:	
Global: GH	
State: SH	

General Habitat: KNOWN ONLY FROM LOCALITIES IN SOUTHERN CALIFORNIA.	Micro Habitat: CLEPTOPARASITIC IN THE NESTS OF PERDITA BEES.
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Last Date Observed: 1946-05-17	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1946-05-17	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
VERDEMONT.

Detailed Location:

COLLECTION LOCALITY DESCRIBED ONLY AS VERDEMONT. MAPPED BY CNDDDB IN THE VICINITY OF THE COMMUNITY OF VERDEMONT, IN THE CITY OF SAN BERNARDINO.

Ecological:

Threats:
DEVELOPMENT.

General:
5 FEMALES WERE COLLECTED BY P.H. TIMBERLAKE ON 17 MAY 1946. WHILE THERE HAS BEEN EXTENSIVE DEVELOPMENT IN THIS AREA SINCE THE TIME OF COLLECTION, AERIAL IMAGERY SUGGESTS SUITABLE HABITAT MAY STILL EXIST IN THE VICINITY.

PLSS: T01N, R05W, Sec. 11 (S)	Accuracy: 1 mile	Area (acres): 0
UTM: Zone-11 N3783624 E466133	Latitude/Longitude: 34.19307 / -117.36755	Elevation (feet): 1,800

County Summary:

San Bernardino

Quad Summary:

San Bernardino North (3411723), Devore (3411724)

Sources:
SHA78A0001 SHANKS, S. - A REVISION OF THE CLEPTOPARASITIC BEE GENUS NEOLARRA (HYMENOPTERA: ANTHOPHORIDAE). THE WASMANN JOURNAL OF BIOLOGY 35(2): 212-246. 1978-XX-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	69399	EO Index:	70175
Key Quad:	Devore (3411724)	Element Code:	PDAST50010
Occurrence Number:	14	Occurrence Last Updated:	2016-08-17

Scientific Name:	<i>Ambrosia monogyra</i>	Common Name:	singlewhorl burrobrush
Listing Status:	Federal: None State: None	Rare Plant Rank:	2B.2
CNDDDB Element Ranks:	Global: G5 State: S2	Other Lists:	

General Habitat:	CHAPARRAL, SONORAN DESERT SCRUB.	Micro Habitat:	SANDY SOILS. 5-475 M.
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Last Date Observed:	1961-09-17	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1961-09-17	Occurrence Rank:	Unknown
Owner/Manager:	UNKNOWN	Trend:	Unknown
Presence:	Presumed Extant		

Location:
 FONTANA POWER PLANT, NORTHWEST OF RIALTO, SAN BERNARDINO MOUNTAINS.

Detailed Location:
 MAPPED IN VICINITY OF FONTANA POWER PLANT.

Ecological:
 COASTAL SAGE SCRUB, IN DISTURBED SOIL.

Threats:
General:
 COLLECTED NEAR POWER PLANT IN 1947 AND 1961. 1926 FEUDGE COLLECTION FROM "RIALTO, 1650 FT" AND 1933 WHEELER COLLECTION FROM "3 MI N OF RIALTO NEAR LYTLE CREEK, 1450 FT" ATTRIBUTED HERE. NEEDS FIELDWORK. INCLUDES FORMER OCC #15.

PLSS:	T01N, R05W, Sec. 22 (S)	Accuracy:	2/5 mile	Area (acres):	280
UTM:	Zone-11 N3779414 E463378	Latitude/Longitude:	34.155 / -117.39729	Elevation (feet):	1,550

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

- Sources:**
- FEU26S0001 FEUDGE, J. - FEUDGE #1500 POM #129361 1926-10-28
 - RAV61S0003 RAVEN, P. - RAVEN #16677 RSA #151144, JEPS #30679, GH #414279 1961-09-17
 - ROO47S0012 ROOS, J. - ROOS #3608 UC #194270, UCR #18632 1947-05-11
 - ROO47S0013 ROOS, J. - ROOS #3747 RSA #44858, CLARK-A #1528-1960, #1528-5521, #1528-5522 1947-10-11
 - WHE33S0010 WHEELER, L. - WHEELER #2142 UCR #80206, RSA #93958, LA #203767, OBI #16030, POM #187458 1933-10-01
 - WHE33S0011 WHEELER, L. - WHEELER #2241 JEPS #4129, CAS #288227, DS #243642 & #300888, GH #414281, LA #203765, OBI #48590, UC #574935 & #723803 1933-11-11



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 39255	EO Index: 34257
Key Quad: Devore (3411724)	Element Code: PDBRA2G060
Occurrence Number: 23	Occurrence Last Updated: 1998-07-29

Scientific Name: <i>Streptanthus bernardinus</i>	Common Name: Laguna Mountains jewelflower
Listing Status: Federal: None	Rare Plant Rank: 4.3
State: None	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
CNDDDB Element Ranks: Global: G3G4	
State: S3S4	

General Habitat: CHAPARRAL, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: CLAY OR DECOMPOSED GRANITE SOILS; SOMETIMES IN DISTURBED AREAS SUCH AS STREAMSIDES OR ROADCUTS. 1440-2500 M.
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Last Date Observed: 1991-06-27	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1991-06-27	Occurrence Rank: Good
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
RADIO TOWER EAST OF SAN SEVANTE FLATS, WEST OF LYTLE CREEK, SAN GABRIEL MOUNTAINS.

Detailed Location:
ALONG USFS ROAD 1N34D UP TO MICROWAVE TOWER. MAPPED WITHIN THE NE 1/4 SW 1/4 SECTION 34.

Ecological:
CHAPARRAL WITH ERIODICTYON TRICHOCALYX, CEANOTHUS LEUCODERMIS, RHAMNUS CALIFORNICA, QUERCUS CHRYSOLEPIS, AND Q. KELLOGGII. ON EXPOSED S AND E-FACING SLOPE ON SHALLOW, ROCKY SOILS.

Threats:
POTENTIAL GRADING/CONSTRUCTION ALONG ROAD AND NEAR MICROWAVE TOWER.

General:
750 PLANTS OBSERVED IN 1991. PLANTS MOST NUMEROUS IN ARTIFICIAL OPENINGS IN CHAPARRAL CREATED BY ROAD CUT OR HEAVY MACHINERY.

PLSS: T02N, R06W, Sec. 34, SW (S)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-11 N3785962 E453903	Latitude/Longitude: 34.21368 / -117.50042	Elevation (feet): 5,400

County Summary: San Bernardino	Quad Summary: Devore (3411724), Cucamonga Peak (3411725)
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Sources:
MIS91F0002 MISTRETTA, O. - FIELD SURVEY FORM FOR STREPTANTHUS BERNARDINUS 1991-06-27



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 77594	EO Index: 78502
Key Quad: Devore (3411724)	Element Code: PDCAC0D053
Occurrence Number: 113	Occurrence Last Updated: 2018-05-07

Scientific Name: <i>Opuntia basilaris</i> var. <i>brachyclada</i>	Common Name: short-joint beavertail
Listing Status:	Rare Plant Rank: 1B.2
Federal: None	Other Lists: BLM_S-Sensitive
State: None	SB_CalBG/RSABG-California/Rancho Santa Ana
CNDDB Element Ranks:	Botanic Garden
Global: G5T3	USFS_S-Sensitive
State: S3	

General Habitat: CHAPARRAL, JOSHUA TREE WOODLAND, MOJAVEAN DESERT SCRUB, PINYON AND JUNIPER WOODLAND.	Micro Habitat: SANDY SOIL OR COARSE, GRANITIC LOAM. 425-2015 M.
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Last Date Observed: 1995-07-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1995-07-XX	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
JUST S OF SCOTLAND; NEAR THE CONFLUENCE OF THE MIDDLE FORK LYTLE CREEK WITH LYTLE CREEK, S OF THE TOWN OF LYTLE CREEK.

Detailed Location:
WEST SIDE OF LYTLE CREEK RD. MAPPED BY CNDDB ACCORDING TO 2008 USFS DIGITAL DATA, IN THE SE 1/4 OF THE SW 1/4 OF SECTION 22.

Ecological:

Threats:

General:

UNKNOWN NUMBER OF PLANTS OBSERVED IN 1995.

PLSS: T02N, R06W, Sec. 22, SW (S)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-11 N3788881 E454015	Latitude/Longitude: 34.24001 / -117.49935	Elevation (feet): 3,000

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

USF08D0001	U.S. FOREST SERVICE - SAN BERNARDINO NF - DIGITAL DATA FOR THREATENED, ENDANGERED, AND SENSITIVE PLANTS ON THE SAN BERNARDINO NATIONAL FOREST 2008-XX-XX
USF16D0014	U.S. FOREST SERVICE-SAN BERNARDINO NATIONAL FOREST - 2016 NRIS BOTANY DATA FOR THE SAN BERNARDINO NATIONAL FOREST 2016-XX-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 68464	EO Index: 1255
Key Quad: San Bernardino South (3411713)	Element Code: PDMALOQ0C0
Occurrence Number: 2	Occurrence Last Updated: 2017-03-02

Scientific Name: <i>Malacothamnus parishii</i>	Common Name: Parish's bush-mallow
Listing Status:	Rare Plant Rank: 1A
Federal: None	Other Lists:
State: None	
CNDDDB Element Ranks:	
Global: GXQ	
State: SX	

General Habitat: CHAPARRAL, COASTAL SAGE SCRUB.	Micro Habitat: IN A WASH. 305-455 M.
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Last Date Observed: 1895-07-20	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1895-07-20	Occurrence Rank: None
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Possibly Extirpated	

Location:
VICINITY OF SAN BERNARDINO.

Detailed Location:
EXACT LOCATION UNKNOWN, MAPPED BY CNDDDB IN THE GENERAL VICINITY OF SAN BERNARDINO. ELEVATION RANGE GIVEN AS 1000-1500 FT.

Ecological:

Threats:
THE VICINITY OF SAN BERNARDINO HAS BEEN HEAVILY URBANIZED; POSSIBLY EXTIRPATED.

General:
TYPE LOCALITY. ONLY SOURCE OF INFORMATION FOR THIS SITE IS AN 1895 COLLECTION BY PARISH. THIS IS THE ONLY KNOWN OCCURRENCE FOR THIS TAXON.

PLSS: T01S, R04W, Sec. 04 (S)	Accuracy: 5 miles	Area (acres): 0
UTM: Zone-11 N3775328 E472422	Latitude/Longitude: 34.11843 / -117.29904	Elevation (feet): 1,250

County Summary: San Bernardino	Quad Summary: Redlands (3411712), San Bernardino South (3411713), Fontana (3411714), Harrison Mtn. (3411722), San Bernardino North (3411723), Devore (3411724)
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Sources:
PAR95S0002 PARISH, S. - PARISH #3804 CAS #52756, UC #18789, GH #420468 1895-07-20



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 03260	EO Index: 10155
Key Quad: Devore (3411724)	Element Code: PDPGN040J2
Occurrence Number: 1	Occurrence Last Updated: 2014-03-11

Scientific Name: <i>Chorizanthe parryi</i> var. <i>parryi</i>	Common Name: Parry's spineflower
Listing Status: Federal: None	Rare Plant Rank: 1B.1
State: None	Other Lists: BLM_S-Sensitive
CNDDDB Element Ranks: Global: G3T2	SB_CalBG/RSABG-California/Rancho Santa Ana
State: S2	Botanic Garden
	USFS_S-Sensitive

General Habitat: COASTAL SCRUB, CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat: DRY SLOPES AND FLATS; SOMETIMES AT INTERFACE OF 2 VEGETATION TYPES, SUCH AS CHAPARRAL AND OAK WOODLAND. DRY, SANDY SOILS. 90-1220 M.
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Last Date Observed: 2011-05-07	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2011-05-07	Occurrence Rank: Good
Owner/Manager: PVT, UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
CAJON WASH, SOUTH OF THE JUNCTION OF I-15 AND I-215, DEVORE.

Detailed Location:
EAST OF CAJON CREEK BEHIND CDF FIRE STATION. 2 POLYGONS MAPPED ACCORDING TO 2010 KIPPER COORDINATES AND 2011 RIEFNER COORDINATES.

Ecological:
INTERMEDIATE TO MATURE RIVERSIDEAN ALLUVIAL SCRUB WITHIN SANDY SOILS AMONGST CAMISSONIA BISTORTA, OENOTHERA ELATA, CHORIZANTHE CORIACEA, AND ERIODICTYON TRICHOCALYX. SANDY FLOODPLAIN SOILS IN OPEN SCRUB.

Threats:
THIS SITE IS PROPOSED FOR DEVELOPMENT.

General:
APPROXIMATELY 20 PLANTS SEEN IN SOUTHEASTERN POLYGON IN 2010. PLANTS NOTED AS "WIDESPREAD AND COMMON" IN NORTHWESTERN POLYGON IN 2011. A 1979 KRANTZ COLLECTION AND A 2006 SALVATO COLLECTION ARE ALSO ATTRIBUTED HERE.

PLSS: T02N, R05W, Sec. 33, NE (S)	Accuracy: specific area	Area (acres): 10
UTM: Zone-11 N3786502 E462774	Latitude/Longitude: 34.21891 / -117.40414	Elevation (feet): 2,100

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

KIP10F0001	KIPPER, J. (ULTRASYSTEMS) - FIELD SURVEY FORM FOR CHORIZANTHE PARRYI VAR. PARRYI 2010-04-27
KRA79S0052	KRANTZ, T. & G. KRANTZ - KRANTZ SN UCR #16931 1979-04-30
RIE11S0006	RIEFNER, R. - RIEFNER #11-45 CAS #1127632, CAS-BOT-BC #226911, RSA #790112, UCR #229280, SD #239848, ARIZ #412800, SEINET #3828324 2011-05-07
SAL06S0001	SALVATO, T. & A. SANDERS - SALVATO #1476 UCR #188962 2006-05-23



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 42076	EO Index: 42076
Key Quad: Devore (3411724)	Element Code: PDPGN040J2
Occurrence Number: 36	Occurrence Last Updated: 2008-10-20

Scientific Name: <i>Chorizanthe parryi</i> var. <i>parryi</i>	Common Name: Parry's spineflower
Listing Status:	Rare Plant Rank: 1B.1
Federal: None	Other Lists: BLM_S-Sensitive
State: None	SB_CalBG/RSABG-California/Rancho Santa Ana
CNDDDB Element Ranks:	Botanic Garden
Global: G3T2	USFS_S-Sensitive
State: S2	

General Habitat: COASTAL SCRUB, CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat: DRY SLOPES AND FLATS; SOMETIMES AT INTERFACE OF 2 VEGETATION TYPES, SUCH AS CHAPARRAL AND OAK WOODLAND. DRY, SANDY SOILS. 90-1220 M.
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Last Date Observed: 1994-05-13	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1994-05-13	Occurrence Rank: Unknown
Owner/Manager: PVT	Trend: Decreasing
Presence: Presumed Extant	

Location:
CAJON WASH, ABOUT 0.45 MILE SSE OF KENDALL AVE AT JUNCTION WITH CAJON BLVD, EAST OF GLEN HELEN REGIONAL PARK.

