

Appendix G Biological Information

Appendices

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U.S. Department of the Interior
Bureau of Land Management
California Desert District
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553

January 2005



Final Environmental Impact Report and Statement for the

West Mojave Plan

A Habitat Conservation Plan and
California Desert Conservation Area
Plan Amendment
Vol 1





The Bureau of Land Management *Today*

Our Vision

To enhance the quality of life for all citizens through the balanced stewardship of America's public lands and resources.

Our Mission

To sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

Our Values

To serve with honesty, integrity, accountability, respect, courage, and commitment to make a difference.

Our Priorities

To improve the health and productivity of the land to support the BLM multiple-use mission.

To cultivate community-based conservation, citizen-centered stewardship, and partnership through consultation, cooperation, and communication.

To respect, value, and support our employees, giving them resources and opportunities to succeed.

To pursue excellence in business practices, improve accountability to our stakeholders, and deliver better service to our customers.

United States
Department of the Interior
BUREAU OF LAND MANAGEMENT
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553

January, 2005

Dear Reader:

Enclosed is the *Final Environmental Impact Report and Statement (Final EIR/S) for the West Mojave Plan*. The Bureau of Land Management (BLM), the federal lead agency, has prepared the Final EIR/S in accordance with the National Environmental Policy Act (NEPA). The County of San Bernardino and the City of Barstow, the California lead agencies, have prepared the Final EIR/S in accordance with the California Environmental Quality Act (CEQA).

This Final EIR/S is a comprehensive environmental analysis of seven alternatives (including the No Action Alternative) that address compliance with the federal and California endangered species acts (FESA and CESA, respectively).

The purpose of the West Mojave Plan is to develop management strategies for the desert tortoise, Mohave ground squirrel and over 100 other sensitive plants and animals that would conserve those species throughout the western Mojave Desert, while at the same time establishing a streamlined program for compliance with the regulatory requirements of FESA and CESA. Agencies, local jurisdictions and others with a stake in the future of the western Mojave Desert have collaborated in the development of the West Mojave Plan.

The public devoted substantial effort to providing in-depth review and input on the Draft EIR/S. During the 90-day public review of the Draft EIR/S, which ended on September 12, 2003, commentators submitted nearly 300 letters. These offered numerous suggestions, comments and opinions concerning the Draft EIR/S. Responses to comments are presented in Chapter 6 of the Final EIR/S, and copies of all letters received can be found on the attached compact disk.

The text of the Final EIR/S includes a number of changes and corrections suggested by commentators. Where the text of the Final EIR/S differs from that presented in the Draft EIR/S, a vertical black line in the left-hand margin indicates the location of the modified or clarified text. A summary of these modifications follows. Because most of the changes consisted of minor modifications, only a selection is presented below.

- Conservation Area adjustments
 - Pisgah Crater (western portion dropped, expansion to northeast)
 - North Edwards (some lands excluded)
 - Alkali Mariposa Lily (realigned to capture the Amargosa Creek drainage, drop

interim conservation areas)

- Biological Transition Areas eliminated (portions added to DWMA)
- New biological objectives for several species
- Tortoise Survey Zones – minor modifications
- Fee Zones – minor modifications
- BLM DWMA Multiple Use Class M Lands changed to Class L
- Revised Monitoring and Adaptive Management Table
- Additional discussion of cumulative impacts
- Appendix C.1 (Implementation Tasks, Costs and Priorities) Revision
- Compact Disk Additions – species accounts, vegetation map, Draft EIR/S comment letters
- BLM Route Designation
 - Adoption of Competitive “C” Routes Northwest of Spangler Open Area
 - Route Openings in Summit Range
 - Route closures in Fremont Kramer Tortoise DWMA to Offset “C” Routes
 - Selected closures in small conservation areas
 - Revised Juniper Subregion route network
 - “No Action” route network is BLM June 30, 2003 Decision Record

The West Mojave Plan proposes a number of amendments to the BLM’s California Desert Conservation Area Plan. The BLM planning process includes an opportunity for administrative review through a plan protest to the BLM Director should a previous commentator on the plan believe that the decision has been issued in error. Only those persons or organizations that participated in the planning process may protest. Protests from parties having no previous involvement will be denied without further review. A protesting party may raise only those issues that were submitted for the record during the planning process. New issues raised in the protest period should be directed to the BLM, California Desert District Manager, 22835 Calle San Juan De Los Lagos, Moreno Valley, CA 92553 for consideration in plan implementation, as potential plan amendments, or as otherwise appropriate. The period for filing protests begins when the EPA publishes in the Federal Register its Notice of Receipt of the West Mojave Plan Final EIR/S. To be considered “timely” the protest must be postmarked no later than the last day of the 30-day protest period. Also, although not a requirement, it is recommended that the protest be sent by certified mail, return receipt requested. E-mail protests will not be accepted. Faxed protests will be considered as potential valid protests provided (1) that the signed faxed letter is received by the BLM Washington Office protest coordinator by the closing date of the protest period and (2) that the protesting party also provides the original letter by either regular or overnight mail postmarked by the close of the protest period. Please direct faxed protests to “BLM Protest Coordinator” at 202-452-5112. Please direct the follow-up letter to the appropriate address provided below.

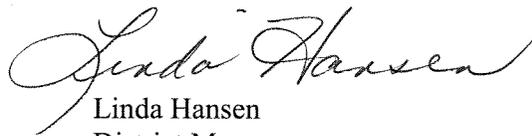
Protest must be filed in writing to: Director (210), Attention: Brenda Williams, P.O. Box 66538, Washington, D.C. 20035, or by overnight mail to: Director (210), Attention: Brenda Williams, 1620 L Street, N.W., Suite 1075, Washington, D.C. 20036. In order to be considered complete, the protest must contain, at a minimum, the following information:

1. The name, mailing address, telephone number, and interest of the person filing the protest.
2. A statement of the issue or issues being protested.
3. A statement of the part or parts of the plan being protested. To the extent possible, this should be done by reference to specific pages, paragraphs, sections, tables, maps, etc. included in the Final EIS.
4. A copy of all documents addressing the issue or issues that were submitted during the planning process or a reference to the date the issue or issues were discussed by you for the record.
5. A concise statement explaining why the decision of the BLM California State Director is believed to be incorrect. This is a critical part of the protest. Take care to document all relevant facts. As much as possible, reference or cite the planning documents, environmental analysis documents, available planning records (i.e. meeting minutes or summaries, correspondence, etc.) A protest that merely expresses disagreement with proposed decision without supporting data will not provide additional basis for the Director's review of the decision.

Please note that comments, including names and street addresses of respondents, are available for public review an/or release under the Freedom of Information Act (FOIA). Individual respondents may request confidentiality. Respondents who wish to withhold name and/or street address from public review or from disclosure under FOIA, must state this prominently at the beginning of the written comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials or organizations or businesses, will be made available for public inspection in their entirety.

The BLM Director will promptly render a decision on the protest. The decision will be in writing and will be sent to the protesting party by certified mail, return receipt requested. The decision of the Director shall be the final decision of the Department of the Interior.

Sincerely,


Linda Hansen
District Manager

Enclosure (2 volume set)

Proposed West Mojave Plan Final Environmental Impact Report and Statement

Federal Lead Agency: U.S. Department of the Interior
Bureau of Land Management
California Desert District Office

California Lead Agencies: County of San Bernardino
Land Use Services Department

City of Barstow
Community Development Department

Project Location: Portions of San Bernardino, Inyo, Kern and Los Angeles
Counties, California

For Further Information: Linda Hansen, Bureau of Land Management
California Desert District Office
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553

Randy Scott, County of San Bernardino
Land Use Services Department
385 North Arrowhead Avenue
San Bernardino, CA 92415

Scott Priester, City of Barstow
Community Development Department
220 East Mountain View Street
Barstow, CA 92311-2888

Abstract The West Mojave Plan (Plan) is a habitat conservation plan and federal land use plan amendment that presents a comprehensive strategy to conserve and protect the desert tortoise, the Mohave ground squirrel and nearly 100 other sensitive plants and animals and the natural communities of which they are a part, while providing a streamlined program for complying with the requirements of the California and federal Endangered Species Acts (CESA and FESA, respectively). The planning area includes 3.2 million acres of public land and 3.0 million acres of private land. This document was produced through a collaborative effort of state and federal agencies and local jurisdictions.

West Mojave Plan

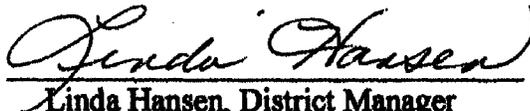
A Habitat Conservation Plan and
California Desert Conservation Area Plan Amendment

Final Environmental Impact Report And Statement

January, 2005



Michael Pool, State Director
Bureau of Land Management



Linda Hansen, District Manager
California Desert District
Bureau of Land Management



Michael E. Hays, Director
Land Use Services Department
County of San Bernardino



Scott Priester, Director
Community Development Department
City of Barstow

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EXECUTIVE SUMMARY

E.1 INTRODUCTION

The West Mojave Plan (Plan) is a habitat conservation plan and federal land use plan amendment that (1) presents a comprehensive strategy to conserve and protect the desert tortoise, the Mohave ground squirrel (MGS) and nearly 100 other sensitive plants and animals and the natural communities of which they are a part, and (2) provides a streamlined program for complying with the requirements of the California and federal Endangered Species Acts (CESA and FESA, respectively).

The Plan is being prepared through the collaborative effort of cities, counties, state and federal agencies having jurisdiction over lands within the region. The Plan will allow streamlined project permitting at the local level, equitable sharing of costs among participants, and shared stewardship of biotic resources. The collaborators include:

- **Local Jurisdictions:** The cities of Adelanto, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Twentynine Palms, and Victorville, and the towns of Apple Valley and Yucca Valley; the Counties of Inyo, Kern, Los Angeles and San Bernardino; and the Indian Wells Valley Water District.
- **State of California:** The California Department of Fish and Game and California Department of Transportation
- **Federal:** The Bureau of Land Management and the United States Fish and Wildlife Service.

These agencies and local jurisdictions are cooperating with a variety of non-governmental organizations, including businesses, environmental organizations, user groups and others with a stake in the future management of the planning area, to develop the West Mojave Plan. Over 100 non-governmental organizations (NGO) have participated in this process. Representatives of the agencies, jurisdictions and NGOs comprise the West Mojave *Supergroup*.

The 9,359,070-acre planning area is located to the north of the Los Angeles metropolitan area. The Plan's conservation program applies to both public and private lands within this area. These lands include 3,263,874 acres of BLM-administered public lands, 3,029,230 acres of private lands and 102,168 acres of lands administered by the State of California.

This Executive Summary is organized as follows:

- A brief description of each of the seven alternatives analyzed by this Environmental Impact Report and Statement (EIR/S).
- A summary of the impacts that would result from implementing each alternative.
- A discussion of the relative likelihood that each of the seven alternatives would achieve the biological goals and objectives established for each of nearly 100 sensitive species addressed by this plan.

Responses to comments received on the Draft EIR/S are presented in Chapter 6. Many of the comments requested modifications or clarifications of either the West Mojave Plan's conservation strategy or the environmental analysis presented in the Draft EIR/S. Where the text of the Final EIR/S differs from that presented in the Draft EIR/S, a vertical black line in the left-hand margin indicates the location of the modified or clarified text. A summary of these modifications follows. Because most of the changes consisted of minor modifications, only a selection is presented below.

- Conservation Area adjustments
 - Pisgah Crater (western portion dropped, expansion to northeast)
 - North Edwards (some lands excluded)
 - Alkali Mariposa Lily (realigned to capture the Amargosa Creek drainage, drop interim conservation areas)
- Biological Transition Areas eliminated (portions added to DWMA)
- New biological objectives for several species
- Tortoise Survey Zones – minor modifications
- Fee Zones – minor modifications
- BLM DWMA Multiple Use Class M Lands changed to Class L
- Revised Monitoring and Adaptive Management Table
- Additional discussion of cumulative impacts
- Appendix C.1 (Implementation Tasks, Costs and Priorities) Revision
- Compact Disk Additions – species accounts, vegetation map, comment letters
- BLM Route Designation
 - Adoption of Competitive “C” Routes Northwest of Spangler Open Area
 - Route Openings in Summit Range
 - Route closures in Fremont Kramer Tortoise DWMA to Offset “C” Routes
 - Selected closures in small conservation areas
 - Revised Juniper Subregion route network
 - “No Action” route network is BLM June 30, 2003 Decision Record

E.2 ALTERNATIVES

The West Mojave Plan identifies measurable biological goals and objectives for each of the sensitive species that is addressed by the Plan. This Final EIR/S examines seven alternative conservation strategies, each of which presents a different and unique approach to achieving those biological goals and objectives. The seven alternatives include the following:

- **Alternative A: PROPOSED ACTION - HABITAT CONSERVATION PLAN.** This alternative presents a multi-species conservation strategy applicable to public and private lands throughout the planning area. It would serve as (1) an amendment of BLM's CDCA Plan for public lands, and (2) a “habitat conservation plan” for private lands. Incidental take permits for 49 “covered species” would be issued to participating local jurisdictions and state agencies.

- **Alternative B: BLM Only.** This alternative consists of those elements of Alternative A that are applicable to, and that could be implemented on, BLM-administered public lands. It is applicable to public lands only.
- **Alternative C: Tortoise Recovery Plan.** This combines those elements of Alternative A that are applicable to the Mohave ground squirrel and other sensitive species with the management program recommended by the 1994 Desert Tortoise (Mojave Population) Recovery Plan. CDCA Plan amendments and a habitat conservation plan would be adopted and incidental take permits would be issued to participating local jurisdictions and state agencies. The public expressly requested detailed consideration of this alternative during NEPA scoping meetings.
- **Alternative D: Enhanced Ecosystem Protection.** This alternative places a high priority on the conservation of sensitive plants and animals, even if adoption of those recommendations would limit motorized vehicle access to and multiple use of the western Mojave Desert. Its recommendations had their origin in discussions among the participating agencies and members of the public during NEPA scoping and the development of Alternative A. CDCA Plan amendments and a habitat conservation plan would be adopted and incidental take permits would be issued to participating local jurisdictions and state agencies.
- **Alternative E: One DWMA – Enhanced Recreation Opportunities.** This alternative places a high priority on multiple uses of desert lands, including motorized vehicle recreation, even if this might preclude the implementation of some of the programs that otherwise might be implemented to conserve species and ecosystems. It also responds to a specific request raised by the public during scoping meetings that the EIR/S explore whether a single DWMA, protecting only the remaining areas of relatively higher tortoise populations, might be an effective means of conserving desert tortoises. CDCA Plan amendments and a habitat conservation plan would be adopted and incidental take permits would be issued to participating local jurisdictions and state agencies.
- **Alternative F: No DWMA – Aggressive Disease and Raven Management.** This alternative proposes a tortoise conservation strategy that relies on an aggressive program of tortoise disease management and raven control, supported by limited fencing, rather than the establishment of tortoise DWMA's to protect habitat. Subject to these modifications, the Alternative A conservation program for other species would be implemented. CDCA Plan amendments and a habitat conservation plan would be adopted and incidental take permits would be issued to participating local jurisdictions and state agencies.
- **Alternative G: No Action.** Existing conservation strategies currently being applied by each of the participating agencies would continue to be implemented.

E.3 SUMMARY OF IMPACTS

Alternatives A through E vary in the amount of new conservation within DWMA's, ACECs, and Conservation Areas from 1.20 million acres (19.8% of the total of undisturbed lands) to 1.79 million acres (29.4%) in Alternative C. These new conservation areas add to the existing 1.15 million acres (18.4%) and achieve much greater protection of desert tortoise habitat. For the primary communities of this habitat, creosote bush scrub and saltbush scrub, the

increase in habitat conservation is 23-34%. The proportional increase is similar for the Mohave ground squirrel.

In addition to increasing the quantity of habitat conserved, the Plan focuses on protecting the highest quality tortoise and ground squirrel habitat, as defined by highest sign counts and live tortoises and persistent capture locations for the Mohave ground squirrel. The alternatives incorporating private land conservation (A, C, D, E) create large habitat blocks capable of sustaining ecosystem processes, landform diversity, all trophic levels and populations large enough to be viable in the face of fluctuations caused by the extreme desert environment. For the desert tortoise, maintenance of conserved habitat with a high carrying capacity is necessary for recovery after the disease runs its course or a cure is found, and after raven predation is reduced.

The Plan presents significant cumulative impacts, both positive and negative to most of the covered species. The beneficial cumulative impacts include the establishment of large, unfragmented habitat blocks, measures to reduce tortoise mortality, measures to minimize disturbance impacts to conserved lands and measures addressing unique components of diversity, such as endemic species, disjuncts and habitat specialists. The provision of incidental take areas where permitting is streamlined accommodates development of large acreages of disturbed lands and degraded habitat. The developed lands put increasing pressure on the conserved lands, from resource extraction, incidental land uses such as utilities and from recreation. The allowable loss of habitat exceeds conservation in all alternatives. Cumulatively this loss would reduce populations of many common species in a very substantial way. As long as the covered species, which are the rarest and those with known declines, are adequately conserved in the Habitat Conservation Area, the cumulative impact would not be significant or adverse. The more common species would survive within the HCA and are present in abundance outside the west Mojave as well.

Although large acreages are available as incidental take areas, not all of these lands would be developed or even disturbed during the term of the Plan. The growth projections for urban development can be accommodated on a small fraction of the land within the ITA. Many areas without water, utilities, or easy access would remain undeveloped, even from rural residences. The monitoring and adaptive management aspects of the Plan would track the success of the conservation measures, and these undeveloped lands would remain available if alterations are needed in the quantity of conserved lands in the future. They are also available for future recreation areas and for developments such as mining or energy production that can be pursued in remote areas. The allocation of lands for different uses achieved by the West Mojave Plan should not be considered as the final determination of land use for the planning area. It is rather a dynamic process of utilizing the best available science and land use planning to achieve conservation of the species and communities known to be in jeopardy. Technologies of the future can and are expected to alter provisions of the Plan to improve upon the implementation of its objectives.

Motorized Vehicle Access Network Mileage: Alternative A proposes minor modifications of a BLM route network adopted on June 30, 2003 that includes 2,265 miles of open routes within a “redesign area”, 159 miles within the Ord Pilot region, 406 miles within

ACECs for which route networks were designated after 1980, and 2,268 miles of remaining 1985-87 designations, or 5,098 miles overall, a total that includes single-track motorcycle routes. Proposed mileage of non-motorcycle routes in higher density tortoise population areas would be 384, a decrease from the 439 miles that were open prior to June 30, 2003. The 406 miles within the ACECs would be less than the pre-June 30, 2003 total of 427. Within the Juniper subregion, a redesigned network consisting of 73 miles of open routes and 25 miles of routes limited to use by single-track vehicles (e.g. motorcycles) would replace the 152 miles of open routes adopted on June 30, 2003.

E.4 BIOLOGICAL GOALS AND OBJECTIVES: WOULD THEY BE MET?

E.4.1 Desert Tortoise

This section considers the four biological goals and associated objectives identified for desert tortoise conservation by the USFWS and CDFG in 1998 during biological evaluation meetings (U.S. Bureau of Land Management 1999). The goals and objectives are reiterated, and followed by tables that indicate for each alternative whether the goals and objectives are met or not. Generalized summary statements follow indicating why certain objectives are met or not.

Alternatives are reiterated as follows:

- **Alternative A:** Proposed Action – Habitat Conservation Plan
- **Alternative B:** BLM Only
- **Alternative C:** Tortoise Recovery Plan
- **Alternative D:** Enhanced Ecosystem Protection
- **Alternative E:** One DWMA – Enhanced Recreation Opportunities
- **Alternative F:** No DWMA – Aggressive Disease and Raven Management
- **Alternative G:** No Action

Goal 1: Protect sufficient habitat to ensure long-term tortoise population viability (see Table ES-1).

Objective 1.1: Establish a minimum of three, preferably four, Desert Wildlife Management Areas that would be managed for the long-term survival and recovery of the desert tortoise, and which would also benefit other special-status plant and animal species.

Objective 1.2: Ensure that at least one DWMA exceeds 1,000 square miles in size

Objective 1.3: Design DWMA's so that they are well distributed across the recovery unit, edge-to-area ratios are minimized, impediments to the movement of tortoises are avoided, and (where feasible) boundaries are contiguous.

**Table ES-1
Tortoise Biological Goal 1**

BIOLOGICAL GOAL 1	SEVEN ALTERNATIVES UNDER CONSIDERATION						
OBJECTIVES	A	B	C	D	E	F	G
1.1 Establish 3 or 4 DWMA's	Yes	Yes	Yes	Yes	No	No	No
1.2 At least one DWMA 1,000 mi ²	Yes	No	Yes	Yes	Yes	No	No
1.3 Good reserve design	Yes	No	Yes	Yes	No	No	No

Alternatives A through D share the common characteristics of establishing four DWMA's, with at least one that is 1,000 mi², and incorporating the appropriate reserve design criteria given in Objective 1.3. This is not true for the BLM-only alternative. Although the alternative maintains the external, larger DWMA boundary, private lands are excluded, undermining the adequate DWMA size and configuration (i.e., lack of conservation on private land, checkerboard ownership pattern within the DWMA would undermine conservation efforts). Although Alternative E would result in the establishment of a single 1,000 mi² DWMA, it fails to meet Objectives 1.1 and 1.3. Alternatives F and G would fail to establish any DWMA's, and therefore would fail to meet any of the three criteria.

Goal 2: Establish an upward or stationary trend in the tortoise population of the West Mojave Recovery Unit for at least 25 years (see Table ES-2).

Objective 2.1: Achieve population growth rates (λ) within DWMA's of at least 1.0.

Objective 2.2: Attain a minimum average population density of 10 adult female tortoises per square mile within each DWMA.

Objective 2.3: Establish a program for tortoise population monitoring that would detect an increase, decrease, or stable trend in tortoise population densities, and include an information feedback loop that ensures that necessary changes would be made in management.

**Table ES-2
Tortoise Biological Goal 2**

BIOLOGICAL GOAL 2	SEVEN ALTERNATIVES UNDER CONSIDERATION						
OBJECTIVES	A	B	C	D	E	F	G
2.1 Achieve stable populations	Unk	Unk	Unk	Unk	No	No	No
2.2 Achieve 10 females/mi ²	Unk	Unk	Unk	Unk	No	No	No
2.3 Population monitoring	No	No	No	No	No	No	No

There are limited means of assessing the seven alternatives in their efficacy to meet Goal 2 and its objectives. Success would be measured in terms of the population's response to implementing proactive conservation programs identified in each alternative. Achieving stable populations and a certain density of tortoises per square mile is unknown for the first four alternatives. Although Alternative E would result in the establishment of a single DWMA, even if the objectives were met for so small an area, poor reserve design, including very high surface area to boundary ratio, would effectively undermine the efficacy of conservation. Failure to establish DWMA's under Alternatives F and G would exacerbate rather than facilitate attaining these objectives.

Unfortunately, the ability to realize Goal 2, for all alternatives, is hampered by the likelihood of catastrophic die-offs that could ultimately extirpate tortoises regardless of proactive conservation management. It would also appear that distance sampling, which is suggested as the means of monitoring the population, might fail in its ability to detect increases or decreases in the population. The methodology does fairly well to measure rapid declines in the population over a three to five year period, but would fail to detect gradual increases, which may take a dozen or more years to detect. The method would be better applied in above-average concentration areas, as a tool to detect die-offs; continuing to apply it in extirpation areas will result in low sample sizes, which would fail to meet the minimum sample size of 80 tortoises/stratum required by the methodology.

Goal 3: Ensure genetic connectivity among desert tortoise populations, both within the West Mojave Recovery Unit, and between this and other recovery units (see Table ES-3).

Objective 3.1: Delineate and maintain movement corridors between DWMA's, and with the Eastern Mojave Recovery Unit, the Eastern Colorado Recovery Unit, and the Northern Colorado Recovery Unit.

Objective 3.2: Ensure a minimum width of two miles for movement corridors, and include provisions for major highway crossings.

**Table ES-3
Biological Goal 3**

BIOLOGICAL GOAL 3	SEVEN ALTERNATIVES UNDER CONSIDERATION						
OBJECTIVES	A	B	C	D	E	F	G
3.1 Delineate movement corridors	No	No	No	No	No	No	No
3.1 Connectivity to eastern recovery unit	No	No	No	No	No	No	No
3.2 Minimum width for connectors	No	No	No	No	No	No	No

As indicated in the table, none of the objectives would be realized by any of the alternatives. However, one has to question the validity of the biological goal in the first place. For example the four critical habitat units designated by the USFWS and analogous DWMA's recommended by the recovery team were used to derive the current proposals, yet with the exception of a small part of the Superior-Cronese DWMA, which is contiguous with the Eastern Mojave Recovery Unit, there are no places where connectivity between conservation areas is possible.

Given highways, freeways, and the city of Barstow, there was never an opportunity to connect the Ord-Rodman DWMA with either of the western DWMA's. Connectivity between the three DWMA's to the west with the Pinto Mountain DWMA was never physically possible. Fort Irwin occupies most of the contiguous areas between the Western Mojave Recovery Unit and the Eastern Mojave Recovery Unit; 29 Palms Marine Corps Base occupies most of the contiguous boundary with the Northern Colorado Recovery Unit; and Joshua Tree National Park completely encompasses the mutual boundary between the Western Mojave and Eastern Colorado recovery units. Given that the Department of Defense and National Park Service manage these areas, respectively, there was never any opportunity for BLM to establish conservation areas in these

places to provide for connectivity. Even so, there are undeveloped (albeit severely degraded on military installations) habitats between areas in the West Mojave and recovery units to the east, which will allow for genetic transfer. National Park Service management, in combination with the BLM’s Chuckwalla DWMA of the NECO Plan, provides for conserved and connected habitat to the Eastern Colorado Recovery Unit.

There is also the question of whether or not connectivity is appropriate in the West Mojave. Sign count data collected since 1998 revealed that there appears to be a spread of disease or some other mortality factor that may be facilitated by the connectivity suggested in the recovery plan. If these patterns are truly resulting from disease spread, one needs to question the validity of maintaining connectivity among conservation areas. Having the Ord-Rodman and Pinto Mountain DWMA’s physically separated from the two western DWMA’s may strengthen the conservation strategy because there is no connectivity and they may be less vulnerable to regional spread of disease.

That the alternatives fail to result in connectivity among the DWMA’s and adjacent recovery units is not considered a serious flaw with any of the alternatives for the reasons given above. Although there is no connectivity between conservation areas, there are still habitats crossing these borders that will allow tortoises to pass unimpeded from one recovery unit to an adjacent one. It is strongly recommended that the new recovery team consider the issue of connectivity in light of the new information now available.

Goal 4: Reduce tortoise mortality resulting from interspecific (i.e., raven predation) and intraspecific (i.e., disease) conflicts that likely result from human-induced changes in the ecosystem processes (see Table ES-4).

Objective 4.1: Initiate proactive management programs addressing each conflict, to be implemented by each affected agency or jurisdiction.

Objective 4.2: Establish an environmental education program to facilitate public understanding and support for proactive management programs necessary to reduce tortoise mortality.

Objective 4.3: Continue research programs and monitoring programs that assess the relative importance of human activities and natural processes that affect desert tortoise populations.

**Table ES-4
Tortoise Biological Goal 4**

BIOLOGICAL GOAL 4	SEVEN ALTERNATIVES UNDER CONSIDERATION						
OBJECTIVES	A	B	C	D	E	F	G
4.1 Address each conflict	Yes	No	Yes	Yes	No	No	No
4.2 Establish education program	Yes	Yes	Yes	Yes	Yes	Yes	No
4.3 Continue research and monitoring	Yes	No	Yes	Yes	No	No	No

Alternative A, upon which Alternatives C and D are predicated, was specifically designed to address the 22 known or suspected threats to tortoises discussed in the recovery plan and recently summarized by Boarman (2002). Each program must be considered on its own merits,

but in general, Alternatives A, C, and D were designed with these threats in mind, and are intended to meet Objective 3.1. Their efficacy is susceptible to limited funding, public support, and many other factors that are not easily foreseeable or controlled.

Effective conservation must necessarily rely on cooperation among all land managers, and include both private and public lands. Alternative B would fail to implement Objective 3.1 for this reason. Alternative E could work to implement Objective 3.1 in the 1,000 mi² area, but its relatively small size and high area to edge ratio fatally flaws it as providing for regional tortoise conservation. The focus on disease and raven management is too narrow to allow Alternative F to accomplish the objective.

Establishing an education program is often touted as important to regional conservation plans yet is seldom realized or implemented. In spite of this ubiquitous problem, each of the alternatives (excepting Alternative G, No Action) proposes some form of enhanced education. For this objective to be realized, managers must take a different, proactive look at regional education, or the conservation strategy is likely to be undermined.

Research and monitoring (Objective 4.3) are strongly encouraged for Alternatives A, C, and D but are missing, or only partially applied (Alternative F), in the remaining alternatives. It is difficult (and questionable) to assign limited funds to continued research when there are numerous, costly conservation programs that need to be implemented. Monitoring is essential, but the efficacy of distance sampling to function as intended is questionable.

E.4.2 Mohave Ground Squirrel

Table ES-5 presents an overview of the likely success of each alternative in meeting the biological goals established by the West Mojave Plan for the threatened Mohave ground squirrel.

**Table ES-5
Mohave Ground Squirrel Biological Goals**

	Biological Goals Met or Not: comparisons among alternatives						
Goal 1. Ensure long-term protection of MGS habitat throughout the species range.							
Objectives for Goal 1	A	B	C	D	E	F	G
Upon Plan adoption, establish management areas for the long-term conservation of MGS habitat:	Yes	No	Yes	Yes	No	No	No
1.1a Establish the MGS CA for the protection of unfragmented habitats outside military installations.							
1.1b Establish BTAs to minimize indirect impacts of human development to the MGS CA	Yes	No	No	Yes	No	No	No
1.2 Allow for adjustments to the MGS CA boundary based on findings of scientific studies.	Yes	No	Yes	Yes	No	No	No
1.3 Implement appropriate actions to ensure the long-term protection of habitat in the MGS CA throughout the life of the Plan.	Yes	No	Yes	Yes	No	No	No
1.4 On a yearly basis, track the loss of MGS habitat resulting from Plan implementation.	Yes	Yes	Yes	Yes	Yes	Yes	No

	Biological Goals Met or Not: comparisons among alternatives						
1.5 Cooperate with military installations by sharing scientific information and reviewing management plans (INRMP, CLUMP, etc) to assist environmental managers in evaluating MGS habitat protection on the bases.	Yes	Yes	Yes	Yes	Yes	Yes	No
Goal 2. Ensure long-term viability of the MGS throughout its range.							
Objectives for Goal 2							
2.1 As per the mandate of the CDFG, minimize and fully mitigate the impacts of the Plan’s authorized incidental take of the MGS throughout the life of the Plan.	Yes	No	Yes	Yes	No	No	No
2.2 Upon Plan adoption, initiate and conduct studies that would determine the following measurable biological parameters: (a) the regional status, (b) potential “hot spots” (refugia), (c) genetic variation throughout the range, and (d) the ecological requirements of the MGS.	Yes	No	Yes	Yes	No	No	No
2.3 Establish long-term study plots throughout the range and annually monitor their MGS populations. Fund continued monitoring in the Coso Range to provide baseline population data.	Yes	No	Yes	Yes	No	No	No
2.4 Use the biological and population data from Goal 2, Objectives 2 and 3 to modify the management prescriptions, as warranted, to ensure the long-term viability of the species.	Yes	No	Yes	Yes	No	No	No

The findings here are similar to those for the tortoise; Alternatives A, C, and D, with a few exceptions, would better realize MGS conservation than the other alternatives. The same flaws identified with Alternatives B, E, F, and G for the tortoise would apply to MGS conservation. Given that the species is only State-listed, Alternatives B and G would, for the most part, be the same.

E.4.3 Other Species

Table ES-6 presents a summary in comparative form of acres of habitat conserved, and acres available for incidental take, for each covered species addressed by the West Mojave Plan for each alternative.

**Table ES-6
Acreage of Conservation and Incidental Take of Covered Species in Each Alternative.**

	A PREFERRED		B BLM ONLY*		C RECOVERY PLAN		D ENHANCED ECOSYSTEM		E ENHANCED RECREATION		F DISEASE AND RAVEN		G NO ACTION***	
	Conserved	Take	Conserved	Take	Conserved	Take	Conserved	Take	Conserved	Take	Conserved	Take	Conserved	Take
Desert tortoise	1,477,630	See text for ITA	1,023,329	454,301 in DWMA. See text for ITA	1,514,847	See text for ITA	1,505,494	4,393 See text for ITA	715,424	4,393 in DWMA. See text for ITA	See text – different approach		DTNA, Cat 1 habitat	Unk.
Mohave ground squirrel	1,701,947	See text for ITA	1,280,106	See text for ITA	1,701,947	See text for ITA	1,701,947	See text for ITA	1,701,947	See text for ITA	1,701,947	See text for ITA	0	Unk.
Alkali Mariposa Lily	Permanent = 3,500+ Isolated sites	40,861	0	40,861	Permanent = 3,500+ Isolated sites	40,861	Permanent = 3,500+ Isolated sites	40,861	Permanent = 3,500+ Isolated sites	40,861	Permanent = 3,500+ Isolated sites	40,861	0**	68,171
Barstow Woolly Sunflower	50,548+	50	17,682+	32,872	50,548+	50	50,548+	50	50,548+	50	50,548+	50	0	Unk., estimated at 32,872 +
Bats	All significant roosts	< 25 bats at any one site	All significant roosts	No t limited	All significant roosts	< 25 bats at any one site	All significant roosts	< 25 bats at any one site	All significant roosts	< 25 bats at any one site	All significant roosts	< 25 bats at any one site	Roosts gated on case-by-case basis	Unk.
Bendire's Thrasher*	132,497	3,973	132,497	3,973	132,497	3,973	132,497	3,973	132,497	3,973	132,497	3,973	106,710	29,760
Brown-crested flycatcher	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	Big Morongo ACEC	Unk.
Burrowing owl	Unk.	No mortality. Limited.	Occurrences on BLM lands	No mortality. Limited.	Unk.	No mortality. Limited.	Unk.	No mortality. Limited.	Unk.	No mortality. Limited.	Unk.	No mortality. Limited.	0**	Unlimited
Carbonate Endemic Plants	5,169	Minimal	4,393	776	5,169	Minimal	5,169	Minimal	5,169	Minimal	5,169	Minimal	0	Unk.
Charlotte's phacelia	All known sites	50	30 of 37 sites	7 sites	All known sites	50	All known sites	50	All known sites	50	All known sites	50	30 of 37 sites	7 sites
Crucifixion thorn	All known sites	50	All known sites	50	All known sites	50	All known sites	50	All known sites	50	All known sites	50	0	Unk.
Desert cymopterus	Most occupied habitat	50	Most occupied habitat	50	Most occupied habitat	50	Most occupied habitat	50	Most occupied habitat	50	Most occupied habitat	50	0	Unk. Estimated at 14,343

	A PREFERRED		B BLM ONLY*		C RECOVERY PLAN		D ENHANCED ECOSYSTEM		E ENHANCED RECREATION		F DISEASE AND RAVEN		G NO ACTION***	
	Conserved	Take	Conserved	Take	Conserved	Take	Conserved	Take	Conserved	Take	Conserved	Take	Conserved	Take
Ferruginous hawk	Prevents and remedies electrocution threat	Unknown but minimized	Prevents and remedies electrocution threat on BLM lands	Potential electrocutions on private lands	Prevents and remedies electrocution threat	Minimized	Electrocution threat minimized for new power lines on BLM lands	Unk.						
Golden eagle*	20,495 at Middle Knob. Prevents and remedies electrocution threat. Minimizes mining impacts.	0	17,671 at Middle Knob. Prevents and remedies electrocution threat on BLM lands	0	20,495 at Middle Knob. Prevents and remedies electrocution threat. Minimizes mining impacts.	0	20,495 at Middle Knob. Prevents and remedies electrocution threat. Minimizes mining impacts.	0	20,495 at Middle Knob. Prevents and remedies electrocution threat. Minimizes mining impacts.	0	20,495 at Middle Knob. Prevents and remedies electrocution threat. Minimizes mining impacts.	0	20,495 at Middle Knob. Electrocution threat minimized for new power lines on BLM lands	0
Gray vireo	15,954+	Unk.	4,393+	Unk.	15,954+	Unk.	15,954+	Unk.	15,954+	Unk.	15,954+	Unk.	0**	Unk.
Inyo California towhee	98% of area (public lands)	2% of area (private lands)	98% of area (public lands)	2% of area (private lands)	98% of area (public lands)	2% of area (private lands)	98% of area (public lands)	2% of area (private lands)	98% of area (public lands)	2% of area (private lands)	98% of area (public lands)	2% of area (private lands)	98% of area (public lands)	2% of area (private lands)
Kelso Creek Monkeyflower*	1,870	50	1,870	Unk. Minimal	1,870	Unk. Minimal	1,870	Unk. Minimal	1,870	Unk. Minimal	1,870	Unk. Minimal	0**	Unk. Minimal
Kern buckwheat	All except <0.1	<0.1	Most occupied habitat	Estimated 5 acres	All except <0.1	<0.1	Unk.	Estimated 10 acres						
Lane Mountain milkvetch	14,597	0	10,164	4,433	14,597	0	14,597	0	14,597	0	14,597	0	Unk.	4,433+
LeConte's thrasher	1,782,892	Unk.	1,392,984	Unk.	1,811,468	Unk.	1,782,892	Unk.	1,521,707	Unk.	48,804+	Unk.	48,804+	Unk.
Little San Bernardino Mountains gilia	All known drainages	50	Sites within JTNP	All other known drainages	All known drainages	50	Sites within JTNP	All other known drainages						
Mojave fringe-toed lizard	42,865+	4 sites, see text	37,270	5,595+	42,865+	4 sites, see text	0	Unk.						
Mojave monkeyflower	57,087	Unk.	36,630	20,457	57,087	50	57,087	50	57,087	50	57,087	50	0	Unk.
Mojave River vole	All sites (conditional)	0	0	Unk	All sites (conditional)	0	0**	Unk.						

	A PREFERRED		B BLM ONLY*		C RECOVERY PLAN		D ENHANCED ECOSYSTEM		E ENHANCED RECREATION		F DISEASE AND RAVEN		G NO ACTION***	
	Conserved	Take	Conserved	Take	Conserved	Take	Conserved	Take	Conserved	Take	Conserved	Take	Conserved	Take
Mojave tarplant	All occupied habitat	50 (new locations)	All occupied habitat	Unk.	All occupied habitat	50 (new locations)	All occupied habitat	Unk.						
Parish's alkali grass	All of single known site	0	0	Unk.	0	All of single known site	0	Unk.						
Parish's phacelia	898	50	512	376	898	50	898	50	898	50	898	50	0	Unk.
Parish's popcorn flower	All of single known site	0	0	Unk.	All of single known site	0	Unk.	Unk.						
Prairie falcon	20,495 at Middle Knob. Minimizes mining impacts.	0	17,671 at Middle Knob. Minimizes mining impacts.	0	20,495 at Middle Knob. Minimizes mining impacts.	0	20,495 at Middle Knob. Minimizes mining impacts.	0	20,495 at Middle Knob. Minimizes mining impacts.	0	20,495 at Middle Knob. Minimizes mining impacts.	0	20,495 at Middle Knob. Minimizes mining impacts.	Unk.
Red Rock poppy	All occupied habitat	50	All occupied habitat	Minimal	All occupied habitat	50	Most habitat	Unk.						
Red Rock tarplant	All occupied habitat	50	All occupied habitat	Minimal	All occupied habitat	50	Most habitat	Unk.						
Salt Springs checkerbloom	All of single known site	0	0	Unk.	All of single known site	0	0	Unk.						
San Diego horned lizard	15,954+	Unk.	4,393+	Unk.	15,954+	Unk.	15,954+	Unk.	15,954+	Unk.	15,954+	Unk.	0**	Unk.
Shockley's rock-creep	5,169	0	4,393	776	5,169	0	5,169	0	5,169	0	5,169	0	4,393 but no added management	776
Short-joint beavertail cactus	10,785	50	0	All	10,785	50	10,785	50	10,785	50	10,785	50	Existing SEAs and 1,590 scattered BLM parcels	0**
Southwestern pond turtle	All known sites (conditional at some)	Unk.	Selected sites	Unk.	All known sites (conditional at some)	Unk.	All known sites (conditional at some)	Unk.	All known sites (conditional at some)	Unk.	All known sites (conditional at some)	Unk.	Selected sites	Unk.
Southwestern willow flycatcher	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	Big Morongo ACEC	Unk.
Summer tanager	Mojave River sites (conditional)	Unk.	Selected sites	Unk.	Mojave River sites (conditional)	Unk.	Mojave River sites (conditional)	Unk.	Mojave River sites (conditional)	Unk.	Mojave River sites (conditional)	Unk.	Selected sites – see text	Unk.
Triple-ribbed milkvetch	All known sites	0	Sites on public land	Unk.	All known sites	0	Sites on public land	Unk.						

	A PREFERRED		B BLM ONLY*		C RECOVERY PLAN		D ENHANCED ECOSYSTEM		E ENHANCED RECREATION		F DISEASE AND RAVEN		G NO ACTION***	
	Conserved	Take	Conserved	Take	Conserved	Take	Conserved	Take	Conserved	Take	Conserved	Take	Conserved	Take
Vermilion flycatcher	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	Selected sites – see text	Unk.
Western snowy plover	All known sites	0	All known sites	0	All known sites	0	All known sites	0	All known sites	0	All known sites	0	Most known sites	Unk.
White-margined beardtongue	All known sites	50	Most known sites	Unk.	All known sites	50	0	Minimal						
Yellow-eared pocket mouse	Unk	Unk	Selected ACECs	Unk	Unk	Unk	Unk	Unk	Unk	Unk	Unk	Unk	Selected ACECs	Unk
Yellow warbler	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	Selected sites – see text	Unk.
Western yellow-billed cuckoo	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	Unk.	Unk.
Yellow-breasted chat	Mojave River sites (conditional) 10,785 (Big Rock Creek)	0	Mojave River sites (conditional)	0	Mojave River sites (conditional) 10,785 (Big Rock Creek)	0	Mojave River sites (conditional) 10,785 (Big Rock Creek)	0	Mojave River sites (conditional) 10,785 (Big Rock Creek)	0	Mojave River sites (conditional) 10,785 (Big Rock Creek)	0	Selected sites – see text	Unk.

See also Table 2-11. Unk. = Unknown.

* Acreages are for BLM managed lands only

** Los Angeles County may expand its SEA boundaries, providing some conservation for this species.

*** See text for potential conservation of the No Action Alternative. Continued review of projects under CEQA, by BLM in Category 1 habitat, and by FWS in occupied and critical habitat will result in some conservation by provision of compensation lands or set-asides.

CHAPTER ONE

INTRODUCTION

1.1 OVERVIEW

The West Mojave Plan (Plan) is a habitat conservation plan and federal land use plan amendment that (1) presents a comprehensive strategy to conserve and protect the desert tortoise, the Mohave ground squirrel (MGS) and over 100 other sensitive plants and animals and the natural communities of which they are a part, and (2) provides a streamlined program for complying with the requirements of the California and federal Endangered Species Acts (CESA and FESA, respectively).

The Plan is being prepared through the collaborative effort of cities, counties, state and federal agencies having jurisdiction over lands within the region. The Plan will allow streamlined project permitting at the local level, equitable sharing of costs among participants, and shared stewardship of biotic resources. The collaborators include:

- **Local Jurisdictions:** The cities of Adelanto, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Twentynine Palms, and Victorville, and the towns of Apple Valley and Yucca Valley; the Counties of Inyo, Kern, Los Angeles and San Bernardino; and the Indian Wells Valley Water District.
- **State of California:** The California Department of Fish and Game and California Department of Transportation (Caltrans)
- **Federal:** The Bureau of Land Management and the United States Fish and Wildlife Service.

These agencies and local jurisdictions are cooperating with a variety of non-governmental organizations, including businesses, environmental organizations, user groups and others with a stake in the future management of the planning area, to develop the West Mojave Plan. Over 100 non-governmental organizations (NGO) have participated in this process. Representatives of the agencies, jurisdictions and NGOs comprise the West Mojave *Supergroup*.

1.1.1 Site Location and Description

The 9,357,929-acre planning area is located to the north of the Los Angeles metropolitan area (See Maps 1-1 and 1-2 and Table 1-1). The Plan's conservation program applies to both public and private lands within this area. These lands include 3,263,874 acres of BLM-administered public lands, 3,029,230 acres of private lands and 102,168 acres of lands administered by the State of California. The Plan will be consistent with the integrated natural resource management plans that have been adopted for 2,667,445 acres of military lands, and with programs being implemented on nearly 300,000 acres of lands within Joshua Tree National Park.

**Table 1-1
Land Ownership in Planning Area**

LAND OWNERSHIP	APPROXIMATE ACRES	APPROXIMATE PERCENTAGE
Private Landowners Counties and Cities	3,029,230	32
State of California State Lands Commission Department of Parks and Recreation Department of Fish and Game	102,168 71,059 27,166 3,943	1
Federal Government Department of the Interior National Park Service Bureau of Indian Affairs Bureau of Land Management Forest Service Department of Defense	3,556,730 292,689 167 3,263,874 2,356 2,667,445	37 29
TOTAL	9,357,929	100

1.1.2 Environmental Impact Statement

The West Mojave Plan is a major federal action that has attracted a high level of public interest and participation. The Bureau of Land Management (BLM) would adopt the Plan through amendment of its California Desert Conservation Area (CDCA) Plan and approval of other actions called for by the West Mojave Plan. To comply with the National Environmental Policy Act, preparation of an environmental impact statement is necessary, and must be completed prior to a BLM decision to approve and adopt the Plan's conservation strategy.

This Environmental Impact Report and Statement (EIR/S) is intended to serve as BLM's NEPA compliance document for the West Mojave Plan and CDCA Plan Amendment. It is a broad-scope analysis of a proposed habitat conservation plan and six other alternatives, including the No Action Alternative. All subsequent environmental analyses for land-use proposals in the planning area could be tiered to the EIR/S.

A Notice Of Intent To Prepare A West Mojave Plan and Environmental Impact Statement was published in the Federal Register on December 5, 1991. This Notice announced the holding of public scoping meetings in January 1992. Meetings were held at the following locations: Ridgecrest (January 6, 1991), Barstow (January 7, 1991), Twentynine Palms (January 8, 1991), Bakersfield (January 9, 1991), Victorville (January 13, 1991), Lancaster (January 14, 1991), and Riverside (January 15, 1991). These meetings initiated the West Mojave planning process.

A federal *Revised Notice of Intent to Prepare West Mojave Plan and Environmental Impact Statement* was published in the Federal Register in May 2002. This notice announced the holding of seven additional NEPA scoping meetings. Those meetings were held at the following

locations: Palmdale (June 26, 2002), San Bernardino (June 27, 2002), Victorville (June 28, 2002), Ridgecrest (July 1, 2002), Lone Pine (July 2, 2002), Pasadena (July 9, 2002) and Yucca Valley (July 10, 2002). At these meetings the suggested conservation strategy developed by the West Mojave Supergroup and its task groups was discussed and comments accepted. Comments received during scoping area available for public review at the BLM's California Desert District Office, Moreno Valley, California.

1.1.3 Program Environmental Impact Report

The County of San Bernardino and the City of Barstow are acting as co-lead agencies under the California Environmental Quality Act (CEQA) and are responsible for preparation of the portions of the document that pertain to state environmental review procedures. Because local jurisdictions may adopt the plan by enacting ordinances and/or amending land use plans, compliance with CEQA is required under California regarding actions taken by state agencies or local governments.

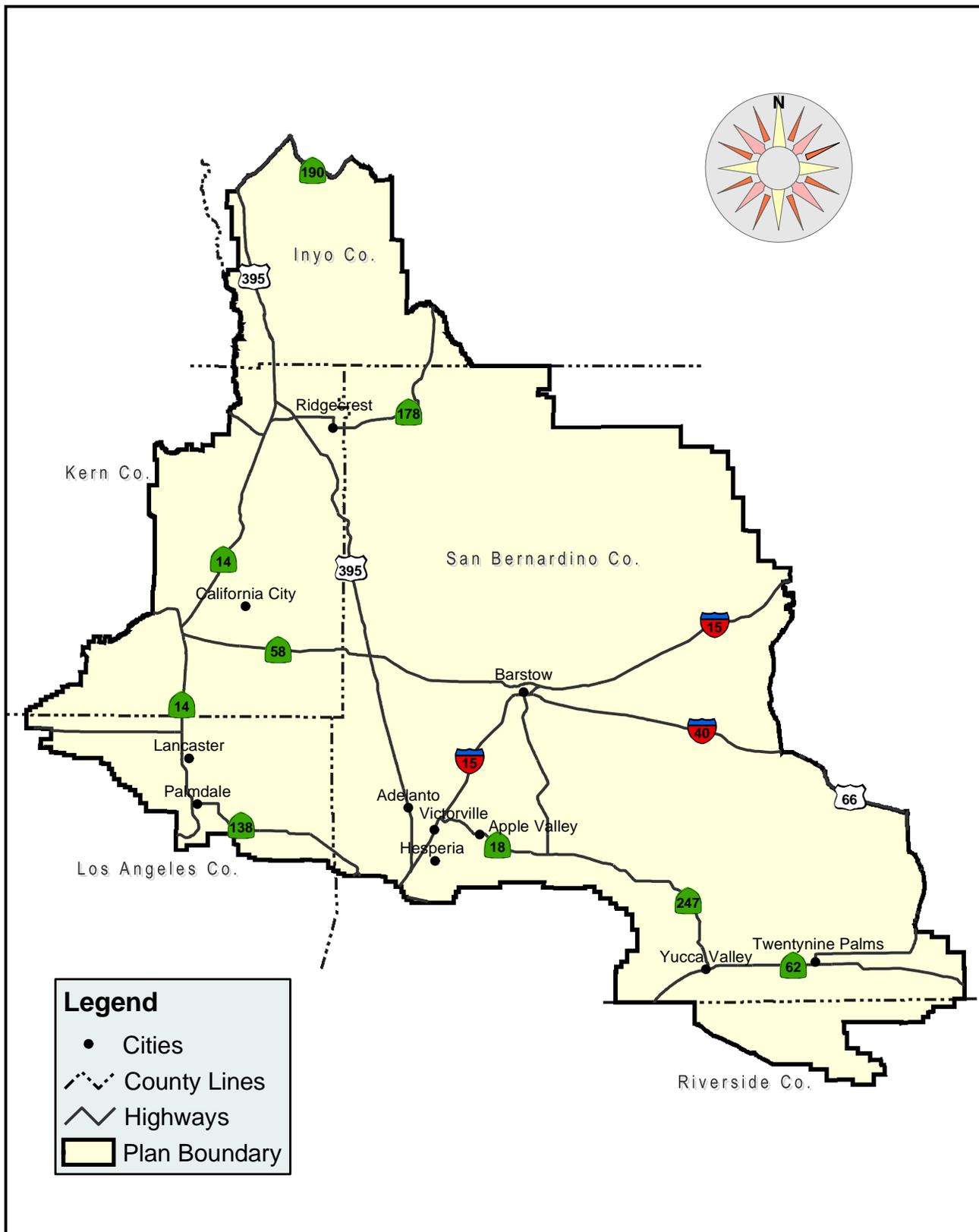
This EIR has been prepared in conformance with CEQA (California Public Resources Code 00 21000 *et seq.*), California CEQA Guidelines (California Code of Regulations, Title 14, 00 15000 *et seq.*), and the County and City local CEQA Guidelines. The EIR is intended to serve as an informational document for the public agency decision-makers and the general public regarding the characteristics and objectives of the proposed project, potential environmental impacts, recommended mitigation measures and reasonable alternatives to the project.

The EIR has been prepared as a Program EIR consistent with CEQA Guidelines Section 15168, which reads in part:

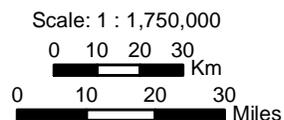
- (a) General. A program EIR is an EIR which may be prepared on a series of actions that can be characterized as one large project and are related either:
- Geographically,
 - As logical parts in the chain of contemplated actions,
 - In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
 - As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

Various advantages of use of a program EIR and its use with later activities are discussed further in the Guidelines Section 15168 (b)(c). This EIR is intended to serve as the foundation environmental document for review of subsequent actions within the West Mojave planning area for all related state agency and local jurisdiction discretionary approvals required to implement the proposed Plan. A list of agencies and jurisdictions that may use the plan as well as the actions that may be taken by those entities is displayed in Table 1-2.

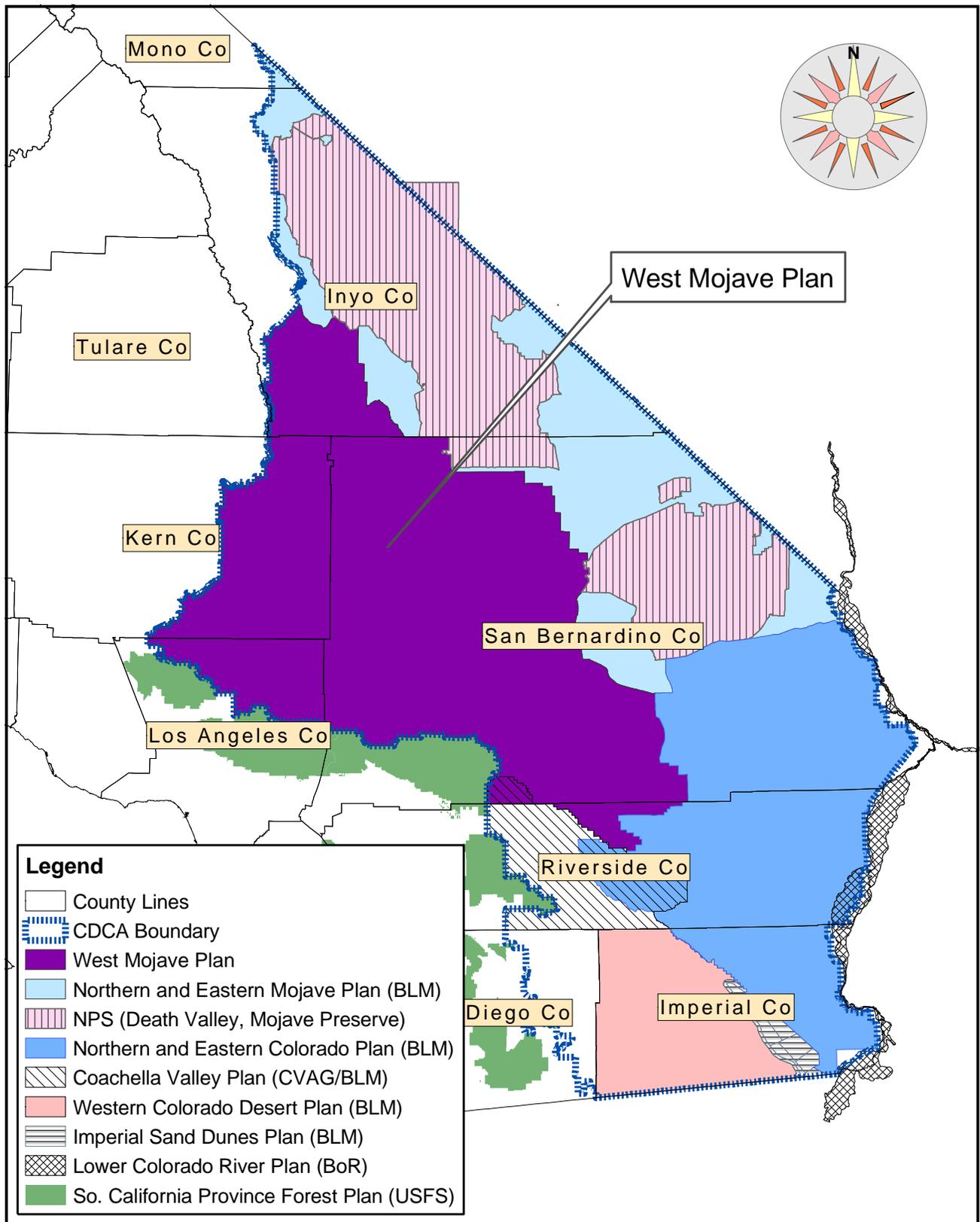
Planning Area



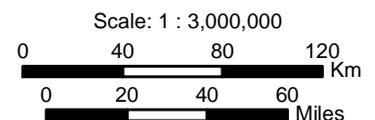
**West Mojave Plan FEIR/S
Map 1-1**



Regional Planning Efforts



**West Mojave Plan FEIR/S
Map 1-2**



Scope of the EIR: The scope of the EIR has been established through the various public meetings that have been held by the BLM over the last 10 years, but more extensively since 1997 when a re-structured planning effort was initiated by the participating agencies, led by the BLM. More recently, by the CEQA co-lead agencies conducted public scoping as required by CEQA to ensure that issues affecting the local jurisdictions and affected communities were addressed. The renewed planning effort by the BLM, as described in Sections 1.4.3 through 1.4.6, established a “Super Group” of interested stakeholders and a Steering Committee. In addition, Task Groups were convened that were open to any interest group or member of the public, which functioned as working groups to develop key elements of the plan. As described above, the BLM conducted formal scoping meetings pursuant to NEPA requirements during June and July of 2002. Subsequently, the CEQA co-lead agencies were identified and public scoping meetings as required by the CEQA Guidelines, were conducted to provide additional opportunities for the public to comment on the issues to be addressed in the EIR/S. The CEQA public scoping meetings were held during the public comment period for the Notice of Preparation of the EIR covering the plan. Written comments received in response to the NOP were also considered in establishing the scope of the EIR/S.

On December 27, 2002, a *Notice of Preparation of Environmental Impact Report for the West Mojave Plan on 6.4 Million Acres Located In California Desert Conservation Area* (NOP) was published by the San Bernardino County Land Use Services Department and the Kern County Planning Department. The NOP indicated that the counties would be coordinating the development of a programmatic EIR for the West Mojave Plan as co-lead agencies. The Notice of Preparation announced the holding of three CEQA scoping meetings. These meetings were held at the following locations: Bakersfield (January 9, 2003), Ridgecrest (January 10, 2003), and San Bernardino (January 16, 2003).

Due to additional interest in San Bernardino County’s role as co-lead agency, on January 24, 2003 the County of Kern and the County of San Bernardino released an *Extension Of Comment Period And Addition Of Second Public Scoping Meeting In San Bernardino County*. The additional scoping meeting was held in Victorville on February 5, 2003.

A Revised NOP was issued on April 9, 2003, which indicated that the City of Barstow would join San Bernardino County as co-lead agency instead of Kern County. Following the announcement by Kern County on March 10, 2003, that it no longer would act in the capacity of CEQA co-lead agency, the City agreed to serve in that capacity to represent the various cities that may participate in the West Mojave Plan.

Appendix U presents a summary of the comments received on the NOP and during the public scoping meetings. The issues to be addressed and the areas of controversy surrounding the West Mojave Plan are listed in the Section 1.4.1 of this document.

1.1.4 Incidental Take Permits

To allow the incidental take of federally listed species on private lands, the United States Fish and Wildlife Service (USFWS) would issue incidental take permits to local jurisdictions under the authority of Section 10(a)(1)(B) of FESA (Section 10(a) permits). To allow incidental take of state-listed species, the California Department of Fish and Game (CDFG) would issue incidental take permits to local jurisdictions under the authority of Section 2081 of CESA (Section 2081 permits). The Plan would function as the “habitat conservation plan” (HCP) required by FESA as a precondition to the issuance of its Section 10(a) permit, and would indicate how the permit issuance criteria for both the Section 10(a) and Section 2081 permits would be met. The term of those permits would be thirty years.

A critical component of the Section 10(a) permit is the Implementing Agreement (IA). The IA defines the roles and obligations of each party (permitter and permittee(s)) and provides a common understanding of actions that will be undertaken to minimize and mitigate the effects on the subject listed and unlisted species and their habitats. The agreement legally binds the permittees to the requirements and responsibilities of a conservation plan and Section 10(a) permit. It may also assign the responsibility for planning, approving, and implementing the mitigation measures under the HCP.

The USFWS has established guidance on the preparation of HCPs and associated IAs in the form of the Habitat Conservation Planning Handbook (November 1996) and an Addendum (June 2000). While the Handbook is intended primarily as internal agency guidance, it has been used extensively by entities seeking an Incidental Take Permit. The Handbook identifies the specific components of an HCP that must be addressed to satisfy the criteria for issuance of an incidental take permit along with the key elements that an IA must contain.

Because many of the multi-species HCPs that have been prepared in California involve state listed species, the convention has been to use a single HCP document to address both state and federal requirements. Both the USFWS and the CDFG have recognized the advantages of utilizing one document to address both agencies’ requirements for issuance of the respective incidental take permits.

The Draft EIR/S for the West Mojave Plan described both the proposed HCP and amendments to the BLM’s CDCA Plan. The Final EIR/S has been revised in response to comments received from the public on the Draft EIR/S as well as from discussions with both USFWS and CDFG.

In order to satisfy the specific requirements of the USFWS and the CDFG with regards to the Section 10(a) and 2081 permit procedures, a final HCP and IA must be submitted along with formal applications by local government. This is a subsequent action that is contemplated as part of the program addressed in this EIR/S. The final HCP will reflect the selected alternative as adopted by the local government lead agencies. The final HCP will be a stand-alone document that incorporates the relevant sections from the EIR/S that meet USFWS and CDFG technical guidance to satisfy the submittal requirements for the incidental take permits. Any further

environmental review associated with incidental take permit procedures will comply with the requirements of NEPA and CEQA.

1.1.5 EIR/S Organization

The EIR/S is organized into the following parts:

- **Chapter One - Introduction** provides an overview of the Plan, the reasons for its preparation, applicable statutes, regulations, and policies, and the history of the planning process.
- **Chapter Two - Alternatives** describes the seven alternative conservation strategies examined in detail by this document. A tabular comparison of these alternatives is provided. This chapter also describes other suggested strategies that were discussed during the planning process but ultimately eliminated from detailed consideration by the EIR/S.
- **Chapter Three - Affected Environment** describes those aspects of the natural and human environment that are likely to be affected by the adoption of the alternatives described in Chapter 2. These include the region's biological, recreation and cultural resources, a social and economic profile of the western Mojave Desert, energy production and transmission, and a discussion of motorized vehicle access to public lands.
- **Chapter Four - Environmental Consequences** presents an analysis of the effects that adoption of each of the alternatives could have on the natural and human environment.
- **Chapter Five** addresses the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity, irreversible and irretrievable commitments of resources, growth inducing effects, energy consumption and conservation, environmental justice considerations, and effects found not to be significant. It includes references cited, a list of preparers and a table of acronyms.
- **Chapter Six** presents a summary of comments received during the scoping process.
- **Appendices** that include supporting technical materials and studies.

1.1.6 Use of EIR/S by Agencies and Jurisdictions

The EIR/S would be used by many of the collaborating agencies and local jurisdictions in making decisions concerning the West Mojave Plan. These entities are listed in Table 1-2 along with the possible uses of the EIR. Public agencies (i.e., Responsible and Trustee Agencies) that may use this EIR in their decision-making or permit processing, will consider the information in this EIR along with other information that may be presented during the CEQA process. The role of a state or local public entity acting as a responsible agency under CEQA is described in Section 15096 of the CEQA Guidelines.

**Table 1-2
Agencies and Jurisdictions Expected to use EIR/S During Decision-making Process**

AGENCY/JURISDICTION	STATUS	POTENTIAL USE(S) OF THE EIR/S
Bureau of Land Management	NEPA Lead Agency	CDCA Amendment
San Bernardino County	CEQA Co-Lead Agency NEPA Cooperating Agency	Plan adoption and other implementing actions
Kern County	CEQA Responsible Agency NEPA Cooperating Agency	Plan adoption and other implementing actions
Inyo County	CEQA Responsible Agency	Plan adoption and other implementing actions
Los Angeles County	CEQA Responsible Agency	Plan adoption and other implementing actions
Fish and Wildlife Service	NEPA Cooperating Agency	Section 7 Consultation & Section 10a(1B) Permit
California Department of Fish and Game	CEQA Responsible and Trustee Agency	Incidental Take Permit per Section 2081
Caltrans	CEQA Responsible Agency	Plan adoption and other implementing actions
Adelanto	CEQA Responsible Agency	Plan adoption and other implementing actions
Apple Valley	CEQA Responsible Agency	Plan adoption and other implementing actions
Barstow	CEQA Co-Lead Agency	Plan adoption and other implementing actions
California City	CEQA Responsible Agency	Plan adoption and other implementing actions
Hesperia	CEQA Responsible Agency	Plan adoption and other implementing actions
Lancaster	CEQA Responsible Agency	Plan adoption and other implementing actions
Palmdale	CEQA Responsible Agency	Plan adoption and other implementing actions
Ridgecrest	CEQA Responsible Agency	Plan adoption and other implementing actions
Twentynine Palms	CEQA Responsible Agency	Plan adoption and other implementing actions
Victorville	CEQA Responsible Agency	Plan adoption and other implementing actions
Yucca Valley	CEQA Responsible Agency	Plan adoption and other implementing actions
Indian Wells Valley Water District	CEQA Responsible Agency	Adopt Plan

Per CEQA, the term “responsible agency” includes all public agencies other than the lead agency having discretionary approval power over the project. Responsible Agency means a public agency that proposes to carry out or approve a project, for which a lead agency is preparing or has prepared an EIR or negative declaration. Trustee Agency means a state agency having jurisdiction by law over natural resources affected by the project that are held in trust for the people of California. Per NEPA, “cooperating agency” means an agency (including, by agreement, a local agency) having jurisdiction by law or special expertise with respect to any environmental impact involved in a major federal action.

1.1.7 Modifications to be Found in the Final EIR/S

Responses to comments received on the Draft EIR/S are presented in Chapter 6. Many of the comments requested modifications or clarifications of either the West Mojave Plan's conservation strategy or the environmental analysis presented in the Draft EIR/S. Where the text of the Final EIR/S differs from that presented in the Draft EIR/S, a vertical black line in the left-hand margin indicates the location of the modified or clarified text. A summary of these modifications follows. Because most of the changes consisted of minor modifications, only a selection is presented below.

- Conservation Area adjustments
 - Pisgah Crater (western portion dropped, expansion to northeast)
 - North Edwards (some lands excluded)
 - Alkali Mariposa Lily (realigned to capture the Amargosa Creek drainage, increase size and drop interim conservation areas)
- Biological Transition Areas eliminated (portions added to DWMA)
- New biological objectives for several species
- Tortoise Survey Zones – minor modifications
- Fee Zones – minor modifications
- BLM DWMA Multiple Use Class M Lands changed to Class L
- Revised Monitoring and Adaptive Management Table
- Additional discussion of cumulative impacts
- Appendix C.1 (Implementation Tasks, Costs and Priorities) Revision
- Compact Disk Additions – species accounts, vegetation map, Draft EIR/S comment letters
- BLM Route Designation
 - Adoption of Competitive “C” Routes Northwest of Spangler Open Area
 - Route Openings in Summit Range
 - Route closures in Fremont Kramer Tortoise DWMA to Offset “C” Routes
 - Selected closures in small conservation areas
 - Revised Juniper Subregion route network
 - “No Action” route network is BLM June 30, 2003 Decision Record

1.2 PURPOSE AND NEED

The West Mojave planning area is rich in biological diversity because of its varied vegetation communities and landforms and because of its location adjacent to the Transverse Ranges, the Sierra Nevada, the Colorado Desert and the Great Basin. With its proximity to the rapidly growing cities of the Los Angeles basin, the West Mojave planning area is subject to increasing demand for community development, recreation and resource utilization. One result is an increasing loss of species habitat.

Loss or degradation of species habitat along and beyond the urban interface can lead to the listing of plants and animals as threatened or endangered by the USFWS and/or the CDFG.

USFWS has listed thirteen western Mojave species; CDFG has listed eleven; six are listed by both agencies (see Table 1-3). It was the listing of the desert tortoise by USFWS and CDFG in 1990 and 1989, respectively, that was the impetus for the preparation of the West Mojave Plan. Several dozen other plants and animals are at risk of listing in the next few decades, unless proactive conservation steps are taken.

**Table 1-3
Special Status Species Summary**

CATEGORY	LISTED	PROPOSED	OTHER	TOTAL
Fish	1	0	0	1
Amphibians	3	0	0	3
Reptiles	1	0	4	5
Birds	7	0	30	37
Mammals	1	0	13	14
Plants	8	0	55	63
TOTAL	21	0	102	123

Because species are interdependent, the steps necessary to conserve species cannot be taken in isolation. Species exist naturally as members of a network of varying connections to other species and their habitats. The inherent interdependence of species and ecosystems makes it difficult to protect any given plant or animal without taking into account factors that may apply to many species. Both species and natural communities must be considered.

Once a species is listed, federal agencies such as the BLM are required to ensure that declining populations *recover* to levels sufficient to ensure their long-term survival. Any new development project on public lands that may affect a listed species can proceed only after the agency “consults” with USFWS and receives a biological opinion finding that the project would not jeopardize the continued existence of the species in the wild. Once recovery is attained, the species can be delisted.

CESA and FESA impose special requirements on private lands as well. In most cases, persons may not *take* a species listed as threatened or endangered. This protection extends to the listed species’ habitat. Take is permitted, however, if a landowner obtains an incidental take permit. Such permits are required from the agency that listed the species (USFWS and/or CDFG). Obtaining these permits can be a time-consuming and expensive process. Permitting delays will only increase if unattended biological problems lead to more species being listed.

This situation has led to two unmet needs, for: (1) a regional biological strategy to conserve plant and animal species and their habitats and prevent future listings; and (2) an efficient, equitable and cost-effective process for complying with threatened and endangered species laws.

The purpose of the West Mojave Plan is to satisfy both of these needs. The Plan includes a conservation strategy which would allow state and federal land management agencies to implement their mandates under FESA and CESA to recover listed species and their habitats,

and to conserve natural communities. At the same time, it proposes a streamlined program which would significantly reduce the time and expense involved in obtaining biological opinions and incidental take permits.

1.3 RELATIONSHIP BETWEEN THE WEST MOJAVE PLAN AND THE EXPANSION OF FORT IRWIN

The National Training Center at Fort Irwin provides a battlefield environment for training brigade-sized units of the United States Army. It is the Department of the Army's premier combat training center. Due to changes in technology and tactics, the Army has sought to include additional lands within the boundaries of the installation to enable it to conduct training that meets the future combat needs of the Army. To this end, the Army has been examining possible base expansion scenarios for more than a decade.

In December 1996 the BLM, as lead federal agency due to its role as administrator of public lands likely to be included in any base expansion, published a draft Environmental Impact Statement titled "Army's Land Acquisition Project for the National Training Center, Fort Irwin California, and Proposed Amendment to the California Desert Conservation Area Plan." The DEIS examined several potential alternative base expansion scenarios, and was released for a 90-day public review.

In December 2001, Congress enacted the Fort Irwin Military Land Withdrawal Act. This statute withdrew approximately 110,000 acres of public lands adjacent to Fort Irwin and transferred jurisdiction from BLM to the Army. While the purpose of the transfer was to provide the lands necessary for expanded training at Fort Irwin, the Army was precluded from using the lands for that purpose until it completed the steps necessary to comply with NEPA and the federal endangered species act. Completion of these steps will require the preparation of a supplemental draft EIS (SDEIS) and a final EIS, and a Section 7 consultation with USFWS. Fort Irwin has assumed federal lead responsibility for preparation of the base expansion SDEIS, because the critical NEPA question has become the use of these lands by Army rather than their transfer to Army. The supplemental draft EIS was published in April 2004.

The Fort Irwin Military Land Withdrawal Act requires that "the analysis [of the Fort Irwin base expansion] shall be coordinated, to the extent practicable and appropriate, with the review of the West Mojave Coordinated Management Plan that, as of the date of the enactment of this Act, is being undertaken by the Bureau of Land Management." Accordingly, the preparation of this final EIR/S has been coordinated with the Army's base expansion planning team so that the information presented in each document is consistent and the potential and cumulative impacts of the projects are adequately addressed.

1.4 HISTORY OF THE PLANNING PROCESS

1.4.1 Planning Issues

The issues to be addressed by the West Mojave Plan have been identified through a ten-year public involvement process that began with a first round of scoping meetings (held in January 1992), increasingly frequent Supergroup meetings, several dozen meetings of task groups established by the Supergroup between December 1999 and May 2002, a final round of NEPA scoping meetings held in June and July 2002, and most recently concluding with CEQA scoping meetings held in January and February 2003 and an opportunity to comment on the Notice of Preparation for the EIR. A summary of the most important issues is presented in Table 1-4.

**Table 1-4
Planning Issues**

ISSUE	DISCUSSION
Desert Tortoise	Identify conservation areas and adopt conservation strategies that minimize take on private land and recover populations on public land.
Mohave Ground Squirrel	Identify conservation areas and adopt conservation strategies that minimize take on private land and recover populations on public land.
Other Listed and Sensitive Species	Adopt conservation strategies that minimize take on private land, recover populations on public land, and prevent future listings of unlisted species.
Streamlined Endangered Species Act Compliance	Develop a streamlined process that would allow applicants for city, county, state and federal permits and authorizations to accelerate existing costly and time-consuming permit issuance procedures.
Motorized Vehicle Access Network for Public Lands	Provide appropriate motorized vehicle access to public lands for commercial, recreational and other purposes in a manner that is compatible with species conservation.
Expansion of Fort Irwin	Develop conservation strategies that will be effective even if expanded military training programs are implemented on lands transferred in 2001 to Fort Irwin.
Standards and Guidelines for Public Lands	Develop rangeland standards for managing ecosystem health and guidelines for managing domestic livestock uses.
Regional Economic Growth	Promote economic growth within the planning area.

1.4.2 1992 Memorandum of Understanding

The West Mojave planning process was formally initiated in 1992 by the execution of a *Memorandum of Understanding By and Between the U.S. Bureau of Land Management and the Undersigned Participating Agencies* (MOU; see Appendix A). Recognizing that CESA and FESA direct the parties to “protect certain species of concern and their habitats from adverse effects resulting from public and private development and actions” and acknowledging that “the private sector cannot now be assured that project review will be timely or that mitigation, compensation, and other requirements will be consistent among the participating agencies” (MOU, page 1), the MOU identified the following “Purposes of the Plan”:

1. Protection of Species of Concern: To conserve and protect species of concern and the ecosystem on which they depend within the western Mojave Desert.
2. Provide Equity in Regulation: To provide a comprehensive means to coordinate and standardize mitigation and compensation requirements so that public and private actions will be regulated equally and consistently, reducing delays, expenses, and regulatory duplication. It is intended that the Plan will eliminate uncertainty in developing private projects and will prescribe a system to ensure that the costs of compensation/mitigation are applied equitably to all agencies and parties.
3. Reduce Cumulative Impacts: To prescribe mitigation measures for private development and agency actions to lessen or avoid cumulative impacts to the species of concern and eliminate, whenever possible, case-by-case review of impacts of projects when consistent with the mitigation and compensation requirements prescribed by the Plan. [MOU, page 2]

The MOU provided that the Plan “will function as the Habitat Conservation Plan for the [incidental take] permit applications” by participating local governments.