Detailed Location:
MAPPED BY CNDDDB AS 2 POLYGONS ACCORDING TO A 1994 MALLORY ET AL. MAP.

Ecological:
MATURE ALLUVIAL FAN SAGE SCRUB WITH ERIODICTYON TRICHOCALYX, LOTUS SCOPARIUS, TOXICODENDRON DIVERSILOBUM AND OTHER SHRUBS WITH LASTARRIAEA CORIACEA, BROMUS MADRITENSIS RUBENS, ERODIUM CICUTARIUM, CRYPTANTHA INTERMEDIA, AND PHACELIA.

Threats:
SAND GRAVEL MINING NEARBY. THE NW PORTION OF THE SITE APPEARS TO HAVE BEEN DEVELOPED BASED ON 2008 AERIAL IMAGERY.

General:
10,000+ PLANTS OBSERVED IN 1994.

PLSS: T01N, R05W, Sec. 02, SW (S)	Accuracy: specific area	Area (acres): 62
UTM: Zone-11 N3784062 E465084	Latitude/Longitude: 34.19698 / -117.37896	Elevation (feet): 1,400

County Summary: San Bernardino	Quad Summary: San Bernardino North (3411723), Devore (3411724)
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Sources:
MAL94F0002 MALLORY, J. ET AL. - FIELD SURVEY FORM FOR CHORIZANTHE PARRYI VAR. PARRYI 1994-05-13
MAL94S0002 MALLORY, J. & I. ANDERSON - MALLORY #6409-05 RSA #572924 1994-05-13



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 47453	EO Index: 47453
Key Quad: Devore (3411724)	Element Code: PDPGN040J2
Occurrence Number: 40	Occurrence Last Updated: 2018-10-25

Scientific Name: <i>Chorizanthe parryi</i> var. <i>parryi</i>	Common Name: Parry's spineflower
Listing Status:	Rare Plant Rank: 1B.1
Federal: None	Other Lists: BLM_S-Sensitive
State: None	SB_CalBG/RSABG-California/Rancho Santa Ana
CNDDDB Element Ranks:	Botanic Garden
Global: G3T2	USFS_S-Sensitive
State: S2	

General Habitat: COASTAL SCRUB, CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat: DRY SLOPES AND FLATS; SOMETIMES AT INTERFACE OF 2 VEGETATION TYPES, SUCH AS CHAPARRAL AND OAK WOODLAND. DRY, SANDY SOILS. 90-1220 M.
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Last Date Observed: 2012-05-17	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2012-05-17	Occurrence Rank: Good
Owner/Manager: SBD FLOOD CONTROL, PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
VICINITY OF LYTLE CREEK WASH, SIERRA AVE, AND RIVERSIDE AVE; NORTH OF FONTANA AND SOUTHEAST OF HIGHWAY 15.

Detailed Location:
SEVERAL POLYGONS MAPPED ACCORDING TO 2008 USFS DIGITAL DATA, 2010 O'FARRELL MAP, 2010 LEATHERMAN MAP, AND 2012 PARETI COORDINATES.

Ecological:
WIDELY SCATTERED PATCHES IN MATURE CHAPARRAL ON ALLUVIAL FLOODPLAIN. DOMINATED BY ADENOSTOMA FASCICULATUM WITH AMSINCKIA TESSELLATA, ARTEMISIA CALIFORNICA, AVENA BARBATA, BROMUS DIANDRUS, B. HORDEACEUS, B. RUBENS, B. TECTORUM, ETC.

Threats:
LOTS OF TRASH AND HOUSING NEARBY IN 2005. UTILITY IMPROVEMENTS, COLLECTION, ORVS, NON-NATIVES, MOWING, AND FIRE.

General:
NE POLY: COMMON IN WIDELY SCATTERED PATCHES IN 1999, SEEN IN 2003-2007, & 2010. 2ND NE-MOST POLYGON: 5000+ PLANTS IN 2005. ~15,750 PLANTS IN MOST OF REMAINING POLYGONS IN 2010. 54 PLANTS IN 2 S-MOST POLYGONS IN 2012.

PLSS: T01N, R05W, Sec. 17 (S)	Accuracy: specific area	Area (acres): 112
UTM: Zone-11 N3781277 E460111	Latitude/Longitude: 34.17169 / -117.43280	Elevation (feet): 1,800

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Sources:

FRA05S0004	FRAGA, N. & L. GROSS - FRAGA #1539 UCR #165223, RSA #707461, CHSC #10700 2005-04-18
LEA10F0002	LEATHERMAN, S. (BONTERRA CONSULTING) - FIELD SURVEY FORM FOR CHORIZANTHE PARRYI VAR. PARRYI 2010-04-15
LEA10S0001	LEATHERMAN, S. - LEATHERMAN #2010-15 RSA #769559 2010-03-31
OFA04R0001	O'FARRELL, M.J. (O'FARRELL BIOLOGICAL CONSULTING) - RESTORATION AND ENHANCEMENT OF HABITAT FOR THE SBKR CONSERVATION AREA, LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, SAN BERNARDINO COUNTY, CALIFORNIA, FINAL ANNUAL REPORT FOR 2003. 2004-02-XX
OFA05R0001	O'FARRELL, M.J. (O'FARRELL BIOLOGICAL CONSULTING) - RESTORATION AND ENHANCEMENT OF HABITAT FOR THE SBKR CONSERVATION AREA, LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, SAN BERNARDINO COUNTY, CALIFORNIA, FINAL ANNUAL REPORT FOR 2004. 2005-01-XX
OFA06R0001	O'FARRELL, M.J. (O'FARRELL BIOLOGICAL CONSULTING) - RESTORATION AND ENHANCEMENT OF HABITAT FOR THE SBKR CONSERVATION AREA, LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, SAN BERNARDINO COUNTY, CALIFORNIA, FINAL ANNUAL REPORT FOR 2005. 2006-08-XX
OFA07R0001	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - RESTORATION AND ENHANCEMENT OF HABITAT FOR THE SBKR CONSERVATION AREA, LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, SAN BERNARDINO COUNTY, CALIFORNIA, FINAL ANNUAL REPORT FOR 2006 2007-02-XX
OFA08R0001	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - RESTORATION AND ENHANCEMENT OF HABITAT FOR THE SBKR CONSERVATION AREA, LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, SAN BERNARDINO COUNTY, CALIFORNIA, FINAL ANNUAL REPORT FOR 2007 2008-01-XX
OFA10U0001	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - EMAIL FROM M. O'FARRELL REGARDING SBKR TRAPPING AT LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, FROM 2003 TO 2007. 2010-02-03
OFA11R0001	O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - RESTORATION AND ENHANCEMENT OF HABITAT FOR THE SBKR CONSERVATION AREA, LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, SAN BERNARDINO COUNTY, CALIFORNIA, FINAL ANNUAL REPORT FOR 2010 2011-03-XX
PAR12F0012	PARETI, J. (BONTERRA CONSULTING) - FIELD SURVEY FORM FOR CHORIZANTHE PARRYI VAR. PARRYI 2012-05-17
RUD12S0002	RUDALEVIGE, A. & J. PARETI - RUDALEVIGE #002 UCR #275230 2012-04-19
USF08D0001	U.S. FOREST SERVICE - SAN BERNARDINO NF - DIGITAL DATA FOR THREATENED, ENDANGERED, AND SENSITIVE PLANTS ON THE SAN BERNARDINO NATIONAL FOREST 2008-XX-XX
WHI99F0007	WHITE, S. - FIELD SURVEY FORM FOR CHORIZANTHE PARRYI VAR. PARRYI 1999-05-26



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	72604	EO Index:	73495
Key Quad:	Devore (3411724)	Element Code:	PDPGN040J2
Occurrence Number:	90	Occurrence Last Updated:	2008-10-17

Scientific Name:	<i>Chorizanthe parryi</i> var. <i>parryi</i>		Common Name:	Parry's spineflower
Listing Status:	Federal:	None	Rare Plant Rank:	1B.1
	State:	None	Other Lists:	BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive
CNDDDB Element Ranks:	Global:	G3T2		
	State:	S2		

General Habitat:	Micro Habitat:
COASTAL SCRUB, CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	DRY SLOPES AND FLATS; SOMETIMES AT INTERFACE OF 2 VEGETATION TYPES, SUCH AS CHAPARRAL AND OAK WOODLAND. DRY, SANDY SOILS. 90-1220 M.

Last Date Observed:	1999-05-26	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1999-05-26	Occurrence Rank:	Unknown
Owner/Manager:	UNKNOWN	Trend:	Unknown
Presence:	Presumed Extant		

Location:
 LYTLE CREEK FLOOD PLAIN, CA. 0.6 MILE SSE OF VERDEMONT RANCH, 5 MILES SOUTH OF DEVORE.

Detailed Location:
 MAPPED BY CNDDDB IN THE VICINITY OF THE SHERIFF ACADEMY (ACCORDING TO A 1998 PROVANCE & RICHMEIER COLLECTION) AND THE LEVEE AREA ON THE NE BANK OF LYTLE CREEK (ACCORDING TO A 1999 WHITE COLLECTION).

Ecological:
 OPEN PLACES IN CHAPARRAL. ASSOCIATES INCLUDE PHACELIA CICUTARIA, CROTON CALIFORNICA, CALOCHORTUS SPLENDENS, PENSTEMON SPECTABILIS, GUTIERREZIA CALIFORNICA, SOLANUM XANTI, HELIANTHEMUM SCOPARIUM, CHORIZANTHE STATICOIDES, AND C. CORIACEA.

Threats:
General:
 SITE BASED ON A 1998 COLLECTION AND A 1999 COLLECTION; MENTIONED AS "LOCALLY COMMON IN 1 VERY SMALL SANDY WASH" IN 1998 & "COMMON (PATCHY)" IN 1999. NEEDS FIELDWORK.

PLSS:	T01N, R05W, Sec. 15 (S)	Accuracy:	2/5 mile	Area (acres):	0
UTM:	Zone-11 N3781858 E463581	Latitude/Longitude:	34.17706 / -117.39517	Elevation (feet):	1,725

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
 PRO98S0006 PROVANCE, M. & R. RICHMEIER - PROVANCE #604 RSA #653160, UCR #113490, CAS #999837, CAS-BOT-BC #252806 1998-06-03
 WHI99S0004 WHITE, S. - WHITE #7426 RSA #653731 1999-05-26



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 72606	EO Index: 73496
Key Quad: Devore (3411724)	Element Code: PDPGN040J2
Occurrence Number: 91	Occurrence Last Updated: 2008-10-20

Scientific Name: <i>Chorizanthe parryi</i> var. <i>parryi</i>	Common Name: Parry's spineflower
Listing Status: Federal: None	Rare Plant Rank: 1B.1
State: None	Other Lists: BLM_S-Sensitive
CNDDDB Element Ranks: Global: G3T2	SB_CalBG/RSABG-California/Rancho Santa Ana
State: S2	Botanic Garden
	USFS_S-Sensitive

General Habitat: COASTAL SCRUB, CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat: DRY SLOPES AND FLATS; SOMETIMES AT INTERFACE OF 2 VEGETATION TYPES, SUCH AS CHAPARRAL AND OAK WOODLAND. DRY, SANDY SOILS. 90-1220 M.
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Last Date Observed: 2005-04-27	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2005-04-27	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
JUST NORTH OF NEALEYS CORNER AT THE INTERSECTION OF GLEN HELEN PARKWAY AND LYTLE CREEK RD, SW OF DEVORE.

Detailed Location:
MAPPED ACCORDING TO DIGITAL DATA SUBMITTED BY FRAGA IN 2005.

Ecological:
DISTURBED ALLUVIAL BENCH WITH SCATTERED JUNIPERS. ASSOCIATED WITH ADENOSTOMA FASCICULATUM, AMBROSIA ACANTHICARA, ARTEMISIA CALIFORNICA, AVENA FATUA, BROMUS DIANDRUS, B. RUBENS, CALYSTEGIA MACROSTEGIA, CAMISSONIA BISORTA, C. HIRTELLA, ETC.

Threats:
LOTS OF TRASH DUMPING, ADJACENT TO ROAD AND WELL.

General:
UNKNOWN NUMBER SEEN IN 1994. APPROXIMATELY 500 GENETS SEEN IN 2005.

PLSS: T01N, R05W, Sec. 07, NE (S)	Accuracy: specific area	Area (acres): 15
UTM: Zone-11 N3783168 E459769	Latitude/Longitude: 34.18872 / -117.43661	Elevation (feet): 1,800

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

BAL94S0001	BALLMER, G. - BALLMER SN UCR #90245, RSA #645622, SD #225063 1994-05-08
FRA05D0001	FRAGA, N. - DIGITAL DATA TO ACCOMPANY SOURCES FRA05U0002 & FRA05U0003 2005-08-25
FRA05S0005	FRAGA, N. & L. GROSS - FRAGA #1546 UCR #164917 2005-04-27
JON94S0002	JONES, C. & A. DICKENSON - JONES SN RSA #571019 1994-06-20



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 91699	EO Index: 92773	
Key Quad: Devore (3411724)	Element Code: PDPGN040J2	
Occurrence Number: 103	Occurrence Last Updated: 2014-02-27	

Scientific Name: <i>Chorizanthe parryi</i> var. <i>parryi</i>	Common Name: Parry's spineflower
Listing Status:	Rare Plant Rank: 1B.1
Federal: None	Other Lists: BLM_S-Sensitive
State: None	SB_CalBG/RSABG-California/Rancho Santa Ana
CNDDDB Element Ranks:	Botanic Garden
Global: G3T2	USFS_S-Sensitive
State: S2	

General Habitat: COASTAL SCRUB, CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat: DRY SLOPES AND FLATS; SOMETIMES AT INTERFACE OF 2 VEGETATION TYPES, SUCH AS CHAPARRAL AND OAK WOODLAND. DRY, SANDY SOILS. 90-1220 M.
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Last Date Observed: 2012-05-17	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2012-05-17	Occurrence Rank: Good
Owner/Manager: PVT-SCE	Trend: Unknown
Presence: Presumed Extant	

Location:
NORTH SIDE OF W CASMALIA ST, APPROXIMATELY 0.15 MILE EAST OF INTERSECTION WITH ALDER AVE, NORTH OF HWY 210.

Detailed Location:
MAPPED IN THE SW 1/4 OF THE SW 1/4 OF SECTION 28 ACCORDING TO A 2010 LEATHERMAN MAP.

Ecological:
ROCKY OR COBBLE TYPE SOILS. ASSOCIATED WITH CROTON CALIFORNICA, CAMISSONIA BISTORTA, ADENOSTOMA FASCICULATUM, LOTUS SCOPARIUS, STYLOCLINE GNAPHALOIDES, LASTARRIAEA CORIACEA, ERODIUM BOTRYS, BROMUS DIANDRUS, VULPIA MYUROS, ETC.

Threats:
UTILITY IMPROVEMENT PROJECTS, PLANT COLLECTION, ORV ACTIVITY, NON-NATIVES, MOWING OF VEGETATION FOR MAINTENANCE, FIRE.

General:
47 PLANTS OBSERVED IN 2010. 8 PLANTS OBSERVED IN 2012.

PLSS: T01N, R05W, Sec. 28, SW (S)	Accuracy: specific area	Area (acres): 1
UTM: Zone-11 N3777559 E461653	Latitude/Longitude: 34.13821 / -117.41591	Elevation (feet): 1,520

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

LEA10F0002	LEATHERMAN, S. (BONTERRA CONSULTING) - FIELD SURVEY FORM FOR CHORIZANTHE PARRYI VAR. PARRYI 2010-04-15
PAR12F0012	PARETI, J. (BONTERRA CONSULTING) - FIELD SURVEY FORM FOR CHORIZANTHE PARRYI VAR. PARRYI 2012-05-17



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 91727	EO Index: 92806
Key Quad: Devore (3411724)	Element Code: PDPGN040J2
Occurrence Number: 125	Occurrence Last Updated: 2014-03-04

Scientific Name: <i>Chorizanthe parryi</i> var. <i>parryi</i>	Common Name: Parry's spineflower
Listing Status:	Rare Plant Rank: 1B.1
Federal: None	Other Lists: BLM_S-Sensitive
State: None	SB_CalBG/RSABG-California/Rancho Santa Ana
CNDDDB Element Ranks:	Botanic Garden
Global: G3T2	USFS_S-Sensitive
State: S2	

General Habitat: COASTAL SCRUB, CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat: DRY SLOPES AND FLATS; SOMETIMES AT INTERFACE OF 2 VEGETATION TYPES, SUCH AS CHAPARRAL AND OAK WOODLAND. DRY, SANDY SOILS. 90-1220 M.
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Last Date Observed: 2012-05-21	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2012-05-21	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
ALLUVIAL FAN BELOW LYTLE CREEK, NORTHEAST OF RIVERSIDE AVE, SOUTHEAST OF I-15.

Detailed Location:
MAPPED IN THE NW 1/4 OF THE SE 1/4 OF SECTION 16 ACCORDING TO 2012 SANDERS COORDINATES.

Ecological:
IN OPEN SANDY PATCH. ALLUVIAL SLOPE, SANDY AND STONY. SCRUB WITH LOTUS SCOPARIUS, ERIOGONUM FASCICULATUM, PECTOCARYA LINEARIS, FESTUCA MYUROS, ERIODICTYON TRICHOCALYX, STIPA CORONATA, S. SPECIOSA, SALVIA COLUMBARIAE, S. MELLIFERA, ETC.

Threats:
PARTIALLY DISTURBED BY GRAVEL MINING.

General:
SITE IS BASED ON A 2012 COLLECTION BY SANDERS.

PLSS: T01N, R05W, Sec. 16, SE (S)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-11 N3781068 E462287	Latitude/Longitude: 34.16988 / -117.40918	Elevation (feet): 1,750

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
SAN12S0040 SANDERS, A. - SANDERS #40179 UCR #235069 2012-05-21



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 91729	EO Index: 92808
Key Quad: Devore (3411724)	Element Code: PDPGN040J2
Occurrence Number: 126	Occurrence Last Updated: 2014-03-04

Scientific Name: <i>Chorizanthe parryi</i> var. <i>parryi</i>	Common Name: Parry's spineflower
Listing Status:	Rare Plant Rank: 1B.1
Federal: None	Other Lists: BLM_S-Sensitive
State: None	SB_CalBG/RSABG-California/Rancho Santa Ana
CNDDDB Element Ranks:	Botanic Garden
Global: G3T2	USFS_S-Sensitive
State: S2	

General Habitat: COASTAL SCRUB, CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.	Micro Habitat: DRY SLOPES AND FLATS; SOMETIMES AT INTERFACE OF 2 VEGETATION TYPES, SUCH AS CHAPARRAL AND OAK WOODLAND. DRY, SANDY SOILS. 90-1220 M.
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Last Date Observed: 2012-05-22	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2012-05-22	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
CAJON PASS AREA NEAR CONFLUENCE OF CAJON AND LYTLE CREEK WASHES, NORTH AND NORTHWEST OF EL RANCHO VERDE COUNTRY CLUB.

Detailed Location:
2 POLYGONS MAPPED BY CNDDDB. EASTERN POLYGON IS SPECIFIC, BASED ON 2 SETS OF 2012 COORDINATES FROM SANDERS. WESTERN POLYGON IS NON-SPECIFIC, BASED ON A 2009 WOOD COLLECTION FROM "~0.5 MI E OF POWERHOUSE, SECTIONS 22 & 23."

Ecological:
DRY WASH, ALLUVIAL SLOPE, SANDY AND STONY SOIL IN OPEN SCRUB. ASSOCIATED WITH CERCOCARPUS BETULOIDES, YUCCA WHIPPLEI, LOTUS SCOPARIUS, ERIOGONUM FASCICULATUM, FESTUCA MYUROS, ERIODICTYON TRICHOCALYX, STIPA CORONATA, S. SPECIOSA, ETC.

Threats:
General:
WESTERN POLYGON BASED ON A 2009 WOOD COLLECTION, PLANTS NOTED AS "UNCOMMON." EASTERN POLYGON BASED ON 2012 SANDERS COLLECTIONS, PLANTS NOTED AS "SCATTERED."

PLSS: T01N, R05W, Sec. 23, SW (S)	Accuracy: non-specific area	Area (acres): 77
UTM: Zone-11 N3779333 E464673	Latitude/Longitude: 34.15432 / -117.38322	Elevation (feet): 1,500

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

SAN12S0041	SANDERS, A. - SANDERS #40188 UCR #235061 2012-05-21
SAN12S0042	SANDERS, A. - SANDERS #40193 UCR #240059 2012-05-22
WOO09S0017	WOOD, J. & B. WOOD - WOOD #816 RSA #752416 2009-05-31



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 79243	EO Index: 56642
Key Quad: Devore (3411724)	Element Code: PDPGN040Z1
Occurrence Number: 13	Occurrence Last Updated: 2010-06-30

Scientific Name: <i>Chorizanthe xanti var. leucotheca</i>	Common Name: white-bracted spineflower
Listing Status:	Rare Plant Rank: 1B.2
Federal: None	Other Lists: BLM_S-Sensitive
State: None	SB_CalBG/RSABG-California/Rancho Santa Ana
CNDDB Element Ranks:	Botanic Garden
Global: G4T3	SB_USDA-US Dept of Agriculture
State: S3	USFS_S-Sensitive

General Habitat: MOJAVEAN DESERT SCRUB, PINYON AND JUNIPER WOODLAND, COASTAL SCRUB (ALLUVIAL FANS).	Micro Habitat: SANDY OR GRAVELLY PLACES. 365-1830 M.
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Last Date Observed: 1979-04-30	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1979-04-30	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
CAJON PASS, DEVORE, SOUTH OF JUNCTION OF FREEWAYS 15 AND 15E (NOW I-215), EAST OF CAJON CREEK, WEST OF CAJON BLVD.

Detailed Location:
BEHIND THE CDF FIRE STATION.

Ecological:
ASSOCIATED WITH CHORIZANTHE CORIACEA AND CHORIZANTHE PROCUMBENS, AMONGST OLD STAND OF CERCOCARPUS BETULOIDES, YUCCA WHIPPLEI, ETC. FREE OF ANNUAL GRASSES.

Threats:
General:
ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1979 COLLECTION BY KRANTZ.

PLSS: T02N, R05W, Sec. 33, NE (S)	Accuracy: 1/5 mile	Area (acres): 0
UTM: Zone-11 N3786552 E462624	Latitude/Longitude: 34.21935 / -117.40577	Elevation (feet): 2,100

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
KRA79S0045 KRANTZ, T. - KRANTZ SN UCR #16932 1979-04-30



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 79257	EO Index: 56643
Key Quad: Devore (3411724)	Element Code: PDPGN040Z1
Occurrence Number: 14	Occurrence Last Updated: 2010-07-01

Scientific Name: <i>Chorizanthe xanti</i> var. <i>leucotheca</i>	Common Name: white-bracted spineflower
Listing Status:	Rare Plant Rank: 1B.2
Federal: None	Other Lists:
State: None	BLM_S-Sensitive
CNDDDB Element Ranks:	SB_CalBG/RSABG-California/Rancho Santa Ana
Global: G4T3	Botanic Garden
State: S3	SB_USDA-US Dept of Agriculture
	USFS_S-Sensitive

General Habitat: MOJAVEAN DESERT SCRUB, PINYON AND JUNIPER WOODLAND, COASTAL SCRUB (ALLUVIAL FANS).	Micro Habitat: SANDY OR GRAVELLY PLACES. 365-1830 M.
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Last Date Observed: 2005-05-24	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2005-05-24	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
LYTLE CREEK ROAD, ABOUT 0.4 MILE EAST OF LYTLE CREEK RANGER STATION, NW OF RIALTO.

Detailed Location:
APPROXIMATELY 200 FEET SOUTH OF THE ROAD.

Ecological:
RAISED BENCH OF ALLUVIAL WASH. ALLUVIAL CHAPARRAL WITH AMBROSIA ACANTHICARPA, ARTEMISIA DOUGLASIANA, AVENA FATUA, BROMUS DIANDRUS, B. HORDEACEUS, CERCOCARPUS BETULOIDES, CHORIZANTHE STATICOIDES, DICENTRA CHRYSANTHA, ERIOGONUM FASCICULATUM.

Threats:
General:

MAIN SOURCE OF INFORMATION FOR OCCURRENCE IS 2005 COLLECTION BY FRAGA & MORGAN. 1920 PEIRSON COLLECTION FROM LYTLE CREEK AT 3500 FEET AND 1985 HENRICKSON COLLECTION FROM LYTLE CREEK WASH ABOUT 2-4 MILES NORTH OF I-15 ALSO ATTRIBUTED HERE.

PLSS: T02N, R06W, Sec. 26, NE (S)	Accuracy: 1/10 mile	Area (acres): 0
UTM: Zone-11 N3787975 E456410	Latitude/Longitude: 34.23194 / -117.47329	Elevation (feet): 2,700

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

FRA05S0017	FRAGA, N. & T. MORGAN - FRAGA #1566 UCR #164838 2005-05-24
FRA05U0002	FRAGA, N. - 2004-2005 SURVEYS OF THREATENED, ENDANGERED, FOREST SENSITIVE, AND WATCHLIST PLANTS SPECIES (TESPW) IN THE AREAS BURNED BY THE GRAND PRIX AND OLD FIRE OF 2003 2005-08-25
HEN85S0003	HENRICKSON, J. - HENRICKSON #20231 RSA #657008, UCR #153619 1985-05-11
PEI20S0009	PEIRSON, F. - PEIRSON #1772 RSA #65278, CAS #178403, CAS-BOT-BC #248058 1920-05-18



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: B2224	EO Index: 114148
Key Quad: Devore (3411724)	Element Code: PDPGN040Z1
Occurrence Number: 61	Occurrence Last Updated: 2019-02-05

Scientific Name: <i>Chorizanthe xanti var. leucotheca</i>	Common Name: white-bracted spineflower
Listing Status:	Rare Plant Rank: 1B.2
Federal: None	Other Lists: BLM_S-Sensitive
State: None	SB_CalBG/RSABG-California/Rancho Santa Ana
CNDDDB Element Ranks:	Botanic Garden
Global: G4T3	SB_USDA-US Dept of Agriculture
State: S3	USFS_S-Sensitive

General Habitat: MOJAVEAN DESERT SCRUB, PINYON AND JUNIPER WOODLAND, COASTAL SCRUB (ALLUVIAL FANS).	Micro Habitat: SANDY OR GRAVELLY PLACES. 365-1830 M.
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Last Date Observed: 2010-05-25	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2010-05-25	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
LYTLE CREEK, JUST SW OF HITCHING RANCH.

Detailed Location:
MAPPED ACCORDING TO VEGETATION SURVEY COORDINATES.

Ecological:
ASSOCIATED WITH ERIODICTYON TRICHOCALYX, LEPIDOSPARTUM SQUAMATUM, CHAENACTIS GLABRIUSCULA, ERIOGONUM FASCICULATUM, VULPIA MYUROS, BROMUS MADRITENSIS SSP. RUBENS, CAMISSONIA BISTORTA, YUCCA WHIPPLEI, AVENA BARBATA, CRYPTANTHA, ETC.

Threats:
General:
LESS THAN 1% COVER OF CHORIZANTHE OBSERVED DURING 2010 VEGETATION SURVEYS.

PLSS: T02N, R06W, Sec. 25, SW (S)	Accuracy: 80 meters	Area (acres): 5
UTM: Zone-11 N3787371 E456954	Latitude/Longitude: 34.22652 / -117.46737	Elevation (feet): 2,560

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
VEG16U0001 VEGETATION CLASSIFICATION AND MAPPING PROGRAM (CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE) - DATABASE OF PLANT SPECIES OBSERVED DURING VEGETATION SURVEYS, 1984-2016 2016-XX-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: B2225	EO Index: 114149
Key Quad: Devore (3411724)	Element Code: PDPGN040Z1
Occurrence Number: 62	Occurrence Last Updated: 2019-02-05

Scientific Name: <i>Chorizanthe xanti var. leucotheca</i>	Common Name: white-bracted spineflower
Listing Status:	Rare Plant Rank: 1B.2
Federal: None	Other Lists: BLM_S-Sensitive
State: None	SB_CalBG/RSABG-California/Rancho Santa Ana
CNDDDB Element Ranks:	Botanic Garden
Global: G4T3	SB_USDA-US Dept of Agriculture
State: S3	USFS_S-Sensitive

General Habitat: MOJAVEAN DESERT SCRUB, PINYON AND JUNIPER WOODLAND, COASTAL SCRUB (ALLUVIAL FANS).	Micro Habitat: SANDY OR GRAVELLY PLACES. 365-1830 M.
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Last Date Observed: 2010-05-18	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2010-05-18	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
CAJON WASH; JUST SW OF CAJON BLVD NEAR LOCATION OF HIGH VOLTAGE POWERLINE CROSSING ROAD, KEENBROOK.

Detailed Location:
MAPPED ACCORDING TO 2010 WOOD COORDINATES; COORDINATES PRESUMABLY FROM COLLECTION LABEL. IN THE SE 1/4 OF THE NW 1/4 OF SECTION 19.

Ecological:
MATURE ALLUVIAL BENCH WITH CYLINDROPUNTIA PARRYI, SALVIA APIANA, CERCOCARPUS BETULOIDES, AND ADENOSTOMA FASCICULATUM.

Threats:
General:
ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2010 WOOD COLLECTION; MENTIONED AS "UNCOMMON" IN 2010.