1.4.3 1997 Equitable Precepts

In mid-1997 the participating agencies, led by the BLM, restructured the planning process to ensure (1) greater public participation in developing a conservation strategy that would meet the needs of the participants, and (2) collection and use of the best science reasonably available, including recent field surveys. As a first step in this restructuring, on September 10, 1997, the West Mojave Supergroup adopted Equitable Precepts to guide the preparation of the West Mojave Plan. These consisted of the Mission Statement and Principles set forth below:

Mission Statement

The West Mojave Plan will provide an improved and streamlined process which minimizes the need for individual consultations with the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG) while providing better science for species conservation.

The [West Mojave] Plan will allow projects to be approved and signed-off rapidly. Project proponents will know the mitigation measures that will be required of them before the project is presented to the local government or, in the case of public land, presented to the state or federal agency.

Principles

1. The ultimate goal of the [West Mojave] Plan will be based on specified measures to enable project proponents to comply with the requirements of CESA and FESA.
2. The [West Mojave] Plan will be equitable, predictable and compatible with local, state and federal agency permitting procedures so as to be easily administered.
3. The mitigation strategy will be responsive to the needs and unique characteristics of the many diverse industries and activities in the program area on both public and private land while allowing compatible growth.
4. Project proponents shall have a choice of utilizing the conservation program or working

directly with the CDFG or USFWS to address Endangered Species Act compliance.

5. The [West Mojave] Plan will incorporate realistic fiscal considerations, with identified sources, i.e. federal, state, local, public and private.
6. The [West Mojave] Plan will ensure that no one group of desert users will be singled out to disproportionately bear the burden of the [West Mojave] Plan implementation.
7. The [West Mojave] Plan will have the flexibility to respond to future legislative, regulatory and judicial requirements.

1.4.4 Data Base

The West Mojave Plan is based upon the best science reasonably available. To meet this standard, data were reviewed to identify pertinent life history information, assess threats to covered species, and provide the most appropriate management prescriptions to address those threats. Where existing information was considered incomplete, species experts were consulted to fill in the data gaps. The planning team consulted 8 botanists, 13 ornithologists, 3 mammalogists, and 4 herpetologists to ensure that data for those taxa were the most complete and accurate information available. For the desert tortoise, this meant collecting and digitizing existing transect data and performing new surveys over approximately 3,615 square miles that had not been recently surveyed. Previous planning for Mohave ground squirrel conservation (Remple 1991, Clark 1993) and recent studies (Leitner and Leitner 1989, 1990, 1996a, 1996b; Leitner et al. 1995, 1997) were important for designing reserves and determining appropriate management prescriptions. New field surveys were conducted in the spring of 2001 for sensitive birds and plants.¹

Biological data for the Plan were obtained from a variety of sources. The data were compiled, analyzed, and stored to support various components of the Plan preparation and implementation process. The sources of data include known location information for covered species and habitats. These data were compiled from various sources, including the following:

- California Natural Diversity Data Base (NDDDB) records. Data from the NDDDB were from 1999 and have been updated periodically since then.
- CDFG, BLM, Army and USFWS data.
- Data collected from biologists knowledgeable about the plan area and/or a given species. This included records from consultants and non-profit organizations (e.g. California Native Plant Society, Point Reyes Bird Observatory, Mojave Desert Bird Club).
- Data from individual biologists obtained during planning meetings.
- Location data from voucher specimens held in museums and herbaria.
- Published records and species distribution information from peer-reviewed journal articles, where information on species has been described at an appropriate scale.
- Presence-absence tortoise survey data resulting from studies required by county and local government since the 1990 listing.

¹ See Chapter 3 for a more detailed discussion of these data.
Chapter 1

Dr. William Boarman prepared a survey of the threats adversely affecting the desert tortoise for the West Mojave planning effort. This was the peer-reviewed *Threats to the Desert Tortoise: A Critical Review of the Scientific Literature* (attached as Appendix J). Dr. Boarman's threats analysis was instrumental in identifying potential conservation measures to address each known threat adversely affecting the tortoise.

Species Accounts: For each plant or animal addressed by the Plan, a *Species Account* was prepared. A wildlife biologist or botanist possessing recognized expertise concerning the species in question authored each of these documents. The accounts described the general status, habitat, life history, distribution, biological goals, and threats faced by each species, as well as a detailed bibliography. All species accounts were peer reviewed. GIS maps were created for each species showing known occurrences and general distribution, and all cited papers and reports were obtained and copies filed.

Current Management Situation: In March 1999, a report was published detailing the *Current Management Situation of Special Status Species in the West Mojave Planning Area* (CMS). This report identified existing policies and management actions being applied by each of the participating agencies with respect to each of the species being addressed by the Plan.

Geographic Information System Database: A digital library of over 300 geographic data layers was assembled, displaying biological, political, topographic and other critical planning information.

Motorized Vehicle Access Network Field Survey: Between September 2001 and March 2002, thirteen field crews inventoried nearly 8,000 miles of motorized vehicle access routes within the western Mojave Desert. Both four wheel drive and motorcycle crews participated in the survey. Routes were recorded using global positioning system technology. The nature of the route (graded gravel, good dirt, motorcycle trail) was recorded, and nearly two-dozen types of pertinent desert features mapped (including campsites, mines, trailheads, and water sources). This information was transferred into the planning team's digital GIS library. In addition, data collected by BLM field survey crews in 1985 and 1987, and during the preparation of BLM management plans for areas of critical environmental concern between 1980 and the late 1990s, was digitized and stored in the GIS database. This data was supplemented by data digitally collected from aerial photography taken in 1995 and 1996, and covering most public lands within the planning area.

In response to the many comments on the Juniper subregion, an inventory of existing routes of travel was performed in October 2003. Using this new database, comment clarification letters and comments at three meetings held to discuss this subregion, BLM revised the route designations in the Juniper subregion to provide a more accurate and effective transportation network.

Development of the List of Species Addressed by the Plan: The list of species to be addressed by the Plan was based on wildlife agency compilations of threatened, endangered, vulnerable, and declining species. Species addressed by the plan include both those for which

private land incidental take permit coverage would be sought (“covered species”), and those for which a public land conservation strategy would be adopted and implemented by the BLM through its California Desert Conservation Area Plan.

Criteria for inclusion on the list included the following:

- Species listed as threatened or endangered by the state and federal governments.
- Species proposed for listing by the federal government.
- Species designated as candidates for listing by the state and federal government.
- “Species of Special Concern” on the Department’s “Special Animals” list.
- Plants included on the Department’s “Special Plants” list.
- Plants and animals on the BLM “sensitive species” list.
- Plants included on List 1B or List 2 of the California Native Plant Society’s *Inventory of Rare and Endangered Plants of California*.

The Supergroup approved the list of 98 plant and animal species to be addressed by the Plan in 1996. The USGS then contracted with experts on each species, who prepared the species accounts for use in development of the Plan.

On May 5, 1997 and April 3, 1998, local botanists submitted a list of plants and animals seen at Middle Knob and in surrounding areas. These records were examined, and those species found within the West Mojave Plan area were included. On September 1 1998, the California Native Plant Society submitted a list of fourteen rare plants within the West Mojave and requested their addition to the Plan list. This list was reviewed and species with sufficient information were added to the list of species to be addressed by the West Mojave Plan.

The *Current Management Situation of Special Status Species in the West Mojave Planning Area* was published March 31, 1999. This document detailed existing conservation measures in place for each jurisdiction for each of the original 98 species.

Using the species accounts and the *Current Management Situation*, West Mojave Plan biologists met with the wildlife agencies to prepare an evaluation. The evaluation team reviewed all species on the Supergroup list along with the proposed additions. Fifty-eight species were dropped from the list and were not further addressed by the Plan because of insufficient data, because they were being separately addressed by other Habitat Conservation Plans and Biological Opinions already in place or underway, because they were too common, or for other reasons. The Evaluation Report of September 22, 1998 discussed the reasons for retention or deletion of species from the covered species list.

Changes were made in the federal, state and CNPS lists between 1998 and now. The *Inventory of Rare and Endangered Plans of California* was revised in August 2001, and plants that were added to List 1B and List 2 were added to the West Mojave list if sufficient information was available to prepare conservation plans. Plants that were deleted from the earlier edition were deleted from the West Mojave list. Similarly, CDFG’s list of “Special Animals” changed over time, and these changes were incorporated into the West Mojave list.

The final list of species was completed on June 26, 2002. This list was provided to members of the Task Groups and Supergroup and all interested stakeholders. As this list was reviewed by the local jurisdictions, a few additional changes were made, such as deletion of Kelso Creek monkeyflower, mountain plover and Bendire's thrasher from the request for incidental take coverage.

In response to comments on the West Mojave Plan, other species were deleted from the request for incidental take coverage. Concerns expressed by CDFG resulted in deletion of nine species because of insufficient information or for other reasons. These are bighorn sheep, spotted bat, pallid bat, long-legged myotis, Western mastiff bat, golden eagle, Panamint alligator lizard, Reveal's buckwheat, and flax-like monardella.

The Plan now lists 49 species as covered species proposed for receipt of incidental take permits under the Section 10(a) and 2081 permits. Wildlife agency review of this document and the Implementing Agreement may result in the exclusion of other species from permit coverage. The list of all species addressed by the Plan, along with the scientific names, is included as Appendix Y.

1.4.5 Biological Evaluation

Following the assembly of the database, a "Biological Evaluation" was conducted in a series of meetings between March 1998 and June 2000. Participants included biologists from the West Mojave planning team, USFWS, CDFG and invited experts. Biologists evaluated the effectiveness of current management, identified management shortfalls, and suggested measures to address those shortfalls. Evaluation meetings were structured around the following seven questions:

- How important is the planning area to the species as a whole?
- Does the planning area contain essential habitat for the species to complete its life history?
- Why was the species placed on the special status list? What is the concern?
- Is current management adequate to protect the species?
- Is the geographical size and location of conservation areas adequate to protect the species? If not, what additional areas need to be committed to assure protection of the species?
- Is the management of proposed conservation areas adequate to protect the species? If not, what management improvements could be implemented to assure protection of the species within the target conservation areas?
- Is management of lands outside conservation areas adequate to protect the species? If not, what management improvements could be implemented to assure protection of the species outside conservation areas?

An Evaluation Report addressing the Desert Tortoise, mammals, birds, fish, reptiles and amphibians was published on September 22, 1999 and distributed to the Supergroup. A Mohave

ground squirrel Evaluation Report was completed and distributed on September 14, 2000. Finally, an Evaluation Report addressing rare plants was completed and distributed on October 15, 2001.

1.4.6 Task Groups Develop the Conservation Strategy

In November 1999, the West Mojave Supergroup established four task groups to develop components of the West Mojave Plan. Task group members were not appointed; rather, any organization or individual could attend and participate in a task group meeting. All meetings were open to the public and, at one time or another, a representative of nearly every Supergroup entity attended a task group session. Task groups were not established to make decisions for the participating agencies and jurisdictions, nor were they intended to function as formal appointed advisory bodies. Rather, the task groups provided an informal public forum to allow collaborative interagency and stakeholder planning and information gathering, as an extension of public scoping efforts. These Task Groups included:

- Task Group 1, Conservation Strategy
- Task Group 2, Motorized Vehicle Access Network
- Task Group 3, Regulatory Issues
- Task Group 4, Plan Implementation

A 14-member Steering Committee was established by the Supergroup to resolve deadlocks and provide guidance to the task groups.

Task groups met 47 times between December 1999 and May 2002. On two occasions task groups deadlocked on issues. Six meetings of the Steering Committee successfully resolved these deadlocks.

Numerous issues were too complex or controversial to resolve at a single task group meeting. In such cases, subcommittees composed of volunteers were asked to discuss the issue and return with a proposed solution at the following task group meeting. Task Group 1 formed over a dozen subcommittees that dealt with issues as diverse as the expensive tortoise fencing program, desert recreation, mitigation fees and compensation structure, and “best management practices” to apply as standard take-avoidance measures. To assist Task Group 2 and the route designation process, two subcommittees were formed: a field survey advisory group and a route designation technical committee. A subcommittee might meet once or, once established, be recalled on numerous occasions to address difficult issues. Over 50 subcommittee meetings were held in addition to task group meetings.

As the task group process evolved, certain issues would emerge that would result in considerable public interest or controversy, including the design of the motorized vehicle access network and the role of equestrians in desert planning. When this occurred, public information meetings were held throughout the desert on an irregular basis. About a dozen of these meetings, attended by up to 250 persons, were held during the task group process. Many persons who first became involved through these meetings later joined one or another of the task groups.

1.4.7 Public Review of DEIR/S

A Draft EIR/S was released for a 90-day public review that began on June 13, 2003 and ended on September 12, 2003. Public hearings were held in Victorville (July 15, 2003), Lone Pine (July 16, 2003), Ridgecrest (July 17, 2003), Redlands (July 22, 2003), Yucca Valley (July 23, 2003), Palmdale (July 24, 2003) and Barstow (July 30, 2003). Responses to written and oral comments received from the public are presented in Chapter 6 of this Final EIR/S. Chapters 1 through 5, as well as the appendices, include changes made in response to those comments.

1.5 NECESSARY DECISIONS AND APPROVALS

1.5.1 Agency and Jurisdiction Decisions and Approvals

Bureau of Land Management Implementation of the West Mojave Plan on public lands would require approval of the Plan by the BLM's California State Director through a Record of Decision (ROD). This approval process would include the amendment of the CDCA Plan to ensure consistency with the provisions of the West Mojave Plan. By executing the ROD, BLM will adopt both the West Mojave Plan and any necessary CDCA Plan amendments. The amendments that would be necessary to implement each alternative are listed in Chapter 2, beginning with Section 2.2.10, the amendments associated with Alternative A.

The West Mojave Plan Record of Decision would also amend 25 existing Area of Critical Environmental Concern (ACEC) management plans, and would serve as the ACEC management plan for 14 newly-designated ACECs. These new and revised ACEC management plans may be found in Appendix D.

The BLM Record of Decision will be issued after the final environmental impact report and statement is published, and after any protests are submitted and resolved.

Cities and Counties: Adoption of the West Mojave Plan by cities and counties would not require amendments to local jurisdiction general plan land use elements. Modifications of city and county conservation elements may occur, however, to provide reference to the West Mojave Plan and associated conservation strategies. Certain jurisdictions may also amend their zoning and development ordinances to provide consistency with the HCP's conservation strategies. Local jurisdictions adopting the West Mojave Plan would need to adopt a fee ordinance in order to implement the mitigation fee described in Chapter 2.

Measures applicable to each jurisdiction are identified in Appendix B.

United States Fish and Wildlife Service: For the West Mojave Plan's streamlined FESA compliance procedures to be implemented, USFWS would have to issue an incidental take permit under Section 10(a) of FESA to the participating cities and counties, and to Caltrans. This could include the issuance of "no surprises" assurances for unlisted species. A biological

opinion prepared pursuant to Section 7 of FESA would have to be issued to the BLM and any other participating federal agencies.

California Department of Fish and Game: CDFG would issue an incidental take permit under Section 2081 of CESA to the participating cities, counties and Caltrans.

1.5.2 Relationship to Statutes, Regulations and Policies

All decisions and approvals would be consistent with applicable federal and California statutes, regulations and policies, including but not limited to the following:

- Federal Endangered Species Act
- California Endangered Species Act
- National Environmental Policy Act
- California Environmental Quality Act
- California Fish and Game Code
- California Planning Statutes
- Federal Land Policy and Management Act
- National Historic Preservation Act
- California Desert Protection Act
- Clean Water Act
- Clean Air Act
- Wilderness Act
- Taylor Grazing Act
- Sikes Act
- Mining and Minerals Policy, and National Materials and Minerals Research and Development Acts
- Mining, Mineral Leasing, Material Disposal and Reclamation Acts
- Federal Executive Orders and Congressional Mandates

This plan recognizes that unforeseen national security measures may require immediate compliance by utilities to operate or construct features designed to secure and protect energy and communication systems. Should the Department of Homeland Security, Federal Energy Commission, California Energy Commission or California Public Utility Commission proclaim the necessity of such measures, utilities will be allowed to implement said measures. Appropriate mitigation and plan compliance shall be sought “after the fact.” Where variance to the Plan is required, parties shall negotiate to accomplish the spirit of the Plan.

1.5.3 Relationship to Other Regional Plans

Southern California and southern Nevada are the sites of a number of important regional planning efforts, many of which are addressing the same issues that are being considered by the West Mojave Plan (see Map 1-2). These include regional habitat conservation plans, natural community conservation plans and federal land use plans and amendments. In fact, most of the

land surface between Las Vegas, Nevada and San Diego, California lies within the scope of an ecosystem-planning program.

The following is a brief summary of major planning efforts being undertaken immediately adjacent to or within the West Mojave planning area.

Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP): The lead for this plan is the Coachella Valley Association of Governments. The planning area includes most of the urban and urbanizing area of the Coachella Valley as well as the Santa Rosa Mountains, and portions of Joshua Tree National Park, all within Riverside County. This MSHCP lies adjacent to and southeast of the West Mojave planning area. The plan addresses issues of urbanization on private and state lands. As part of this planning effort, BLM has prepared a separate CDCA plan amendment applicable to federal lands within the Coachella Valley plan area. Both CVMSHCP and the West Mojave Plan are developing conservation strategies for species whose range overlaps both planning areas. These include the management of the Little San Bernardino Mountains gilia, the triple-ribbed milkvetch, the Whitewater and Big Morongo Canyon ACECs and, to a minor degree, the desert tortoise. A Record of Decision for the BLM Coachella Valley CDCA Plan Amendments was signed in December 2002.

Northern and Eastern Mojave Plan (NEMO): The BLM's NEMO plan addressed recovery of the desert tortoise and management of a few additional species of concern on public lands. NEMO addressed only BLM programs, and only the BLM's CDCA Plan was amended; private lands and other federal agencies were not affected. The NEMO planning area lies to the northeast of the western Mojave Desert, in the area that generally lies between Death Valley National Park and the Mojave National Preserve. The most important cross-boundary issues that affect both NEMO and West Mojave involve the management of a small Mojave ground squirrel population northeast of Trona, and ensuring that CDCA Plan Amendments are consistent. A Record of Decision for NEMO was signed in December 2002.

Northern and Eastern Colorado Plan (NECO): The NECO plan, like NEMO, primarily concerned the management of BLM lands located to the east and southeast of the West Mojave planning area, although a broader-based planning program was conducted in collaboration with the Marine Corps, the National Park Service and local governments. NECO's decisions affected federal lands only. The most important cross-boundary issues that affect both NEMO and West Mojave involve the management of the Mojave fringe toed lizard (two thirds of the known range lies within the West Mojave, and one third within NECO), as well as ensuring that CDCA Plan Amendments are consistent. A Record of Decision for NECO was signed in December 2002.

Southern California Province Forest Plan: This plan is being prepared by four National Forests located in Southern California, including the Angelus and San Bernardino National Forests, which are adjacent to and south of the West Mojave planning area. Decisions reached by the Southern California Province Plan will affect National Forest lands only. The most important cross-boundary issues that affect both the Forest Service planning efforts and the West Mojave Plan involve the implementation of the Carbonate Habitat Management Strategy;

developing conservation programs for the San Diego horned lizard, the short-joint beavertail cactus, the gray vireo and the arroyo toad; and the coordination of motorized vehicle access networks.

Military Integrated Resource Management Plans (INRMPs): Each of the five military bases located within the West Mojave planning area has prepared, or is preparing, an INRMP to guide the management of natural resources on each base. The INRMPs affect military lands only. The most important cross-boundary issues that affect both the West Mojave Plan and INRMPs follow: (1) For Edwards Air Force Base, management of the desert tortoise, Mohave ground squirrel, alkali mariposa lily, desert cymopterus and Barstow woolly sunflower; (2) for China Lake Naval Air Weapons Station, the management of the desert tortoise, Mohave ground squirrel, Townsend's big-eared bat, bighorn sheep, and Inyo California towhee; (3) for Fort Irwin, management of desert tortoise and the Lane Mountain milkvetch; (4) for the Marine Corps Air Ground Combat Center at Twentynine Palms, the management of the desert tortoise, California leaf-nosed bat, bighorn sheep, Mojave fringe-toed lizard and white-margined beardtongue; and (5) for the Marine Corps Logistics Base near Barstow, the management of the desert tortoise.



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Query Criteria: Quad is (Black Mtn. (3411867) or Liebre Mtn. (3411866) or Burnt Peak (3411865) or Lake Hughes (3411864) or Del Sur (3411863) or Lancaster West (3411862) or Lancaster East (3411861) or Alpine Butte (3411768) or Hi Vista (3411767) or Adobe Mountain (3411766) or Green Valley (3411854) or Sleepy Valley (3411853) or Ritter Ridge (3411852) or Palmdale (3411851) or Littlerock (3411758) or Lovejoy Buttes (3411757) or El Mirage (3411756) or Acton (3411842) or Juniper Hills (3411748) or Valyermo (3411747) or Mescal Creek (3411746) or Pacifico Mountain (3411841))

Anaxyrus californicus		Element Code: AAABB01230	
arroyo toad			
Listing Status:	Federal: Endangered	CNDDDB Element Ranks:	Global: G2G3
	State: None		State: S2S3
	Other: CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered		
Habitat:	General: SEMI-ARID REGIONS NEAR WASHES OR INTERMITTENT STREAMS, INCLUDING VALLEY-FOOTHILL AND DESERT RIPARIAN, DESERT WASH, ETC.		
	Micro: RIVERS WITH SANDY BANKS, WILLOWS, COTTONWOODS, AND SYCAMORES; LOOSE, GRAVELLY AREAS OF STREAMS IN DRIER PARTS OF RANGE.		

Occurrence No.	17	Map Index: 31217	EO Index: 19324	Element Last Seen: 1992-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1992-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2009-04-23

Quad Summary: Black Mtn. (3411867)
County Summary: Ventura

Lat/Long:	34.68951 / -118.84677	Accuracy:	specific area
UTM:	Zone-11 N3840163 E330834	Elevation (ft):	3000
PLSS:	T07N, R19W, Sec. 24 (S)	Acres:	211.5

Location: PIRU CREEK, NW AND SE OF HARDLUCK CAMPGROUND, LOS PADRES NATIONAL FOREST.
Detailed Location: LOCATED IN POOLS ALONG PIRU CREEK AND AN UNNAMED TRIBUTARY WHOSE CONFLUENCE IS JUST NORTH OF HARDLUCK CAMPGROUND.

Ecological:
General: UCSB SPECIMEN #31810-31817 (LOTS), 31818-31820, 31845-31850 (LOTS), 31852-31853 (LOTS) 31934-31937 (LOTS), 31939 (LOT), 31977-31987 (LOTS). IN THE ELEVATION RANGE 1050-1340, 79 CLUTCHES, 770 JUVS OBSERVED, 1992.
Owner/Manager: USFS-LOS PADRES NF

Occurrence No.	35	Map Index: 33418	EO Index: 29202	Element Last Seen: 2001-06-30
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 2001-06-30
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2012-08-15

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.45882 / -118.01803	Accuracy:	specific area
UTM:	Zone-11 N3813501 E406493	Elevation (ft):	3300
PLSS:	T04N, R11W, Sec. 03 (S)	Acres:	141.4

Location: LITTLE ROCK CREEK, FROM THE CONFLUENCE OF SANTIAGO CANYON CREEK UPSTREAM TO 1 MILE ABOVE BASIN CAMPGROUND, ANGELES NF.
Detailed Location: MAPPED TO PROVIDED MAPS.

Ecological: SOUTHERN SYCAMORE ALDER RIPARIAN WITH OPENINGS OF COBBLE AND SAND BAR; SEVERAL ARTIFICIAL SWIMMING HOLES CREATED BY RECREATIONAL USERS. TWO-STRIPED GARTER SNAKE ALSO FOUND IN A PORTION OF THIS SITE.
General: 1996: 6 ADULTS OBS 25 APR; 16 ADS & 1 JUV OBS 2 MAY; AMPLEXING PAIR OBS 30 MAY, FRESH EGG MASS & MALE TOAD PRESENT LATER SAME DAY, EGGS DESTROYED BY 3 JUN; 2 ADS & 1 JUV OBS 3 JUN. 2001: 6 ADS & 3 JUV OBS 25 APR-5 MAY; 2 ADS OBS 30 JUN.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	53	Map Index:	02339	EO Index:	44188	Element Last Seen:	1970-05-XX
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:		1970-05-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2000-11-02	
Quad Summary:	Pacifico Mountain (3411841)						
County Summary:	Los Angeles						
Lat/Long:	34.48986 / -118.02504	Accuracy:	specific area				
UTM:	Zone-11 N3816949 E405884	Elevation (ft):	3110				
PLSS:	T05N, R11W, Sec. 27 (S)	Acres:	51.2				
Location:	LITTLE ROCK CREEK BELOW LITTLE ROCK RESERVOIR, ANGELES NATIONAL FOREST.						
Detailed Location:	MAPPED TO COMMUNITY BELOW DAM DUE TO INSUFFICIENT SITE SPECIFIC INFORMATION.						
Ecological:	THIS AREA IS MAPPED AS MOJAVE RIPARIAN FOREST BY THE CNDDDB.						
General:	AT LEAST 1 TOAD OBSERVED, INDICATED AS PROBABLY EXTINCT.						
Owner/Manager:	USFS-ANGELES NF						
Occurrence No.	116	Map Index:	82359	EO Index:	83375	Element Last Seen:	1999-07-08
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1999-07-08	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-05-17	
Quad Summary:	Pacifico Mountain (3411841)						
County Summary:	Los Angeles						
Lat/Long:	34.46097 / -118.02976	Accuracy:	nonspecific area				
UTM:	Zone-11 N3813750 E405418	Elevation (ft):	3400				
PLSS:	T04N, R11W, Sec. 04 (S)	Acres:	53.0				
Location:	SANTIAGO CREEK, 0.5 MI S OF JOSHUA TREE CAMPGROUND, 2.1 MI E OF MT EMMA, ANGELES NATIONAL FOREST.						
Detailed Location:	ANNUAL MONITORING SITE, SANTIAGO CREEK AREA SITE #1 & #2. MAPPED TO PROVIDED MAP.						
Ecological:							
General:	UNKNOWN NUMBERS OF TADPOLES OBSERVED ON 1 JUL (AT NIGHT) & 8 JUL 1999.						
Owner/Manager:	USFS-ANGELES NF						
Occurrence No.	117	Map Index:	82360	EO Index:	83376	Element Last Seen:	1999-07-26
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1999-07-26	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-04-21	
Quad Summary:	Pacifico Mountain (3411841)						
County Summary:	Los Angeles						
Lat/Long:	34.44470 / -118.01129	Accuracy:	1/10 mile				
UTM:	Zone-11 N3811929 E407096	Elevation (ft):	3485				
PLSS:	T04N, R11W, Sec. 10 (S)	Acres:	0.0				
Location:	LITTLE ROCK CREEK, 0.8 MI NW OF BARE MOUNTAIN CANYON, ABOUT 2 MI DOWNSTREAM FROM LITTLE ROCK RESERVOIR, ANGELES NF.						
Detailed Location:	ANNUAL MONITORING SITE. SITE NAME: LITTLE ROCK CREEK AREA #4. MAPPED TO PROVIDED MAP.						
Ecological:							
General:	1999: 1 ADULT & 1 JUVENILE OBS ON 25 MAY; 3 JUVENILES OBS ON 8 JUN; NONE OBS ON 26 JUL (DAY); ONE ADULT & ONE JUVENILE OBS ON 26 JUL (NIGHT). SURVEY RESULTS ARE FOR THIS OCCURRENCE AND OCCURRENCE #118 (EOND 83377) LOCATED TO THE SE.						
Owner/Manager:	USFS-ANGELES NF						



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Occurrence No.	118	Map Index:	82361	EO Index:	83377	Element Last Seen:	1999-07-26
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1999-07-26	Record Last Updated:	2011-04-21
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Juniper Hills (3411748)						
County Summary:	Los Angeles						
Lat/Long:	34.43561 / -117.99447			Accuracy:	nonspecific area		
UTM:	Zone-11 N3810906 E408632			Elevation (ft):	3460		
PLSS:	T04N, R11W, Sec. 14 (S)			Acres:	25.0		
Location:	MOUTH OF BARE MOUNTAIN CANYON AT LITTLE ROCK CREEK, 1.6 MI NW OF SYCAMORE CAMPGROUND, 2 MI SE OF BASIN CAMPGROUND.						
Detailed Location:	ANNUAL MONITORING SITE. SITE NAME: LITTLE ROCK CREEK AREA #4. MAPPED TO PROVIDED MAP.						
Ecological:							
General:	1999: 1 ADULT & 1 JUVENILE OBS ON 25 MAY; 3 JUVENILES OBS ON 8 JUN; NONE OBS ON 26 JUL (DAY); ONE ADULT & ONE JUVENILE OBS ON 26 JUL (NIGHT). SURVEY RESULTS ARE FOR THIS OCCURRENCE AND OCCURRENCE #117 (EONDX 83376) LOCATED TO THE NW.						
Owner/Manager:	USFS-ANGELES NF						

<i>Rana draytonii</i>	Element Code: AAABH01022						
California red-legged frog							
Listing Status:	Federal:	Threatened	CNDDB Element Ranks:	Global:	G2G3		
	State:	None		State:	S2S3		
	Other:	CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable					
Habitat:	General:	LOWLANDS & FOOTHILLS IN OR NEAR PERMANENT SOURCES OF DEEP WATER WITH DENSE, SHRUBBY OR EMERGENT RIPARIAN VEGETATION.					
	Micro:	REQUIRES 11-20 WEEKS OF PERMANENT WATER FOR LARVAL DEVELOPMENT. MUST HAVE ACCESS TO ESTIVATION HABITAT.					

Occurrence No.	167	Map Index:	33439	EO Index:	1580	Element Last Seen:	1995-05-XX
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:	1995-05-XX	Record Last Updated:	1996-08-27
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Sleepy Valley (3411853)						
County Summary:	Los Angeles						
Lat/Long:	34.60652 / -118.26148			Accuracy:	80 meters		
UTM:	Zone-11 N3830132 E384336			Elevation (ft):	3020		
PLSS:	T06N, R13W, Sec. 16 (S)			Acres:	0.0		
Location:	RITTER RANCH, 9 MILES WEST OF PALMDALE.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF A POND FED BY ARTESIAN SPRINGS. VEGETATION CONSISTS OF RIPARIAN VEGETATION, PRIMARILY WILLOW; 20-30% CATTAILS/BULRUSH.						
General:	4 ADULTS OBSERVED IN MAY 1995; NO LARVAL RED-LEGGED FROGS WERE CAPTURED DURING EXTENSIVE POND SAMPLING (SEINING AND DIPNETTING).						
Owner/Manager:	PVT						



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Occurrence No.	1340	Map Index:	76852	EO Index:	77792	Element Last Seen:	2011-03-31
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2011-03-31	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-03-06	
Quad Summary:	Acton (3411842)						
County Summary:	Los Angeles						
Lat/Long:	34.44446 / -118.14834			Accuracy:	specific area		
UTM:	Zone-11 N3812037 E394505			Elevation (ft):	3030		
PLSS:	T04N, R12W, Sec. 09 (S)			Acres:	83.0		
Location:	ALONG ALISO CANYON, 0.75 TO 1.5 MI SSE OF BLUM RANCH, ANGELES NF.						
Detailed Location:	E OF ALISO CANYON RD, NEAR THE HEADWATERS OF SANTA CLARA RIVER. MAPPED TO PROVIDED COORDINATES.						
Ecological:	POOLS WITHIN A NARROW DRAINAGE THAT APPEARED BURNED IN THE PAST. RECOVERING COTTONWOOD/WILLOW RIPARIAN HABITAT EXISTED. POOLS WERE ROCK-LINED & SUPPORTED PERENNIAL WATER. GOLDFISH WAS PRESENT.						
General:	2 ADULTS OBSERVED IN ADJACENT POOLS 23 SEP 2009. 8 MALES, 5 FEMALES, AND 7 UNKNOWN SEX OBSERVED BETWEEN 19 APR-8 JUL 2010. 1 FEMALE AND 3 UNKNOWN SEX OBSERVED BETWEEN 10 FEB-31 MAR 2011.						
Owner/Manager:	USFS-ANGELES NF						

Occurrence No.	1361	Map Index:	85349	EO Index:	86372	Element Last Seen:	2011-07-05
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2011-07-05	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-03-13	
Quad Summary:	Acton (3411842)						
County Summary:	Los Angeles						
Lat/Long:	34.43691 / -118.13685			Accuracy:	specific area		
UTM:	Zone-11 N3811187 E395552			Elevation (ft):	3170		
PLSS:	T04N, R12W, Sec. 16 (S)			Acres:	35.0		
Location:	ALONG ALISO CANYON, VICINITY OF BM 3245 AND BEARTRAP CANYON, ABOUT 1.75 MI WSW OF KENTUCKY SPRINGS.						
Detailed Location:	MAPPED TO PROVIDED SHAPEFILES.						
Ecological:							
General:	2 ADULT FEMALES, 3 ADULT MALES, 21 ADULTS OF UNKNOWN SEX, 3 JUVENILE, AND 1 EGG MASS OBSERVED BETWEEN 23 APR-30 JUN 2010. 2 ADULT FEMALES, 7 ADULT MALES, 13 ADULTS OF UNKNOWN SEX, AND A 20CM EGG MASS OBSERVED BETWEEN 30 APR-5 JUL 2011.						
Owner/Manager:	UNKNOWN						

<i>Rana muscosa</i>		Element Code: AAABH01330
southern mountain yellow-legged frog		
Listing Status:	Federal: Endangered	CNDDB Element Ranks: Global: G1
	State: Endangered	State: S1
Other:	CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, USFS_S-Sensitive	
Habitat:	General: FEDERAL LISTING REFERS TO POPULATIONS IN THE SAN GABRIEL, SAN JACINTO & SAN BERNARDINO MOUNTAINS (SOUTHERN DPS). NORTHERN DPS WAS DETERMINED TO WARRENT LISTING AS ENDANGERED, APR 2014, EFFECTIVE JUN 30, 2014.	
	Micro: ALWAYS ENCOUNTERED WITHIN A FEW FEET OF WATER. TADPOLES MAY REQUIRE 2 - 4 YRS TO COMPLETE THEIR AQUATIC DEVELOPMENT.	



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Occurrence No.	43	Map Index: 42586	EO Index: 42586	Element Last Seen: 1953-05-01
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 1953-05-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2014-02-28

Quad Summary: Juniper Hills (3411748)

County Summary: Los Angeles

Lat/Long:	34.41804 / -117.97246	Accuracy:	2/5 mile
UTM:	Zone-11 N3808938 E410635	Elevation (ft):	4000
PLSS:	T04N, R10W, Sec. 19 (S)	Acres:	0.0

Location: SYCAMORE CAMPGROUND, LITTLE ROCK CREEK, SAN GABRIEL MOUNTAINS.

Detailed Location:

Ecological:

General: OCCURRENCE KNOWN FROM ZWEIFEL COLLECTIONS FROM 1951 AND 1953. USGS CONSIDERS THIS POPULATION POSSIBLY EXTIRPATED.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	44	Map Index: 42587	EO Index: 42587	Element Last Seen: 1911-04-11
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 1911-04-11
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2014-02-28

Quad Summary: Juniper Hills (3411748)

County Summary: Los Angeles

Lat/Long:	34.38988 / -117.94161	Accuracy:	2/5 mile
UTM:	Zone-11 N3805788 E413442	Elevation (ft):	4700
PLSS:	T04N, R10W, Sec. 32 (S)	Acres:	0.0

Location: ALONG LITTLE ROCK CREEK, 2 MILES SE OF CONFLUENCE WITH SOUTH FORK LITTLE ROCK CREEK, SAN GABRIEL MOUNTAINS.

Detailed Location: LOCALITY DESCRIBED BY COLLECTOR AS LITTLE ROCK CANYON, 4700 FEET. MAPPED BY CNDDDB ALONG LITTLE ROCK CREEK NEAR THE POINT WHERE IT CROSSES 4700 FEET IN ELEVATION.

Ecological:

General: OCCURRENCE KNOWN FROM TWO CAMP COLLECTIONS FROM 1911. USGS CONSIDERS THIS POPULATION POSSIBLY EXTIRPATED.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	46	Map Index: 42602	EO Index: 42602	Element Last Seen:	1970-07-23
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	2000-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-02-28
Quad Summary:	Valyermo (3411747)				
County Summary:	Los Angeles				
Lat/Long:	34.40879 / -117.86288		Accuracy:	nonspecific area	
UTM:	Zone-11 N3807820 E420697		Elevation (ft):		
PLSS:	T04N, R09W, Sec. 30 (S)		Acres:	92.8	
Location:	PUNCHBOWL CANYON, SAN GABRIEL MOUNTAINS, ABOUT 2 MILES SOUTH OF VALYERMO.				
Detailed Location:					
Ecological:					
General:	3 ADULTS COLLECTED BY H. ADAMS & M. RUGGLES ON 23 JUL 1970. AREA SURVEYED BY USGS IN 2000 AND NO FROGS FOUND.				
Owner/Manager:	USFS-ANGELES NF, LAX COUNTY				
Occurrence No.	48	Map Index: 42607	EO Index: 42607	Element Last Seen:	1969-05-24
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1969-05-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-02-28
Quad Summary:	Pacifico Mountain (3411841)				
County Summary:	Los Angeles				
Lat/Long:	34.45468 / -118.01703		Accuracy:	nonspecific area	
UTM:	Zone-11 N3813041 E406581		Elevation (ft):	3360	
PLSS:	T04N, R11W, Sec. 03 (S)		Acres:	26.4	
Location:	ALONG LITTLE ROCK CREEK ABOUT 1 MILE SOUTH OF LITTLE ROCK RESERVOIR, SAN GABRIEL MOUNTAINS.				
Detailed Location:					
Ecological:					
General:	OCCURRENCE KNOWN FROM TWO 1969 COLLECTIONS BY LONG AND ISAKSEN. ALTHOUGH THERE ARE FROGS IN OTHER PARTS OF LITTLE ROCK CREEK, THIS SECTION HAS A LARGE TROUT POPULATION. USGS CONSIDERS THIS POPULATION POSSIBLY EXTIRPATED.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	85	Map Index: 42967	EO Index: 42967	Element Last Seen:	1943-06-14
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	1943-06-14
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-04-02
Quad Summary:	Valyermo (3411747)				
County Summary:	Los Angeles				
Lat/Long:	34.44795 / -117.85375		Accuracy:	nonspecific area	
UTM:	Zone-11 N3812156 E421573		Elevation (ft):	3700	
PLSS:	T04N, R09W, Sec. 07 (S)		Acres:	281.2	
Location:	BIG ROCK CREEK, VALYERMO, NORTH SIDE OF SAN GABRIEL MOUNTAINS.				
Detailed Location:	MAPPED BY CNDDDB ALONG BIG ROCK CREEK IN THE VICINITY OF VALYERMO.				
Ecological:					
General:	OCCURRENCE KNOWN FROM A SET OF 14 JUN 1943 COLLECTIONS BY COWLES. USGS CONSIDERS THIS POPULATION EXTIRPATED.				
Owner/Manager:	UNKNOWN				



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Occurrence No.	86	Map Index: 42968	EO Index: 42968	Element Last Seen:	2003-07-22
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2004-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-04-02
Quad Summary:	Valyermo (3411747)				
County Summary:	Los Angeles				
Lat/Long:	34.41211 / -117.82435		Accuracy:	nonspecific area	
UTM:	Zone-11 N3808160 E424240		Elevation (ft):	4270	
PLSS:	T04N, R09W, Sec. 21 (S)		Acres:	49.0	
Location:	BIG ROCK CREEK NEAR SYCAMORE FLAT CAMPGROUND, SAN GABRIEL MOUNTAINS.				
Detailed Location:	MAPPED TO PROVIDED COORDINATES AND COLLECTION LOCALITIES.				
Ecological:					
General:	COLLECTED IN THIS VICINITY IN 1946, 1947, AND 1959. 6 FROGS AND 1 EGG MASS OBSERVED 30 APR; 15 FROGS AND LARVAE OBSERVED 30 JUN; 15 FROGS, 1 METAMORPH, AND 1 EGG MASS OBSERVED 22 JUL 2003. 0 DETECTED DURING 2004 SURVEYS.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	87	Map Index: 42969	EO Index: 42969	Element Last Seen:	1959-08-07
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1959-08-07
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-04-02
Quad Summary:	Juniper Hills (3411748), Pacifico Mountain (3411841)				
County Summary:	Los Angeles				
Lat/Long:	34.43724 / -117.99736		Accuracy:	nonspecific area	
UTM:	Zone-11 N3811089 E408368		Elevation (ft):	3600	
PLSS:	T04N, R11W, Sec. 14 (S)		Acres:	83.8	
Location:	LITTLE ROCK CREEK NEAR BARE MOUNTAIN CANYON, SAN GABRIEL MOUNTAINS.				
Detailed Location:	MAPPED BY CNDDDB ALONG LITTLE ROCK CREEK ACCORDING TO COLLECTIONS LOCALITIES DESCRIBED AS "LITTLE ROCK CREEK AT BARE MT. CREEK," "3.6 MI SSE LITTLE ROCK DAM," AND "LITTLE ROCK CANYON; 2.5 MI. N. SYCAMORE CAMP GROUND."				
Ecological:					
General:	OCCURRENCE KNOWN FROM COLLECTIONS MADE IN 1951, 1953, AND 1959. ALTHOUGH THERE ARE FROGS IN OTHER PARTS OF LITTLE ROCK CREEK, THIS SECTION HAS A LARGE TROUT POPULATION. USGS CONSIDERS THIS POPULATION POSSIBLY EXTIRPATED.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	109	Map Index: 73966	EO Index: 74962	Element Last Seen:	2012-08-21
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2012-08-21
Occ. Type:	Natural/Native occurrence		Trend: Stable	Record Last Updated:	2014-04-29

Quad Summary: Crystal Lake (3411737), Valyermo (3411747)

County Summary: Los Angeles

Lat/Long:	34.38159 / -117.83064	Accuracy:	nonspecific area
UTM:	Zone-11 N3804780 E423635	Elevation (ft):	5020
PLSS:	T03N, R09W, Sec. 04 (S)	Acres:	130.0

Location: SOUTH FORK BIG ROCK CREEK, UPSTREAM (SOUTH) FROM SOUTH FORK CAMPGROUND, AND 1.5 MILES WNW OF MT LEWIS, ANGELES NF.

Detailed Location: MAPPED TO PROVIDED COORDINATES & MAPS ALONG PORTION OF S FK BIG ROCK CREEK & TRIB UP MT LEWIS. USGS MONITORING SITE. POPULATION #S ARE THE MINIMUM NUMBER OF ADULT, JUVENILE, AND/OR METAMORPHS CONFIRMED PER YEAR. TADPOLES WERE ALSO OBSERVED.

Ecological: TWO-STRIPPED GARTER SNAKE (THAMNOPHIS HAMMONDII) ALSO OBSERVED IN 2001 AND 2004. STREAM SHIFTED IN 2003, ALLOWING TROUT TO BYPASS FISH BARRIER. MAJORITY OF POPULATION LOCATED IN UPPER REACHES, ABOVE FISH BARRIER, ALONG TRIBUTARY.

General: 2 OBS 2000. 15+ OBSERVED IN 2001. 74 OBS IN 2002. 85+ AND 3 EGG MASSES OBS IN 2003. 100+ OBS IN 2004. 17+ OBS IN 2005. 20+ OBS IN 2006. 20+ OBS IN 2007. 12+ OBS IN 2008. 110+ OBS IN 2009. 123+ OBS IN 2010. 66+ OBS IN 2011. 70+ OBS IN 2012.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	176	Map Index: 86611	EO Index: 87611	Element Last Seen:	2011-06-27
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-06-27
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-08-28

Quad Summary: Valyermo (3411747)

County Summary: Los Angeles

Lat/Long:	34.39563 / -117.82246	Accuracy:	nonspecific area
UTM:	Zone-11 N3806330 E424400	Elevation (ft):	4540
PLSS:	T04N, R09W, Sec. 28 (S)	Acres:	15.0

Location: SOUTH FORK CAMPGROUND, ALONG SOUTH FORK BIG ROCK CREEK, ABOUT 0.9 MI W OF PARADISE SPRINGS, 1.8 MI NW OF MOUNT LEWIS.

Detailed Location: MAPPED TO PROVIDED COORDINATES.

Ecological:

General: 2 MOUNTAIN YELLOW-LEGGED FROGS OBSERVED ON 27 JUN 2011.

Owner/Manager: USFS-ANGELES NF



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Gymnogyps californianus

Element Code: ABNKA03010

California condor

Listing Status:	Federal: Endangered	CNDDB Element Ranks:	Global: G1
	State: Endangered		State: S1
Habitat:	Other: ABC_WLBCC-Watch List of Birds of Conservation Concern, CDF_S-Sensitive, IUCN_CR-Critically Endangered		
	General: REQUIRE VAST EXPANSES OF OPEN SAVANNAH, GRASSLANDS, AND FOOTHILL CHAPARRAL IN MOUNTAIN RANGES OF MODERATE ALTITUDE.		
	Micro: DEEP CANYONS CONTAINING CLEFTS IN THE ROCKY WALLS PROVIDE NESTING SITES. FORAGES UP TO 100 MILES FROM ROOST/NEST.		

Occurrence No.	1	Map Index: 00018	EO Index: 14756	Element Last Seen:	1976-12-21
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1976-12-21
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10

Quad Summary: Piru (3411847), Fillmore (3411848), Cobblestone Mtn. (3411857), Devils Heart Peak (3411858), Black Mtn. (3411867), Alamo Mountain (3411868), Santa Paula Peak (3411941), Topatopa Mountains (3411951), Lion Canyon (3411952), Wheeler Springs (3411953), Lockwood Valley (3411961), San Guillermo (3411962), Reyes Peak (3411963)

County Summary: Los Angeles, Ventura

Lat/Long:	34.55437 / -119.03678	Accuracy:	specific area
UTM:	Zone-11 N3825510 E313124	Elevation (ft):	2900
PLSS:	T05N, R21W, Sec. 01 (S)	Acres:	181581.4

Location: SESPE-PIRU CONDOR AREA.

Detailed Location:

Ecological:

General: YEAR-LONG USE; NESTING AND ROOSTING.

Owner/Manager: USFS-LOS PADRES NF, PVT

Occurrence No.	8	Map Index: 00797	EO Index: 14753	Element Last Seen:	1976-06-29
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1976-06-29
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10

Quad Summary: Whitaker Peak (3411856), Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.64682 / -118.66070	Accuracy:	specific area
UTM:	Zone-11 N3835132 E347802	Elevation (ft):	3200
PLSS:	T06N, R17W, Sec. 03 (S)	Acres:	10253.7

Location: REDROCK MTN

Detailed Location: INCLUDES T07N, R17W: SECTIONS 25-28, 33, 34, AND 36; T06N, R17W: SECTIONS 1-4 AND 9-12.

Ecological:

General: NESTING AND ROOSTING AREA; YEAR-LONG USE.

Owner/Manager: USFS-ANGELES NF



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<i>Haliaeetus leucocephalus</i>		Element Code: ABNKC10010	
bald eagle			
Listing Status:	Federal: Delisted	CNDDDB Element Ranks:	Global: G5
	State: Endangered		State: S2
Other:	BLM_S-Sensitive, CDF_S-Sensitive, CDFW_FP-Fully Protected, IUCN_LC-Least Concern, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern		
Habitat:	General: OCEAN SHORE, LAKE MARGINS, & RIVERS FOR BOTH NESTING & WINTERING. MOST NESTS WITHIN 1 MI OF WATER.		
	Micro: NESTS IN LARGE, OLD-GROWTH, OR DOMINANT LIVE TREE W/OPEN BRANCHES, ESPECIALLY PONDEROSA PINE. ROOSTS COMMUNALLY IN WINTER.		

Occurrence No.	348	Map Index:	88062	EO Index:	89076	Element Last Seen:	2009-01-10
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:			2009-01-10
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2013-02-07

Quad Summary: Lake Hughes (3411864)
County Summary: Los Angeles

Lat/Long:	34.66690 / -118.40180	Accuracy:	80 meters
UTM:	Zone-11 N3836998 E371562	Elevation (ft):	3288
PLSS:	T07N, R14W, Sec. 30 (S)	Acres:	0.0

Location: NORTH SHORE OF ELIZABETH LAKE, ABOUT 0.4 MI WSW OF MUNZ RANCH RD & CO HWY N2 INTERSECTION, 1.9 MI OF NNE GRASS MOUNTAIN.
Detailed Location: MAPPED TO PROVIDED COORDINATES. NEAR CENTER OF NORTHERN SHORE. CO HWY N2 ALSO KNOWN AS ELIZABETH LAKE RD.
Ecological: RIPARIAN AREA ALONG THE EDGE OF LAKE. EAGLE SPOTTED IN COTTONWOOD TREE.
General: 1 WINTERING ADULT BALD EAGLE OBSERVED "NEAR THE DISCONTINUOUS DAM THAT BISECTS THE LAKE" 10 JAN 2009. A "SECOND OR THIRD YEAR" BALD EAGLE WAS OBSERVED IN AREA APPROXIMATELY THREE WEEKS PRIOR.
Owner/Manager: PVT



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<i>Accipiter cooperii</i>		Element Code: ABNKC12040	
Cooper's hawk			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5
	State: None		State: S3
	Other: CDFW_WL-Watch List, IUCN_LC-Least Concern		
Habitat:	General: WOODLAND, CHIEFLY OF OPEN, INTERRUPTED OR MARGINAL TYPE.		
	Micro: NEST SITES MAINLY IN RIPARIAN GROWTHS OF DECIDUOUS TREES, AS IN CANYON BOTTOMS ON RIVER FLOOD-PLAINS; ALSO, LIVE OAKS.		

Occurrence No.	35	Map Index:	02212	EO Index:	27351	Element Last Seen:	1921-01-06
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1921-01-06	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1989-08-10	

Quad Summary:	Palmdale (3411851)
County Summary:	Los Angeles

Lat/Long:	34.58637 / -118.11591	Accuracy:	1/5 mile
UTM:	Zone-11 N3827740 E397658	Elevation (ft):	2650
PLSS:	T06N, R12W, Sec. 26 (S)	Acres:	0.0

Location:	PALMDALE.
Detailed Location:	
Ecological:	
General:	UCLA #J24.
Owner/Manager:	UNKNOWN

<i>Buteo swainsoni</i>		Element Code: ABNKC19070	
Swainson's hawk			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5
	State: Threatened		State: S3
	Other: ABC_WLBCC-Watch List of Birds of Conservation Concern, BLM_S-Sensitive, IUCN_LC-Least Concern, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern		
Habitat:	General: BREEDS IN GRASSLANDS WITH SCATTERED TREES, JUNIPER-SAGE FLATS, RIPARIAN AREAS, SAVANNAHS, & AGRICULTURAL OR RANCH LANDS WITH GROVES OR LINES OF TREES.		
	Micro: REQUIRES ADJACENT SUITABLE FORAGING AREAS SUCH AS GRASSLANDS, OR ALFALFA OR GRAIN FIELDS SUPPORTING RODENT POPULATIONS.		



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Occurrence No.	7	Map Index: 02503	EO Index: 27302	Element Last Seen: 1979-05-15
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1979-05-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2003-08-06

Quad Summary: Alpine Butte (3411768)

County Summary: Los Angeles

Lat/Long:	34.66692 / -117.89701	Accuracy:	1/5 mile
UTM:	Zone-11 N3836472 E417814	Elevation (ft):	2500
PLSS:	T07N, R10W, Sec. 25 (S)	Acres:	0.0

Location: 0.5 MILE SOUTH OF THE JUNCTION OF AVENUE K & 130TH STREET EAST, EAST OF LANCASTER.
Detailed Location: NEST TREE LOCATED 75 YARDS EAST OFF OF A DIRT ROAD.
Ecological: NEST TREE IS A JOSHUA TREE.
General: DFG SWHA #LA001. ONE ADULT OBSERVED AT THE NEST ON 15 MAY 1979; FORAGING OBSERVED IN SEC 25 AND 26.
Owner/Manager: PVT

Occurrence No.	800	Map Index: 42305	EO Index: 42305	Element Last Seen: 1999-07-06
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1999-07-06
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2000-05-10

Quad Summary: Lancaster East (3411861)

County Summary: Los Angeles

Lat/Long:	34.70507 / -118.03269	Accuracy:	nonspecific area
UTM:	Zone-11 N3840822 E405426	Elevation (ft):	2400
PLSS:	T07N, R11W, Sec. 10 (S)	Acres:	64.4

Location: ALONG AVENUE I, EAST OF 50TH STREET EAST, ANTELOPE VALLEY, 4 MILES EAST OF LANCASTER.
Detailed Location: RANCH HOUSE LOCATED DIRECTLY ACROSS THE STREET.
Ecological: NEST TREE IS A LOCUST, SURROUNDED BY AGRICULTURAL FIELDS.
General: NEST DISCOVERED ON 5 MAY 1996. 2 ADULTS AND 2 YOUNG OBSERVED AT THE NEST ON 4 JUL 1996. ADULT OBSERVED ON THE NEST ON 6 JUL 1999.
Owner/Manager: UNKNOWN

Occurrence No.	801	Map Index: 42483	EO Index: 42483	Element Last Seen: 1999-06-09
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 1999-06-09
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2000-03-02

Quad Summary: Alpine Butte (3411768)

County Summary: Los Angeles

Lat/Long:	34.70473 / -117.91643	Accuracy:	3/5 mile
UTM:	Zone-11 N3840681 E416073	Elevation (ft):	2440
PLSS:	T07N, R10W, Sec. 14 (S)	Acres:	0.0

Location: AVENUE I EAST AT 120TH STREET EAST, ANTELOPE VALLEY, EAST OF PALMDALE
Detailed Location:
Ecological: HABITAT CONSISTS OF AGRICULTURAL FIELDS.
General: ADULT OBSERVED DISPLAYING AGITATED BEHAVIOR ON 18 MAY 1999, AND AN ADULT OBSERVED NEAR THE SAME AREA ON 9 JUN 1999; NESTING PRESUMED, BUT EXACT NEST TREE LOCATION NOT KNOWN.
Owner/Manager: UNKNOWN



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Occurrence No.	1767	Map Index: 83463	EO Index: 84482	Element Last Seen:	2011-06-07
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-06-07
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2013-08-06

Quad Summary: Del Sur (3411863)

County Summary: Los Angeles

Lat/Long:	34.69765 / -118.34661	Accuracy:	80 meters
UTM:	Zone-11 N3840340 E376664	Elevation (ft):	2580
PLSS:	T07N, R14W, Sec. 15 (S)	Acres:	0.0

Location: 0.5 MI SSW OF W AVENUE I AT 120TH STREET W, ABOUT 11.3 MILES WEST OF LANCASTER PO.

Detailed Location: MAPPED TO PROVIDED COORDINATES.

Ecological: THE NEST WAS LOCATED ABOUT 20 FEET HIGH IN A COTTONWOOD TREE ADJACENT TO AN ORCHARD AND ALFALFA FIELDS.

General: 2 DEFENSIVE ADULTS OBSERVED ON 29 APR 2011. BIRDS OBSERVED AT NEST ON 5 MAY, AND IN INCUBATION POSTURE ON 7 JUN 2011; NEST LATER FAILED.

Owner/Manager: PVT

Occurrence No.	1777	Map Index: 85530	EO Index: 86530	Element Last Seen:	2012-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2012-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2013-08-06

Quad Summary: Alpine Butte (3411768)

County Summary: Los Angeles

Lat/Long:	34.69434 / -117.93439	Accuracy:	specific area
UTM:	Zone-11 N3839545 E414417	Elevation (ft):	2450
PLSS:	T07N, R10W, Sec. 16 (S)	Acres:	8.0

Location: ALONG 110TH ST E, 0.3 MI N OF E AVE J, ABOUT 7.7 MI WNW OF SADDLEBACK BUTTE STATE PARK.

Detailed Location: MAPPED TO PROVIDED COORDINATES.

Ecological: NESTS IN ROADSIDE ELMS. 2011-2012 NEST TREE SPECIES GIVEN AS LOCUST, PERHAPS MISIDENTIFIED. THE 2005-2009 MALE HAD BEEN BANDED AS A NESTLING IN 1997, THE FEMALE AS A NESTLING IN 1998.

General: BANDED MALE OBSERVED NEAR NEST WITH 2 YOUNG 11 JUL 2005. SAME MALE, AND BANDED FEMALE NEAR NEST WITH 1 YOUNG IN 2009. SUCCESSFUL NEST REPORTED IN 2010. 3 FLEDGED IN 2011. NEST FAILED DURING INCUBATION IN 2012, LIKELY DUE TO HIGH WINDS.

Owner/Manager: UNKNOWN



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Occurrence No.	2415	Map Index: 89911	EO Index: 90922	Element Last Seen:	2012-XX-XX
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2012-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2013-08-09

Quad Summary: Alpine Butte (3411768)

County Summary: Los Angeles

Lat/Long:	34.70155 / -117.93408	Accuracy:	80 meters
UTM:	Zone-11 N3840344 E414453	Elevation (ft):	2435
PLSS:	T07N, R10W, Sec. 15 (S)	Acres:	0.0

Location: 110TH STREET E ABOUT 0.2 MILES SOUTH OF E AVENUE I, 5.25 MILES NNW OF ALPINE BUTTE AND EAST OF LANCASTER.
Detailed Location: MAPPED TO COORDINATES GIVEN FOR TERRITORY SWH-LA-006.
Ecological: NEST TREE SPECIES RECORDED AS LOCUST. LOCUSTS USED FOR NESTING MATERIAL, JOSHUA TREES FOR ROOSTING.
General: COURTSHIP DISPLAYS OBSERVED 8 MAY 2012. ACTIVE NEST OBSERVED DURING 2012 SURVEYS LATER FAILED, LIKELY DUE TO HIGH WINDS.
Owner/Manager: UNKNOWN

Occurrence No.	2416	Map Index: 89912	EO Index: 90923	Element Last Seen:	2012-07-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2012-07-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2013-08-06

Quad Summary: Alpine Butte (3411768)

County Summary: Los Angeles

Lat/Long:	34.74375 / -117.96753	Accuracy:	1/10 mile
UTM:	Zone-11 N3845053 E411434	Elevation (ft):	2365
PLSS:	T08N, R10W, Sec. 32 (S)	Acres:	0.0

Location: ABOUT 0.2 MILES NE OF 90TH STREET E AT E AVENUE F-8, ABOUT 8.7 MILES NNW OF ALPINE BUTTE, NE OF LANCASTER.
Detailed Location: MAPPED TO COORDINATES GIVEN FOR TERRITORY SWH-LA-005.
Ecological: NEST WAS IN ELM, IN HABITAT DESCRIBED AS "RURAL/AGRICULTURAL AT RISK."
General: TERRITORY DISCOVERED IN MAY 2012, SINGLE CHICK PRESENT IN EARLY JUL, CHICK AND ADULT FEMALE LATER FOUND DEAD OF APPARENTLY NATURAL CAUSES (ADULT SNARED IN BRANCHES, CHICK PREDATED).
Owner/Manager: UNKNOWN



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Occurrence No.	2432	Map Index:	21923	EO Index:	90972	Element Last Seen:	1927-05-08
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1927-05-08	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-08-07	

Quad Summary: Palmdale (3411851), Ritter Ridge (3411852)

County Summary: Los Angeles

Lat/Long:	34.57949 / -118.11653	Accuracy:	1 mile
UTM:	Zone-11 N3826978 E397593	Elevation (ft):	2660
PLSS:	T06N, R12W, Sec. 26 (S)	Acres:	0.0

Location: PALMDALE.

Detailed Location: MAPPED TO VICINITY OF PALMDALE, PER SPECIMEN LOCALITY; EXACT COLLECTION LOCATION UNKNOWN.

Ecological: 1921 NEST 12' UP IN "YUCCA PALM," STICKS LINED WITH YUCCA FIBERS. 1927 NEST 18' UP IN "YUCCA PALM," 1' WIDE X 4" DEEP, BUILT PRIMARILY OF STICKS WITH DRIED JOSHUA TREE SPINES & YUCCA FIBERS. AREA HAS UNDERGONE EXTENSIVE DEVELOPMENT.

General: PIERCE COLLECTED 3 EGGS IN 1921 (WFVZ#97252). COLLECTED 3 EGGS IN 1927 (WFVZ#97260); "BIRDS NEAR & SCREAMED."

Owner/Manager: UNKNOWN

Occurrence No.	2661	Map Index:	27633	EO Index:	91832	Element Last Seen:	1978-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-12-12	

Quad Summary: Lancaster East (3411861), Lancaster West (3411862)

County Summary: Los Angeles

Lat/Long:	34.69828 / -118.13809	Accuracy:	1 mile
UTM:	Zone-11 N3840173 E395765	Elevation (ft):	2400
PLSS:	T07N, R12W, Sec. 15 (S)	Acres:	0.0

Location: LANCASTER.

Detailed Location: MAPPED GENERALLY TO LANCASTER PER LOCALITY GIVEN IN REPORT, "NEAR LANCASTER." EXACT COLLECTION LOCATION UNKNOWN.

Ecological: NEST TREE WAS A COTTONWOOD.

General: ACTIVE NEST OBSERVED BY GARRETT IN 1978, 2 YOUNG FLEDGED.

Owner/Manager: UNKNOWN

Buteo regalis

Element Code: ABNKC19120

ferruginous hawk

Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G4
	State: None		State: S3S4

Other: CDFW_WL-Watch List, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern

Habitat: **General:** OPEN GRASSLANDS, SAGEBRUSH FLATS, DESERT SCRUB, LOW FOOTHILLS & FRINGES OF PINYON-JUNIPER HABITATS.

Micro: EATS MOSTLY LAGOMORPHS, GROUND SQUIRRELS, AND MICE. POPULATION TRENDS MAY FOLLOW LAGOMORPH POPULATION CYCLES.



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Occurrence No.	17	Map Index: 66004	EO Index: 66083	Element Last Seen:	1998-12-21
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	1998-12-21
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-08-23
Quad Summary:	Del Sur (3411863)				
County Summary:	Los Angeles				
Lat/Long:	34.68932 / -118.28794		Accuracy:	80 meters	
UTM:	Zone-11 N3839346 E382026		Elevation (ft):	2420	
PLSS:	T07N, R13W, Sec. 17 (S)		Acres:	0.0	
Location:	EAST OF LANCASTER, DEL SUR, NEAR CORNER OF AVENUE J AND 90TH ST WEST.				
Detailed Location:	BIRD PERCHED ON TELEPHONE POLE.				
Ecological:	ABANDONED AGRICULTURAL FIELD.				
General:	WINTERING SITE. 1 JUVENILE OBSERVED ON 21 DEC 1998.				
Owner/Manager:	UNKNOWN				
Occurrence No.	18	Map Index: 66005	EO Index: 66084	Element Last Seen:	1998-12-21
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	1998-12-21
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-08-23
Quad Summary:	Lancaster West (3411862)				
County Summary:	Los Angeles				
Lat/Long:	34.73339 / -118.24584		Accuracy:	80 meters	
UTM:	Zone-11 N3844184 E385943		Elevation (ft):	2370	
PLSS:	T08N, R13W, Sec. 34 (S)		Acres:	0.0	
Location:	ABOUT 5.8 MI NW OF LANCASTER, MIDWAY BETWEEN 60TH ST WEST AND 70TH ST WEST ON AVENUE G.				
Detailed Location:	BIRD PERCHED ON TELEPHONE POLE.				
Ecological:	OLD AGRICULTURAL FIELD.				
General:	WINTERING SITE. 1 ADULT OBSERVED ON 21 DEC 1998.				
Owner/Manager:	UNKNOWN				
Occurrence No.	20	Map Index: 66009	EO Index: 66088	Element Last Seen:	1999-01-29
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	1999-01-29
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-08-23
Quad Summary:	Lancaster West (3411862)				
County Summary:	Los Angeles				
Lat/Long:	34.70376 / -118.24904		Accuracy:	80 meters	
UTM:	Zone-11 N3840902 E385610		Elevation (ft):	2360	
PLSS:	T07N, R13W, Sec. 15 (S)		Acres:	0.0	
Location:	ABOUT 5 MI WEST OF LANCASTER ON AVENUE I, ~0.25 MI EAST OF 70TH ST WEST.				
Detailed Location:					
Ecological:	AGRICULTURE LAND, ALFALFA FIELDS. THIS IS A KNOWN WINTERING AREA FOR MANY RAPTORS.				
General:	WINTERING & FORAGING SITE. 1 JUVENILE OBSERVED ON 29 JAN 1999.				
Owner/Manager:	UNKNOWN				



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Occurrence No.	88	Map Index: 83486	EO Index: 84513	Element Last Seen:	2008-04-14
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2008-04-14
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-08-10

Quad Summary: Lancaster East (3411861)
County Summary: Los Angeles

Lat/Long:	34.66367 / -118.05451	Accuracy:	80 meters
UTM:	Zone-11 N3836253 E403380	Elevation (ft):	2450
PLSS:	T07N, R11W, Sec. 28 (S)	Acres:	0.0

Location: 0.3 MILES NE OF 40TH STREET E AT E AVENUE L, ABOUT 5.5 MILES ESE OF LANCASTER PO.
Detailed Location: MAPPED TO PROVIDED COORDINATES.
Ecological: AREA DESCRIBED AS ABANDONED AGRICULTURE WITH TRASH.
General: ONE ADULT OVER-WINTERING WAS OBSERVED PERCHED AND PRESUMED FORAGING ON 14 APR 2008.
Owner/Manager: UNKNOWN

Occurrence No.	89	Map Index: 83487	EO Index: 84514	Element Last Seen:	2011-01-22
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-01-22
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-08-10

Quad Summary: Del Sur (3411863)
County Summary: Los Angeles

Lat/Long:	34.65382 / -118.27484	Accuracy:	80 meters
UTM:	Zone-11 N3835394 E383176	Elevation (ft):	2630
PLSS:	T07N, R13W, Sec. 32 (S)	Acres:	0.0

Location: ON POWERLINE TOWER ABOUT 0.9 MI ESE OF 90TH STREET W AT W AVENUE L, ABOUT 7.5 MI WSW OF THE LANCASTER PO.
Detailed Location: MAPPED TO PROVIDED COORDINATES.
Ecological: FORAGING AND OVER-WINTERING PEREGRINE FALCON AND NORTHERN HARRIER ALSO OBSERVED WITHIN 0.5 MILES.
General: ONE INDIVIDUAL WAS OBSERVED OVER-WINTERING ON 22 JAN 2011. ALTHOUGH NOT STATED BY SOURCE, IT APPEARS FROM AERIAL IMAGES THAT THE BIRD WAS LIKELY PERCHED IN A POWERLINE TOWER.
Owner/Manager: UNKNOWN

Occurrence No.	90	Map Index: 83490	EO Index: 84515	Element Last Seen:	2010-12-06
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-12-06
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-08-10

Quad Summary: Del Sur (3411863)
County Summary: Los Angeles

Lat/Long:	34.69426 / -118.33484	Accuracy:	1/10 mile
UTM:	Zone-11 N3839950 E377737	Elevation (ft):	2550
PLSS:	T07N, R14W, Sec. 14 (S)	Acres:	0.0

Location: 0.5 MI NE OF W AVE J AT 120TH STREET W, ABOUT 10.5 MILES WEST OF THE LANCASTER PO.
Detailed Location: MAPPED TO PROVIDED COORDINATES.
Ecological: SEVERAL OTHER DETECTIONS OF WINTERING AND FORAGING FERRUGINOUS HAWKS AND NORTHERN HARRIERS, AS WELL AS NESTING SWAINSON'S HAWKS IN AREA.
General: ONE OVER-WINTERING INDIVIDUAL WAS OBSERVED ON 6 DEC 2010.
Owner/Manager: UNKNOWN



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Occurrence No.	91	Map Index: 83492	EO Index: 84516	Element Last Seen:	2011-01-26
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-01-26
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-08-10
Quad Summary:	Del Sur (3411863)				
County Summary:	Los Angeles				
Lat/Long:	34.70373 / -118.33721		Accuracy:	1/10 mile	
UTM:	Zone-11 N3841003 E377535		Elevation (ft):	2535	
PLSS:	T07N, R14W, Sec. 11 (S)		Acres:	0.0	
Location:	ALONG W AVE I 0.25 MI EAST OF 120TH STREET W, ABOUT 10.75 MI WEST OF THE LANCASTER PO.				
Detailed Location:	MAPPED TO PROVIDED COORDINATES.				
Ecological:	SEVERAL OTHER DETECTIONS OF FLYING, FORAGING, OVER-WINTERING, AND NESTING RAPTORS NEARBY INCLUDING SWAINSON'S HAWK AND NORTHERN HARRIER.				
General:	2 INDIVIDUALS WERE OBSERVED IN THE PROJECT SITE ON 26 JAN 2011.				
Owner/Manager:	UNKNOWN				
Occurrence No.	92	Map Index: 83493	EO Index: 84518	Element Last Seen:	2011-02-28
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-02-28
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-08-10
Quad Summary:	Del Sur (3411863)				
County Summary:	Los Angeles				
Lat/Long:	34.71502 / -118.32445		Accuracy:	80 meters	
UTM:	Zone-11 N3842239 E378720		Elevation (ft):	2500	
PLSS:	T07N, R14W, Sec. 11 (S)		Acres:	0.0	
Location:	ALONG 110TH STREET W ABOUT 0.75 MI NORTH OF W AVENUE I, ABOUT 10.25 MI WNW OF THE LANCASTER PO.				
Detailed Location:	MAPPED TO PROVIDED COORDINATES.				
Ecological:	SEVERAL OTHER DETECTIONS OF FLYING AND FORAGING FERRUGINOUS HAWKS NEARBY, AS WELL AS FORAGING SWAINSON'S HAWK & NORTHERN HARRIER, AND WINTERING MOUNTAIN PLOVER.				
General:	ONE INDIVIDUAL WAS OBSERVED HUNTING FROM TELEPHONE POLE ON 28 FEB 2011.				
Owner/Manager:	UNKNOWN				
Occurrence No.	93	Map Index: 83495	EO Index: 84519	Element Last Seen:	2011-03-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-03-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-08-10
Quad Summary:	Del Sur (3411863)				
County Summary:	Los Angeles				
Lat/Long:	34.72443 / -118.33179		Accuracy:	nonspecific area	
UTM:	Zone-11 N3843292 E378062		Elevation (ft):	2530	
PLSS:	T07N, R14W, Sec. 02 (S)		Acres:	95.0	
Location:	ABOUT 0.6 MILES SW OF W AVENUE G AT 110TH STREET W, ABOUT 10.75 MILES WNW OF THE LANCASTER PO.				
Detailed Location:	MAPPED TO PROVIDED COORDINATES.				
Ecological:	MANY OTHER DETECTIONS OF FLYING FERRUGINOUS HAWKS IN THE AREA, AS WELL AS DETECTIONS OF FORAGING NORTHERN HARRIERS, WINTERING MOUNTAIN PLOVERS, AND FORAGING SWAINSON'S HAWKS.				
General:	9 DETECTIONS OF INDIVIDUALS OVER-WINTERING ON 29 NOV AND 7 DEC 2010; 5, 11, 13, 17, 21, & 25 JAN 2011, AND 2 MAR 2011.				
Owner/Manager:	UNKNOWN				



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Occurrence No.	94	Map Index: 83496	EO Index: 84520	Element Last Seen:	2011-01-24
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-01-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-08-10
Quad Summary:	Del Sur (3411863)				
County Summary:	Los Angeles				
Lat/Long:	34.73023 / -118.34486		Accuracy:	nonspecific area	
UTM:	Zone-11 N3843950 E376873		Elevation (ft):	2565	
PLSS:	T07N, R14W, Sec. 03 (S)		Acres:	35.0	
Location:	JUST OVER A MILE W OF 110TH ST W AT W AVE G, & ABOUT A MILE E OF ANTELOPE VALLEY POPPY RESERVE, 11.5 MI WNW OF LANCASTER				
Detailed Location:	MAPPED TO PROVIDED COORDINATES.				
Ecological:	SEVERAL OTHER DETECTIONS OF FLYING FERRUGINOUS HAWKS IN THE AREA AS WELL AS DETECTIONS OF PRAIRIE FALCON, SWAINSON'S HAWK, AND NORTHERN HARRIER.				
General:	3 OVER-WINTERING INDIVIDUALS DETECTED PERCHING IN TOWERS OR CONSTRUCTION AREA ON 5, 22, & 24 JAN 2011.				
Owner/Manager:	UNKNOWN				
Occurrence No.	95	Map Index: 83497	EO Index: 84521	Element Last Seen:	2011-01-18
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-01-18
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-08-10
Quad Summary:	Ritter Ridge (3411852)				
County Summary:	Los Angeles				
Lat/Long:	34.58498 / -118.20481		Accuracy:	1/10 mile	
UTM:	Zone-11 N3827681 E389503		Elevation (ft):	3080	
PLSS:	T06N, R13W, Sec. 25 (S)		Acres:	0.0	
Location:	ABOUT 0.3 MILES SOUTH OF ELIZABETH LAKE RD AT THE NORTHWEST END OF ANAVERDE VALLLEY, ABOUT 5 MI WEST OF THE PALMDALE PO.				
Detailed Location:	MAPPED TO PROVIDED COORDINATES.				
Ecological:	OTHER FORAGING FERRUGINOUS AND SWAINSON'S HAWKS OBSERVED FLYING NEARBY.				
General:	ONE OVER-WINTERING INDIVIDUAL WAS OBSERVED NEAR THE CONSTRUCTION SITE ON 18 JAN 2011.				
Owner/Manager:	UNKNOWN				
Occurrence No.	96	Map Index: 83498	EO Index: 84522	Element Last Seen:	2011-01-14
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-01-14
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-08-10
Quad Summary:	Ritter Ridge (3411852)				
County Summary:	Los Angeles				
Lat/Long:	34.57771 / -118.20430		Accuracy:	1/10 mile	
UTM:	Zone-11 N3826874 E389540		Elevation (ft):	3100	
PLSS:	T06N, R13W, Sec. 25 (S)		Acres:	0.0	
Location:	ON POWERLINE TOWER NEAR THE NW END OF ANA VERDE MOTORWAY, AND ABOUT 5 MILES WEST OF THE PALMDALE PO.				
Detailed Location:	MAPPED TO PROVIDED COORDINATES.				
Ecological:					
General:	ONE INDIVIDUAL OVER-WINTERING WAS OBSERVED HUNTING FROM POWERLINE TOWER ON 14 JAN 2011.				
Owner/Manager:	UNKNOWN				



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<i>Aquila chrysaetos</i>		Element Code: ABNKC22010	
golden eagle			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5
	State: None		State: S3
Other:	BLM_S-Sensitive, CDF_S-Sensitive, CDFW_FP-Fully Protected, CDFW_WL-Watch List, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern		
Habitat:	General: ROLLING FOOTHILLS, MOUNTAIN AREAS, SAGE-JUNIPER FLATS, & DESERT.		
	Micro: CLIFF-WALLED CANYONS PROVIDE NESTING HABITAT IN MOST PARTS OF RANGE; ALSO, LARGE TREES IN OPEN AREAS.		