PLSS: T02N, R05W, Sec. 19, NW (S)	Accuracy: 80 meters	Area (acres): 5
UTM: Zone-11 N3789596 E458794	Latitude/Longitude: 34.24666 / -117.4475	Elevation (feet): 2,390

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
WOO10S0091 WOOD, J. - WOOD #1835 RSA #0014618 2010-05-18



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 71693	EO Index: 21152
Key Quad: Devore (3411724)	Element Code: PDPGN0V010
Occurrence Number: 3	Occurrence Last Updated: 2016-03-09

Scientific Name: <i>Dodecahema leptoceras</i>	Common Name: slender-horned spineflower
Listing Status:	Rare Plant Rank: 1B.1
Federal: Endangered	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: Endangered	
CNDDB Element Ranks:	
Global: G1	
State: S1	

General Habitat: CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB (ALLUVIAL FAN SAGE SCRUB).	Micro Habitat: FLOOD DEPOSITED TERRACES AND WASHES; ASSOCIATES INCLUDE ENCELIA, DALEA, LEPIDOSPARTUM, ETC. SANDY SOILS. 200-765 M.
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Last Date Observed: 1984-04-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2005-04-27	Occurrence Rank: None
Owner/Manager: PVT	Trend: Decreasing
Presence: Possibly Extirpated	

Location:
CAJON CREEK WASH, BEHIND FIRE STATION, AT DEVORE.

Detailed Location:
MAPPED ACCORDING TO A 1984 KRANTZ MAP AND A 1979 DERBY MAP. OTHER AREAS OF THIS WASH HAVE BEEN SEARCHED BUT NO D. LEPTOCERAS WAS FOUND (1979).

Ecological:
FOUND ON OLD WASH TERRACES. OCCURS WITH LARGE SPECIMENS OF CERCOCARPUS BETULOIDES, ERIDICTYON TRICHOCALYX, ARTEMISIA CALIFORNICA, YUCCA WHIPPLEI, CHORIZANTHE CORIACEA, C. LEPTOTHECA, & C. STATICOIDES.

Threats:
SURROUNDING AREA DISTURBED BY FLOOD CONTROL. COTTONTAIL BROWSING, EXOTICS, CAMPGROUND EXPANSION, ORVS THREATEN AS WELL.

General:
<100 PLANTS IN 1979 RESTRICTED TO <1 ACRE OF OCCUPIED HABITAT. <10,000 IN 1982. A POCKET OF <10 PLANTS FOUND ON W SIDE OF WASH IN 1984. NOT SEEN IN 1986-1988, POSSIBLY DUE TO DROUGHT. NO PLANTS IN 2005. APPROPRIATE HABITAT MAY STILL EXIST.

PLSS: T02N, R05W, Sec. 33, NE (S)	Accuracy: specific area	Area (acres): 16
UTM: Zone-11 N3786663 E462652	Latitude/Longitude: 34.22035 / -117.40547	Elevation (feet): 2,040

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Sources:

BIO84R0001	BIO-TECH - REPORT: A REVIEW OF THE ENDANGERMENT STATUS OF DODECAHEMA LEPTOCERAS & ERIASTRUM DENSIFOLIUM SSP. SANCTORUM. 1984-05-15
COX83U0001	COX, R. - THE NATURE CONSERVANCY ELEMENT PRESERVATION PLAN. 1983-XX-XX
DER79U0001	DERBY, J. - LETTER FROM J. DERBY TO C. BELL REGARDING DEVORE SITE, WITH MAP. 1979-05-15
FRA05U0002	FRAGA, N. - 2004-2005 SURVEYS OF THREATENED, ENDANGERED, FOREST SENSITIVE, AND WATCHLIST PLANTS SPECIES (TESPW) IN THE AREAS BURNED BY THE GRAND PRIX AND OLD FIRE OF 2003 2005-08-25
KAY82F0001	KAY, B. - FIELD SURVEY FORM FOR DODECAHEMA LEPTOCERAS 1982-05-04
KRA79S0018	KRANTZ, T. - KRANTZ SN UCR #24614 1979-04-30
KRA79U0010	KRANTZ, T. - STATUS REPORT FOR DODECAHEMA LEPTOCERAS 1979-05-06
KRA83U0005	KRANTZ, T. - RECORD OF PHONE CONVERSATION CONCERNING SEVERAL SITES (OCCURRENCES 1, 2, 3, 6) 1983-10-24
KRA84R0001	KRANTZ, T. - REVIEW OF ENDANGERED STATUS FOR DODECAHEMA LEPTOCERAS & ERIASTRUM DENSIFOLIUM SANCTORUM. 1984-05-15
KRA88F0001	KRANTZ, T. - FIELD SURVEY FORM FOR DODECAHEMA LEPTOCERAS 1988-05-02
NEE89U0001	NEEL, M. - MEETING NOTES FROM 5/3/89 MEETING REGARDING DODECAHEMA LEPTOCERAS. 1989-06-20



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	03247	EO Index:	10171
Key Quad:	Devore (3411724)	Element Code:	PDPGN0V010
Occurrence Number:	18	Occurrence Last Updated:	2016-03-09

Scientific Name:	<i>Dodecahema leptoceras</i>	Common Name:	slender-horned spineflower
Listing Status:	Federal: Endangered State: Endangered	Rare Plant Rank:	1B.1
CNDDB Element Ranks:	Global: G1 State: S1	Other Lists:	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden

General Habitat:	CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB (ALLUVIAL FAN SAGE SCRUB).	Micro Habitat:	FLOOD DEPOSITED TERRACES AND WASHES; ASSOCIATES INCLUDE ENCELIA, DALEA, LEPIDOSPARTUM, ETC. SANDY SOILS. 200-765 M.
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Last Date Observed:	1984-04-XX	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	2005-04-27	Occurrence Rank:	None
Owner/Manager:	SBD COUNTY	Trend:	Decreasing
Presence:	Possibly Extirpated		

Location:
CAJON PASS; CAJON CANYON NEAR DEVORE, NORTH OF EXISTING GLEN HELEN CAMPGROUND AREA.

Detailed Location:
WEST SIDE OF WASH, SOUTH OF JUNCTION OF I-15 AND 1-15 EAST.

Ecological:
ON GRAVELLY BENCH AMONG CERCOCARPUS BETULOIDES AND YUCCA WHIPPLEI. SITE IS FREE OF ANNUAL GRASSES ASSOCIATED WITH CHORIZANTHE CORIACEA AND C. PROCUMBENS.

Threats:
COMPETITION FROM INTRODUCED PLANTS AND ALTERATION OF THE NATURAL WATER FLOWS ARE THREATENING.

General:
10 PLANTS SEEN IN 1984. BY THE 1987 NEEL REPORT THIS OCCURRENCE MAY HAVE DISAPPEARED; IT HAD BEEN DECLINING FOR SEVERAL YEARS. NO PLANTS SEEN IN 2005.

PLSS: T02N, R05W, Sec. 33 (S)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-11 N3786133 E462279	Latitude/Longitude: 34.21556 / -117.40949	Elevation (feet): 2,040

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:

FRA05U0002	FRAGA, N. - 2004-2005 SURVEYS OF THREATENED, ENDANGERED, FOREST SENSITIVE, AND WATCHLIST PLANTS SPECIES (TESPW) IN THE AREAS BURNED BY THE GRAND PRIX AND OLD FIRE OF 2003 2005-08-25
KRA84R0001	KRANTZ, T. - REVIEW OF ENDANGERED STATUS FOR DODECAHEMA LEPTOCERAS & ERIASTRUM DENSIFOLIUM SANCTORUM. 1984-05-15
NEE87R0001	NEEL, M. - REPORT: SURVEYS FOR ERIASTRUM DENSIFOLIUM SSP. SANCTORUM & CENTROSTEGIA (DODECAHEMA) LEPTOCERAS ON THE SAN BERNARDINO NF. 1987-09-30



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 35460	EO Index: 30890
Key Quad: Devore (3411724)	Element Code: PDPGN0V010
Occurrence Number: 35	Occurrence Last Updated: 2008-07-15

Scientific Name: <i>Dodecahema leptoceras</i>	Common Name: slender-horned spineflower
Listing Status:	Rare Plant Rank: 1B.1
Federal: Endangered	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: Endangered	
CNDDB Element Ranks:	
Global: G1	
State: S1	

General Habitat: CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB (ALLUVIAL FAN SAGE SCRUB).	Micro Habitat: FLOOD DEPOSITED TERRACES AND WASHES; ASSOCIATES INCLUDE ENCELIA, DALEA, LEPIDOSPARTUM, ETC. SANDY SOILS. 200-765 M.
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Last Date Observed: 1994-06-20	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2005-04-27	Occurrence Rank: Unknown
Owner/Manager: FLOOD CONTROL DISTRICT	Trend: Decreasing
Presence: Presumed Extant	

Location:
 LYTLE CREEK, 0.25 MILE EAST OF NEALEYS CORNER, SAN BERNARDINO MOUNTAINS REGION.

Detailed Location:
 MAPPED ACCORDING TO THE DIRECTIONS ON A 1994 JONES & DICKERSON COLLECTION APPROX 300 FT N OF DEVORE RD AND 150 FT E OF WELL.

Ecological:
 ON ALLUVIAL BENCH FAN SCRUB, THROUGHOUT LYTLE CREEK; ASSOC WITH JUNIPERUS CALIFORNICA, ERIOGONUM FASCICULATUM, ERIODICTYON TRICHOCALYX, CHORIZANTHE STATICOIDES, LASTARRIAEA CORIACEA, SALVIA COLUMBARIAE, SCHISMUS BARBATUS.

Threats:
General:
 2 SMALL POPS OF <100 PLANTS IN 1993. 92 PLANTS IN A 10 X 20 FT AREA NEAR JUNIPER REPORTED IN 1994; TWO OTHER POPS ARE LOCATED NEARBY (EXACT LOCATION OF THESE POPS UNK TO CNDDB). NO PLANTS SEEN IN 2005 (POSS DUE TO HEAVY RAINFALL IN 2004).

PLSS: T01N, R05W, Sec. 07 (S)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-11 N3783211 E459765	Latitude/Longitude: 34.18911 / -117.43664	Elevation (feet): 2,100

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

FRA05U0002	Fraga, N. - 2004-2005 SURVEYS OF THREATENED, ENDANGERED, FOREST SENSITIVE, AND WATCHLIST PLANTS SPECIES (TESPW) IN THE AREAS BURNED BY THE GRAND PRIX AND OLD FIRE OF 2003 2005-08-25
JON94S0001	JONES, C. & A. DICKERSON - JONES SN RSA #571020 1994-06-20
MOR93U0004	MOREY, S. - RECOVERY WORKSHOP SUMMARY. 1993-12-20



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 71698	EO Index: 72596	
Key Quad: Devore (3411724)	Element Code: PDPGN0V010	
Occurrence Number: 39	Occurrence Last Updated: 2016-03-11	

Scientific Name: <i>Dodecahema leptoceras</i>	Common Name: slender-horned spineflower
Listing Status:	Rare Plant Rank: 1B.1
Federal: Endangered	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: Endangered	
CNDDDB Element Ranks:	
Global: G1	
State: S1	

General Habitat: CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB (ALLUVIAL FAN SAGE SCRUB).	Micro Habitat: FLOOD DEPOSITED TERRACES AND WASHES; ASSOCIATES INCLUDE ENCELIA, DALEA, LEPIDOSPARTUM, ETC. SANDY SOILS. 200-765 M.
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Last Date Observed: 2013-04-26	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2013-04-26	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
CAJON CANYON, JUST NORTH OF RUDELLE HILL.

Detailed Location:
MAPPED AS 2 POLYGONS ACCORDING TO 2005 FRAGA DIGITAL DATA AND 2013 KEELAN COORDINATES.

Ecological:
OLD ALLUVIAL BENCH WITH LARGE CERCOCARPUS BETULOIDES. ASSOCIATES INCL PRUNUS ILICIFOLIA, OPUNTIA PARRYI, SALVIA APIANA, S. COLUMBARIAE, ERIOGONUM FASCICULATUM, E. GRACILE, ERIODICTYON TRICHOCALYX, PHACELIA DISTANS, LOTUS SCOPARIUS, ETC.

Threats:
HEAVY AVENA INFESTATION, ADJACENT TO RR TRACKS AND CAJON BLVD.

General:
5000 PLANTS IN 2005. "LOCALLY COMMON" IN 2010. UNKNOWN NUMBER IN 2013. A 1950 ROOS COLLECTION FROM "CAJON CYN, 1 MILE BELOW 'BLUE CUT'" IS ALSO ATTRIBUTED TO THIS SITE.

PLSS: T02N, R05W, Sec. 19, NW (S)	Accuracy: specific area	Area (acres): 5
UTM: Zone-11 N3789592 E458784	Latitude/Longitude: 34.24662 / -117.44761	Elevation (feet): 2,400

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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- Sources:**
- FRA05D0001 FRAGA, N. - DIGITAL DATA TO ACCOMPANY SOURCES FRA05U0002 & FRA05U0003 2005-08-25
 - FRA05S0033 FRAGA, N. & L. GROSS - FRAGA #1580 UCR #164835 2005-06-02
 - FWS07D0001 U.S. FISH AND WILDLIFE SERVICE-CARLSBAD - USFWS CARLSBAD SPECIAL STATUS SPECIES DATABASE, AUGUST 2007 VERSION 2007-08-09
 - GRO05S0004 GROSS, L. - GROSS #2259 RSA #705985 2005-05-12
 - KEE13U0001 KEELAN, B. - EXPORT OF DATA FROM BRIAN KEELAN'S PLANT DATABASE 2013-07-26
 - ROO50S0011 ROOS, J.C. - ROOS #4822 UCR #24251, RSA #52806 & #659185, CAS #909698, CAS-BOT-BC #412638, CLARK-A #1528-3601, UCSB #38055 1950-06-03
 - WOO10S0077 WOOD, J. - WOOD #1836 RSA #768433 2010-05-18



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 20101	EO Index: 18414
Key Quad: San Bernardino North (3411723)	Element Code: PDPLM03035
Occurrence Number: 4	Occurrence Last Updated: 2019-02-04

Scientific Name: <i>Eriastrum densifolium ssp. sanctorum</i>	Common Name: Santa Ana River woollystar
Listing Status:	Rare Plant Rank: 1B.1
Federal: Endangered	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: Endangered	
CNDDDB Element Ranks:	
Global: G4T1	
State: S1	

General Habitat: COASTAL SCRUB, CHAPARRAL.	Micro Habitat: IN SANDY SOILS ON RIVER FLOODPLAINS OR TERRACED FLUVIAL DEPOSITS. 180-705 M.
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Last Date Observed: 2017-05-04	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2017-05-04	Occurrence Rank: Excellent
Owner/Manager: SBD COUNTY FLOOD CONTROL DIST	Trend: Unknown
Presence: Presumed Extant	

Location:
CAJON WASH; UPSTREAM FROM CONFLUENCE WITH LYTLE CREEK AND SOUTH OF INSTITUTION ROAD.

Detailed Location:
MAPPED ACCORDING TO A 2008 WHITE & WOOD MAP. FRAGA DID NOT SEE ANY PLANTS IN GENERAL VICINITY IN 2005; MAY HAVE BEEN SEARCHING IN VICINITY OF OLD EO #4 WHICH WAS MAPPED FURTHER TO EAST.

Ecological:
MOST ABUNDANT ON BENCHES SUBJECT TO RECENT FLOW; ALSO OCCURRED IN LOWER DENSITIES WITHIN SOME OF THE LARGER SCOURED CHANNELS AND OLDEST BENCHES WITH THE GREATEST VEGETATIVE COVER. ASSOCIATES INCLUDE LEPIDOSPARTUM SQUAMATUM, OPUNTIA, ETC.

Threats:
OHVS, WEEDS, MINING, AND PEDESTRIAN TRAFFIC ARE THREATS. THIS AREA CONTAINS KNOWN HYBRIDS.

General:
5,325 PLANTS SEEN IN 2008 BETWEEN EO #4 & EO #33; MAY BE CONTINUOUS WITH EO #33, NEEDS FIELDWORK. 11,880 PLANTS OBSERVED IN 2013; SITE BEING EVALUATED FOR MITIGATION BANK VALUE. 6790 PLANTS OBSERVED IN 2017.

PLSS: T01N, R05W, Sec. 14 (S)	Accuracy: specific area	Area (acres): 264
UTM: Zone-11 N3780955 E465677	Latitude/Longitude: 34.16898 / -117.37239	Elevation (feet): 1,500

County Summary: San Bernardino	Quad Summary: San Bernardino North (3411723), Devore (3411724)
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- Sources:**
- BOY83U0001 BOYD, S. - PERSONAL COMMUNICATION ON BACK OF FIELD SURVEY FORM ABOUT AN HERBARIUM COLLECTION. 1983-XX-XX
 - DIC13F0002 DICUS, M. & J. DICUS - FIELD SURVEY FORM FOR ERIASTRUM DENSIFOLIUM SSP. SANCTORUM 2013-06-13
 - EVE52S0002 EVERETT, P. ET AL. - EVERETT #17265 RSA #78788 & #0119702 1952-07-01
 - FRA05U0002 FRAGA, N. - 2004-2005 SURVEYS OF THREATENED, ENDANGERED, FOREST SENSITIVE, AND WATCHLIST PLANTS SPECIES (TESPW) IN THE AREAS BURNED BY THE GRAND PRIX AND OLD FIRE OF 2003 2005-08-25
 - LAN17F0010 LANCASTER, C. - FIELD SURVEY FORM FOR ERIASTRUM DENSIFOLIUM SSP. SANCTORUM 2017-05-04
 - LAN17F0011 LANCASTER, C. - FIELD SURVEY FORM FOR ERIASTRUM DENSIFOLIUM SSP. SANCTORUM 2017-05-04
 - WHI08F0007 WHITE, S. & J. WOOD (SCOTT WHITE BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR ERIASTRUM DENSIFOLIUM SSP. SANCTORUM 2008-08-07
 - WOO08S0002 WOOD, J. & S. WHITE - WOOD #109 RSA #737447 2008-08-07



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 03273	EO Index: 18407
Key Quad: Devore (3411724)	Element Code: PDPLM03035
Occurrence Number: 15	Occurrence Last Updated: 1992-01-10

Scientific Name: <i>Eriastrum densifolium ssp. sanctorum</i>	Common Name: Santa Ana River woollystar
Listing Status: Federal: Endangered	Rare Plant Rank: 1B.1
State: Endangered	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
CNDDB Element Ranks: Global: G4T1	
State: S1	

General Habitat: COASTAL SCRUB, CHAPARRAL.	Micro Habitat: IN SANDY SOILS ON RIVER FLOODPLAINS OR TERRACED FLUVIAL DEPOSITS. 180-705 M.
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Last Date Observed: XXXX-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1985-05-02	Occurrence Rank: None
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Extirpated	

Location:
VICINITY OF DEVORE.

Detailed Location:

Ecological:

Threats:

General:

FEWER THAN 50 PLANTS SEEN 'RECENTLY', BUT POPULATION ENTIRELY DISKED ON 5/2/85.

PLSS: T02N, R05W, Sec. 34 (S)	Accuracy: 2/5 mile	Area (acres): 0
UTM: Zone-11 N3786703 E463479	Latitude/Longitude: 34.22075 / -117.39649	Elevation (feet): 2,000

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
KRA85R0001 KRANTZ, T. - RARE PLANT SURVEY - SANTA ANA RIVER WASH. BIO-TECH ENVIRONMENTAL PLANNING CONSULTANTS. 1985-04-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 76325	EO Index: 77304
Key Quad: Devore (3411724)	Element Code: PDPLM03035
Occurrence Number: 33	Occurrence Last Updated: 2019-02-04

Scientific Name: <i>Eriastrum densifolium ssp. sanctorum</i>	Common Name: Santa Ana River woollystar
Listing Status:	Rare Plant Rank: 1B.1
Federal: Endangered	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: Endangered	
CNDDDB Element Ranks:	
Global: G4T1	
State: S1	

General Habitat: COASTAL SCRUB, CHAPARRAL.	Micro Habitat: IN SANDY SOILS ON RIVER FLOODPLAINS OR TERRACED FLUVIAL DEPOSITS. 180-705 M.
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Last Date Observed: 2017-05-03	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2017-05-03	Occurrence Rank: Excellent
Owner/Manager: SBD COUNTY FLOOD CONTROL DIST	Trend: Unknown
Presence: Presumed Extant	

Location:
CAJON WASH; UPSTREAM FROM CONFLUENCE WITH LYTLE CREEK AND MOSTLY NORTH OF INSTITUTION RD.

Detailed Location:
MAPPED BY CNDDDB ACCORDING TO A 2008 WHITE & WOOD MAP (NORTH OF INSTITUTION ROAD) AND 2017 RAMIREZ COORDINATES (SOUTH OF INSTITUTION ROAD WITH CAJON WASH).

Ecological:
MOST ABUNDANT ON BENCHES SUBJECT TO RECENT FLOW; ALSO OCCURRED IN LOWER DENSITIES WITHIN SOME OF THE LARGER SCOURED CHANNELS AND OLDEST BENCHES WITH THE GREATEST VEGETATIVE COVER. ASSOCIATES INCLUDE LEPIDOSPARTUM SQUAMATUM, OPUNTIA, ETC.

Threats:
OHVS, WEEDS, MINING, AND PEDESTRIAN TRAFFIC THREATEN. KNOWN HYBRIDS OCCUR IN THE AREA.

General:
5,325 PLANTS SEEN IN 2008 BETWEEN EO #4 & 33. THIS OCCURRENCE MAY BE CONTINUOUS WITH EO #4; NEEDS FIELDWORK. 8,864 PLANTS OBSERVED IN 2013; SITE BEING EVALUATED FOR MITIGATION BANK VALUE. 2,410 PLANTS SEEN IN 2017.

PLSS: T01N, R05W, Sec. 11 (S)	Accuracy: specific area	Area (acres): 164
UTM: Zone-11 N3782673 E465098	Latitude/Longitude: 34.18445 / -117.37876	Elevation (feet): 1,700

County Summary: San Bernardino	Quad Summary: San Bernardino North (3411723), Devore (3411724)
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- Sources:**
- DIC13F0002 DICUS, M. & J. DICUS - FIELD SURVEY FORM FOR ERIASTRUM DENSIFOLIUM SSP. SANCTORUM 2013-06-13
 - LAN17F0008 LANCASTER, C. - FIELD SURVEY FORM FOR ERIASTRUM DENSIFOLIUM SSP. SANCTORUM 2017-05-03
 - LAN17F0009 LANCASTER, C. - FIELD SURVEY FORM FOR ERIASTRUM DENSIFOLIUM SSP. SANCTORUM 2017-05-03
 - RAM17U0001 RAMIREZ, R. - OBSERVATION RECORD FOR ERIASTRUM DENSIFOLIUM SSP. SANCTORUM, CALFLORA ID: MG35448 2017-02-18
 - WHI08F0007 WHITE, S. & J. WOOD (SCOTT WHITE BIOLOGICAL CONSULTING) - FIELD SURVEY FORM FOR ERIASTRUM DENSIFOLIUM SSP. SANCTORUM 2008-08-07
 - WOO08S0001 WOOD, J. & S. WHITE - WOOD #100 RSA #737039 2008-08-05



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	96407	EO Index:	97567
Key Quad:	Devore (3411724)	Element Code:	PDPLM03035
Occurrence Number:	41	Occurrence Last Updated:	2015-06-18

Scientific Name:	<i>Eriastrum densifolium ssp. sanctorum</i>	Common Name:	Santa Ana River woollystar
Listing Status:	Federal: Endangered State: Endangered	Rare Plant Rank:	1B.1
CNDDDB Element Ranks:	Global: G4T1 State: S1	Other Lists:	SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden

General Habitat:	Micro Habitat:
COASTAL SCRUB, CHAPARRAL.	IN SANDY SOILS ON RIVER FLOODPLAINS OR TERRACED FLUVIAL DEPOSITS. 180-705 M.

Last Date Observed:	2014-01-21	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	2014-01-21	Occurrence Rank:	Fair
Owner/Manager:	PVT	Trend:	Unknown
Presence:	Presumed Extant		

Location:
W SIDE OF LYTLE CRK NEAR WATER TANK N OF N SYCAMORE AVE, ABOUT 0.6 AIR MI WNW OF EL RANCH VERDE COUNTRY CLUB, N RIALTO.

Detailed Location:
MAPPED BY CNDDDB ACCORDING TO A 2014 BOSHART COORDINATES AND MAP, IN THE SE 1/4 OF THE SE 1/4 OF SECTION 22.

Ecological:
Threats:

OFF-ROAD VEHICLES.

General:
1 PLANT OBSERVED IN 2013 AND 2014.

PLSS:	T01N, R05W, Sec. 22, SE (S)	Accuracy:	80 meters	Area (acres):	0
UTM:	Zone-11 N3779201 E464463	Latitude/Longitude:	34.15312 / -117.38549	Elevation (feet):	1,480

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
BOS14F0001 BOSHART, L. - FIELD SURVEY FORM FOR ERIASTRUM DENSIFOLIUM SSP. SANCTORUM 2014-01-21



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number:	54941	EO Index:	54941
Key Quad:	Cucamonga Peak (3411725)	Element Code:	PDROS0W045
Occurrence Number:	19	Occurrence Last Updated:	2016-01-19

Scientific Name:	<i>Horkelia cuneata var. puberula</i>	Common Name:	mesa horkelia
Listing Status:	Federal: None State: None	Rare Plant Rank:	1B.1
CNDDB Element Ranks:	Global: G4T1 State: S1	Other Lists:	USFS_S-Sensitive

General Habitat:	CHAPARRAL, CISMONTANE WOODLAND, COASTAL SCRUB.	Micro Habitat:	SANDY OR GRAVELLY SITES. 15-1645 M.
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Last Date Observed:	1995-05-10	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	1995-05-10	Occurrence Rank:	Unknown
Owner/Manager:	UNKNOWN	Trend:	Decreasing
Presence:	Presumed Extant		

Location:
HIGHLAND AVE 0.5 MILE WEST OF I-15, SAN BERNARDINO VALLEY.

Detailed Location:
MAPPED AS BEST GUESS BY CNDDB, AT HIGHLAND AVE 0.5 MILE WEST OF INTERSTATE 15, IN THE VICINITY OF EAST ETIWANDA CREEK. NEAR THE COMMON CORNER OF SECTIONS 27, 28, 33, & 34.

Ecological:
IN REMNANT ALLUVIAL SCRUB/CHAPARRAL.

Threats:
DEVELOPMENT, HIGHWAY CONSTRUCTION. HALF OF SITE WAS BULLDOZED IN 1995 3 DAYS AFTER COLLECTION WAS MADE.

General:
"UNCOMMON" IN 1995. PER S. WHITE COMMUNICATION TO D. TIBOR (2001), THIS SITE IS NEAR THE NEW 210 FREEWAY, NOW UNDER CONSTRUCTION, AND THE CITY OF RANCHO CUCAMONGA IS DEVELOPING LAND ON THE ALLUVIAL FAN IN THE AREA.

PLSS: T01N, R06W, Sec. 28 (S)	Accuracy: 2/5 mile	Area (acres): 280
UTM: Zone-11 N3777355 E453331	Latitude/Longitude: 34.13603 / -117.50617	Elevation (feet): 1,400

County Summary:	Quad Summary:
San Bernardino	Devore (3411724), Cucamonga Peak (3411725)

Sources:

BAL95S0001	BALLMER, G. & K. STOCKWELL - BALLMER SN RSA #643561, UCR #86708 (ALSO CITED IN WHI01U0002) 1995-05-07
STO95S0004	STOCKWELL, K. - STOCKWELL SN HSC #93440, RSA #581925 & #643562, SD #233931, UCR #86707 (ALSO CITED IN WHI01U0002) 1995-05-10
WHI01U0002	WHITE, S. - LETTER TO D. TIBOR REGARDING COLLECTION AND LOCATION INFORMATION ON HORKELIA CUNEATA SSP. PUBERULA. 2001-08-30



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 37024	EO Index: 32021
Key Quad: San Bernardino North (3411723)	Element Code: PDSOLOG0D0
Occurrence Number: 4	Occurrence Last Updated: 2012-02-08

Scientific Name: <i>Lycium parishii</i>	Common Name: Parish's desert-thorn
Listing Status:	Rare Plant Rank: 2B.3
Federal: None	Other Lists:
State: None	
CNDDDB Element Ranks:	
Global: G4	
State: S1	

General Habitat: COASTAL SCRUB, SONORAN DESERT SCRUB.	Micro Habitat: -3-570 M.
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Last Date Observed: 1885-04-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1885-04-XX	Occurrence Rank: None
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Extirpated	

Location:
MESAS NORTH OF SAN BERNARDINO.

Detailed Location:
EXACT LOCATION NOT KNOWN. MAPPED IN THE GENERAL VICINITY OF THE BENCHES AND FOOTHILLS NORTH OF SAN BERNARDINO.

Ecological:

Threats:

General:

OCCURRENCE KNOWN FROM 1881 AND 1885 COLLECTIONS BY PARISH & PARISH. SANDERS REPORTS THAT THE SAN BERNARDINO POPULATIONS OF LYCIUM PARISHII ARE ALMOST CERTAINLY EXTIRPATED (1993).