Occurrence No.	315	Map Index:	87831	EO Index:	88805	Element Last Seen:	1965-03-01
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1965-03-01	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-01-07	
Quad Summary:	Acton (3411842)						
County Summary:	Los Angeles						
Lat/Long:	34.45080 / -118.15120		Accuracy:	1 mile			
UTM:	Zone-11 N3812743 E394250		Elevation (ft):	3150			
PLSS:	T04N, R12W, Sec. 08 (S)		Acres:	0.0			
Location:	ALISO CANYON, 2.8 MILES SE OF ACTON POST OFFICE, 4 MILES E OF RAVENNA, SAN GABRIEL MOUNTAINS.						
Detailed Location:	LOCATION DESCRIPTION WAS "ACTON, IN ALISO CANYON, OFF SOLEDAD CANYON, IN ANGELES NATIONAL FOREST." INTERPRETED "OFF SOLEDAD CANYON" AS BEING CLOSER TO THE MOUTH OF ALISO CANYON.						
Ecological:							
General:	EGG(S) COLLECTED: WFVZ # 11086 20 FEB 1963, WFVZ # 11088 23 FEB 1964, WFVZ # 11095 1 MAR 1965. COLLECTED BY E. HARRISON AND S. PEYTON.						
Owner/Manager:	USFS-ANGELES NF, PVT						



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<i>Falco columbarius</i>		Element Code: ABNKD06030	
merlin			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5
	State: None		State: S3
	Other: CDFW_WL-Watch List, IUCN_LC-Least Concern		
Habitat:	General: SEACOAST, TIDAL ESTUARIES, OPEN WOODLANDS, SAVANNAHS, EDGES OF GRASSLANDS & DESERTS, FARMS & RANCHES.		
	Micro: CLUMPS OF TREES OR WINDBREAKS ARE REQUIRED FOR ROOSTING IN OPEN COUNTRY.		

Occurrence No.	30	Map Index:	83504	EO Index:	84530	Element Last Seen:	2010-11-03
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2010-11-03	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-08-11	

Quad Summary:	Lancaster West (3411862)
County Summary:	Los Angeles

Lat/Long:	34.74488 / -118.18216	Accuracy:	1/10 mile
UTM:	Zone-11 N3845388 E391788	Elevation (ft):	2320
PLSS:	T08N, R12W, Sec. 32 (S)	Acres:	0.0

Location:	0.25 MI SSE OF W AVE F AT 30TH ST W & 0.7 MI WSW OF W AVE F AT ANTELOPE VALLEY FWY (138), 4.4 MI NNW OF LANCASTER PO.
Detailed Location:	MAPPED TO PROVIDED COORDINATES.
Ecological:	
General:	ONE INDIVIDUAL OVER-WINTERING OBSERVED AT "AVENUE F YARD" ON 3 NOV 2010.
Owner/Manager:	UNKNOWN

<i>Falco mexicanus</i>		Element Code: ABNKD06090	
prairie falcon			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5
	State: None		State: S4
	Other: CDFW_WL-Watch List, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern		
Habitat:	General: INHABITS DRY, OPEN TERRAIN, EITHER LEVEL OR HILLY.		
	Micro: BREEDING SITES LOCATED ON CLIFFS. FORAGES FAR AFIELD, EVEN TO MARSHLANDS AND OCEAN SHORES.		



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*** SENSITIVE ***

Occurrence No.	239	Map Index:	00792	EO Index:	26173	Element Last Seen:	1980-05-29
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1980-05-29	Record Last Updated:	2014-06-11
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long: **Accuracy:** 1/5 mile

UTM: **Elevation (ft):** 3260

PLSS: **Acres:** 0.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological:

General:

Owner/Manager:

*** SENSITIVE ***

Occurrence No.	240	Map Index:	00764	EO Index:	26172	Element Last Seen:	1980-05-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1980-05-19	Record Last Updated:	2014-06-11
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Whitaker Peak (3411856), Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long: **Accuracy:** 2/5 mile

UTM: **Elevation (ft):** 3000

PLSS: **Acres:** 0.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological:

General:

Owner/Manager:



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*** SENSITIVE ***

Occurrence No.	241	Map Index: 02577	EO Index: 26170	Element Last Seen:	1978-06-16
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-06-16
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2005-02-23

Quad Summary: Hi Vista (3411767)

County Summary: Los Angeles

Lat/Long:		Accuracy:	1/5 mile
UTM:		Elevation (ft):	2800
PLSS:		Acres:	0.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological:

General:

Owner/Manager:

*** SENSITIVE ***

Occurrence No.	242	Map Index: 02570	EO Index: 26171	Element Last Seen:	1978-06-16
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-06-16
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2005-02-23

Quad Summary: Lovejoy Buttes (3411757)

County Summary: Los Angeles

Lat/Long:		Accuracy:	1/5 mile
UTM:		Elevation (ft):	3100
PLSS:		Acres:	0.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological:

General:

Owner/Manager:



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*** SENSITIVE ***

Occurrence No.	243	Map Index:	02569	EO Index:	26167	Element Last Seen:	1997-XX-XX
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:	1997-XX-XX	Record Last Updated:	2008-11-10
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Valyermo (3411747)

County Summary: Los Angeles

Lat/Long:		Accuracy:	1/5 mile
UTM:		Elevation (ft):	4645
PLSS:		Acres:	0.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological: SANDSTONE CLIFFS SURROUNDED BY JUNIPER, YUCCA, JOSHUA TREE, & CREOSOTE.

General:

Owner/Manager:

*** SENSITIVE ***

Occurrence No.	400	Map Index:	00323	EO Index:	26029	Element Last Seen:	1978-06-16
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1978-06-16	Record Last Updated:	1989-08-10
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Black Mtn. (3411867)

County Summary: Los Angeles

Lat/Long:		Accuracy:	1/5 mile
UTM:		Elevation (ft):	3420
PLSS:		Acres:	0.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological:

General:

Owner/Manager:



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*** SENSITIVE ***

Occurrence No.	433	Map Index:	02560	EO Index:	26003	Element Last Seen:	1983-06-23
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1984-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2008-11-19	

Quad Summary: Valyermo (3411747)

County Summary: Los Angeles

Lat/Long:		Accuracy:	1/5 mile
UTM:		Elevation (ft):	4395
PLSS:		Acres:	0.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological: SANDSTONE CLIFFS SURROUNDED BY JUNIPER, YUCCA, JOSHUA TREE, & CREOSOTE.

General:

Owner/Manager:

*** SENSITIVE ***

Occurrence No.	463	Map Index:	60162	EO Index:	60198	Element Last Seen:	1997-XX-XX
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:		1997-XX-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2008-07-25	

Quad Summary: Valyermo (3411747)

County Summary: Los Angeles

Lat/Long:		Accuracy:	2/5 mile
UTM:		Elevation (ft):	5000
PLSS:		Acres:	0.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological: HABITAT CONSISTED OF A ROCKY OUTCROPPING.

General:

Owner/Manager:



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*** SENSITIVE ***

Occurrence No.	464	Map Index:	60180	EO Index:	60216	Element Last Seen:	1976-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1976-XX-XX	Record Last Updated:	2008-07-25
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Acton (3411842)

County Summary: Los Angeles

Lat/Long:		Accuracy:	1/5 mile
UTM:		Elevation (ft):	3400
PLSS:		Acres:	0.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological:

General:

Owner/Manager:

*** SENSITIVE ***

Occurrence No.	496	Map Index:	72835	EO Index:	73706	Element Last Seen:	1972-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1972-XX-XX	Record Last Updated:	2008-11-10
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Valyermo (3411747)

County Summary: Los Angeles

Lat/Long:		Accuracy:	2/5 mile
UTM:		Elevation (ft):	4270
PLSS:		Acres:	0.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological:

General:

Owner/Manager:

<i>Charadrius montanus</i>		Element Code: ABNNB03100
mountain plover		
Listing Status:	Federal: None	CNDDB Element Ranks: Global: G3
	State: None	State: S2?
Other:	ABC_WLBCC-Watch List of Birds of Conservation Concern, BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened, USFWS_BCC-Birds of Conservation Concern	
Habitat:	General: SHORT GRASSLANDS, FRESHLY PLOWED FIELDS, NEWLY SPROUTING GRAIN FIELDS, & SOMETIMES SOD FARMS	
	Micro: SHORT VEGETATION, BARE GROUND & FLAT TOPOGRAPHY. PREFERS GRAZED AREAS & AREAS WITH BURROWING RODENTS.	



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Occurrence No.	37	Map Index: 54401	EO Index: 54401	Element Last Seen:	2004-01-10
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2004-01-10
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2004-02-10

Quad Summary: Lancaster East (3411861)
County Summary: Los Angeles

Lat/Long:	34.64686 / -118.04194	Accuracy:	80 meters
UTM:	Zone-11 N3834376 E404512	Elevation (ft):	2483
PLSS:	T07N, R11W, Sec. 33 (S)	Acres:	0.0

Location: NORTHWEST CORNER OF 50TH STREET EAST AND AVENUE "M," CITY OF PALMDALE, ANTELOPE VALLEY.

Detailed Location:

Ecological: PLOVERS WERE FEEDING IN A MOWED ALFALFA FIELD; SURROUNDING AREA IS AGRICULTURE

General: MOUNTAIN PLOVERS SIGHTED DURING LANCASTER CHRISTMAS BIRD COUNT ON 20 DEC 2003. ABOUT 90 MOUNTAIN PLOVERS OBSERVED ON 10 JAN 2004.

Owner/Manager: PALMDALE AIRPORT

Occurrence No.	41	Map Index: 83510	EO Index: 84533	Element Last Seen:	2011-01-20
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-01-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-08-11

Quad Summary: Del Sur (3411863)
County Summary: Los Angeles

Lat/Long:	34.71776 / -118.33082	Accuracy:	nonspecific area
UTM:	Zone-11 N3842551 E378140	Elevation (ft):	2520
PLSS:	T07N, R14W, Sec. 11 (S)	Acres:	55.0

Location: JUST EAST OF 110TH ST W, ABOUT 1 MILE NNW OF W AVE I AT 110TH ST W, ABOUT 10.5 MILES WNW OF LANCASTER PO.

Detailed Location: MAPPED WITH RESPECT TO PROVIDED COORDINATES.

Ecological:

General: ABOUT 200 WINTERING INDIVIDUALS OBSERVED ON 7 DEC 2010. SMALLER GROUPS OF 20 TO 50 WINTERING INDIVIDUALS OBSERVED ON 13, 17, AND 20 JAN 2011.

Owner/Manager: UNKNOWN

Occurrence No.	55	Map Index: 84802	EO Index: 85834	Element Last Seen:	2004-01-10
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2004-01-10
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-01-20

Quad Summary: Lake Hughes (3411864)
County Summary: Los Angeles

Lat/Long:	34.72747 / -118.39457	Accuracy:	4/5 mile
UTM:	Zone-11 N3843706 E372317	Elevation (ft):	2760
PLSS:	T07N, R14W, Sec. 05 (S)	Acres:	0.0

Location: IN THE VICINITY OF ANTELOPE VALLEY CALIFORNIA POPPY RESERVE SNR, 4 MI NW OF W AVENUE I AT 110TH ST W, ANTELOPE VALLEY.

Detailed Location: MAPPED TO PROVIDED COORDINATES AND LOCATION LISTED AS "ANTELOPE VALLEY CALIFORNIA POPPY RESERVE SNR."

Ecological:

General: AT LEAST 1 DETECTED BY D. TAN ON 10 JAN 2004.

Owner/Manager: DPR-ANDERSON VALLEY RESERVE



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Occurrence No.	57	Map Index: 84804	EO Index: 85836	Element Last Seen:	2011-12-30
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-12-30
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-01-20

Quad Summary: Lancaster East (3411861)
County Summary: Los Angeles

Lat/Long:	34.65121 / -118.05953	Accuracy:	1/5 mile
UTM:	Zone-11 N3834875 E402905	Elevation (ft):	2470
PLSS:	T07N, R11W, Sec. 32 (S)	Acres:	0.0

Location: IN THE VICINITY OF 40TH ST EAST BETWEEN AVE L AND M, ABOUT 7 MI NW OF ANTELOPE CENTER, ANTELOPE VALLEY.
Detailed Location: MAPPED TO PROVIDED COORDINATES AND LOCATION LISTED AS "40TH ST. EAST BETWEEN AVE L AND M."
Ecological:
General: 28 DETECTED BY L. SCHMAHL ON 30 DEC 2011.
Owner/Manager: UNKNOWN

Occurrence No.	58	Map Index: 84805	EO Index: 85837	Element Last Seen:	2012-01-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2012-01-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-01-20

Quad Summary: Lancaster East (3411861)
County Summary: Los Angeles

Lat/Long:	34.65945 / -118.05654	Accuracy:	1/5 mile
UTM:	Zone-11 N3835787 E403188	Elevation (ft):	2460
PLSS:	T07N, R11W, Sec. 33 (S)	Acres:	0.0

Location: IN THE VICINITY OF AVENUE L AT 40TH ST E, 7.5 MI NW OF ANTELOPE CENTER, ANTELOPE VALLEY.
Detailed Location: MAPPED TO PROVIDED COORDINATES AND LOCATION LISTED AS "ANTELOPE VALLEY (AVENUE L & 40TH ST. E)."
Ecological:
General: ABOUT 50 DETECTED BY D. SLOAN ON 1 JAN 2012.
Owner/Manager: UNKNOWN

Occurrence No.	59	Map Index: 84806	EO Index: 85838	Element Last Seen:	2011-12-27
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-12-27
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-01-20

Quad Summary: Lancaster East (3411861)
County Summary: Los Angeles

Lat/Long:	34.66068 / -118.04098	Accuracy:	1/5 mile
UTM:	Zone-11 N3835907 E404616	Elevation (ft):	2460
PLSS:	T07N, R11W, Sec. 34 (S)	Acres:	0.0

Location: IN THE VICINITY OF AVE L AT 50TH ST E, 7 MI NW OF ANTELOPE CENTER, ANTELOPE VALLEY.
Detailed Location: MAPPED TO PROVIDED COORDINATES AND LOCATION LISTED AS "ANTELOPE VALLEY--AVE. L AT 50TH ST. E."
Ecological:
General: ABOUT 40 DETECTED BY K. GARRETT ON 14 DEC 2002. ABOUT 35 DETECTED BY F. & S. GILLILAND AND D. DOWELL ON 27 DEC 2011.
Owner/Manager: UNKNOWN



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Occurrence No.	60	Map Index: 84807	EO Index: 85839	Element Last Seen:	2011-01-22
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-01-22
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-01-20

Quad Summary: Alpine Butte (3411768)

County Summary: Los Angeles

Lat/Long:	34.67010 / -117.97066	Accuracy:	1/5 mile
UTM:	Zone-11 N3836888 E411069	Elevation (ft):	2490
PLSS:	T07N, R10W, Sec. 30 (S)	Acres:	0.0

Location: IN THE VICINITY OF 90TH ST E AT AVE K, 6 MI N OF ANTELOPE CENTER, ANTELOPE VALLEY.

Detailed Location: MAPPED TO PROVIDED COORDINATES AND LOCATION LISTED AS "ANTELOPE VALLEY--90TH ST. E AT AVE. K."

Ecological:

General: ABOUT 70 DETECTED BY N. VARGAS ON 22 JAN 2011.

Owner/Manager: UNKNOWN

Occurrence No.	61	Map Index: 84808	EO Index: 85840	Element Last Seen:	2010-01-09
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-01-09
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-01-20

Quad Summary: Lancaster East (3411861)

County Summary: Los Angeles

Lat/Long:	34.70394 / -118.00518	Accuracy:	1/5 mile
UTM:	Zone-11 N3840672 E407944	Elevation (ft):	2410
PLSS:	T07N, R11W, Sec. 13 (S)	Acres:	0.0

Location: IN THE VICINITY OF AVE I AT 70TH ST E, 8.7 MI NNW OF ANTELOPE CENTER, ANTELOPE VALLEY.

Detailed Location: MAPPED TO PROVIDED COORDINATES AND LOCATION LISTED AS "ANTELOPE VALLEY--AVE. I AT 70TH ST. E."

Ecological:

General: 3 DETECTED BY J. MOORE & J. HARDESTY ON 9 JAN 2010.

Owner/Manager: UNKNOWN



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Occurrence No.	62	Map Index:	84809	EO Index:	85841	Element Last Seen:	2012-01-01
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2012-01-01	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-05-03	
Quad Summary:	Alpine Butte (3411768)						
County Summary:	Los Angeles						
Lat/Long:	34.70468 / -117.92961			Accuracy:	nonspecific area		
UTM:	Zone-11 N3840687 E414865			Elevation (ft):	2440		
PLSS:	T07N, R10W, Sec. 15 (S)			Acres:	1322.0		
Location:	AGRICULTURE FIELDS ALONG THE E SIDE OF 110TH ST E BETWEEN E AVE H AND E AVE J, 12 MI E OF LANCASTER, ANTELOPE VALLEY.						
Detailed Location:	MAPPED TO EBIRD COORDINATES & LOCATIONS STATED AS (# RECORDS): "ANTELOPE VALLEY--110TH ST. E AT E AVE. I (15)"; "ANTELOPE VALLEY--110TH ST. E AT E AVE. J (37)"; "ANTELOPE VALLEY: 110TH E AND AVE H-8 (2)"; AND 9 MORE SIMILAR IN SAME VICINIT.						
Ecological:	EBIRD DOES NOT PROVIDE ANY ECOLOGICAL OR HABITAT INFORMATION, BUT IT APPEARS IN 2010 AIR PHOTOS THAT THIS AREA IS AGRICULTURE SURROUNDED BY DESERT SCRUB HABITAT, PROBABLY ATTRACTING THE MOUNTAIN PLOVERS AND THE BIRDERS.						
General:	UNK # OBSERVED JAN 1998. 176 OBS DEC 2006. ABOUT 110 MAX OBS JAN 2007. ABOUT 200 MAX OBS WINTER 2007-2008 (NOV, JAN, FEB). 15-26 OBS OCT-NOV 2008. 223 MAX OBS JAN-FEB 2010. 205 MAX OBS NOV 2010-FEB 2011. 75 MAX OBS NOV 2011-JAN 2012.						
Owner/Manager:	PVT						

Occurrence No.	91	Map Index:	85381	EO Index:	86396	Element Last Seen:	2007-12-15
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2007-12-15	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-05-11	
Quad Summary:	Palmdale (3411851), Lancaster East (3411861)						
County Summary:	Los Angeles						
Lat/Long:	34.62770 / -118.04548			Accuracy:	1 mile		
UTM:	Zone-11 N3832255 E404165			Elevation (ft):	2500		
PLSS:	T06N, R11W, Sec. 09 (S)			Acres:	0.0		
Location:	A & G SOD FARMS IN THE VICINITY OF 50TH ST E AT E AVE N, JUST EAST OF PALMDALE AIRPORT, ABOUT 5 MI NE OF PALMDALE.						
Detailed Location:	MAPPED TO PROVIDED EBIRD COORDINATES FOR LOCATIONS STATED AS "LANCASTER SOD FARMS," "A&G SOD FARM, LANCASTER," & "A AND G SOD FIELDS--50TH ST. E AT AVENUE N."						
Ecological:	SEVERAL AGRICULTURE FIELDS IN THE VICINITY APPEAR TO PROVIDE OVER WINTERING AND FORAGING HABITAT FOR MOUNTIAN PLOVERS. EBIRD DETECTION LOCATIONS LIMITED BY ACCESSIBLE PUBLIC ROADS.						
General:	20 REPORTED BY H. KING ON 22 DEC 1990. 1 REPORTED BY M. SAN MIGUEL ON 24 OCT 1998. 35 ON 2 DEC, AND 20 ON 27 DEC 1999 BY M. SAN MIGUEL. 40 REPORTED BY J. MOORE ON 12 JAN 2004. 10 REPORTED BY H. KING & B. MORAMARCO ON 15 DEC 2007.						
Owner/Manager:	PVT						

<i>Athene cucularia</i>		Element Code: ABNSB10010	
burrowing owl			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G4
	State: None		State: S3
Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern		
Habitat:	General:	OPEN, DRY ANNUAL OR PERENIAL GRASSLANDS, DESERTS & SCRUBLANDS CHARACTERIZED BY LOW-GROWING VEGETATION.	
	Micro:	SUBTERRANEAN NESTER, DEPENDENT UPON BURROWING MAMMALS, MOST NOTABLY, THE CALIFORNIA GROUND SQUIRREL.	



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Occurrence No.	353	Map Index: 42528	EO Index: 42528	Element Last Seen:	1999-10-07
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen:	1999-10-07
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2000-03-13

Quad Summary: Ritter Ridge (3411852)

County Summary: Los Angeles

Lat/Long:	34.55932 / -118.17288	Accuracy:	1/10 mile
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UTM:	Zone-11 N3824799 E392399	Elevation (ft):	3120
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PLSS:	T06N, R12W, Sec. 32 (S)	Acres:	0.0
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Location: SOUTH SIDE OF ANAVERDE VALLEY, 2 MILES WEST OF THE AVENUE S INTERCHANGE ON HIGHWAY 14, PALMDALE.

Detailed Location:

Ecological: BURROW IS LOCATED ON THE WEST-FACING SLOPE OF A BROAD, SHALLOW CANYON (DEEPLY SCoured BOTTOM); SURROUNDED BY GRAZED NON-NATIVE GRASSLAND.

General: 1 ADULT OWL OBSERVED AT THE BURROW SITE ON 7 OCT 2000.

Owner/Manager: PVT

Occurrence No.	557	Map Index: 50574	EO Index: 50574	Element Last Seen:	2006-01-20
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	2006-01-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2007-05-24

Quad Summary: Lancaster West (3411862)

County Summary: Los Angeles

Lat/Long:	34.67516 / -118.20192	Accuracy:	80 meters
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UTM:	Zone-11 N3837677 E389888	Elevation (ft):	2365
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PLSS:	T07N, R13W, Sec. 24 (S)	Acres:	0.0
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Location: NW CORNER OF THE INTERSECTION OF AVENUE K AND 40TH STREET WEST, LANCASTER.

Detailed Location: STANDING IRRIGATION PIPES WERE USED FOR NESTING.

Ecological: HABITAT CONSISTS OF DISTURBED ALKALI SINK SCRUB/EXOTIC ANNUALS, ON AN OLD AGRICULTURAL FIELD. SURROUNDING AREA CONSISTS OF RESIDENTIAL TO THE NORTH, EAST, AND WEST, AND DISTURBED JOSHUA TREE WOODLAND/ALKALI SCRUB TO THE SOUTH.

General: BREEDING OBSERVATIONS MADE DURING 2001. 1 BIRD OBSERVED DURING DEC 2002 (XMAS BIRD COUNT) AND AGAIN ON 11 JAN 2003. 1 PAIR LAST OBSERVED AT THIS SITE ON 20 JAN 2006, BEFORE PIPES (USED FOR NESTING) WERE REMOVED AND FILLED WITH DIRT.

Owner/Manager: PVT



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Occurrence No.	586	Map Index: 51327	EO Index: 51327	Element Last Seen:	2003-05-14
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	2005-06-09
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-08-07

Quad Summary: Del Sur (3411863)

County Summary: Los Angeles

Lat/Long:	34.70306 / -118.34132	Accuracy:	80 meters
UTM:	Zone-11 N3840933 E377158	Elevation (ft):	2540
PLSS:	T07N, R14W, Sec. 14 (S)	Acres:	0.0

Location: JUST SE OF THE INTERSECTION OF AVENUE I & 120TH STREET WEST, 4 MILES NE OF ELIZABETH LAKE.

Detailed Location: BURROW WAS LOCATED ~50 FEET SOUTH OF THE SPEED SIGN ON AVENUE I.

Ecological: HABITAT CONSISTS OF A FALLOW FIELD WITH SHORT, ANNUAL HERBACEOUS GROWTH/ANNUAL WILDFLOWERS; GROUND SQUIRREL BURROWS FOUND IN THE FLAT AREA.

General: 2 ADULTS AND 6 YOUNG OBSERVED ON 11 MAY 2003; 1 AGITATED ADULT PRESENT AT THE SITE ON 14 MAY 2003. NO OWLS OR BURROWS WERE SEEN IN THE AREA ON 9 JUN 2005, ALTHOUGH THE SITE SEEMS TO HAVE CHANGED LITTLE SINCE 2003.

Owner/Manager: PVT

Occurrence No.	709	Map Index: 56799	EO Index: 56815	Element Last Seen:	2004-09-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2004-09-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2004-09-15

Quad Summary: Lancaster East (3411861)

County Summary: Los Angeles

Lat/Long:	34.68784 / -118.06771	Accuracy:	nonspecific area
UTM:	Zone-11 N3838945 E402198	Elevation (ft):	2420
PLSS:	T07N, R11W, Sec. 20 (S)	Acres:	169.4

Location: AREA BOUNDED BY 30TH STREET EAST TO 40TH STREET EAST AND AVENUES J TO J-8, EAST OF LANCASTER

Detailed Location:

Ecological: HABITAT CONSISTS OF RUDERAL AGRICULTURAL FIELDS/SPARSE DESERT SCRUB WITH SCATTERED JOSHUA TREES; FLAT TOPOGRAPHY.

General: AS MANY AS 8 OWLS OCCUPYING BURROWS ON 1 SEP 2004.

Owner/Manager: PVT



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Occurrence No.	710	Map Index: 56802	EO Index: 56818	Element Last Seen: 2004-09-03
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 2005-11-21
Occ. Type:	Natural/Native occurrence		Trend: Decreasing	Record Last Updated: 2007-06-04

Quad Summary: Lancaster West (3411862)
County Summary: Los Angeles

Lat/Long:	34.67639 / -118.21055	Accuracy:	80 meters
UTM:	Zone-11 N3837824 E389098	Elevation (ft):	2370
PLSS:	T07N, R13W, Sec. 24 (S)	Acres:	0.0

Location: WEST SIDE OF 45TH AVENUE WEST AND NORTH OF AVENUE K, 3.5 MILES WSW OF LANCASTER.
Detailed Location:
Ecological: HABITAT CONSISTED OF DISTURBED FALLOW AGRICULTURAL FIELDS/SPARSE RUDERAL VEGETATION, WITH SCATTERED RUDERAL WOODY SCRUB; IRRIGATION PIPES PROVIDE BURROW SITE AVAILABILITY.
General: 3 INDIVIDUALS/BURROWS OBSERVED ON 3 SEP 2004. OWLS WERE GONE BY 21 NOV 2005, FOLLOWING THE GRADING OF THE SITE FOR DEVELOPMENT.
Owner/Manager: PVT

Occurrence No.	788	Map Index: 64577	EO Index: 64656	Element Last Seen: 2006-03-17
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 2006-04-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2006-05-02

Quad Summary: Palmdale (3411851)
County Summary: Los Angeles

Lat/Long:	34.55248 / -118.04469	Accuracy:	80 meters
UTM:	Zone-11 N3823912 E404151	Elevation (ft):	2700
PLSS:	T05N, R11W, Sec. 04 (S)	Acres:	0.0

Location: SE OF THE CORNER OF 47TH ST EAST AND ROUTE 138, APPROXIMATELY 4 MILES SE OF PALMDALE.
Detailed Location: MAPPED ACCORDING TO LOCATION SHOWN ON ATTACHED MAP.
Ecological: HABITAT CONSISTS OF OLD FIELD WITH SPARSE VEGETATION GROWTH.
General: 1 PAIR OBSERVED EXHIBITING COURTSHIP BEHAVIOR AT BURROW SITE ON 17 MAR 2006. BY MISTAKE BURROW WAS DESTROYED (FILLED WITH DIRT, CONCRETE) SOMETIME PRIOR TO 31 APR 2006.
Owner/Manager: PVT

Occurrence No.	790	Map Index: 64586	EO Index: 64665	Element Last Seen: 2005-01-06
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 2006-03-13
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-05-29

Quad Summary: Del Sur (3411863)
County Summary: Los Angeles

Lat/Long:	34.67528 / -118.26306	Accuracy:	80 meters
UTM:	Zone-11 N3837759 E384286	Elevation (ft):	2380
PLSS:	T07N, R13W, Sec. 21 (S)	Acres:	0.0

Location: NEAR NW CORNER OF AVENUE K AND 75TH STREET WEST, 7 MILES WEST OF LANCASTER.
Detailed Location:
Ecological: HABITAT CONSISTS OF AN OLD AGRICULTURAL FIELD, WITH IRRIGATION PIPES AND SPARSE RUDERAL VEGETATION.
General: 1 OBSERVED AT IRRIGATION PIPE ON 6 JAN; 1 OWL OBSERVED PERCHED ON AN IRRIGATION PIPE ON 16 JAN 2005. SITE DEMOLISHED AND FILLED WITH DIRT. OWLS NOT OBSERVED ON 13 MAR 2006.
Owner/Manager: PVT



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Occurrence No.	798	Map Index: 64733	EO Index: 64812	Element Last Seen:	2009-06-XX
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2009-06-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-11-18

Quad Summary: Alpine Butte (3411768)

County Summary: Los Angeles

Lat/Long:	34.73459 / -117.96545	Accuracy:	specific area
UTM:	Zone-11 N3844036 E411615	Elevation (ft):	2380
PLSS:	T08N, R10W, Sec. 32 (S)	Acres:	8.0

Location: NORTH SIDE OF AVENUE G, 0.3 MILE EAST OF 90TH STREET EAST, 9 MILES ENE OF LANCASTER.

Detailed Location: IN 2005, OWLS WERE USING AN IRRIGATION STANDPIPE FOR A BURROW; NO NATURAL BURROWS WERE OBSERVED IN THIS AREA. SEVERAL OTHER STANDPIPES ALONG NORTH SIDE OF ROAD. MAPPED TO PROVIDED MAP AND COORDINATES.

Ecological: HABITAT CONSISTS OF AN ABANDONED AGRICULTURAL FIELD SUPPORTING NON-NATIVE GRASSES AND SPARSE RUDERAL VEGETATION.

General: JUL-SEP 2004, 34 OWLS OBSERVED AT 34 ACTIVE BURROW SITES, FROM AVE D TO AVE H BETWEEN 50TH E & 110TH E. 2 ADULTS & 2 JUVENILES (~5 WEEKS OLD) OBSERVED ON 16 JUN 2005. FRESH PELLETS, WHITEWASH & BONES OBSERVED AT CONCRETE STANDPIPE JUN 2009.

Owner/Manager: PVT

Occurrence No.	799	Map Index: 64737	EO Index: 64816	Element Last Seen:	2008-12-XX
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2008-12-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-11-18

Quad Summary: Lancaster East (3411861)

County Summary: Los Angeles

Lat/Long:	34.74320 / -118.00975	Accuracy:	specific area
UTM:	Zone-11 N3845030 E407569	Elevation (ft):	2355
PLSS:	T08N, R11W, Sec. 35 (S)	Acres:	43.0

Location: NW AVENUE F-8 AT 70TH ST E, ABOUT 8.5 MI NE OF LANCASTER PO.

Detailed Location: 2005 OWLS WERE OBSERVED AT AN IRRIGATION STANDPIPE (SP), POSSIBLY USING A BROKEN PIPE AT GROUND SURFACE FOR A BURROW. 2009 SITE NAMES INCLUDE SD17 (SE CIRCLE), SD20 (NW CIRCLE), SD25, SD26, SD27, SD28, SD31 (POLYGON) AND SD32 (NE CIRCLE).

Ecological: HABITAT CONSISTS OF AN ABANDONED AG FIELD SUPPORTING NON-NATIVE GRASSES & SPARSE RUDERAL VEGETATION. 2008 SITES WERE VISITED MULTIPLE TIMES. BURROWS FOUND IN 2008 WERE DISTURBED & COLLAPSED BY CLEARANCE ACTIVITY IN LATE DEC (SD27 & SD31).

General: 2005: 2 AD OBS 16 JUN. 2008: BURROWS WITH SIGN OBS 11 MAY (SD17); OWL ON SP JUN. SIGNS WITH SP OBS 20 NOV (SD20 & 28). 1 OWL FLYING FROM SP OBS NOV & DEC (SD25 & 26). 1 BUOW AT BURROW OBS NOV (SD27 & 31). BUOW AT SP, BURROWS NEARBY OBS NOV.

Owner/Manager: UNKNOWN



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Occurrence No.	805	Map Index: 64814	EO Index: 64893	Element Last Seen:	2006-05-30
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2006-05-30
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-06-06

Quad Summary: Lancaster West (3411862)
County Summary: Los Angeles

Lat/Long:	34.69383 / -118.19846	Accuracy:	80 meters
UTM:	Zone-11 N3839744 E390229	Elevation (ft):	2335
PLSS:	T07N, R12W, Sec. 18 (S)	Acres:	0.0

Location: SE CORNER OF LANCASTER BOULEVARD AND 40TH STREET WEST, ALONG THE WEST EDGE OF LANCASTER.
Detailed Location: NUMEROUS CALIFORNIA GROUND SQUIRRELS WERE LOCATED ALONG THE PERIMETER OF THE 80-ACRE PARCEL IN WHICH THE BURROW SITE IS FOUND. LARGE NUMBERS OF DIPODOMYS MERRIAMII ALSO PRESENT.
Ecological: HABITAT CONSISTS OF ALKALI SINKS WITH SALTBUSH SCRUB MIXED WITH LOW-DENSITY CALIFORNIA JUNIPER; DOMINATED BY YUCCA BREVIFOLIA, JUNIPERUS CALIFORNICA, ATRIPLEX CANESCENS, PRUNUS FASCICULATA, SCHISMUS SP, SUAEDA SP, AND ATRIPLEX PHYLLOSTEGIA.
General: 2 ADULTS AND 8 YOUNG WERE DETECTED ON 30 MAY 2006 DURING MOHAVE GROUND SQUIRREL TRAPPING.
Owner/Manager: PVT

Occurrence No.	816	Map Index: 65402	EO Index: 65481	Element Last Seen:	2006-07-18
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2006-07-18
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-07-27

Quad Summary: Del Sur (3411863)
County Summary: Los Angeles

Lat/Long:	34.70639 / -118.27139	Accuracy:	80 meters
UTM:	Zone-11 N3841220 E383566	Elevation (ft):	2391
PLSS:	T07N, R13W, Sec. 09 (S)	Acres:	0.0

Location: EAST SIDE OF 80TH STREET WEST, 0.2 MILE NORTH OF AVENUE I, LANCASTER.
Detailed Location:
Ecological: BURROW SITE IS LOCATED AT AN OLD, ABANDONED AGRICULTURAL FIELD.
General: BUOW PAIR HAS BEEN OBSERVED AT THIS LOCATION FOR THE PAST SEVERAL MONTHS; ON 18 JUL 2006, 2 ADULTS AND 3 JUVENILES WERE OBSERVED PERCHED ON A 2' HIGH CEMENT IRRIGATION PIPE.
Owner/Manager: PVT



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Occurrence No.	939	Map Index: 69378	EO Index: 70156	Element Last Seen:	2006-03-03
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2006-03-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2007-05-24
Quad Summary:	Lancaster East (3411861)				
County Summary:	Los Angeles				
Lat/Long:	34.69083 / -118.04500		Accuracy:	80 meters	
UTM:	Zone-11 N3839255 E404282		Elevation (ft):	2421	
PLSS:	T07N, R11W, Sec. 16 (S)		Acres:	0.0	
Location:	NORTH SIDE OF AVENUE J, 0.2 MILE WEST OF 40TH STREET EAST, EAST OF LANCASTER.				
Detailed Location:	STANDING IRRIGATION PIPES WERE LIKELY USED FOR NESTING.				
Ecological:	HABITAT CONSISTS OF AN OLD AGRICULTURAL FIELD WITH CEMENT IRRIGATION PIPES; SURROUNDED BY OLD AGRICULTURAL FIELDS WITH RESIDENTIAL DEVELOPMENT ENCROACHING FROM THE WEST.				
General:	PAIR OF OWLS OBSERVED ON 3 MAR 2006, OCCUPYING A CONCRETE IRRIGATION PIPE "BURROW." THEY WILL LIKELY BE EVICTED.				
Owner/Manager:	PVT				

Occurrence No.	951	Map Index: 69411	EO Index: 70187	Element Last Seen:	2006-01-20
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	2006-01-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2007-05-29
Quad Summary:	Ritter Ridge (3411852)				
County Summary:	Los Angeles				
Lat/Long:	34.59195 / -118.14612		Accuracy:	80 meters	
UTM:	Zone-11 N3828390 E394895		Elevation (ft):	2692	
PLSS:	T06N, R12W, Sec. 22 (S)		Acres:	0.0	
Location:	NORTH SIDE OF AUTO CENTER DRIVE AND WEST OF 10TH STREET, PALMDALE.				
Detailed Location:					
Ecological:	HABITAT CONSISTS OF A DISTURBED VACANT LOT SUPPORTING CALIFORNIA GROUND SQUIRRELS, RABBIBRUSH, AND SPARSE RUDERAL VEGETATION.				
General:	2 OWLS WERE OBSERVED ON 20 JAN 2006, USING GROUND SQUIRREL BURROWS ON THE EAST-FACING SIDE OF AN EARTHEN FILL SLOPE; OWLS WERE PASSIVELY EVICTED AFTER ONE WAS BANDED WITH A COLOR BAND.				
Owner/Manager:	PVT				



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Occurrence No.	964	Map Index:	69453	EO Index:	70231	Element Last Seen:	2005-06-12
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2005-06-12	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2007-05-31	
Quad Summary:	Lancaster East (3411861)						
County Summary:	Los Angeles						
Lat/Long:	34.69667 / -118.06833			Accuracy:	80 meters		
UTM:	Zone-11 N3839925 E402152			Elevation (ft):	2404		
PLSS:	T07N, R11W, Sec. 17 (S)			Acres:	0.0		
Location:	SOUTH OF LANCASTER BOULEVARD, 0.5 MILE WEST OF 32ND STREET EAST, 2 MILES EAST OF LANCASTER.						
Detailed Location:	LOCATED ON A 10-ACRE SITE. MAPPED IN THE NE1/4 OF THE SW1/4 SEC 17.						
Ecological:	HABITAT CONSISTS OF AN HISTORIC AGRICULTURAL FIELD DOMINATED BY RED-STEMMED FILAREE, WITH SCATTERED RABBITBRUSH. IRRIGATION PIPES ARE FOUND THROUGHOUT THE SITE.						
General:	AT LEAST 1 OWL WAS OBSERVED AT THIS SITE ON 12 MAY; 1 OWL AGAIN OBSERVED ON 21NOV 2005 AT AN ACTIVE BURROW SITE.						
Owner/Manager:	PVT						

Occurrence No.	1057	Map Index:	71349	EO Index:	72253	Element Last Seen:	2005-11-22
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2005-11-22	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2008-05-21	
Quad Summary:	Lancaster East (3411861)						
County Summary:	Los Angeles						
Lat/Long:	34.69585 / -118.06058			Accuracy:	80 meters		
UTM:	Zone-11 N3839827 E402860			Elevation (ft):	2410		
PLSS:	T07N, R11W, Sec. 17 (S)			Acres:	0.0		
Location:	SW OF THE INTERSECTION OF LANCASTER BLVD AND 40TH ST EAST, LANCASTER.						
Detailed Location:							
Ecological:	BURROW FOUND IN AN ABANDONED AG FIELD. RED-STEMMED FILARAE IS PREDOMINATE COVER. IRRIGATION PIPES ON SITE						
General:	1 ACTIVE BURROW AND 1 BUOW OBSERVED.						
Owner/Manager:	PVT						



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*** SENSITIVE ***

Occurrence No.	1067	Map Index:	71391	EO Index:	72289	Element Last Seen:	2004-09-30
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2004-09-30	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2008-05-28	

Quad Summary: Lancaster East (3411861)

County Summary: Los Angeles

Lat/Long:		Accuracy:	1/10 mile
UTM:		Elevation (ft):	2365
PLSS:		Acres:	0.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological: BURROW SITES ON ABANDONED AG FIELDS WITH STANDING IRRIGATION PIPES. SURROUNDING AREA IS AGRICULTURE AND SPARSE RESIDENTIAL.

General:

Owner/Manager:

*** SENSITIVE ***

Occurrence No.	1068	Map Index:	71392	EO Index:	72290	Element Last Seen:	2004-09-30
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2004-09-30	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2008-05-28	

Quad Summary: Lancaster East (3411861)

County Summary: Los Angeles

Lat/Long:		Accuracy:	1/10 mile
UTM:		Elevation (ft):	2365
PLSS:		Acres:	0.0

Location: *SENSITIVE* LOCATION INFORMATION SUPPRESSED.

Detailed Location: PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological: BURROW SITES ON ABANDONED AG FIELDS WITH STANDING IRRIGATION PIPES. SURROUNDING AREA IS AGRICULTURE AND SPARSE RESIDENTIAL.

General:

Owner/Manager:



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Occurrence No.	1555	Map Index: 80728	EO Index: 81735	Element Last Seen:	2009-01-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-01-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-11-18

Quad Summary: Alpine Butte (3411768)

County Summary: Los Angeles

Lat/Long:	34.74006 / -117.97043	Accuracy:	80 meters
UTM:	Zone-11 N3844647 E411165	Elevation (ft):	2370
PLSS:	T08N, R10W, Sec. 31 (S)	Acres:	0.0

Location: W EDGE OF 90TH ST E, 0.4 MI N OF E AVENUE G, S OF REDMAN AND NE ROOSEVELT.

Detailed Location: SITE NAME IS SD24, JUST S OF E AVENUE F-8. MAPPED TO PROVIDED COORDINATES (LOCATION IS APPROXIMATE).

Ecological:

General: LARGE GROUND BURROW (NO MOUND) WITH MANY DRY BUT INTACT PELLETS AROUND ENTRANCE FOUND DURING JAN 2009.

Owner/Manager: UNKNOWN

Occurrence No.	1556	Map Index: 80729	EO Index: 81752	Element Last Seen:	2009-07-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-07-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-11-18

Quad Summary: Alpine Butte (3411768)

County Summary: Los Angeles

Lat/Long:	34.72818 / -117.98432	Accuracy:	specific area
UTM:	Zone-11 N3843341 E409880	Elevation (ft):	2390
PLSS:	T07N, R10W, Sec. 06 (S)	Acres:	15.0

Location: ABOUT 0.5 MI SSE-SE E AVENUE G AT 80TH ST E, SSW OF REDMAN AND ENE OF ROOSEVELT.

Detailed Location: SITE NAMES ARE L1 (APPROXIMATELY 80 M N OF AVE G-8, 100 M E OF 85TH E), L2 (100 M N OF AVE G-8, 160 M W OF 85TH E), L3 (160 M N OF AVE G-8, 170 M W OF 85TH E) AND L4 (190 M S OF AVE G-4, 135 M W OF 85TH E). MAPPED TO PROVIDED COORDINATES.

Ecological:

General: GROUND BURROWS WITH FRESH SIGN OBSERVED AT ALL FOUR SITES; OWL FLUSHED FROM BURROW AT L4; ALL OBSERVATIONS MADE DURING JUL 2009.

Owner/Manager: UNKNOWN

Occurrence No.	1558	Map Index: 80744	EO Index: 81766	Element Last Seen:	2009-06-25
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-06-25
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-11-18

Quad Summary: Lancaster East (3411861)

County Summary: Los Angeles

Lat/Long:	34.74481 / -118.02050	Accuracy:	80 meters
UTM:	Zone-11 N3845218 E406586	Elevation (ft):	2350
PLSS:	T08N, R11W, Sec. 35 (S)	Acres:	0.0

Location: E OF RANCHO SIERRA GOLF CLUB, 0.3 MI SE E AVENUE F AT 60TH ST E, ABOUT 8.25 MI NE OF LANCASTER PO.

Detailed Location: SITE NAME SD18. "LOCATED NEAR 62ND STREET EAST AT AVENUE F-4." MAPPED TO PROVIDED COORDINATES.

Ecological:

General: FRESH PELLETS FOUND IN CONCRETE STANDPIPE ON 30 APR 2009 AND AGAIN ON 25 JUN 2009.

Owner/Manager: UNKNOWN



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Occurrence No.	1573	Map Index:	80875	EO Index:	81851	Element Last Seen:	2008-04-25
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2008-04-25	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-11-29	

Quad Summary: Littlerock (3411758)

County Summary: Los Angeles

Lat/Long:	34.54270 / -117.90036	Accuracy:	80 meters
UTM:	Zone-11 N3822700 E417384	Elevation (ft):	2850
PLSS:	T05N, R10W, Sec. 11 (S)	Acres:	0.0

Location: ALONG SOUTH SIDE OF E AVE T, 0.6 MI W OF LONGVIEW RD, 2.6 MI NNE PEARBLOSSOM PO.
Detailed Location: ON BERM WHERE SHOULDER OF ROAD MEETS CREOSOTE BUSH. MAPPED TO PROVIDED COORDINATES.
Ecological: HABITAT CONSISTS OF CREOSOTE BUSH SCRUB.
General: 1 ADULT OBSERVED PERCHED ON THE GROUND NEAR THREE BURROWS.
Owner/Manager: UNKNOWN

Occurrence No.	1580	Map Index:	80943	EO Index:	81942	Element Last Seen:	2009-11-09
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-11-09	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-12-03	

Quad Summary: Del Sur (3411863)

County Summary: Los Angeles

Lat/Long:	34.70265 / -118.31317	Accuracy:	specific area
UTM:	Zone-11 N3840853 E379735	Elevation (ft):	2470
PLSS:	T07N, R14W, Sec. 13 (S)	Acres:	17.0

Location: ALONG S SIDE OF W AVE I, 0.1 MI E OF 105TH ST W, ABOUT 5 MI WSW GENERAL WILLIAM J FOX AIRFIELD, DEL SUR.
Detailed Location: AT UNIV. OF CALIF. AGRICULTURAL FIELD STATION (TOPO). ID #95, 115, 116, 117, 188, 189 AND 190 (LOO09D03). MAPPED TO PROVIDED COORDINATES.
Ecological: HABITAT CONSISTS OF CALIFORNIA ANNUAL GRASSLAND COMMUNITY. TWO COYOTES OBSERVED IN AREA; FRESH SCAT DISCOVERED WITHIN 6 INCHES OF BURROW. VISUAL DISTURBANCES INCLUDE TRASH DUMPING, ROAD DEVELOPMENT AND SCE TRANSMISSION LINE.
General: BU=BURROW. 2009: BU W/ OLD & NEW WHITEWASH (#117), 2 ACTIVE BU W/ PELLETS, FUR & BONES (#188 &189), & 2 BU W/ SIGN OBS 20 FEB & 20 MAR; OTHER BU MAY BELONG TO RODENTS (#115-116). 2 AD & 4 JUV AT BU 22 MAR (#190). 1 OBS AT BU 9 NOV (#95).
Owner/Manager: UNKNOWN



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Occurrence No.	1581	Map Index: 80951	EO Index: 81954	Element Last Seen:	2009-07-27
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-07-27
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-12-02

Quad Summary: Del Sur (3411863)

County Summary: Los Angeles

Lat/Long:	34.68646 / -118.36632	Accuracy:	specific area
UTM:	Zone-11 N3839123 E374843	Elevation (ft):	2750
PLSS:	T07N, R14W, Sec. 21 (S)	Acres:	10.0

Location: 0.3 MI W OF 130TH ST W AT W AVE J, ABOUT 2 MI NE ELIZABETH LAKE, DEL SUR.

Detailed Location: SITE NAMES L8 (AT 134TH ST W AND AVE J-6) AND L9 (JUST N OF AVE J NEAR 133RD ST W). MAPPED TO PROVIDED COORDINATES.

Ecological:

General: 2 ADULTS FLUSHED FROM GROUND BURROW (L8) AND RETREATED N TO ALTERNATE BURROWS (L9); L9 BURROW WAS IN A PILE OF BROKEN CONCRETE COVERED IN WHITEWASH; OWLS THEN RETREATED A COUPLE HUNDRED METERS TO THE NORTH ADJACENT TO RAVINE ON 27 JUL 2009.

Owner/Manager: UNKNOWN

Occurrence No.	1582	Map Index: 80952	EO Index: 81955	Element Last Seen:	2007-06-24
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2007-06-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-12-02

Quad Summary: Del Sur (3411863)

County Summary: Los Angeles

Lat/Long:	34.70284 / -118.34711	Accuracy:	80 meters
UTM:	Zone-11 N3840916 E376626	Elevation (ft):	2570
PLSS:	T07N, R14W, Sec. 15 (S)	Acres:	0.0

Location: ALONG S SIDE OF W AVE I, 0.3 MI W OF 120TH ST W, ABOUT 3.5 MI NE ELIZABETH LAKE, DEL SUR.

Detailed Location: BLOCK CODE 3840-375 - LOCATION CODE A. MAPPED TO PROVIDED COORDINATES.

Ecological: HABITAT CONSISTS OF IDLE OR FALLOW FIELD, NEAR HAY OR ALFALFA AGRICULTURE. LOWLAND ELEVATION SUBREGION. GROUND SQUIRRELS DETECTED WITHIN 100 M OF BREEDING LOCATION.

General: 2 ADULTS OBSERVED AND 1 BREEDING PAIR ESTIMATED TO OCCUR IN AREA ON 24 JUN 2007.

Owner/Manager: UNKNOWN



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Occurrence No.	1583	Map Index: 80953	EO Index: 81956	Element Last Seen:	2007-06-24
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2007-06-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-12-02

Quad Summary: Del Sur (3411863)

County Summary: Los Angeles

Lat/Long:	34.73194 / -118.34985	Accuracy:	80 meters
UTM:	Zone-11 N3844146 E376419	Elevation (ft):	2580
PLSS:	T07N, R14W, Sec. 03 (S)	Acres:	0.0

Location: ALONG S SIDE OF W AVE G, 1.4 MI W OF 110TH ST W, JUST E OF ANTELOPE VALLEY CA POPPY PRESERVE, DEL SUR.

Detailed Location: BLOCK CODE 3840-375 - LOCATION CODE C. MAPPED TO PROVIDED COORDINATES.

Ecological: HABITAT CONSISTS BRUSHLAND. LOWLAND ELEVATION SUBREGION. GROUND SQUIRRELS DETECTED WITHIN 100 M OF BREEDING LOCATION.

General: 2 ADULTS AND 4 JUVENILES OBSERVED; 1 BREEDING PAIR ESTIMATED TO OCCUR IN AREA ON 24 JUN 2007.

Owner/Manager: UNKNOWN

Occurrence No.	1584	Map Index: 80955	EO Index: 81958	Element Last Seen:	2009-06-16
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2009-06-16
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-12-02

Quad Summary: Del Sur (3411863)

County Summary: Los Angeles

Lat/Long:	34.74546 / -118.31303	Accuracy:	80 meters
UTM:	Zone-11 N3845601 E379809	Elevation (ft):	2460
PLSS:	T08N, R14W, Sec. 36 (S)	Acres:	0.0

Location: 1 MI NE 110TH ST W AT W AVE G, ABOUT 4.5 MI W OF GENERAL WILLIAM J FOX AIRFIELD, DEL SUR.

Detailed Location: OBSERVED 1200 FT E OF "CONST 83" OF THE TRTP123 PROJECT. MAPPED TO PROVIDED COORDINATES.

Ecological: HABITAT CONSISTS OF NATIVE ANNUAL GRASSLAND HABITAT. IMMEDIATE AND SURROUNDING LAND USES ARE SCE TRANSMISSION LINE, OFF-ROADING AND SHEEP GRAZING. VISIBLE DISTURBANCES INCLUDE TRASH DUMPING, SCE TRANSMISSION LINE AND ROAD DEVELOPMENT.

General: A FAMILY OF 5 ADULT BURROWING OWLS OBSERVED ON 16 JUN 2009.

Owner/Manager: UNKNOWN



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Occurrence No.	1585	Map Index: 80956	EO Index: 81959	Element Last Seen:	2009-06-24
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2009-06-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-12-02
Quad Summary:	Del Sur (3411863)				
County Summary:	Los Angeles				
Lat/Long:	34.72372 / -118.31996		Accuracy:	80 meters	
UTM:	Zone-11 N3843198 E379144		Elevation (ft):	2490	
PLSS:	T07N, R14W, Sec. 01 (S)		Acres:	0.0	
Location:	0.7 MI SSE 110TH ST W AT W AVE G, ABOUT 5 MI WSW OF GENERAL WILLIAM J FOX AIRFIELD, DEL SUR.				
Detailed Location:	OBSERVED 980 FT W OF "CONST 89" OF THE TRTP123 PROJECT. MAPPED TO PROVIDED COORDINATES.				
Ecological:	HABITAT CONSISTS OF NATIVE ANNUAL GRASSLAND HABITAT. IMMEDIATE AND SURROUNDING LAND USES ARE SCE TRANSMISSION LINE, OFF-ROADING AND SHEEP GRAZING. VISIBLE DISTURBANCES INCLUDE TRASH DUMPING, SCE TRANSMISSION LINE AND ROAD DEVELOPMENT.				
General:	A FAMILY OF 5 ADULT BURROWING OWLS OBSERVED ON 24 JUN 2009.				
Owner/Manager:	UNKNOWN				
Occurrence No.	1586	Map Index: 80957	EO Index: 81961	Element Last Seen:	2007-06-06
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-03-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-12-02
Quad Summary:	Del Sur (3411863)				
County Summary:	Los Angeles				
Lat/Long:	34.71288 / -118.31567		Accuracy:	80 meters	
UTM:	Zone-11 N3841991 E379521		Elevation (ft):	2480	
PLSS:	T07N, R14W, Sec. 12 (S)		Acres:	0.0	
Location:	0.75 MI NE 110TH ST W AT W AVE I, ABOUT 5 MI WSW OF GENERAL WILLIAM J FOX AIRFIELD, DEL SUR.				
Detailed Location:	MAPPED TO PROVIDED COORDINATES.				
Ecological:					
General:	ACTIVE BUOW BURROW, 5 INCHES WIDE, CONTAINING WHITEWASH, CRUSHED PELLETS WITH BONES AND FEATHERS OBSERVED ON 6 JUN 2007; NO SIGN PRESENT ON 20 MAR 2009.				
Owner/Manager:	UNKNOWN				
Occurrence No.	1608	Map Index: 81054	EO Index: 82039	Element Last Seen:	2007-06-24
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2007-06-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-12-09
Quad Summary:	Del Sur (3411863)				
County Summary:	Los Angeles				
Lat/Long:	34.69245 / -118.34140		Accuracy:	80 meters	
UTM:	Zone-11 N3839756 E377134		Elevation (ft):	2580	
PLSS:	T07N, R14W, Sec. 14 (S)		Acres:	0.0	
Location:	ABOUT 0.25 MI NNE 120TH ST W AT W AVE J, DEL SUR.				
Detailed Location:	BLOCK CODE 3835-375 - LOCATION CODE B. MAPPED TO PROVIDED COORDINATES.				
Ecological:	HABITAT CONSISTS OF A DRAINAGE WITHIN BRUSHLAND. LOWLAND ELEVATION SUBREGION. GROUND SQUIRRELS DETECTED WITHIN 100 M OF BREEDING LOCATION.				
General:	1 PROBABLE MALE FLUSHED FROM BURROW AND FLEW BACK TO PERCH NEARBY ON 24 JUN 2007.				
Owner/Manager:	UNKNOWN				



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Occurrence No.	1888	Map Index:	89828	EO Index:	90831	Element Last Seen:	2013-07-28
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2013-07-28	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-07-31	
Quad Summary:	Lancaster West (3411862)						
County Summary:	Los Angeles						
Lat/Long:	34.70070 / -118.20220			Accuracy:	80 meters		
UTM:	Zone-11 N3840510 E389896			Elevation (ft):	2330		
PLSS:	T07N, R13W, Sec. 13 (S)			Acres:	0.0		
Location:	W SIDE OF 40TH STREET W, ABOUT 0.3 MI N OF W LANCASTER BLVD, NW SIDE OF LANCASTER.						
Detailed Location:	MAPPED TO PROVIDED MAP AND "APPROXIMATELY 1/4 MILE SOUTH OF AVENUE I AND APPROX. 50 YARDS WEST OF 40TH STREET WEST, ANTELOPE VALLEY."						
Ecological:	RUDURAL AGRICULTURAL FIELDS SURROUNDED BY SOME COMMERCIAL AND RESIDENTIAL DEVELOPMENT.						
General:	1 BURROWING OWL OBSERVED ON HEAVILY WHITE-WASHED NATURAL ROCK OUTCROPPING 12 JUL; OBSERVED AGAIN ON 22 & 26 JUL; 2 ADULTS & 1 JUVENILE OBSERVED USING A BURROW ON 28 JUL 2013.						
Owner/Manager:	UNKNOWN						

<i>Toxostoma lecontei</i>		Element Code: ABPBK06100	
Le Conte's thrasher			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G4
	State: None		State: S3
Other:	ABC_WLBCC-Watch List of Birds of Conservation Concern, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern		
Habitat:	General:	DESERT RESIDENT; PRIMARILY OF OPEN DESERT WASH, DESERT SCRUB, ALKALI DESERT SCRUB, AND DESERT SUCCULENT SCRUB HABITATS.	
	Micro:	COMMONLY NESTS IN A DENSE, SPINY SHRUB OR DENSELY BRANCHED CACTUS IN DESERT WASH HABITAT, USUALLY 2-8 FEET ABOVE GROUND.	

Occurrence No.	1	Map Index:	21923	EO Index:	20945	Element Last Seen:	1920-05-11
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1920-05-11	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-09-15	
Quad Summary:	Palmdale (3411851), Ritter Ridge (3411852)						
County Summary:	Los Angeles						
Lat/Long:	34.57949 / -118.11653			Accuracy:	1 mile		
UTM:	Zone-11 N3826978 E397593			Elevation (ft):	2660		
PLSS:	T06N, R12W, Sec. 26 (S)			Acres:	0.0		
Location:	PALMDALE.						
Detailed Location:							
Ecological:							
General:	COLLECTED BY VAN ROSSEN IN 1920 (UCLA SPECIMEN #H 672).						
Owner/Manager:	UNKNOWN						



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Occurrence No.	2	Map Index: 02234	EO Index: 24553	Element Last Seen: 1926-05-16
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1926-05-16
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1989-08-10

Quad Summary: Palmdale (3411851)
County Summary: Los Angeles

Lat/Long:	34.52776 / -118.09397	Accuracy:	1 mile
UTM:	Zone-11 N3821218 E399601	Elevation (ft):	4125
PLSS:	T05N, R12W, Sec. 12 (S)	Acres:	0.0

Location: 5 MI SW PALMDALE.

Detailed Location:

Ecological:

General: LACM SPECIMEN #14253.

Owner/Manager: UNKNOWN

Occurrence No.	58	Map Index: 02450	EO Index: 24515	Element Last Seen: 1978-04-29
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-04-29
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1989-08-10

Quad Summary: Juniper Hills (3411748), Littlerock (3411758)
County Summary: Los Angeles

Lat/Long:	34.50804 / -117.93923	Accuracy:	1 mile
UTM:	Zone-11 N3818889 E413782	Elevation (ft):	
PLSS:	T05N, R10W, Sec. 21 (S)	Acres:	0.0

Location: PEARBLOSSOM, NEAR INTERSECTION OF 106TH ST & HWY 138.

Detailed Location:

Ecological:

General: EGG SET FROM NEST IN DENSE SHRUB (OLIVE?) GROWING IN CREOSOTE BUSH. THIS SHRUB WAS PLANTED IN A ROW ALONG A SIDE RD. MANY OLD THRASHER NESTS WERE IN THESE SHRUBS.

Owner/Manager: UNKNOWN

Occurrence No.	89	Map Index: 02553	EO Index: 24494	Element Last Seen: 1987-05-12
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1987-05-12
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1989-08-10

Quad Summary: Hi Vista (3411767)
County Summary: Los Angeles

Lat/Long:	34.65276 / -117.86340	Accuracy:	1/5 mile
UTM:	Zone-11 N3834875 E420880	Elevation (ft):	2560
PLSS:	T07N, R09W, Sec. 31 (S)	Acres:	0.0

Location: W OF PIUTE BUTTE, W SIDE OF NORTH 150TH ST, 0.2 MI S JCT W/ RD TO ANTELOPE VALLEY MUSEUM.

Detailed Location: 4 OBS DURING 1987 BREEDING SEASON IN SUITABLE HABITAT.

Ecological: VEG WITHIN A 50 M RADIUS INCLUDES ATRIPLEX, HYMENOCLEA SALSOLA & YUCCA BREVIFOLIA.

General:

Owner/Manager: PVT



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Occurrence No.	90	Map Index: 02555	EO Index: 24492	Element Last Seen: 1986-06-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1986-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1989-08-10

Quad Summary: Hi Vista (3411767)

County Summary: Los Angeles

Lat/Long:	34.64664 / -117.86312	Accuracy:	1/5 mile
UTM:	Zone-11 N3834196 E420900	Elevation (ft):	2570
PLSS:	T07N, R09W, Sec. 31 (S)	Acres:	0.0

Location: SW OF PIUTE BUTTE, JCT OF NORTH 150TH ST & EAST AVE.

Detailed Location: 1 INDIVIDUAL HEARD DURING 1986 BREEDING SEASON IN SUITABLE HABITAT. NONE OBS IN 1987.

Ecological: YUCCA BREVIFOLIA, LARREA TRIDENTATA, AMBROSIA DUMOSA & SALSOLA KALI TENUIFOLIA.

General:

Owner/Manager: PVT

Occurrence No.	91	Map Index: 02556	EO Index: 24491	Element Last Seen: 1987-05-12
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1987-05-12
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1994-08-01

Quad Summary: Lovejoy Buttes (3411757), Hi Vista (3411767)

County Summary: Los Angeles

Lat/Long:	34.62497 / -117.86257	Accuracy:	1/5 mile
UTM:	Zone-11 N3831793 E420930	Elevation (ft):	2620
PLSS:	T06N, R09W, Sec. 08 (S)	Acres:	0.0

Location: NORTH OF LOVEJOY BUTTES, N 150TH ST EAST, 0.5 MI N OF JCT WITH AVENUE O.

Detailed Location: THREE OBS DURING 1987 BREEDING SEASON IN SUITABLE HABITAT.

Ecological: VEG WITHIN 50 M IS MOSTLY SALSOLA KALI TENUIFOLIA BUT ALSO ATRIPLEX & YUCCA BREVIFOLIA. CLEARED UNDERSTORY.

General:

Owner/Manager: PVT

Occurrence No.	92	Map Index: 02554	EO Index: 24490	Element Last Seen: 1986-06-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1986-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1989-08-10

Quad Summary: Lovejoy Buttes (3411757)

County Summary: Los Angeles

Lat/Long:	34.61776 / -117.86368	Accuracy:	1/5 mile
UTM:	Zone-11 N3830994 E420822	Elevation (ft):	2650
PLSS:	T06N, R09W, Sec. 07 (S)	Acres:	0.0

Location: NORTH OF LOVEJOY BUTTES, JCT OF AVENUE O & 150TH ST EAST.

Detailed Location: ONE HEARD DURING 1986 BREEDING SEASON IN SUITABLE NESTING HABITAT. NONE HEARD IN 1987.

Ecological: VEG WITHIN 50 M INCLUDES YUCCA BREVIFOLIA, LARREA TRIDENTATA, ATRIPLEX AND SALSOLA KALI TENUIFOLIA.

General:

Owner/Manager: PVT



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Occurrence No.	93	Map Index: 02544	EO Index: 24489	Element Last Seen:	1986-06-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1986-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10
Quad Summary:	Lovejoy Buttes (3411757)				
County Summary:	Los Angeles				
Lat/Long:	34.61304 / -117.87145		Accuracy:	1/5 mile	
UTM:	Zone-11 N3830477 E420104		Elevation (ft):	2650	
PLSS:	T06N, R09W, Sec. 18 (S)		Acres:	0.0	
Location:	NORTHWEST OF LOVEJOY BUTTES, N 145TH ST EAST, 2.5 MI S OF JCT WITH AVENUE O.				
Detailed Location:	ONE HEARD & ONE OBS DURING 1986 BREEDING SEASON IN SUITABLE BREEDING HABITAT. NONE HEARD IN 1987.				
Ecological:	VEG WITHIN 50 M RADIUS INCLUDES LARREA TRIDENTATA, YUCCA BREVIFOLIA, ATRIPLEX & BUNCHGRASS.				
General:					
Owner/Manager:	PVT				
Occurrence No.	94	Map Index: 02541	EO Index: 24488	Element Last Seen:	1987-05-12
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1987-05-12
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10
Quad Summary:	Lovejoy Buttes (3411757)				
County Summary:	Los Angeles				
Lat/Long:	34.60414 / -117.87256		Accuracy:	1/5 mile	
UTM:	Zone-11 N3829491 E419994		Elevation (ft):	2780	
PLSS:	T06N, R09W, Sec. 18 (S)		Acres:	0.0	
Location:	WEST LOVEJOY BUTTES, N 145TH ST EAST, 0.9 MI S OF JCT WITH AVENUE O.				
Detailed Location:	ONE OBS DURING 1987 BREEDING SURVEY IN SUITABLE HABITAT.				
Ecological:	VEG WITHIN 50 M RADIUS INCLUDES YUCCA BREVIFOLIA, LARREA TRIDENTATA, AMBROSIA DUMOSA AND BUNCHGRASS.				
General:					
Owner/Manager:	PVT				
Occurrence No.	95	Map Index: 02484	EO Index: 24487	Element Last Seen:	1986-06-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1986-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10
Quad Summary:	Littlerock (3411758), Alpine Butte (3411768)				
County Summary:	Los Angeles				
Lat/Long:	34.62414 / -117.91535		Accuracy:	1/5 mile	
UTM:	Zone-11 N3831744 E416091		Elevation (ft):	2800	
PLSS:	T06N, R10W, Sec. 11 (S)		Acres:	0.0	
Location:	ANTELOPE VALLEY, W OF ALPINE, 5.5 MI N JCT 121 STREET EAST & AVENUE T.				
Detailed Location:	ONE HEARD & ONE OBS DURING 1986 SURVEY IN SUITABLE HABITAT.				
Ecological:	VEG WITHIN 50 M INCLUDES SALSOLA KALI TENUIFOLIA, HYMENOCLEA SALSOLA AND LARREA TRIDENTATA.				
General:					
Owner/Manager:	PVT				



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Occurrence No.	96	Map Index: 02480	EO Index: 24486	Element Last Seen:	1986-06-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1986-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10
Quad Summary:	Littlerock (3411758)				
County Summary:	Los Angeles				
Lat/Long:	34.61637 / -117.91757		Accuracy:	1/5 mile	
UTM:	Zone-11 N3830884 E415879		Elevation (ft):	2660	
PLSS:	T06N, R10W, Sec. 15 (S)		Acres:	0.0	
Location:	ANTELOPE VALLEY, SW ALPINE BUTTE 4 MI N JCT 121 STREET EAST AND AVENUE T.				
Detailed Location:	ONE OBS DURING 1986 BREEDING SURVEY IN SUITABLE HABITAT. NONE OBS IN 1987.				
Ecological:	VEG WITHIN A 50 M RADIUS INCLUDES LARREA TRIDENTATA, YUCCA BREVIFOLIA, ACAMPTOPAPPUS SPHAEROCEPHALUS, AMBOSIA DUMOSA & BUNCHGRASS.				
General:					
Owner/Manager:	PVT				
Occurrence No.	97	Map Index: 02525	EO Index: 24485	Element Last Seen:	1986-06-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1986-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10
Quad Summary:	Littlerock (3411758)				
County Summary:	Los Angeles				
Lat/Long:	34.61637 / -117.88201		Accuracy:	1/5 mile	
UTM:	Zone-11 N3830855 E419140		Elevation (ft):	2680	
PLSS:	T06N, R10W, Sec. 13 (S)		Acres:	0.0	
Location:	ANTELOPE VALLEY, SE ALPINE BUTTE, 2.5 MI N JCT PALMDALE BLVD AND 140TH STREET EAST.				
Detailed Location:	ONE HEARD DURING 1986 BREEDING SEASON IN SUITABLE HABITAT. NONE OBS IN 1987.				
Ecological:	VEG WITHIN 50 M RADIUS INCLUDES LARREA TRIDENTATA, CROTON CALIFORNICUS, AMBROSIA DUMOSA & BUNCHGRASS.				
General:					
Owner/Manager:	PVT				
Occurrence No.	98	Map Index: 02545	EO Index: 24484	Element Last Seen:	1986-06-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1986-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10
Quad Summary:	Lovejoy Buttes (3411757)				
County Summary:	Los Angeles				
Lat/Long:	34.59748 / -117.87062		Accuracy:	1/5 mile	
UTM:	Zone-11 N3828751 E420166		Elevation (ft):	2790	
PLSS:	T06N, R09W, Sec. 19 (S)		Acres:	0.0	
Location:	ANTELOPE VALLEY, W OF LOVEJOY BUTTES, E OF N 145TH ST EAST, 1.2 MI S OF JCT WITH AVENUE O.				
Detailed Location:	TWO INDIVIDUALS HEARD DURING 1986 BREEDING SEASON IN SUITABLE HABITAT. NONE OBS IN 1987.				
Ecological:	VEG WITHIN 50 M RADIUS INCLUDES LARREA TRIDENTATA, YUCCA BREVIFOLIA & BUNCHGRASS.				
General:					
Owner/Manager:	PVT				



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Occurrence No.	99	Map Index: 02543	EO Index: 24483	Element Last Seen:	1986-06-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1986-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10

Quad Summary: Lovejoy Buttes (3411757)

County Summary: Los Angeles

Lat/Long:	34.58804 / -117.87229	Accuracy:	1/5 mile
UTM:	Zone-11 N3827705 E420003	Elevation (ft):	2743
PLSS:	T06N, R09W, Sec. 19 (S)	Acres:	0.0

Location: ANTELOPE VALLEY, W OF LOVEJOY BUTTES, NW OF JCT OF AVENUE Q & NORTH 145TH STREET EAST.

Detailed Location: ONE INDIVIDUAL HEARD DURING 1986 BREEDING SEASON IN SUITABLE HABITAT. NONE LOCATED IN 1987.

Ecological: VEG WITHIN 50 M RADIUS INCLUDES YUCCA BREVIFOLIA, ATRIPLEX, LARREA TRIDENTATA & CHRYSOTHAMNUS NAUSEOSUS.

General:

Owner/Manager: PVT

Occurrence No.	131	Map Index: 02642	EO Index: 24451	Element Last Seen:	1986-06-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1986-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10

Quad Summary: Hi Vista (3411767)

County Summary: Los Angeles

Lat/Long:	34.67859 / -117.82730	Accuracy:	1/5 mile
UTM:	Zone-11 N3837712 E424212	Elevation (ft):	2610
PLSS:	T07N, R09W, Sec. 22 (S)	Acres:	0.0

Location: W OF SADDLEBACK BUTTE, 0.75 MI N OF JCT E AVE K-8 & 170TH STREET EAST.

Detailed Location: ONE HEARD DURING 1986 BREEDING SEASON IN SUITABLE HABITAT. NOT SEEN IN 1987.

Ecological: VEGETATION WITHIN A 50 M RADIUS INCLUDES LARREA TRIDENTATA, YUCCA BREVIFOLIA AND ATRIPLEX. PAVED ROAD AND CAMP GROUND OCCUR WITHIN HABITAT.

General:

Owner/Manager: DPR-SADDLEBACK BUTTE SP

Occurrence No.	132	Map Index: 02631	EO Index: 24450	Element Last Seen:	1986-06-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1986-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10

Quad Summary: Hi Vista (3411767)

County Summary: Los Angeles

Lat/Long:	34.69026 / -117.83034	Accuracy:	1/5 mile
UTM:	Zone-11 N3839008 E423944	Elevation (ft):	2640
PLSS:	T07N, R09W, Sec. 21 (S)	Acres:	0.0

Location: NW OF SADDLEBACK BUTTE, 1.8 MI E OF JCT EAST AVENUE J & NORTH 150TH STREET EAST.

Detailed Location: ONE HEARD DURING 1986 BREEDING SEASON IN SUITABLE HABITAT. NOT HEARD IN 1987.

Ecological: VEGETATION WITHIN A 50 M RADIUS INCLUDES LARREA TRIDENTATA, AMBROSIA DUMOSA AND YUCCA BREVIFOLIA. PAVED ROAD, POWER LINE AND HOUSES OCCUR IN AREA.

General:

Owner/Manager: PVT



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Occurrence No.	133	Map Index: 02673	EO Index: 24449	Element Last Seen:	1986-06-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1986-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10

Quad Summary: Hi Vista (3411767)

County Summary: Los Angeles

Lat/Long:	34.69081 / -117.81007	Accuracy:	1/5 mile
UTM:	Zone-11 N3839054 E425802	Elevation (ft):	2775
PLSS:	T07N, R09W, Sec. 15 (S)	Acres:	0.0

Location: N OF SADDLEBACK BUTTE, 3.1 MI E OF JCT OF NORTH 150TH STREET EAST & EAST AVENUS J.

Detailed Location: ONE HEARD AND ONE OBSERVED DURING 1986 BREEDING SEASON IN SUITABLE HABITAT. NOT SEEN IN 1987.

Ecological: VEGETATION WITHIN A 50 M RADIUS INCLUDES LARREA TRIDENTATA, YUCCA BREVIFOLIA, AMBROSIA DUMOSA AND BUNCHGRASS. PAVED ROAD OCCURS WITHIN HABITAT.

General:

Owner/Manager: PVT

Occurrence No.	134	Map Index: 02721	EO Index: 24448	Element Last Seen:	1987-05-12
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1987-05-12
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10

Quad Summary: Hi Vista (3411767)

County Summary: Los Angeles

Lat/Long:	34.71192 / -117.77367	Accuracy:	1/5 mile
UTM:	Zone-11 N3841369 E429154	Elevation (ft):	2970
PLSS:	T07N, R08W, Sec. 07 (S)	Acres:	0.0

Location: NE OF SADDLEBACK BUTTE, 0.4 MI N OF JCT OF EAST AVENUE I & NORTH 200TH STREET EAST.

Detailed Location: TWO OBSERVED DURING 1987 BREEDING SEASON IN SUITABLE HABITAT. ALSO ONE HEARD IN 1986.

Ecological: VEGETATION IS SPARSE AND WITHIN A 50 M RADIUS INCLUDES LARREA TRIDENTATA, AMBROSIA DUMOSA, YUCCA BREVIFOLIA, ATRIPLEX, AND TYMENOCLEA SALSOLA. PAVED ROAD OCCURS WITHIN HABITAT.

General:

Owner/Manager: PVT

Occurrence No.	147	Map Index: 02922	EO Index: 24435	Element Last Seen:	1986-06-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1986-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10

Quad Summary: Mescal Creek (3411746)

County Summary: Los Angeles, San Bernardino

Lat/Long:	34.45526 / -117.65979	Accuracy:	1/5 mile
UTM:	Zone-11 N3812833 E439396	Elevation (ft):	3800
PLSS:	T04N, R08W, Sec. 12 (S)	Acres:	0.0

Location: APPROX 0.25 MI N ON 26TH ST E FROM JCT WITH ANTELOPE HWY, NWO PINON HILLS.

Detailed Location: ONE HEARD DURING 1986 BREEDING SEASON IN SUITABLE HABITAT. NOT OBSERVED IN 1987.