PLSS: T01N, R04W, Sec. 07 (S)	Accuracy: 5 miles	Area (acres): 0
UTM: Zone-11 N3782133 E468094	Latitude/Longitude: 34.17968 / -117.34622	Elevation (feet):

County Summary:

San Bernardino

Quad Summary:

San Bernardino South (3411713), Fontana (3411714), San Bernardino North (3411723), Devore (3411724), Silverwood Lake (3411733)

Sources:

PAR81S0022	PARISH, S. & W. PARISH - PARISH #795 NY #138742, GH #77152, A #77153 1881-04-01
PAR85S0009	PARISH, S. - PARISH #795 CAS, UC #103854 & #192456, DS #120845 1885-XX-XX
SAN93U0004	SANDERS, A. - COMMENTS FOR CNPS INVENTORY 5 1993-10-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 76820	EO Index: 1247
Key Quad: Devore (3411724)	Element Code: PMLIL0D150
Occurrence Number: 20	Occurrence Last Updated: 2009-10-01

Scientific Name: <i>Calochortus plummerae</i>	Common Name: Plummer's mariposa-lily
Listing Status:	Rare Plant Rank: 4.2
Federal: None	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: None	
CNDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat:	Micro Habitat:
COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 60-2500 M.

Last Date Observed: 2009-05-30	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2009-05-30	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
ALONG LYTLE CREEK WASH, 0.4 AIR MILE NNW OF THE CLUBHOUSE AT EL RANCHO VERDE COUNTRY CLUB, RIALTO.

Detailed Location:

Ecological:
RIVERSIDIAN ALLUVIAL FAN SAGE SCRUB DOMINATED BY JUNIPERUS CALIFORNICA AND CERCOCARPUS BETULOIDES.

Threats:
THREATENED BY ORV ACTIVITY.

General:
UNKNOWN NUMBER OF PLANTS OBSERVED IN 2009.

PLSS: T01N, R05W, Sec. 23, SW (S)	Accuracy: 1/10 mile	Area (acres): 0
UTM: Zone-11 N3779478 E465065	Latitude/Longitude: 34.15564 / -117.37898	Elevation (feet): 1,480

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:

ULR09F0002	ULRICH, B. (SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS) - FIELD SURVEY FORM FOR CAMPYLORHYNCHUS BRUNNEICAPILLUS, WITH CALOCHORTUS PLUMMERAE OBSERVED NEARBY 2009-05-30
WOG38S0003	WOGLUM, R. - WOGLUM #2171 RSA #377427 1938-06-21



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 26659	EO Index: 1249
Key Quad: Devore (3411724)	Element Code: PML10D150
Occurrence Number: 21	Occurrence Last Updated: 2009-10-13

Scientific Name: <i>Calochortus plummerae</i>	Common Name: Plummer's mariposa-lily
Listing Status:	Rare Plant Rank: 4.2
Federal: None	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: None	
CNDDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat: COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 60-2500 M.
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Last Date Observed: 1990-05-24	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2004-06-30	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
CAJON WASH; 0.25 MILE NORTH OF INSTITUTION ROAD.

Detailed Location:
EXACT LOCATION SOMEWHAT UNCERTAIN. MAPPED BY CNDDDB NON-SPECIFICALLY 1/4 MILE NNW OF INSTITUTION ROAD AS A STRIP WHICH PARALLELS THE ROAD; THIS IS QUITE ARTIFICIAL; NEEDS FIELDWORK.

Ecological:
RIVERSIDIAN ALLUVIAL FAN SAGE SCRUB WITH CERCOCARPUS BETULOIDES, ERIOGONUM FASCICULATUM, OPUNTIA LITTORALIS, AND MANY WEEDY SPECIES.

Threats:
General:
ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1990 COLLECTION BY WHITE AND MONTIJO. NO PLANTS COULD BE RELOCATED IN A 2004 SURVEY.

PLSS: T01N, R05W (S)	Accuracy: non-specific area	Area (acres): 98
UTM: Zone-11 N3782796 E465311	Latitude/Longitude: 34.18557 / -117.37645	Elevation (feet): 1,650

County Summary: San Bernardino	Quad Summary: San Bernardino North (3411723), Devore (3411724)
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Sources:

FRA05U0002	Fraga, N. - 2004-2005 SURVEYS OF THREATENED, ENDANGERED, FOREST SENSITIVE, AND WATCHLIST PLANTS SPECIES (TESPW) IN THE AREAS BURNED BY THE GRAND PRIX AND OLD FIRE OF 2003 2005-08-25
SAN92U0005	SANDERS, A. - CALOCHORTUS PLUMMERAE LOCATIONS DOCUMENTED BY SPECIMENS IN THE UCR HERBARIUM 1992-06-XX
WHI90S0002	WHITE, S. & R. MONTIJO - WHITE SN UCR #62386 1990-05-24



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 26657	EO Index: 1246
Key Quad: Devore (3411724)	Element Code: PMLI0D150
Occurrence Number: 22	Occurrence Last Updated: 1995-12-20

Scientific Name: <i>Calochortus plummerae</i>	Common Name: Plummer's mariposa-lily
Listing Status:	Rare Plant Rank: 4.2
Federal: None	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: None	
CNDDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat: COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 60-2500 M.
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Last Date Observed: 1971-07-07	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1971-07-07	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
GRAPEVINE SPRING, SAN GABRIEL MOUNTAINS.

Detailed Location:

Ecological:

Threats:

General:

ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1971 COLLECTION BY THORNE ET AL.

PLSS: T01N, R06W, Sec. 02, NW (S)	Accuracy: 1/5 mile	Area (acres): 0
UTM: Zone-11 N3784550 E455765	Latitude/Longitude: 34.20103 / -117.48013	Elevation (feet): 4,300

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
THO71S0003 THORNE, R. ET AL. - THORNE #40872 RSA #225937 1971-07-07



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 26658	EO Index: 1245
Key Quad: Devore (3411724)	Element Code: PML10D150
Occurrence Number: 23	Occurrence Last Updated: 2009-12-03

Scientific Name: <i>Calochortus plummerae</i>	Common Name: Plummer's mariposa-lily
Listing Status:	Rare Plant Rank: 4.2
Federal: None	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: None	
CNDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat: COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 60-2500 M.
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Last Date Observed: 2004-06-30	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2004-06-30	Occurrence Rank: Good
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
ALONG BIG TREE TRUCK RD (USFS ROAD 1N34) AT SUMMIT OF RIDGELINE BETWEEN GRAPEVINE CANYON & DUNCAN CANYON, NW OF RIALTO.

Detailed Location:

Ecological:
ROCKY SLOPES IN CHAPARRAL BY ROADCUT. ASSOCIATES INCLUDE: MIMULUS AURANTIACUS, GALIUM ANGUSTIFOLIUM, SISYMBRIUM ALTISIMUM, AVENA BARBATA, ERIOGONUM FASCICULATUM, ERIOPHYLLUM CONFERTIFOLIUM, ETC. OPEN, ARID, ROCKY SITE.

Threats:
NEAR ROADCUT.

General:
177 PLANTS OBSERVED IN 2004.

PLSS: T01N, R06W, Sec. 12, NW (S)	Accuracy: specific area	Area (acres): 1
UTM: Zone-11 N3783538 E456947	Latitude/Longitude: 34.19195 / -117.46725	Elevation (feet): 3,700

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

FRA04F0006	Fraga, N. et al. - Field Survey Form for Calochortus plummerae 2004-06-30
FRA04S0004	Fraga, N. et al. - Fraga #1292 UCR #147599, RSA #701247 2004-06-30
THO71S0004	Thorne, R. et al. - Thorne #40866 RSA #225801 1971-07-07
USF08D0001	U.S. Forest Service - San Bernardino NF - Digital Data for Threatened, Endangered, and Sensitive Plants on the San Bernardino National Forest 2008-XX-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 47932	EO Index: 47932
Key Quad: Devore (3411724)	Element Code: PML10D150
Occurrence Number: 62	Occurrence Last Updated: 2002-05-20

Scientific Name: <i>Calochortus plummerae</i>	Common Name: Plummer's mariposa-lily
Listing Status:	Rare Plant Rank: 4.2
Federal: None	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: None	
CNDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat: COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 60-2500 M.
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Last Date Observed: 2001-06-11	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2001-06-11	Occurrence Rank: Fair
Owner/Manager: PVT	Trend: Unknown
Presence: Presumed Extant	

Location:
SOUTHWEST OF DEVORE, 1.1 AIR MILES JUST NNE OF JUNCTION HWY 30 AND I-15, NORTHEAST OF GILFILLAN AIRPORT, EAST OF RIALTO.

Detailed Location:
ALONG DIRT ROADS EAST OF DIVERSION DIKE. TWO COLONIES MAPPED WITHIN THE NE 1/4 OF THE SE 1/4 OF SECTION 22.

Ecological:
IN RIVERSIDIAN SAGE SCRUB/ALLUVIAL SCRUB, ROCKY SUBSTRATE. FOUND WITH ARTEMISIA CALIFORNICA, SALVIA MELLIFERA, RHUS TRILOBATA, TOXICODENDRON DIVERSILOBUM, LOTUS SCOPARIUS, PRUNUS ILICIFOLIA, AND DELPHINIUM CARDINALIS.

Threats:
SURROUNDING AREAS DEVELOPED. SITE IS TO BE ANNEXED BY COUNTY INTO "OPEN SPACE."

General:
5 PLANTS OBSERVED IN 2001.

PLSS: T01N, R06W, Sec. 22, SE (S)	Accuracy: specific area	Area (acres): 3
UTM: Zone-11 N3779810 E454691	Latitude/Longitude: 34.15824 / -117.49154	Elevation (feet): 1,600

County Summary:	Quad Summary:
San Bernardino	Devore (3411724)

Sources:
WOL01F0001 WOLF, A. - FIELD SURVEY FORM FOR CALOCHORTUS PLUMMERAE 2001-06-11



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 61008	EO Index: 61044
Key Quad: Devore (3411724)	Element Code: PML10D150
Occurrence Number: 98	Occurrence Last Updated: 2009-11-17

Scientific Name: <i>Calochortus plummerae</i>	Common Name: Plummer's mariposa-lily
Listing Status:	Rare Plant Rank: 4.2
Federal: None	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: None	
CNDDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat: COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 60-2500 M.
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Last Date Observed: 2004-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2004-XX-XX	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
EASTERN SLOPE OF SAN SEVAINE CANYON, NORTH OF THE NORTHERNMOST PORTION OF FOXBOROUGH DRIVE, FONTANA.

Detailed Location:
MAPPED IN THE SW 1/4 OF THE SW 1/4 SECTION 11.

Ecological:
COASTAL SAGE SCRUB WITH SALVIA MELLIFERA, SALVIA APIANA, ERIOGONUM FASCICULATUM, ARTEMISIA CALIFORNICA, ADENOSTOMA FASCICULATUM, BRASSICA GENICULATA, ETC.

Threats:
General:
MAPPED BASED ON USFS SHAPEFILE WHICH PROVIDES LOCATION, SPECIES, AND "OLD FIRE BAER, 1 YEAR OUT SURVEYS." 1993 COLLECTION FROM "2 MI NW OF LYTLE CREEK RD ON DIRT FRONTAGE ROAD, DUNN CANYON RD & LYTLE CREEK JUNCTION" ALSO ATTRIBUTED HERE.

PLSS: T01N, R06W, Sec. 11, SW (S)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-11 N3782197 E455120	Latitude/Longitude: 34.17978 / -117.48700	Elevation (feet): 2,400

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:

SWI93S0001	SWINNEY, R. - SWINNEY #2259 UCR #92473 1993-06-18
USF08D0001	U.S. FOREST SERVICE - SAN BERNARDINO NF - DIGITAL DATA FOR THREATENED, ENDANGERED, AND SENSITIVE PLANTS ON THE SAN BERNARDINO NATIONAL FOREST 2008-XX-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 77300	EO Index: 78213
Key Quad: Devore (3411724)	Element Code: PMLI0D150
Occurrence Number: 131	Occurrence Last Updated: 2009-11-17

Scientific Name: <i>Calochortus plummerae</i>	Common Name: Plummer's mariposa-lily
Listing Status:	Rare Plant Rank: 4.2
Federal: None	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: None	
CNDDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat: COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 60-2500 M.
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Last Date Observed: 1995-06-17	Occurrence Type: Natural/Native occurrence
Last Survey Date: 1995-06-17	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
3.2 MILES SE OF LYTLE CREEK ROAD AND APPLEWHITE ROAD JUNCTION ON USFS ROAD 3N31, LOWER LYTLE CREEK DIVIDE.

Detailed Location:
220 METERS EAST OF THE ROAD. IN THE NW 1/4 OF THE SE 1/4 OF SECTION 24.

Ecological:
CHAPARRAL AND COASTAL SAGE SCRUB WITH ADENOSTOMA FASCICULATUM AND QUERCUS BERBERIDIFOLIA. BURN AREA OF SUMMER 1994, SOUTHERN EDGE OF BURN.

Threats:
General:
ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1995 COLLECTION BY SWINNEY, BUT SWINNEY DESCRIBED THIS PLANT AS ABUNDANT AT THE SITE AT THAT TIME.

PLSS: T02N, R06W, Sec. 24, SE (S)	Accuracy: 1/5 mile	Area (acres): 0
UTM: Zone-11 N3789149 E457670	Latitude/Longitude: 34.24258 / -117.45967	Elevation (feet): 3,400

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
SWI95S0005 SWINNEY, R. - SWINNEY #3850 RSA #665940, UCR #180625 1995-06-17



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 77303	EO Index: 78216
Key Quad: Devore (3411724)	Element Code: PMLI0D150
Occurrence Number: 132	Occurrence Last Updated: 2009-11-17

Scientific Name: <i>Calochortus plummerae</i>	Common Name: Plummer's mariposa-lily
Listing Status:	Rare Plant Rank: 4.2
Federal: None	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: None	
CNDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat: COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 60-2500 M.
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Last Date Observed: 2004-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2004-XX-XX	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
RIDGELINE NORTH OF MILLER NARROWS, NORTH OF LYTLE CREEK, ROUGHLY A MILE DOWNSTREAM FROM CONFLUENCES OF ALL THREE FORKS.

Detailed Location:
IN THE NW 1/4 OF THE NW 1/4 OF SECTION 26.

Ecological:
Threats:

General:
ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A US FOREST SERVICE SHAPEFILE WHICH PROVIDES LOCATION, SPECIES, AND "OLD FIRE BAER, 1 YEAR OUT SURVEYS." OLD FIRE BURNED IN FALL 2003; PRESUMABLY OBSERVATION WAS MADE IN 2004.

PLSS: T02N, R06W, Sec. 26, NW (S)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-11 N3788273 E455176	Latitude/Longitude: 34.23458 / -117.48671	Elevation (feet): 3,100

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
USF08D0001 U.S. FOREST SERVICE - SAN BERNARDINO NF - DIGITAL DATA FOR THREATENED, ENDANGERED, AND SENSITIVE PLANTS ON THE SAN BERNARDINO NATIONAL FOREST 2008-XX-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 77306	EO Index: 78218
Key Quad: Devore (3411724)	Element Code: PMLI0D150
Occurrence Number: 133	Occurrence Last Updated: 2009-11-17

Scientific Name: <i>Calochortus plummerae</i>	Common Name: Plummer's mariposa-lily
Listing Status:	Rare Plant Rank: 4.2
Federal: None	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: None	
CNDDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat: COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 60-2500 M.
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Last Date Observed: 2009-06-17	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2009-06-17	Occurrence Rank: Poor
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
BETWEEN CAJON WASH AND GLEN HELEN REGIONAL PARK CAMPGROUND, 0.5 MILE SOUTH OF JUNCTION OF I-15 & I-215.

Detailed Location:
0.1 MILE EAST OF INTERSTATE-15.

Ecological:
INTERMEDIATE ALLUVIAL FAN SAGE SCRUB ON A TERRACE. SANDY, GRAVELLY SOIL. ASSOCIATED WITH YERBA SANTA AND WESTERN SYCAMORE.

Threats:
THREATENED BY DEVELOPMENT AND ORVS. VISIBLE DISTURBANCES INCLUDE TRASH, FIRE, OFF ROAD VEHICLE USE.

General:
1 PLANT OBSERVED IN 2009.

PLSS: T02N, R05W, Sec. 33, N (S)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-11 N3786303 E462293	Latitude/Longitude: 34.21710 / -117.40934	Elevation (feet): 2,020

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
KIP09F0002 KIPPER, J. (ULTRASYSTEMS) - FIELD SURVEY FORM FOR CALOCHORTUS PLUMMERAE 2009-06-17



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 77310	EO Index: 78221
Key Quad: Devore (3411724)	Element Code: PMLI0D150
Occurrence Number: 134	Occurrence Last Updated: 2009-11-17

Scientific Name: <i>Calochortus plummerae</i>	Common Name: Plummer's mariposa-lily
Listing Status:	Rare Plant Rank: 4.2
Federal: None	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: None	
CNDDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat: COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 60-2500 M.
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Last Date Observed: 2004-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2004-XX-XX	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
1.2 AIR MILES SSW OF THE JUNCTION OF I-15 AND I-215, NE OF SYCAMORE CANYON, SW OF DEVORE.

Detailed Location:
IN THE SE 1/4 OF THE SE 1/4 OF SECTION 32, NORTH OF USFS ROAD 3N31.

Ecological:
Threats:

General:
ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A US FOREST SERVICE SHAPEFILE WHICH PROVIDES LOCATION, SPECIES, AND "OLD FIRE BAER, 1 YEAR OUT SURVEYS." OLD FIRE BURNED IN FALL 2003; PRESUMABLY OBSERVATION WAS MADE IN 2004.

PLSS: T02N, R05W, Sec. 32, SE (S)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-11 N3785500 E461312	Latitude/Longitude: 34.20982 / -117.41996	Elevation (feet): 2,300

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
USF08D0001 U.S. FOREST SERVICE - SAN BERNARDINO NF - DIGITAL DATA FOR THREATENED, ENDANGERED, AND SENSITIVE PLANTS ON THE SAN BERNARDINO NATIONAL FOREST 2008-XX-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 77312	EO Index: 78225
Key Quad: Devore (3411724)	Element Code: PMLI0D150
Occurrence Number: 135	Occurrence Last Updated: 2009-11-17

Scientific Name: <i>Calochortus plummerae</i>	Common Name: Plummer's mariposa-lily
Listing Status:	Rare Plant Rank: 4.2
Federal: None	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: None	
CNDDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat: COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 60-2500 M.
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Last Date Observed: 2004-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2004-XX-XX	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
ALONG BIG TREE TRUCK ROAD (USFS ROAD 1N34), 2.1 ROAD MILES WEST OF LYTLE CREEK ROAD, NW OF RIALTO.

Detailed Location:
WHERE THE ROAD CROSSES THE CENTER OF THE SECTION LINE WHICH SEPARATES SECTIONS 1 AND 12.

Ecological:
Threats:

General:
ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A US FOREST SERVICE SHAPEFILE WHICH PROVIDES LOCATION, SPECIES, AND "OLD FIRE BAER, 1 YEAR OUT SURVEYS." OLD FIRE BURNED IN FALL 2003; PRESUMABLY OBSERVATION WAS MADE IN 2004.

PLSS: T01N, R06W, Sec. 12, NE (S)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-11 N3783742 E457446	Latitude/Longitude: 34.19381 / -117.46184	Elevation (feet): 3,100

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
USF08D0001 U.S. FOREST SERVICE - SAN BERNARDINO NF - DIGITAL DATA FOR THREATENED, ENDANGERED, AND SENSITIVE PLANTS ON THE SAN BERNARDINO NATIONAL FOREST 2008-XX-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 77313	EO Index: 78226
Key Quad: Devore (3411724)	Element Code: PMLI0D150
Occurrence Number: 136	Occurrence Last Updated: 2010-04-26

Scientific Name: <i>Calochortus plummerae</i>	Common Name: Plummer's mariposa-lily
Listing Status:	Rare Plant Rank: 4.2
Federal: None	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: None	
CNDDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat: COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 60-2500 M.
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Last Date Observed: 2004-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2004-XX-XX	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
RIDGETOP NORTH OF DUNCAN CANYON, WEST OF NEALEYS CORNER AT THE MOUTH OF LYTLE CREEK CANYON, NW OF RIALTO.

Detailed Location:
ON RIDGETOP JUST EAST OF THE CENTER OF THE NE 1/4 OF SECTION 12.

Ecological:
Threats:

General:
ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A US FOREST SERVICE SHAPEFILE WHICH PROVIDES LOCATION, SPECIES, AND "OLD FIRE BAER, 1 YEAR OUT SURVEYS." OLD FIRE BURNED IN FALL 2003; PRESUMABLY OBSERVATION WAS MADE IN 2004.

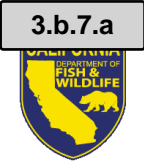
PLSS: T01N, R06W, Sec. 12, NE (S)	Accuracy: 80 meters	Area (acres): 0
UTM: Zone-11 N3783274 E457859	Latitude/Longitude: 34.18960 / -117.45733	Elevation (feet): 3,100

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
USF08D0001 U.S. FOREST SERVICE - SAN BERNARDINO NF - DIGITAL DATA FOR THREATENED, ENDANGERED, AND SENSITIVE PLANTS ON THE SAN BERNARDINO NATIONAL FOREST 2008-XX-XX



Occurrence Report
California Department of Fish and Wildlife
California Natural Diversity Database



Map Index Number: 77333	EO Index: 78242
Key Quad: Devore (3411724)	Element Code: PMLIL0D150
Occurrence Number: 137	Occurrence Last Updated: 2009-11-17

Scientific Name: <i>Calochortus plummerae</i>	Common Name: Plummer's mariposa-lily
Listing Status:	Rare Plant Rank: 4.2
Federal: None	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: None	
CNDDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat: COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 60-2500 M.
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Last Date Observed: 2006-09-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2006-09-XX	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
SOUTHERN TRACT OF THE LYTLE CREEK SAN BERNARDINO KANGAROO RAT CONSERVATION AREA, RIALTO.

Detailed Location:
WITHIN SOUTHERN TRACT, SUBUNIT 1. EXACT LOCATION OF SUBUNIT 1 UNKNOWN. MAPPED BY CNDDDB AS BEST AS POSSIBLE BASED ON AERIAL IMAGERY FROM THE SAME PERIOD OF TIME AS THE OBSERVATIONS.

Ecological:
ASSOCIATED WITH VULPIA MYUROS, HYPOCHAERIS, CRYPTANTHA, ERODIUM CICUTARIUM, AND LOTUS SUBPINNATUS.

Threats:
General:
CALOCHORTUS PLUMMERAE WAS ESTIMATED TO COMPRISE 0.1% OF THE COVER OF THIS PLOT DURING A VEGETATION ASSESSMENT IN APRIL AND SEPTEMBER 2006.

PLSS: T01N, R05W, Sec. 16 (S)	Accuracy: 1/5 mile	Area (acres): 0
UTM: Zone-11 N3781962 E461600	Latitude/Longitude: 34.17792 / -117.41668	Elevation (feet): 1,900

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
OFA07R0001 O'FARRELL, M. (O'FARRELL BIOLOGICAL CONSULTING) - RESTORATION AND ENHANCEMENT OF HABITAT FOR THE SBKR CONSERVATION AREA, LYTLE CREEK NORTH MASTER PLANNED COMMUNITY, SAN BERNARDINO COUNTY, CALIFORNIA, FINAL ANNUAL REPORT FOR 2006 2007-02-XX



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 77334	EO Index: 78247
Key Quad: Devore (3411724)	Element Code: PMLIL0D150
Occurrence Number: 138	Occurrence Last Updated: 2009-11-17

Scientific Name: <i>Calochortus plummerae</i>	Common Name: Plummer's mariposa-lily
Listing Status:	Rare Plant Rank: 4.2
Federal: None	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden
State: None	
CNDDDB Element Ranks:	
Global: G4	
State: S4	

General Habitat: COASTAL SCRUB, CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	Micro Habitat: OCCURS ON ROCKY AND SANDY SITES, USUALLY OF GRANITIC OR ALLUVIAL MATERIAL. CAN BE VERY COMMON AFTER FIRE. 60-2500 M.
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Last Date Observed: 2001-05-13	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2001-05-13	Occurrence Rank: Unknown
Owner/Manager: UNKNOWN	Trend: Unknown
Presence: Presumed Extant	

Location:
SOUTH OF VERDEMONT RANCH AND WEST OF GLEN HELEN SHERIFFS FACILITY, LYTLE CREEK WASH.

Detailed Location:
Ecological:
DISTURBED ALLUVIAL SHRUBLAND. 1650-1750 FT ELEVATION.

Threats:
General:
ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 2001 COLLECTION BY WHITE.

PLSS: T01N, R05W, Sec. 15 (S)	Accuracy: 2/5 mile	Area (acres): 0
UTM: Zone-11 N3781854 E463206	Latitude/Longitude: 34.17701 / -117.39925	Elevation (feet): 1,700

County Summary: San Bernardino	Quad Summary: Devore (3411724)
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Sources:
WHI01S0006 WHITE, S. - WHITE #8592 RSA #674736 2001-05-13



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 35454	EO Index: 30889	
Key Quad: Devore (3411724)	Element Code: PMLIL1A0J0	
Occurrence Number: 37	Occurrence Last Updated: 2012-02-27	

Scientific Name: <i>Lilium parryi</i>	Common Name: lemon lily
Listing Status:	Rare Plant Rank: 1B.2
Federal: None	Other Lists: SB_CalBG/RSABG-California/Rancho Santa Ana
State: None	Botanic Garden
CNDDB Element Ranks:	USFS_S-Sensitive
Global: G3	
State: S3	

General Habitat: LOWER MONTANE CONIFEROUS FOREST, MEADOWS AND SEEPS, RIPARIAN FOREST, UPPER MONTANE CONIFEROUS FOREST.	Micro Habitat: WET, MOUNTAINOUS TERRAIN; GENERALLY IN FORESTED AREAS; ON SHADY EDGES OF STREAMS, IN OPEN BOGGY MEADOWS & SEEPS. 625-2930 M.
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Last Date Observed: 1993-XX-XX	Occurrence Type: Natural/Native occurrence
Last Survey Date: 2004-06-30	Occurrence Rank: Unknown
Owner/Manager: USFS-SAN BERNARDINO NF	Trend: Unknown
Presence: Presumed Extant	

Location:
SAN SEVAINE COW CAMP, SOUTHEAST BASE OF THE SAN GABRIEL MOUNTAINS.

Detailed Location:
Ecological:
SPRINGY HILLSIDE ABOVE GRASSY FLAT.

Threats:
General:
OBSERVED NEAR SAN SEVAINE COW CAMP BY THORNE IN 1971. 2 PLANTS OBSERVED HERE IN 1993 BY ELAM. SITE VISITED AND SEARCHED IN 2004, NO PLANTS FOUND.

PLSS: T01N, R06W, Sec. 02, NW (S)	Accuracy: 1/5 mile	Area (acres): 0
UTM: Zone-11 N3784691 E455092	Latitude/Longitude: 34.20227 / -117.48744	Elevation (feet): 4,700

County Summary: San Bernardino	Quad Summary: Devore (3411724)
--	--

Sources:

ELA94R0001	ELAM, D. - "GENETIC VARIATION AND REPRODUCTIVE OUTPUT IN PLANT POPULATIONS: EFFECTS OF POPULATION SIZE AND INCOMPATIBILITY" PHD DISSERTATION. LILIUM PARRYI, ERIODICTYON CAPITATUM 1994-12-XX
FRA04F0021	FRAGA, N. - FIELD SURVEY FORM FOR LILIUM PARRYI 2004-06-30
THO71S0008	THORNE, R. ET AL. - THORNE #40892 RSA #225939 1971-07-07



Appendix C

Site Visit Photographs



Photo 1 - View facing northwest, looking proposed pipeline alignment along W Via Bello Drive.



Photo 2 - View facing northwest, looking the West Valley Water District reservoir at the western end of W Via Bello Drive.

Site Visit Photographs



Photo 3 - View facing east from N Linden Avenue, looking at the “open space” between N Linden Avenue and the RWFF.



Photo 4 - View facing east from N Linden Avenue, looking at the “open space” between N Linden Avenue and the RWFF.

Site Visit Photographs



Photo 5 - View facing east from N Linden Avenue, looking at the "open space" between N Linden Avenue and the RWFF.



Photo 6 - View facing northwest from N Riverside Avenue (looking at the sand and gravel mining operation [Cemex] and San Bernardino Kangaroo Rat critical habitat).

Site Visit Photographs



Photo 7 - View facing west, looking RWFF entrance off N Cedar Ave.



Photo 8 - View facing northwest from N Riverside Avenue (looking at the sand and gravel mining operation [Cemex] and San Bernardino Kangaroo Rat critical habitat).

Site Visit Photographs



Appendix D NWI Wetlands Inventory



April 12, 2021

Wetlands

- | | | | | | |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland |  | Lake |
|  | Estuarine and Marine Wetland |  | Freshwater Forested/Shrub Wetland |  | Other |
| | |  | Freshwater Pond |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

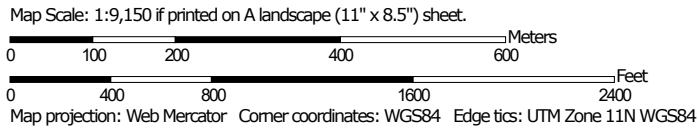


Appendix E NRCS Soils Map

Soil Map—San Bernardino County Southwestern Part, California
(RRWF Soils Map 04122021)




Soil Map may not be valid at this scale.