Ecological: VEGETATION WITHIN 50 M RADIUS INCLUDES LARREA TRIDENTATA, HYMENOCLEA SALSOLA, YUCCA BREVIFOLIA, EPHEDRA, BUNCHGRASS AND HAPLOPAPPUS. PAVED ROAD, POWERLINE AND DRAINAGE CANAL OCCUR IN HABITAT.

General:

Owner/Manager: PVT



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Occurrence No.	148	Map Index: 02924	EO Index: 24434	Element Last Seen:	1986-06-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1986-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10

Quad Summary: Mescal Creek (3411746)

County Summary: Los Angeles, San Bernardino

Lat/Long:	34.46316 / -117.65962	Accuracy:	1/5 mile
UTM:	Zone-11 N3813709 E439417	Elevation (ft):	3720
PLSS:	T04N, R07W, Sec. 06 (S)	Acres:	0.0

Location: APPROX 0.75 MI N ON 26TH ST E FROM JCT WITH ANTELOPE HWY, NNW OF PINON HILLS.

Detailed Location: ONE HEARD DURING 1986 BREEDING SEASON IN SUITABLE HABITAT.

Ecological: VEGETATION WITHIN A 50 M RADIUS INCLUDES YUCCA BREVIFOLIA, JUNIPERUS, ERIOGONUM FASCICULATUM, HYMENOCLEA SALSOLA, EPHEDRA, SALAZARIA MEXICANA, HAPLOPAPPUS AND BUNCHGRASS. HOUSE AND POWERLINE OCCUR IN HABITAT.

General:

Owner/Manager: PVT

Occurrence No.	149	Map Index: 02918	EO Index: 24433	Element Last Seen:	1986-06-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1986-06-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10

Quad Summary: Mescal Creek (3411746)

County Summary: Los Angeles, San Bernardino

Lat/Long:	34.48957 / -117.66010	Accuracy:	1/5 mile
UTM:	Zone-11 N3816638 E439392	Elevation (ft):	3450
PLSS:	T05N, R08W, Sec. 25 (S)	Acres:	0.0

Location: APPROX 2.6 MI N ON 26TH ST E FROM JCT WITH ANTELOPE HWY, NNW OF PINON HILLS.

Detailed Location: ONE OBSERVED DURING 1986 BREEDING SEASON IN SUITABLE HABITAT. NONE OBSERVED IN 1987.

Ecological: VEGETATION WITHIN A 50 M RADIUS INCLUDES HYMENOCLEA SALSOLA, LARREA TRIDENTATA, LYCIUM ANDERSONII, ERIOGONUM FASCICULATUM, SALAZARIA MEXICANA AND YUCCA BREVIFOLIA. HOUSE, ROAD AND POWERLINE OCCUR IN HABITAT.

General:

Owner/Manager: PVT



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Occurrence No.	150	Map Index: 02847	EO Index: 24432	Element Last Seen:	1986-06-08
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1986-06-08
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10
Quad Summary:	Mescal Creek (3411746)				
County Summary:	Los Angeles				
Lat/Long:	34.46492 / -117.70520		Accuracy:	1/5 mile	
UTM:	Zone-11 N3813933 E435232		Elevation (ft):	3850	
PLSS:	T04N, R08W, Sec. 03 (S)		Acres:	0.0	
Location:	APPROX 2.6 MI E ON TEJON RD FROM JCT WITH ANTELOPE HWY, NW OF PINON HILLS.				
Detailed Location:	ONE OBSERVED DURING 1986 BREEDING SESON IN SUITABLE HABITAT. NOT OBSERVED IN 1987.				
Ecological:	VEGETATION WITHIN A 50 M RADIUS INCLUDES YUCCA BREVIFOLIA, JUNIPERUS, HYMENOCLEA SALSOLA, LARREA TRIDENTATA, ERIOGONUM FASCICULATUM AND BUNCHGRASS.				
General:					
Owner/Manager:	PVT				
Occurrence No.	151	Map Index: 02837	EO Index: 24430	Element Last Seen:	1986-06-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1986-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10
Quad Summary:	Mescal Creek (3411746)				
County Summary:	Los Angeles				
Lat/Long:	34.46938 / -117.71273		Accuracy:	1/5 mile	
UTM:	Zone-11 N3814432 E434544		Elevation (ft):	3780	
PLSS:	T04N, R08W, Sec. 03 (S)		Acres:	0.0	
Location:	APPROX 3.1 MI E ON TEJON RD FROM JCT WITH ANTELOPE HWY, NW OF PINON HILLS.				
Detailed Location:	ONE HEARD DURING 1986 BREEDING SURVEY IN SUITABLE HABITAT. NOT OBSERVED IN 1987.				
Ecological:	VEGETATION WITHIN A 50 M RADIUS INCLUDES EPHEDRA, HAPLOPAPPUS, ERIOGONUM FASCICULATUM, HYMENOCLEA SALSOLA, JUNIPERUS, YUCCA BREVIFOLIA, AND EUROTIA LANATA. GRADED ROAD, POWERLINE AND GRAZING OCCUR IN HABITAT.				
General:					
Owner/Manager:	PVT				
Occurrence No.	152	Map Index: 02819	EO Index: 24429	Element Last Seen:	1986-06-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1986-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10
Quad Summary:	Mescal Creek (3411746)				
County Summary:	Los Angeles				
Lat/Long:	34.46934 / -117.72142		Accuracy:	1/5 mile	
UTM:	Zone-11 N3814433 E433746		Elevation (ft):	3760	
PLSS:	T04N, R08W, Sec. 04 (S)		Acres:	0.0	
Location:	APPROX 3.6 MI E ON TEJON RD FROM JCT WITH ANTELOPE HWY, NW OF PINON HILLS.				
Detailed Location:	ONE OBSERVED DURING 1986 BREEDING SEASON IN SUITABLE HABITAT.				
Ecological:	VEGETATION WITHIN A 50 M RADIUS INCLUDES YUCCA BREVIFOLIA, JUNIPERUS, LARREA TRIDENTATA, HYMENOCLEA SALSOLA AND LYCIUM COOPERI. DISTURBANCE NOT EVIDENT.				
General:					
Owner/Manager:	PVT				



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Occurrence No.	156	Map Index: 24361	EO Index: 6608	Element Last Seen: 1990-04-28
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 1990-04-28
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1993-09-27

Quad Summary: Lovejoy Buttes (3411757)
County Summary: Los Angeles

Lat/Long:	34.61339 / -117.84835	Accuracy:	1/5 mile
UTM:	Zone-11 N3830498 E422223	Elevation (ft):	2760
PLSS:	T06N, R09W, Sec. 17 (S)	Acres:	0.0

Location: NORTH SLOPE OF LOVEJOY BUTTES, SOUTH OF AVENUE "O," BETWEEN 155TH STREET EAST & 158TH STREET EAST, LAKE LOS ANGELES.
Detailed Location: BIRDS FOUND ON THE NORTH-FACING SLOPE, AMONG LARGE ROCK OUTCROPS.
Ecological: HABITAT CONSISTS OF JOSHUA TREE WOODLAND, WITH ABUNDANT ANNUALS PRESENT.
General: IN 1990, ONE PAIR OF THRASHERS OBSERVED, STAYING CLOSE AND CALLING, ALTHOUGH NO NEST WAS FOUND.
Owner/Manager: UNKNOWN

Lanius ludovicianus		Element Code: ABPBR01030
loggerhead shrike		
Listing Status:	Federal: None	CNDDB Element Ranks: Global: G4
	State: None	State: S4
Other:	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	
Habitat:	General: BROKEN WOODLANDS, SAVANNAH, PINYON-JUNIPER, JOSHUA TREE, & RIPARIAN WOODLANDS, DESERT OASES, SCRUB & WASHES.	
	Micro: PREFERS OPEN COUNTRY FOR HUNTING, WITH PERCHES FOR SCANNING, AND FAIRLY DENSE SHRUBS AND BRUSH FOR NESTING.	

Occurrence No.	57	Map Index: 81009	EO Index: 81997	Element Last Seen: 2008-04-09
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 2008-04-09
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2010-12-07

Quad Summary: Palmdale (3411851), Ritter Ridge (3411852)
County Summary: Los Angeles

Lat/Long:	34.62075 / -118.12600	Accuracy:	1/10 mile
UTM:	Zone-11 N3831564 E396776	Elevation (ft):	2595
PLSS:	T06N, R12W, Sec. 11 (S)	Acres:	0.0

Location: 0.4 MI S OF DENIS AND 1.5 MILES EAST OF THE ANTELOPE VALLEY FREEWAY, 2.6 MI NNW OF PALMDALE PO.
Detailed Location: ON WEST SIDE OF SIERRA HWY, ABOUT 0.2 MILE WEST JCT OF VALLEY LINE ROAD & SITE 8 ROAD. MAPPED ACCORDING TO PROVIDED UTM COORDINATES.
Ecological: JOSHUA TREE WOODLAND. IMMEDIATE & SURROUNDING LAND USE: USAF PLANT 42, URBAN.
General: TWO INDIVIDUALS OBSERVED PERCHED ON JOSHUA TREE ON 9 APRIL 2008, PRESUMED TO BE BREEDING.
Owner/Manager: UNKNOWN



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Occurrence No.	63	Map Index: 81027	EO Index: 82014	Element Last Seen:	2008-04-18
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2008-04-18
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-12-08

Quad Summary: Littlerock (3411758)

County Summary: Los Angeles

Lat/Long:	34.51055 / -117.99023	Accuracy:	1/10 mile
UTM:	Zone-11 N3819212 E409102	Elevation (ft):	3008
PLSS:	T05N, R11W, Sec. 24 (S)	Acres:	0.0

Location: E OF LITTLE WASH ROCK AREA AND S OF CA AQUEDUCT, 0.8 MI S OF LITTLEROCK PO.

Detailed Location: 0.3 MI NNE FROM THE INTERSECTION OF MT EMMA ROAD & 77TH STREET E. MAPPED ACCORDING TO PROVIDED UTM COORDINATES.

Ecological: CREOSOTE BUSH SCRUB & JOSHUA TREE WOODLAND. VISIBLE DISTURBANCES: TRASH.

General: TWO INDIVIDUALS OBSERVED PERCHED ON JOSHUA TREE ON 18 APRIL 2008, PRESUMED TO BE BREEDING.

Owner/Manager: UNKNOWN

Occurrence No.	68	Map Index: 81046	EO Index: 82032	Element Last Seen:	2009-06-15
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	2009-06-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-12-09

Quad Summary: Ritter Ridge (3411852)

County Summary: Los Angeles

Lat/Long:	34.53180 / -118.15387	Accuracy:	1/10 mile
UTM:	Zone-11 N3821728 E394108	Elevation (ft):	4304
PLSS:	T05N, R12W, Sec. 08 (S)	Acres:	0.0

Location: 1.7 MILES NNW JCT OF VINCENT AND SR-14 (ANTELOPE VALLEY FREEWAY S), S OF ANAVERDE VALLEY, 4.25 MI SSW OF PALMDALE PO.

Detailed Location: ALONG NE SIDE OF POWERLINES AND 0.7 MILE NE OF HAROLD BEACON. MAPPED ACCORDING TO PROVIDED UTM COORDINATES.

Ecological: POWERLINES RUNNING THROUGH AREA.

General: TWO BIRDS WERE OBSERVED ON 15 JUNE 2009. BEGGING BEHAVIOR WAS OBSERVED BUT IT WAS UNCLEAR IF IT WAS A PAIR OR AN ADULT AND JUVENILE.

Owner/Manager: UNKNOWN



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Occurrence No.	70	Map Index:	81052	EO Index:	82037	Element Last Seen:	2008-04-03
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2008-04-03	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-12-09	

Quad Summary:	Lancaster East (3411861)		
County Summary:	Los Angeles		

Lat/Long:	34.64389 / -118.11269	Accuracy:	1/10 mile
UTM:	Zone-11 N3834116 E398024	Elevation (ft):	2509
PLSS:	T06N, R12W, Sec. 02 (S)	Acres:	0.0

Location:	NORTHWEST SIDE OF US AIRFORCE PLANT 42 AND PALMDALE AIRPORT, 1.4 MI NNE OF DENIS AT THE SIERRA HWY, SOUTH OF LANCASTER.
Detailed Location:	JUST S OF E AVENUE M AT THE 10TH STREET E (CHALLENGER WAY) INTERSECTION. MAPPED ACCORDING TO PROVIDED UTM COORDINATES.
Ecological:	JOSHUA TREE WOODLAND. VISIBLE DISTURBANCES: TRASH.
General:	TWO INDIVIDUALS OBSERVED PERCHED ON JOSHUA TREE ON 3 APRIL 2008, PRESUMED TO BE BREEDING.
Owner/Manager:	UNKNOWN



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Vireo bellii pusillus

Element Code: ABPBW01114

least Bell's vireo

Listing Status:	Federal: Endangered	CNDDB Element Ranks:	Global: G5T2
	State: Endangered		State: S2
	Other: ABC_WLBCC-Watch List of Birds of Conservation Concern, IUCN_NT-Near Threatened		
Habitat:	General: SUMMER RESIDENT OF SOUTHERN CALIFORNIA IN LOW RIPARIAN IN VICINITY OF WATER OR IN DRY RIVER BOTTOMS; BELOW 2000 FT.		
	Micro: NESTS PLACED ALONG MARGINS OF BUSHES OR ON TWIGS PROJECTING INTO PATHWAYS, USUALLY WILLOW, BACCHARIS, MESQUITE.		

Occurrence No.	319	Map Index:	78860	EO Index:	79815	Element Last Seen:	2005-05-05
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2005-05-05	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-05-18	

Quad Summary: Palmdale (3411851)

County Summary: Los Angeles

Lat/Long:	34.54961 / -118.11226	Accuracy:	specific area
UTM:	Zone-11 N3823661 E397949	Elevation (ft):	2815
PLSS:	T05N, R12W, Sec. 02 (S)	Acres:	8.0

Location: SOUTHWEST SIDE OF UNA LAKE, EAST AND WEST OF SIERRA HIGHWAY, ABOUT 2 MILES SOUTH OF PALMDALE.

Detailed Location: LOCATION MAPPED ACCORDING TO PROVIDED MAP.

Ecological: HABITAT CONSISTS OF WILLOW AND MULEFAT SCRUB GROWING IN FLOODED AREA. VISIBLE DISTURBANCE INCLUDES ROAD AND RAILROAD.

General: 1 SINGING VIREO OBSERVED ON A TERRITORY ON 5 MAY 2005. 1 VIREO (PRESUMED TO BE THE SAME BIRD) SEEN 2 WEEKS EARLIER IN THE SAME AREA.

Owner/Manager: PVT

Occurrence No.	321	Map Index:	78888	EO Index:	79867	Element Last Seen:	2006-05-29
Occ. Rank:	Poor	Presence:	Presumed Extant	Site Last Seen:		2006-05-29	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-05-20	

Quad Summary: Lancaster West (3411862)

County Summary: Los Angeles

Lat/Long:	34.71913 / -118.16702	Accuracy:	80 meters
UTM:	Zone-11 N3842517 E393141	Elevation (ft):	2316
PLSS:	T07N, R12W, Sec. 05 (S)	Acres:	0.0

Location: JUST EAST THE INTERSECTION OF AVENUE H AND HIGHWAY 14 (ANTELOPE VALLEY FREEWAY), CITY OF LANCASTER.

Detailed Location: 25 METERS NORTH OF AVENUE H AT THE SOUTHEASTERN CORNER OF WATER DETENTION BASIN.

Ecological: HABITAT IS LOW TO MEDIUM HEIGHT WILLOWS. EXTENSIVE AREA OF LOWER WILLOWS & OTHER SHRUBS ON DAMP SOIL TO THE NORTH. SURROUNDING LAND: HIGHLY DISTURBED JOSHUA TREE WOODLAND & URBANIZATION. SITE QUALITY GOOD PRIOR TO VEGETATION CLEARING.

General: 1 ADULT OBS SINGING ON 29 MAY 2006. THIS BIRD WAS STATED AS BEING "ON TERRITORY FOR A NUMBER OF WEEKS". THERE WAS NO EVIDENCE OF ACTUAL NESTING. SITE WAS CLEARED OF VEGETATION AFTER THE NESTING SEASON.

Owner/Manager: CITY OF LANCASTER



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<i>Aimophila ruficeps canescens</i>		Element Code: ABPBX91091	
southern California rufous-crowned sparrow			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5T3
	State: None		State: S2S3
	Other: CDFW_WL-Watch List		
Habitat:	General: RESIDENT IN SOUTHERN CALIFORNIA COASTAL SAGE SCRUB AND SPARSE MIXED CHAPARRAL.		
	Micro: FREQUENTS RELATIVELY STEEP, OFTEN ROCKY HILLSIDES WITH GRASS & FORB PATCHES.		

Occurrence No.	179	Map Index:	79008	EO Index:	79968	Element Last Seen:	2005-05-12
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2005-05-12	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-06-07	

Quad Summary: Sleepy Valley (3411853)
County Summary: Los Angeles

Lat/Long:	34.58445 / -118.25633	Accuracy:	80 meters
UTM:	Zone-11 N3827679 E384777	Elevation (ft):	3737
PLSS:	T06N, R13W, Sec. 28 (S)	Acres:	0.0

Location: ALONG GOODE HILL RD. ~2 MI SSE OF INTERSECTION OF BOUQUET CYN RD & ELIZABETH LAKE RD. W OF RITTER CYN, S OF LEONA VALLEY
Detailed Location: MAPPED ACCORDING TO UTM COORDINATES PROVIDED.
Ecological: MIXED CHAPARRAL THAT BURNED IN 2002 & STILL RECOVERING. REMNANT ADENOSTOMA FASCICULATUM, QUERCUS BERBERDIFOLIA (OR JOHN-TUCKERI), CERCOCARPUS BETULOIDES, DENDROMECON RIGIDA, AND VARIOUS EARLY SUCCESSIONAL ANNUALS AND GRASSES. LOAMY SOILS.
General: 1 ADULT OBSERVED AT THIS LOCATION ON 12 MAY 2005.
Owner/Manager: PVT

Occurrence No.	180	Map Index:	79010	EO Index:	79969	Element Last Seen:	2005-05-13
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2005-05-13	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-06-07	

Quad Summary: Ritter Ridge (3411852)
County Summary: Los Angeles

Lat/Long:	34.55750 / -118.20186	Accuracy:	80 meters
UTM:	Zone-11 N3824629 E389737	Elevation (ft):	3543
PLSS:	T05N, R13W, Sec. 01 (S)	Acres:	0.0

Location: SW ANAVERDE VALLEY, 1 MI NE OF HAUSER MICROWAVE STATION, 4 MI W OF ANTELOPE VALLEY FWY & WAVE S, 5.3 MI WSW OF PALMDALE.
Detailed Location: 0.25 MI EAST FROM THE END OF EDISON ROAD, JUST SOUTH OF ANA VERDE MOUNTAIN WAY IN SIERRA PELONA RANGE. MAPPED ACCORDING TO UTM COORDINATES & MAP PROVIDED.
Ecological: MIXED CHAPARRAL/JUNIPER WOODLAND THAT BURNED IN 2002 AND STILL RECOVERING. REMNANT JUNIPERUS CALIFORNICA, PRUNUS ILICIFOLIA, ERIOGONUM FASCICULATUM, ERICAMERIA SP., VARIOUS EARLY SUCCESSIONAL ANNUALS & GRASSES. NW SLOPE, ROCKY, LOAMY SOILS.
General: 1 SINGING ADULT MALE OBSERVED ON 13 MAY 2005.
Owner/Manager: PVT



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<i>Artemisospiza belli belli</i>		Element Code: ABPBX97021
Bell's sage sparrow		
Listing Status:	Federal: None	CNDDB Element Ranks: Global: G5T2T4
	State: None	State: S2?
Other:	ABC_WLBCC-Watch List of Birds of Conservation Concern, CDFW_WL-Watch List, USFWS_BCC-Birds of Conservation Concern	
Habitat:	General: NESTS IN CHAPARRAL DOMINATED BY FAIRLY DENSE STANDS OF CHAMISE. FOUND IN COASTAL SAGE SCRUB IN SOUTH OF RANGE.	
	Micro: NEST LOCATED ON THE GROUND BENEATH A SHRUB OR IN A SHRUB 6-18 INCHES ABOVE GROUND. TERRITORIES ABOUT 50 YDS APART.	

Occurrence No.	55	Map Index: 79023	EO Index: 79981	Element Last Seen: 2005-05-12
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen: 2005-05-12
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2010-12-21

Quad Summary: Ritter Ridge (3411852)
County Summary: Los Angeles

Lat/Long:	34.58584 / -118.23579	Accuracy:	nonspecific area
UTM:	Zone-11 N3827810 E386662	Elevation (ft):	3600
PLSS:	T06N, R13W, Sec. 27 (S)	Acres:	188.0

Location: JUST EAST OF RITTER CANYON AND SSE OF MESSER RANCH, SE END OF LEONA VALLEY, 7 MILES WEST OF PALMDALE PO.
Detailed Location: AREA BISECTED BY JEEP TRAIL SOUTH OF ELIZABETH LAKE ROAD. LOCATION MAPPED ACCORDING TO PROVIDED MAP.
Ecological: MIXED CHAPARRAL THAT BURNED IN 2002 & STILL RECOVERING. REMNANT ADENOSTOMA FASCICULATUM, CERCOCARPUS BETULOIDES, ERIOGONUM FASCICULATUM, ERIODICTYON SPP., ARTEMISIA CALIFORNICA, ARCTOSTAPHYLOS SPP., & VARIOUS SUCCESSIONAL ANNUALS & GRASSES.
General: 4 INDIVIDUALS OBS 12 MAY 2005 (SEVERAL MALES SINGING). RITTER RANCH UNDERGOING CONSTRUCTION OF SUBDIVISIONS; HOWEVER, CONSERVATION AREAS ARE ON RANCH. "LIKELY NEAR OR WITHIN INTERGRADE ZONE OF BELLI AND CANESCENS. HABITAT SUGGESTS BELLI."
Owner/Manager: PVT



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Agelaius tricolor		Element Code: ABPBXB0020	
tricolored blackbird			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G2G3
	State: None		State: S1S2
Other:	ABC_WLBCC-Watch List of Birds of Conservation Concern, BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, USFWS_BCC-Birds of Conservation Concern		
Habitat:	General:	HIGHLY COLONIAL SPECIES, MOST NUMEROUS IN CENTRAL VALLEY & VICINITY. LARGELY ENDEMIC TO CALIFORNIA.	
	Micro:	REQUIRES OPEN WATER, PROTECTED NESTING SUBSTRATE, & FORAGING AREA WITH INSECT PREY WITHIN A FEW KM OF THE COLONY.	

Occurrence No.	401	Map Index:	55406	EO Index:	55406	Element Last Seen:	2009-04-25
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2009-04-25	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-02-02	
Quad Summary:	Palmdale (3411851), Ritter Ridge (3411852)						
County Summary:	Los Angeles						
Lat/Long:	34.55160 / -118.11966		Accuracy:	nonspecific area			
UTM:	Zone-11 N3823889 E397271		Elevation (ft):	2815			
PLSS:	T05N, R12W, Sec. 03 (S)		Acres:	262.0			
Location:	LAKE PALMDALE AND UNA LAKE, ABOUT 1.5 MILES SOUTH OF PALMDALE. SOUTHEAST OF HWY 14 INTERSECTION WITH AVENUE S.						
Detailed Location:	PRIVATE HUNTING CLUB.						
Ecological:	1994: GREAT-TAILED GRACKLE & YELLOW-HEADED BLACKBIRD POPULATIONS INCREASING. MANY YEARS WITH OBSERVATIONS FROM APR TO SEP OR OCT.						
General:	28 APR 1990: 100 OBS. 1994: 20 BIRDS NESTING. 22 MAY 1993: 29 OBS. 4 JUN 1994: 13 OBS. 23 MAY 1995: 1 OBS. 6 MAY 2004: 3 OBS. 25 APR 2008: 350 OBS + 12 OBS AT UNA LAKE. 25 APR 2009: 100 OBS. NESTING ASSUMED FOR THESE SPRING OBS.						
Owner/Manager:	PVT						



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Catostomus santaanae

Element Code: AFCJC02190

Santa Ana sucker

Listing Status: Federal: Threatened

CNDDDB Element Ranks: Global: G1

State: None

State: S1

Other: AFS_TH-Threatened, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable

Habitat: General: ENDEMIC TO LOS ANGELES BASIN SOUTH COASTAL STREAMS.

Micro: HABITAT GENERALISTS, BUT PREFER SAND-RUBBLE-BOULDER BOTTOMS, COOL, CLEAR WATER, & ALGAE.

Occurrence No. 13 **Map Index:** 01944 **EO Index:** 14833 **Element Last Seen:** 1993-08-04

Occ. Rank: Fair **Presence:** Presumed Extant **Site Last Seen:** 1993-08-04

Occ. Type: Natural/Native occurrence **Trend:** Decreasing **Record Last Updated:** 2006-09-06

Quad Summary: Acton (3411842), Agua Dulce (3411843)

County Summary: Los Angeles

Lat/Long: 34.43990 / -118.29916

Accuracy: specific area

UTM: Zone-11 N3811699 E380642

Elevation (ft): 2000

PLSS: T04N, R14W, Sec. 12 (S)

Acres: 701.0

Location: SANTA CLARA RIVER, FROM LANG TO ARRASTRE CYN (1978). 2.5 MILES EAST FROM LANG & THE ANELOPE VALLEY FREEWAY (1993).

Detailed Location: COLLECTED AT 8 SITES ALONG STREAM LENGTH SEARCHED (1978).

Ecological: WILLOW/ BACCHARIS RIPARIAN WITH OVERSTORY OF COTTONWOOD AND LIVE OAK. RECENTLY SCOURED BY HEAVY RAINS AND HIGH WATER FLOWS IN PREVIOUS 2 WINTERS (1993).

General: 1993 SAMPLE SITE WAS LOCATED, T4N, R14W, SECTION 11. THERE WERE 15 SAMPLE POINTS WITH A TOTAL OF 4 FISH OBSERVED AT 3 OF THOSE POINTS. OTHER RARE SPECIES SEEN GASTEROSTEUS ACULEATUS WILLIAMSONI & GILA ORCUTTI

Owner/Manager: PVT



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Gasterosteus aculeatus williamsoni

Element Code: AFCPA03011

unarmored threespine stickleback

Listing Status:	Federal: Endangered	CNDDDB Element Ranks:	Global: G5T1
	State: Endangered		State: S1
	Other: AFS_EN-Endangered, CDFW_FP-Fully Protected		
Habitat:	General: WEEDY POOLS, BACKWATERS, AND AMONG EMERGENT VEGETATION AT THE STREAM EDGE IN SMALL SOUTHERN CALIFORNIA STREAMS.		
	Micro: COOL (<24 C), CLEAR WATER WITH ABUNDANT VEGETATION.		

Occurrence No.	2	Map Index:	01308	EO Index:	20033	Element Last Seen:	2005-XX-XX
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:			2008-XX-XX
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2010-07-30

Quad Summary: Green Valley (3411854), Warm Springs Mountain (3411855)

County Summary: Los Angeles

Lat/Long:	34.54669 / -118.51284	Accuracy:	nonspecific area
UTM:	Zone-11 N3823814 E361188	Elevation (ft):	1760
PLSS:	T05N, R16W, Sec. 01 (S)	Acres:	608.8

Location: SAN FRANCISQUITO CANYON, FROM SOUTHERN BOUNDARY OF ANGELES NF TO 8.4 MI UPSTREAM TO POWERHOUSE NUMBER ONE, ANGELES NF.

Detailed Location: TRIBUTARY OFF SANTA CLARA RIVER, EAST OF I-5 AND NORTH OF HWY 126, VALENCIA. MAPPED ACCORDING TO DETAILED LOCATION & MAP PROVIDED.

Ecological: HEALTHY POPULATION UNTIL 2005 WHEN HIGH WATER EVENT RE-COURSED THE CHANNEL & HEAVILY SCOURED THE DRAINAGE. FOCUSED SURVEYS BY USGS & CDFG DETERMINED THAT THE 2005 FLOODING EXTIRPATED THE SPECIES FROM THAT DRAINAGE.

General: 1977: FOUND FROM 100 M UPSTREAM OF SAN FRANCISQUITO CYN RD UPSTREAM TO SAN FRANCISQUITO POWERHOUSE NO. 1. 100 CAPT & RELEASED ON 19 DEC 2000. 22 FISH FROM 4 DEC 2000 THRU 2 MAY '02 IN MIDDLE REACHES. 2005: OBS JAN-SEPT, LATER EXTIRPATED.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	4	Map Index:	02048	EO Index:	5409	Element Last Seen:	2007-12-13
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:			2007-12-13
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2010-05-26

Quad Summary: Acton (3411842), Agua Dulce (3411843)

County Summary: Los Angeles

Lat/Long:	34.43992 / -118.28597	Accuracy:	nonspecific area
UTM:	Zone-11 N3811685 E381854	Elevation (ft):	2440
PLSS:	T04N, R13W, Sec. 07 (S)	Acres:	774.0

Location: SANTA CLARA RIVER AT LANG AROUND RIVERS END PARK, THROUGH SOLEDAD CANYON, UPSTREAM TO & 1 MILE UP ARRASTRE CANYON.

Detailed Location: FLOODS IN 1993 ELIMINATED MOST BREEDING POOLS; WATERFALL CREATED BY DYNAMITING RIVER HAS PREVENTED UPSTREAM RECOLONIZATION, FURTHER ISOLATING THE POPULATION. HISTORIC INFO IN 1996 REPORT.

Ecological: EMERGENT VEGETATION (GRASSES) GROWING OUT FROM SHORE LEAVING ONLY ABOUT A 3' CHANNEL. SANTA ANA SUCKER AND ARROYO CHUB ALSO AT THIS SITE. 2007: CREEK UNDERGOING RESTORATION AFTER CLEAN WATER ACT SEC 404 VIOLATION. 20 OBS

General: 1987: 51 COLL & DEP @ UCLA. '81-95: UTS SAMPLING (SOLEDAD CAMPGROUND): HIGH OF 784 IN '91, LOW OF 13 IN '95. SEINING-VIC OF RUSS: 57 IN '99, 123 IN 2000 & 80 IN '01. 30 ON 19 DEC '01. 6 OBS 6 MAY '05. 20 OBS 3 MAR '07. 1 OBS 13 DEC '07.

Owner/Manager: PVT, USFS-ANGELES NF



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<i>Myotis yumanensis</i>		Element Code: AMACC01020	
Yuma myotis			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5
	State: None		State: S4?
	Other: BLM_S-Sensitive, IUCN_LC-Least Concern, WBWG_LM-Low-Medium Priority		
Habitat:	General: OPTIMAL HABITATS ARE OPEN FORESTS AND WOODLANDS WITH SOURCES OF WATER OVER WHICH TO FEED.		
	Micro: DISTRIBUTION IS CLOSELY TIED TO BODIES OF WATER. MATERNITY COLONIES IN CAVES, MINES, BUILDINGS OR CREVICES.		

Occurrence No.	58	Map Index:	68427	EO Index:	68663	Element Last Seen:	1999-08-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1999-08-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2007-04-10	
Quad Summary:	Pacifco Mountain (3411841)						
County Summary:	Los Angeles						
Lat/Long:	34.48647 / -118.02150		Accuracy:	1/10 mile			
UTM:	Zone-11 N3816570 E406205		Elevation (ft):	3340			
PLSS:	T05N, R11W, Sec. 27 (S)		Acres:	0.0			
Location:	NE OF LITTLE ROCK RESERVOIR, VICINITY OF LITTLE DAM.						
Detailed Location:	MAPPED ACCORDING TO UTM COORDINATES PROVIDED BY SOURCE, DATUM NOT GIVEN.						
Ecological:							
General:	8 FEMALES CAPTURED/RELEASED BY MIST NET ON 17 JUL 1998. 3 MALES AND 12 FEMALES CAPTURED/RELEASED BY MIST NET ON 19 AUG 1999.						
Owner/Manager:	UNKNOWN						



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Myotis evotis		Element Code: AMACC01070	
long-eared myotis			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5
	State: None		State: S4?
	Other: BLM_S-Sensitive, IUCN_LC-Least Concern, WBWG_M-Medium Priority		
Habitat:	General: FOUND IN ALL BRUSH, WOODLAND & FOREST HABITATS FROM SEA LEVEL TO ABOUT 9000 FT. PREFERS CONIFEROUS WOODLANDS & FORESTS.		
	Micro: NURSERY COLONIES IN BUILDINGS, CREVICES, SPACES UNDER BARK, & SNAGS. CAVES USED PRIMARILY AS NIGHT ROOSTS.		
Occurrence No.	37	Map Index: 68448	EO Index: 68696
Occ. Rank:	Unknown	Presence: Presumed Extant	Element Last Seen: 1998-08-06
Occ. Type:	Natural/Native occurrence	Trend: Unknown	Site Last Seen: 1998-08-06
			Record Last Updated: 2007-04-10
Quad Summary:	Valyermo (3411747)		
County Summary:	Los Angeles		
Lat/Long:	34.38148 / -117.77020	Accuracy:	1/10 mile
UTM:	Zone-11 N3804724 E429191	Elevation (ft):	5940
PLSS:	T03N, R09W, Sec. 01 (S)	Acres:	0.0
Location:	ANGELES NF, JUST EAST OF BLUE RIDGE, ABOUT 0.3MI NORTH OF HWY 2 (ANGELES CREST HWY). VICINITY OF ICY SPRINGS & ROCK CR.		
Detailed Location:	MAPPED ACCORDING TO UTM COORDINATES PROVIDED BY SOURCE, DATUM NOT GIVEN.		
Ecological:			
General:	6 FEMALES CAPTURED BY MIST NET AND RELEASED ON 6 AUG 1998.		
Owner/Manager:	USFS-ANGELES NF		



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<i>Myotis volans</i>		Element Code: AMACC01110	
long-legged myotis			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5
	State: None		State: S4?
	Other: IUCN_LC-Least Concern, WBWG_H-High Priority		
Habitat:	General: MOST COMMON IN WOODLAND & FOREST HABITATS ABOVE 4000 FT. TREES ARE IMPORTANT DAY ROOSTS; CAVES & MINES ARE NIGHT ROOSTS.		
	Micro: NURSERY COLONIES USUALLY UNDER BARK OR IN HOLLOW TREES, BUT OCCASIONALLY IN CREVICES OR BUILDINGS.		

Occurrence No.	78	Map Index: 68448	EO Index: 68693	Element Last Seen: 1998-08-06
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1998-08-06
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-04-10
Quad Summary:	Valyermo (3411747)			
County Summary:	Los Angeles			
Lat/Long:	34.38148 / -117.77020	Accuracy:	1/10 mile	
UTM:	Zone-11 N3804724 E429191	Elevation (ft):	5940	
PLSS:	T03N, R09W, Sec. 01 (S)	Acres:	0.0	
Location:	ANGELES NF, JUST EAST OF BLUE RIDGE, ABOUT 0.3MI NORTH OF HWY 2 (ANGELES CREST HWY). VICINITY OF ICY SPRINGS & ROCK CR.			
Detailed Location:	MAPPED ACCORDING TO UTM COORDINATES PROVIDED BY SOURCE, DATUM NOT GIVEN.			
Ecological:				
General:	7 FEMALES CAPTURED BY MIST NET AND RELEASED ON 6 AUG 1998.			
Owner/Manager:	USFS-ANGELES NF			



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<i>Myotis ciliolabrum</i>		Element Code: AMACC01140	
western small-footed myotis			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5
	State: None		State: S2S3
	Other: BLM_S-Sensitive, IUCN_LC-Least Concern, WBWG_M-Medium Priority		
Habitat:	General: WIDE RANGE OF HABITATS MOSTLY ARID WOODED & BRUSHY UPLANDS NEAR WATER. SEEKS COVER IN CAVES, BUILDINGS, MINES & CREVICES		
	Micro: PREFERS OPEN STANDS IN FORESTS AND WOODLANDS. REQUIRES DRINKING WATER. FEEDS ON A WIDE VARIETY OF SMALL FLYING INSECTS.		

Occurrence No.	24	Map Index: 68446	EO Index: 68691	Element Last Seen:	1998-07-30
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1998-07-30
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2007-04-10
Quad Summary:	Mescal Creek (3411746)				
County Summary:	Los Angeles				
Lat/Long:	34.41062 / -117.71667		Accuracy:	1/10 mile	
UTM:	Zone-11 N3807919 E434135		Elevation (ft):	5420	
PLSS:	T04N, R08W, Sec. 28 (S)		Acres:	0.0	
Location:	ANGELES NATIONAL FOREST, ABOUT 0.7MI NE OF BALL FLAT, VICINITY OF MESCAL CREEK.				
Detailed Location:	MAPPED ACCORDING TO UTM COORDINATES PROVIDED BY SOURCE, DATUM NOT GIVEN.				
Ecological:					
General:	3 FEMALES CAPTURED BY MIST NET AND RELEASED ON 30 JUL 1998.				
Owner/Manager:	USFS-ANGELES NF				

<i>Lasiurus cinereus</i>		Element Code: AMACC05030	
hoary bat			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5
	State: None		State: S4?
	Other: IUCN_LC-Least Concern, WBWG_M-Medium Priority		
Habitat:	General: PREFERS OPEN HABITATS OR HABITAT MOSAICS, WITH ACCESS TO TREES FOR COVER & OPEN AREAS OR HABITAT EDGES FOR FEEDING.		
	Micro: ROOSTS IN DENSE FOLIAGE OF MEDIUM TO LARGE TREES. FEEDS PRIMARILY ON MOTHS. REQUIRES WATER.		

Occurrence No.	50	Map Index: 68504	EO Index: 68809	Element Last Seen:	1938-07-15
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1938-07-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2007-03-16
Quad Summary:	Lake Hughes (3411864)				
County Summary:	Los Angeles				
Lat/Long:	34.67609 / -118.44615		Accuracy:	4/5 mile	
UTM:	Zone-11 N3838075 E367513		Elevation (ft):		
PLSS:	T07N, R15W, Sec. 23 (S)		Acres:	0.0	
Location:	LAKE HUGHES.				
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST ESTIMATE AROUND COMMUNITY OF LAKE HUGHES.				
Ecological:					
General:	1 MALE SPECIMEN (LACM #5003) COLLECTED BY J. VON BLOEKER ON 15 JUL 1938.				
Owner/Manager:	UNKNOWN				



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Corynorhinus townsendii

Element Code: AMACC08010

Townsend's big-eared bat

Listing Status: **Federal:** None **CNDDB Element Ranks:** **Global:** G3G4
State: Candidate Threatened **State:** S2S3
Other: BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, WBWG_H-High Priority
Habitat: **General:** THROUGHOUT CALIFORNIA IN A WIDE VARIETY OF HABITATS. MOST COMMON IN MESIC SITES.
Micro: ROOSTS IN THE OPEN, HANGING FROM WALLS & CEILINGS. ROOSTING SITES LIMITING. EXTREMELY SENSITIVE TO HUMAN DISTURBANCE.

Occurrence No. 301 **Map Index:** 78168 **EO Index:** 93163 **Element Last Seen:** 1930-04-09
Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 1930-04-09
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2014-04-17

Quad Summary: Valyermo (3411747), Lovejoy Buttes (3411757)

County Summary: Los Angeles

Lat/Long: 34.50579 / -117.81902 **Accuracy:** 1 mile
UTM: Zone-11 N3818544 E424815 **Elevation (ft):** 3202
PLSS: T05N, R09W, Sec. 21 (S) **Acres:** 0.0

Location: LLANO, JUST EAST OF BIG ROCK WASH, ALONG SR 138 (PEARBLOSSOM HWY), 4.5 MILES NORTHEAST FROM TOWN OF VALYERMO.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED TO PROVIDED LOCALITY OF "LLANO, MOJAVE DESERT."

Ecological:

General: 3 COLLECTED ON 22 OCT BY G. CANTWELL (LACM #1356,1591,1594), 1 ON 24 OCT (LACM #71245), AND 1 ON 25 OCT 1929 (SBMNH #5806). 4 COLLECTED ON 9 APR 1930 BY G. CANTWELL (LACM #1357,1358,1592,1593).

Owner/Manager: UNKNOWN

Occurrence No. 306 **Map Index:** 92082 **EO Index:** 93172 **Element Last Seen:** 1941-05-25
Occ. Rank: Unknown **Presence:** Presumed Extant **Site Last Seen:** 1941-05-25
Occ. Type: Natural/Native occurrence **Trend:** Unknown **Record Last Updated:** 2014-05-19

Quad Summary: Burnt Peak (3411865)

County Summary: Los Angeles

Lat/Long: 34.69210 / -118.52839 **Accuracy:** 1 mile
UTM: Zone-11 N3839962 E360004 **Elevation (ft):** 3970
PLSS: T07N, R16W, Sec. 13 (S) **Acres:** 0.0

Location: SHAKE CANYON, IN SAWMILL MOUNTAIN.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED GENERALLY TO PROVIDED LOCALITY OF "SHAKE CANYON."

Ecological:

General: 1 MALE COLLECTED ON 25 MAY 1941 (SBMNH #5799).

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	307	Map Index:	92088	EO Index:	93178	Element Last Seen:	1941-06-22
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1941-06-22	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-05-19	
Quad Summary:	Acton (3411842)						
County Summary:	Los Angeles						
Lat/Long:	34.44500 / -118.21430			Accuracy:	1 mile		
UTM:	Zone-11 N3812168 E388446			Elevation (ft):	2450		
PLSS:	T04N, R13W, Sec. 11 (S)			Acres:	0.0		
Location:	2 MI SW OF ACTON ALONG SOLEDAD CANYON, IN THE GENERAL VICINITY OF RAVENNA.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED GENERALLY TO BEST APPROXIMATION OF "ACTON, 2 MI SW; SOLEDAD CANYON, OLD MINE."						
Ecological:							
General:	2 COLLECTED BY J. COUFFER (LACM #10468,70256), 5 BY H. FLETCHER (LACM #70260,7826-7829), 1 BY J. VAN NORDHEIM (LACM 70208), AND 10 BY J. VON BLOCKER (LACM #7824,7825,70251-70255,70264-70266) IN JUN 1941.						
Owner/Manager:	UNKNOWN						

Occurrence No.	308	Map Index:	02088	EO Index:	93179	Element Last Seen:	1943-08-15
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1943-08-15	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-04-21	
Quad Summary:	Acton (3411842)						
County Summary:	Los Angeles						
Lat/Long:	34.47010 / -118.19618			Accuracy:	1 mile		
UTM:	Zone-11 N3814930 E390144			Elevation (ft):	2710		
PLSS:	T05N, R13W, Sec. 36 (S)			Acres:	0.0		
Location:	ACTON, SOLEDAD CANYON.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED GENERALLY TO PROVIDED LOCALITY "ACTON."						
Ecological:							
General:	1 SPECIMEN COLLECTED 15 JUN 1941 AND 2 SPECIMENS COLLECTED ON 11 SEP 1942 BY J. VAN NORDHEIM (LACM #21601, 21603, 21604). 4 SPEIMENS COLLECTED ON 15 AUG 1943 BY D. CONSTANTINE (LACM #19869-19872).						
Owner/Manager:	UNKNOWN						



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<i>Antrozous pallidus</i>		Element Code: AMACC10010	
pallid bat			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5
	State: None		State: S3
Other:	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, WBWG_H-High Priority		
Habitat:	General: DESERTS, GRASSLANDS, SHRUBLANDS, WOODLANDS & FORESTS. MOST COMMON IN OPEN, DRY HABITATS WITH ROCKY AREAS FOR ROOSTING.		
	Micro: ROOSTS MUST PROTECT BATS FROM HIGH TEMPERATURES. VERY SENSITIVE TO DISTURBANCE OF ROOSTING SITES.		

Occurrence No.	184	Map Index:	66526	EO Index:	66647	Element Last Seen:	1942-09-11
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1942-09-11	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2006-10-23	
Quad Summary:	Acton (3411842)						
County Summary:	Los Angeles						
Lat/Long:	34.44325 / -118.21484		Accuracy:	3/5 mile			
UTM:	Zone-11 N3811974 E388394		Elevation (ft):	2680			
PLSS:	T04N, R13W, Sec. 11 (S)		Acres:	0.0			
Location:	2 MI SOUTH OF ACTON, SOLEDAD CANYON.						
Detailed Location:	COLLECTED AT AN OLD MINE. LOCATION OF MINE UNKNOWN. MAPPED IN THE GENERAL VICINITY OF 2 MI SOUTH OF ACTON. INCLUDES "OLD MINES NEAR ACTON" AND "6 MI NE OF SAUGUS, SOLEDAD CANYON."						
Ecological:							
General:	4 FEMALES COLL. BY COUFFER 17, 25 & 27 APR 1942, LACM #19541-19544. 1 MALE & 1 FEMALE COLL. BY COUFFER & VAN NORDHEIM 26 APR 1942 LACM #8022-8023. 1 FEMALE COLL. 3 MAY LACM #22022, 3 MALES COLL. 11 SEP 1942, LACM #21605-21607 BY NORDHEIM.						
Owner/Manager:	UNKNOWN						



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<i>Eumops perotis californicus</i>		Element Code: AMACD02011	
western mastiff bat			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5T4
	State: None		State: S3?
	Other: BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, WBGW_H-High Priority		
Habitat:	General: MANY OPEN, SEMI-ARID TO ARID HABITATS, INCLUDING CONIFER & DECIDUOUS WOODLANDS, COASTAL SCRUB, GRASSLANDS, CHAPARRAL ETC		
	Micro: ROOSTS IN CREVICES IN CLIFF FACES, HIGH BUILDINGS, TREES & TUNNELS.		

Occurrence No.	84	Map Index: 66323	EO Index: 66416	Element Last Seen:	1997-03-27
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1997-03-27
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-09-21
Quad Summary:	Shadow Mountains SE (3411755), El Mirage (3411756)				
County Summary:	San Bernardino				
Lat/Long:	34.60218 / -117.63120		Accuracy:	1 mile	
UTM:	Zone-11 N3829109 E442124		Elevation (ft):		
PLSS:	T06N, R07W, Sec. 16 (S)		Acres:	0.0	
Location:	EL MIRAGE.				
Detailed Location:					
Ecological:					
General:	1 MALE SPECIMEN COLLECTED BY DENNY G. CONSTANTINE FROM SAN BERNARDINO CO. HEALTH LABORATORY ON 27 MAR 1997, MVZ #186400.				
Owner/Manager:	UNKNOWN				

Occurrence No.	170	Map Index: 66429	EO Index: 66528	Element Last Seen:	1929-10-24
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1929-10-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-09-26
Quad Summary:	Lovejoy Buttes (3411757)				
County Summary:	Los Angeles				
Lat/Long:	34.50563 / -117.81886		Accuracy:	2/5 mile	
UTM:	Zone-11 N3818526 E424829		Elevation (ft):		
PLSS:	T05N, R09W, Sec. 21 (S)		Acres:	0.0	
Location:	LLANO.				
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED IN THE GENERAL VICINITY OF LLANO. LAT/LONG COORDINATES PROVIDED BY PIERSON AND RAINEY ARE APPROX. 3 MI ESE OF LLANO.				
Ecological:					
General:	SPECIMEN COLLECTED 24 OCT 1929 AND DEPOSITED AT LACM.				
Owner/Manager:	UNKNOWN				



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<i>Neotamias speciosus speciosus</i>		Element Code: AMAFB02172	
lodgepole chipmunk			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G4T2T3
	State: None		State: S2S3
	Other:		
Habitat:	General:	SUMMITS OF ISOLATED PIUTE, SAN BERNARDINO, & SAN JACINTO MOUNTAINS. USUALLY FOUND IN OPEN-CANOPY FORESTS.	
	Micro:	HABITAT IS USUALLY LODGEPOLE PINE FORESTS IN THE SAN BERNARDINO MTS & CHINQUAPIN SLOPES IN THE SAN JACINTO MTS.	
Occurrence No.	8	Map Index: 58592	EO Index: 58628
Occ. Rank:	Unknown	Presence:	Presumed Extant
Occ. Type:	Natural/Native occurrence	Trend:	Unknown
Element Last Seen:	1974-09-03		
Site Last Seen:	1974-09-03		
Record Last Updated:	2004-12-14		
Quad Summary:	Green Valley (3411854), Lake Hughes (3411864)		
County Summary:	Los Angeles		
Lat/Long:	34.62033 / -118.41126	Accuracy:	1 mile
UTM:	Zone-11 N3831846 E370622	Elevation (ft):	3000
PLSS:	T06N, R14W, Sec. 07 (S)	Acres:	0.0
Location:	GREEN VALLEY, ANGELES NATIONAL FOREST.		
Detailed Location:	MAPPED ACCORDING TO COORDINATES PROVIDED BY MANIS. LOCATION UNCERTAINTY GIVEN AS 6010.8998 M (3.75 MI)		
Ecological:			
General:	2 SPECIMENS COLLECTED (1 MALE & 1 FEMALE) 2-3 SEP 1974 BY K. MCDONALD AT "GREEN VALLEY [PLOT], NE, SAN BERNARDINO NATIONAL FOREST." DEPOSITED AT MVZ #176117 & 176118.		
Owner/Manager:	USFS-ANGELES NF		



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<i>Ammospermophilus nelsoni</i>		Element Code: AMAFB04040	
Nelson's antelope squirrel			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G2
	State: Threatened		State: S2
	Other: BLM_S-Sensitive, IUCN_EN-Endangered		
Habitat:	General: WESTERN SAN JOAQUIN VALLEY FROM 200-1200 FT ELEV. ON DRY, SPARSELY VEGETATED LOAM SOILS.		
	Micro: DIG BURROWS OR USE K-RAT BURROWS. NEED WIDELY SCATTERED SHRUBS, FORBS & GRASSES IN BROKEN TERRAIN WITH GULLIES & WASHES		

Occurrence No.	312	Map Index:	65310	EO Index:	65389	Element Last Seen:	1954-06-06
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:			1954-06-06
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2006-07-21

Quad Summary: Mescal Creek (3411746)
County Summary: Los Angeles

Lat/Long:	34.49305 / -117.71393	Accuracy:	2/5 mile
UTM:	Zone-11 N3817058 E434452	Elevation (ft):	3450
PLSS:	T05N, R08W, Sec. 28 (S)	Acres:	0.0

Location: 1 MILE SOUTH AND 6 MILES EAST OF LLANO.
Detailed Location:
Ecological:
General: 1 MALE AND 1 FEMALE SPECIMEN, KU #59568 AND 59569, COLLECTED BY T.A. VAUGHAN.
Owner/Manager: UNKNOWN

<i>Xerospermophilus mohavensis</i>		Element Code: AMAFB05150	
Mohave ground squirrel			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G2G3
	State: Threatened		State: S2S3
	Other: BLM_S-Sensitive, IUCN_VU-Vulnerable		
Habitat:	General: OPEN DESERT SCRUB, ALKALI SCRUB & JOSHUA TREE WOODLAND. ALSO FEEDS IN ANNUAL GRASSLANDS. RESTRICTED TO MOJAVE DESERT.		
	Micro: PREFERS SANDY TO GRAVELLY SOILS, AVOIDS ROCKY AREAS. USES BURROWS AT BASE OF SHRUBS FOR COVER. NESTS ARE IN BURROWS.		



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Occurrence No.	23	Map Index:	21922	EO Index:	8137	Element Last Seen:	1954-03-15
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1954-03-15	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-06-07	

Quad Summary: Lovejoy Buttes (3411757)

County Summary: Los Angeles

Lat/Long:	34.59430 / -117.85407	Accuracy:	3/5 mile
UTM:	Zone-11 N3828385 E421680	Elevation (ft):	3100
PLSS:	T06N, R09W, Sec. 20 (S)	Acres:	0.0

Location: SOUTH PORTION OF LOVEJOY BUTTES, 1.8 MILES WNW OF E PALMDALE BLVD AT 170TH ST E, 18 MILES EAST OF PALMDALE.

Detailed Location: SPECIMEN LOCALITY STATED AS "18 MI E PALMDALE[LOVEJOY BUTTES]; ELEVATION 3100 FT." CLARK (1992) DATA ARE COMPILATIONS OF OTHER SOURCES, INCLUDING MUSEUM RECORDS IN #DC59. MAPPED TO DESCRIBED LOCALITY AND TRS PROVIDED BY CLARK.

Ecological:

General: ONE MALE COLLECTED BY N. B. MCCULLOCH (MVZ #125679) ON 15 MAR 1954.

Owner/Manager: UNKNOWN

Occurrence No.	24	Map Index:	02204	EO Index:	7331	Element Last Seen:	1944-07-06
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1944-07-06	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-10-14	

Quad Summary: Palmdale (3411851), Ritter Ridge (3411852)

County Summary: Los Angeles

Lat/Long:	34.59436 / -118.12067	Accuracy:	nonspecific area
UTM:	Zone-11 N3828631 E397232	Elevation (ft):	2600
PLSS:	T06N, R12W, Sec. 23 (S)	Acres:	2296.2

Location: GENERAL AREA OF PALMDALE BETWEEN AVE R AND AVE O, E OF DIVISION ST AND W OF 15TH ST.

Detailed Location: MAPPED TO LOCALITIES OF "2 MI N PALMDALE, ANTELOPE VALLEY," "1 MI N PALMDALE" & "PALMDALE." CLARK (1992) DATA SUMMARIZES OTHER SOURCES INCLUDING MVZ IN #DC56.

Ecological: NAIP AERIAL IMAGERY 2010 SUGGESTS MOST OF THE AREA IS DEVELOPED. POSSIBLY EXTIRPATED; FURTHER MONITORING NEEDED.

General: 4 FEMALES & 3 MALES COLLECTED APR & JUL 1920. 3 FEMALES & 1 MALE COLLECTED MAR, APR & JUN 1931. 6 FEMALES & 3 MALES COLLECTED MAR, APR 1932. 1 MALE COLLECTED JUL 1944. MORE CURRENT INVESTIGATION NEEDED.

Owner/Manager: UNKNOWN



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Occurrence No.	25	Map Index: 02598	EO Index: 8139	Element Last Seen:	1930-04-04
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	1930-04-04
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-10-20
Quad Summary:	Lovejoy Buttes (3411757), Hi Vista (3411767)				
County Summary:	Los Angeles				
Lat/Long:	34.61704 / -117.84039		Accuracy:	3/5 mile	
UTM:	Zone-11 N3830896 E422956		Elevation (ft):	2650	
PLSS:	T06N, R09W, Sec. 09 (S)		Acres:	0.0	
Location:	1 MILE NW OF LOVEJOY SPRINGS, LAKE LOS ANGELES (TOWN).				
Detailed Location:	MAPPED TO LOCALITY DESCRIPTION OF "1 MI NW LOVEJOY SPRINGS; ELEVATION 2650 FT." CLARK (1992) DATA IS A SUMMARY OF OTHER SOURCES, INCLUDING MUSEUM RECORDS IN #DC57.				
Ecological:	NAIP AERIAL IMAGERY 2010 SUGGESTS MUCH OF AREA IS DEVELOPED. MAY BE EXTANT POPULATIONS NEARBY. FURTHER RESEARCH NEEDED.				
General:	ONE FEMALE COLLECTED BY S. B. BENSON ON 4 APR 1930 (MVZ #44285). MORE RECENT RESEARCH NEEDED.				
Owner/Manager:	UNKNOWN				
Occurrence No.	26	Map Index: 02196	EO Index: 7360	Element Last Seen:	1984-06-14
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2005-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-11-04
Quad Summary:	Lancaster East (3411861), Lancaster West (3411862)				
County Summary:	Los Angeles				
Lat/Long:	34.67380 / -118.12153		Accuracy:	1 mile	
UTM:	Zone-11 N3837442 E397251		Elevation (ft):	2440	
PLSS:	T07N, R12W, Sec. 26 (S)		Acres:	0.0	
Location:	SE OF LANCASTER, BY SUNRISE.				
Detailed Location:	1920 LOCALITY STATED AS "2 MI S, 0.5 MI E LANCASTER." 1984 DETECTION LOCALITY STATED AS "7 MI N PALMDALE," IN SEC 23. 1992 REFERENCE IS A SUMMARY OF OTHER COLLECTIONS COMPILED BY D. CLARK. MAPPED TO INCLUDE BOTH DESCRIBED LOCATIONS.				
Ecological:	NAIP AERIAL IMAGERY 2010 SUGGESTS MOST OF AREA IS DEVELOPED AND MOHAVE GROUND SQUIRRELS MAY NO LONGER PERSIST HERE. FURTHER SURVEY/TRAPPING EFFORTS NEEDED.				
General:	ONE MALE COLLECTED ON 16 JUL 1920 (MVZ #31967). 1 SQUIRREL DETECTED 14 JUN 1984 BY MCKERNAN (DC #271). NONE WERE DETECTED DURING 2005 10 X 10 GRID PROTOCOL TRAPPING IN THE NW 1/4 OF SECTION 25.				
Owner/Manager:	UNKNOWN				



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Occurrence No.	45	Map Index: 02258	EO Index: 7332	Element Last Seen:	1934-08-27
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1934-08-27
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-05
Quad Summary:	Palmdale (3411851)				
County Summary:	Los Angeles				
Lat/Long:	34.57021 / -118.08639		Accuracy:	nonspecific area	
UTM:	Zone-11 N3825919 E400346		Elevation (ft):	2600	
PLSS:	T06N, R11W, Sec. 31 (S)		Acres:	3907.0	
Location:	2 MI E AND SE OF PALMDALE, S OF US AIR FORCE PLANT 42.				
Detailed Location:	LOCALITIES DESCRIBED AS "1 MI E OF PALMDALE," "2 MI E OF PALMDALE," "PALMDALE, 3 MI E" AND "PALMDALE, 2 MI SE."				
Ecological:	F=FEMALE, M=MALE. MUCH OF THIS AREA HAS BEEN DEVELOPED BY 1994 (AERIAL IMAGE).				
General:	1931: 1 MAMMAE ACTIVE F COLLECTED 12 APR (UCLA #18669); 2 F COLL 14 JUN (LACM #2639-40); 1 F COLL 6 AUG (SDNHM #9629); 3 F & 1 M COLL 26 AUG (SDNHM #9623-24 & 9708-09); 1 M COLL 27 AUG (SDNHM #9726). 1 M COLL 27 AUG 1934 (SDNHM #9710).				
Owner/Manager:	UNKNOWN				
Occurrence No.	54	Map Index: 02626	EO Index: 24255	Element Last Seen:	1960-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1972-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1996-02-22
Quad Summary:	Valyermo (3411747)				
County Summary:	Los Angeles				
Lat/Long:	34.47690 / -117.83500		Accuracy:	1/5 mile	
UTM:	Zone-11 N3815351 E423322		Elevation (ft):	3520	
PLSS:	T05N, R09W, Sec. 33 (S)		Acres:	0.0	
Location:	INTERSECTION OF BOBS GAP AND 165TH STREET.				
Detailed Location:					
Ecological:					
General:	SIGNIFICANT POPULATION IN EARLY 1960'S, BUT NONE FOUND IN 1972.				
Owner/Manager:	UNKNOWN				
Occurrence No.	134	Map Index: 21920	EO Index: 28617	Element Last Seen:	1977-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1977-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1993-02-04
Quad Summary:	Palmdale (3411851)				
County Summary:	Los Angeles				
Lat/Long:	34.60553 / -118.04512		Accuracy:	1/5 mile	
UTM:	Zone-11 N3829795 E404173		Elevation (ft):	2540	
PLSS:	T06N, R11W, Sec. 16 (S)		Acres:	0.0	
Location:	AT CORNER OF 47TH STREET E AND AVENUE P STREET, 4 MILES ENE OF PALMDALE				
Detailed Location:					
Ecological:					
General:	UNKNOWN NUMBER OF SQUIRRELS TRAPPED BY M.A. RECHT FROM 1973-1977.				
Owner/Manager:	UNKNOWN				



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Occurrence No.	135	Map Index: 21921	EO Index: 20950	Element Last Seen: 1931-06-13
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 1931-06-13
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2011-12-08

Quad Summary: Palmdale (3411851)

County Summary: Los Angeles

Lat/Long:	34.57988 / -118.02862	Accuracy:	1 mile
UTM:	Zone-11 N3826935 E405657	Elevation (ft):	2640
PLSS:	T06N, R11W, Sec. 27 (S)	Acres:	0.0

Location: ALONG E PALMDALE BLVD, 0.2 MI E OF 55TH ST E, 5 MI E OF PALMDALE.

Detailed Location: SPECIMEN LOCATION STATED AS "PALMDALE, 5 MI E." MAPPED 5 MI E OF GNIS POINT "PALMDALE." EXACT LOCATION UNKNOWN.

Ecological: MOJAVE CREOSOTE BUSH SCRUB WITH LARREA TRIDENTATA, AMBROSIA DUMOSA AND GRAYIA SPINOSA.

General: ONE FEMALE COLLECTED BY G.G. CANTWELL ON 13 JUN 1931 (LACM #2638). NONE TRAPPED OR DETECTED DURING SEVERAL SURVEY EFFORTS IN THE AREA IN 2004, 2006 AND 2007.

Owner/Manager: UNKNOWN

Occurrence No.	190	Map Index: 22805	EO Index: 7926	Element Last Seen: 1976-09-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 2005-05-29
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2011-12-09

Quad Summary: Hi Vista (3411767)

County Summary: Los Angeles

Lat/Long:	34.70444 / -117.81822	Accuracy:	nonspecific area
UTM:	Zone-11 N3840572 E425067	Elevation (ft):	3000
PLSS:	T07N, R09W, Sec. 15 (S)	Acres:	349.9

Location: JUST EAST OF BLUE ROCK, 2 MI NW OF SADDLEBACK BUTTE.

Detailed Location: MAPPED TO GENERAL AREA E OF BLUE ROCK. LOCALITIES PROVIDED AS "175TH ST E & DIRT EXTENSION OF AVE I" AND "E OF BLUE ROCK BUTTE IN ANTELOPE VALLEY: 28.2 KM E OF LANCASTER, 1.6 KM N OF AVE J."

Ecological: MOJAVE CREOSOTE SCRUB WITH LARREA TRIDENTATA, AMBROSIA DUMOSA, YUCCA, AMSINCKIA TESSELLATA. OPEN DESERT DWITH TOWN OF HI VISTA 1/2 MI TO NE, SADDLEBACK BUTTE STATE PARK TO THE S. VISIBLE DISTURBANCES INCLUDE 175TH ST E & AVE I.

General: TWENTY SQUIRRELS SIGHTED BY RECHT FROM APR 1974-SEP 1976. NONE OBSERVED 22-24 APR & 29 MAY 2005.

Owner/Manager: UNKNOWN, BLM



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Occurrence No.	226	Map Index: 22800	EO Index: 7925	Element Last Seen:	1991-05-25
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	1991-05-25
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1993-03-22

Quad Summary: Hi Vista (3411767)

County Summary: Los Angeles

Lat/Long:	34.65050 / -117.86965	Accuracy:	1/5 mile
UTM:	Zone-11 N3834630 E420305	Elevation (ft):	2500
PLSS:	T07N, R09W, Sec. 31 (S)	Acres:	0.0

Location: JUST NORTH OF ROCKY BUTTES. ALONG DIRT ROAD (SHOULD BE AVENUE L-8 EAST, ABOUT 1/2 MILE WEST OF 150TH STREET.)

Detailed Location:

Ecological: JOSHUA TREE WOODLAND HABITAT. SANDY SOIL.

General: TWO ADULTS OBSERVED ALONG ROAD AT SEPARATE TIMES. BOTH INDIVIDUALS ENTERED AND EXITED SITE UNDER OBSERVATION FOR DESERT TORTOISE. AREA OBSERVED FOR WEEKS DURING SPRING OF 1990 BUT NO SQUIRRELS SIGHTED.

Owner/Manager: UNKNOWN

Occurrence No.	227	Map Index: 22803	EO Index: 7881	Element Last Seen:	1992-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2002-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-11-16

Quad Summary: Hi Vista (3411767)

County Summary: Los Angeles

Lat/Long:	34.67792 / -117.81583	Accuracy:	nonspecific area
UTM:	Zone-11 N3837629 E425263	Elevation (ft):	2700
PLSS:	T07N, R09W (S)	Acres:	1938.9

Location: SADDLEBACK BUTTE STATE PARK.

Detailed Location: MGS SEEN ALL OVER PARK EXCEPT ROCKY AREAS. NON-SPECIFIC POLYGON ALSO INCLUDES NE 1/4 SEC 24 AND SE 1/4 OF SEC 13. CLARK (1992) SUMMARIZES OTHER SOURCES, INCLUDING RECHT DATA IN #DC231 & 233.

Ecological:

General: UNKNOWN NUMBER OF SQUIRRELS OBSERVED 1973-1992. NONE DETECTED DURING 2002 TRAPPING IN NE 1/4 SEC 22. FURTHER RESEARCH AND TRAPPING EFFORTS NEEDED.

Owner/Manager: DPR-SADDLEBACK BUTTE SP



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Occurrence No.	228	Map Index: 22804	EO Index: 7927	Element Last Seen:	1977-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1977-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1993-02-12
Quad Summary:	Hi Vista (3411767)				
County Summary:	Los Angeles				
Lat/Long:	34.70388 / -117.77677		Accuracy:	1/5 mile	
UTM:	Zone-11 N3840479 E428863		Elevation (ft):	2970	
PLSS:	T07N, R09W, Sec. 13 (S)		Acres:	0.0	
Location:	0.25 MILE SOUTHWEST OF INTERSECTION OF NORTH 200 STREET EAST AND AVENUE I.				
Detailed Location:					
Ecological:	NO INFORMATION GIVEN.				
General:	UNKNOWN NUMBER OF SQUIRRELS DETECTED BY RECHT FROM 1973-1977. DATA REPORTED BY D. CLARK (DC232).				
Owner/Manager:	UNKNOWN				
Occurrence No.	229	Map Index: 22802	EO Index: 7887	Element Last Seen:	1977-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1977-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1993-02-12
Quad Summary:	Hi Vista (3411767)				
County Summary:	Los Angeles				
Lat/Long:	34.64815 / -117.82447		Accuracy:	1/5 mile	
UTM:	Zone-11 N3834334 E424444		Elevation (ft):	2600	
PLSS:	T07N, R09W, Sec. 34 (S)		Acres:	0.0	
Location:	JUST NORTHWEST OF INTERSECTION OF NORTH 170TH STREET EAST AND EAST AVENUE M.				
Detailed Location:					
Ecological:	NO INFORMATION GIVEN.				
General:	UNKNOWN NUMBER OF SQUIRRELS DETECTED BY RECHT BETWEEN 1973-1977. DATA REPORTED BY D. CLARK (DC237).				
Owner/Manager:	UNKNOWN				
Occurrence No.	230	Map Index: 22801	EO Index: 7888	Element Last Seen:	1977-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1977-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1993-02-12
Quad Summary:	Hi Vista (3411767)				
County Summary:	Los Angeles				
Lat/Long:	34.63612 / -117.86598		Accuracy:	1/5 mile	
UTM:	Zone-11 N3833032 E420628		Elevation (ft):	2600	
PLSS:	T06N, R09W, Sec. 06 (S)		Acres:	0.0	
Location:	JUST WEST OF NORTH 150TH STREET EAST, 0.5 MILE NORTH OF AVENUE N.				
Detailed Location:					
Ecological:	NO INFORMATION GIVEN.				
General:	UNKNOWN NUMBER OF SQUIRRELS DETECTED BY RECHT FROM 1973-1977. DATA REPORTED BY D. CLARK (DC238).				
Owner/Manager:	UNKNOWN				



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Occurrence No.	255	Map Index: 22817	EO Index: 21239	Element Last Seen: 1977-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1977-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1993-02-18

Quad Summary: Alpine Butte (3411768)

County Summary: Los Angeles

Lat/Long:	34.64949 / -117.96578	Accuracy:	1/5 mile
UTM:	Zone-11 N3834598 E411495	Elevation (ft):	2525
PLSS:	T07N, R10W, Sec. 32 (S)	Acres:	0.0

Location: WEST OF ALPINE BUTTE, JUST NORTHEAST OF INTERSECTION OF EAST AVE M & 90TH STREET EAST.

Detailed Location:

Ecological:

General: UNKNOWN NUMBER OF SQUIRRELS DETECTED BY RECHT FROM 1973-77 (DC229).

Owner/Manager: UNKNOWN

Occurrence No.	256	Map Index: 22818	EO Index: 17042	Element Last Seen: 1987-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1987-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1993-02-18

Quad Summary: Hi Vista (3411767), Alpine Butte (3411768)

County Summary: Los Angeles

Lat/Long:	34.68664 / -117.87685	Accuracy:	1/5 mile
UTM:	Zone-11 N3838643 E419681	Elevation (ft):	2510
PLSS:	T07N, R09W, Sec. 19 (S)	Acres:	0.0

Location: NORTH OF ALPINE BUTTE, 1.25 MI EAST OF EAST AVE J-130TH STREET EAST JUNCTION.

Detailed Location:

Ecological:

General: UNKNOWN NUMBER OF SQUIRRELS DETCTED BY RECHT FROM 1973-77 AND IN 1987 (DC230).

Owner/Manager: UNKNOWN

Occurrence No.	257	Map Index: 22819	EO Index: 21573	Element Last Seen: 1992-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1992-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1993-02-18

Quad Summary: Mescal Creek (3411746)

County Summary: Los Angeles

Lat/Long:	34.49688 / -117.73369	Accuracy:	1/5 mile
UTM:	Zone-11 N3817495 E432641	Elevation (ft):	3400
PLSS:	T05N, R08W, Sec. 29 (S)	Acres:	0.0

Location: SOUTH SIDE OF HWY 18, BETWEEN 223RD STREET EAST AND JUNCTION OF HWY 138 AND HWY 18.

Detailed Location:

Ecological:

General: UNKNOWN NUMBER OF SQUIRRELS DETECTED BY RECHT IN 1992 (DC241).

Owner/Manager: UNKNOWN



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Occurrence No.	268	Map Index: 78168	EO Index: 21422	Element Last Seen:	1931-07-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1931-07-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-13
Quad Summary:	Valyermo (3411747), Lovejoy Buttes (3411757)				
County Summary:	Los Angeles				
Lat/Long:	34.50579 / -117.81902		Accuracy:	1 mile	
UTM:	Zone-11 N3818544 E424815		Elevation (ft):	3200	
PLSS:	T05N, R09W, Sec. 21 (S)		Acres:	0.0	
Location:	175TH ST E AT SR 138 (PEARBLOSSOM HWY), LLANO.				
Detailed Location:	SPECIMEN LOCATION STATED AS "LOS ANGELES COUNTY LLANO." MAPPED TO LLANO. EXACT LOCATION UNKNOWN. D. CLARK (1992) SUMMARIZES OTHER SOURCES WITH DC195 REFERENCING SBMNH SPECIMENS.				
Ecological:	MOJAVE CREOSOTE BUSH SCRUB.				
General:	2 SPECIMENS COLLECTED BY J. VON BLOEKER, JR. ON 14 JUN (SBMNH #6188) AND 2 JUL 1931 (SBMNH #6187). FURTHER RESEARCH/TRAPPING NEEDED. NONE DETECTED DURING TRAPPING EFFORTS IN 1999 AND 2006 THAT WERE WELL OVER 1 MILE AWAY FROM HERE.				
Owner/Manager:	UNKNOWN				
Occurrence No.	271	Map Index: 22831	EO Index: 7876	Element Last Seen:	1973-04-28
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1973-04-28
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1993-02-18
Quad Summary:	Lancaster East (3411861)				
County Summary:	Los Angeles				
Lat/Long:	34.63831 / -118.03195		Accuracy:	3/5 mile	
UTM:	Zone-11 N3833418 E405418		Elevation (ft):	2500	
PLSS:	T06N, R11W, Sec. 03 (S)		Acres:	0.0	
Location:	EAST OF AIR FORCE PLANT 42.				
Detailed Location:					
Ecological:					
General:	TWO SQUIRRELS DETECTED BY MCKERNAN ON 28 APR 1973 (DC272).				
Owner/Manager:	UNKNOWN				
Occurrence No.	278	Map Index: 22836	EO Index: 21354	Element Last Seen:	1977-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1977-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1993-04-02
Quad Summary:	Adobe Mountain (3411766)				
County Summary:	Los Angeles				
Lat/Long:	34.69286 / -117.74221		Accuracy:	1/5 mile	
UTM:	Zone-11 N3839233 E432019		Elevation (ft):	2850	
PLSS:	T07N, R08W, Sec. 17 (S)		Acres:	0.0	
Location:	WEST OF ADOBE MOUNTAIN. NORTHWEST OF JUNCTION OF NORTH 220TH STREET EAST AND EAST AVE J.				
Detailed Location:					
Ecological:					
General:	UNKNOWN NUMBER OF SQUIRRELS DETECTED BY RECHT FROM 1973-1977 (DC234).				
Owner/Manager:	UNKNOWN				



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Occurrence No.	279	Map Index: 22838	EO Index: 7875	Element Last Seen:	1989-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1989-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1993-04-02

Quad Summary: Littlerock (3411758)

County Summary: Los Angeles

Lat/Long:	34.53843 / -117.93166	Accuracy:	2/5 mile
UTM:	Zone-11 N3822252 E414508	Elevation (ft):	2800
PLSS:	T05N, R10W, Sec. 09 (S)	Acres:	0.0

Location: LITTLEROCK, SOUTH OF AVE T FROM 106TH STREET TO 116TH STREET.

Detailed Location:

Ecological:

General: UNKNOWN NUMBER OF SQUIRRELS DETECTED BY RECHT 1973-77 AND 1986-89 (DC236).

Owner/Manager: UNKNOWN

Occurrence No.	280	Map Index: 22837	EO Index: 7873	Element Last Seen:	1974-09-04
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1974-09-04
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-11-22

Quad Summary: Littlerock (3411758)

County Summary: Los Angeles

Lat/Long:	34.56472 / -117.90861	Accuracy:	1 mile
UTM:	Zone-11 N3825149 E416649	Elevation (ft):	2760
PLSS:	T06N, R10W, Sec. 35 (S)	Acres:	0.0

Location: GENERAL AREA 0.5 MI S OF E AVE R AT 123RD ST E, 4 MI N OF PEARBLOSSOM.

Detailed Location: MAPPED TO GIVEN LOCALITY OF "4 MI N OF PEARBLOSSOM," MEASURED FROM PEARBLOSSOM PO. CLARK (1992) SUMMARIZES OTHER SOURCES, INCLUDING MCKERNAN'S 1974 DATA IN #DC267.

Ecological:

General: 3 SQUIRRELS DETECTED BY MCKERNAN ON 4 SEP 1974.

Owner/Manager: UNKNOWN

Occurrence No.	308	Map Index: 57304	EO Index: 57320	Element Last Seen:	1959-06-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1959-06-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2004-10-07

Quad Summary: El Mirage (3411756)

County Summary: Los Angeles

Lat/Long:	34.55681 / -117.72297	Accuracy:	1 mile
UTM:	Zone-11 N3824134 E433672	Elevation (ft):	3600
PLSS:	T05N, R08W, Sec. 04 (S)	Acres:	0.0

Location: LOCATED IN THE VICINITY OF BLACK BUTTE ABOUT 6.5 MILES NORTHEAST OF LLANO.

Detailed Location: MAPPED TO LOCALITY OF "BLACK BUTTE, NEAR PEARBLOSSOM."

Ecological:

General: 1 FEMALE COLLECTED 2 JUN 1959 (LACM #90200).

Owner/Manager: UNKNOWN, BLM



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Occurrence No.	309	Map Index: 57305	EO Index: 57321	Element Last Seen: 1961-06-04
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1961-06-04
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2004-10-07

Quad Summary: Hi Vista (3411767), Rogers Lake South (3411777)

County Summary: Los Angeles

Lat/Long:	34.73816 / -117.82758	Accuracy:	1 mile
UTM:	Zone-11 N3844319 E424241	Elevation (ft):	3000
PLSS:	T08N, R09W, Sec. 34 (S)	Acres:	0.0

Location: LOCATED 3 MI W OF HI VISTA ALONG AVENUE G.

Detailed Location: MAPPED TO LOCALITY OF "HI VISTA, 3 MI W."

Ecological:

General: 1 MALE COLLECTED 4 JUN 1961 (LACM #47348).

Owner/Manager: UNKNOWN, BLM

Occurrence No.	453	Map Index: 84348	EO Index: 85379	Element Last Seen: 1989-06-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1989-06-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2011-12-01

Quad Summary: Littlerock (3411758)

County Summary: Los Angeles

Lat/Long:	34.55861 / -117.88223	Accuracy:	1/10 mile
UTM:	Zone-11 N3824450 E419063	Elevation (ft):	2810
PLSS:	T06N, R10W, Sec. 36 (S)	Acres:	0.0

Location: JUST NW OF E AVE S AT 140TH ST E, ABOUT 4 MI NNE OF PEARBLOSSOM.

Detailed Location: MAPPED TO PROVIDED MAP.

Ecological: JOSHUA TREE WOODLAND WITH CREOSOTE BUSH SCRUB ASSOCIATIONS.

General: 1 SQUIRREL OBSERVED BETWEEN MID-MAR AND JUN OF 1989.

Owner/Manager: UNKNOWN



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<i>Perognathus inornatus inornatus</i>		Element Code: AMAFD01061	
San Joaquin pocket mouse			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G4T2T3
	State: None		State: S2S3
	Other: BLM_S-Sensitive		
Habitat:	General: TYPICALLY FOUND IN GRASSLANDS AND BLUE OAK SAVANNAS.		
	Micro: NEEDS FRIABLE SOILS.		

Occurrence No.	1	Map Index: 21923	EO Index: 20947	Element Last Seen:	1931-04-12
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1931-04-12
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-09-15

Quad Summary: Palmdale (3411851), Ritter Ridge (3411852)
County Summary: Los Angeles

Lat/Long:	34.57949 / -118.11653	Accuracy:	1 mile
UTM:	Zone-11 N3826978 E397593	Elevation (ft):	2650
PLSS:	T06N, R12W, Sec. 26 (S)	Acres:	0.0

Location: PALMDALE.
Detailed Location:
Ecological:
General: IDENTIFICATION OF SPECIMEN QUESTIONABLE. UCLA MUSEUM SPECIMEN #18670.
Owner/Manager: UNKNOWN

Occurrence No.	63	Map Index: 38713	EO Index: 33720	Element Last Seen:	1989-07-15
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen:	1989-07-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-05-12

Quad Summary: Black Mtn. (3411867)
County Summary: Ventura

Lat/Long:	34.73559 / -118.86657	Accuracy:	nonspecific area
UTM:	Zone-11 N3845308 E329115	Elevation (ft):	3500
PLSS:	T08N, R19W, Sec. 35 (S)	Acres:	40.4

Location: 3.9 MILES WEST OF I-5 AND 3.2 MILES NNW OF HARDLUCK CAMPGROUND, HUNGRY VALLEY STATE VEHICULAR RECREATION AREA.
Detailed Location:
Ecological: DISTURBED ANNUAL GRASSLAND, HEAVY MUSTARD COMPONENT.
General: 4 INDIVIDUALS CAPTURED, 1989.
Owner/Manager: DPR-HUNGRY VALLEY SVRA



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<i>Perognathus alticolus inexpectatus</i>		Element Code: AMAFD01082		
Tehachapi pocket mouse				
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G1G2T1T2	
	State: None		State: S1S2	
	Other: CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, USFS_S-Sensitive			
Habitat:	General: ARID ANNUAL GRASSLAND & DESERT SHRUB COMMUNITIES, BUT ALSO TAKEN IN FALLOW GRAIN FIELD & IN RUSSIAN THISTLE.			
	Micro: BURROWS FOR COVER & NESTING. AESTIVATES AND HIBERNATES DURING EXTREME WEATHER. FORAGES ON OPEN GROUND & UNDER SHRUBS.			
Occurrence No.	10	Map Index: 59036	EO Index: 23897	Element Last Seen: 1938-07-16
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 1981-07-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2006-08-07
Quad Summary:	Lake Hughes (3411864)			
County Summary:	Los Angeles			
Lat/Long:	34.66906 / -118.42287		Accuracy:	nonspecific area
UTM:	Zone-11 N3837265 E369635		Elevation (ft):	3400
PLSS:	T07N, R15W, Sec. 25 (S)		Acres:	2364.9
Location:	VICINITY OF ELIZABETH LAKE & HUGHES LAKE.			
Detailed Location:	IN 1981, SULENTICH TRAPPED 0.25 MI NE LAKE HUGHES AT 3375 FT AND HAD NO SUCCESS. ALSO NO SUCCESS 200 M NORTH OF WEST END LAKE ELIZABETH AT 3400 FT.			
Ecological:				
General:	LACM # 5017-5019 COLLECTED 15 JULY TO 16 JULY 1938 FROM ELIZABETH LAKE AND # 5020 COLLECTED 14 JULY 1938 FROM HUGHES LAKE.			
Owner/Manager:	USFS-ANGELES NF, PVT			



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<i>Dipodomys merriami parvus</i>		Element Code: AMAFD03143	
San Bernardino kangaroo rat			
Listing Status:	Federal: Endangered	CNDDB Element Ranks:	Global: G5T1
	State: None		State: S1
	Other: CDFW_SSC-Species of Special Concern		
Habitat:	General: ALLUVIAL SCRUB VEGETATION ON SANDY LOAM SUBSTRATES CHARACTERISTIC OF ALLUVIAL FANS AND FLOOD PLAINS.		
	Micro: NEEDS EARLY TO INTERMEDIATE SERAL STAGES.		

Occurrence No.	48	Map Index: 78159	EO Index: 79061	Element Last Seen:	1962-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1962-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-02-22
Quad Summary:	Littlerock (3411758)				
County Summary:	Los Angeles				
Lat/Long:	34.57943 / -117.88820		Accuracy:	3/5 mile	
UTM:	Zone-11 N3826764 E418536		Elevation (ft):	2747	
PLSS:	T06N, R10W, Sec. 25 (S)		Acres:	0.0	
Location:	ALONG ROCK CREEK, 2.6 MILES SOUTHWEST OF LOVEJOY BUTTES, ABOUT 5.3 MILES NNE FROM THE TOWN OF PEARBLOSSOM.				
Detailed Location:	AROUND E PALMDALE BLVD & N LONGVIEW ROAD. MUSEUM RECORD LOCALITY STATED AS "13 MI E PALMDALE." MAPPED ACCORDING TO COORDINATES PROVIDED BY MANIS.				
Ecological:					
General:	TCWC SPECIMEN #16265 COLLECTED BY J.P. MILLS IN 1962.				
Owner/Manager:	UNKNOWN				

Occurrence No.	49	Map Index: 78168	EO Index: 79069	Element Last Seen:	1958-04-05
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1958-04-05
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-02-22
Quad Summary:	Valyermo (3411747), Lovejoy Buttes (3411757)				
County Summary:	Los Angeles				
Lat/Long:	34.50579 / -117.81902		Accuracy:	1 mile	
UTM:	Zone-11 N3818544 E424815		Elevation (ft):	3202	
PLSS:	T05N, R09W, Sec. 21 (S)		Acres:	0.0	
Location:	JUST EAST OF BIG ROCK WASH, ALONG SR 138 (PEARBLOSSOM HWY), 4.5 MILES NORTHEAST FROM TOWN OF VALYERMO, LLANO.				
Detailed Location:	MUSEUM SPECIMEN LOCALITY GIVEN AS "LLANO, LOS ANGELES COUNTY, CALIFORNIA." MAPPED ACCORDING TO LOCALITY GIVEN.				
Ecological:					
General:	MSU SPECIMEN RECORDS # 6075 & 6077 COLLECTED ON 11 JAN 1958 AND SPECIMEN #6076 COLLECTED ON 5 APR 1958 BY J.G. ENGEMANN.				
Owner/Manager:	UNKNOWN				

<i>Chaetodipus fallax pallidus</i>		Element Code: AMAFD05032	
pallid San Diego pocket mouse			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5T3
	State: None		State: S3
	Other: CDFW_SSC-Species of Special Concern		
Habitat:	General:		



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DESERT BORDER AREAS IN EASTERN SAN DIEGO CO. IN DESERT WASH, DESERT SCRUB, DESERT SUCCULENT SCRUB, PINYON-JUNIPER, ETC.

Micro: SANDY HERBACEOUS AREAS, USUALLY IN ASSOCIATION WITH ROCKS OR COARSE GRAVEL.

Occurrence No.	14	Map Index:	60381	EO Index:	60417	Element Last Seen:	1951-10-29
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1951-10-29		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2005-03-07		
Quad Summary:	Mescal Creek (3411746), Valyermo (3411747)						
County Summary:	Los Angeles						
Lat/Long:	34.42265 / -117.76592			Accuracy:	1 mile		
UTM:	Zone-11 N3809286 E429620			Elevation (ft):	4750		
PLSS:	T04N, R09W, Sec. 24 (S)			Acres:	0.0		
Location:	MOUTH OF GRANDVIEW CANYON, SAN GABRIEL MOUNTAINS. NEAR LARGO VISTA.						
Detailed Location:	MAPPED IN THE MOUTH OF GRANDVIEW CANYON. GRANDVIEW CANYON IS ABOUT 5.6 MILES S & 3.3 MILES E OF LLANO (SITE A). SPECIMEN VOUCHER INDICATES IT IS 4 MILES S & 5 MILES E OF LLANO. ALSO COLLECTED AT 5 MI SE OF VALYERMO (SITE B).						
Ecological:							
General:	SITE A: 1 MALE SPECIMEN COLLECTED 29 OCT 1951 BY T. VAUGHAN (KU #45251). SITE B: 3 MALE & 5 FEMALE SPECIMENS COLLECTED 21-29 OCT & 13 NOV 1951 BY T. VAUGHAN (KU 45244, 45252, 45254-45257, 45260 & 45261).						
Owner/Manager:	UNKNOWN						

Occurrence No.	15	Map Index:	60382	EO Index:	60418	Element Last Seen:	1951-10-30
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1951-10-30		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2005-03-07		
Quad Summary:	Mescal Creek (3411746)						
County Summary:	Los Angeles						
Lat/Long:	34.44496 / -117.72950			Accuracy:	1 mile		
UTM:	Zone-11 N3811736 E432984			Elevation (ft):	4400		
PLSS:	T04N, R08W, Sec. 09 (S)			Acres:	0.0		
Location:	ABOUT 2.5 MILES NORTHEAST OF LARGO VISTA IN THE SAN GABRIEL MOUNTAINS, JUST EAST OF GABRIEL CANYON.						
Detailed Location:	EXACT LOCATION NOT KNOWN. MAPPED ACCORDING TO SPECIMEN LOCALITY DESCRIPTION.						
Ecological:							
General:	1 MALE & 1 FEMALE SPECIMEN COLLECTED 29 & 30 OCT 1951 BY T. VAUGHAN AT "LLANO, 4 MI S, 5 MI E OF; SAN GABRIEL MTS; DESERT SLOPE." DEPOSITED AT KU #45250 & 45253.						
Owner/Manager:	UNKNOWN						



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Occurrence No.	16	Map Index: 60383	EO Index: 60419	Element Last Seen: 1967-09-09
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1967-09-09
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2005-03-07

Quad Summary: Juniper Hills (3411748)

County Summary: Los Angeles

Lat/Long:	34.44089 / -117.90870	Accuracy:	1 mile
UTM:	Zone-11 N3811418 E416517	Elevation (ft):	4150
PLSS:	T04N, R10W, Sec. 15 (S)	Acres:	0.0

Location: LOCATED ABOUT 4.5 MILES SOUTH OF PEARBLOSSOM AND 1.5 MILES ESE OF JUNIPER HILLS.

Detailed Location: EXACT LOCATION NOT KNOWN. LOCALITY DESCRIPTION INDICATES SPECIMEN WAS COLLECTED 4-5 MILES SOUTH OF PEARBLOSSOM. THUS MAPPED AT ABOUT 4.5 MILES SOUTH OF PEARBLOSSOM.

Ecological:

General: ONE FEMALE SPECIMEN COLLECTED 9 SEP 1967 BY R. PLATTE AT "PEARBLOSSOM, 4-5 MI S." DEPOSITED AT LACM #32880.

Owner/Manager: UNKNOWN

Occurrence No.	17	Map Index: 60384	EO Index: 60420	Element Last Seen: 1951-10-20
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1951-10-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2005-03-24

Quad Summary: Mescal Creek (3411746)

County Summary: Los Angeles

Lat/Long:	34.40449 / -117.69007	Accuracy:	1 mile
UTM:	Zone-11 N3807223 E436576	Elevation (ft):	5900
PLSS:	T04N, R08W, Sec. 26 (S)	Acres:	0.0

Location: 10 MILES SE OF VALYERMO ON THE DESERT SLOPE OF THE SAN GABRIEL MOUNTAINS, ABOUT 2 MI N OF BIG PINES, ANGELES NF.

Detailed Location: EXACT LOCATION NOT KNOWN. MAPPED ACCORDING TO LOCALITY DESCRIPTION. COORDINATES PROVIDED BY MANIS FALL ABOUT 10 MILES NORTHWEST OF VALYERMO RATHER THAN 10 MILES SOUTHEAST.

Ecological:

General: ONE MALE SPECIMEN COLLECTED 20 OCT 1951 BY T. VAUGHAN AT "VALYERMO, 10 MI SE OF; SAN GABRIEL MTS; DESERT SLOPE." DEPOSITED AT KU #45245.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	18	Map Index: 60385	EO Index: 60421	Element Last Seen:	1966-07-14
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1966-07-14
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2005-03-07

Quad Summary:	Valyermo (3411747)				
County Summary:	Los Angeles				

Lat/Long:	34.44500 / -117.81768	Accuracy:	1 mile		
UTM:	Zone-11 N3811802 E424883	Elevation (ft):	4100		
PLSS:	T04N, R09W, Sec. 09 (S)	Acres:	0.0		

Location:	ABOUT 2 MILES EAST OF VALYERMO.				
Detailed Location:					
Ecological:					
General:	ONE FEMALE SPECIMEN COLLECTED 14 JUL 1966 BY N. KARAAZISSIS AT "VALYERMO, 2 MI E." DEPOSITED AT LACM #28083.				
Owner/Manager:	UNKNOWN				



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<i>Onychomys torridus ramona</i>		Element Code: AMAFF06022	
southern grasshopper mouse			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5T3?
	State: None		State: S3?
	Other: CDFW_SSC-Species of Special Concern		
Habitat:	General: DESERT AREAS, ESPECIALLY SCRUB HABITATS WITH FRIABLE SOILS FOR DIGGING. PREFERS LOW TO MODERATE SHRUB COVER.		
	Micro: FEEDS ALMOST EXCLUSIVELY ON ARTHROPODS, ESPECIALLY SCORPIONS & ORTHOPTERAN INSECTS.		

Occurrence No.	24	Map Index: 58477	EO Index: 58513	Element Last Seen: 1930-11-02
Occ. Rank:	Unknown	Presence: Presumed Extant	Site Last Seen: 1930-11-02	
Occ. Type:	Natural/Native occurrence	Trend: Unknown	Record Last Updated: 2004-12-10	

Quad Summary: Agua Dulce (3411843), Mint Canyon (3411844), Sleepy Valley (3411853), Green Valley (3411854)
County Summary: Los Angeles

Lat/Long:	34.50068 / -118.38141	Accuracy:	1 mile
UTM:	Zone-11 N3818539 E373178	Elevation (ft):	2100
PLSS:	T05N, R14W, Sec. 19 (S)	Acres:	0.0

Location: ANGELES NATIONAL FOREST. MINT CANYON ABOUT 3 MILES WEST OF AGUA DULCE.
Detailed Location:
Ecological:
General: 1 FEMALE SPECIMEN COLLECTED BY C. LAMB ON 2 NOV 1930 AT "MINT CANYON." DEPOSITED AT MVZ # 47188.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	25	Map Index: 58478	EO Index: 58514	Element Last Seen: 1988-08-06
Occ. Rank:	Unknown	Presence: Presumed Extant	Site Last Seen: 1988-08-06	
Occ. Type:	Natural/Native occurrence	Trend: Unknown	Record Last Updated: 2004-12-10	

Quad Summary: Lovejoy Buttes (3411757)
County Summary: Los Angeles

Lat/Long:	34.52032 / -117.79133	Accuracy:	1 mile
UTM:	Zone-11 N3820135 E427369	Elevation (ft):	3100
PLSS:	T05N, R09W, Sec. 14 (S)	Acres:	0.0

Location: ABOUT 1 MILE NORTH AND 6 MILES EAST OF PEARBLOSSOM.
Detailed Location:
Ecological:
General: ONE MALE SPECIMEN COLLECTED BY S. GEORGE 6 AUG 1988 AT "PEARBLOSSOM, 1 MI N, 6 MI EAST." DEPOSITED AT LACM # 86828.
Owner/Manager: UNKNOWN



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<i>Microtus californicus stephensi</i>		Element Code: AMAFF11035	
south coast marsh vole			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5T1T2
	State: None		State: S1S2
	Other: CDFW_SSC-Species of Special Concern		
Habitat:	General: TIDAL MARSHES IN LOS ANGELES, ORANGE AND SOUTHERN VENTURA COUNTIES.		
	Micro: <input type="checkbox"/>		

Occurrence No.	4	Map Index:	57703	EO Index:	58987	Element Last Seen:	1986-10-07
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1986-10-07	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	2004-12-22		

Quad Summary: Mount San Antonio (3411736), Mescal Creek (3411746)
County Summary: Los Angeles

Lat/Long:	34.37400 / -117.67755	Accuracy:	3/5 mile
UTM:	Zone-11 N3803834 E437704	Elevation (ft):	6600
PLSS:	T03N, R08W, Sec. 02 (S)	Acres:	0.0

Location: ABOUT 0.8 MILES SOUTHEAST OF BIG PINE STATION ALONG CALIFORNIA STATE HIGHWAY 2. SAN GABRIEL MOUNTAINS.
Detailed Location:
Ecological:
General: 2 MALE SPECIMENS COLLECTED 7 OCT 1986 BY J. MALDONADO AT "SAN GABRIEL MTS., 0.5 MI S, 0.75 MI E BIG PINE STATION, ALONG HWY 2." DEPOSITED AT LACM #86854 & 86855.
Owner/Manager: UNKNOWN

<i>Taxidea taxus</i>		Element Code: AMAJF04010	
American badger			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5
	State: None		State: S4
	Other: CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern		
Habitat:	General: MOST ABUNDANT IN DRIER OPEN STAGES OF MOST SHRUB, FOREST, AND HERBACEOUS HABITATS, WITH FRIABLE SOILS.		
	Micro: NEEDS SUFFICIENT FOOD, FRIABLE SOILS & OPEN, UNCULTIVATED GROUND. PREYS ON BURROWING RODENTS. DIGS BURROWS.		



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Occurrence No.	26	Map Index: 56527	EO Index: 56543	Element Last Seen: 1988-05-16
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 1988-05-16
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2004-08-30

Quad Summary: Lake Hughes (3411864)

County Summary: Los Angeles

Lat/Long:	34.68657 / -118.45049	Accuracy:	nonspecific area
UTM:	Zone-11 N3839243 E367132	Elevation (ft):	3800
PLSS:	T07N, R15W, Sec. 22 (S)	Acres:	42.6

Location: 0.6 MILE NORTH OF LAKE HUGHES.

Detailed Location:

Ecological: HABITAT CONSISTS OF CHAPARRAL, DOMINATED BY ADENOSTOMA, ARCTOSTAPHYLOS, CEANOTHUS, CERCOCARPUS, AND PINUS COULTERI.

General: AN ACTIVE DEN WAS OBSERVED, 13-16 MAY 1988.

Owner/Manager: UNKNOWN

Occurrence No.	27	Map Index: 56529	EO Index: 56545	Element Last Seen: 1992-08-01
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 1992-08-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2004-08-30

Quad Summary: Liebre Mtn. (3411866), Black Mtn. (3411867)

County Summary: Los Angeles

Lat/Long:	34.72430 / -118.75373	Accuracy:	2/5 mile
UTM:	Zone-11 N3843869 E339425	Elevation (ft):	3150
PLSS:	T07N, R18W, Sec. 02 (S)	Acres:	0.0

Location: WEST FORK OF LIEBRE GULCH, 7.5 MILES SE OF GORMAN

Detailed Location:

Ecological: HABITAT CONSISTS OF VALLEY OAK RIPARIAN WOODLAND, WITH FLOWING WATER, BORDERED BY CHAPARRAL.

General: ONE ADULT OBSERVED ON 1 AUG 1992.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	150	Map Index: 56841	EO Index: 56857	Element Last Seen: 1930-04-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1930-04-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2004-09-20

Quad Summary: Lovejoy Buttes (3411757)

County Summary: Los Angeles

Lat/Long:	34.60227 / -117.84994	Accuracy:	1 mile
UTM:	Zone-11 N3829266 E422066	Elevation (ft):	2950
PLSS:	T06N, R09W, Sec. 17 (S)	Acres:	0.0

Location: NEAR LOVEJOY BUTTES.

Detailed Location: MAPPED ACCORDING TO LAT/LONG GIVEN BY MVZ; MAX ERROR DISTANCE: 3 MI.

Ecological:

General: COLLECTION (MVZ #44282) BY SETH B. BENSON ON 3 APR 1930.

Owner/Manager: UNKNOWN



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Occurrence No.	151	Map Index:	01549	EO Index:	56863	Element Last Seen:	1904-06-21
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1904-06-21	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2004-09-20	
Quad Summary:	Lake Hughes (3411864), Fairmont Butte (3411874)						
County Summary:	Los Angeles						
Lat/Long:	34.73609 / -118.42397		Accuracy:	1 mile			
UTM:	Zone-11 N3844700 E369639		Elevation (ft):	2800			
PLSS:	T08N, R15W, Sec. 36 (S)		Acres:	0.0			
Location:	FAIRMONT, ANTELOPE VALLEY.						
Detailed Location:	MAPPED ACCORDING TO LAT/LONG GIVEN BY MVZ; MAX ERROR DISTANCE: 1 KM.						
Ecological:							
General:	MALE COLLECTED (MVZ #7077) BY JOSEPH GRINNELL ON 21 JUN 1904. 1 COLLECTED (DATE UNKNOWN), LACM.						
Owner/Manager:	UNKNOWN						

Occurrence No.	416	Map Index:	73775	EO Index:	74746	Element Last Seen:	2003-01-18
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2003-01-18	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2009-03-04	
Quad Summary:	Black Mtn. (3411867)						
County Summary:	Los Angeles						
Lat/Long:	34.73719 / -118.80015		Accuracy:	80 meters			
UTM:	Zone-11 N3845374 E335199		Elevation (ft):	3050			
PLSS:	T08N, R18W, Sec. 33 (S)		Acres:	0.0			
Location:	PEACE VALLEY, ALONG GORMAN CREEK & HWY 5, ABOUT 1.5 MI SE OF QUAIL CANYON CAMPGROUND, ABOUT 10.2 MI SE OF FRAZIER PARK.						
Detailed Location:	MAPPED TO PROVIDED COORDINATES.						
Ecological:	IN WASH, HABITAT CONSISTED OF SAGEBRUSH & COTTONWOOD.						
General:	ON 18 JAN 2003, REPORTER DETECTED TRACKS MADE WITHIN 2 DAYS & IDENTIFIED THEM TO SPECIES WITH 100% CERTAINTY.						
Owner/Manager:	DPR-HUNGRY VALLEY SVRA						

<i>Emys marmorata</i>		Element Code: ARAAD02030	
western pond turtle			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G3G4
	State: None		State: S3
	Other: BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive		
Habitat:	General: A THOROUGHLY AQUATIC TURTLE OF PONDS, MARSHES, RIVERS, STREAMS & IRRIGATION DITCHES, USUALLY WITH AQUATIC VEGETATION, BELOW 6000 FT ELEVATION.		
	Micro: NEED BASKING SITES AND SUITABLE (SANDY BANKS OR GRASSY OPEN FIELDS) UPLAND HABITAT UP TO 0.5 KM FROM WATER FOR EGG-LAYING.		



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Occurrence No.	949	Map Index: 72619	EO Index: 9696	Element Last Seen: 1999-09-15
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 1999-09-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2008-10-20

Quad Summary: Ritter Ridge (3411852), Sleepy Valley (3411853)

County Summary: Los Angeles

Lat/Long:	34.60241 / -118.24481	Accuracy:	nonspecific area
UTM:	Zone-11 N3829657 E385858	Elevation (ft):	3000
PLSS:	T06N, R13W, Sec. 15 (S)	Acres:	85.0

Location: AMARGOSA CREEK, ALONG THE NORTH SIDE OF ELIZABETH LAKE PINE CANYON ROAD, APPROXIMATELY 7 MILES WNW OF PALMDALE.

Detailed Location:

Ecological: HABITAT CONSISTS OF RIPARIAN; CREEK CONTAINS SMALL PONDED AREAS OF WATER. THE MAIN POOL IS LOCATED NEXT TO THE ROADWAY WHERE IT CROSSES BENEATH THE ROAD. THIS AREA CONTAINS SMALL REEDS BUT NO TREES.

General: DURING 1990, 16 TURTLES WERE COUNTED IN A SMALL AREA NEAR THE ROAD; ANOTHER 3 OBSERVED DOWNSTREAM ALONG THE CREEK. AN UNKNOWN NUMBER WERE OBSERVED DURING 1997 AND 1999.

Owner/Manager: UNKNOWN

Occurrence No.	950	Map Index: 17288	EO Index: 9701	Element Last Seen: 1990-05-19
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen: 1990-05-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2008-02-06

Quad Summary: Lake Hughes (3411864)

County Summary: Los Angeles

Lat/Long:	34.66434 / -118.38962	Accuracy:	specific area
UTM:	Zone-11 N3836699 E372675	Elevation (ft):	3270
PLSS:	T07N, R14W, Sec. 29 (S)	Acres:	17.6

Location: ON THE EAST END OF ELIZABETH LAKE, JUST SOUTH OF ELIZABETH LAKE PINE CANYON ROAD, APPROXIMATELY 18 MI NW OF PALMDALE.

Detailed Location: AREA IS FENCED, POSTED, AND MAY BE ON THE MARKET. HOWEVER, FENCING CURRENTLY PROTECTS THE SITE FROM DISTURBANCE BY THE PUBLIC. 1954 LOCATION GIVEN AS "SHORE OF LAKE ELIZABETH". 1955 LOCATION GIVEN AS "SMALL POND NEAR LAKE ELIZABETH".

Ecological: HABITAT CONSISTS OF SEVERAL SMALL LAKES RINGED BY CATTAILS, WHICH APPEARS TO BE A CONTINUATION OF THE EASTERN MARSHLAND OF ELIZABETH LAKE.

General: 2 TURTLES COLLECTED BY J. CUNNINGHAM & D. MULLAL, 1 IN 1954 (LACM#137509) & 1 IN 1955 (LACM# 137508). 7 TURTLES OBSERVED BASKING IN 1990.

Owner/Manager: PVT-RTR REALTY CORP



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Occurrence No.	1084	Map Index:	72613	EO Index:	31714	Element Last Seen:	1995-06-XX
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:	1995-06-XX	Record Last Updated:	2008-10-17
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary:	Ritter Ridge (3411852)
County Summary:	Los Angeles

Lat/Long:	34.59665 / -118.23049	Accuracy:	80 meters
UTM:	Zone-11 N3829002 E387163	Elevation (ft):	2020
PLSS:	T06N, R13W, Sec. 23 (S)	Acres:	0.0

Location:	AMARGOSA CREEK, SOUTH OF RITTER RIDGE, WEST OF PALMDALE.
Detailed Location:	
Ecological:	HABITAT CONSISTS OF AN INTERMITTENT CREEK WITH AREAS OF DENSE RIPARIAN, PRIMARILY WILLOW AND COTTONWOOD. THAMNOPHIS HAMMONDII ALSO FOUND AT THIS SITE.
General:	AN UNSPECIFIED NUMBER OF TURTLES OBSERVED DURING JUNE 1995.
Owner/Manager:	PVT



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<i>Gopherus agassizii</i>		Element Code: ARAAF01012	
desert tortoise			
Listing Status:	Federal: Threatened	CNDDB Element Ranks:	Global: G3
	State: Threatened		State: S2
	Other: IUCN_VU-Vulnerable		
Habitat:	General: MOST COMMON IN DESERT SCRUB, DESERT WASH, AND JOSHUA TREE HABITATS; OCCURS IN ALMOST EVERY DESERT HABITAT.		
	Micro: REQUIRE FRIABLE SOIL FOR BURROW AND NEST CONSTRUCTION. CREOSOTE BUSH HABITAT WITH LG ANNUAL WILDFLOWER BLOOMS PREFERRED.		

Occurrence No.	1	Map Index: 03129	EO Index: 14806	Element Last Seen:	2004-04-12
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2004-04-12
Occ. Type:	Natural/Native occurrence		Trend: Decreasing	Record Last Updated:	2006-08-04

Quad Summary: West Ord Mountain (3411668), Minneola (3411677), Daggett (3411678), Harvard Hill (3411686), Yermo (3411687), Nebo (3411688), Victorville (3411753), Adelanto (3411754), Shadow Mountains SE (3411755), Stoddard Well (3411761), Turtle Valley (3411762), Helendale (3411763), Victorville NW (3411764), Shadow Mountains (3411765), Adobe Mountain (3411766), Hi Vista (3411767), Barstow SE (3411771), Hodge (3411772), Wild Crossing (3411773), Astley Rancho (3411774), Red Buttes (3411775), Jackrabbit Hill (3411776), Rogers Lake South (3411777), Redman (3411778), Barstow (3411781), Hinkley (3411782), Twelve Gauge Lake (3411783), Kramer Hills (3411784), Kramer Junction (3411785), Leuhman Ridge (3411786), Rogers Lake North (3411787), Edwards (3411788), Rosamond Lake (3411871), Bissell (3411881), Alvord Mtn. West (3511616), Coyote Lake (3511617), Lane Mountain (3511618), Langford Well (3511626), Paradise Range (3511627), Williams Well (3511628), Mud Hills (3511711)

County Summary: Kern, Los Angeles, San Bernardino

Lat/Long:	35.02758 / -117.38310	Accuracy:	specific area
UTM:	Zone-11 N3876168 E465052	Elevation (ft):	
PLSS:	T11N, R06W, Sec. 34 (S)	Acres:	1782558.0

Location: FREMONT-STODDARD; FREMONT VALLEY SOUTH TO THE VICINITY OF ADELANTO AND HWY 14 EAST TO CALICO MOUNTAINS, W MOJAVE DESERT.

Detailed Location: LARGEST OF 4 PRIMARY POPS IN CALIF. IN 1977, ESTIMATED DENSITIES WERE 20 TO >250 TORTOISES/SQ MI. AS OF 1987, EVIDENCE SUGGESTS MAJOR DECLINES IN ESTIMATED DENSITY IN MOST AREAS.

Ecological: AREA COVERS APPROX. 1700 SQ MILES, FROM 2000 TO >4000 FT ELEV W/SEVERAL VEG COMMUNITIES INCLUDED.

General:

Owner/Manager: BLM, PVT, DFG, DOD, STATE

Occurrence No.	248	Map Index: 73360	EO Index: 74326	Element Last Seen:	1990-04-28
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	1990-04-28
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-01-08

Quad Summary: Lovejoy Buttes (3411757)

County Summary: Los Angeles

Lat/Long:	34.61478 / -117.85148	Accuracy:	nonspecific area
UTM:	Zone-11 N3830655 E421937	Elevation (ft):	2685
PLSS:	T06N, R09W, Sec. 17 (S)	Acres:	36.0

Location: NORTH OF LOVEJOY BUTTES, SOUTH OF AVE O, LAKE LOS ANGELES.

Detailed Location: SOUTH OF AVE O, BETWEEN 155TH ST EAST AND 158TH ST EAST. L.A. ASSESSOR'S PARCEL #3029-12-08.

Ecological: JOSHUA TREE WOODLAND; ANNUALS ABUNDANT ON NORTH-FACING SLOPE. 2006 AERIAL PHOTO SHOWS THAT THE AREA IS STILL UNDEVELOPED.

General: 80 ACRES. 1 ADULT FEMALE TORTOISE WAS OBSERVED EATING ANNUALS. TRACKS TRACED BACK TO BURROW, ABOUT 50M AWAY IN A SMALL GULLY. BURROW ENTRANCE COVERED WITH FRESH SOIL. THERE ARE SEVERAL BURROW IN THIS AREA. POPULATION PROBABLY STILL VIABLE.

Owner/Manager: PVT

<i>Anniella pulchra pulchra</i>	Element Code: ARACC01012
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silvery legless lizard

Listing Status: **Federal:** None **CNDDDB Element Ranks:** **Global:** G3G4T3T4Q
State: None **State:** S3
Other: CDFW_SSC-Species of Special Concern, USFS_S-Sensitive
Habitat: **General:** SANDY OR LOOSE LOAMY SOILS UNDER SPARSE VEGETATION.
Micro: SOIL MOISTURE IS ESSENTIAL. THEY PREFER SOILS WITH A HIGH MOISTURE CONTENT.

Occurrence No.	4	Map Index: 36347	EO Index: 31344	Element Last Seen:	1995-05-XX
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	1995-05-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1997-08-12

Quad Summary: Ritter Ridge (3411852)
County Summary: Los Angeles

Lat/Long:	34.59403 / -118.21813	Accuracy:	80 meters
UTM:	Zone-11 N3828698 E388294	Elevation (ft):	2880
PLSS:	T06N, R13W, Sec. 23 (S)	Acres:	0.0

Location: LEONA VALLEY, 5 AIR MILES WEST OF PALMDALE ALONG ELIZABETH LAKE PINE CANYON ROAD.
Detailed Location: AMARGOSA CREEK, SANDY AREAS IN AND AROUND RIPARIAN.
Ecological: INTERMITTENT CREEK WITH AREAS OF DENSE RIPARIAN VEGETATION, PRIMARILY WILLOW AND COTTONWOOD AND OPEN SANDY BANKS WITH PATCHY SHRUB COVER.
General: ONE ADULT FOUND DEAD IN CREEK (1995). ELEVATION WAS GIVEN AS 2020 FEET BUT THE POINT MAPPED WAS AT 2880 FEET.
Owner/Manager: PVT

Occurrence No.	8	Map Index: 38704	EO Index: 33711	Element Last Seen:	1988-03-28
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1988-03-28
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-05-05

Quad Summary: Lancaster West (3411862)
County Summary: Los Angeles

Lat/Long:	34.64328 / -118.16114	Accuracy:	1 mile
UTM:	Zone-11 N3834098 E393583	Elevation (ft):	2530
PLSS:	T06N, R12W, Sec. 04 (S)	Acres:	0.0

Location: 6.4 KILOMETERS SSW OF LANCASTER (LOCATION DISTANCE TAKEN FROM LANCASTER POST OFFICE), NOT ABLE TO DETERMINE ACTUAL SITE.
Detailed Location: LOCATION MAPPED AS A 1 MILE CIRCLE DUE TO NON-SPECIFIC DIRECTIONS.
Ecological:
General: ID VERIFIED BY LAWRENCE E. HUNT, SPECIMENS IN SANTA BARBARA VERTEBRATE MUSEUM (UCSBVM 21272-21274). PREVIOUSLY NOT KNOWN FROM DESERT FLOOR OF ANTELOPE VALLEY. PROBABLY REPRESENTS EASTERN LIMIT OF SPECIES, LIMITING CLIMATIC CONDITIONS.
Owner/Manager: UNKNOWN



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Occurrence No.	9	Map Index: 38705	EO Index: 33712	Element Last Seen: 1988-01-22
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1988-01-22
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-05-05

Quad Summary: Lancaster West (3411862)

County Summary: Los Angeles

Lat/Long:	34.69822 / -118.21855	Accuracy:	1 mile
UTM:	Zone-11 N3840253 E388395	Elevation (ft):	2345
PLSS:	T07N, R13W, Sec. 13 (S)	Acres:	0.0

Location: 7.2 KILOMETERS W OF LANCASTER, MIRA LOMA DETENTION FACILITY (LOCATION DISTANCE MEASURED FROM LANCASTER POST OFFICE).

Detailed Location: LOCATION MAPPED AS A 1 MILE CIRCLE DUE TO NON-SPECIFIC DIRECTIONS, UNCERTAIN IF SPECIMEN WAS FOUND IN THE FACILITY.

Ecological:

General: JUVENILE CAPTURED & RELEASED. PREVIOUSLY NOT KNOWN FROM DESERT FLOOR OF ANTELOPE VALLEY. PROBABLY REPRESENTS EASTERN LIMIT OF SPECIES RANGE AS CLIMATIC CONDITIONS RAPIDLY BECOME LIMITING TO THE EAST IN THE MOJAVE DESERT.

Owner/Manager: UNKNOWN

Occurrence No.	34	Map Index: 61960	EO Index: 61996	Element Last Seen: 2005-06-22
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 2005-06-22
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2005-07-12

Quad Summary: Lancaster West (3411862)

County Summary: Los Angeles

Lat/Long:	34.66998 / -118.19605	Accuracy:	1/10 mile
UTM:	Zone-11 N3837096 E390419	Elevation (ft):	2400
PLSS:	T07N, R12W, Sec. 30 (S)	Acres:	0.0

Location: 0.45 MILE SE OF THE INTERSECTION OF AVENUE K AND 40TH STREET WEST, SW OF LANCASTER

Detailed Location:

Ecological: HABITAT CONSISTS OF SALTBUCH SCRUB AND JUNIPER/JOSHUA TREE WOODLAND; SOILS VERY SANDY, ALMOST DUNE-LIKE, WITH SOME WINTERFAT AND SPINY HOPSAGE PRESENT.

General: 2 SLL'S DETECTED WHILE TRAPPING FOR MOJAVE GROUND SQUIRRELS, ON 22 JUN 2005.

Owner/Manager: CITY OF LANCASTER



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Occurrence No.	37	Map Index: 63769	EO Index: 63864	Element Last Seen:	2003-02-19
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2003-02-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-01-25
Quad Summary:	Palmdale (3411851)				
County Summary:	Los Angeles				
Lat/Long:	34.54333 / -118.06500		Accuracy:	80 meters	
UTM:	Zone-11 N3822917 E402277		Elevation (ft):	2785	
PLSS:	T05N, R11W, Sec. 06 (S)		Acres:	0.0	
Location:	JUST NORTH OF PEARBLOSSOM HIGHWAY AND 0.1 MILE WEST OF 37TH STREET EAST, PALMDALE				
Detailed Location:	SITE HAS BEEN DEVELOPED INTO A SCHOOL.				
Ecological:	HABITAT CONSISTS OF DISTURBED JUNIPER/DESERT SCRUB/JOSHUA TREES ON ALLUVIAL SOIL.				
General:	1 FOUND INJURED AND ANOTHER OBSERVED DEAD DURING BIOMONITORING OF MOHAVE GROUND SQUIRRELS ON 19 FEB 2003.				
Owner/Manager:	PALMDALE SCHOOL DISTRICT				

Occurrence No.	38	Map Index: 63774	EO Index: 63869	Element Last Seen:	2005-02-17
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2005-02-17
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-01-25
Quad Summary:	Ritter Ridge (3411852)				
County Summary:	Los Angeles				
Lat/Long:	34.57367 / -118.13179		Accuracy:	1/10 mile	
UTM:	Zone-11 N3826348 E396186		Elevation (ft):	2730	
PLSS:	T06N, R12W, Sec. 27 (S)		Acres:	0.0	
Location:	NORTH OF RAYBURN ROAD, BETWEEN DIVISION STREET AND HIGHWAY 14, PALMDALE				
Detailed Location:					
Ecological:	HABITAT CONSISTS OF DISTURBED DESERT SCRUB ON ALLUVIAL SOIL.				
General:	DURING MOHAVE GROUND SQUIRREL BIOMONITORING, 2 WERE FOUND DEAD AND 2 WERE FOUND INJURED ON 17 FEB 2005, FOLLOWING SITE "GRUBBING" FOR A SCHOOL SITE.				
Owner/Manager:	PALMDALE SCHOOL DISTRICT				



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Occurrence No.	45	Map Index: 71513	EO Index: 72409	Element Last Seen:	2008-03-07
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-03-07
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2008-06-13
Quad Summary:	Palmdale (3411851)				
County Summary:	Los Angeles				
Lat/Long:	34.51305 / -118.11778		Accuracy:	80 meters	
UTM:	Zone-11 N3819612 E397397		Elevation (ft):	3345	
PLSS:	T05N, R12W, Sec. 15 (S)		Acres:	0.0	
Location:	NORTHWEST OF ANTELOPE VALLEY FREEWAY (SR-14) AT JUNCTION WITH SIERRA HIGHWAY, SOLEDAD PASS, 4.5 MI SOUTH OF PALMDALE.				
Detailed Location:	SOUTH ANTELOPE VALLEY SITE - AVSITE009. FOUND IN LOOSE, SANDY SUBSTRATE UNDER BOARDS.				
Ecological:	HABITAT CONSISTS OF JUNIPER WOODLAND WITH ABUNDANT ARTIFICIAL COVER CONSISTING OF BOARDS, RUBLE, MATTRESSES, CARPET AND OTHER ASSORTED TRASH, NATURAL WOOD, AND LEAF LITTER.				
General:	2 ADULTS OBSERVED AT A BURROW SITE ON 29 FEB AND 7 MAR 2008. THE WOOD AND OTHER DEBRIS APPEARS TO PROVIDE QUALITY SHELTER. CURRENT, SURROUNDING LAND USE IS ABANDONED/VACANT WITH STONE HOUSE RUIN AND LARGER ABANDONED FOUNDATION.				
Owner/Manager:	UNKNOWN				
Occurrence No.	51	Map Index: 73577	EO Index: 74565	Element Last Seen:	2007-03-09
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2007-03-09
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-02-13
Quad Summary:	Palmdale (3411851)				
County Summary:	Los Angeles				
Lat/Long:	34.54349 / -118.08783		Accuracy:	1/10 mile	
UTM:	Zone-11 N3822957 E400183		Elevation (ft):	2830	
PLSS:	T05N, R12W, Sec. 01 (S)		Acres:	0.0	
Location:	0.20 MI WEST OF THE JUNCTION OF ARNOLD DR & 25TH ST EAST, PALMDALE.				
Detailed Location:	MAPPED ACCORDING TO MAP PROVIDED.				
Ecological:	JOSHUA TREE/JUNIPER WOODLAND. COMPACTED FINE SAND.				
General:	1 INDIVIDUAL OBSERVED AT THE BASE OF A JUNIPER.				
Owner/Manager:	UNKNOWN				
Occurrence No.	52	Map Index: 73578	EO Index: 74566	Element Last Seen:	2007-01-18
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2007-01-18
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-02-13
Quad Summary:	Palmdale (3411851)				
County Summary:	Los Angeles				
Lat/Long:	34.55419 / -118.09200		Accuracy:	1/10 mile	
UTM:	Zone-11 N3824148 E399813		Elevation (ft):	2760	
PLSS:	T05N, R12W, Sec. 01 (S)		Acres:	0.0	
Location:	0.12 MI NE OF THE JUNCTION OF FIRETHORN ST & AVE S4, PALMDALE.				
Detailed Location:	MAPPED ACCORDING TO MAP PROVIDED.				
Ecological:	JUNIPER WITH SANDY, LOOSE AND ROCKY SOIL.				
General:	1 INDIVIDUAL OBSERVED AT THE BASE OF A JUNIPER.				
Owner/Manager:	UNKNOWN				



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Occurrence No.	53	Map Index: 73583	EO Index: 74568	Element Last Seen:	2006-04-12
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	2006-04-12
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-02-13
<hr/>					
Quad Summary:	Palmdale (3411851)				
County Summary:	Los Angeles				
<hr/>					
Lat/Long:	34.55870 / -118.01975		Accuracy:	1/10 mile	
UTM:	Zone-11 N3824579 E406447		Elevation (ft):	2710	
PLSS:	T06N, R11W, Sec. 35 (S)		Acres:	0.0	
<hr/>					
Location:	NE CORNER OF AVE S & ROCKIE LN, PALMDALE.				
Detailed Location:	MAPPED ACCORDING TO MAP AND LOCATION PROVIDED. "OBSERVED ~ 100 METERS NE OF THE INTERSECTION OF AVE S & ROCKIE LN IN EAST PALMDALE".				
Ecological:	CREOSOTE BUSH & JOSHUA TREE. SANDY SOIL, ESSENTIALLY PLANER, LEVEL.				
General:	1 INDIVIDUAL OBSERVED 12 APR 2006. 2008 GLOBEXPLORER PHOTO SHOWS THIS SITE IS NOW DEVELOPED. HABITAT STILL EXISTS SOUTH OF AVE S.				
Owner/Manager:	PVT				

Occurrence No.	70	Map Index: 78616	EO Index: 79543	Element Last Seen:	2009-03-03
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2009-03-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-07-14
<hr/>					
Quad Summary:	Ritter Ridge (3411852)				
County Summary:	Los Angeles				
<hr/>					
Lat/Long:	34.51395 / -118.13507		Accuracy:	specific area	
UTM:	Zone-11 N3819729 E395811		Elevation (ft):	3600	
PLSS:	T05N, R12W, Sec. 16 (S)		Acres:	12.0	
<hr/>					
Location:	0.3 MI NE OF TUCKERWAY RANCH, 1.25 MI NW FROM JUNCTION OF ANTELOPE VALLEY FWY (SR 14) & PEACEFUL VALLEY ROAD, PALMDALE.				
Detailed Location:	SITES CT 102 & 103, THREE SITES JUST EAST OF 4X4 ROAD AND POWERLINE CORRIDOR. MAPPED ACCORDING TO UTM COORDINATES PROVIDED.				
Ecological:	JUNIPER, SCRUB OAK WOODLAND W/CHAPARRAL YUCCA & MIXED HERBACEOUS UNDERSTORY. SOILS: DECOMPOSED GRANITE & FRIABLE. AREA MILDLY DISTURBED, BUT MOSTLY INTACT WITHIN 1 MI FROM SUBURBAN/WILDLIFE INTERFACE. DIRT ROADS & OHV IN AREA.				
General:	2 ADULTS (DUPLICATE SIGHTINGS?) RELOCATED UNHARMED ON 4 FEB 2009. 1 ADULT OBSERVED ON 10 FEB 2009. 1 LIZARD RELOCATED ON 2 MAR 2009. 1 ADULT OBSERVED 3 MAR 2009 AND MOVED FROM CONSTRUCTION AREA TO SIMILAR HABITAT NEARBY.				
Owner/Manager:	PVT, UNKNOWN				



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Occurrence No.	71	Map Index:	78619	EO Index:	79547	Element Last Seen:	2009-02-10
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-02-10	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-07-14	
Quad Summary:	Ritter Ridge (3411852)						
County Summary:	Los Angeles						
Lat/Long:	34.52273 / -118.14411		Accuracy:	80 meters			
UTM:	Zone-11 N3820712 E394992		Elevation (ft):	3841			
PLSS:	T05N, R12W, Sec. 16 (S)		Acres:	0.0			
Location:	ABOUT 0.9 MILES NNW OF TUCKERWAY RANCH, 2.5 MILES SW OF LAKE PALMDALE, PALMDALE.						
Detailed Location:	SITE CT 98, EAST OF 4X4 ROAD AND SCE POWERLINES, NORTH OF TUCKERWAY RANCH ROAD AND EAST OF PEACEFUL VALLEY ROAD. MAPPED ACCORDING TO PROVIDED UTM COORDINATES.						
Ecological:	JUNIPER, SCRUB OAK WOODLAND W/CHAPARRAL YUCCA & MIXED HERBACEOUS UNDERSTORY. SOILS: DECOMPOSED GRANITE & FRIABLE. AREA MILDLY DISTURBED, BUT MOSTLY INTACT WITHIN 1 MI FROM SUBURBAN/WILDLIFE INTERFACE. DIRT ROADS & OHV IN AREA.						
General:	ONE ADULT OBSERVED ON 31 JAN 2009. 1 ADULT OBSERVED ON 10 FEB 2009 AND MOVED FROM CONSTRUCTION AREA TO SIMILAR HABITAT NEARBY.						
Owner/Manager:	PVT, UNKNOWN						
Occurrence No.	72	Map Index:	78622	EO Index:	79549	Element Last Seen:	2009-02-12
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-02-12	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-06-30	
Quad Summary:	Pacifco Mountain (3411841)						
County Summary:	Los Angeles						
Lat/Long:	34.48878 / -118.11878		Accuracy:	80 meters			
UTM:	Zone-11 N3816921 E397275		Elevation (ft):	3207			
PLSS:	T05N, R12W, Sec. 27 (S)		Acres:	0.0			
Location:	JUST N OF VINCENT SUBSTATION HELIPORT, 1.25 MI E OF ANTELOPE FWY AT EXIT 27, 0.8 MI SSW FROM TOWN OF VINCENT, PALMDALE.						
Detailed Location:	JUST SOUTH OF ROCKYFORD ROAD JUST WEST OF ANGELES FOREST HWY. MAPPED ACCORDING TO UTM COORDINATES PROVIDED.						
Ecological:	JUNIPER, SCRUB OAK WOODLAND W/CHAPARRAL YUCCA & MIXED HERBACEOUS UNDERSTORY. SOILS: DECOMPOSED GRANITE & FRIABLE. AREA MILDLY DISTURBED, WITHIN 1 MI FROM SUBURBAN/WILDLIFE INTERFACE, ALONG MAJOR POWERLINE CORRIDOR. DIRT ROADS & OHV IN AREA.						
General:	ONE ADULT OBSERVED ON 12 FEB 2009.						
Owner/Manager:	PVT						



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Occurrence No.	79	Map Index:	79226	EO Index:	80204	Element Last Seen:	2009-03-30
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2009-03-30	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-07-14	

Quad Summary: Palmdale (3411851), Ritter Ridge (3411852)
County Summary: Los Angeles

Lat/Long:	34.50701 / -118.12808	Accuracy:	specific area
UTM:	Zone-11 N3818953 E396444	Elevation (ft):	3340
PLSS:	T05N, R12W, Sec. 22 (S)	Acres:	10.0

Location: ABOUT 0.5 - 0.6 MILE NORTHWEST THE JCT OF PEACEFUL VALLEY RD AND THE ANTELOPE VALLEY FREEWAY (HWY 14), NW OF VINCENT.
Detailed Location: SITES CT 107 AND 108, ALONG EAST SIDE OF POWERLINES. LOCATION MAPPED TO PROVIDED COORDINATES.
Ecological: HABITAT CONSISTS OF DESERT SCRUB/BUCKWHEAT SCRUB AND JUNIPER WOODLAND. SURROUNDING LAND COMPRISED OF SCATTERED RESIDENTIAL/RANCHES AND POWERLINE CORRIDOR.
General: 1 ADULT OBSERVED ON 4 MAR 2009. 1 ADULT OBSERVED ON 30 MAR 2009. BOTH LIZARDS REMOVED/RELOCATED UNHARMED TO NEARBY SIMILAR HABITAT. SITE IS CONSIDERED TO BE OF GOOD TO FAIR QUALITY BY DATA CONTRIBUTOR.
Owner/Manager: UNKNOWN

Occurrence No.	90	Map Index:	79362	EO Index:	80344	Element Last Seen:	2009-02-03
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2009-02-03	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-07-08	

Quad Summary: Ritter Ridge (3411852)
County Summary: Los Angeles

Lat/Long:	34.61483 / -118.24140	Accuracy:	80 meters
UTM:	Zone-11 N3831031 E386188	Elevation (ft):	3630
PLSS:	T06N, R13W, Sec. 15 (S)	Acres:	0.0

Location: 0.5 MILE NNE OF GODDE HILL ROAD AT GODDE PASS, PORTAL RIDGE, PALMDALE ZIP CODE.
Detailed Location: CT 27 / SR 24/23, JUST EAST OF TRANSMISSION LINES. LOCATION MAPPED TO PROVIDED COORDINATES.
Ecological:
General: OBSERVATIONS DURING TEHACHAPI RENEWABLE TRANSMISSION PROJECT SEGMENT 2. 1 LEGLESS LIZARD RELOCATED ON 3 FEB 2009.
Owner/Manager: UNKNOWN

<i>Phrynosoma blainvillii</i>		Element Code: ARACF12100
coast horned lizard		
Listing Status:	Federal: None	CNDDB Element Ranks: Global: G3G4
	State: None	State: S3S4
	Other: BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	
Habitat:	General: FREQUENTS A WIDE VARIETY OF HABITATS, MOST COMMON IN LOWLANDS ALONG SANDY WASHES WITH SCATTERED LOW BUSHES.	
	Micro: OPEN AREAS FOR SUNNING, BUSHES FOR COVER, PATCHES OF LOOSE SOIL FOR BURIAL, & ABUNDANT SUPPLY OF ANTS & OTHER INSECTS.	



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Occurrence No.	42	Map Index: 02653	EO Index: 28132	Element Last Seen: 1946-05-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1946-05-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2012-11-06

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.43041 / -117.82428	Accuracy:	2/5 mile
UTM:	Zone-11 N3810188 E424264	Elevation (ft):	4080
PLSS:	T04N, R09W, Sec. 16 (S)	Acres:	0.0

Location: ON BIG PINES HWY ABOUT 0.6 MI EAST OF BIG ROCK CREEK ROAD, & ABOUT 2 MI SE OF VALYERMO RANGER STATION, SHOEMAKER CANYON.

Detailed Location: MAPPED TO SPECIMEN LOCALITY OF "CA. 2 MI SE VALYERMO RANGER STATION" & MVZ FIELD NOTES STATING "WE DROVE ON THROUGH THE CANYON & TOOK ROAD TO BIG PINES VIA VALYERMO... A HORNED LIZARD WAS CAPTURED AS IT CROSSED THE ROAD ABOVE RANGER STA."

Ecological:

General: ONE MALE COLLECTED BY R.C. STEBBINS ON 2 MAY 1946.
Owner/Manager: UNKNOWN

Occurrence No.	43	Map Index: 02736	EO Index: 28119	Element Last Seen: 1959-07-22
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1959-07-22
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2012-11-05

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.39015 / -117.76862	Accuracy:	1 mile
UTM:	Zone-11 N3805684 E429344	Elevation (ft):	5720
PLSS:	T04N, R09W, Sec. 36 (S)	Acres:	0.0

Location: FENNER CANYON, ABOUT 2 MILES WEST OF JACKSON LAKE, SAN GABRIEL MOUNTAINS.

Detailed Location: MAPPED TO 1959 SPECIMEN LOCALITY: "SAN GABRIEL MTS; FENNER CANYON NEAR BIG ROCK CANYON."

Ecological:

General: LACM #26965 COLLECTED BY SCHOENHERR ON 22 JUL 1959.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	44	Map Index: 02343	EO Index: 28121	Element Last Seen: 1951-05-06
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1951-05-06
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2012-10-25

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.47804 / -118.02284	Accuracy:	1 mile
UTM:	Zone-11 N3815636 E406073	Elevation (ft):	3300
PLSS:	T05N, R11W, Sec. 34 (S)	Acres:	0.0

Location: VICINITY OF LITTLE ROCK RESERVOIR ON LITTLE ROCK CREEK, SAN GABRIEL MOUNTAINS SE OF PALMDALE.

Detailed Location: 1922 LOCALITIES GIVEN AS "PALMDALE (LITTLE ROCK CREEK);" EXACT LOCATION UNKNOWN, ATTRIBUTED HERE. MAPPED TO 1951 LOCALITY "LITTLE ROCK RESERVOIR."

Ecological:

General: LACM #4282 & 4283 COLLECTED BY L. WYMAN ON 30 MAY 1922. LACM #19861 COLLECTED BY TENDICK ON 6 MAY 1951.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	56	Map Index:	02811	EO Index:	28122	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		Record Last Updated:	2012-11-01
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Mescal Creek (3411746)

County Summary: Los Angeles

Lat/Long:	34.40670 / -117.73104	Accuracy:	2/5 mile
UTM:	Zone-11 N3807494 E432812	Elevation (ft):	6000
PLSS:	T04N, R08W, Sec. 29 (S)	Acres:	0.0

Location: BALL FLAT, ALONG BALL FLAT ROAD (4N16) ABOUT 1.25 ROAD MILES NORTH OF BIG PINES HWY, BIG PINES RECREATION AREA.

Detailed Location: LOCATION STATED AS "BALL FLAT ROAD, 1.0 MILE N COUNTY ROAD STATION." INTERPRETED COUNTY ROAD STATION AS LA COUNTY ROAD DEPOT ON TOPO MAP. MAPPED TO GENERAL AREA ABOUT 1 DIRT ROAD MILE NORTH AND JUST NW OF BALL FLAT.

Ecological:

General: R. MCDIARMID REPORTED TO A. SCHOENHERR THAT HE HAD DETECTED THEM HERE; NO DATE GIVEN, BUT PRIOR TO 1976 AND LIKELY BETWEEN 1958-1968.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	57	Map Index:	02836	EO Index:	28117	Element Last Seen:	1930-05-27
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		Record Last Updated:	2012-11-02
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Mescal Creek (3411746)

County Summary: Los Angeles

Lat/Long:	34.39294 / -117.71687	Accuracy:	2/5 mile
UTM:	Zone-11 N3805959 E434104	Elevation (ft):	6000
PLSS:	T04N, R08W, Sec. 33 (S)	Acres:	0.0

Location: VICINITY OF MESCAL GULCH, CAMP MCKIWANIS, AND CAMP TERRISITA PINES JUST EAST OF JACKSON LAKE, BIG PINES RECREATION AREA.

Detailed Location: MAPPED GENERALLY TO LOCALITES STATED AS: "LOWER END OF MESCAL GULCH," "CAMP MCKIWANIS AT HEAD OF MESCAL GULCH," AND "CAMP TERRISITA PINES AT 6100 FEET."

Ecological:

General: ORIGINALLY COLLECTED AT LOWER MESCAL GULCH BY BOGERT ON 27 MAY 1930 (CITED BY BOG30A01, REE52A01, & SCH76A01). PERSONALLY DETECTED BY A. A. SCHOENHERR AT CAMP MCKIWANIS & TERRISITA PINES WITH UNKNOWN DATE FROM HIS 1976 ARTICLE.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	59	Map Index: 02803	EO Index: 28115	Element Last Seen: 1959-08-17
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1959-08-17
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2012-11-02

Quad Summary: Mescal Creek (3411746)

County Summary: Los Angeles

Lat/Long:	34.39274 / -117.73207	Accuracy:	1/5 mile
UTM:	Zone-11 N3805946 E432706	Elevation (ft):	6200
PLSS:	T04N, R08W, Sec. 32 (S)	Acres:	0.0

Location: BIG PINES RECREATION AREA, CAMP JUNIPERO SERRA.

Detailed Location: LACM #26967 FROM "BIG PINES REC. AREA; CAMP JUNIPERO SERRA," BUT COLLECTOR STATED AS "C. JUNIPERO SERRA" WHICH MUST BE WRONG. CONSECUTIVE LACM #S FROM SAME YEAR & SIMILAR LOCATIONS ATTRIBUTED TO SCHOENHERR (A.A.S). ASSUMED COLLECTOR A.A.S.

Ecological: A. SCHOENHERR'S PERSONAL RECORDS NOTE THAT THIS SPECIES WAS DETECTED AT CAMP JUNIPERO SERRA AT 6200 FEET. MAPPED TO THE GENERAL AREA.

General: A. SCHOENHERR PUBLISHED HIS ARTICLE IN 1976 & NOTED THAT HIS PERSONAL RECORDS NOTE THIS SPECIES WAS DETECTED AT CAMP JUNIPERO SERRA AT 6200 FEET. ASSUMED THAT THIS RECORD IS THE SAME AS LACM #26967 COLLECTED HERE ON 17 AUG 1959.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	76	Map Index: 02660	EO Index: 28107	Element Last Seen: 1951-05-12
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1951-05-12
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2012-11-06

Quad Summary: Valyermo (3411747)

County Summary: Los Angeles

Lat/Long:	34.39389 / -117.82169	Accuracy:	2/5 mile
UTM:	Zone-11 N3806137 E424469	Elevation (ft):	4580
PLSS:	T04N, R09W, Sec. 33 (S)	Acres:	0.0

Location: SOUTH FORK CAMPGROUND ON SOUTH FORK BIG ROCK CREEK, 1.3 UPSTREAM MI FROM SYCAMORE FLAT, & ABOUT 4 AIR MI SSE OF VALYERMO

Detailed Location: COLLECTION LOCALITY STATED AS "SOUTH FORK CAMPGROUNDS" (SOUTH FORK CAMPGROUND ON S. FORK BIG ROCK CREEK ONLY MATCHING CAMP IN LA CO). A.A.S. LOCALITY OF "SOUTH FORK BIG ROCK CREEK JUST ABOVE CAMPGROUND."

Ecological:

General: ONE COLLECTED BY D. MEDINA ON 12 MAY 1951 AT "SOUTH FORK CAMPGROUNDS" (LACM #101338). DETECTED BY A.A. SCHOENHERR WITH NO DATE IN HIS 1976 PUBLICATION.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	77	Map Index: 87177	EO Index: 88131	Element Last Seen: 1948-03-28
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1948-03-28
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2012-11-06

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.41260 / -117.82373	Accuracy:	2/5 mile
UTM:	Zone-11 N3808214 E424298	Elevation (ft):	4300
PLSS:	T04N, R09W, Sec. 21 (S)	Acres:	0.0

Location: SYCAMORE FLAT ALONG BIG ROCK CREEK, ABOUT 3.2 ROAD MILES SOUTH OF VALYERMO, ANGELES NATIONAL FOREST.
Detailed Location: INCLUDED LAW20S0003 WITH LOCALITY OF "BIG ROCK CREEK" AND "4300FT." OTHER COLLECTIONS STATED "3.2 MI S VALYERMO; NE UNION" (ASSUMED ROAD MILES AND ONLY ROAD SOUTH) AND "SAN GABRIEL MTS; BIG ROCK CREEK SYCAMORE FLAT."

Ecological:

General: ONE FEMALE COLLECTED BY J.E. LAW ON 22 JUN 1920. ONE COLLECTED BY COWLES ON 29 SEP 1946 (LACM #19860). ONE COLLECTED BY ZWEIFEL ON 28 MAR 1948 (LACM #19866).
Owner/Manager: USFS-ANGELES NF

Occurrence No.	112	Map Index: 87208	EO Index: 28092	Element Last Seen: 1976-05-18
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1976-05-18
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2012-11-07

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.40084 / -117.84445	Accuracy:	3/5 mile
UTM:	Zone-11 N3806925 E422383	Elevation (ft):	4880
PLSS:	T04N, R09W, Sec. 29 (S)	Acres:	0.0

Location: VICINITY OF DEVILS CHAIR NEAR HOLCOMB CANYON IN SOUTHERN DEVILS PUNCHBOWL COUNTY PARK.
Detailed Location: BOGERT (1930) DESCRIBED THEM AS "MODERATELY COMMON... AS FAR NORTH AS THE DEVIL'S PUNCHBOWL." M.C. LONG DETECTIONS AT 4880FT IN DEVILS PUNCHBOWL COUNTY PARK (IN BRO86U0005); MAPPED TO VICINITY OF TRAIL AT ABOUT 4880FT.

Ecological:

General: KNOWN TO OCCUR IN VICINITY BY 1930, AND COLLECTIONS FROM "DEVILS PUNCHBOWL AREA" ON 11 MAY 1951 BY H. STANLEY (LACM #S 101339, 101340). M.C. LONG DETECTED 1 HATCHLING ON 18 JULY 1973, 1 ADULT ON 23 MAR 1974, AND 1 HATCHLING ON 18 MAY 1976.
Owner/Manager: LAX COUNTY



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Occurrence No.	113	Map Index: 02747	EO Index: 28095	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-10-30

Quad Summary: Mescal Creek (3411746), Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.43832 / -117.75728	Accuracy:	1 mile
UTM:	Zone-11 N3811017 E430427	Elevation (ft):	4650
PLSS:	T04N, R08W, Sec. 18 (S)	Acres:	0.0

Location: VICINITY OF "PANORAMA MOTORWAY," DIRT ROAD TO BOULDER CANYON 2.5 MILES NORTH OF MILE HIGH.
Detailed Location: MAPPED TO SCHOENHERR'S LOCALITY, "DIRT ROAD TO BOULDER CANYON, 2.5 MILES N MILE HIGH (RGM)." RGM = ROY MCDIARMID, A USC HERPETOLOGIST. EXACT LOCATION UNKNOWN; ACTUAL LOCATION MAY BE NEAR BIG JOHN FLAT IF TRAVELING 2.5 MI N FROM MILE HIGH.

Ecological:

General: DETECTED BY ROY MCDIARMID, AS REPORTED IN SCHOENHERR (1976), ON UNKNOWN DATE. OTHER MCDIARMID COLLECTIONS DATE FROM 1958-1968.
Owner/Manager: UNKNOWN, USFS-ANGELES NF

Occurrence No.	127	Map Index: 02257	EO Index: 28081	Element Last Seen:	1967-06-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1967-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-01-23

Quad Summary: Palmdale (3411851)
County Summary: Los Angeles

Lat/Long:	34.54276 / -118.05395	Accuracy:	1/5 mile
UTM:	Zone-11 N3822843 E403291	Elevation (ft):	2800
PLSS:	T05N, R11W, Sec. 05 (S)	Acres:	0.0

Location: JUNCTION OF 42ND ST & PEAR BLOSSOM HWY (JOSHUA ACRES), 3 MILES SOUTHEAST OF PALMDALE.

Detailed Location:

Ecological:

General: LACM SPECIMEN #52793 COLLECTED 3 JUN 1967 BY HOSKELL.
Owner/Manager: UNKNOWN



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Occurrence No.	140	Map Index: 87181	EO Index: 88144	Element Last Seen:	1977-06-04
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1977-06-04
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-11-06

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.41915 / -117.84566	Accuracy:	2/5 mile
UTM:	Zone-11 N3808956 E422289	Elevation (ft):	4300
PLSS:	T04N, R09W, Sec. 20 (S)	Acres:	0.0

Location: VICINITY OF PUNCHBOWL CANYON, ABOUT 1.25 MILES UPSTREAM (S) FROM BIG ROCK SPRINGS (TOWN), DEVILS PUNCHBOWL COUNTY PARK.
Detailed Location: BOGERT (1930) DESCRIBED THEM AS "MODERATELY COMMON... AS FAR NORTH AS THE DEVIL'S PUNCHBOWL." 1977 LOCATION STATED AS SAN GABRIEL MTNS, N. OF PARK BOUNDARY, 4300FT; MAPPED NEAR TRAIL AT ABOUT 4300FT JUST NORTH OF PARK BOUNDARY.

Ecological:

General: KNOWN TO OCCUR IN VICINITY BY 1930, AND COLLECTIONS FROM "DEVILS PUNCHBOWL AREA" ON 11 MAY 1951 BY H. STANLEY (LACM #S 101339, 101340). ONE DETECTED ON 4 JUN 1977 BY M.C. LONG AND R.M. MCKERNAN.
Owner/Manager: USFS-ANGELES NF, LAX COUNTY

Occurrence No.	144	Map Index: 02088	EO Index: 28064	Element Last Seen:	1953-04-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1953-04-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-01-23

Quad Summary: Acton (3411842)
County Summary: Los Angeles

Lat/Long:	34.47010 / -118.19618	Accuracy:	1 mile
UTM:	Zone-11 N3814930 E390144	Elevation (ft):	2800
PLSS:	T05N, R13W, Sec. 36 (S)	Acres:	0.0

Location: ACTON, SOLEDAD CANYON.
Detailed Location:
Ecological:
General: LACM SPECIMEN #19877 COLLECTED 1 APR 1953.
Owner/Manager: UNKNOWN

Occurrence No.	146	Map Index: 02195	EO Index: 28067	Element Last Seen:	1964-05-10
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1964-05-10
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-01-23

Quad Summary: Palmdale (3411851), Ritter Ridge (3411852)
County Summary: Los Angeles

Lat/Long:	34.60856 / -118.12305	Accuracy:	1 mile
UTM:	Zone-11 N3830208 E397032	Elevation (ft):	2620
PLSS:	T06N, R12W, Sec. 14 (S)	Acres:	0.0

Location: 5 MILES SOUTH OF LANCASTER ON HWY 6.
Detailed Location:
Ecological:
General: LACM SPECIMEN #101335 COLLECTED 10 MAY 1964 BY D.J. SUTHERLIN.
Owner/Manager: UNKNOWN



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Occurrence No.	147	Map Index: 02186	EO Index: 28068	Element Last Seen: 1964-05-10
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1964-05-10
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2006-01-23

Quad Summary: Lancaster East (3411861), Lancaster West (3411862)

County Summary: Los Angeles

Lat/Long:	34.65831 / -118.13118	Accuracy:	1 mile
UTM:	Zone-11 N3835734 E396348	Elevation (ft):	2480
PLSS:	T07N, R12W, Sec. 34 (S)	Acres:	0.0

Location: 2 MILES SOUTH OF LANCASTER ON HWY 6.

Detailed Location:

Ecological:

General: LACM SPECIMEN # 101336 COLLECTED 10 MAY 1964 BY D.J. SUTHERLIN.

Owner/Manager: UNKNOWN

Occurrence No.	155	Map Index: 02232	EO Index: 28047	Element Last Seen: 1972-04-09
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1972-04-09
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2006-01-23

Quad Summary: Pacifico Mountain (3411841)

County Summary: Los Angeles

Lat/Long:	34.42059 / -118.09605	Accuracy:	1/5 mile
UTM:	Zone-11 N3809336 E399281	Elevation (ft):	3800
PLSS:	T04N, R12W, Sec. 24 (S)	Acres:	0.0

Location: 0.8 MI NORTH ON ALISO CYN RD, OFF ANGELES FOREST HWY, 7 MI SE OF ACTON.

Detailed Location:

Ecological:

General: LACM SPECIMEN #101333 COLLECTED 9 APR 1972 BR R.E. LEE.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	157	Map Index: 01549	EO Index: 28059	Element Last Seen: 1958-08-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1958-08-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2011-03-17

Quad Summary: Lake Hughes (3411864), Fairmont Butte (3411874)

County Summary: Los Angeles

Lat/Long:	34.73609 / -118.42397	Accuracy:	1 mile
UTM:	Zone-11 N3844700 E369639	Elevation (ft):	2800
PLSS:	T08N, R15W, Sec. 36 (S)	Acres:	0.0

Location: FAIRMONT, 4 MI NORTH OF LAKE HUGHES.

Detailed Location: SDNHM #19362 STATED LOCALITY AS " FAIRMONT". EXACT LOCATION IS UNKNOWN.

Ecological:

General: SDNHM SPECIMEN #19362 COLLECTED BY J.D. NOKES ON 2 AUG 1958.

Owner/Manager: UNKNOWN



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Occurrence No.	158	Map Index:	00603	EO Index:	28060	Element Last Seen:	1955-05-15
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1955-05-15	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2006-01-23	

Quad Summary: Whitaker Peak (3411856), Cobblestone Mtn. (3411857), Liebre Mtn. (3411866), Black Mtn. (3411867)

County Summary: Los Angeles

Lat/Long:	34.61748 / -118.74065	Accuracy:	1 mile
UTM:	Zone-11 N3832001 E340418	Elevation (ft):	2400
PLSS:	T06N, R18W, Sec. 13 (S)	Acres:	0.0

Location: FRENCHMANS FLAT CAMPGROUND, APPROX 7.5 MI NW OF CASTAIC LAKE.

Detailed Location:

Ecological:

General: LACM SPECIMEN #19876 COLLECTED 15 MAY 1955 BY CUNNUNGHAM.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	325	Map Index:	20081	EO Index:	9901	Element Last Seen:	1990-04-12
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		1990-04-12	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1991-12-03	

Quad Summary: Pacifico Mountain (3411841)

County Summary: Los Angeles

Lat/Long:	34.47512 / -118.11754	Accuracy:	1/5 mile
UTM:	Zone-11 N3815405 E397373	Elevation (ft):	3200
PLSS:	T05N, R12W, Sec. 34 (S)	Acres:	0.0

Location: APPROXIMATELY ONE MI SSE OF HWY 14, ALONG THE ANGELES FOREST HWY.

Detailed Location:

Ecological: HABITAT IS A WASH WITHIN DESERT TRANSITIONAL CHAPARRAL.

General:

Owner/Manager: PVT

Occurrence No.	443	Map Index:	42141	EO Index:	42141	Element Last Seen:	1995-05-21
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		1995-05-21	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2000-02-02	

Quad Summary: Sleepy Valley (3411853)

County Summary: Los Angeles

Lat/Long:	34.59882 / -118.25875	Accuracy:	2/5 mile
UTM:	Zone-11 N3829275 E384575	Elevation (ft):	3200
PLSS:	T06N, R13W, Sec. 21 (S)	Acres:	0.0

Location: 0.75 MILE SOUTH OF THE INTERSECTION OF ELIZABETH LAKE ROAD AND QUARTZ HILL ROAD, WEST OF PALMDALE.

Detailed Location: LIZARDS OBSERVED ON THE BERM OF ROGERS CREEK POND.

Ecological: HABITAT CONSISTS OF A MIXTURE OF SCRUB AND GRASSLAND.

General: 2 ADULTS OBSERVED ON 21 MAY 1995.