Soil Map—San Bernardino County Southwestern Part, California
(RRWF Soils Map 04122021)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)




















Soils





 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.
Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Bernardino County Southwestern Part, California
Survey Area Data: Version 12, May 27, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 1, 2018—Jul 8, 2019

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HaC	Hanford coarse sandy loam, 2 to 9 percent slopes	10.0	2.4%
Ps	Psamments, Fluvents and Frequently flooded soils	85.9	20.5%
SoC	Soboba gravelly loamy sand, 0 to 9 percent slopes	99.1	23.7%
SpC	Soboba stony loamy sand, 2 to 9 percent slopes	29.5	7.1%
TvC	Tujunga gravelly loamy sand, 0 to 9 percent slopes	193.8	46.3%
Totals for Area of Interest		418.4	100.0%

EXHIBIT B

RESOLUTION NO. 2021-22**RESOLUTION OF THE BOARD OF DIRECTORS
OF WEST VALLEY WATER DISTRICT
ADOPTING AN INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
FOR THE
OLIVER P. ROEMER WATER FILTRATION FACILITY
EXPANSION PROJECT**

WHEREAS, due to projected population growth with increased water demands, and to provide a reliable long term water supply to supplement groundwater production for existing customers, West Valley Water District (“District”) is planning to expand treatment capacity at the Oliver P. Roemer Water Filtration Facility (“Project”) to allow the treatment of additional State Water Project water; and

WHEREAS, it has been determined that approval of the Project is subject to the environmental review requirements of the California Environmental Quality Act (“CEQA”) and as the lead agency, the District commissioned the preparation of an Initial Study, which Initial Study has been presented to the Board of Directors of the District (“Board”), to analyze all potential environmental impacts of the Project: and

WHEREAS, on the basis of the Initial Study, which indicated that the Project will not have a significant impact on the environment, it was determined that a Mitigated Negative Declaration should be prepared, which proposed Mitigated Negative Declaration has been presented to the Board; and

WHEREAS, the proposed Mitigated Negative Declaration was made available to the public and to all interested agencies for review and comment.

NOW, THEREFORE, BE IT RESOLVED by the Board of the West Valley Water District as follows;

1. As the decision-making body for the Project, the Board has reviewed and considered the information contained in the Mitigated Negative Declaration and Initial Study (collectively, “Documents”). The Board finds that the Mitigated Negative Declaration and Initial Study contain a complete and accurate reporting of the environmental impacts associated with the Project. The Board further finds that the Documents have been completed in compliance with CEQA and State CEQA Guidelines, and all other applicable rules and regulations.
2. The proposed Mitigated Negative Declaration and Initial Study prepared for the Project reflect the independent judgement of the District. As the decision-making body for the Project, the Board reviewed and independently considered the information contained in the Documents prior to approving the Project.

- 3. The Board has also reviewed and independently considered the proposed mitigation measures, which are including within the Documents.
- 4. The Project will not result in a significant impact upon the environment.
- 5. The Board hereby adopts the Mitigated Negative Declaration and mitigation measures for the Project. The Board directs staff to file a Notice of Determination with the County of San Bernardino within five (5) working days of the Project approval.

ADOPTED, SIGNED, AND APPROVED THIS 16th DAY OF SEPTEMBER, 2021.

AYES:	DIRECTORS:
NOES:	DIRECTORS:
ABSENT:	DIRECTORS:
ABSTAIN:	DIRECTORS:

ATTEST:

Peggy Asche
Board Secretary

Channing Hawkins,
President of the Board of Directors
of West Valley Water District



**BOARD OF DIRECTORS
ENGINEERING, OPERATIONS AND PLANNING COMMITTEE
STAFF REPORT**

DATE: September 8, 2021
TO: Engineering, Operations and Planning Committee
FROM: Shamindra Manbahal, General Manager
SUBJECT: WELL 41 PUMP REPLACEMENT

BACKGROUND:

Well 41 is projected to become a workhorse facility in Zone 2 portion of the water system and will allow the District to become less reliant on imported water. It has a capacity of approximately 2.6 million gallons per day. Well 41 was out of service for several years due to perchlorate contamination, so the facility was equipped with an ion exchange treatment system during the 2020/21 fiscal year in order to put the well back into service. After the well was cleared by the Water Quality Department to return to use and the well began pumping against system pressure several areas of the column pipe failed due to corrosion that was not visible because it was down inside the well.

DISCUSSION:

Well 41 was pulled and inspected by General Pump, the District's approved as-needed, on-call pump contractor. As the well was disassembled, during removal it was discovered that the corrosion was bad enough that the entire well column and shaft assembly had to be torched apart and must be replaced with new components. The condition of the components was also confirmed by Production Department staff who personally inspected the entire assembly as it was being removed.

General Pump has the entire well pump assembly and motor in their shop, and has assembled their quote for reconditioning, repair, and re-installation from as-built drawings, pump curve information, system pressure information, and drillers logs. Going forward and completing the repair and replacement with General Pump will ensure the well is back in service in the shortest possible timeline, providing much needed production capacity in Zone 2 and water flow to protect the costly ion exchange resin inside the treatment system located at Well 41. Below is a summary of the work to be performed.

Description	Cost
Replace column pipe, oil tube, pump shaft, pump assembly, and suction pipe	\$100,558.77
Shop and field labor to recondition well & well head and install pump at Well 41	\$49,143.18
Performance and Payment Bonds (3-5%)	\$7,485.10

Not-to-Exceed Cost

\$157,187.05

FISCAL IMPACT:

The Fiscal Year 2021/22 Capital Budget includes well pump repair funds from Project Number W22023 titled “Annual R/R – Wells and Pumping Equipment” (\$50,000), and the remaining \$107,187.05 will come from a surplus in Project Number W19040 titled “Well 18A Pipe Blending Project”.

STAFF RECOMMENDATION:

Staff recommends that this item be submitted for consideration, and that the Board of Directors approve this item and authorize the General Manager to execute the necessary documents.

SM:js

ATTACHMENT(S):

1. Exhibit A - Quote from General Pump
2. Exhibit B - Photos of Corrosion Well Assembly

EXHIBIT A



159 N. ACACIA STREET * SAN DIMAS, CA 91773
 PHONE: (909) 599-9606 * FAX: (909) 599-6238

CAMARILLO, CA 93010 * PHONE: (805) 482-1215
www.genpump.com

WELL & PUMP SERVICE SINCE 1952

Lic. #496765

Serving Southern California and Central Coast

August 26, 2021

Via Email

West Valley Water District
 855 West Baseline Road
 Rialto, California 92377
 Attn: Joe Schaack

Subject: Well 41

General Pump Company recently removed the complete pump from the well after determining apparent holes/splits in the column pipe were resulting in loss of production. The pump was transported to the GPC yard where it was unloaded and prepared for disassembly. The well was also video logged. After review of the video, it indicated moderate to heavy nodule build up blocking off 60-80% of the well screen. It is recommended that a couple of days (two days) of continual wire brushing (two brushes) followed by one (1) day of Airburst® this would conceivably clean the well both internally and with the use of Airburst, it will provide high-energy pressure pulses in the well. The energy generates acoustic waves that break up and remove mineral scale in the new well formation. A post video will be provided to confirm the brushing and Airburst provides adequate cleaning.

The pump column, tube and shaft will all need to be replaced as well as the bowl assembly. Records indicate initial hydraulic design of 2000 GPM @ 425' TDH. This design will need to be confirmed with you and your department. The existing bowls have heavy wear along the internal registers, the wear is close to intercepting the threaded bolt holes. Additional wear in these areas of the bowls could result in catastrophic failure. A new bowl with 17-4 PH shaft and stainless steel impellers is being quoted as a replacement. These materials will assist with prolonging the life of the pump, by wearing better to sand and or air being produced. All rates are current with Master Services Agreement. Please allow 4-5 weeks for completion after acceptance.

Engineering Inspection

- Cone strainer and suction pipe needs to be replaced. Pump bowl is worn. Bowl shaft is worn in the first stage intermediate bowl and discharge case throttle bearing journals. Bowl bearings are worn as are the impeller hydraulic seal rings. Intermediate bowl internal registers are worn in and near the connecting threaded bolt holes.
- Column pipe is worn, corrosion & plating is visible. All production column pipe, oil lubricated tube and shaft assemblies were torch cut during removal for the well. Top column pipe, oil lubricated stretch tube and head shaft were torch cut during removal.



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West Valley Water District
August 26, 2021
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- Threaded top column flange appears to be in good condition. Oil lubricated tube stretch plate and oil receiver bearing appear to be in good condition.
- Discharge head is in good condition. Motor visually appears to be in good condition. Motor megs 100 megohms at 500 volts. Rotor turns free by hand; non reverse ratchet is functional. Oil level sight glasses are stained.

Cost

Shop Labor

- | | |
|--|--------|
| • Pressure wash pump bowls & prep for disassembly | 1 Hrs. |
| • Disassemble pump bowl assembly & inspect | 4 Hrs. |
| • Receive & inspect new materials, quality assurance | 6 Hrs. |
| • Install new discharge case threaded oil tube connector bearing, verify tolerances & runout | 1 Hrs. |
| • Clean new suction pipe, weld-on new cone strainer & suction pipe down hole lifting lugs | 2 Hrs. |
| • Pressure wash new column pipe clean & prep threaded pipe couplings | 8 Hrs. |
| • Pressure wash new tube & shaft assemblies, prepare for installation | 6 Hrs. |
| • Remove & install new line shaft couplings w/ thread anti-seize | 6 Hrs. |
| • Stab out tube & shaft into production column pipe, prepare for installation | 6 Hrs. |
| • Heat, quench & remove top column pipe from threaded top column flange | 2 Hrs. |
| • Sandblast & clean top column flange, wire wheel internal pipe threads, prep for machining | 2 Hrs. |
| • Machine & thread new top column Parallel & Concentric to center line of pump | 8 Hrs. |
| • Sandblast & clean top column pipe jam nut, wire wheel internal threads | 2 Hrs. |
| • Clean & wire wheel discharge head registers, prep for machining, handling | 2 Hrs. |
| • Set-up & indicate discharge head on V.T.L., machine head registers P & C | 8 Hrs. |
| • Clean taped holes, install top column & flange w/ new gasket & fasteners | 2 Hrs. |
| • Engineer, calculate & machine oil tube tension / stretch tube | 6 Hrs. |
| • Engineer, calculate & machine head shaft, thread, key, polish & balance | 6 Hrs. |
| • Clean tube stretch / tension plate assembly, prepare for installation | 1 Hrs. |
| • Mount & install GPC 2 gallon oil pot, dripper assembly & manual by-pass tube & fittings | 1 Hrs. |
| • Mount & install water level gage bracket & compression fittings | 2 Hrs. |
| • Transport discharge head to & from sandblasting facility, handling | 3 Hrs. |
| • Inspect & paint discharge head after sandblast, handling | 3 Hrs. |
| • Clean & install customer's Cal OSHA discharge head shaft guard screens | 2 Hrs. |

90 Hrs. @ \$90/Hr. \$ 8,100.00



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Materials

• Cone strainer, 316 stainless steel, heavy duty 7ga wire wound	\$ 780.00	
• Suction pipe with down hole lifting lugs	1,191.00	
• Pump bowl assembly, stainless steel impellers & trim, 17-4 shaft	20,728.00	
• ***Confirm operating hydraulics prior to order***		
• Discharge case threaded bronze oil tube connector bearing	204.00	
• Pump bowl shaft coupling, carbon steel	48.00	
• Production column pipe, threaded & coupled	38,866.00	
• Oil lubricated tube & shaft assembly, standard construction	23,666.00	
• Oil tube black widow centering spider	340.00	
• Top column pipe (landing joint) Sch 40 heavy wall	710.00	
• Top column flange gasket & zinc yellow- chromate plated GR8 fasteners	122.00	
• Oil tube nut packing	62.00	
• Top tension / stretch oil tube	160.00	
• Top stretch plate gasket & stainless steel fasteners	22.00	
• Head shaft, carbon steel	1,180.00	
• Head shaft bronze adjusting nut, motor driver steel gib key & brass lock screw	180.00	
• General Pump Co. 2 Gallon oil pot, oil dripper assembly w/ manual bypass	720.00	
• 110V oiler automatic solenoid valve	68.00	
• Gallons vertical hollow shaft electric motor turbine oil	160.00	
• Gallons oil tube installation turbine oil	384.00	
• 1/4" S. S. Dekron continuous PVC jacketed airline	1,568.00	
• Liquid filled water level pressure gauge, bracket & compression fittings	204.00	
• 12" 150# Full face gasket kit w/ GR5 zinc plated fasteners	135.00	
• Motor junction box electrical connection kit, 300 hp	350.00	
• 316 S.S. Bandit, clamps & pads to secure airline & PVC to production column pipe	318.00	
• Oxygen / acetylene, 2 ea.	260.00	
• Misc. Consumables, assembly lube, solvents, paint, pump head base sealant & shims	220.00	
• Shipping & Handling	680.00	
• Sales Tax @ 7.75%	7,232.77	100,558.77



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Field Labor – Wire Brush

- Mob to site, conduct brief tailgate safety meeting
- Setup equipment
- Wire brush well using two brushes
- Bail as required- if needed

Two Men Rig & Service Truck Est. 24 Hrs. @ \$260/Hr.	6,240.00
Est. OT- 8 Hrs. @ \$116/Hr.	928.00

Field Labor – Airburst

- | | |
|---|-----------|
| • Airburst Technician & Equipment- 1 ten (10) hour day | 10,800.00 |
| Two Men Rig & Service Truck
Est. 10 Hrs. @ \$260/Hr. | 2,600.00 |
| Est. OT 2 Hrs. @ \$116/Hr. | 232.00 |

Shop Labor

- | | |
|----------------------------------|----------|
| • Load Airburst equipment/unload | |
| • Load/unload brushes/bailer | |
| • Makeup two steel brushes | |
| Est. 18 Hrs. @ \$90/Hr. | 1,620.00 |

Material

- | | |
|-------------------------|--------|
| • HTH Granular Chlorine | 170.00 |
| • Sales Tax @ 7.75% | 13.18 |

Rental

- | | |
|--------------------------------------|----------|
| • (2) Steel wire brushes @ \$500/Ea. | 1,000.00 |
|--------------------------------------|----------|

Outside Service

- | | |
|----------------|----------|
| • Re-video log | 1,000.00 |
|----------------|----------|



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Field Labor – Install

- Mob to site , conduct brief tailgate safety meeting
- Confirm lockout/tagout of energy source
- Setup rig
- Install complete repaired pump
- Install motor, wire motor, check rotation
- Perform startup, record data

Two Men Combo Rig & Service Truck Est. 38 Hrs. @ \$260/Hr.	9,880.00	
One Man and Service Truck Est. 38 Hrs. @ \$140/Hr.	5,320.00	39,803.18

Outside Service

- | | | |
|----------------------------|--------|----------|
| • Sandblast discharge head | 640.00 | |
| • Portable Toilet | 600.00 | 1,240.00 |

**Motor recondition, standard testing, clean, dip & bake windings, replace thrust & guide bearings is available upon request.

Total Labor & Materials \$ 149,701.95

Should you have any questions or need additional information regarding the above summary and associated cost, please do not hesitate to contact us. Thank you.

GENERAL PUMP COMPANY, INC.

Tom Nanchy

Tom Nanchy
Sr. Project Manager / Project Engineer

EXHIBIT B

Photos – Corrosion on Well Assembly