Owner/Manager: PVT



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Occurrence No.	458	Map Index:	46981	EO Index:	46981	Element Last Seen:	2001-09-27
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2001-09-27
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2002-01-15
Quad Summary:	Lake Hughes (3411864)						
County Summary:	Los Angeles						
Lat/Long:	34.66957 / -118.43252			Accuracy:	80 meters		
UTM:	Zone-11 N3837334 E368752			Elevation (ft):	3287		
PLSS:	T07N, R15W, Sec. 26 (S)			Acres:	0.0		
Location:	PAINTED TURTLE CAMP, LAKE HUGHES.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF RECOVERING CHAPARRAL.						
General:	1 JUVENILE OBSERVED FORAGING IN OPEN CHAPARRAL ON 27 SEP 2001.						
Owner/Manager:	PVT						
Occurrence No.	522	Map Index:	56325	EO Index:	56341	Element Last Seen:	2004-04-XX
Occ. Rank:	Fair			Presence:	Presumed Extant	Site Last Seen:	2004-04-XX
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2004-08-05
Quad Summary:	Ritter Ridge (3411852), Sleepy Valley (3411853)						
County Summary:	Los Angeles						
Lat/Long:	34.50909 / -118.25067			Accuracy:	1/5 mile		
UTM:	Zone-11 N3819315 E385193			Elevation (ft):	3400		
PLSS:	T05N, R13W, Sec. 21 (S)			Acres:	0.0		
Location:	JUST NORTH OF VALLEY SAGE ROAD, 0.25 MILE NORTH OF HWY 14 AND APPROXIMATELY 0.25 MILE WEST OF HISTORIC PURITAN MINE.						
Detailed Location:							
Ecological:	HABITAT CONSISTS OF JUNIPER WOODLAND WITH LOOSE, FRIABLE SOILS. SURROUNDING LAND IS RESIDENTIAL. DISTURBANCES INCLUDE TRASH, HISTORIC MINING AND RECREATION.						
General:	1 OBSERVED DURING APRIL 2004.						
Owner/Manager:	PVT						



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Occurrence No.	570	Map Index:	76207	EO Index:	77189	Element Last Seen:	2008-05-15
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2008-05-15	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2009-11-10	

Quad Summary: Black Mtn. (3411867)

County Summary: Los Angeles

Lat/Long:	34.66500 / -118.76420	Accuracy:	80 meters
UTM:	Zone-11 N3837309 E338351	Elevation (ft):	2760
PLSS:	T07N, R18W, Sec. 26 (S)	Acres:	0.0

Location: PIRU CREEK AREA, JUST WEST OF I-5, PYRAMID LAKE,

Detailed Location: JUST NORTH OF THE VISTA DEL LAGO VISITOR CENTER/VAQUERO PICNIC AREA. MAPPED ACCORDING TO COORDINATES/MAP PROVIDED.

Ecological: NON-NATIVE GRASSLANDS AND RUDERAL VEGETATION ADJACENT TO SOUTHERN MIXED CHAPARRAL. MOST COMMON NON-NATIVES INCLUDE FOXTAIL CHESS, WILD OAT, AND RIPGUT GRASS.

General: TWO LIZARDS WERE SEEN WITHIN 100 FEET OF EACH OTHER ON 15 MAY 2008, AROUND MID-MORNING ON A SUNNY DAY.

Owner/Manager: USFS-LOS PADRES NF

Occurrence No.	578	Map Index:	39829	EO Index:	34831	Element Last Seen:	1990-08-17
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		1990-08-17	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-09-28	

Quad Summary: Mescal Creek (3411746)

County Summary: Los Angeles

Lat/Long:	34.43048 / -117.70104	Accuracy:	80 meters
UTM:	Zone-11 N3810111 E435588	Elevation (ft):	4400
PLSS:	T04N, R08W, Sec. 15 (S)	Acres:	0.0

Location: RANCH, 3 MILES NNE OF JACKSON LAKE, WASH IN THE JESUS CANYON AREA, 0.3 MILE N OF ANGELES NF.

Detailed Location: HORSE RANCH: OPEN SPACE PROBABLY ADEQUATE ON SITE FOR PRESERVATION OF POPULATION.

Ecological: TRANSITIONAL DESERT WASH JOSHUA TREE-DESERT CHAPARRAL-PINION JUNIPER WOODLAND

General: 1 JUVENILE OBSERVED.

Owner/Manager: PVT



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Occurrence No.	580	Map Index:	39837	EO Index:	34839	Element Last Seen:	1991-05-15
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		1991-05-15	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-09-28	

Quad Summary: Lancaster West (3411862)

County Summary: Los Angeles

Lat/Long:	34.63468 / -118.21594	Accuracy:	80 meters
UTM:	Zone-11 N3833204 E388549	Elevation (ft):	2585
PLSS:	T06N, R13W, Sec. 01 (S)	Acres:	0.0

Location: 4733 WEST AVE., M-12, 0.15 MILE EAST OF JUNCTION WITH 50TH STREET WEST, QUARTZ HILL.

Detailed Location: IN FRONT YARD NEAR HIGH DENSITY POPULATION OF ANTS.

Ecological: LAWNS, GARDENS, SINGLE FAMILY RESIDENCES ON 3/4 ACRE LOTS IN OLD ALMOND ORCHARD. SEVERAL VACANT OR OVERGROWN LOTS ON M-12, COULD SUPPORT A VIABLE POPULATION OF P.CORONATUM HERE.

General: 1 OBSERVED, 1991. IT WAS STATED THAT MORE SURVEYS NEEDED IN THE QUARTZ HILL AREA; PREVIOUS RECORDS OF P.C. BLAINVILLEI COULD BE ERRONEOUS.

Owner/Manager: PVT

Occurrence No.	698	Map Index:	78385	EO Index:	79312	Element Last Seen:	2009-06-22
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2009-06-22	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-03-22	

Quad Summary: Acton (3411842)

County Summary: Los Angeles

Lat/Long:	34.45557 / -118.12755	Accuracy:	80 meters
UTM:	Zone-11 N3813247 E396429	Elevation (ft):	3662
PLSS:	T04N, R12W, Sec. 03 (S)	Acres:	0.0

Location: 0.2 MI N OF BPL FOREST SERVICE ROAD (RD 4N24.2), 1.25 MI NW OF KENTUCKY SPRINGS, 1.5 MI NE OF GLEASON CANYON.

Detailed Location: LIES BETWEEN ALISO CANYON ROAD & ANGELES FOREST HIGHWAY. MAPPED ACCORDING TO UTM COORDINATES PROVIDED.

Ecological: BURNED CSS. SANDY SOILS WITH ERIOGONUM AND ENCELIA. AREA IS A TRANSMISSION LINE COORIDOR WITH DIRT ACCESS ROADS.

General: ONE ADULT LIZARD OBSERVED ON SIDE OF ACCESS ROAD ON 22 JUNE 2009.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	700	Map Index: 78399	EO Index: 79319	Element Last Seen:	2009-05-30
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2009-05-30
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-04-13

Quad Summary: Ritter Ridge (3411852)

County Summary: Los Angeles

Lat/Long:	34.60292 / -118.22655	Accuracy:	80 meters
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UTM:	Zone-11 N3829694 E387534	Elevation (ft):	3200
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PLSS:	T06N, R13W, Sec. 14 (S)	Acres:	0.0
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Location: LEONA VALLEY, N OF AMARGOSA CREEK AND S OF RITTER RIDGE, ABOUT 8 MILES SW OF LANCASTER, ALONG SAN ANDREAS RIFT ZONE.

Detailed Location: ABOUT 1.1 MILES ESE FROM GODDE PASS, ALONG DIRT ROAD SOUTH OF HACIENDA RANCH ROAD AND NORTHEAST OF CHERRY TREE LANE. MAPPED TO PROVIDED COORDINATES.

Ecological: SURROUNDING LAND USE: SCE TRANSMISSION LINES.

General: ONE ADULT OBSERVED ALONG DIRT ROAD ON 30 MAY 2009.

Owner/Manager: UNKNOWN

Occurrence No.	701	Map Index: 78400	EO Index: 79320	Element Last Seen:	2010-05-25
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2010-05-25
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-04-07

Quad Summary: Ritter Ridge (3411852)

County Summary: Los Angeles

Lat/Long:	34.61907 / -118.24750	Accuracy:	specific area
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UTM:	Zone-11 N3831509 E385634	Elevation (ft):	3644
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PLSS:	T06N, R13W, Sec. 10 (S)	Acres:	10.0
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Location: PORTAL RIDGE ALONG TRANSMISSION LINE, 1 MI NE OF GODDE HILL RD AT ELIZABETH LAKE RD, 2.6 MI SW OF QUARTZ HILL PO.

Detailed Location: LOCATED ALONG SEC TRANSMISSION LINE AND DIRT ROAD. MAPPED TO PROVIDED COORDINATES.

Ecological: HABITAT CONSISTS OF CALIFORNIA BUCKWHEAT INTERGRADING WITH CALIFORNIA JUNIPER SCRUB WITH STRONG COMPONENT OF NATIVE PERENNIAL BUNCHGRASSES. HABITAT IS HIGH QUALITY WITH LOW-DENSITY CATTLE GRAZING IN THE AREA.

General: ONE ADULT FOUND DEAD ON DIRT ROAD ON 14 AUG 2009. LOOKED TO HAVE BEEN RUN OVER BY VEHICLE. ONE ADULT (ABOUT 2 1/2 INCHES SNOUT-VENT LENGTH) WAS OBSERVED ON DIRT ACCESS ROAD & RELOCATED TO NEARBY HABITAT ON 25 MAY 2010.

Owner/Manager: PVT



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Occurrence No.	702	Map Index: 78402	EO Index: 79323	Element Last Seen:	2009-05-27
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2009-05-27
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-03-22

Quad Summary: Green Valley (3411854)

County Summary: Los Angeles

Lat/Long:	34.61400 / -118.43553	Accuracy:	80 meters
UTM:	Zone-11 N3831175 E368387	Elevation (ft):	2681
PLSS:	T06N, R15W, Sec. 14 (S)	Acres:	0.0

Location: SOUTH PORTAL CANYON, JUST WNW OF JUPITER MOUNTAIN, AND 1.6 MILES WSW FROM THE TOWN OF GREEN VALLEY.

Detailed Location: JUST NE FROM THE INTERSECTION OF SAN FRANCISQUITO CANYON ROAD AND S PORTAL TRUCK TRAIL. LOCATION MAPPED ACCORDING TO MAP PROVIDED.

Ecological: AREA IS RESIDENTIAL AREA SURROUNDED BY ANGELES NF. VEGETATION IS MIXED CHAPARRAL DOMINATED BY CHAMISE CHAPARRAL, AND THICK-LEAFED YERBA SANTA. ON-SITE VEGETATION WAS CLEARED TO REDUCE FIRE LOAD IN PROXIMITY TO THE SURROUNDING RESIDENCES.

General: ONE ADULT OBSERVED RUNNING ON GROUND, POSSIBLY FORAGING ON 27 MAY 2009. INDIVIDUAL WAS MOVED TO SHRUB COVER NEAR AN ACTIVE HARVESTER ANT NEST APPROXIMATELY 150 YARDS AWAY DUE TO PENDING VEGETATION CLEARANCE.

Owner/Manager: LADWP

Occurrence No.	703	Map Index: 78404	EO Index: 79324	Element Last Seen:	2009-03-27
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2009-03-27
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-03-23

Quad Summary: Green Valley (3411854)

County Summary: Los Angeles

Lat/Long:	34.55967 / -118.48663	Accuracy:	80 meters
UTM:	Zone-11 N3825217 E363614	Elevation (ft):	1776
PLSS:	T06N, R15W, Sec. 32 (S)	Acres:	0.0

Location: SAN FRANCISQUITO CREEK, ALONG FOREST ROAD 5N27, N OF LOS ANGELES AQUEDUCT, 6 MILES SW FROM GREEN VALLEY, ANGELES NF.

Detailed Location: SMALL POCKET OF PRIVATE LAND IN ANGELES NF, JUST S OF GUN CLUB ALONG SAN FRANCISQUITO ROAD. T&R GIVEN AS T6N, 15W, SEC 52. SECTION SHOULD BE 32. MAPPED ACCORDING TO MAP PROVIDED.

Ecological: HABITAT CONSISTS OF A THEN-DRY CHANNEL OF SAN FRANCISQUITO CREEK, SANDY STREAM BED WITH SPARSE MULEFAT AND WILLOW RIPARIAN VEGETATION. SEPARATED FROM THE FLOWING CREEK CHANNEL BY DENSE RIPARIAN. SURROUNDING HILLSIDES CONTAINED CHAPARRAL.

General: ONE ADULT OBSERVED RUNNING ALONG STREAMBED NEAR AN ANT HILL ON 27 MARCH 2009.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	721	Map Index: 80492	EO Index: 81479	Element Last Seen:	2009-04-23
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	2009-04-23
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-12-09

Quad Summary: Black Mtn. (3411867)

County Summary: Ventura

Lat/Long:	34.69430 / -118.84895	Accuracy:	80 meters
UTM:	Zone-11 N3840699 E330644	Elevation (ft):	2960
PLSS:	T07N, R19W, Sec. 13 (S)	Acres:	0.0

Location: 0.4 MI N OF BUCK CREEK (HARDLUCK) CAMPGROUND ALONG BUCK CREEK RD, 2.7 MI SSE OF HUNGRY VALLEY.

Detailed Location: INDIVIDUAL WAS OBSERVED ADJACENT TO BUCK CREEK RD ABOUT 1/3 MI NW OF PIRU CK LOW WATER CROSSING. USFS CLOSED THE ROAD TO PUBLIC VEHICLE DUE TO THE BUFO CALIFORNICUS POPULATION LOCATED IN THE CAMPGROUND. MAPPED TO COORDINATES.

Ecological: CHAPARRAL COMMUNITY DOMINATED BY ADENOSOMA FASCICULATUM, WITH ERIOGONUM FASCICULATUM, ERIODICTYON CRASSIFOLIUM, RHUS TRILOBATA, ERICAMERIA LINEARIFOLIA, & JUNIPERUS CALIFORNICA. SUBSTRATE IS SANDSTONE WITH AREAS OF FLAT FRIABLE SANDY SOILS.

General: 1 ADULT WAS OBSERVED ON 23 APR 2009.

Owner/Manager: USFS-LOS PADRES NF

Occurrence No.	728	Map Index: 80546	EO Index: 81530	Element Last Seen:	2010-05-21
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2010-05-21
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-11-01

Quad Summary: Lake Hughes (3411864)

County Summary: Los Angeles

Lat/Long:	34.64286 / -118.44283	Accuracy:	specific area
UTM:	Zone-11 N3834386 E367764	Elevation (ft):	3990
PLSS:	T06N, R15W, Sec. 02 (S)	Acres:	8.0

Location: TURNOUT ALONG NF7N01 AT TULE RIDGE, 0.6 MI N OF SOUTH PORTAL ELIZABETH TUNNEL, 2 MI S OF LAKE HUGHES.

Detailed Location: SITE IS LOCATED BETWEEN TWO LARGE DRAINAGES WHICH CONVERGE INTO ONE BELOW THE ROAD. MAPPED TO COORDINATES PROVIDED.

Ecological: VERY GRAVELLY SOIL, DOMINATED BY ERIODICTYON CRASSIFOLIUM, ADENOSOMA FASCICULATUM, SALVIA COLUMBARIAE, & ERIOGONUM FASCICULATUM. IMMEDIATE SURROUNDING AREA IS DENSE WITH CHAMISE CHAPARRAL & AN UNNAMED SPRING.

General: ONE ADULT AND JUVENILE WERE OBSERVED ON 21 MAY 2010. THEY WERE RUNNING A SHORT DISTANCE, HIDING UNDER NATIVE VEGETATION AS THE VEHICLE/PERSON APPROACHED.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	749	Map Index: 81392	EO Index: 82371	Element Last Seen:	2009-06-24
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-06-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-01-20
Quad Summary:	Sleepy Valley (3411853)				
County Summary:	Los Angeles				
Lat/Long:	34.62305 / -118.35095		Accuracy:	80 meters	
UTM:	Zone-11 N3832072 E376156		Elevation (ft):	4040	
PLSS:	T06N, R14W, Sec. 10 (S)		Acres:	0.0	
Location:	DIRT ROAD (TRANSMISSION LINE), 1.1 MI SSW JCT OF TRANSMISSION LINE & ELIZABETH LAKE RD, 1 MI WSW LEONA VALLEY RANCH.				
Detailed Location:	TEHACHAPI RENEWABLE TRANSMISSION PROJECT SITE SEGMENT 1, SECTION 2. MAPPED TO PROVIDED COORDINATES.				
Ecological:					
General:	UNKNOWN NUMBER OF INDIVIDUALS WERE OBSERVED ON THE DIRT ROAD 24 JUN 2009. SPECIES IDENTIFIED AS PHRYNOSOMA SP. AND MAPPED BY CNDDDB AS PHRYNOSOMA BLAINVILLII DUE TO LOCATION OF OBSERVATION.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	750	Map Index: 81395	EO Index: 82372	Element Last Seen:	2008-08-15
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-08-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-01-20
Quad Summary:	Del Sur (3411863)				
County Summary:	Los Angeles				
Lat/Long:	34.64992 / -118.33195		Accuracy:	80 meters	
UTM:	Zone-11 N3835029 E377937		Elevation (ft):	3730	
PLSS:	T07N, R14W, Sec. 35 (S)		Acres:	0.0	
Location:	ALONG TRANSMISSION LINE ON UNNAMED DIRT ROAD, 1 MI SSW OF COCHEMS RANCH, 1.5 MI SE OF JOHNSON SUMMIT, PORTAL RIDGE.				
Detailed Location:	TEHACHAPI RENEWABLE TRANSMISSION PROJECT SITE SEGMENT 1, SECTION 3. MAPPED TO PROVIDED COORDINATES.				
Ecological:					
General:	ONE INDIVIDUAL WAS OBSERVED AND RELOCATED BY MONITOR ON 15 AUG 2008.				
Owner/Manager:	UNKNOWN				
Occurrence No.	751	Map Index: 81394	EO Index: 82373	Element Last Seen:	2008-08-23
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-08-23
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-01-20
Quad Summary:	Del Sur (3411863)				
County Summary:	Los Angeles				
Lat/Long:	34.65389 / -118.33074		Accuracy:	80 meters	
UTM:	Zone-11 N3835467 E378053		Elevation (ft):	3280	
PLSS:	T07N, R14W, Sec. 35 (S)		Acres:	0.0	
Location:	JUST W TRANSMISSION LINE ON UNNAMED DIRT ROAD, 0.3 MI SE OF BM 3058, 0.6 MI S OF CA AQUEDUCT AT JOHNSON RD, PORTAL RIDGE				
Detailed Location:	TEHACHAPI RENEWABLE TRANSMISSION PROJECT SITE SEGMENT, 1 SECTION 3. MAPPED TO PROVIDED COORDINATES.				
Ecological:					
General:	ONE INDIVIDUAL WAS OBSERVED ON 23 AUG 2008,				
Owner/Manager:	UNKNOWN				



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Occurrence No.	752	Map Index: 81396	EO Index: 82374	Element Last Seen:	2008-09-04
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-09-04
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-01-20
Quad Summary:	Del Sur (3411863)				
County Summary:	Los Angeles				
Lat/Long:	34.65948 / -118.32578		Accuracy:	80 meters	
UTM:	Zone-11 N3836081 E378517		Elevation (ft):	3095	
PLSS:	T07N, R14W, Sec. 35 (S)		Acres:	0.0	
Location:	ALONG TRANSMISSION LINE ABOUT 0.1 MILE SOUTH OF THE CALIF AQUEDUCT, 0.3 MI SW OF COCHEMS RANCH, PORTAL RIDGE.				
Detailed Location:	TEHACHAPI RENEWABLE TRANSMISSION PROJECT SITESEGMENT 1, SECTION 3. MAPPED TO COORDINATES PROVIDED.				
Ecological:					
General:	ONE INDIVIDUAL WAS OBSERVED BY THE SIDE OF THE ROAD NEAR THE AQUADUCT ON 4 SEP 2008.				
Owner/Manager:	UNKNOWN				
Occurrence No.	753	Map Index: 81401	EO Index: 82376	Element Last Seen:	2009-04-17
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-04-17
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-01-20
Quad Summary:	Green Valley (3411854)				
County Summary:	Los Angeles				
Lat/Long:	34.57359 / -118.41510		Accuracy:	80 meters	
UTM:	Zone-11 N3826667 E370198		Elevation (ft):	3140	
PLSS:	T06N, R15W, Sec. 25 (S)		Acres:	0.0	
Location:	1.2 MI NNW OF CHAPARRAL CAMPGROUND AND 1.7 MI W OF BOUQUET CANYON DAM, NORTH END OF DEL SUR RIDGE.				
Detailed Location:	TEHACHAPI RENEWABLE TRANSMISSION PROJECT SITE SEGMENT 1, SECTION 2. MAPPED TO PROVIDED COORDINATES.				
Ecological:					
General:	TWO JUVENILES WERE OBSERVED ON 17 APR 2009.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	754	Map Index: 81408	EO Index: 82386	Element Last Seen:	2007-05-22
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2007-05-22
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-01-20
Quad Summary:	Del Sur (3411863)				
County Summary:	Los Angeles				
Lat/Long:	34.63482 / -118.25932		Accuracy:	80 meters	
UTM:	Zone-11 N3833269 E384573		Elevation (ft):	2870	
PLSS:	T06N, R13W, Sec. 04 (S)		Acres:	0.0	
Location:	ALONG TRANSMISSION LINE JUST N OF MOUTH OF RAILROAD CYN, 0.3 MI SW OF VALLEY VIEW RANCH, 2 MI NE OF LEONA VALLEY (TOWN).				
Detailed Location:	TEHACHAPI RENEWABLE TRANSMISSION PROJECT SITE SEGMENT 2. MAPPED TO PROVIDED COORDINATES.				
Ecological:					
General:	ONE INDIVIDUAL WAS OBSERVED ON 22 MAY 2007.				
Owner/Manager:	UNKNOWN				



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Occurrence No.	755	Map Index: 81409	EO Index: 82388	Element Last Seen:	2008-05-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-05-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-01-20
Quad Summary:	Ritter Ridge (3411852)				
County Summary:	Los Angeles				
Lat/Long:	34.59769 / -118.22612		Accuracy:	80 meters	
UTM:	Zone-11 N3829113 E387566		Elevation (ft):	2960	
PLSS:	T06N, R13W, Sec. 23 (S)		Acres:	0.0	
Location:	0.2 MI NE OF ELIZABETH LAKE RD AT CHERRY TREE LN, 1.3 MI SE OF GODDE PASS, SOUTH END OF LEONA VALLEY.				
Detailed Location:	TEHACHAPI RENEWABLE TRANSMISSION PROJECT SITE SEGMENT 2. MAPPED TO PROVIDED COORDINATES.				
Ecological:					
General:	ONE INDIVIDUAL WAS OBSERVED ON 1 MAY 2008.				
Owner/Manager:	UNKNOWN				
Occurrence No.	756	Map Index: 81410	EO Index: 82389	Element Last Seen:	2008-04-09
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-04-09
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-01-20
Quad Summary:	Ritter Ridge (3411852)				
County Summary:	Los Angeles				
Lat/Long:	34.59106 / -118.22506		Accuracy:	80 meters	
UTM:	Zone-11 N3828377 E387654		Elevation (ft):	3200	
PLSS:	T06N, R13W, Sec. 23 (S)		Acres:	0.0	
Location:	0.3 MILE SOUTHWEST JCT OF TRANSMISSION LINE AND ELIZABETH LAKE ROAD, 0.9 MI E OF MESSER RANCH, LEONA VALLEY.				
Detailed Location:	TEHACHAPI RENEWABLE TRANSMISSION PROJECT SITE SEGMENT 2. MAPPED TO PROVIDED COORDINATES.				
Ecological:					
General:	ONE INDIVIDUAL WAS OBSERVED ON 9 APR 2008.				
Owner/Manager:	UNKNOWN				
Occurrence No.	760	Map Index: 81903	EO Index: 82876	Element Last Seen:	2008-09-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-09-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-04-07
Quad Summary:	Ritter Ridge (3411852)				
County Summary:	Los Angeles				
Lat/Long:	34.57593 / -118.24958		Accuracy:	80 meters	
UTM:	Zone-11 N3826726 E385384		Elevation (ft):	4475	
PLSS:	T06N, R13W, Sec. 27 (S)		Acres:	0.0	
Location:	TRANSMISSION LINE AT JEEP TRAIL ON WEST SIDE OF RITTER CANYON, 1.25 MI SSW OF MESSER RANCH, 1.5 MI ENE OF MOUNT MCDILL.				
Detailed Location:	TEHACHAPI RENEWABLE TRANSMISSION PROJECT SITE SEGMENT 2. MAPPED TO PROVIDED COORDINATES.				
Ecological:					
General:	ONE INDIVIDUAL WAS OBSERVED ON 1 SEP 2008.				
Owner/Manager:	UNKNOWN				



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Occurrence No.	761	Map Index: 81904	EO Index: 82877	Element Last Seen:	2007-06-04
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2007-06-04
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-03-01

Quad Summary: Ritter Ridge (3411852)

County Summary: Los Angeles

Lat/Long:	34.55941 / -118.22403	Accuracy:	80 meters
UTM:	Zone-11 N3824865 E387706	Elevation (ft):	3800
PLSS:	T06N, R13W, Sec. 35 (S)	Acres:	0.0

Location: JUST N OF TRANSMISSION LINE AND S OF ANAVERDE CREEK, 0.9 MI NNW OF HAUSER MICROWAVE STATION, 2.6 MI SW OF CITY RANCH.

Detailed Location: TEHACHAPI RENEWABLE TRANSMISSION PROJECT SITE SEGMENT 2. MAPPED TO PROVIDED COORDINATES.

Ecological:

General: ONE INDIVIDUAL WAS OBSERVED ON 4 JUN 2007.

Owner/Manager: UNKNOWN

Occurrence No.	765	Map Index: 81932	EO Index: 82905	Element Last Seen:	1949-06-07
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1949-06-07
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-03-03

Quad Summary: Valyermo (3411747), Juniper Hills (3411748)

County Summary: Los Angeles

Lat/Long:	34.45462 / -117.86528	Accuracy:	3/5 mile
UTM:	Zone-11 N3812905 E420520	Elevation (ft):	3780
PLSS:	T04N, R09W, Sec. 07 (S)	Acres:	0.0

Location: 1 MILE NORTHWEST OF VALYERMO.

Detailed Location: MAPPED TO THE LOCALITY STATEMENT OF SDNHM #40004 "VALYERMO; 1MI NW OF."

Ecological:

General: SDNHM SPECIMEN #40004, COLLECTED BY CHARLES E. SHAW ON 7 JUN 1949.

Owner/Manager: UNKNOWN



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Charina trivirgata		Element Code: ARADA01020	
rosy boa			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G4G5
	State: None		State: S3S4
	Other: IUCN_LC-Least Concern, USFS_S-Sensitive		
Habitat:	General: DESERT & CHAPARRAL FROM THE COAST TO THE MOJAVE & COLORADO DESERTS. PREFERS MODERATE TO DENSE VEGETATION & ROCKY COVER.		
	Micro: HABITATS WITH A MIX OF BRUSHY COVER & ROCKY SOIL SUCH AS COASTAL CANYONS & HILLSIDES, DESERT CANYONS, WASHES & MOUNTAINS		

Occurrence No.	38	Map Index: 78582	EO Index: 79515	Element Last Seen:	2009-06-23
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2009-06-23
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-04-14
Quad Summary:	Pacífico Mountain (3411841)				
County Summary:	Los Angeles				
Lat/Long:	34.48891 / -118.11823		Accuracy:	80 meters	
UTM:	Zone-11 N3816935 E397326		Elevation (ft):	3209	
PLSS:	T05N, R12W, Sec. 27 (S)		Acres:	0.0	
Location:	JUST N OF VINCENT SUBSTATION HELIPORT, 1.25 MI E OF ANTELOPE FWY AT EXIT 27, 0.8 MI SSW FROM TOWN OF VINCENT, PALMDALE.				
Detailed Location:	ALONG ROCKYFORD ROAD JUST WEST OF ANGELES FOREST HWY. MAPPED ACCORDING TO UTM COORDINATES PROVIDED.				
Ecological:	SURROUNDING LAND USE: SCE TRANSMISSION LINE.				
General:	ONE ADULT FOUND IN CONSTRUCTION SITE AND MOVED TO SAFE AREA ON 23 JUNE 2009.				
Owner/Manager:	UNKNOWN				

Occurrence No.	39	Map Index: 78585	EO Index: 79518	Element Last Seen:	2009-06-02
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2009-06-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-04-14
Quad Summary:	Green Valley (3411854)				
County Summary:	Los Angeles				
Lat/Long:	34.58116 / -118.45795		Accuracy:	80 meters	
UTM:	Zone-11 N3827563 E366279		Elevation (ft):	2019	
PLSS:	T06N, R15W, Sec. 27 (S)		Acres:	0.0	
Location:	SAN FRANCISQUITO CANYON, ABOUT 1 MILE NORTH OF BEE CANYON, ABOUT 4.2 MILES WEST OF BOUQUET CANYON DAM, ANGELES NF.				
Detailed Location:	ALONG PELTON STREET JUST NORTH OF JUNCTION WITH SAN FRANCISQUITO CANYON ROAD. MAPPED ACCORDING TO MAP AND LOCALITY PROVIDED.				
Ecological:	UPSLOPE OF SAN FRANCISQUITO CREEK. AREA COMPOSED OF NON-NATIVE ANNUALS, COASTAL SAGE SCRUB, AND CHAPARRAL SPECIES. SITE LOCATED ON PAVED ROAD USED FOR ACCESS TO LADWP POWER PLANT, EMPLOYEE RESIDENCES, AND FACILITIES.				
General:	ONE JUVENILE OBSERVED CROSSING ROAD ON 2 JUNE 2009.				
Owner/Manager:	LADWP				

Thamnophis hammondi		Element Code: ARADB36160	
two-striped garter snake			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G4
	State: None		State: S3S4
	Other: BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive		



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Habitat:	General:	COASTAL CALIFORNIA FROM VICINITY OF SALINAS TO NORTHWEST BAJA CALIFORNIA. FROM SEA TO ABOUT 7,000 FT ELEVATION.		
	Micro:	HIGHLY AQUATIC, FOUND IN OR NEAR PERMANENT FRESH WATER. OFTEN ALONG STREAMS WITH ROCKY BEDS AND RIPARIAN GROWTH.		

Occurrence No.	42	Map Index:	33384	EO Index:	29231	Element Last Seen:	1997-07-01
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:	1997-07-01	Record Last Updated:	2005-06-28
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Juniper Hills (3411748), Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.44630 / -118.01208	Accuracy:	nonspecific area
UTM:	Zone-11 N3812107 E407026	Elevation (ft):	3300
PLSS:	T04N, R11W, Sec. 10 (S)	Acres:	163.7

Location: LITTLE ROCK CREEK, BETWEEN BASIN CAMPGROUND AND THE BARE MOUNTAIN CANYON CONFLUENCE, ANGELES NATIONAL FOREST
Detailed Location:
Ecological: HABITAT CONSISTS OF RIPARIAN AREA ALONG LITTLE ROCK CREEK, DOMINATED BY SALIX EXIGUA, POPULUS SP, BACCHARIS SALICIFOLIA, & PLATANUS.
General: 1 ADULT (3' LONG) OBSERVED ON 30 APR 1991. 2 ADULTS/2 JUVENILES OBSERVED FORAGING IN CREEKBED IN 1995; 1 ADULT HAD APPARENTLY JUST EATEN A 3-5 INCH FISH (SMALL TROUT). 5 SUB-ADULTS OBSERVED HUNTING IN JUN & JUL 1997.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	44	Map Index:	33420	EO Index:	14530	Element Last Seen:	1996-06-03
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:	1996-06-03	Record Last Updated:	1996-06-17
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.44575 / -118.04995	Accuracy:	specific area
UTM:	Zone-11 N3812081 E403546	Elevation (ft):	3800
PLSS:	T04N, R11W, Sec. 08 (S)	Acres:	29.7

Location: SANTIAGO CANYON, 0.25-0.50 MILE DOWNSTREAM FROM WHERE ROAD 4N20 CROSSES SANTIAGO CREEK, 2 MI SW OF LITTLE ROCK RESERVOIR
Detailed Location:
Ecological: HABITAT CONSISTS OF SOUTHERN SYCAMORE ALDER RIPARIAN WOODLAND. COAST HORNED LIZARDS ALSO OBSERVED IN VICINITY.
General: WILDFIRE IN 1994 IMPACTED THE DOWNSTREAM HABITAT AT THIS SITE. 1 ADULT OBSERVED ON 3 JUNE 1996.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	45	Map Index: 33483	EO Index: 19316	Element Last Seen:	1995-06-XX
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	1995-06-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1996-09-09
Quad Summary:	Ritter Ridge (3411852)				
County Summary:	Los Angeles				
Lat/Long:	34.59663 / -118.23072		Accuracy:	80 meters	
UTM:	Zone-11 N3829000 E387143		Elevation (ft):	2020	
PLSS:	T06N, R13W, Sec. 23 (M)		Acres:	0.0	
Location:	AMARGOSA CREEK, SOUTH OF RITTER RIDGE, WEST OF PALMDALE.				
Detailed Location:					
Ecological:	HABITAT CONSISTS OF AN INTERMITTENT CREEK WITH AREAS OF DENSE RIPARIAN, PRIMARILY WILLOW AND COTTONWOOD. WESTERN POND TURTLE ALSO FOUND AT THIS SITE.				
General:	1 ADULT OBSERVED FORAGING IN JUNE 1995.				
Owner/Manager:	PVT				
Occurrence No.	54	Map Index: 17287	EO Index: 42186	Element Last Seen:	1999-09-15
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	1999-09-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2000-01-18
Quad Summary:	Ritter Ridge (3411852), Sleepy Valley (3411853)				
County Summary:	Los Angeles				
Lat/Long:	34.60232 / -118.24479		Accuracy:	nonspecific area	
UTM:	Zone-11 N3829647 E385860		Elevation (ft):	3000	
PLSS:	T06N, R13W, Sec. 15 (S)		Acres:	81.2	
Location:	AMARGOSA CREEK, ALONG THE NORTH SIDE OF ELIZABETH LAKE PINE CANYON ROAD, APPROXIMATELY 7 MILES WNW OF PALMDALE.				
Detailed Location:					
Ecological:	HABITAT CONSISTS OF RIPARIAN; CREEK CONTAINS SMALL PONDED AREAS OF WATER. THE MAIN POOL IS LOCATED NEXT TO THE ROADWAY WHERE IT CROSSES BENEATH THE ROAD. THIS AREA CONTAINS SMALL REEDS BUT NO TREES.				
General:	1 VERY LARGE ADULT FEMALE AND 1 JUVENILE OBSERVED ON 6 MAY 1997. 1 ADULT MALE (MARKED) OBSERVED ON 5 JUN 1997. 1 JUVENILE OBSERVED CRAWLING ACROSS THE DRIED CREEK BOTTOM ON 15 SEP 1999.				
Owner/Manager:	UNKNOWN				



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Occurrence No.	125	Map Index:	78431	EO Index:	79351	Element Last Seen:	2008-05-28
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2008-05-28	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-03-24	
Quad Summary:	Green Valley (3411854)						
County Summary:	Los Angeles						
Lat/Long:	34.56530 / -118.42761	Accuracy:	80 meters				
UTM:	Zone-11 N3825764 E369038	Elevation (ft):	3286				
PLSS:	T06N, R15W, Sec. 36 (S)	Acres:	0.0				
Location:	DEL SUR RIDGE, JUNCTION OF DEL SUR RIDGE ROAD AND FOREST QUARRY ROAD, 2.5 MILES WSW OF BOUQUET CANYON DAM, ANGELES NF.						
Detailed Location:	1.3 MILES WNW OF CHAPARRAL CAMPGROUND. MAPPED ACCORDING TO COORDINATES PROVIDED.						
Ecological:	SURROUNDING VEGETATION WAS BURNED CHAPARRAL SNAGS. LIMITED WATER IN DRAINAGE AT THIS POINT IN TIME. GREEN VEGETATION AND POOLED WATER MORE PROMINENT DOWNSTREAM IN THE DRAINAGE. SOIL: ROCKY AND COARSE.						
General:	ONE ADULT LOCATED IN BED OF UNNAMED DRAINAGE ON 28 MAY 2008.						
Owner/Manager:	USFS-ANGELES NF						
Occurrence No.	138	Map Index:	80362	EO Index:	81349	Element Last Seen:	2001-08-22
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2001-08-22	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-10-12	
Quad Summary:	Crystal Lake (3411737), Valyermo (3411747)						
County Summary:	Los Angeles						
Lat/Long:	34.38098 / -117.83103	Accuracy:	nonspecific area				
UTM:	Zone-11 N3804713 E423598	Elevation (ft):	5020				
PLSS:	T03N, R09W, Sec. 04 (S)	Acres:	209.0				
Location:	SOUTH FORK BIG ROCK CREEK, JUST S OF SOUTH FORK CAMPGROUND ABOUT 1.5 MI W OF MT LEWIS, 3.5 MI NE OF CEDAR SPRING (TOWN).						
Detailed Location:	MAPPED TO SURVEY REACH LOCATION MAP #9, ATTACHED TO REPORT BAC02R0002.						
Ecological:	USGS MONITORING SITE.						
General:	UNKNOWN NUMBER OF INDIVIDUALS OBSERVED DURING USGS FIELD SURVEY FOR RANA MUSCOSA ON 22 AUG 2001.						
Owner/Manager:	USFS-ANGELES NF						



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Southern California Threespine Stickleback Stream		Element Code: CARE2320CA	
Southern California Threespine Stickleback Stream			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: GNR
	State: None		State: SNR
	Other:		
Habitat:	General: <input type="checkbox"/>		
	Micro: <input type="checkbox"/>		

Occurrence No.	3	Map Index:	01308	EO Index:	25078	Element Last Seen:	1990-05-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1990-05-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1994-06-09	
Quad Summary:	Green Valley (3411854), Warm Springs Mountain (3411855)						
County Summary:	Los Angeles						
Lat/Long:	34.54669 / -118.51284		Accuracy:	nonspecific area			
UTM:	Zone-11 N3823814 E361188		Elevation (ft):	1760			
PLSS:	T05N, R16W, Sec. 01 (S)		Acres:	608.8			
Location:	UPPER SAN FRANCISQUITO CREEK, TRIBUTARY TO SANTA CLARA RIVER, LOS ANGELES COUNTY.						
Detailed Location:	FROM THE ANGELES NATIONAL FOREST BOUNDARY UPSTREAM ABOUT 14 KM TO NEAR CLEARWATER CANYON JUNCTION AT POWERHOUSE NO. 1.						
Ecological:	CONTAINS PURE POPULATION OF UNARMORED THREESPIKE STICKLEBACK. LOW GRADIENT FLOODPLAIN STREAM THAT IS AT TIMES MAINTAINED BY RESERVOIR.						
General:							
Owner/Manager:	USFS-ANGELES NF						

Occurrence No.	5	Map Index:	02048	EO Index:	5408	Element Last Seen:	1993-08-04
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		1993-08-04	
Occ. Type:	Natural/Native occurrence	Trend:	Fluctuating	Record Last Updated:		2010-05-26	
Quad Summary:	Acton (3411842), Agua Dulce (3411843)						
County Summary:	Los Angeles						
Lat/Long:	34.43992 / -118.28597		Accuracy:	nonspecific area			
UTM:	Zone-11 N3811685 E381854		Elevation (ft):	2440			
PLSS:	T04N, R13W, Sec. 07 (S)		Acres:	774.0			
Location:	SANTA CLARA RIVER, SOLEDAD CANYON, LOS ANGELES COUNTY.						
Detailed Location:	FROM 1.25 MILES EAST OF THE TOWN OF LANG UPSTREAM TO 1 MILE UP THE CREEK IN ARRASTRE CANYON.						
Ecological:	CONTAINS PURE POPULATION OF UNARMORED THREESPIKE STICKLEBACK. INTRODUCED SANTA ANA SUCKER AND ARROYO CHUB ARE ALSO FOUND HERE. WILLOW-BACCHARIS RIPARIAN WITH COTTONWOOD & LIVE OAK OVERSTORY.						
General:	STICKLEBACK POPULATION STUDIES DONE DURING 1981-85 & 1989-1993. PEAK FLOOD YEARS SIGNIFICANTLY REDUCE STICKLEBACK POPULATION.						
Owner/Manager:	PVT, USFS-ANGELES NF						

Valley Needlegrass Grassland		Element Code: CTT42110CA	
Valley Needlegrass Grassland			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G3
	State: None		State: S3.1
	Other:		
Habitat:	General: <input type="checkbox"/>		



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Micro:

Occurrence No.	5	Map Index: 01705	EO Index: 13582	Element Last Seen:	1980-04-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1980-04-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-15

Quad Summary: Del Sur (3411863), Lake Hughes (3411864), Little Buttes (3411873), Fairmont Butte (3411874)
County Summary: Los Angeles

Lat/Long:	34.74248 / -118.38175	Accuracy:	1 mile
UTM:	Zone-11 N3845355 E373514	Elevation (ft):	2880
PLSS:	T08N, R14W, Sec. 32 (S)	Acres:	0.0

Location: ANTELOPE VALLEY CA POPPY RESERVE. 2 MILES EAST OF FAIRMONT ON LANCASTER AVE; ANTELOPE BUTTES.
Detailed Location: TOP & SIDES OF BUTTES. MAPPED AS GENERAL DUE TO SIZE.
Ecological: NASSELLA COVERS (5-30%). SLOPE 5-80%. SANDY-GRAVELLY SOIL.
General: FAIRLY UNDISTURBED. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: DPR-ANTELOPE VALLEY CA POP RES

Occurrence No.	6	Map Index: 01713	EO Index: 25050	Element Last Seen:	1980-04-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1980-04-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-15

Quad Summary: Lake Hughes (3411864)
County Summary: Los Angeles

Lat/Long:	34.69887 / -118.38036	Accuracy:	1/5 mile
UTM:	Zone-11 N3840517 E373575	Elevation (ft):	2800
PLSS:	T07N, R14W, Sec. 17 (S)	Acres:	0.0

Location: 2 MILES DUE NORTH OF ELIZABETH LAKE ON NORTH SIDE OF MUNZ RANCH ROAD.
Detailed Location:
Ecological: DOMINANTS: NASSELLA CERNUA, POA SECUNDA, SITANION, HAPLOPAPPUS. SANDY-GRAVELLY SOIL. SLOPE 0 TO 60%.
General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: UNKNOWN



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Occurrence No.	22	Map Index:	01627	EO Index:	19752	Element Last Seen:	1980-04-25
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1980-04-25	Record Last Updated:	1998-07-15
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				

Quad Summary:	Lake Hughes (3411864)
County Summary:	Los Angeles

Lat/Long:	34.71942 / -118.40731	Accuracy:	1/5 mile
UTM:	Zone-11 N3842830 E371139	Elevation (ft):	2900
PLSS:	T07N, R14W, Sec. 06 (S)	Acres:	0.0

Location:	SE OF FAIRMONT. EAST OF ROAD 160 ON STEEP SLOPES. SOUTH OF ANTELOPE VALLEY POPPY RESERVE.
Detailed Location:	SOUTH & EAST ASPECT.
Ecological:	NASSELLA CERNUA DOM. SOIL SANDY, GRAVELLY, SLOPE 60-80%. ASSOC. SPP: POA SECUNDA VAR. SECUNDA, SITANION, BROMUS TECTORUM & B. RUBENS. ESCHSCHOLZIA ON BLUFFS ABOVE RAVINES.
General:	SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager:	UNKNOWN



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Wildflower Field		Element Code: CTT42300CA	
Wildflower Field			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G2
	State: None		State: S2.2
	Other:		
Habitat:	General: <input type="checkbox"/>		
	Micro: <input type="checkbox"/>		

Occurrence No.	1	Map Index: 01580	EO Index: 13322	Element Last Seen:	1980-04-25
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1980-04-25
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-14
Quad Summary:	Lake Hughes (3411864)				
County Summary:	Los Angeles				
Lat/Long:	34.71331 / -118.41674		Accuracy:	1/5 mile	
UTM:	Zone-11 N3842164 E370266		Elevation (ft):	2950	
PLSS:	T07N, R15W, Sec. 12 (S)		Acres:	0.0	
Location:	SE OF FAIRMONT. SE OF JUNCTION OF CALIFORNIA AQUEDUCT AND AVENUE H.				
Detailed Location:					
Ecological:	ESCHSCHOLZIA CALIFORNICA IN DENSE STANDS ON LEVEL TERRAIN. SLOPE 0.10%, ASPECT VARIOUS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.				
General:	SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	UNKNOWN				

Occurrence No.	2	Map Index: 01705	EO Index: 7494	Element Last Seen:	1980-04-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1980-04-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-14
Quad Summary:	Del Sur (3411863), Lake Hughes (3411864), Little Buttes (3411873), Fairmont Butte (3411874)				
County Summary:	Los Angeles				
Lat/Long:	34.74248 / -118.38175		Accuracy:	1 mile	
UTM:	Zone-11 N3845355 E373514		Elevation (ft):	2880	
PLSS:	T08N, R14W, Sec. 32 (S)		Acres:	0.0	
Location:	ANTELOPE VALLEY CA POPPY RESERVE. 2 MILES EAST OF FAIRMONT ON LANCASTER AVE; ANTELOPE BUTTES.				
Detailed Location:	MAPPED AS GENERAL DUE TO SIZE.				
Ecological:	IN FLATS AT BASE OF BUTTES. SLOPE 0-5%. SANDY-GRAVELLY SOIL. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.				
General:	SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	DPR-ANTELOPE VALLEY CA POP RES				



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Southern Riparian Forest			Element Code: CTT61300CA		
Southern Riparian Forest					
Listing Status:	Federal: None		CNDDB Element Ranks:	Global: G4	
	State: None			State: S4	
	Other:				
Habitat:	General: <input type="checkbox"/>				
	Micro: <input type="checkbox"/>				

Occurrence No.	14	Map Index: 01080	EO Index: 16035	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-23
Quad Summary:	Burnt Peak (3411865)				
County Summary:	Los Angeles				
Lat/Long:	34.70338 / -118.54557		Accuracy:	specific area	
UTM:	Zone-11 N3841237 E358451		Elevation (ft):	4170	
PLSS:	T07N, R16W, Sec. 11 (S)		Acres:	61.4	
Location:	HIDEWAY CANYON, FOR ABOUT 0.9 MILE U/S (SOUTH) OF PINE CANYON ROAD.				
Detailed Location:	BOUNDARY REPRESENTS EXTENT AS INTERPRETED FROM 1978 AERIAL PHOTOS.				
Ecological:	DENSE COVER. VEGETATION COMPOSITION UNKNOWN. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.				
General:	NEEDS FIELD VISIT. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	USFS-ANGELES NF				

Occurrence No.	15	Map Index: 01150	EO Index: 16036	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1989-08-10
Quad Summary:	Burnt Peak (3411865)				
County Summary:	Los Angeles				
Lat/Long:	34.69571 / -118.52674		Accuracy:	specific area	
UTM:	Zone-11 N3840360 E360162		Elevation (ft):	4200	
PLSS:	T07N, R16W, Sec. 13 (S)		Acres:	37.7	
Location:	SHAKE CANYON, BETWEEN UPPER & LOWER SHAKE CAMPGROUNDS.				
Detailed Location:	INTERPRETED FROM 1978 AERIAL PHOTOS.				
Ecological:	VEGETATION COMPOSITION UNKNOWN. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.				
General:	NEEDS FIELD VISIT. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	USFS-ANGELES NF				

Southern Coast Live Oak Riparian Forest			Element Code: CTT61310CA		
Southern Coast Live Oak Riparian Forest					
Listing Status:	Federal: None		CNDDB Element Ranks:	Global: G4	
	State: None			State: S4	
	Other:				
Habitat:	General: <input type="checkbox"/>				
	Micro: <input type="checkbox"/>				



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Occurrence No.	85	Map Index: 00718	EO Index: 11832	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-08-28

Quad Summary: Whitaker Peak (3411856), Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.62069 / -118.69455	Accuracy:	specific area
UTM:	Zone-11 N3832285 E344651	Elevation (ft):	2800
PLSS:	T06N, R17W, Sec. 09 (S)	Acres:	43.9

Location: CREEK TO EAST OF OLD RIDGE ROUTE, NORTH OF WEST BRANCH OF CALIFORNIA AQUEDUCT.

Detailed Location: MAPPED PER INTERPRETATION OF AERIAL PHOTOS.

Ecological: QUERCUS AGRIFOLIA WOODLAND FORMING CLOSED CANOPY ACCORDING TO WIESLANDER SURVEY.

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.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	92	Map Index: 01345	EO Index: 11831	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-08-28

Quad Summary: Green Valley (3411854)

County Summary: Los Angeles

Lat/Long:	34.59896 / -118.47814	Accuracy:	specific area
UTM:	Zone-11 N3829563 E364456	Elevation (ft):	2800
PLSS:	T06N, R15W, Sec. 21 (S)	Acres:	142.9

Location: CLEARWATER CANYON & TRIBUTARY NORTH OF PLUM SPRING.

Detailed Location: MAPPED PER INTERPRETATION OF 1978 AERIAL PHOTOS.

Ecological: QUERCUS AGRIFOLIA WOODLAND FORMING CLOSED CANOPY ACCORDING TO WIESLANDER SURVEY.

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.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	112	Map Index: 01400	EO Index: 15940	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-08-28

Quad Summary: Green Valley (3411854)

County Summary: Los Angeles

Lat/Long: 34.59878 / -118.46593 **Accuracy:** specific area

UTM: Zone-11 N3829527 E365576 **Elevation (ft):** 2520

PLSS: T06N, R15W, Sec. 21 (S) **Acres:** 94.1

Location: TRIBUTARY TO CLEARWATER CANYON, 0.5 MILE WEST OF LOS ANGELES AQUEDUCT.

Detailed Location:

Ecological: TRIBUTARY TO INTERPRETATION OF 1978 AERIAL PHOTOS, APPEARS TO BE QUERCUS AGRIFOLIA.

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.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	113	Map Index: 01254	EO Index: 15938	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-08-28

Quad Summary: Green Valley (3411854), Warm Springs Mountain (3411855)

County Summary: Los Angeles

Lat/Long: 34.56596 / -118.49936 **Accuracy:** specific area

UTM: Zone-11 N3825932 E362456 **Elevation (ft):** 2000

PLSS: T06N, R15W, Sec. 31 (S) **Acres:** 39.7

Location: UNNAMED TRIBUTARY TO SAN FRANCISQUITO CANYON FROM NORTH. NORTH OF DRINKWATER FLAT.

Detailed Location:

Ecological: MAPPED FROM INTERPRETATION OF AERIAL PHOTOS APPEARS TO BE QUERCUS AGRIFOLIA.

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.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	114	Map Index:	01300	EO Index:	15936	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1978-09-19	Record Last Updated:	1998-08-31
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Green Valley (3411854)						
County Summary:	Los Angeles						
Lat/Long:	34.51700 / -118.49060			Accuracy:	specific area		
UTM:	Zone-11 N3820490 E363180			Elevation (ft):	2320		
PLSS:	T05N, R15W, Sec. 18 (S)			Acres:	68.6		
Location:	UNNAMED INTERMITTENT STREAM NORTH OF HASKELL CANYON, ABOUT 2 MILES SOUTH OF DRINKWATER FLAT.						
Detailed Location:	EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS.						
Ecological:	UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.						
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.						
Owner/Manager:	USFS-ANGELES NF						
Occurrence No.	115	Map Index:	01458	EO Index:	15937	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1978-09-19	Record Last Updated:	1998-08-31
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Green Valley (3411854)						
County Summary:	Los Angeles						
Lat/Long:	34.52421 / -118.45229			Accuracy:	specific area		
UTM:	Zone-11 N3821239 E366708			Elevation (ft):	2360		
PLSS:	T05N, R15W, Sec. 16 (S)			Acres:	32.9		
Location:	UNNAMED INTERMITTENT STREAM TRIBUTARY TO BOUQUET CANYON, ABOUT 1 MILE NORTH OF TEXAS CANYON FIRE CONTROL STATION.						
Detailed Location:	EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS.						
Ecological:	UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.						
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.						
Owner/Manager:	USFS-ANGELES NF						



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Occurrence No.	116	Map Index:	01695	EO Index:	15935	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-08-31	

Quad Summary: Green Valley (3411854)

County Summary: Los Angeles

Lat/Long:	34.62028 / -118.38747	Accuracy:	specific area
UTM:	Zone-11 N3831810 E372804	Elevation (ft):	3160
PLSS:	T06N, R14W, Sec. 08 (S)	Acres:	54.5

Location: DOWD CANYON, EAST OF GREEN VALLEY.

Detailed Location: EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS.

Ecological: UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

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.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	117	Map Index:	01654	EO Index:	15933	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-08-31	

Quad Summary: Green Valley (3411854)

County Summary: Los Angeles

Lat/Long:	34.53850 / -118.39974	Accuracy:	specific area
UTM:	Zone-11 N3822756 E371553	Elevation (ft):	2720
PLSS:	T05N, R15W, Sec. 12 (S)	Acres:	85.2

Location: FALL CANYON, FROM ABOUT 1 MILE TO 2 MILES U/S FROM TEXAS CANYON.

Detailed Location: EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS.

Ecological:

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.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	118	Map Index:	01577	EO Index:	15934	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-08-31	

Quad Summary: Green Valley (3411854)

County Summary: Los Angeles

Lat/Long:	34.52416 / -118.41845	Accuracy:	specific area
UTM:	Zone-11 N3821189 E369814	Elevation (ft):	2360
PLSS:	T05N, R15W, Sec. 14 (S)	Acres:	120.0

Location: MYSTIC CANYON, NORTH OF TEXAS CANYON.
Detailed Location: EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS.

Ecological:

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.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	119	Map Index:	01726	EO Index:	15932	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-08-31	

Quad Summary: Sleepy Valley (3411853), Green Valley (3411854)

County Summary: Los Angeles

Lat/Long:	34.51366 / -118.37666	Accuracy:	specific area
UTM:	Zone-11 N3819972 E373634	Elevation (ft):	2200
PLSS:	T05N, R14W, Sec. 17 (S)	Acres:	47.5

Location: ROWHER CANYON, ABOUT 0.6 MILE NORTH OF MINT CANYON, ABOUT 0.25 MILE DOWNSTREAM OF WHISKEY SPRING
Detailed Location: EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS.

Ecological: UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

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.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	120	Map Index: 01715	EO Index: 15930	Element Last Seen: 1988-04-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1988-04-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-08-31
Quad Summary:	Sleepy Valley (3411853), Green Valley (3411854)			
County Summary:	Los Angeles			
Lat/Long:	34.59896 / -118.38383		Accuracy: specific area	
UTM:	Zone-11 N3829441 E373106		Elevation (ft): 3400	
PLSS:	T06N, R14W, Sec. 20 (S)		Acres: 74.4	
Location:	SPUNKY CANYON, U/S OF BOUQUET RESERVOIR.			
Detailed Location:	EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS.			
Ecological:	UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.			
General:	NEEDS FIELD 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.			
Owner/Manager:	USFS-ANGELES NF			
Occurrence No.	121	Map Index: 01621	EO Index: 15931	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-08-28
Quad Summary:	Green Valley (3411854)			
County Summary:	Los Angeles			
Lat/Long:	34.61199 / -118.40990		Accuracy: specific area	
UTM:	Zone-11 N3830919 E370735		Elevation (ft): 3400	
PLSS:	T06N, R14W, Sec. 18 (S)		Acres: 35.6	
Location:	UNNAMED INTERMITTENT CREEK TRIBUTARY TO FOWD CANYON SW OF GREEN VALLEY.			
Detailed Location:	EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS.			
Ecological:	QUERCUS AGRIFOLIA WOODLAND FORMING CLOSED CANOPY ACCORDING TO WIESLANDER SURVEY.			
General:	NEEDS FIELD 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.			
Owner/Manager:	UNKNOWN IN USFS-ANGELES NF			



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Occurrence No.	122	Map Index:	01767	EO Index:	15929	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-08-31	

Quad Summary: Sleepy Valley (3411853)

County Summary: Los Angeles

Lat/Long:	34.53775 / -118.36174	Accuracy:	specific area
UTM:	Zone-11 N3822625 E375039	Elevation (ft):	2800
PLSS:	T05N, R14W, Sec. 08 (S)	Acres:	97.7

Location: ROWHER CANYON, U/S OF CONFLUENCE OF SPADE CANYON FROM ABOUT 0.8 TO 2.2 MILES.

Detailed Location: EXTANT PER INTERPRETATION OF AERIAL PHOTOS.

Ecological: UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

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.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	123	Map Index:	01857	EO Index:	15927	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-08-31	

Quad Summary: Sleepy Valley (3411853)

County Summary: Los Angeles

Lat/Long:	34.55426 / -118.32878	Accuracy:	specific area
UTM:	Zone-11 N3824416 E378088	Elevation (ft):	3200
PLSS:	T05N, R14W, Sec. 03 (S)	Acres:	40.0

Location: UPPER PORTION SPADE CANYON, SOUTH-FACING SLOPE OF SIERRA PELONA.

Detailed Location: EXTANT PER INTERPRETATION OF AERIAL PHOTOS.

Ecological: UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

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.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	124	Map Index:	01853	EO Index:	15928	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-08-31	

Quad Summary: Sleepy Valley (3411853)

County Summary: Los Angeles

Lat/Long:	34.57447 / -118.32971	Accuracy:	specific area
UTM:	Zone-11 N3826658 E378032	Elevation (ft):	3680
PLSS:	T06N, R14W, Sec. 26 (S)	Acres:	37.9

Location: MARTINDALE CANYON, EAST OF BIG OAK SPRING.

Detailed Location: MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.

Ecological: UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

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.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	125	Map Index:	01889	EO Index:	15926	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-08-31	

Quad Summary: Sleepy Valley (3411853)

County Summary: Los Angeles

Lat/Long:	34.57667 / -118.30953	Accuracy:	specific area
UTM:	Zone-11 N3826878 E379887	Elevation (ft):	4000
PLSS:	T06N, R14W, Sec. 25 (S)	Acres:	33.6

Location: UNNAMED INTERMITTENT STREAM TRIBUTARY TO BOUQUET CANYON NE.

Detailed Location: MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.

Ecological: UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

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.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	126	Map Index: 01785	EO Index: 15925	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-08-28

Quad Summary: Sleepy Valley (3411853)
County Summary: Los Angeles

Lat/Long:	34.52820 / -118.35482	Accuracy:	specific area
UTM:	Zone-11 N3821557 E375660	Elevation (ft):	2520
PLSS:	T05N, R14W, Sec. 09 (S)	Acres:	252.9

Location: SPADE CANYON & ROHWER CANYON D/S OF THEIR CONFLUENCE.
Detailed Location: EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS.
Ecological: OPEN CANOPY OF QUERCUS AGRIFOLIA OVER LEPIDOSPARTUM SQUAMATUM & ERIOGONUM FASCICULATUM ACCORDING TO WIESLANDER SURVEY.
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.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	127	Map Index: 01768	EO Index: 12504	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Decreasing	Record Last Updated: 1998-08-31

Quad Summary: Sleepy Valley (3411853)
County Summary: Los Angeles

Lat/Long:	34.51046 / -118.35987	Accuracy:	specific area
UTM:	Zone-11 N3819596 E375170	Elevation (ft):	2320
PLSS:	T05N, R14W, Sec. 21 (S)	Acres:	129.8

Location: MINT CANYON & SPADE SPRING CANYON NEAR THEIR CONFLUENCE.
Detailed Location:
Ecological: OPEN QUERCUS AGRIFOLIA & SALIX SPP WOODLAND OVER GRASSES ACCORDING TO WIESLANDER SURVEY. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
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.
Owner/Manager: UNKNOWN



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Occurrence No.	128	Map Index: 01794	EO Index: 15924	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-08-28
Quad Summary:	Sleepy Valley (3411853)			
County Summary:	Los Angeles			
Lat/Long:	34.58403 / -118.35210		Accuracy: specific area	
UTM:	Zone-11 N3827745 E375993		Elevation (ft): 3040	
PLSS:	T06N, R14W, Sec. 27 (S)		Acres: 43.0	
Location:	BOUQUET CANYON, VICINITY OF TWO SHAY RANCH U/S OF BOUQUET RESERVOIR.			
Detailed Location:	EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS.			
Ecological:	QUERCUS AGRIFOLIA WOODLAND FORMING CLOSED CANOPY ACCORDING TO WIESLANDER SURVEY.			
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.			
Owner/Manager:	PVT IN USFS-ANGELES NF			
Occurrence No.	129	Map Index: 01366	EO Index: 15922	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-08-28
Quad Summary:	Mint Canyon (3411844), Green Valley (3411854)			
County Summary:	Los Angeles			
Lat/Long:	34.52069 / -118.47492		Accuracy: specific area	
UTM:	Zone-11 N3820879 E364625		Elevation (ft): 2400	
PLSS:	T05N, R15W, Sec. 17 (S)		Acres: 248.3	
Location:	HASKELL CANYON, ABOUT 0.5 MILE NW OF DEL SUR RIDGE U/S FOR SEVERAL MILES.			
Detailed Location:	EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS. EXTENDS FURTHER D/S THAN WIESLANDER SURVEY MAPPED.			
Ecological:	QUERCUS AGRIFOLIA & PLATANUS RACEMOSA FORMING CLOSED CANOPY ACCORDING TO WIESLANDER SURVEY TOWARD D/S OF PORTION SHOWN.			
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.			
Owner/Manager:	USFS-ANGELES NF			



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Occurrence No.	133	Map Index:	00247	EO Index:	15921	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1978-09-19	Record Last Updated:	1998-08-28
Occ. Type:	Natural/Native occurrence		Trend:	Unknown			
Quad Summary:	Black Mtn. (3411867), Alamo Mountain (3411868)						
County Summary:	Ventura						
Lat/Long:	34.70847 / -118.87951			Accuracy:	specific area		
UTM:	Zone-11 N3842322 E327874			Elevation (ft):	3400		
PLSS:	T07N, R19W, Sec. 10 (S)			Acres:	58.2		
Location:	BEAR GULCH, <1.5 MILE UPSTREAM FROM JUNCTION WITH PIRU CREEK.						
Detailed Location:	EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS.						
Ecological:	QUERCUS AGRIFOLIA AND POPULUS FREMONTII FORMING CLOSED CANOPY ACCORDING TO WIESLANDER SURVEY.						
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.						
Owner/Manager:	USFS-LOS PADRES NF						

Occurrence No.	135	Map Index:	01225	EO Index:	15918	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1978-09-19	Record Last Updated:	1998-08-28
Occ. Type:	Natural/Native occurrence		Trend:	Unknown			
Quad Summary:	Green Valley (3411854), Warm Springs Mountain (3411855)						
County Summary:	Los Angeles						
Lat/Long:	34.53412 / -118.50314			Accuracy:	specific area		
UTM:	Zone-11 N3822406 E362057			Elevation (ft):	2160		
PLSS:	T05N, R16W, Sec. 12 (S)			Acres:	123.4		
Location:	DRY CANYON, FROM DRINKWATER FLAT D/S ABOUT 1.5 MILES.						
Detailed Location:	EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS.						
Ecological:	QUERCUS AGRIFOLIA WOODLAND FORMING CLOSED CANOPY ACCORDING TO WIESLANDER SURVEY.						
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.						
Owner/Manager:	USFS-ANGELES NF						

Southern Cottonwood Willow Riparian Forest				Element Code: CTT61330CA			
Southern Cottonwood Willow Riparian Forest							
Listing Status:	Federal:	None	CNDDDB Element Ranks:	Global:	G3	State:	S3.2
	State:	None					
	Other:						
Habitat:	General:	<input type="checkbox"/>					
	Micro:	<input type="checkbox"/>					



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Occurrence No.	31	Map Index: 02251	EO Index: 15819	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-20
Quad Summary:	Pacifco Mountain (3411841)				
County Summary:	Los Angeles				
Lat/Long:	34.40872 / -118.08265		Accuracy:	specific area	
UTM:	Zone-11 N3808006 E400498		Elevation (ft):	3600	
PLSS:	T04N, R12W, Sec. 24 (S)		Acres:	280.7	
Location:	ALISO CANYON, FROM NEAR CONFLUENCE OF TIE CANYON D/S TO ABOUT 0.5 MILE NW OF WAGONWHEEL RANCH.				
Detailed Location:	INTERPRETED FROM 1978 AERIAL PHOTOGRAPHS.				
Ecological:					
General:	NEEDS FIELD CHECK. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	32	Map Index: 02181	EO Index: 15817	Element Last Seen:	1978-09-29
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-20
Quad Summary:	Pacifco Mountain (3411841), Acton (3411842)				
County Summary:	Los Angeles				
Lat/Long:	34.43226 / -118.12807		Accuracy:	specific area	
UTM:	Zone-11 N3810662 E396353		Elevation (ft):	3160	
PLSS:	T04N, R12W, Sec. 15 (S)		Acres:	378.1	
Location:	ALISO CANYON, FROM 1 MILE U/S OF BLUM RANCH BUILDING SOUTH U/S ABOUT 3 MILES.				
Detailed Location:	INTERPRETED FROM 1978 AERIAL PHOTOGRAPHS. FORMERLY EXTENDED FARTHER D/S.				
Ecological:	CLOSED CANOPY POPULUS FREMONTII ACCORDING TO WIESLANDER SURVEY.				
General:	SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	33	Map Index: 02095	EO Index: 15818	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-20
Quad Summary:	Acton (3411842)				
County Summary:	Los Angeles				
Lat/Long:	34.43155 / -118.19213		Accuracy:	specific area	
UTM:	Zone-11 N3810651 E390466		Elevation (ft):	2760	
PLSS:	T04N, R13W, Sec. 13 (S)		Acres:	139.4	
Location:	ARRASTRE CANYON FROM ABOUT 0.5 MILE U/S OF CONFLUENCE W/ SOLEDAD CANYON U/S FOR >1 MILE.				
Detailed Location:	INTERPRETED FROM 1978 AERIAL PHOTOGRAPHS.				
Ecological:	CLOSED CANOPY POPULUS FREMONTII ACCORDING TO WIESLANDER SURVEY.				
General:	SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	UNKNOWN				



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Occurrence No.	34	Map Index: 02007	EO Index: 15816	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-20

Quad Summary: Acton (3411842), Agua Dulce (3411843)

County Summary: Los Angeles

Lat/Long:	34.44253 / -118.21091	Accuracy:	specific area
UTM:	Zone-11 N3811889 E388755	Elevation (ft):	2320
PLSS:	T04N, R13W, Sec. 11 (S)	Acres:	192.1

Location: SOLEDAD CANYON, FROM ACTON CAMP D/S FOR OVER 3 MILES.

Detailed Location: INTERPRETED FROM 1978 AERIAL PHOTOGRAPHS.

Ecological: CLOSED CANOPY POPULUS FREMONTII, PLATANUS RACEMOSA & SALIX SPP ACCORDING TO WIESLANDER SURVEY.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: UNKNOWN

Occurrence No.	36	Map Index: 01077	EO Index: 15815	Element Last Seen: 1988-04-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1988-04-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-20

Quad Summary: Warm Springs Mountain (3411855), Lake Hughes (3411864), Burnt Peak (3411865)

County Summary: Los Angeles

Lat/Long:	34.63591 / -118.52912	Accuracy:	specific area
UTM:	Zone-11 N3833731 E359843	Elevation (ft):	2200
PLSS:	T06N, R16W, Sec. 01 (S)	Acres:	380.5

Location: ELIZABETH LAKE CANYON, FROM NEAR DEER CANYON D/S TO PROSPECT CREEK.

Detailed Location:

Ecological: ALNUS RHOMBIFOLIA ALONG FLOWING CREEK; SCATTERED POPULUS FREMONTII OVER BACCHARIS VIMINEA ON FLOODPLAIN. SYCAMORES AND ALDERS FOR SHORT WAY D/S OF FISH CANYON. QUERCUS AGRIFOLIA AT OUTER FLOODPLAIN EDGES BELOW RED FOX CANYON.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	37	Map Index: 01082	EO Index: 15813	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-20
Quad Summary:	Burnt Peak (3411865)				
County Summary:	Los Angeles				
Lat/Long:	34.72079 / -118.55064		Accuracy:	specific area	
UTM:	Zone-11 N3843175 E358016		Elevation (ft):	3760	
PLSS:	T07N, R16W, Sec. 02 (S)		Acres:	113.3	
Location:	KINGS CANYON, WEST OF KINGS CANYON RANCH FOR ABOUT 1.3 MILES.				
Detailed Location:	INTERPRETED FROM 1978 AERIAL PHOTOGRAPHS.				
Ecological:	UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.				
General:	FIELD VERIFICATION NEEDED. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	UNKNOWN				
Occurrence No.	38	Map Index: 01450	EO Index: 15811	Element Last Seen:	1988-04-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1988-04-02
Occ. Type:	Natural/Native occurrence		Trend: Decreasing	Record Last Updated:	1998-07-20
Quad Summary:	Lake Hughes (3411864)				
County Summary:	Los Angeles				
Lat/Long:	34.66348 / -118.45549		Accuracy:	specific area	
UTM:	Zone-11 N3836688 E366637		Elevation (ft):	3120	
PLSS:	T07N, R15W, Sec. 27 (S)		Acres:	200.9	
Location:	ELIZABETH LAKE CANYON, FROM HUGHES LAKE D/S FOR ABOUT 1.5 MILES, & TRIBUTARY.				
Detailed Location:					
Ecological:	COTTONWOODS OVER WILLOW SEEN 1988. NO WATER IN STREAM ON DAY OF APRIL VISIT. WIESLANDER MAPPED				
General:	SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	PVT IN USFS-ANGELES NF				
Occurrence No.	39	Map Index: 01447	EO Index: 15812	Element Last Seen:	1935-XX-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	1988-04-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-20
Quad Summary:	Lake Hughes (3411864)				
County Summary:	Los Angeles				
Lat/Long:	34.67398 / -118.45439		Accuracy:	specific area	
UTM:	Zone-11 N3837852 E366755		Elevation (ft):	3400	
PLSS:	T07N, R15W, Sec. 22 (S)		Acres:	63.1	
Location:	NORTH & WEST SHORE HUGHES LAKE & SURROUNDINGS.				
Detailed Location:	ONCE CONTINUOUS W/ OCC #038.				
Ecological:	WIESLANDER MAPPED AS CLOSED CANOPY WILLOWS. POPULUS FREMONTII PRESENT BUT UNDERSTORY DEVELOPED. EXTIRPATED AS A NATURAL COMMUNITY.				
General:	SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	PVT				



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Occurrence No.	40	Map Index: 00796	EO Index: 15810	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-20

Quad Summary: Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.67362 / -118.65325	Accuracy:	specific area
UTM:	Zone-11 N3838093 E348534	Elevation (ft):	2800
PLSS:	T07N, R17W, Sec. 26 (S)	Acres:	194.6

Location: BEAR CANYON, NORTH OF REDROCK MOUNTAIN.

Detailed Location: MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.

Ecological: <40% POPULUS FREMONTII W/ DENSE SHRUBS (WILLOWS?). UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

General: NEEDS FIELD 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.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	41	Map Index: 00791	EO Index: 15808	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-20

Quad Summary: Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.64389 / -118.65844	Accuracy:	specific area
UTM:	Zone-11 N3834803 E348004	Elevation (ft):	2360
PLSS:	T06N, R17W, Sec. 02 (S)	Acres:	131.7

Location: REDROCK CANYON, SOUTHWEST OF REDROCK MOUNTAIN.

Detailed Location: MAPPED FROM INTERPRETATION OF 1978 AERIAL PHOTOS.

Ecological: CLOSED CANOPY POPULUS FREMONTII ACCORDING TO WIESLANDER SURVEY. ABOUT 50% POPULUS FREMONTII OVER DENSE SHRUBS (SALIX?).

General: NEEDS FIELD 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.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	42	Map Index: 00770	EO Index: 15809	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-20

Quad Summary: Liebre Mtn. (3411866)
County Summary: Los Angeles

Lat/Long:	34.67713 / -118.66954	Accuracy:	specific area
UTM:	Zone-11 N3838507 E347047	Elevation (ft):	2920
PLSS:	T07N, R17W, Sec. 22 (S)	Acres:	44.8

Location: CIENAGA CANYON, DOWNSTREAM OF KELLY RANCH.
Detailed Location: EXTANT 1978 PER INTERPRETATION OF AERIAL PHOTOS.
Ecological: OPEN CANOPY OF POPULUS FREMONTII, PLATANUS RACEMOSA & SALIX SPP ACCORDING TO WIESLANDER SURVEY. < 30% P. FREMONTII, SHRUBS, MORE OPEN THAN OCC'S #040 & #041.
General: NEEDS FIELD 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.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	43	Map Index: 00829	EO Index: 12480	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-20

Quad Summary: Liebre Mtn. (3411866)
County Summary: Los Angeles

Lat/Long:	34.67050 / -118.64160	Accuracy:	specific area
UTM:	Zone-11 N3837729 E349595	Elevation (ft):	3200
PLSS:	T07N, R17W, Sec. 25 (S)	Acres:	66.9

Location: PINE CANYON, EAST OF BEAR CANYON.
Detailed Location: MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.
Ecological: <40% POPULUS FREMONTII.
General: NEEDS FIELD 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.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	49	Map Index: 01544	EO Index: 15804	Element Last Seen: 1988-04-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1988-04-02
Occ. Type:	Natural/Native occurrence		Trend: Decreasing	Record Last Updated: 1998-07-20

Quad Summary: Green Valley (3411854)

County Summary: Los Angeles

Lat/Long:	34.54055 / -118.43875	Accuracy:	specific area
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UTM:	Zone-11 N3823033 E367976	Elevation (ft):	2280
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PLSS:	T05N, R15W, Sec. 03 (S)	Acres:	549.4
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Location: BOUQUET CANYON, D/S FROM BOUQUET RESERVOIR FOR SEVERAL MILES.

Detailed Location:

Ecological: MAPPED BY WIESLANDER SURVEY (1935) AS CLOSED CANOPY STANDS OF VARIED COMPOSITION: INCLUDING QUERCUS AGRIFOLIA, SALIX, POPULUS FREMONTII, PLATANUS RACEMOSA.

General: FIELD CHECKED APRIL, 1988. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	50	Map Index: 01975	EO Index: 15803	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-20

Quad Summary: Sleepy Valley (3411853)

County Summary: Los Angeles

Lat/Long:	34.60821 / -118.26531	Accuracy:	specific area
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UTM:	Zone-11 N3830324 E383987	Elevation (ft):	
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PLSS:	T06N, R13W, Sec. 16 (S)	Acres:	48.2
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Location: AMARGOSA CREEK, U/S OF THE RITTER RANCH, EAST OF LEONA VALLEY.

Detailed Location: MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.

Ecological:

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.

Owner/Manager: UNKNOWN



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Occurrence No.	58	Map Index:	00510	EO Index:	15793	Element Last Seen:	1978-09-19
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-20	

Quad Summary: Black Mtn. (3411867)

County Summary: Los Angeles

Lat/Long:	34.65016 / -118.78698	Accuracy:	specific area
UTM:	Zone-11 N3835700 E336234	Elevation (ft):	2350
PLSS:	T07N, R18W, Sec. 34 (S)	Acres:	132.5

Location: BEARTRAP CANYON & PIRU GORGE, FROM JUNCTION W/ BEARTRAP CANYON & 1 MILE D/S. PYRAMID LAKE.

Detailed Location: EXTIRPATED BY INUNDATION BY RESERVOIR PER INTERPRETATION OF 1978 AERIAL PHOTOS.

Ecological: MAPPED BY WIESLANDER SURVEY (1935) AS CLOSED CANOPY OF POPULUS FREMONTII & SALIX SPP ALONG TRIBUTARY PORTION & ALONG GORGE OPEN CANOPY W/ ADDITIONAL SPP CHRYSOTHAMNUS NAUSEOSUS & BACCHARIS VIMINEA.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-LOS PADRES NF, ANGELES NF

Occurrence No.	59	Map Index:	00425	EO Index:	15792	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-20	

Quad Summary: Black Mtn. (3411867)

County Summary: Los Angeles

Lat/Long:	34.70340 / -118.80750	Accuracy:	specific area
UTM:	Zone-11 N3841639 E334459	Elevation (ft):	2800
PLSS:	T07N, R18W, Sec. 17 (S)	Acres:	175.7

Location: LOWER HUNGRY VALLEY AT TRIBUTARY TO GORMAN CREEK & 1 MILE PORTION OF GORMAN CREEK.

Detailed Location: EXTANT & INCREASED AREA PER INTERPRETATION OF 1978 AERIAL PHOTOS.

Ecological: MAPPED BY WIESLANDER SURVEY (1935) AS OPEN POPULUS FREMONTII & CHRYSOTHAMNUS NAUSEOSUS U/S; GRASSLAND D/S; & CLOSED CANOPY POPULUS FREMONTII & SALIX SPP ALONG GORMAN CREEK.

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.

Owner/Manager: UNKNOWN



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Occurrence No.	78	Map Index:	01221	EO Index:	15776	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-20	

Quad Summary: Green Valley (3411854), Warm Springs Mountain (3411855)

County Summary: Los Angeles

Lat/Long:	34.55141 / -118.50477	Accuracy:	specific area
UTM:	Zone-11 N3824326 E361936	Elevation (ft):	1720
PLSS:	T05N, R16W, Sec. 01 (S)	Acres:	163.7

Location: SAN FRANCISQUITO CANYON, FROM ABOUT 1.5 TO 2.5 MILES U/S OF SAN FRANCISQUITOS POWERHOUSE 2.

Detailed Location: MAPPED FROM INTERPRETATION OF 1978 AERIAL PHOTOS.

Ecological: MAPPED BY WIESLANDER SURVEY (1935) AS OPEN STAND OF SALIX SPP, POPULUS FREMONTII, BACCHARIS VIMINEA & GRASSES. D/S OF BOUNDARY SHOWN APPEARS TO BE MORE OPEN P. FREMONTII & B. VIMINEA.

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.

Owner/Manager: USFS-ANGELES NF

Southern Mixed Riparian Forest		Element Code: CTT61340CA
Southern Mixed Riparian Forest		
Listing Status:	Federal: None	CNDDDB Element Ranks:
	State: None	Global: G2
	Other:	State: S2.1
Habitat:	General: <input type="checkbox"/>	
	Micro: <input type="checkbox"/>	

Occurrence No.	9	Map Index:	00911	EO Index:	13502	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-22	

Quad Summary: Burnt Peak (3411865), Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.64307 / -118.62442	Accuracy:	specific area
UTM:	Zone-11 N3834662 E351121	Elevation (ft):	2760
PLSS:	T06N, R16W, Sec. 06 (S)	Acres:	44.8

Location: FISH CANYON, BURNT PEAK CANYON & TRIBUTARIES.

Detailed Location:

Ecological: DENSE CANOPY INCLUDES ALNUS RHOMBIFOLIA, PLATANUS RACEMOSA AND QUERCUS CHRYSOLEPIS PER HOLLAND. MAPPED BY WIESLANDER SURVEY (1935) AS QUERCUS AGRIFOLIA.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF



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Canyon Live Oak Ravine Forest		Element Code: CTT61350CA	
Canyon Live Oak Ravine Forest			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G3
	State: None		State: S3.3
	Other:		
Habitat:	General: <input type="checkbox"/>		
	Micro: <input type="checkbox"/>		

Occurrence No.	43	Map Index:	02605	EO Index:	15696	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-08-02	
Quad Summary:	Valyermo (3411747)						
County Summary:	Los Angeles						
Lat/Long:	34.39744 / -117.84237		Accuracy:	specific area			
UTM:	Zone-11 N3806546 E422572		Elevation (ft):	4720			
PLSS:	T04N, R09W, Sec. 29 (S)		Acres:	118.4			
Location:	HOLCOMB CANYON.						
Detailed Location:	EXTENT PER INTERPRETATION OF AERIAL PHOTOS.						
Ecological:	APPERS TO BE CLOSED CANOPY QUERCUS CHRYSOLEPIS AND ALNUS RHOMBIFOLIA.						
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.						
Owner/Manager:	USFS-ANGELES NF						

Occurrence No.	45	Map Index:	00455	EO Index:	12474	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-08-02	
Quad Summary:	Black Mtn. (3411867)						
County Summary:	Los Angeles						
Lat/Long:	34.65296 / -118.79808		Accuracy:	specific area			
UTM:	Zone-11 N3836029 E335222		Elevation (ft):	2950			
PLSS:	T07N, R18W, Sec. 33 (S)		Acres:	52.2			
Location:	UNNAMED TRIBUTARY TO PYRAMID LAKE ORIGINATING FROM THE BAILEY HOMESTEAD.						
Detailed Location:							
Ecological:	APPERS TO BE CLOSED CANOPY QUERCUS CHRYSOLEPIS AND Q. AGRIFOLIA PER INTERPRETATION OF AERIAL PHOTOS.						
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.						
Owner/Manager:	USFS-LOS PADRES NF						

Mojave Riparian Forest		Element Code: CTT61700CA	
Mojave Riparian Forest			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G1
	State: None		State: S1.1
	Other:		
Habitat:	General: <input type="checkbox"/>		



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Micro:

Occurrence No.	4	Map Index: 02511	EO Index: 15593	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-23

Quad Summary: Juniper Hills (3411748)
County Summary: Los Angeles

Lat/Long:	34.40773 / -117.89009	Accuracy:	specific area
UTM:	Zone-11 N3807724 E418195	Elevation (ft):	5080
PLSS:	T04N, R10W, Sec. 26 (S)	Acres:	219.5

Location: CRUTHERS CREEK, NORTH OF BURKHART SADDLE TO NEAR ANGELES NATIONAL FOREST BOUNDARY.
Detailed Location: FROM INTERPRETATION OF 1978 AERIAL PHOTOS.
Ecological: VEG COMPOSITION UNKNOWN. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
General: NEEDS FIELD CHECK. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	5	Map Index: 02499	EO Index: 15594	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-23

Quad Summary: Juniper Hills (3411748)
County Summary: Los Angeles

Lat/Long:	34.40635 / -117.90830	Accuracy:	specific area
UTM:	Zone-11 N3807586 E416520	Elevation (ft):	5120
PLSS:	T04N, R10W, Sec. 27 (S)	Acres:	137.0

Location: PALLETT CREEK, EAST OF PLEASANT VIEW RIDGE.
Detailed Location: INTERPRETED FROM 1978 AERIAL PHOTOS.
Ecological: VEG COMPOSITION UNKNOWN. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO
General: NEEDS FIELD VISIT. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	6	Map Index: 02339	EO Index: 15595	Element Last Seen: 1988-03-31
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1988-03-31
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-23

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.48986 / -118.02504	Accuracy:	specific area
UTM:	Zone-11 N3816949 E405884	Elevation (ft):	3080
PLSS:	T05N, R11W, Sec. 27 (S)	Acres:	51.2

Location: LITTLE ROCK WASH BETWEEN LITTLE ROCK-PALMDALE DAM & LITTLE ROCK STATION.
Detailed Location:
Ecological: OPEN CANOPY OF POPULUS FREMONTII W/SOME PLATANUS RACEMOSA. MUCH RIVER WASH.
General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	7	Map Index: 02350	EO Index: 15592	Element Last Seen: 1988-03-31
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen: 1988-03-31
Occ. Type:	Natural/Native occurrence		Trend: Decreasing	Record Last Updated: 1998-07-23

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.46228 / -118.01873	Accuracy:	specific area
UTM:	Zone-11 N3813885 E406433	Elevation (ft):	3320
PLSS:	T04N, R11W, Sec. 03 (S)	Acres:	90.4

Location: LITTLE ROCK CREEK, UPSTREAM OF LITTLE ROCK RESERVOIR FOR <1 MILE.
Detailed Location:
Ecological: OPEN CANOPY OF POPULUS FREMONTII AND SALIX SPP OVER BACCHARIS GLUTINOSA; MUCH RIVER WASH.
General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	8	Map Index: 02522	EO Index: 13386	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-23

Quad Summary: Valyermo (3411747), Juniper Hills (3411748)
County Summary: Los Angeles

Lat/Long:	34.45508 / -117.88505	Accuracy:	specific area
UTM:	Zone-11 N3812971 E418705	Elevation (ft):	3720
PLSS:	T04N, R10W, Sec. 12 (S)	Acres:	69.8

Location: PALLETT CREEK, FROM ABOUT 0.7 MILE EAST OF 131ST STREET, EXTENDING D/S (EAST) FOR ABOUT 1 MILE.
Detailed Location: EXTANT 1978 PER INTERPRETATION OF AERIAL PHOTOS.
Ecological: CLOSED CANOPY POPULUS FREMONTII & SALIX SPP ACCORDING TO WIESLANDER SURVEY.
General: NEEDS FIELD VISIT. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: UNKNOWN



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Occurrence No.	9	Map Index: 02557	EO Index: 15591	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-23

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.46131 / -117.86434	Accuracy:	specific area
UTM:	Zone-11 N3813646 E420612	Elevation (ft):	3520
PLSS:	T04N, R09W, Sec. 06 (S)	Acres:	241.7

Location: BIG ROCK CREEK, FROM CRYSTALAIRE COUNTRY CLUB UPSTREAM ABOUT 2 MILES.
Detailed Location: EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS; AREA D/S OF COUNTY FIRE STATION #79 APPEARED TO HAVE MUCH DENSER CANOPY THAN REST OF BOUNDED AREA.
Ecological: WIESLANDER SURVEY MAPPED AS CLOSED CANOPY ALNUS RHOMBIFOLIA, POPULUS FREMONTII, PLATANUS RACEMOSA & SALIX SP.
General: NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: UNKNOWN

Occurrence No.	10	Map Index: 02617	EO Index: 15590	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-23

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.43734 / -117.83867	Accuracy:	specific area
UTM:	Zone-11 N3810968 E422948	Elevation (ft):	3880
PLSS:	T04N, R09W, Sec. 17 (S)	Acres:	64.6

Location: VICINITY OF BIG ROCK SPRINGS AND DOWNSTREAM IN BIG ROCK CREEK ABOUT 0.5 MILE.
Detailed Location: EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS.
Ecological: CLOSED CANOPY POPULUS FREMONTII & SALIX SPP ACCORDING TO WIESLANDER SURVEY. COVER SPARSE. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
General: NEEDS FIELDWORK. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: UNKNOWN



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Occurrence No.	11	Map Index: 02584	EO Index: 15588	Element Last Seen: 1978-09-19
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-23

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.47466 / -117.85356	Accuracy:	specific area
UTM:	Zone-11 N3815117 E421615	Elevation (ft):	3400
PLSS:	T05N, R09W, Sec. 31 (S)	Acres:	37.7

Location: CRYSTALAIR COUNTRY CLUB JUST SOUTH OF BIG ROCK SIPHON.
Detailed Location: NOW EXTIRPATED BY GOLF COURSE PER INTERPRETATION OF 1978 AERIAL PHOTOS.
Ecological: MAPPED AS CLOSED CANOPY POPULUS FREMONTII & SALIX SPP BY WIESLANDER SURVEY. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: PVT?

Occurrence No.	12	Map Index: 02613	EO Index: 15589	Element Last Seen: 1978-09-19
Occ. Rank:	None		Presence: Extirpated	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-23

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.48188 / -117.84227	Accuracy:	specific area
UTM:	Zone-11 N3815909 E422659	Elevation (ft):	3400
PLSS:	T05N, R09W, Sec. 32 (S)	Acres:	48.9

Location: SOUTHWEST OF BIG ROCK RANCH BUILDINGS.
Detailed Location: EXTIRPATED BY AGRICULTURE ACCORDING TO INTERPRETATION OF 1978 AERIAL PHOTOS.
Ecological: MAPPED AS CLOSED CANOPY POPULUS FREMONTII & SALIX ACCORDING TO WIESLANDER SURVEY. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: UNKNOWN



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Occurrence No.	13	Map Index: 02618	EO Index: 15587	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-23
Quad Summary:	Valyermo (3411747)				
County Summary:	Los Angeles				
Lat/Long:	34.41564 / -117.83638		Accuracy:	specific area	
UTM:	Zone-11 N3808560 E423139		Elevation (ft):	4120	
PLSS:	T04N, R09W, Sec. 20 (S)		Acres:	88.0	
Location:	BIG ROCK CREEK, FROM GAGING STATION EAST OF DEVILS PUNCHBOWL UPSTREAM TO CONFLUENCE WITH SOUTH FORK BIG ROCK CREEK.				
Detailed Location:	EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS, U/S PART APPEARS TO BE SCRUB.				
Ecological:	MAPPED BY WIESLANDER SURVEY AS CLOSED CANOPY ALNUS RHOMBIFOLIA, PLATANUS RACEMOSA & POPULUS FREMONTII.				
General:	NEEDS FIELDWORK. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	USFS-ANGELES NF				

Occurrence No.	14	Map Index: 02685	EO Index: 12471	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-22
Quad Summary:	Valyermo (3411747)				
County Summary:	Los Angeles				
Lat/Long:	34.39598 / -117.80340		Accuracy:	specific area	
UTM:	Zone-11 N3806355 E426153		Elevation (ft):	4760	
PLSS:	T04N, R09W, Sec. 27 (S)		Acres:	25.3	
Location:	NEAR PARADISE SPRINGS ON BIG ROCK CREEK.				
Detailed Location:	EXTANT, 1978, PER INTERPRETATION OF AERIAL PHOTOS.				
Ecological:	MAPPED BY WIESLANDER SURVEY AS CLOSED CANOPY ALNUS RHOMBIFOLIA.				
General:	NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	USFS-ANGELES NF				

Southern Sycamore Alder Riparian Woodland			Element Code: CTT62400CA		
Southern Sycamore Alder Riparian Woodland					
Listing Status:	Federal:	None	CNDDB Element Ranks:	Global:	G4
	State:	None		State:	S4
	Other:				
Habitat:	General:	<input type="checkbox"/>			
	Micro:	<input type="checkbox"/>			



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Occurrence No.	66	Map Index:	02262	EO Index:	15488	Element Last Seen:	1988-03-30
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1988-03-30	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-22	

Quad Summary: Waterman Mtn. (3411738), Chilao Flat (3411831), Condor Peak (3411832), Pacifico Mountain (3411841)

County Summary: Los Angeles

Lat/Long:	34.32903 / -118.11913	Accuracy:	specific area
UTM:	Zone-11 N3799206 E397048	Elevation (ft):	3600
PLSS:	T03N, R12W, Sec. 22 (S)	Acres:	4241.8

Location: BIG TUJUNGA CANYON & MANY TRIBUTARIES, U/S OF RESERVOIR BEHIND BIG TUJUNGA DAM.

Detailed Location:

Ecological: CLOSED CANOPY PLATANUS RACEMOSA, Q. CHRYSOLEPIS, SALIX SPP. & ALNUS RHOMBIFOLIA W/SCATTERED POPULUS FREMONTII & MORE WILLOWS THAN W FORK SAN GABRIEL ACCORDING TO WIESLANDER SURVEY. MIDDLE FORK MILL CREEK BURNED 1977, RECOVERING PER HOLLAND.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	76	Map Index:	02622	EO Index:	15480	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-22	

Quad Summary: Crystal Lake (3411737), Valyermo (3411747)

County Summary: Los Angeles

Lat/Long:	34.37193 / -117.83604	Accuracy:	specific area
UTM:	Zone-11 N3803712 E423130	Elevation (ft):	5320
PLSS:	T03N, R09W, Sec. 05 (S)	Acres:	428.9

Location: SOUTH FORK BIG ROCK CREEK, BETWEEN MT WILLIAMSON & MT LEWIS.

Detailed Location: EXTANT, 1978, PER AERIAL PHOTO INTERPRETATION.

Ecological: CLOSED CANOPY ALNUS RHOMBIFOLIA ACCORDING TO WIESLANDER SURVEY.

General: RECENT GROUND TRUTH NEEDED. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	78	Map Index: 02416	EO Index: 15477	Element Last Seen: 1988-03-31
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1988-03-31
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-22

Quad Summary: Waterman Mtn. (3411738), Juniper Hills (3411748), Pacifico Mountain (3411841)

County Summary: Los Angeles

Lat/Long:	34.40264 / -117.94278	Accuracy:	specific area
UTM:	Zone-11 N3807204 E413347	Elevation (ft):	4000
PLSS:	T04N, R10W, Sec. 29 (S)	Acres:	1775.5

Location: LITTLE ROCK CREEK, FROM ABOUT 0.7 MILE U/S OF LITTLE ROCK RESERVOIR U/S FOR SEVERAL MILES.

Detailed Location: PORTIONS FIELD CHECKED 1988, COPPER CANYON MAPPED FROM INTERPRETATION OF 1978 AIR PHOTOS, WIESLANDER DID NOT MAP; MAY NOT BE SYCAMORES AT HIGHER ELEVATIONS.

Ecological: CLOSED CANOPY QUERCUS CHRYSOLEPIS, PLATANUS RACEMOSA, SALIX SPP. & ALNUS RHOMBIFOLIA IN VARIOUS COMBINATIONS ACCORDING TO WIESLANDER SURVEY.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	79	Map Index: 02294	EO Index: 15476	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-22

Quad Summary: Pacifico Mountain (3411841)

County Summary: Los Angeles

Lat/Long:	34.43629 / -118.05412	Accuracy:	specific area
UTM:	Zone-11 N3811036 E403152	Elevation (ft):	4000
PLSS:	T04N, R11W, Sec. 17 (S)	Acres:	222.7

Location: SANTIAGO CANYON FROM ABOUT 1.5 MILES U/S (SW) OF LITTLE ROCK RESERVOIR FOR ABOUT THREE MILES.

Detailed Location: EXTANT, 1978, PER AERIAL PHOTO INTERPRETATION.

Ecological: CLOSED CANOPY ALNUS RHOMBIFOLIA ACCORDING TO WIESLANDER SURVEY.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	80	Map Index: 02369	EO Index: 15474	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-22
Quad Summary:	Pacifico Mountain (3411841)				
County Summary:	Los Angeles				
Lat/Long:	34.40679 / -118.01010		Accuracy:	specific area	
UTM:	Zone-11 N3807724 E407164		Elevation (ft):	4200	
PLSS:	T04N, R11W, Sec. 26 (S)		Acres:	133.0	
Location:	BARE MOUNTAIN CANYON, ABOUT 1 MILE WSW OF TOP OF BARE MTN D/S FOR ABOUT 2 MILES.				
Detailed Location:	EXTANT, 1978, PER AERIAL PHOTO INTERPRETATION.				
Ecological:	CLOSED CANOPY QUERCUS CHRYSOLEPIS & ALNUS RHOMBIFOLIA ACCORDING TO WIESLANDER SURVEY.				
General:	SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	81	Map Index: 02125	EO Index: 15475	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-22
Quad Summary:	Acton (3411842)				
County Summary:	Los Angeles				
Lat/Long:	34.40972 / -118.17592		Accuracy:	specific area	
UTM:	Zone-11 N3808213 E391927		Elevation (ft):	3240	
PLSS:	T04N, R12W, Sec. 19 (S)		Acres:	145.7	
Location:	ARRASTRE CANYON, U/S OF WERNER CAMP FOR ABOUT 2 MILES.				
Detailed Location:	EXTANT, 1978, PER AERIAL PHOTO INTERPRETATION.				
Ecological:	CLOSED CANOPY QUERCUS CHRYSOLEPIS & ALNUS RHOMBIFOLIA ACCORDING TO WIESLANDER SURVEY.				
General:	SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	82	Map Index: 02039	EO Index: 15473	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-22
Quad Summary:	Acton (3411842)				
County Summary:	Los Angeles				
Lat/Long:	34.40223 / -118.22579		Accuracy:	specific area	
UTM:	Zone-11 N3807436 E387333		Elevation (ft):	2800	
PLSS:	T04N, R13W, Sec. 27 (S)		Acres:	195.5	
Location:	MILL CANYON & TRIBUTARY FROM EAST, FROM 1.75 MILES U/S OF CONFLUENCE W/ SOLEDAD CANYON U/S >1 MILE.				
Detailed Location:	EXTANT, 1978, PER AERIAL PHOTO INTERPRETATION.				
Ecological:	UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.				
General:	RECENT GROUND TRUTH NEEDED. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	83	Map Index:	02017	EO Index:	15472	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-22	

Quad Summary: Acton (3411842)
County Summary: Los Angeles

Lat/Long:	34.45638 / -118.24160	Accuracy:	specific area
UTM:	Zone-11 N3813459 E385954	Elevation (ft):	2680
PLSS:	T04N, R13W, Sec. 04 (S)	Acres:	42.0

Location: HUGHES CANYON ABOUT 1 MILE NORTH OF SOLEDAD CANYON.
Detailed Location: EXTANT, 1978, PER AERIAL PHOTO INTERPRETATION.
Ecological: VEG COMPOSITION UNKNOWN. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
General: RECENT GROUND TRUTH NEEDED. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: UNKNOWN

Occurrence No.	95	Map Index:	01197	EO Index:	15459	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-22	

Quad Summary: Burnt Peak (3411865)
County Summary: Los Angeles

Lat/Long:	34.65990 / -118.51471	Accuracy:	specific area
UTM:	Zone-11 N3836372 E361205	Elevation (ft):	3080
PLSS:	T07N, R15W, Sec. 30 (S)	Acres:	467.4

Location: FISH CREEK, FROM "THE POTHOLES" D/S TO ELIZABETH LAKE CANYON.
Detailed Location: MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.
Ecological: LONG REACHES OF SCRUB W/CLOSED CANOPY QUERCUS AGRIFOLIA, ALNUS RHOMBIFOLIA & PLATANUS RACEMOSA.
General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	96	Map Index:	01031	EO Index:	15460	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-22	

Quad Summary: Warm Springs Mountain (3411855), Burnt Peak (3411865)
County Summary: Los Angeles

Lat/Long:	34.63117 / -118.56759	Accuracy:	specific area
UTM:	Zone-11 N3833259 E356309	Elevation (ft):	2680
PLSS:	T06N, R16W, Sec. 10 (S)	Acres:	117.2

Location: PROSPECT CANYON, FROM ELIZABETH LAKE CANYON U/S FOR ABOUT 1 MILE.
Detailed Location: 1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.
Ecological: CLOSED CANOPY QUERCUS AGRIFOLIA, SALIX SPP & PLATANUS RACEMOSA ACCORDING TO WIESLANDER SURVEY.
General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	97	Map Index: 01063	EO Index: 15458	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-22

Quad Summary: Burnt Peak (3411865)

County Summary: Los Angeles

Lat/Long:	34.63232 / -118.55078	Accuracy:	specific area
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UTM:	Zone-11 N3833363 E357852	Elevation (ft):	2480
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PLSS:	T06N, R16W, Sec. 02 (S)	Acres:	62.3
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Location: UNNAMED INTERMITTENT STREAM TO EAST OF PROSPECT CANYON, NORTH OF ELIZABETH LAKE CANYON.

Detailed Location: 1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.

Ecological: CLOSED CANOPY QUERCUS AGRIFOLIA, SALIX SPP & PLATANUS RACEMOSA ACCORDING TO WIESLANDER SURVEY.

General: RECENT GROUND TRUTH NEEDED. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	98	Map Index: 00717	EO Index: 15456	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-22

Quad Summary: Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.68362 / -118.68939	Accuracy:	specific area
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UTM:	Zone-11 N3839257 E345241	Elevation (ft):	2720
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PLSS:	T07N, R17W, Sec. 21 (S)	Acres:	106.0
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Location: SALT CREEK, ABOUT 1 MILE NE OF TROUGH CANYON.

Detailed Location: MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.

Ecological: APPEARS TO BE AN EXAMPLE OF THIS COMMUNITY.

General: RECENT GROUND TRUTH NEEDED. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	99	Map Index:	00779	EO Index:	15457	Element Last Seen:	1978-09-19
Occ. Rank:	None	Presence:	Possibly Extirpated	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-22	

Quad Summary: Whitaker Peak (3411856), Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.62586 / -118.66061	Accuracy:	specific area
UTM:	Zone-11 N3832807 E347772	Elevation (ft):	1880
PLSS:	T06N, R17W, Sec. 10 (S)	Acres:	173.8

Location: CASTAIC CREEK, ABOUT 1 MILE U/S OF CONFLUENCE W/ FISH CANYON EXTENDING U/S ABOUT 1.75 MILES.

Detailed Location: APPEARS TO HAVE WASHED AWAY ACCORDING TO INTERPRETATION OF 1978 AERIAL PHOTOS.

Ecological: OPEN CANOPY QUERCUS AGRIFOLIA, POPULUS FREMONTII & PLATANUS RACEMOSA ACCORDING TO WIESLANDER SURVEY.

General: RECENT GROUND TRUTH NEEDED. SEE WWW.DFG.CA.GOV/BIOGEO/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	102	Map Index:	00833	EO Index:	15454	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-22	

Quad Summary: Warm Springs Mountain (3411855), Whitaker Peak (3411856), Burnt Peak (3411865), Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.64800 / -118.60544	Accuracy:	specific area
UTM:	Zone-11 N3835180 E352869	Elevation (ft):	2040
PLSS:	T07N, R16W, Sec. 32 (S)	Acres:	1061.0

Location: FISH CANYON, SOUTH OF THE PIANOBOX PROSPECT AND EAST FORK FISH CANYON, INCLUDING BURNT PEAK & LION CANYONS.

Detailed Location:

Ecological: OPEN CANOPY ALNUS RHOMBIFOLIA & BACCHARIS VIMINEA BELOW CAMPGROUND ACC TO WIESLANDER SURVEY. 30-40% TREE COVER PER 1978 AIR PHOTOS ABOVE CAMP, OPEN ALNUS, PLATANUS, POPULUS, BACCHARIS & ERIOGONUM FASCIC PER WIESLANDER; TREES 10-30%, 1978.

General: RECENT GROUND TRUTH NEEDED. SEE WWW.DFG.CA.GOV/BIOGEO/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	137	Map Index:	01478	EO Index:	15423	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-22	

Quad Summary: Green Valley (3411854), Lake Hughes (3411864)

County Summary: Los Angeles

Lat/Long:	34.60711 / -118.44279	Accuracy:	specific area
UTM:	Zone-11 N3830420 E367712	Elevation (ft):	2320
PLSS:	T06N, R15W, Sec. 14 (S)	Acres:	570.2

Location: SAN FRANCISQUITO CANYON U/S OF BEE CANYON, INCLUDING TRIBUTARY SOUTH PORTAL CANYON.
Detailed Location: 1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.
Ecological: CLOSED CANOPY QUERCUS AGRIFOLIA, SALIX SPP & PLATANUS RACEMOSA ACCORDING TO WIESLANDER SURVEY.
General: NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	138	Map Index:	01388	EO Index:	15424	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-22	

Quad Summary: Green Valley (3411854)

County Summary: Los Angeles

Lat/Long:	34.56402 / -118.47631	Accuracy:	specific area
UTM:	Zone-11 N3825686 E364568	Elevation (ft):	1800
PLSS:	T06N, R15W, Sec. 33 (S)	Acres:	116.4

Location: SAN FRANCISQUITO CANYON, JUST D/S OF CONFLUENCE OF BEE CANYON.
Detailed Location: 1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.
Ecological: OPEN CANOPY OF PLATANUS RACEMOSA OVER GRASSES ACCORDING TO WIESLANDER SURVEY.
General: NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	139	Map Index:	01707	EO Index:	15422	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-22	

Quad Summary: Mint Canyon (3411844), Green Valley (3411854)

County Summary: Los Angeles

Lat/Long:	34.50436 / -118.38298	Accuracy:	specific area
UTM:	Zone-11 N3818948 E373040	Elevation (ft):	2160
PLSS:	T05N, R14W, Sec. 19 (S)	Acres:	47.4

Location: RUSH CANYON, U/S OF CONFLUENCE W/ MINT CANYON.
Detailed Location: 1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.
Ecological: CLOSED CANOPY QUERCUS AGRIFOLIA & PLATANUS RACEMOSA ACCORDING TO WIESLANDER SURVEY. TREES VERY SPARSE.
General: NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	140	Map Index: 01243	EO Index: 15420	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-22
Quad Summary:	Green Valley (3411854), Warm Springs Mountain (3411855), Lake Hughes (3411864)				
County Summary:	Los Angeles				
Lat/Long:	34.61718 / -118.49178		Accuracy:	specific area	
UTM:	Zone-11 N3831602 E363235		Elevation (ft):	2800	
PLSS:	T06N, R15W, Sec. 08 (S)		Acres:	622.7	
Location:	TULE CANYON AND SMALL REACH OF RUBY CANYON FOR <1 MILE DOWNSTREAM OF CONFLUENCE WITH TULE CANYON.				
Detailed Location:	1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOS. AREA IS UPSTREAM OF WARM SPRINGS BURN.				
Ecological:	CLOSED CANOPY QUERCUS AGRIFOLIA, SALIX SPP, AND PLATANUS RACEMOSA ACCORDING TO WIESLANDER SURVEY.				
General:	NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	151	Map Index: 01996	EO Index: 15411	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-22
Quad Summary:	Acton (3411842), Agua Dulce (3411843)				
County Summary:	Los Angeles				
Lat/Long:	34.41561 / -118.25540		Accuracy:	specific area	
UTM:	Zone-11 N3808954 E384630		Elevation (ft):	2840	
PLSS:	T04N, R13W, Sec. 20 (S)		Acres:	117.0	
Location:	MATTOX CANYON, FROM 0.9 TO 2.4 MILES U/S FROM JUNCTION WITH SANTA CLARA RIVER,				
Detailed Location:	1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.				
Ecological:	CLOSED CANOPY PLATANUS RACEMOSA ACCORDING TO WIESLANDER SURVEY.				
General:	NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	153	Map Index:	01973	EO Index:	15410	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-22	

Quad Summary: Sunland (3411833), Acton (3411842), Agua Dulce (3411843)

County Summary: Los Angeles

Lat/Long:	34.38193 / -118.26179	Accuracy:	specific area
UTM:	Zone-11 N3805226 E383997	Elevation (ft):	3560
PLSS:	T04N, R13W, Sec. 32 (S)	Acres:	167.4

Location: NORTH FORK PACOIMA CANYON AND TRIBUTARY.

Detailed Location: 1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOS; EXTENT INCREASED RELATIVE TO WIESLANDER SURVEY.

Ecological: CLOSED CANOPY QUERCUS AGRIFOLIA & PLATANUS RACEMOSA ACCORDING TO WIESLANDER SURVEY.

General: NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	155	Map Index:	00260	EO Index:	15406	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-22	

Quad Summary: Black Mtn. (3411867)

County Summary: Ventura

Lat/Long:	34.68608 / -118.87059	Accuracy:	specific area
UTM:	Zone-11 N3839823 E328645	Elevation (ft):	3550
PLSS:	T07N, R19W, Sec. 23 (S)	Acres:	94.7

Location: SNOWY CREEK, >1 MILE U/S FROM JUNCTION WITH PIRU CREEK.

Detailed Location: MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.

Ecological: APPEARS TO BE CLOSED CANOPY PLATANUS RACEMOSA AND ALNUS RHOMBIFOLIA.

General: NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-LOS PADRES NF



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Occurrence No.	156	Map Index:	00308	EO Index:	15407	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-22	

Quad Summary: Black Mtn. (3411867), Alamo Mountain (3411868)
County Summary: Ventura

Lat/Long:	34.65051 / -118.83537	Accuracy:	specific area
UTM:	Zone-11 N3835819 E331799	Elevation (ft):	3700
PLSS:	T07N, R18W, Sec. 31 (S)	Acres:	255.1

Location: BUCK CREEK, TRIBUTARY TO PIRU CREEK.
Detailed Location: 1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOS. EXTENDS FARTHER U/S THAN IS SHOWN HERE; UPSTREAM LIMIT UNKNOWN.
Ecological: CLOSED CANOPY ALNUS RHOMBIFOLIA ACCORDING TO WIESLANDER SURVEY.
General: NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: USFS-LOS PADRES NF

Southern Riparian Scrub		Element Code: CTT63300CA
Southern Riparian Scrub		
Listing Status:	Federal: None	CNDDB Element Ranks:
	State: None	Global: G3
	Other:	State: S3.2
Habitat:	General: <input type="checkbox"/>	
	Micro: <input type="checkbox"/>	

Occurrence No.	27	Map Index:	02405	EO Index:	15315	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-23	

Quad Summary: Juniper Hills (3411748)
County Summary: Los Angeles

Lat/Long:	34.45949 / -117.97564	Accuracy:	specific area
UTM:	Zone-11 N3813537 E410388	Elevation (ft):	4120
PLSS:	T04N, R10W, Sec. 06 (S)	Acres:	33.3

Location: INTERMITTENT STREAM WEST OF BRAINARD CANYON, ABOUT 1 MILE WSW OF JUNIPER HILLS PARK.
Detailed Location:
Ecological: 1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOGRAPHS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.
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.
Owner/Manager: UNKNOWN



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Occurrence No.	28	Map Index: 01096	EO Index: 15316	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-23

Quad Summary: Burnt Peak (3411865), Neenach School (3411875)

County Summary: Los Angeles

Lat/Long:	34.74258 / -118.53965	Accuracy:	specific area
UTM:	Zone-11 N3845576 E359059	Elevation (ft):	3360
PLSS:	T08N, R16W, Sec. 35 (S)	Acres:	68.7

Location: BALDWIN GRADE CANYON, EAST OF DANIELSON MOTORWAY.

Detailed Location:

Ecological: 1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOGRAPHS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

General: NEEDS FIELD 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.

Owner/Manager: UNKNOWN

Occurrence No.	29	Map Index: 01113	EO Index: 15314	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-23

Quad Summary: Burnt Peak (3411865)

County Summary: Los Angeles

Lat/Long:	34.74261 / -118.53536	Accuracy:	specific area
UTM:	Zone-11 N3845573 E359452	Elevation (ft):	3400
PLSS:	T08N, R16W, Sec. 36 (S)	Acres:	46.2

Location: UNNAMED CANYON TO EAST OF BALDWIN GRADE CANYON, EAST OF DANIELSON MOTORWAY.

Detailed Location:

Ecological: 1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOGRAPHS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

General: NEEDS FIELD 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.

Owner/Manager: UNKNOWN



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Occurrence No.	30	Map Index: 01161	EO Index: 15313	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-23
Quad Summary:	Burnt Peak (3411865)				
County Summary:	Los Angeles				
Lat/Long:	34.73524 / -118.52275		Accuracy:	specific area	
UTM:	Zone-11 N3844738 E360594		Elevation (ft):	3400	
PLSS:	T08N, R16W, Sec. 36 (S)		Acres:	44.9	
Location:	NORTH LONG CANYON, SOUTH OF LOS ANGELES AQUEDUCT.				
Detailed Location:					
Ecological:	1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOGRAPHS. UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.				
General:	EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOGRAPHS. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	UNKNOWN				

Occurrence No.	31	Map Index: 01460	EO Index: 13366	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-13
Quad Summary:	Green Valley (3411854)				
County Summary:	Los Angeles				
Lat/Long:	34.56750 / -118.44354		Accuracy:	specific area	
UTM:	Zone-11 N3826028 E367580		Elevation (ft):	2000	
PLSS:	T06N, R15W, Sec. 35 (S)		Acres:	190.9	
Location:	BEE CANYON, U/S FROM SAN FRANCISQUITO CANYON, INCLUDES SEVERAL TRIBUTARIES TO THE SOUTH.				
Detailed Location:	1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOGRAPHS.				
Ecological:	MAPPED BY WIESLANDER SURVEY AS OPEN STAND OF QUERCUS AGRIFOLIA OVER ERIOGONUM FASCICULATUM AND LEPIDOSPARTUM SQUAMATUM.				
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.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	32	Map Index: 01543	EO Index: 15312	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-13

Quad Summary: Mint Canyon (3411844), Sleepy Valley (3411853), Green Valley (3411854)

County Summary: Los Angeles

Lat/Long:	34.52224 / -118.39025	Accuracy:	specific area
UTM:	Zone-11 N3820940 E372399	Elevation (ft):	1920
PLSS:	T05N, R14W, Sec. 18 (S)	Acres:	545.5

Location: TEXAS CANYON, FROM CONFLUENCE W/ BOUQUET CANYON U/S FOR SEVERAL MILES.

Detailed Location: 1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOGRAPHS.

Ecological: MAPPED BY WIESLANDER SURVEY AS OPEN STAND OF QUERCUS AGRIFOLIA & PLATANUS RACEMOSA OVER LEPIDOSPARTUM SQUAMATUM & ERIOGONUM FASCICULATUM. TREES WIDELY SPACED. PROBABLY HAS SALIX SPP IN U/S PORTION PER HOLLAND.

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.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	33	Map Index: 01854	EO Index: 15311	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-13

Quad Summary: Sleepy Valley (3411853)

County Summary: Los Angeles

Lat/Long:	34.53469 / -118.32849	Accuracy:	specific area
UTM:	Zone-11 N3822245 E378086	Elevation (ft):	2680
PLSS:	T05N, R14W, Sec. 10 (S)	Acres:	149.9

Location: SPADE SPRING CANYON, U/S FROM SLEEPY VALLEY.

Detailed Location: 1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOGRAPHS.

Ecological: MAPPED BY WIESLANDER SURVEY AS SCRUB OF PRUNUS ILICIFOLIA, GRASSES, LEPIDOSPARTUM SQUAMATUM & ERIOGONUM FASCICULATUM.

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.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	34	Map Index:	01870	EO Index:	15309	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-13	
Quad Summary:	Sleepy Valley (3411853)						
County Summary:	Los Angeles						
Lat/Long:	34.53054 / -118.31777			Accuracy:	specific area		
UTM:	Zone-11 N3821772 E379064			Elevation (ft):	2680		
PLSS:	T05N, R14W, Sec. 11 (S)			Acres:	149.6		
Location:	MINT CANYON, NORTH OF SIERRA HIGHWAY, EAST OF SLEEPY VALLEY.						
Detailed Location:	1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOGRAPHS.						
Ecological:	MAPPED BY WIESLANDER SURVEY AS SCRUB OF ERIOGONUM FASCICULATUM, LEPIDOSPARTUM, GRASSES, ENCELIA ACTONI (SYN=E. VIRGINENSIS SSP ACTONII) & PRUNUS ILICIFOLIA.						
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.						
Owner/Manager:	USFS-ANGELES NF						

Occurrence No.	37	Map Index:	01944	EO Index:	15306	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2006-09-06	
Quad Summary:	Acton (3411842), Agua Dulce (3411843)						
County Summary:	Los Angeles						
Lat/Long:	34.43990 / -118.29916			Accuracy:	specific area		
UTM:	Zone-11 N3811699 E380642			Elevation (ft):	1900		
PLSS:	T04N, R14W, Sec. 12 (S)			Acres:	701.0		
Location:	SANTA CLARA RIVER, FROM JUNCTION WITH ARRASTRE CANYON TO APPROXIMATELY 2.2 MILES D/S, SOLEDAD CANYON.						
Detailed Location:	1978 EXTENT MAPPED FROM INTERPRETATION OF AERIAL PHOTOGRAPHS.						
Ecological:	MAPPED BY WIESLANDER SURVEY AS SCRUB OF ARTEMISIA TRIDENTATA, ERIOGONUM FASCICULATUM AND LEPIDOSPARTUM SQUAMATUM.						
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.						
Owner/Manager:	PVT						

Southern Willow Scrub			Element Code: CTT63320CA	
Southern Willow Scrub				
Listing Status:	Federal:	None	CNDDB Element Ranks:	Global: G3
	State:	None		State: S2.1
	Other:			
Habitat:	General:	<input type="checkbox"/>		
	Micro:	<input type="checkbox"/>		



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Occurrence No.	19	Map Index:	00901	EO Index:	15277	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-21	

Quad Summary: Burnt Peak (3411865)

County Summary: Los Angeles

Lat/Long:	34.67847 / -118.60593	Accuracy:	specific area
UTM:	Zone-11 N3838561 E352878	Elevation (ft):	3720
PLSS:	T07N, R16W, Sec. 20 (S)	Acres:	305.1

Location: FISH CANYON, NORTH OF LITTLE BURNT PEAK D/S FOR ABOUT 3.5 MILES.

Detailed Location: MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.

Ecological: WILLOW SCRUB WITH BACCHARIS VIMINEA, LEPIDOSPARTUM SQUAMATUM AND WIDELY SCATTERED PLATANUS RACEMOSA.

General: GROUND TRUTH NEEDED. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	20	Map Index:	01139	EO Index:	15275	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1978-09-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-21	

Quad Summary: Warm Springs Mountain (3411855), Burnt Peak (3411865)

County Summary: Los Angeles

Lat/Long:	34.62653 / -118.52818	Accuracy:	specific area
UTM:	Zone-11 N3832689 E359914	Elevation (ft):	2440
PLSS:	T06N, R16W, Sec. 12 (S)	Acres:	87.6

Location: RED FOX CANYON, FROM ELIZABETH LAKE CANYON U/S FOR ABOUT 1.5 MILES.

Detailed Location:

Ecological: WIESLANDER SURVEY MAPPED AS CLOSED CANOPY QUERCUS AGRIFOLIA, PLATANUS RACEMOSA AND WILLOWS; APPEARED TO BE WILLOW SCRUB IN 1978 FROM INTERPRETATION OF AERIAL PHOTOS.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	21	Map Index: 01168	EO Index: 15276	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-21

Quad Summary: Burnt Peak (3411865)
County Summary: Los Angeles

Lat/Long:	34.63344 / -118.51940	Accuracy:	specific area
UTM:	Zone-11 N3833443 E360730	Elevation (ft):	3040
PLSS:	T06N, R16W, Sec. 01 (S)	Acres:	80.6

Location: INTERMITTENT STREAM EAST OF ELIZABETH LAKE CANYON, NORTH OF RED FOX CANYON.

Detailed Location:

Ecological: WIESLANDER SURVEY MAPPED AS CLOSED CANOPY QUERCUS AGRIFOLIA AND WILLOW; APPEARED TO BE WILLOW SCRUB IN 1978 FROM INTERPRETATION OF AERIAL PHOTOS.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	22	Map Index: 01613	EO Index: 15274	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-21

Quad Summary: Lake Hughes (3411864)
County Summary: Los Angeles

Lat/Long:	34.70119 / -118.40966	Accuracy:	specific area
UTM:	Zone-11 N3840811 E370895	Elevation (ft):	2880
PLSS:	T07N, R14W, Sec. 18 (S)	Acres:	28.5

Location: MYRICK CANYON, JUST EAST OF CALIFORNIA AQUEDUCT.

Detailed Location: MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.

Ecological: UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.

General: NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: UNKNOWN



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Occurrence No.	23	Map Index: 00619	EO Index: 15272	Element Last Seen: 1988-04-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1988-04-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-21

Quad Summary: Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.70718 / -118.73265	Accuracy:	specific area
UTM:	Zone-11 N3841937 E341323	Elevation (ft):	3080
PLSS:	T07N, R18W, Sec. 12 (S)	Acres:	341.8

Location: LIEBRE GULCH, FROM NEAR QUAIL LAKE FIRE STATION D/S OVER 4 MILES.

Detailed Location:

Ecological: WIESLANDER SURVEY MAPPED AS CLOSED CANOPY OF QUERCUS CHRYSOLEPIS & WILLOW AT TOP; WILLOW & FOOTHILL PINE D/S. MOST HAS BURNED, NO Q. CHRYSOLEPIS REMAINS AT TOP & FEW PINUS SABINIANA REMAIN IN MIDDLE REACH.

General: DENSE THICKET OF 10-15 FT TALL SALIX LASIOLEPIS W/SCATTERED POPULUS FREMONTII, 1988. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF, PVT

Occurrence No.	24	Map Index: 00706	EO Index: 15273	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-21

Quad Summary: Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.71687 / -118.70086	Accuracy:	specific area
UTM:	Zone-11 N3842962 E344252	Elevation (ft):	4080
PLSS:	T07N, R17W, Sec. 08 (S)	Acres:	75.6

Location: COLD CANYON, SOUTHWEST SIDE OF LIEBRE MOUNTAIN.

Detailed Location: MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.

Ecological: APPEARS TO BE SCRUB OF WILLOW AND BACCHARIS VIMINEA.

General: NEEDS FIELD CHECK. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	25	Map Index: 00694	EO Index: 15271	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-21
Quad Summary:	Liebre Mtn. (3411866)				
County Summary:	Los Angeles				
Lat/Long:	34.70235 / -118.70598		Accuracy:	specific area	
UTM:	Zone-11 N3841360 E343756		Elevation (ft):	3240	
PLSS:	T07N, R17W, Sec. 17 (S)		Acres:	34.0	
Location:	COLD CANYON, JUST U/S OF CONFLUENCE W/ SALT CREEK.				
Detailed Location:	MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.				
Ecological:	APPEARS TO BE SCRUB OF WILLOW AND BACCHARIS VIMINEA.				
General:	NEEDS FIELD CHECK. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	26	Map Index: 00583	EO Index: 12460	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-21
Quad Summary:	Whitaker Peak (3411856), Liebre Mtn. (3411866), Black Mtn. (3411867)				
County Summary:	Los Angeles				
Lat/Long:	34.62511 / -118.74323		Accuracy:	specific area	
UTM:	Zone-11 N3832852 E340196		Elevation (ft):	1920	
PLSS:	T06N, R18W, Sec. 12 (S)		Acres:	183.3	
Location:	PIRU CREEK, FROM PIRU GORGE D/S BEYOND FRENCHMANS FLAT.				
Detailed Location:	MAPPED FROM INTERPRETATION OF AERIAL PHOTOS.				
Ecological:	APPEARS TO BE WILLOW SCRUB; D/S PORTION APPEARS TO HAVE SOME PLATANUS RACEMOSA AND ALNUS RHOMBIFOLIA.				
General:	NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	28	Map Index: 01743	EO Index: 15269	Element Last Seen: 1988-04-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1988-04-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-07-21

Quad Summary: Sleepy Valley (3411853), Green Valley (3411854)
County Summary: Los Angeles

Lat/Long:	34.60646 / -118.36962	Accuracy:	specific area
UTM:	Zone-11 N3830255 E374420	Elevation (ft):	3480
PLSS:	T06N, R14W, Sec. 16 (S)	Acres:	52.7

Location: SPUNKY CANYON U/S OF BOUQUET RESERVOIR ABOUT 1 MILE, EXTENDING U/S ABOUT 1 MILE.
Detailed Location: MAPPED FROM INTERPRETATION ON 1978 AERIAL PHOTOS.
Ecological: SALIX LASIOLEPIS AND SAMBUCUS W/SCATTERED QUERCUS AGRIFOLIA. MUHLENBERGIA SP IN UNDERSTORY. SURROUNDED BY ADENOSTOMA FASCICULATUM CHAPARRAL.
General: FIELD CHECKED APRIL 1988. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	29	Map Index: 00445	EO Index: 15267	Element Last Seen: 1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Decreasing	Record Last Updated: 1998-07-21

Quad Summary: Black Mtn. (3411867)
County Summary: Los Angeles

Lat/Long:	34.71928 / -118.80101	Accuracy:	specific area
UTM:	Zone-11 N3843389 E335085	Elevation (ft):	2975
PLSS:	T07N, R18W, Sec. 09 (S)	Acres:	39.6

Location: GORMAN CREEK, FROM CASWELL TO >0.5 MILE D/S, PEACE VALLEY.
Detailed Location: PORTION U/S EXTIRPATED BY FREEWAY AND AGRICULTURE PER INTERPRETATION OF 1978 AERIAL PHOTOS.
Ecological: MAPPED BY WIESLANDER SURVEY AS OPEN SALIX SPP.
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.
Owner/Manager: PVT



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Occurrence No.	30	Map Index:	01954	EO Index:	15268	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1978-09-19	Record Last Updated:	1998-07-21
Occ. Type:	Natural/Native occurrence		Trend:	Unknown			
Quad Summary:	Sleepy Valley (3411853)						
County Summary:	Los Angeles						
Lat/Long:	34.55345 / -118.28131			Accuracy:	specific area		
UTM:	Zone-11 N3824270 E382443			Elevation (ft):	3640		
PLSS:	T05N, R13W, Sec. 06 (S)			Acres:	39.0		
Location:	LETTEAU CANYON, ON SOUTH SLOPE OF MT MCDILL.						
Detailed Location:	MAPPED PER INTERPRETATION OF 1978 AERIAL PHOTOS.						
Ecological:	UNABLE TO CONVERT TO FLORISTIC CLASSIFICATION, LACKS SPP. INFO.						
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.						
Owner/Manager:	UNKNOWN						

Occurrence No.	32	Map Index:	00324	EO Index:	15265	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1978-09-19	Record Last Updated:	1998-07-21
Occ. Type:	Natural/Native occurrence		Trend:	Unknown			
Quad Summary:	Black Mtn. (3411867)						
County Summary:	Ventura						
Lat/Long:	34.68049 / -118.84160			Accuracy:	specific area		
UTM:	Zone-11 N3839154 E331290			Elevation (ft):	2800		
PLSS:	T07N, R19W, Sec. 24 (S)			Acres:	263.2		
Location:	PIRU CREEK, FROM BUCK CREEK SPRING TO JUNCTION WITH SNOWY CREEK.						
Detailed Location:	EXTANT, VERY OPEN BUT PLANTUS RACEMOSA NOT EVIDENT, 1978, PER INTERPRETATION OF AERIAL PHOTOS.						
Ecological:	MAPPED BY WIESLANDER SURVEY AS OPEN CANOPY OF SALIX SPP., POPULUS FREMONTII, BACCHARIS VIMINEA AND PLATANUS RACEMOSA WITH ERIOGONUM FASCICULATUM UNDERSTORY.						
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.						
Owner/Manager:	USFS-LOS PADRES NF						

Valley Oak Woodland			Element Code: CTT71130CA	
Valley Oak Woodland				
Listing Status:	Federal:	None	CNDDB Element Ranks:	Global: G3
	State:	None		State: S2.1
	Other:			
Habitat:	General:	<input type="checkbox"/>		
	Micro:	<input type="checkbox"/>		



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Occurrence No.	77	Map Index:	00897	EO Index:	12450	Element Last Seen:	1988-03-31
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1988-03-31	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-31	

Quad Summary: Burnt Peak (3411865)

County Summary: Los Angeles

Lat/Long:	34.72400 / -118.60150	Accuracy:	specific area
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UTM:	Zone-11 N3843603 E353364	Elevation (ft):	4080
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PLSS:	T07N, R16W, Sec. 05 (S)	Acres:	191.4
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Location: NORTH-FACING & NE-FACING HILLSIDE BETWEEN OAK FLAT & OAK GROVE CANYON, EAST OF PRATT CANYON.

Detailed Location:

Ecological: OPEN WOODLAND OF QUERCUS LOBATA AND PINUS SABINIANA WITH GRASS UNDERSTORY ACCORDING TO WIESLANDER SURVEY.

General: FIELD VERIFIED 1988. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: UNKNOWN

Occurrence No.	79	Map Index:	00766	EO Index:	28767	Element Last Seen:	1988-04-01
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1988-04-01	
Occ. Type:	Natural/Native occurrence	Trend:	Decreasing	Record Last Updated:		1998-07-31	

Quad Summary: Liebre Mtn. (3411866), La Liebre Ranch (3411876)

County Summary: Los Angeles

Lat/Long:	34.74608 / -118.67092	Accuracy:	1 mile
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UTM:	Zone-11 N3846156 E347048	Elevation (ft):	3680
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PLSS:	T08N, R17W, Sec. 27 (S)	Acres:	0.0
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Location: SAN ANDREAS RIFT ZONE, VICINITY OF RANCHO CORONA DEL VALLE.

Detailed Location:

Ecological: OPEN WOODLAND OF QUERCUS LOBATA OVER CHRYSOTHAMNUS NAUSEOSUS AND/OR GRASS ACCORDING TO WIESLANDER SURVEY. QUERCUS LOBATA <15%, C. NAUSEOSUS >40%.

General: SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.

Owner/Manager: UNKNOWN



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Occurrence No.	80	Map Index: 00838	EO Index: 15109	Element Last Seen:	1988-04-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1988-04-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-31
Quad Summary:	Liebre Mtn. (3411866)				
County Summary:	Los Angeles				
Lat/Long:	34.72713 / -118.63416		Accuracy:	specific area	
UTM:	Zone-11 N3843999 E350379		Elevation (ft):	4280	
PLSS:	T07N, R17W, Sec. 01 (S)		Acres:	58.9	
Location:	RICHARDSON CANYON, NEAR PINE GROVE RANCH.				
Detailed Location:	HOLLAND, 1988 SAW SAME PLANT ASSEMBLAGE BUT MODIFIED BOUNDARY CONSIDERABLY.				
Ecological:	OPEN WOODLAND OF QUERCUS LOBATA AND PINUS SABINIANA ACCORDING TO WIESLANDER SURVEY.				
General:	SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	81	Map Index: 00817	EO Index: 15108	Element Last Seen:	1988-04-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1988-04-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-31
Quad Summary:	Liebre Mtn. (3411866)				
County Summary:	Los Angeles				
Lat/Long:	34.72925 / -118.64631		Accuracy:	specific area	
UTM:	Zone-11 N3844252 E349271		Elevation (ft):	1200	
PLSS:	T07N, R17W, Sec. 02 (S)		Acres:	36.4	
Location:	INTERMITTENT STREAM ASSOC W/ COW SPRING, SOUTH OF OAKDALE CANYON ROAD.				
Detailed Location:					
Ecological:	OPEN WOODLAND OF QUERCUS LOBATA AND PINUS SABINIANA OVER ARTEMISIA TRIDENTATA ACCORDING TO WIESLANDER SURVEY. OPEN CANOPY QUERCUS LOBATA W/SCATTERED PINUS SABINIANA PER HOLLAND, 1988.				
General:	SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	82	Map Index: 00691	EO Index: 15107	Element Last Seen:	1978-09-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1978-09-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-07-31
Quad Summary:	Liebre Mtn. (3411866), La Liebre Ranch (3411876)				
County Summary:	Los Angeles				
Lat/Long:	34.74876 / -118.70747		Accuracy:	specific area	
UTM:	Zone-11 N3846509 E343707		Elevation (ft):	3800	
PLSS:	T08N, R17W, Sec. 29 (S)		Acres:	43.6	
Location:	NORTH OF QUAIL LAKE FIRE STATION, EAST OF OLD RIDGE ROUTE.				
Detailed Location:	EXTANT, 1978 ACCORDING TO INTERPRETATION OF AERIAL PHOTOGRAPHS.				
Ecological:	OPEN WOODLAND OF QUERCUS LOBATA AND PINUS SABINIANA ACCORDING TO WIESLANDER SURVEY.				
General:	NEEDS FIELD VERIFICATION. SEE WWW.DFG.CA.GOV/BIOGEODATA/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.				
Owner/Manager:	UNKNOWN				



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Occurrence No.	101	Map Index:	00690	EO Index:	13490	Element Last Seen:	1988-04-01
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1988-04-01	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-07-31	
Quad Summary:	Burnt Peak (3411865)						
County Summary:	Los Angeles						
Lat/Long:	34.71256 / -118.55870			Accuracy:	specific area		
UTM:	Zone-11 N3842273 E357264			Elevation (ft):	4120		
PLSS:	T07N, R16W, Sec. 10 (S)			Acres:	84.9		
Location:	VICINITY OF QUAIL LAKE FIRE STATION, EAST OF BALD MOUNTAIN.						
Detailed Location:							
Ecological:	OPEN WOODLAND OF QUERCUS LOBATA WITH SCATTERED PINUS SABINIANA WITH GRASS UNDERSTORY ACCORDING TO WIESLANDER SURVEY, 1935 AND HOLLAND, 1988.						
General:	APPEARS TO BE PARTLY AN INHOLDING W/IN ANGELES NATIONAL FOREST. SEE WWW.DFG.CA.GOV/BIOGEO/VEGCAMP/NATURAL_COMM_BACKGROUND.ASP TO INTERPRET AND ADDRESS THE PRESENCE OF RARE COMMUNITIES.						
Owner/Manager:	UNKNOWN						

<i>Ceratochrysis longimala</i>	Element Code: IIHYM71040
Desert cuckoo wasp	
Listing Status:	Federal: None
	State: None
	Other:
Habitat:	General: <input type="checkbox"/>
	Micro: <input type="checkbox"/>
CNDDDB Element Ranks:	Global: G1
	State: S1

Occurrence No.	2	Map Index:	59280	EO Index:	59316	Element Last Seen:	1959-05-06
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1959-05-06	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2006-12-14	
Quad Summary:	Black Mtn. (3411867)						
County Summary:	Los Angeles, Ventura						
Lat/Long:	34.72371 / -118.86012			Accuracy:	3/5 mile		
UTM:	Zone-11 N3843980 E329681			Elevation (ft):	3900		
PLSS:	T07N, R19W, Sec. 02 (S)			Acres:	0.0		
Location:	HUNGRY VALLEY, 5 MILES SOUTH OF GORMAN.						
Detailed Location:							
Ecological:							
General:	ONE PARATYPE FEMALE, DEPOSITED IN UCD.						
Owner/Manager:	DPR-HUNGRY VALLEY SVRA						



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<i>Plebejus saepiolus aureolus</i>		Element Code: ILEPG6011	
San Gabriel Mountains blue butterfly			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5T1
	State: None		State: S1
	Other:		
Habitat:	General:	TYPE LOCALITY IS A WET MEADOW SEEP IN YELLOW PINE FOREST.	
	Micro:	FOODPLANT IS TRIFOLIUM WORMSKIOLDII.	

Occurrence No.	1	Map Index:	45637	EO Index:	45637	Element Last Seen:	1980-07-15
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1980-07-15	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2005-04-01	
Quad Summary:	Mescal Creek (3411746)						
County Summary:	Los Angeles						
Lat/Long:	34.37868 / -117.69158		Accuracy:	1/5 mile			
UTM:	Zone-11 N3804361 E436418		Elevation (ft):	6860			
PLSS:	T03N, R08W, Sec. 02 (S)		Acres:	0.0			
Location:	0.1 AIR MILES WSW BIG PINES RANGER STATION; BIG PINES.						
Detailed Location:							
Ecological:	WET MEADOW SEEP SURROUNDED BY YELLOW PINE FOREST, TRIFOLIUM WORMSKIOLDII ABUNDANT.						
General:	HOLOTYPE AND ALLOTYPE HOUSED AT THE NATURAL HISTORY MUSEUM OF LA CO. PARATYPES: 8 MALES & 17 FEMALES COLLECTED 6/18/70; 1 MALE & 4 FEMALES COLL. 6/24/70; 1 MALE & 1 FEMALE COLLECTED 6/27/70. 2 SPECIMENS DEP. AT UC DAVIS, COLL. 22 JUN 1969.						
Owner/Manager:	USFS-ANGELES NF						

<i>Oreonana vestita</i>		Element Code: PDAP11G030	
woolly mountain-parsley			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G3
	State: None		State: S3
	Other:	Rare Plant Rank - 1B.3, SB_RSABG-Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	
Habitat:	General:	SUBALPINE CONIFEROUS FOREST, UPPER MONTANE CONIFEROUS FOREST.	
	Micro:	HIGH RIDGES; ON SCREE, TALUS, OR GRAVEL. 2410-3500 M.	



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Occurrence No.	38	Map Index: 85437	EO Index: 86451	Element Last Seen:	2008-06-10
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-06-10
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-16

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.39600 / -117.85178	Accuracy:	1/10 mile
UTM:	Zone-11 N3806394 E421704	Elevation (ft):	6375
PLSS:	T04N, R09W, Sec. 29 (S)	Acres:	0.0

Location: DEVILS PUNCHBOWL CO PARK; PEAK 6374 AT EXTREME SW CORNER OF PARK, ON EXTENSION OF PLEASANT VIEW RIDGE, SAN GABRIEL MTNS.
Detailed Location: MAPPED BY CNDDDB ACCORDING TO A 2008 SWINNEY COLLECTION IN THE SW 1/4 OF THE SW 1/4 OF SECTION 29, AT PEAK 6374.
Ecological: MOUNTAIN PEAK WITH DARK BROWN SOIL AND COARSE RUST-COLORED GRAVEL TO 2 IN DIAMETER. CONIFEROUS FOREST WITH PINUS JEFFREYI, CEANOTHUS GREGGII, ARCTOSTAPHYLOS, ERIODICTYON TRICHOCALYX, ETC.
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2008 SWINNEY COLLECTION; MENTIONED AS "SCARCE."
Owner/Manager: LAX COUNTY

Occurrence No.	39	Map Index: 85444	EO Index: 86457	Element Last Seen:	2008-07-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-07-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-14

Quad Summary: Juniper Hills (3411748)
County Summary: Los Angeles

Lat/Long:	34.38502 / -117.88440	Accuracy:	1/10 mile
UTM:	Zone-11 N3805202 E418696	Elevation (ft):	7720
PLSS:	T04N, R10W, Sec. 36 (S)	Acres:	0.0

Location: PALLETT MOUNTAIN, 0.5 MILE EAST OF BURKHART SADDLE, 5 MILES NORTH OF BUCKHORN FLAT CAMP, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED BY CNDDDB BY ACCORDING TO A 2008 SWINNEY COLLECTION NEAR THE CENTER OF THE SW 1/4 OF SECTION 36.
Ecological: CONIFEROUS FOREST ON MOUNTAIN PEAK. WITH ELYMUS ELYMOIDES, IVESIA SANTOLINOIDES, ERIOGONUM WRIGHTII, E. KENNEDYI, ETC.
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2008 SWINNEY COLLECTION; MENTIONED AS ABUNDANT. NEEDS FIELDWORK.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	40	Map Index: 85446	EO Index: 86459	Element Last Seen: 1968-07-23
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1968-07-23
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2012-03-14

Quad Summary: Juniper Hills (3411748)

County Summary: Los Angeles

Lat/Long:	34.38766 / -117.89365	Accuracy:	1/5 mile
UTM:	Zone-11 N3805502 E417848	Elevation (ft):	6900
PLSS:	T04N, R10W, Sec. 35 (S)	Acres:	0.0

Location: NORTH SIDE OF BURKHART SADDLE, 0.5 MILES WEST OF PALLETT MOUNTAIN, SAN GABRIEL MOUNTAINS.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB ON THE NORTH SIDE OF BURKHART SADDLE TO ENCOMPASS ELEVATIONS OF 6900 FT (2105 M) ACCORDING TO A 1968 WHEELER COLLECTION.

Ecological: DRY, SUNNY, DECOMPOSING GRANITE, SANDY LOAM.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1968 WHEELER COLLECTION. NEEDS FIELDWORK.

Owner/Manager: USFS-ANGELES NF

<i>Eriophyllum mohavense</i>		Element Code: PDAST3N070
Barstow woolly sunflower		
Listing Status:	Federal: None	CNDDDB Element Ranks: Global: G2
	State: None	State: S2
	Other: Rare Plant Rank - 1B.2, BLM_S-Sensitive	
Habitat:	General: DESERT CHENOPOD SCRUB, MOJAVEAN DESERT SCRUB, DESERT PLAYAS.	
	Micro: MOSTLY IN OPEN, SILTY OR SANDY AREAS W/SALTBUSH SCRUB, OR CREO. BUSH SCRUB. BARREN RIDGES OR MARGINS OF PLAYAS. 500-900M	

Occurrence No.	64	Map Index: 84196	EO Index: 85218	Element Last Seen: 2011-04-13
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen: 2011-04-13
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2011-11-07

Quad Summary: Adobe Mountain (3411766)

County Summary: Los Angeles, San Bernardino

Lat/Long:	34.74422 / -117.66689	Accuracy:	80 meters
UTM:	Zone-11 N3844882 E438955	Elevation (ft):	2945
PLSS:	T08N, R07W, Sec. 31 (S)	Acres:	0.0

Location: ALONG 260TH STREET EAST, 0.65 MILE NORTH OF INTERSECTION WITH SHADOW MOUNTAIN ROAD, EL MIRAGE VALLEY.

Detailed Location: PLANTS LOCATED 15 METERS TO THE EAST OF 260TH STREET. MAPPED BY CNDDDB IN THE SW 1/4 OF THE NW 1/4 OF SECTION 31 ACCORDING TO 2011 COORDINATES PROVIDED BY MCINTYRE.

Ecological: HABITAT IS SIMILAR TO THAT OF ERMO NEAR KRAMER JUNCTION, OCCURRS IN EDGES OF BARE PATCHES OF GROUND. AREA HAS TREMENDOUS BLOOM OF LASTHENIA CALIFORNICA. ALSO ASSOCIATED WITH LEPIDIUM FLAVUM VAR. FLAVUM AND ATRIPLEX SPINIFERA.

General: ~35 PLANTS OBSERVED IN 2011. APPEARS TO BE EXTENSIVE HABITAT ALONG 260TH ST; THIS SITE WAS ONLY SITE WHERE PLANTS SEEN IN A QUICK SURVEY, THOUGH THERE MAY BE ADDITIONAL POPULATIONS IN THE AREA.

Owner/Manager: PVT?



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<i>Layia heterotricha</i>		Element Code: PDAST5N070	
pale-yellow layia			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G2
	State: None		State: S2
	Other: Rare Plant Rank - 1B.1, BLM_S-Sensitive, SB_SBBG-Santa Barbara Botanic Garden, USFS_S-Sensitive		
Habitat:	General: CISMONTANE WOODLAND, PINYON-JUNIPER WOODLAND, VALLEY AND FOOTHILL GRASSLAND.		
	Micro: ALKALINE OR CLAY SOILS; OPEN AREAS. 270-1365 (2675) M.		

Occurrence No.	35	Map Index:	27633	EO Index:	67357	Element Last Seen:	1895-05-08
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1895-05-08	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2006-11-22	

Quad Summary: Lancaster East (3411861), Lancaster West (3411862)
County Summary: Los Angeles

Lat/Long:	34.69828 / -118.13809	Accuracy:	1 mile
UTM:	Zone-11 N3840173 E395765	Elevation (ft):	
PLSS:	T07N, R12W, Sec. 15 (S)	Acres:	0.0

Location: LANCASTER.
Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS NEAR LANCASTER.
Ecological:
General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS AN 1895 COLLECTION BY DAVIDSON. NEEDS FIELDWORK.
Owner/Manager: UNKNOWN

<i>Stylocline masonii</i>		Element Code: PDAST8Y080	
Mason's neststraw			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G1
	State: None		State: S1
	Other: Rare Plant Rank - 1B.1, BLM_S-Sensitive, USFS_S-Sensitive		
Habitat:	General: CHENOPOD SCRUB, PINYON-JUNIPER WOODLAND.		
	Micro: SANDY WASHES. 100-1200 M.		

Occurrence No.	1	Map Index:	23828	EO Index:	19443	Element Last Seen:	1991-04-30
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1991-04-30	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1993-08-20	

Quad Summary: Acton (3411842)
County Summary: Los Angeles

Lat/Long:	34.46836 / -118.18708	Accuracy:	nonspecific area
UTM:	Zone-11 N3814728 E390978	Elevation (ft):	2720
PLSS:	T05N, R13W, Sec. 36 (S)	Acres:	37.7

Location: SOLEDAD CANYON, 0.8 KM (0.5 MI) EAST OF ACTON.
Detailed Location: BROAD, SANDY WASH 2600 FT ESE OF ACTON. SE 1/4 OF THE SE 1/4 OF SECTION 36.
Ecological: GROWING IN ASSOCIATION WITH ARTEMISIA TRIDENTATA SSP. PARISHII, EPHEDRA SP., RUMEX HYMENOSEPALUS, PENSTEMON SPECTABILIS, STYLOCLINE PSILOCARPHOIDES, NEMOPHILA MENZIESII, CRYPTANTHA MICRANTHA, PHACELIA FREMOTII, AND CLAYTONIA EXIGUA.
General: FIRST REPORT FOR LOS ANGELES COUNTY.
Owner/Manager: UNKNOWN



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<i>Symphotrichum greatae</i>		Element Code: PDASTE80U0	
Greata's aster			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G2
	State: None		State: S2.3
	Other: Rare Plant Rank - 1B.3, BLM_S-Sensitive		
Habitat:	General: CHAPARRAL, CISMONTANE WOODLAND.		
	Micro: MESIC CANYONS. 800-1500 M.		

Occurrence No.	10	Map Index: 58442	EO Index: 58478	Element Last Seen:	1995-07-12
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1995-07-12
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2004-12-09
Quad Summary:	Juniper Hills (3411748)				
County Summary:	Los Angeles				
Lat/Long:	34.40731 / -117.96431		Accuracy:	nonspecific area	
UTM:	Zone-11 N3807741 E411373		Elevation (ft):	4000	
PLSS:	T04N, R10W, Sec. 30 (S)		Acres:	22.6	
Location:	SAN GABRIEL MOUNTAINS, LITTLE ROCK CREEK JUST SOUTH OF CONFLUENCE WITH SOUTH FORK LITTLE ROCK CREEK.				
Detailed Location:					
Ecological:	NEAR STREAM IN MOIST GRANITIC SAND IN PARTIAL SUN. ASSOCIATED WITH PLATANUS RACEMOSA, JUNCUS MACROPHYLLUS, ALNUS RHOMBIFOLIA, BOYKINIA ROTUNDIFOLIA, SALIX LASIOLEPIS, MELIOLOTUS ALBUS, AND ARTEMISIA LUDOVICIANA.				
General:	4 PLANTS SEEN IN 1995.				
Owner/Manager:	USFS-ANGELES NF				

Occurrence No.	11	Map Index: 58443	EO Index: 58479	Element Last Seen:	1994-09-27
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1994-09-27
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2004-12-09
Quad Summary:	Juniper Hills (3411748), Pacifico Mountain (3411841)				
County Summary:	Los Angeles				
Lat/Long:	34.43806 / -117.99899		Accuracy:	nonspecific area	
UTM:	Zone-11 N3811182 E408220		Elevation (ft):	3700	
PLSS:	T04N, R11W, Sec. 14 (S)		Acres:	48.5	
Location:	SAN GABRIEL MOUNTAINS, LITTLE ROCK CREEK, JUST ABOVE AND BELOW CONFLUENCE WITH BARE MOUNTAIN CANYON.				
Detailed Location:	MAPPED ALONG LITTLE ROCK CREEK NEAR THE CONFLUENCE WITH BARE MOUNTAIN CANYON.				
Ecological:	NEAR STREAM IN MOIST, COARSE SAND IN PARTIAL SUN. ASSOCIATED WITH BACCHARIS SALICIFOLIA, SALIX LASIOLEPIS, TYPHA DOMINGUENSIS, EQUISETUM SP., AND ARTEMISIA DRACUNCULUS.				
General:	SMALL POPULATION OF SEVERAL INDIVIDUALS IN 1995.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	34	Map Index: 58685	EO Index: 58721	Element Last Seen:	1994-06-21
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1994-06-21
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2004-12-16
Quad Summary:	Pacifico Mountain (3411841)				
County Summary:	Los Angeles				
Lat/Long:	34.40184 / -118.03442		Accuracy:	1/10 mile	
UTM:	Zone-11 N3807198 E404923		Elevation (ft):	5200	
PLSS:	T04N, R11W, Sec. 28 (S)		Acres:	0.0	
Location:	SAN GABRIEL MOUNTAINS, SANTIAGO CANYON.				
Detailed Location:	MAPPED IN THE NW 1/4 OF SE 1/4 OF SEC 28.				
Ecological:	IN STREAM BOTTOM IN FULL SHADE ON MOIST, COARSE GRANITIC LOAM. ASSOCIATED WITH AQUILEGIA FORMOSA, CAREX CF. ALMA, PSEUDOTSUGA MACROCARPA, CALOEDRUS DECURRENS, AND ALNUS RHOMBIFOLIA.				
General:	"SMALL GROUP" OF PLANTS SEEN IN 1994.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	35	Map Index: 58686	EO Index: 58722	Element Last Seen:	1995-05-23
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1995-05-23
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2004-12-16
Quad Summary:	Pacifico Mountain (3411841)				
County Summary:	Los Angeles				
Lat/Long:	34.40751 / -118.00974		Accuracy:	1/10 mile	
UTM:	Zone-11 N3807803 E407197		Elevation (ft):	4450	
PLSS:	T04N, R11W, Sec. 26 (S)		Acres:	0.0	
Location:	SAN GABRIEL MOUNTAINS, BARE MOUNTAIN CANYON.				
Detailed Location:	MAPPED IN THE NW 1/4 OF NW 1/4 OF SEC 26.				
Ecological:	ADJACENT TO STREAM ON MOIST GRANITIC LOAM IN PARTIAL SUN. ASSOCIATED WITH ALNUS RHOMBIFOLIA, BROMUS DIANDRUS, CLEMATIS LIGUISTICIFOLIA, AND ARTEMISIA DOUGLASIANA.				
General:	FEWER THAN 20 PLANTS IN 1995.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	36	Map Index: 02088	EO Index: 58723	Element Last Seen:	1893-08-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1893-08-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2004-12-16
Quad Summary:	Acton (3411842)				
County Summary:	Los Angeles				
Lat/Long:	34.47010 / -118.19618		Accuracy:	1 mile	
UTM:	Zone-11 N3814930 E390144		Elevation (ft):		
PLSS:	T05N, R13W, Sec. 36 (S)		Acres:	0.0	
Location:	ACTON.				
Detailed Location:	MAPPED AS BEST GUESS IN THE VICINITY OF ACTION.				
Ecological:					
General:	ONLY SOURCE IS 1893 COLLECTION. NEEDS FIELDWORK.				
Owner/Manager:	UNKNOWN				



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Occurrence No.	40	Map Index: 59089	EO Index: 59125	Element Last Seen:	2001-06-24
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2001-06-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2005-01-04

Quad Summary: Burnt Peak (3411865), Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.63522 / -118.62625	Accuracy:	nonspecific area
UTM:	Zone-11 N3833795 E350938	Elevation (ft):	2600
PLSS:	T06N, R17W, Sec. 01 (S)	Acres:	49.9

Location: LIEBRE MOUNTAINS, FISH CANYON, 2.0 MILES NORTH OF CIENEGA CAMPGROUND.

Detailed Location: MAPPED APPROXIMATELY 2.0 MILES NORTH OF CIENEGA CAMPGROUND ALONG FISH CANYON, NEAR ELEVATION PROVIDED.

Ecological: ALONG STREAM IN RIPARIAN WOODLAND. ASSOCIATED WITH ALNUS RHOMBIFOLIA, SALIX LAEVIGATA, QUERCUS CHRYSOLEPIS, TYPHA LATIFOLIA, XANTHIUM STRUMARIUM, AND JUNCUS MICROPHYLLUS.

General:

Owner/Manager: USFS-ANGELES NF

<i>Cryptantha clokeyi</i>			Element Code: PDBORA3M0
Clokey's cryptantha			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G2
	State: None		State: S2
	Other: Rare Plant Rank - 1B.2, BLM_S-Sensitive		
Habitat:	General: MOJAVEAN DESERT SCRUB.		
	Micro: SANDY OR GRAVELLY SOILS. ONE SITE: 850M.		

Occurrence No.	7	Map Index: 78565	EO Index: 79495	Element Last Seen:	2003-04-14
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2003-04-14
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-04-13

Quad Summary: Del Sur (3411863), Lake Hughes (3411864), Fairmont Butte (3411874)

County Summary: Los Angeles

Lat/Long:	34.73679 / -118.38335	Accuracy:	nonspecific area
UTM:	Zone-11 N3844726 E373359	Elevation (ft):	
PLSS:	T08N, R14W, Sec. 32 (S)	Acres:	1787.0

Location: ANTELOPE VALLEY CALIFORNIA POPPY RESERVE.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB NON-SPECIFICALLY TO ENCOMPASS THE ENTIRE RESERVE. THIS IS NOT THE BEST, BUT WE NEED BETTER LOCATION DATA.

Ecological: VALLEY GRASSLAND IN SANDY SOIL DOMINATED BY ERODIUM CICUTARIUM, ESCHSCHOLZIA, PLATYSTEMON CALIFORNICUS, POA, CHAENACTIS, AND LINANTHUS.

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 2003 COLLECTION BY DEAN, ET AL.

Owner/Manager: DPR-ANTELOPE VALLEY CA POP RES



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<i>Plagiobothrys parishii</i>		Element Code: PDBOR0V0U0	
Parish's popcornflower			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G1
	State: None		State: S1
	Other: Rare Plant Rank - 1B.1, USFS_S-Sensitive		
Habitat:	General: GREAT BASIN SCRUB, JOSHUA TREE WOODLAND.		
	Micro: ALKALINE SOILS; MESIC SITES. 750-1400M.		

Occurrence No.	3	Map Index:	55449	EO Index:	55449	Element Last Seen:	1917-04-08
Occ. Rank:	None	Presence:	Extirpated	Site Last Seen:		1917-04-08	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2004-05-12	
Quad Summary:	Lovejoy Buttes (3411757)						
County Summary:	Los Angeles						
Lat/Long:	34.60522 / -117.82677		Accuracy:	3/5 mile			
UTM:	Zone-11 N3829576 E424193		Elevation (ft):	2700			
PLSS:	T06N, R09W, Sec. 15 (S)		Acres:	0.0			
Location:	LOVEJOY SPRINGS, ABOUT 16 MILES NORTHEAST OF PALMDALE.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDDB IN THE VICINITY OF LOVEJOY SPRINGS ON THE EAST SIDE OF LOVEJOY BUTTES, APPROXIMATELY 1.7 MILES NORTH OF PALMDALE AVENUE.						
Ecological:	IN SWAMPY SOIL.						
General:	UNKNOWN NUMBER OF PLANTS SEEN IN 1917. PER TIM THOMAS IN 1999, PLANTS ARE EXTIRPATED FROM THIS SITE.						
Owner/Manager:	UNKNOWN						



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<i>Boechera lincolnensis</i>		Element Code: PDBRA061M3	
Lincoln rockcress			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G4?
	State: None		State: S2
	Other: Rare Plant Rank - 2B.3, BLM_S-Sensitive		
Habitat:	General: CHENOPOD SCRUB, MOJAVEAN DESERT SCRUB.		
	Micro: ON LIMESTONE. 1100-2075M.		

Occurrence No.	8	Map Index:	81492	EO Index:	82472	Element Last Seen:	2005-03-13
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2005-03-13	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2011-01-28	
Quad Summary:	Lake Hughes (3411864), Burnt Peak (3411865), Fairmont Butte (3411874), Neenach School (3411875)						
County Summary:	Los Angeles						
Lat/Long:	34.75320 / -118.49292		Accuracy:	nonspecific area			
UTM:	Zone-11 N3846689 E363354		Elevation (ft):				
PLSS:	T08N, R15W, Sec. 29 (S)		Acres:	629.0			
Location:	RIPLEY DESERT WOODLAND STATE PARK, FAIRMONT.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB TO ENCOMPASS ALL OF ARTHUR B. RIPLEY DESERT WOODLAND STATE PARK (T08N R15W SECTION 29).						
Ecological:							
General:	ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 2005 PHOTO BY MILLER IN CALPHOTOS. NEEDS POPULATION INFORMATION.						
Owner/Manager:	DPR-RIPLEY DESERT WOODLAND SP						

<i>Opuntia basilaris var. brachyclada</i>		Element Code: PDCAC0D053	
short-joint beavertail			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5T3
	State: None		State: S3
	Other: Rare Plant Rank - 1B.2, BLM_S-Sensitive, SB_RSABG-Rancho Santa Ana Botanic Garden, USFS_S-Sensitive		
Habitat:	General: CHAPARRAL, JOSHUA TREE WOODLAND, MOJAVEAN DESERT SCRUB, PINYON-JUNIPER WOODLAND, RIPARIAN WOODLAND.		
	Micro: SANDY SOIL OR COARSE, GRANITIC LOAM. 425-1800 M.		



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Occurrence No.	5	Map Index:	02830	EO Index:	21485	Element Last Seen:	2011-06-26
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2011-06-26	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-12-27	

Quad Summary: Mescal Creek (3411746)

County Summary: Los Angeles

Lat/Long:	34.40805 / -117.71672	Accuracy:	specific area
UTM:	Zone-11 N3807634 E434129	Elevation (ft):	5100
PLSS:	T04N, R08W, Sec. 21 (S)	Acres:	66.7

Location: MESCAL CREEK EAST OF BIG JOHN FLAT, NORTH SLOPE, SAN GABRIEL MOUNTAINS.

Detailed Location: PLANTS LOCATED ON BOTH SIDES OF CANYON ABOVE DRAINAGE BUT PRIMARILY ON E SIDE AND MOST ABUNDANT IN SIDE DRAINAGE. MAPPED BETWEEN 5000' AND 5300' ELEVATION MOSTLY WITHIN THE E 1/2 SECTION 21 ACCORDING TO A 1991 MISTRETTA & PARRA-SZIJJ MAP.

Ecological: PINYON WOODLAND/SOUTHERN MIXED CHAPARRAL GROWING WITH PINUS MONOPHYLLA, QUERCUS CHRYSOLEPIS, EPHEDRA, CERCOCARPUS BETULOIDES, YUCCA WHIPPLEI, ARCTOSTAPHYLOS GLAUCA, CEANOTHUS GREGGII, ERIOGONUM FASCICULATUM, AND ERIODICTYON TRICHOCALYX.

General: 105 PLANTS OBSERVED IN 1990. 6 PLANTS OBSERVED IN ONE AREA IN 2011; 4 PLANTS DID NOT APPEAR IN VERY GOOD CONDITION. 2 HISTORIC COLLECTIONS BY EWAN FROM 1936 FROM ALONG MESCAL CREEK ALSO ATTRIBUTED TO THIS SITE.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	6	Map Index:	02729	EO Index:	21482	Element Last Seen:	1990-03-28
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1990-03-28	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2009-11-30	

Quad Summary: Valyermo (3411747)

County Summary: Los Angeles

Lat/Long:	34.41602 / -117.76943	Accuracy:	nonspecific area
UTM:	Zone-11 N3808553 E429292	Elevation (ft):	4900
PLSS:	T04N, R09W, Sec. 24 (S)	Acres:	135.4

Location: LARGO VISTA; ALONG 204TH STREET EAST/LARGO VISTA RD JUST NORTH OF BIG PINES HIGHWAY, NORTH SLOPE SAN GABRIEL MOUNTAINS.

Detailed Location: MAPPED BY MISTRETTA ALONG ROAD BETWEEN MILE HIGH AND LARGO VISTA (N POLYGON); ADDITIONAL POPULATION WAS REPORTED AT INTERSECTION OF LA COUNTY ROUTE N4 AND THE ROAD FROM WRIGHTWOOD TO PEAR BLOSSOM (S POLYGON).

Ecological: PINYON WOODLAND, JOSHUA TREE WOODLAND, AND PINYON-CHAPARRAL ECOTONE. ASSOCIATED WITH ARTEMISIA TRIDENTATA, PINUS MONOPHYLLA, STIPA, HAPLOPAPPUS, CERCOCARPUS BETULOIDES, CEANOTHUS GREGGII, YUCCA WHIPPLEI, Y. BREVIFOLIA, ARCTOSTAPHYLOS, ETC.

General: 140 PLANTS OBSERVED IN 1990 IN N-MOST POLYGON. S-MOST POLYGON BASED ON A 1969 BENSON COLLECTION. PLANTS IN THIS POP EXHIBIT A VARIETY OF MORPHOLOGICAL FORMS FROM VERY VAR. BASILARIS-LIKE TO TYPICAL VAR. BRACHYCLADA, SOMETIMES ON SAME PLANT.

Owner/Manager: USFS-ANGELES NF, PVT



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Occurrence No.	7	Map Index: 38944	EO Index: 33951	Element Last Seen:	1952-03-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1952-03-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-12-09

Quad Summary: Valyermo (3411747)

County Summary: Los Angeles

Lat/Long: 34.44724 / -117.85401 **Accuracy:** 1 mile

UTM: Zone-11 N3812078 E421548 **Elevation (ft):**

PLSS: T04N, R09W, Sec. 07 (S) **Acres:** 0.0

Location: VALYERMO.

Detailed Location: MAPPED ALONG NORTH SLOPE OF SAN GABRIEL MOUNTAINS IN VICINITY OF THE TOWN OF VALYERMO.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1952 WIEGAND COLLECTION. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN

Occurrence No.	22	Map Index: 38942	EO Index: 33949	Element Last Seen:	1991-08-17
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	1991-08-17
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-06-12

Quad Summary: Mescal Creek (3411746)

County Summary: Los Angeles

Lat/Long: 34.42865 / -117.69631 **Accuracy:** specific area

UTM: Zone-11 N3809905 E436021 **Elevation (ft):** 4300

PLSS: T04N, R08W, Sec. 15 (S) **Acres:** 7.9

Location: DOUBLE G RANCH, NEAR MOUTH OF JESUS CANYON, NORTH SLOPE SAN GABRIEL MOUNTAINS.

Detailed Location: MAPPED WITHIN THE SE 1/4 SE 1/4 SECTION 15.

Ecological: UPLAND CHAPARRAL WITH CEANOTHUS, FREMONTODENDRON, QUERCUS BERBERIDIFOLIA, AND YUCCA WHIPPLEI. EXPOSED S-FACING SLOPE ON COARSE SANDY-ROCKY SOIL.

General: 2 PLANTS OBSERVED IN 1991. MORE WORK NEEDED ON THIS POPULATION. YORKE SUGGESTS PLANTS MAY BE HYBRIDS BETWEEN VAR. BRACHYCLADA AND VAR. BASILARIS.

Owner/Manager: PVT



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Occurrence No.	23	Map Index: 38939	EO Index: 33946	Element Last Seen: 1990-03-28
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 1990-03-28
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2009-11-30
Quad Summary:	Mescal Creek (3411746)			
County Summary:	Los Angeles			
Lat/Long:	34.41624 / -117.73847		Accuracy: specific area	
UTM:	Zone-11 N3808556 E432137		Elevation (ft): 5500	
PLSS:	T04N, R08W, Sec. 20 (S)		Acres: 348.3	
Location:	BIG JOHN FLAT AND UPPER BOULDER CANYON, NORTH SLOPE SAN GABRIEL MOUNTAINS.			
Detailed Location:	MAPPED MOSTLY WITHIN THE S 1/2 SECTION 20, THE SW 1/4 NW 1/4 SECTION 21, THE E 1/2 NW 1/4 SECTION 29, AND THE SW 1/4 NE 1/4 SECTION 29 ACCORDING TO A 1991 MISTRETTA & PARRA-SZIJJ MAP.			
Ecological:	PINYON WOODLAND, JOSHUA TREE WOODLAND, AND CHAPARRAL. ASSOCIATED WITH ARTEMISIA TRIDENTATA, PINUS MONOPHYLLA, CERCOARPUS BETULOIDES, YUCCA WHIPPLEI, Y. BREVIFOLIA, BROMUS, ERIOGONUM FASCICULATUM, ADENOSTOMA FASCICULATUM, EPHEDRA, ET AL.			
General:	SEEN HERE IN 1989. 200 PLANTS OBSERVED IN 1990. THIS POPULATION MAY BE CONTINUOUS WITH THE LARGO VISTA POPULATION (OCCURRENCE #6). THIS IS THE LARGEST CONCENTRATION OF THIS TAXON IN THE SAN GABRIELS.			
Owner/Manager:	USFS-SAN BERNARDINO NF			
Occurrence No.	24	Map Index: 38940	EO Index: 33947	Element Last Seen: 1990-02-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1990-02-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2009-12-01
Quad Summary:	Mescal Creek (3411746)			
County Summary:	San Bernardino			
Lat/Long:	34.38304 / -117.63523		Accuracy: 80 meters	
UTM:	Zone-11 N3804811 E441601		Elevation (ft): 5600	
PLSS:	T03N, R07W, Sec. 05 (S)		Acres: 0.0	
Location:	EAST SLOPE OF TABLE MOUNTAIN ABOUT 0.7 MILE SOUTH OF OAK SPRING RANCH, NORTH SLOPE SAN GABRIEL MOUNTAINS.			
Detailed Location:	MAPPED ABOUT 1 MILE EAST OF LAX/SBD COUNTY LINE ALONG DIRT ROAD RIGHT ON THE LINE BETWEEN SECTIONS 32 AND 5.			
Ecological:	RIPARIAN PINYON-JUNIPER WOODLAND GROWING WITH QUERCUS.			
General:	SEVERAL PLANTS OBSERVED BY B. KING (ANGELES NF) IN 1990 AND REPORTED TO MISTRETTA ET AL.			
Owner/Manager:	USFS-ANGELES NF			



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Occurrence No.	25	Map Index: 38947	EO Index: 33954	Element Last Seen:	2011-08-07
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2011-08-07
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-02-29

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.39459 / -117.81700	Accuracy:	specific area
UTM:	Zone-11 N3806211 E424901	Elevation (ft):	4800
PLSS:	T04N, R09W, Sec. 34 (S)	Acres:	12.0

Location: SOUTH FORK BIG ROCK CREEK, MANZANITA TRAIL ABOVE SOUTH FORK CAMPGROUND, ABOUT 4 AIR MI NORTHWEST OF MT BADEN-POWELL.
Detailed Location: GROWING ALONG TRAIL. MAPPED BY CNDDDB ACCORDING TO COORDINATES IN A 2011 DAVIS FIELD SURVEY.
Ecological: IN VARIOUS TYPES OF SOIL, MOST CONTAINING DECOMPOSED GRANITE. WITH GARRYA FLAVESCENS, CERCOCARPUS BETULOIDES, OROBANCHE VALIDA SSP VALIDA, YUCCA WHIPPLEI, ERIOGONUM FASCICULATUM, ERIOGONUM MICROTHECUM, AND ARCTOSTAPHYLOS GLAUCA.
General: SITE BASED ON A 2011 DAVIS FIELD SURVEY; 21 PLANTS SEEN. AN UNDATED COLLECTION BY PARFITT, AS CITED IN PINKAVA ET AL., 1992 FROM "TRAILHEAD AT ENTRANCE TO SOUTH FORK CAMPGROUND" IS ALSO ATTRIBUTED TO THIS SITE.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	26	Map Index: 38948	EO Index: 33955	Element Last Seen:	1990-06-15
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1990-06-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-12-21

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.40901 / -117.80347	Accuracy:	specific area
UTM:	Zone-11 N3807800 E426158	Elevation (ft):	5800
PLSS:	T04N, R09W, Sec. 27 (S)	Acres:	141.6

Location: PINYON RIDGE, ABOUT 3-4 MILES SOUTHEAST OF VALYERMO, NORTH SLOPE SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED ALONG RIDGETOP WITHIN THE S 1/2 SECTION 22, NE 1/4 SECTION 27, AND NW 1/4 SECTION 26.
Ecological: PINYON WOODLAND-CHAPARRAL ECOTONE. ASSOCIATED WITH PINUS MONOPHYLLA, FREMONTODENDRON CALIFORNICA, QUERCUS TURBINELLA, CERCOCARPUS BETULOIDES, CEANOTHUS GREGGII, CHRYSOTHAMNUS NAUSEOSUS, AND YUCCA WHIPPLEI.
General: 60 PLANTS ESTIMATED IN 1990. EFFECT OF DISTURBANCES NOT KNOWN.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	27	Map Index: 38949	EO Index: 33956	Element Last Seen:	2011-07-23
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen:	2011-07-23
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-02-29

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.39794 / -117.82833	Accuracy:	specific area
UTM:	Zone-11 N3806591 E423862	Elevation (ft):	4700
PLSS:	T04N, R09W, Sec. 28 (S)	Acres:	15.0

Location: SOUTH FORK BIG ROCK CREEK; ALONG TRAIL ABOUT 0.5 MILE NW OF SOUTH FORK CAMPGROUND, NORTH SLOPE SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED BY CNDDDB ACCORDING TO 1990 MAP AND COORDINATES IN 2011 DAVIS FIELD SURVEY.
Ecological: N-FACING SLOPE IN CHAPARRAL ASSOCIATED WITH EPHEDRA, CERCOARPUS BETULOIDES, PINUS MONOPHYLLA, FREMONTODENDRON CALIFORNICUM, ERIOGONUM FASCICULATUM, YUCCA WHIPPLEI, GARRYA FLAVESCENS, AND ARTEMISIA TRIDENTATA.
General: 5 PLANTS OBSERVED IN PRELIMINARY SURVEY ALONG TRAIL IN 1990; MORE LIKELY IN THE AREA. ONE PLANT EXHIBITED CHARACTERISTICS OF O. BASILARIS VAR. BASILARIS. 5 SEEN ON 06/12/2011 AND 7 PLANTS SEEN ON 07/23/2012, BOTH AT SMALL PORTIONS OF SITE.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	28	Map Index: 38950	EO Index: 33957	Element Last Seen:	2011-07-23
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen:	2011-07-23
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-02-29

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.40065 / -117.83829	Accuracy:	specific area
UTM:	Zone-11 N3806899 E422950	Elevation (ft):	4600
PLSS:	T04N, R09W, Sec. 29 (S)	Acres:	12.4

Location: DEVILS PUNCHBOWL COUNTY PARK; ALONG TRAIL ABOUT 1 MILE UPSTREAM FROM BIG ROCK CREEK RD IN HOLCOMB CANYON.
Detailed Location: MAPPED BY CNDDDB AS 2 POLYGONS ON BOTH SIDES OF CANYON ALONG USFS TRAIL 10W09 WITHIN THE SE 1/4 SECTION 29, IN DEVILS PUNCHBOWL COUNTY PARK.
Ecological: N-FACING SLOPE IN CHAPARRAL/PINYON-JUNIPER TRANSITION IN ASSOCIATION WITH CERCOARPUS BETULOIDES, PINUS MONOPHYLLA, FREMONTODENDRON CALIFORNICUM, ERIOGONUM FASCICULATUM, AND YUCCA WHIPPLEI.
General: 4 PLANTS OBSERVED IN PRELIMINARY SURVEY ALONG TRAIL IN 1990; MORE PLANTS LIKELY IN THE AREA. 4 PLANTS SEEN IN 2011 AT E POLYGON.
Owner/Manager: LAX COUNTY



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Occurrence No.	29	Map Index: 38951	EO Index: 33958	Element Last Seen: 1990-03-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1990-03-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2009-12-01

Quad Summary: Juniper Hills (3411748)

County Summary: Los Angeles

Lat/Long:	34.40801 / -117.96370	Accuracy:	80 meters
UTM:	Zone-11 N3807817 E411430	Elevation (ft):	4200
PLSS:	T04N, R10W, Sec. 30 (S)	Acres:	0.0

Location: LITTLE ROCK CREEK; ABOUT 0.25 MILE UPSTREAM FROM CONFLUENCE WITH SOUTH FORK LITTLE ROCK CREEK, SAN GABRIEL MOUNTAINS.

Detailed Location: MAPPED ON NORTH SIDE OF CREEK WITHIN THE NW 1/4 NE 1/4 SECTION 30.

Ecological: S-FACING SLOPE IN CHAPARRAL/SAGEBRUSH TRANSITION IN ASSOCIATION WITH ARTEMISIA TRIDENTATA, EPHEDRA, YUCCA WHIPPLEI, ERIOGONUM FASCICULATUM, SALVIA MELLIFERA, AND PELLAEA ANDROMEDIFOLIA.

General: 10 PLANTS OBSERVED IN 1990. MORE FLOWER BUDS OBSERVED ON THESE PLANTS THAN AT ANY OTHER LOCATION.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	30	Map Index: 38954	EO Index: 33961	Element Last Seen: 1992-05-08
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1992-05-08
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2009-12-01

Quad Summary: Juniper Hills (3411748)

County Summary: Los Angeles

Lat/Long:	34.45037 / -117.99243	Accuracy:	1/10 mile
UTM:	Zone-11 N3812540 E408835	Elevation (ft):	4700
PLSS:	T04N, R11W, Sec. 12 (S)	Acres:	0.0

Location: ALIMONY RIDGE, ABOUT 3.6 MILES NORTH OF BARE MOUNTAIN, SAN GABRIEL MOUNTAINS.

Detailed Location: ADJACENT TO ALIMONY RIDGE OHV TRAIL ABOVE CIMA MESA AND JUNIPER HILLS. MAPPED ABOUT 0.9 MILE WEST OF USFS BOUNDARY.

Ecological: IN FULL SUN/PARTIAL SHADE ON COARSE, GRANITIC LOAM WITH PINUS MONOPHYLLA, JUNIPERUS CALIFORNICA, POA SECUNDA, QUERCUS JOHN-TUCKERI, AND ERIOPHYLLUM CONFERTIFOLIUM.

General: 50 PLANTS OBSERVED ALONG RIDGE IN SMALL, INTERMITTENT GROUPS IN 1992.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	31	Map Index: 38955	EO Index: 33962	Element Last Seen: 1994-05-23
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1994-05-23
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-06-15

Quad Summary: Juniper Hills (3411748)

County Summary: Los Angeles

Lat/Long:	34.42589 / -117.97409	Accuracy:	1/10 mile
UTM:	Zone-11 N3809809 E410494	Elevation (ft):	4200
PLSS:	T04N, R10W, Sec. 18 (S)	Acres:	0.0

Location: NORTHEAST OF LITTLE ROCK CREEK, ABOUT 2.1 MILES NNE OF BARE MOUNTAIN, SAN GABRIEL MOUNTAINS.
Detailed Location: ADJACENT TO CANYON BOTTOM IN THE SW 1/4 SW 1/4 SECTION 18.
Ecological: DRY SITE ON GRANITIC LOAM WITH ARCTOSTAPHYLOS GLAUCA, ERIODICTYON CRASSIFOLIUM, AMSINCKIA TESSELLATA, AND ARTEMISIA TRIDENTATA.
General: 10 PLANTS OBSERVED IN 1994. SEVERAL INDIVIDUALS MORE CLOSELY RESEMBLING VAR. BASILARIS ALSO NOTED.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	32	Map Index: 38956	EO Index: 33963	Element Last Seen: 1994-06-08
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1994-06-08
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-06-15

Quad Summary: Juniper Hills (3411748)

County Summary: Los Angeles

Lat/Long:	34.41313 / -117.98578	Accuracy:	1/10 mile
UTM:	Zone-11 N3808405 E409406	Elevation (ft):	5200
PLSS:	T04N, R11W, Sec. 24 (S)	Acres:	0.0

Location: SOUTHWEST OF LITTLE ROCK CREEK, ABOUT 1 MILE NNE OF BARE MOUNTAIN, SAN GABRIEL MOUNTAINS.
Detailed Location: ALONG RIDGE ABOUT 0.7 MILE SW OF LITTLE ROCK CREEK AND 1.1 MILE WNW OF MOUTH OF SOUTH FORK ROCK CREEK. MAPPED WITHIN THE S 1/2 SECTION 24.
Ecological: ON N-SLOPE IN COBBLY, GRANITIC SUBSTRATE WITH QUERCUS JOHN-TUCKERI, ACHNATHERUM SPECIOSUM, LESSINGIA FILAGINIFOLIA, AND ERIOGONUM FASCICULATUM.
General: FEWER THAN 10 PLANTS OBSERVED IN 1994. SEVERAL INDIVIDUALS MORE CLOSELY RESEMBLING VAR. BASILARIS ALSO NOTED.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	33	Map Index: 38959	EO Index: 33966	Element Last Seen:	1994-03-30
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1994-03-30
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-06-16

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.48915 / -118.01547	Accuracy:	1/10 mile
UTM:	Zone-11 N3816862 E406762	Elevation (ft):	3800
PLSS:	T05N, R11W, Sec. 27 (S)	Acres:	0.0

Location: EAST OF LITTLE ROCK WASH, ABOUT 0.4 MILE ENE OF LITTLE ROCK-PALMDALE DAM (LITTLE ROCK RESERVOIR), SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED NEAR THE CENTER OF THE SE 1/4 SECTION 27.
Ecological: ON DRY, W-FACING SLOPE IN FULL SUN ON GRAVELLY, GRANITIC LOAM WITH ERIOGONUM FASCICULATUM, POA SECUNDA, ACHNATHERUM SPECIOSUM, AND PINUS MONOPHYLLA.
General: FEWER THAN 12 PLANTS OBSERVED IN 1994.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	34	Map Index: 38960	EO Index: 33967	Element Last Seen:	1994-04-15
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1994-04-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-06-16

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.46831 / -118.03382	Accuracy:	1/10 mile
UTM:	Zone-11 N3814568 E405054	Elevation (ft):	3800
PLSS:	T04N, R11W, Sec. 04 (S)	Acres:	0.0

Location: NORTH OF SANTIAGO CANYON, ABOUT 0.7 MILE WSW OF JOSHUA TREE CAMPGROUND ALONG LITTLE ROCK RESERVOIR, SAN GABRIEL MTNS.
Detailed Location: ALONG NE SLOPE OF UNNAMED TRIBUTARY TO SANTIAGO CANYON. MAPPED WITHIN THE NW 1/4 NE 1/4 SECTION 4.
Ecological: ON DRY EAST RIDGE IN FULL SUN ON COARSE, GRANITIC LOAM WITH ERIODICTYON TRICHOCALYX, ERIOGONUM FASCICULATUM, COREOPSIS BIGELOVII, AND BRICKELLIA MICROPHYLLA.
General: 2 PLANTS OBSERVED IN 1994. SEVERAL INDIVIDUALS MORE CLOSELY RESEMBLING VAR. BASILARIS ALSO NOTED.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	35	Map Index: 38961	EO Index: 33968	Element Last Seen:	1994-04-29
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1994-04-29
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-06-16

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.45048 / -118.06076	Accuracy:	1/10 mile
UTM:	Zone-11 N3812616 E402559	Elevation (ft):	4400
PLSS:	T04N, R11W, Sec. 08 (S)	Acres:	0.0

Location: NORTHWEST OF SANTIAGO CANYON, ABOUT 0.8 MILE SOUTHEAST OF MT. EMMA, SAN GABRIEL MOUNTAINS.
Detailed Location: SOUTHWEST SLOPE OF UNNAMMED TRIBUTARY TO SANTIAGO CANYON, ABOUT 0.6 MILE NW OF CREEK IN CANYON BOTTOM. MAPPED WITHIN THE NW 1/4 SECTION 8.
Ecological: ASSOCIATED WITH PINUS MONOPHYLA, JUNIPERUS CALIFORNICA, CERCOCARPUS BETULOIDES, AND POA SECUNDA.
General: 50 PLANTS OBSERVED IN 1994. PLANTS INTERMITTENT ALONG THE SURVEY ROUTE IN SMALL GROUPS.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	36	Map Index: 38962	EO Index: 33969	Element Last Seen:	1994-05-11
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1994-05-11
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-06-16

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.45761 / -118.01290	Accuracy:	1/10 mile
UTM:	Zone-11 N3813362 E406963	Elevation (ft):	3800
PLSS:	T04N, R11W, Sec. 03 (S)	Acres:	0.0

Location: EAST OF LITTLE ROCK CREEK, ABOUT 0.4 MILE ESE OF BASIN CAMPGROUND ABOVE LITTLE ROCK RESERVOIR, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED ABOUT 0.2 MILE UPSLOPE FROM CREEK OPPOSITE AND JUST SOUTH OF BASIN CAMPGROUND. WITHIN THE SE 1/4 OF SECTION 3.
Ecological: ON DRY, W-FACING SLOPE IN FULL SUN ON COARSE, GRANITIC LOAM WITH QUERCUS JOHN-TUCKERI, ACHNATHERUM SPECIOSUM, LOTUS SCOPARIUS, CRYPTANTHA CIRCUMSCISSA, AND EPHEDRA NEVADENSIS.
General: 17 PLANT OBSERVED IN 1994. TYPICALLY GROWING IN CLUMPS OF 2-4 PLANTS.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	37	Map Index:	38964	EO Index:	33971	Element Last Seen:	1994-05-13
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1994-05-13	Record Last Updated:	1998-06-16
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Pacifico Mountain (3411841)						
County Summary:	Los Angeles						
Lat/Long:	34.44832 / -118.00522	Accuracy:	1/10 mile				
UTM:	Zone-11 N3812324 E407659	Elevation (ft):	3900				
PLSS:	T04N, R11W, Sec. 11 (S)	Acres:	0.0				
Location:	EAST OF LITTLE ROCK CREEK, ABOUT 1.1 MILES SE OF BASIN CAMPGROUND ABOVE LITTLE ROCK RESERVOIR, SAN GABRIEL MOUNTAINS.						
Detailed Location:	ALONG SOUTH SLOPE OF UNNAMED TRIBUTARY, ABOUT 0.5 MILE UPSTREAM FROM LITTLE ROCK CREEK. MAPPED NEAR THE CENTER OF THE W 1/2 OF SECTION 11.						
Ecological:	ON DRY, W-FACING SLOPE IN FULL SUN ON COARSE, GRANITIC LOAM WITH QUERCUS JOHN-TUCKERI, ACHNATHERUM SPECIOSUM, EPHEDRA VIRIDIS, ERIOGONUM FASCICULATUM, AND PHACELIA DISTANS.						
General:	8 PLANTS OBSERVED IN 1994. SEVERAL PLANTS MORE CLOSELY RESEMBLING VAR. BASILARIS ALSO NOTED.						
Owner/Manager:	USFS-ANGELES NF						
Occurrence No.	38	Map Index:	38965	EO Index:	33972	Element Last Seen:	2009-05-06
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	2009-05-06	Record Last Updated:	2012-03-01
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Pacifico Mountain (3411841)						
County Summary:	Los Angeles						
Lat/Long:	34.49697 / -118.00737	Accuracy:	nonspecific area				
UTM:	Zone-11 N3817722 E407514	Elevation (ft):	3600				
PLSS:	T05N, R11W, Sec. 26 (S)	Acres:	35.0				
Location:	CARR CANYON, ABOUT 1 MILE NE OF LITTLE ROCK-PALMDALE DAM (LITTLE ROCK RESERVOIR), SAN GABRIEL MOUNTAINS.						
Detailed Location:	MAPPED AS 2 NON-SPECIFIC POLYGONS NEAR CANYON BOTTOM JUST SOUTH OF THE USFS BOUNDARY, WITHIN THE NW 1/4 SECTION 26.						
Ecological:	N-MOST POLY LOCATED ON DRY, LOW-RELIEF BENCHES ON COARSE GABBROIC SUBSTRATE WITH AMBROSIA DUMOSA, SENEIO FLACCIDUS, QUERCUS JOHN-TUCKERI, ETC. S-MOST POLY LOCATED ON DRY N SLOPE ON COARSE GRANITIC SUBSTRATE W/ ERICAMERIA LINEARIFOLIA, ETC.						
General:	5 PLANTS OBSERVED IN 1995 IN N-MOST POLYGON. 16 OBSERVED IN 1995 IN S-MOST POLYGON. A 2009 SWINNEY COLLECTION FROM "UPPER S FORK OF CARR CANYON" IS ALSO ATTRIBUTED TO THIS SITE; MENTIONED AS "UNCOMMON TO SCARCE." INCLUDES FORMER EO #41.						
Owner/Manager:	USFS-ANGELES NF						



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Occurrence No.	39	Map Index: 38966	EO Index: 33973	Element Last Seen: 1995-03-14
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1995-03-14
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2009-12-07

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.49873 / -118.04804	Accuracy:	nonspecific area
UTM:	Zone-11 N3817954 E403783	Elevation (ft):	3500
PLSS:	T05N, R11W, Sec. 29 (S)	Acres:	22.0

Location: BETWEEN HUNT CANYON AND LITTLE ROCK WASH, ABOUT 1.2 MILES WNW OF LITTLE ROCK-PALMDALE DAM, SAN GABRIEL MOUNTAINS.
Detailed Location: E-MOST POLYGON MAPPED S OF POWERLINES IN NW1/4 OF SECTION 28 ACC TO A 1990 MISTRETTE & PARRA-SZIJJ MAP. W-MOST POLYGON MAPPED N OF POWELINES IN NE1/4 OF SECTION 29 ACC TO A 1995 MISTRETTE MAP.
Ecological: W POLY ON SLIGHT N-FACING SLOPE IN FULL SUN ON COBBLY GABBRO-TYPE CLAY WITH ENCELIA ACTONI, ERIOGONUM FASCICULATUM, THYSANOCARPUS LACINIATUS, ERIOPHYLLUM WALLACEI, ETC. E POLY IN OPEN SAGEBRUSH SCRUB WITH QUERCUS TURBINELLA, ARTEMISIA, ETC.
General: 7 PLANTS OBSERVED IN 1990 IN E POLYGON. 6 PLANTS OBSERVED IN 1995 IN W POLYGON. INCLUDES FORMER EO #48.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	40	Map Index: 38967	EO Index: 33974	Element Last Seen: 1995-03-17
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1995-03-17
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1998-06-16

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.48774 / -118.03864	Accuracy:	1/10 mile
UTM:	Zone-11 N3816727 E404633	Elevation (ft):	4000
PLSS:	T05N, R11W, Sec. 28 (S)	Acres:	0.0

Location: RIDGE WEST OF LITTLE ROCK WASH, ABOUT 0.8 MI WEST OF LITTLE ROCK-PALMDALE DAM (LITTLE ROCK RESERVOIR), SAN GABRIEL MTNS.
Detailed Location: MAPPED ON RIDGETOP IN THE SW 1/4 OF SECTION 28.
Ecological: ON DRY, NW-FACING SLOPE IN FULL SUN ON COARSE, GRANITIC SUBSTRATE WITH ERIOGONUM FASCICULATUM, ERIOPHYLLUM CONFERTIFLORUM, GALIUM ANGUSTIFOLIUM, POA SECUNDA, AND EPHEDRA NEVADENSIS.
General: 3 PLANTS OBSERVED IN 1995.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	42	Map Index: 38969	EO Index: 33976	Element Last Seen:	1995-03-28
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1995-03-28
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-06-16

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.48382 / -118.02698	Accuracy:	1/10 mile
UTM:	Zone-11 N3816281 E405700	Elevation (ft):	3400
PLSS:	T05N, R11W, Sec. 34 (S)	Acres:	0.0

Location: WEST SIDE OF LITTLE ROCK RESERVOIR, ABOUT 0.3 MILE NNW OF LAKESIDE CAMPGROUND, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED WITHIN THE NW 1/4 NW 1/4 SECTION 34.
Ecological: ON DRY, N-FACING SLOPE IN FULL SUN ON COARSE, GRANITIC SUBSTRATE WITH ARCTOSTAPHYLOS GLANDULOSA, MELICA IMPERFECTA, ARTEMISIA TRIDENTATA, ERIODICTYON CRASSIFOLIUM, AND ERICAMERIA COOPERI.
General: 8 PLANTS OBSERVED IN 1995.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	43	Map Index: 38970	EO Index: 33977	Element Last Seen:	1995-04-05
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1995-04-05
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-06-16

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.47418 / -118.02727	Accuracy:	1/10 mile
UTM:	Zone-11 N3815212 E405662	Elevation (ft):	3400
PLSS:	T05N, R11W, Sec. 34 (S)	Acres:	0.0

Location: WEST SIDE OF LITTLE ROCK RESERVOIR, ABOUT 0.25 MILE SW OF JUNIPER GROVE CAMPGROUND, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED ALONG NORTH SIDE OF DRAW WITHIN THE NW 1/4 SW 1/4 SECTION 34.
Ecological: ON DRY, E-FACING SLOPE IN FULL SUN ON GABBRO CLAY WITH PINUS MONOPHYLLA, BRICKELLIA MICROPHYLLA, POA SECUNDA, BROMUS TECTORUM, AND CRYPTANTHA.
General: 4 PLANTS OBSERVED IN 1995.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	44	Map Index:	38971	EO Index:	33978	Element Last Seen:	1995-04-25
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1995-04-25	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-06-16	
Quad Summary:	Pacífico Mountain (3411841)						
County Summary:	Los Angeles						
Lat/Long:	34.42806 / -118.01960			Accuracy:	1/10 mile		
UTM:	Zone-11 N3810091 E406315			Elevation (ft):	4000		
PLSS:	T04N, R11W, Sec. 15 (S)			Acres:	0.0		
Location:	SOUTH BRANCH OF KITTER CANYON, ABOUT 1.2 MI SSW OF CONFLUENCE OF KITTER CANYON AND LITTLE ROCK CREEK, SAN GABRIEL MTNS.						
Detailed Location:	MAPPED ABOUT 0.4 MILE UPSTREAM (SOUTH) OF KITTER CANYON.						
Ecological:	ON DRY, W-FACING SLOPE IN FULL SUN ON GRANITIC LOAM WITH CLAYTONIA PARVIFLORA, QUERCUS WISLIZENII, SYNTRICHOPAPPUS LEMMONII, CHAENACTIS SANTALINOIDES, AND POA SECUNDA.						
General:	6 PLANTS OBSERVED IN 1995. BOTH VARIETIES (BRACHYCLADA AND BASILARIS) PRESENT AS WELL AS SEVERAL INDIVIDUALS THAT APPEARED INTERMEDIATE.						
Owner/Manager:	USFS-ANGELES NF						
Occurrence No.	45	Map Index:	38972	EO Index:	33979	Element Last Seen:	1995-04-28
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1995-04-28	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		1998-06-16	
Quad Summary:	Pacífico Mountain (3411841)						
County Summary:	Los Angeles						
Lat/Long:	34.43244 / -118.03102			Accuracy:	1/10 mile		
UTM:	Zone-11 N3810588 E405270			Elevation (ft):	4200		
PLSS:	T04N, R11W, Sec. 16 (S)			Acres:	0.0		
Location:	ABOVE KITTER CANYON, ABOUT 1.4 MI SW OF CONFLUENCE OF KITTER CANYON AND LITTLE ROCK CREEK, SAN GABRIEL MOUNTAINS.						
Detailed Location:	MAPPED ABOUT 0.2 MILE UPSLOPE (NORTH) OF KITTER CANYON.						
Ecological:	ON DRY, E-FACING SLOPE IN FULL SUN ON GRAVELLY, GRANITIC LOAM WITH CLAYTONIA PARVIFLORA, CRYPTANTHA, ERIOGONUM FASCICULATUM, ERIODICTYON TRICHOCALYX, AND BROMUS TECTORUM.						
General:	20 PLANTS OBSERVED IN 1995.						
Owner/Manager:	USFS-ANGELES NF						



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Occurrence No.	46	Map Index: 38973	EO Index: 33980	Element Last Seen:	1995-05-10
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1995-05-10
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-06-30

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.42201 / -118.01296	Accuracy:	1/10 mile
UTM:	Zone-11 N3809414 E406918	Elevation (ft):	4400
PLSS:	T04N, R11W, Sec. 22 (S)	Acres:	0.0

Location: NORTH SLOPE OF WEST FORK BARE MTN CANYON, ABOUT 0.25 MI WEST OF CONFLUENCE WITH BARE MTN CANYON, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED ABOUT 0.15 MILE UPSLOPE (NORTH) OF WEST FORK CANYON.
Ecological: ON DRY, LOW RELIEF BENCH IN FULL SUN ON COARSE, GRANITIC LOAM WITH VULPIA MICROSTACHYS, MIMULUS FREMONTII, CAMISSONIA STRIGULOSA, FREMONTODENDRON CALIFORNICA, AND LOTUS SCOPARIUS.
General: 3 PLANTS OBSERVED IN 1995. SEVERAL INDIVIDUALS MORE CLOSELY RESEMBLING VAR. BASILARIS.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	47	Map Index: 38974	EO Index: 33981	Element Last Seen:	1995-06-20
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1995-06-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-06-16

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.38738 / -118.00809	Accuracy:	1/10 mile
UTM:	Zone-11 N3805569 E407328	Elevation (ft):	5100
PLSS:	T04N, R11W, Sec. 35 (S)	Acres:	0.0

Location: UPPER BARE MOUNTAIN CANYON, ABOUT 2.5 MI SOUTH OF CONFLUENCE WITH WEST FORK BARE MOUNTAIN CANYON, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED ALONG LOWER SLOPE OF CANYON.
Ecological: ON DRY, S-FACING SLOPE IN PARTIAL SHADE ON GRANITIC LOAM WITH AGOSERIS RETRORSA, RHUS TRILOBATA, QUERCUS CHRYSOLEPIS, ELYMUS GLAUCUS, EPILOBIUM CANUM, AND SOLIDAGO CALIFORNICA.
General: 1 PLANT OBSERVED IN 1995.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	49	Map Index: 38976	EO Index: 33983	Element Last Seen: 1989-05-15
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen: 1989-05-15
Occ. Type:	Natural/Native occurrence		Trend: Decreasing	Record Last Updated: 2009-12-22
Quad Summary:	Pacífico Mountain (3411841)			
County Summary:	Los Angeles			
Lat/Long:	34.47875 / -118.06851		Accuracy: specific area	
UTM:	Zone-11 N3815758 E401880		Elevation (ft): 4000	
PLSS:	T05N, R11W, Sec. 31 (S)		Acres: 77.7	
Location:	HUNT CANYON ALONG SOUTH SIDE OF MT EMMA ROAD, SAN GABRIEL MOUNTAINS.			
Detailed Location:	MAPPED MOSTLY WITHIN THE SW 1/4 NE 1/4 SECTION 31.			
Ecological:	OPEN SAGEBRUSH SCRUB WITH SCATTERED PINUS MONOPHYLLA AND JUNIPERUS CALIFORNICA. GROWING WITH SAMBUCUS, QUERCUS TURBINELLA, ARTEMISIA TRIDENTATA, CERCOCARPUS BETULOIDES, YUCCA WHIPPLEI, ARCTOSTAPHYLOS GLAUCA, AND ERIOGONUM FASCICULATUM.			
General:	FEW WIDELY SCATTERED PLANTS OBSERVED IN 1989.			
Owner/Manager:	USFS-ANGELES NF			
Occurrence No.	50	Map Index: 38977	EO Index: 33984	Element Last Seen: 1990-03-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1990-03-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2009-12-07
Quad Summary:	Pacífico Mountain (3411841)			
County Summary:	Los Angeles			
Lat/Long:	34.46639 / -118.08121		Accuracy: 80 meters	
UTM:	Zone-11 N3814400 E400699		Elevation (ft): 4200	
PLSS:	T05N, R12W, Sec. 36 (S)		Acres: 0.0	
Location:	NORTH SIDE OF MT EMMA ROAD ABOUT 1.9 MILES NE OF JUNCTION WITH ANGELES FOREST HIGHWAY, SAN GABRIEL MOUNTAINS.			
Detailed Location:	ALSO WITHIN THE NE 1/4 NE 1/4 SECTION 1.			
Ecological:	PINYON/SOUTHERN CHAPARRAL/SAGEBRUSH ECOTONE WITH PINUS MONOPHYLLA, JUNIPERUS CALIFORNICA, QUERCUS TURBINELLA, ADENOSTOMA, ARTEMISIA TRIDENTATA, CERCOCARPUS BETULOIDES, YUCCA WHIPPLEI, ARCTOSTAPHYLOS GLAUCA, AND ERIOGONUM FASCICULATUM.			
General:	40 PLANTS OBSERVED BETWEEN OCCURRENCE #50 AND 51 IN 1990.			
Owner/Manager:	USFS-ANGELES NF			



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Occurrence No.	51	Map Index:	38978	EO Index:	33985	Element Last Seen:	1990-03-03
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1990-03-03	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2009-12-01	
Quad Summary:	Pacifico Mountain (3411841)						
County Summary:	Los Angeles						
Lat/Long:	34.44872 / -118.09777	Accuracy:	specific area				
UTM:	Zone-11 N3812457 E399157	Elevation (ft):	3800				
PLSS:	T04N, R12W, Sec. 11 (S)	Acres:	7.8				
Location:	SOUTH SIDE OF MT EMMA ROAD ABOUT 0.3 MILE NE OF JUNCTION WITH ANGELES FOREST HIGHWAY, SAN GABRIEL MOUNTAINS.						
Detailed Location:	MAPPED WITHIN THE NE 1/4 NE 1/4 SECTION 11.						
Ecological:	PINYON/SOUTHERN CHAPARRAL/SAGEBRUSH ECOTONE WITH PINUS MONOPHYLLA, JUNIPERUS CALIFORNICA, QUERCUS TURBINELLA, ADENOSTOMA, ARTEMISIA TRIDENTATA, CERCOCARPUS BETULOIDES, YUCCA WHIPPLEI, ARCTOSTAPHYLOS GLAUCA, AND ERIOGONUM FASCICULATUM.						
General:	40 PLANTS OBSERVED BETWEEN OCCURRENCE #50 AND 51 IN 1990. PLANTS AT THIS SITE APPEAR TO BE INTROGRESSED WITH VAR. BASILARIS.						
Owner/Manager:	USFS-ANGELES NF						
Occurrence No.	52	Map Index:	38979	EO Index:	33986	Element Last Seen:	1990-07-01
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1990-07-01	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2009-12-07	
Quad Summary:	Pacifico Mountain (3411841)						
County Summary:	Los Angeles						
Lat/Long:	34.40207 / -118.07004	Accuracy:	specific area				
UTM:	Zone-11 N3807257 E401649	Elevation (ft):	5100				
PLSS:	T04N, R11W, Sec. 30 (S)	Acres:	25.0				
Location:	EAST OF MILL CREEK ABOUT 0.4 MILE ENE OF CONFLUENCE OF MILL CREEK AND TIE CANYON, SAN GABRIEL MOUNTAINS.						
Detailed Location:	RIDGE NORTH OF TIE CANYON DRAINAGE. MAPPED BY CNDDDB AS 2 POLYGONS ACCORDING TO A 1991 MISTRETTA & PARRA-SZIJJ MAP AND 2008 USFS DIGITAL DATA.						
Ecological:	OPEN CHAPARRAL WITH ERIOGONUM FASCICULATUM, YUCCA WHIPPLEI, ERIODICTYON TRICHOCALYX, GARRYA VEATCHII, AND ARCTOSTAPHYLOS GLAUCA.						
General:	12 PLANTS OBSERVED IN 1990 IN S-MOST POLYGON; PLANTS NOTED WHILE DRIVING, MORE PLANTS PROBABLY OCCUR IN THIS AREA. UNKNOWN NUMBER OF PLANTS SEEN IN N-MOST POLYGON (INFORMATION FROM 2008 USFS DIGITAL DATA; DATE SEEN UNKNOWN).						
Owner/Manager:	USFS-ANGELES NF						



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Occurrence No.	53	Map Index:	38980	EO Index:	33987	Element Last Seen:	1990-07-01
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1990-07-01	Record Last Updated:	2009-12-01
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Pacifico Mountain (3411841)						
County Summary:	Los Angeles						
Lat/Long:	34.38225 / -118.09443	Accuracy:	specific area				
UTM:	Zone-11 N3805083 E399384	Elevation (ft):	4300				
PLSS:	T04N, R12W, Sec. 36 (S)	Acres:	57.4				
Location:	BETWEEN MILL CREEK AND ANGELES FOREST HIGHWAY; ABOUT 1 MILE SOUTHWEST OF TIE SUMMIT STATION, SAN GABRIEL MOUNTAINS.						
Detailed Location:	TWO COLONIES; LARGE COLONY MAPPED MOSTLY WITHIN THE SW 1/4 SW 1/4 SECTION 36, SMALLER COLONY MAPPED WITHIN THE NE 1/4 SW 1/4 SECTION 36.						
Ecological:	OPEN CHAPARRAL DOMINATED BY ADENOSTOMA FASCICULATUM AND CEANOTHUS CRASSIFOLIUS IN ASSOCIATION WITH YUCCA WHIPPLEI, PLATANUS RACEMOSA, CEANOTHUS LEUCODERMIS, ARTEMISIA DRACUNCULUS, SOLIDAGO CALIFORNICA, ARCTOSTAPHYLOS GLAUCA, ET AL.						
General:	40 PLANTS OBSERVED IN 1990. PLANTS RESEMBLING VAR. BASILARIS AND VAR. BRACHYCLADA BOTH ENCOUNTERED.						
Owner/Manager:	USFS-ANGELES NF						
Occurrence No.	54	Map Index:	38988	EO Index:	33995	Element Last Seen:	1989-06-01
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:	1989-06-01	Record Last Updated:	1998-06-16
Occ. Type:	Natural/Native occurrence	Trend:	Unknown				
Quad Summary:	Palmdale (3411851)						
County Summary:	Los Angeles						
Lat/Long:	34.52661 / -118.07788	Accuracy:	specific area				
UTM:	Zone-11 N3821075 E401076	Elevation (ft):	3000				
PLSS:	T05N, R11W, Sec. 18 (S)	Acres:	20.8				
Location:	SOUTHEAST OF PEARBLOSSOM HIGHWAY ABOUT 0.5 MILE SOUTH OF THE CALIFORNIA AQUEDUCT AT BARREL SPRINGS ROAD, PALMDALE.						
Detailed Location:	MAPPED MOSTLY WITHIN THE NW 1/4 NW 1/4 SECTION 18.						
Ecological:	CALIFORNIA JUNIPER WOODLAND/JOSHUA TREE WOODLAND WITH JUNIPERUS CALIFORNICA, YUCCA BREVIFOLIA, ARTEMISIA TRIDENTATA, CHRYSOTHAMNUS NAUSEOSUS, HAPLOPAPPUS COOPERI, AND H. LINEARIFOLIUS.						
General:	23 PLANTS OBSERVED IN 1989, ADDITIONAL PLANTS MAY BE PRESENT.						
Owner/Manager:	PVT						



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Occurrence No.	55	Map Index: 38989	EO Index: 33996	Element Last Seen:	1989-03-20
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	2011-05-22
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-01

Quad Summary: Ritter Ridge (3411852)

County Summary: Los Angeles

Lat/Long:	34.58272 / -118.18511	Accuracy:	specific area
UTM:	Zone-11 N3827408 E391307	Elevation (ft):	2900
PLSS:	T06N, R12W, Sec. 30 (S)	Acres:	11.8

Location: SAN ANDREAS RIFT ZONE, JUST SOUTH OF ELIZABETH LAKE-PINE CANYON ROAD AND WEST OF CALIFORNIA AQUEDUCT, WEST OF PALMDALE.

Detailed Location: MAPPED WITHIN THE SE 1/4 NE 1/4 SECTION 30.

Ecological: CALIFORNIA JUNIPER WOODLAND WITH YUCCA BREVIFOLIA, JUNIPERUS CALIFORNICA, CHRYSOTHAMNUS NAUSEOSUS, HAPLOPAPPUS LINEARIFOLIUS, HYMENOXYS COOPERI, EPHEDRA NEVADENSIS, AND ARCTOSTAPHYLOS GLAUCA.

General: 8 PLANTS OBSERVED IN 1989. INTERGRADATION WITH VAR. BASILARIS MAY BE OCCURRING IN THIS AREA. SITE REVISITED IN 2011; NO PLANTS SEEN, LIKELY DUE TO RECENT WILDFIRE.

Owner/Manager: PVT

Occurrence No.	56	Map Index: 38993	EO Index: 34000	Element Last Seen:	1989-03-20
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	1989-03-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-06-16

Quad Summary: Ritter Ridge (3411852)

County Summary: Los Angeles

Lat/Long:	34.57756 / -118.17124	Accuracy:	specific area
UTM:	Zone-11 N3826821 E392573	Elevation (ft):	2900
PLSS:	T06N, R12W, Sec. 29 (S)	Acres:	96.0

Location: NORTH OF CITY RANCH ROAD AND EAST OF CALIFORNIA AQUEDUCT, SAN ANDREAS RIFT ZONE, WEST OF PALMDALE.

Detailed Location: MAPPED ALONG SE-NW TRENDING DRAINAGE MOSTLY WITHIN THE SE 1/4 OF SECTION 29.

Ecological: CALIFORNIA JUNIPER WOODLAND WITH YUCCA BREVIFOLIA, JUNIPERUS CALIFORNICA, CHRYSOTHAMNUS NAUSEOSUS, HAPLOPAPPUS LINEARIFOLIUS, H. COOPERI, EPHEDRA NEVADENSIS, AND ARCTOSTAPHYLOS GLAUCA.

General: 305 PLANTS OBSERVED IN 1989. INTERGRADATION WITH VAR. BASILARIS MAY BE OCCURRING IN THIS AREA.

Owner/Manager: PVT



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Occurrence No.	57	Map Index: 38994	EO Index: 34001	Element Last Seen:	1989-03-20
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	1989-03-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-06-17
Quad Summary:	Ritter Ridge (3411852)				
County Summary:	Los Angeles				
Lat/Long:	34.56970 / -118.16815		Accuracy:	specific area	
UTM:	Zone-11 N3825945 E392846		Elevation (ft):	2950	
PLSS:	T06N, R12W, Sec. 32 (S)		Acres:	11.2	
Location:	ANAVERDE VALLEY BETWEEN ANAVERDE CREEK AND THE CALIFORNIA AQUEDUCT, WEST OF PALMDALE.				
Detailed Location:	MAPPED ABOUT 1.7 MILES SW OF 10TH AVENUE AT AVENUE Q. WITHIN THE NE 1/4 NE 1/4 OF SECTION 32.				
Ecological:	CALIFORNIA JUNIPER WOODLAND WITH YUCCA BREVIFOLIA, JUNIPERUS CALIFORNICA, CHRYSOTHAMNUS NAUSEOSUS, HAPLOPAPPUS LINEARIFOLIUS, H. COOPERI, EPHEDRA NEVADENSIS, AND ARCTOSTAPHYLOS GLAUCA.				
General:	5 PLANTS OBSERVED IN 1989. INTERGRADATION WITH VAR. BASILARIS MAY BE OCCURRING IN THIS AREA.				
Owner/Manager:	PVT				
Occurrence No.	58	Map Index: 38995	EO Index: 34002	Element Last Seen:	1989-03-20
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	1989-03-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1998-06-17
Quad Summary:	Ritter Ridge (3411852)				
County Summary:	Los Angeles				
Lat/Long:	34.56453 / -118.19133		Accuracy:	specific area	
UTM:	Zone-11 N3825397 E390713		Elevation (ft):	3200	
PLSS:	T06N, R12W, Sec. 31 (S)		Acres:	90.9	
Location:	UNDER POWERLINES SOUTH OF ANAVERDE CREEK AND WEST OF THE CALIFORNIA AQUEDUCT, WEST OF PALMDALE.				
Detailed Location:	MAPPED MOSTLY WITHIN THE N 1/2 OF THE S 1/2 SECTION 31.				
Ecological:	CALIFORNIA JUNIPER WOODLAND WITH YUCCA BREVIFOLIA, JUNIPERUS CALIFORNICA, CHRYSOTHAMNUS NAUSEOSUS, HAPLOPAPPUS LINEARIFOLIA, H. COOPERI, EPHEDRA NEVADENSIS, AND ARCTOSTAPHYLOS GLAUCA. LOCALLY ASSOC W/ GRASSY HILLSIDE THAT RECENTLY BURNED.				
General:	12 PLANTS OBSERVED IN 1989. INTERGRADATION WITH VAR. BASILARIS MAY BE OCCURRING IN THIS AREA.				
Owner/Manager:	PVT				
Occurrence No.	97	Map Index: 77561	EO Index: 78428	Element Last Seen:	XXXX-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-12-08
Quad Summary:	Mescal Creek (3411746)				
County Summary:	Los Angeles				
Lat/Long:	34.41002 / -117.69452		Accuracy:	80 meters	
UTM:	Zone-11 N3807839 E436171		Elevation (ft):	6100	
PLSS:	T04N, R08W, Sec. 26 (S)		Acres:	0.0	
Location:	BETWEEN JESUS CANYON AND PUZZLE CANYON; NEAR THE TERMINUS OF FS RD 4N04, SW OF PINON HILLS.				
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2008 USFS DIGITAL DATA.				
Ecological:					
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS 2008 USFS DIGITAL DATA; DATE SEEN UNKNOWN.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	98	Map Index: 77562	EO Index: 78429	Element Last Seen: XXXX-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2009-12-08

Quad Summary: Mescal Creek (3411746)
County Summary: Los Angeles

Lat/Long:	34.40083 / -117.69347	Accuracy:	80 meters
UTM:	Zone-11 N3806819 E436260	Elevation (ft):	6600
PLSS:	T04N, R08W, Sec. 26 (S)	Acres:	0.0

Location: NEAR THE HEADWATERS OF PUZZLE CANYON; W SIDE OF FS RD 4N04, SW OF PINON HILLS.
Detailed Location: MAPPED BY CNDDDB ACCORDING TO 2008 USFS DIGITAL DATA. SW1/4 OF SW1/4 ESTIMATED SEC 26.
Ecological:
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS 2008 USFS DIGITAL DATA; DATE SEEN UNKNOWN.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	99	Map Index: 77563	EO Index: 78430	Element Last Seen: XXXX-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2009-12-08

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.39110 / -117.76661	Accuracy:	specific area
UTM:	Zone-11 N3805788 E429530	Elevation (ft):	5700
PLSS:	T04N, R09W, Sec. 36 (S)	Acres:	13.0

Location: FENNER CANYON, SE END OF PINYON RIDGE.
Detailed Location: MAPPED BY CNDDDB AS 3 POLYGONS ACCORDING TO 2008 USFS DIGITAL DATA. IN NE1/4 SEC 36 AND NW1/4 ADJACENT SEC 31.
Ecological:
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS 2008 USFS DIGITAL DATA; DATE SEEN UNKNOWN.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	100	Map Index: 77564	EO Index: 78431	Element Last Seen: 2008-05-13
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 2008-05-13
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2009-12-08

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.41021 / -117.83688	Accuracy:	1/5 mile
UTM:	Zone-11 N3807958 E423088	Elevation (ft):	4250
PLSS:	T04N, R09W, Sec. 20 (S)	Acres:	0.0

Location: DEVILS PUNCHBOWL COUNTY PARK; ~0.5 MI S OF BIG ROCK CREEK RD IN HOLCOMB CANYON.
Detailed Location: MAPPED BY CNDDDB AS BEST GUESS ~0.5 RD MI S OF BIG ROCK CREEK RD IN HOLCOMB CANYON.
Ecological: CANYON BOTTOM. CHAPARRAL WITH RHAMNUS ILICIFOLIA.
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2008 SWINNEY COLLECTION; MENTIONED AS "UNCOMMON" IN 2008.
Owner/Manager: LAX COUNTY



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Occurrence No.	101	Map Index: 77565	EO Index: 78433	Element Last Seen: XXXX-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2009-12-08

Quad Summary: Juniper Hills (3411748)

County Summary: Los Angeles

Lat/Long:	34.47489 / -117.99954	Accuracy:	80 meters
UTM:	Zone-11 N3815267 E408208	Elevation (ft):	4500
PLSS:	T05N, R11W, Sec. 35 (S)	Acres:	0.0

Location: ~1.5 AIR MI SE OF LITTLE ROCK-PALMDALE DAM, E OF LITTLE ROCK RESERVOIR.

Detailed Location: MAPPED BY CNDDDB ACCORDING TO 2008 USFS DIGITAL DATA.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS 2008 USFS DIGITAL DATA; DATE SEEN UNKNOWN.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	102	Map Index: 77566	EO Index: 78435	Element Last Seen: 1968-03-28
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1968-03-28
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2009-12-09

Quad Summary: Juniper Hills (3411748)

County Summary: Los Angeles

Lat/Long:	34.45818 / -117.99328	Accuracy:	80 meters
UTM:	Zone-11 N3813408 E408766	Elevation (ft):	4800
PLSS:	T04N, R11W, Sec. 01 (S)	Acres:	0.0

Location: ALIMONY RIDGE, E OF LITTLE ROCK RESERVOIR.

Detailed Location: BETWEEN PEAK 4888 & PEAK 4939. MAPPED BY CNDDDB ACCORDING TO 2008 USFS DIGITAL DATA.

Ecological: DRY, SANDY, SUNNY, ROCKY, EAST SLOPE. JUNIPER-PINYON WOODLAND.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS 2008 USFS DIGITAL DATA, DATE SEEN UNKNOWN. A 1968 WHEELER COLLECTION FROM THE SW1/4 OF THE SW1/4 OF SECTION 1 ALSO ATTRIBUTED TO THIS SITE.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	103	Map Index: 77568	EO Index: 78437	Element Last Seen: 1968-05-12
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1968-05-12
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2009-12-08

Quad Summary: Juniper Hills (3411748)

County Summary: Los Angeles

Lat/Long:	34.45949 / -117.92469	Accuracy:	nonspecific area
UTM:	Zone-11 N3813494 E415067	Elevation (ft):	3800
PLSS:	T04N, R10W, Sec. 04 (S)	Acres:	47.0

Location: NE OF JUNIPER HILLS; E OF THE INTERSECTION OF 106TH ST E AND PEACOCK ALLEY, SAN ANDREAS RIFT ZONE.

Detailed Location: MAPPED BY CNDDDB IN THE NE1/4 OF THE SE1/4 OF SECTION 4 BASED ON INFORMATION ON COLLECTION LABEL.

Ecological: GENTLE, SUNNY SE SLOPE. LOOSE, SANDY LOAM.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1968 WHEELER COLLECTION. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN



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Occurrence No.	104	Map Index:	77570	EO Index:	78439	Element Last Seen:	2008-04-13
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2008-04-13	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2009-12-08	
Quad Summary:	Pacífico Mountain (3411841)						
County Summary:	Los Angeles						
Lat/Long:	34.45124 / -118.10980			Accuracy:	80 meters		
UTM:	Zone-11 N3812749 E398055			Elevation (ft):	3600		
PLSS:	T04N, R12W, Sec. 11 (S)			Acres:	0.0		
Location:	KENTUCKY SPRINGS CANYON; JUST S OF THE INTERSECTION OF ANGELES FOREST HWY AND FS RD 4N24.2, W OF MT. EMMA.						
Detailed Location:	MAPPED ALONG DIRT ROAD, WEST OF ANGELES FOREST HWY AND N OF WELL ON TOPO MAP. NE1/4 OF NW1/4 SEC 11.						
Ecological:	OAK, JUNIPER WOODLAND. COARSE, GRANITIC LOAM. E-FACING SLOPE OF SMALL RAVINE. ASSOCIATED WITH ERIOGONUM FASCICULATUM VAR. POLIFOLIUM, QUERCUS JOHN-TUCKERI, ARTEMISIA TRIDENTATA, POA SECUNDA, EPHEDRA NEVADENSIS, AND ERICAMERIA LINEARIFOLIA.						
General:	2 PLANTS IN 2008. AREA BURNED IN AUGUST OF 2006.						
Owner/Manager:	UNKNOWN						
Occurrence No.	105	Map Index:	77571	EO Index:	78441	Element Last Seen:	2010-05-19
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2010-05-19	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-03-01	
Quad Summary:	Pacífico Mountain (3411841)						
County Summary:	Los Angeles						
Lat/Long:	34.43927 / -118.10254			Accuracy:	specific area		
UTM:	Zone-11 N3811414 E398706			Elevation (ft):	3900		
PLSS:	T04N, R12W, Sec. 11 (S)			Acres:	5.0		
Location:	KENTUCKY SPRINGS CANYON; W SIDE OF ANGELES FOREST HWY NEAR ITS INTERSECTION WITH FS RD 4N20.1, SW OF MT. EMMA.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO DIGITAL DATA.						
Ecological:	PINYON JUNIPER WOODLAND/CHAPARRAL TRANSITION. COARSE, GRANITIC SOILS IN FULL SUN. ALONG MODERATE SLOPES OF SHALLOW RAVINE WITH ERIOGONUM FASCICULATUM VAR. FOLIOLOSUM, YUCCA WHIPPLEI, ERICAMERIA LINEARIFOLIA, QUERCUS JOHN-TUCKERI, ETC.						
General:	7 PLANTS SEEN IN 2008; 11 PLANTS SEEN IN 2011.						
Owner/Manager:	USFS-ANGELES NF						



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Occurrence No.	106	Map Index: 77572	EO Index: 78444	Element Last Seen:	2010-05-20
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2010-05-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-01
Quad Summary:	Pacífico Mountain (3411841)				
County Summary:	Los Angeles				
Lat/Long:	34.42738 / -118.09440		Accuracy:	specific area	
UTM:	Zone-11 N3810088 E399440		Elevation (ft):	3900	
PLSS:	T04N, R12W, Sec. 13 (S)		Acres:	8.0	
Location:	ALISO CANYON; W SIDE OF ANGELES FOREST HWY ~1.2 RD MI S OF ITS INTERSECTION WITH FS RD 4N20.1, SW OF MT. EMMA.				
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2008 MISTRETТА FIELD SURVEY AND 2011 DIGITAL DATA.				
Ecological:	OPEN CHAPARRAL. COARSE SOILS, VARIOUS EXPOSURES. FULL SUN. ASSOCIATED WITH ERIOGONUM FASCICULATUM VAR. FOLIOLOSUM, ERICAMERIA LINEARIFOLIA, QUERCUS JOHN-TUCKERI, YUCCA WHIPPLEI, ARCTOSTAPHYLOS GLAUCA, ADENOSTOMA FASCICULATUM, ETC.				
General:	7 SEEN PLANTS IN 2008; 5 PLANTS SEEN IN 2011.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	107	Map Index: 77573	EO Index: 78446	Element Last Seen:	1970-07-16
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1970-07-16
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-12-09
Quad Summary:	Acton (3411842)				
County Summary:	Los Angeles				
Lat/Long:	34.42649 / -118.21450		Accuracy:	4/5 mile	
UTM:	Zone-11 N3810114 E388403		Elevation (ft):	2800	
PLSS:	T04N, R13W, Sec. 14 (S)		Acres:	0.0	
Location:	BOOTLEGGERS CANYON, S OF RAVENNA.				
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS AROUND BOOTLEGGERS CANYON.				
Ecological:	HOT, DRY, SUNNY, NE SLOPE AT EDGE OF CHAPARRAL.				
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1970 WHEELER COLLECTION. NEEDS FIELDWORK. POPULATIONS FROM W OF ANAVERDE VALLEY ARE PROBABLY INTERGRADES WITH VAR. BASILARIS (MACKAY 1998).				
Owner/Manager:	UNKNOWN				



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Occurrence No.	109	Map Index: 77576	EO Index: 78449	Element Last Seen:	2008-04-07
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2008-04-07
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-12-09

Quad Summary: Ritter Ridge (3411852)

County Summary: Los Angeles

Lat/Long:	34.59279 / -118.18954	Accuracy:	specific area
UTM:	Zone-11 N3828529 E390914	Elevation (ft):	2900
PLSS:	T06N, R12W, Sec. 19 (S)	Acres:	2.0

Location: SE END OF RITTER RIDGE, SAN ANDREAS RIFT ZONE.

Detailed Location: W SIDE OF CA AQUEDUCT NEAR RITTER SIPHON.

Ecological: ON OPEN, S-FACING, ROCKY HILLSIDE WITH THIN SOILS. SURROUNDING LAND IS OPEN SCRUB/JUNIPER WOODLAND. ASSOCIATED SPECIES INCLUDE: EPHEDRA NEVADENSIS, ERIOGONUM FASCICULATUM VAR. FASCICULATUM, YUCCA WHIPPLEI, ESCHSCHOLZIA CALIFORNICA, ETC.

General: 7 PLANTS IN 2008. PLANTS FROM ANAVERDE VALLEY AND W ARE PROBABLY INTERGRADES WITH VAR. BASILARIS (MACKAY 1998).

Owner/Manager: DWR

Occurrence No.	110	Map Index: 77577	EO Index: 78450	Element Last Seen:	2008-04-07
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	2008-04-07
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-12-09

Quad Summary: Del Sur (3411863)

County Summary: Los Angeles

Lat/Long:	34.67044 / -118.34980	Accuracy:	specific area
UTM:	Zone-11 N3837326 E376332	Elevation (ft):	3000
PLSS:	T07N, R14W, Sec. 27 (S)	Acres:	2.0

Location: N OF JOHNSON SUMMIT, PORTAL RIDGE.

Detailed Location: S SIDE OF CA AQUEDUCT BETWEEN MILE 328 AND MILE 330.

Ecological: AT THE BASE OF SOME STEEP SLOPES. THE PLANTS ARE FOUND WITHIN AND ON THE SLOPES OF A DRAINAGE THAT BEGINS TO FAN OUT AS IT FLOWS NORTH TO THE AQUEDUCT. THE PLANT COMMUNITY ON SLOPES IS DOMINATED BY QUERCUS JOHN-TUCKERI AND CERCOCARPUS.

General: 55 PLANTS SEEN IN 2008. THERE IS AGE VARIABILITY WITHIN THE POPULATION BUT FEW VERY MATURE INDIVIDUALS. PLANTS FROM ANAVERDE VALLEY AND W ARE PROBABLY INTERGRADES WITH VAR. BASILARIS (MACKAY 1998).

Owner/Manager: DWR



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Occurrence No.	111	Map Index: 77578	EO Index: 78451	Element Last Seen:	2005-10-07
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2005-10-07
Occ. Type:	Natural/Native occurrence		Trend: Decreasing	Record Last Updated:	2009-12-23
Quad Summary:	Lake Hughes (3411864)				
County Summary:	Los Angeles				
Lat/Long:	34.66877 / -118.38769		Accuracy:	specific area	
UTM:	Zone-11 N3837187 E372858		Elevation (ft):	3440	
PLSS:	T07N, R14W, Sec. 29 (S)		Acres:	1.0	
Location:	N SIDE OF ELIZABETH LAKE; N SIDE OF GIST DRIVE, 50 M W OF INTERSECTION WITH LOOKABOUT RD, PORTAL RIDGE.				
Detailed Location:					
Ecological:	SANDY SOILS. DISTURBED CHAMISE (ADENOSTOMA FASCICULATUM) CHAPARRAL WITH PATCHY ARCTOSTAPHYLOS SP. CHAMISE APPEARS TO HAVE BEEN CLEARED NEAR PVT PROPERTY BUT MANY CACTI STILL PERSIST OUT IN OPEN IN DAMAGED OR POOR CONDITION.				
General:	20+ PLANTS SEEN IN 2005; FULL SIZE AND EXTENT OF POP WAS NOT INVESTIGATED. PLANTS FROM ANAVERDE VALLEY AND W ARE PROBABLY INTERGRADES WITH VAR. BASILARIS (MACKAY 1998).				
Owner/Manager:	PVT				
Occurrence No.	115	Map Index: 85226	EO Index: 86247	Element Last Seen:	2009-06-17
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-06-17
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-02-28
Quad Summary:	Mescal Creek (3411746)				
County Summary:	Los Angeles				
Lat/Long:	34.40444 / -117.72389		Accuracy:	80 meters	
UTM:	Zone-11 N3807239 E433467		Elevation (ft):	5340	
PLSS:	T04N, R08W, Sec. 28 (S)		Acres:	0.0	
Location:	BALL FLAT, 2.6 MILES NORTHWEST (312 DEGREES) OF BIG PINES, MESCAL CREEK, SAN GABRIEL MOUNTAINS.				
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO COORDINATES IN 2009 SWINNEY COLLECTION.				
Ecological:	FLAT, BROAD RIDGE TOP; CHAPARRAL AND PINYON-JUNIPER WOODLAND WITH ERIODICTYON TRICHOCALYX, ERICAMERIA NAUSEOSA, FREMONTODENDRON CALIFORNICUM, AND CERCOCARPUS LEDIFOLIUS.				
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2009 SWINNEY COLLECTION; MENTIONED AS "SCARCE."				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	116	Map Index: 85340	EO Index: 86360	Element Last Seen:	2009-06-17
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-06-17
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-06

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.39084 / -117.77612	Accuracy:	80 meters
UTM:	Zone-11 N3805766 E428656	Elevation (ft):	5375
PLSS:	T04N, R09W, Sec. 36 (S)	Acres:	0.0

Location: FENNER CANYON JUST ABOVE CONFLUENCE WITH BIG ROCK CREEK, ~2.5 MI NORTH OF MT BADEN-POWELL.
Detailed Location: MAPPED BY CNDDDB ACCORDING TO COORDINATES IN 2009 SWINNEY COLLECTION.
Ecological: SANDY AND ROCKY WASH BOTTOM; CHAPARRAL WITH FREMONTODENDRON CALIFORNICUM, CERCOCARPUS, FRANGULA CALIFORNICA, QUERCUS CHRYSOLEPIS, ERIOGONUM FASCICULATUM VAR POLIFOLIUM, AND GARRYA.
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2009 SWINNEY COLLECTION; MENTIONED AS "SCARCE."
Owner/Manager: USFS-ANGELES NF

Occurrence No.	117	Map Index: 85238	EO Index: 86259	Element Last Seen:	2011-07-03
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2011-07-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-02-29

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.40336 / -117.81857	Accuracy:	specific area
UTM:	Zone-11 N3807185 E424764	Elevation (ft):	4600
PLSS:	T04N, R09W, Sec. 28 (S)	Acres:	10.0

Location: ON BOTH SIDES OF BIG ROCK CREEK RD, ABOUT 0.4 ROAD MI FROM JUNCTION WITH FS RD 4N11A0, ~2.2 AIR MI NORTH OF MT LEWIS.
Detailed Location: MAPPED BY CNDDDB ACCORDING TO COORDINATES IN A 2011 DAVIS FIELD SURVEY IN SECTIONS 27 AND 28.
Ecological: LOCATED IN AND ABOVE THE WATER LINE, SOFT TO HARD COMPACTED SOIL WITH NUMEROUS WASHES DRAINING INTO THE MAIN CHANNEL. PINUS MONOPHYLLA AND FREMONTODENDRON CALIFORNICUM DOMINANT SPECIES WITH CERCOCARPUS BETULOIDES VAR BETULOIDES.
General: IN 2011, 42 PLANTS SEEN IN THE WESTERN MOST POLYGON, NOT IN VERY GOOD CONDITION; 10 PLANTS SEEN IN THE E POLYGON, 8 WERE IN GOOD CONDITION, 2 NOT SO GOOD.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	118	Map Index:	85242	EO Index:	86261	Element Last Seen:	2011-07-17
Occ. Rank:	Poor	Presence:	Presumed Extant	Site Last Seen:		2011-07-17	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-03-07	
Quad Summary:	Valyermo (3411747)						
County Summary:	Los Angeles						
Lat/Long:	34.40410 / -117.86001			Accuracy:	specific area		
UTM:	Zone-11 N3807299 E420956			Elevation (ft):	5230		
PLSS:	T04N, R09W, Sec. 30 (S)			Acres:	10.0		
Location:	DEVILS PUNCHBOWL AREA; ALONG DEVILS CHAIR TRAIL, ABOUT 3.6 AIR MI NORTHWEST OF MT LEWIS, SAN GABRIEL MOUNTAINS.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO COORDINATES IN 2011 DAVIS FIELD SURVEYS IN SECTION 30.						
Ecological:	NE-FACING HILLSIDE. PLANTS LOCATED UNDER FREMONTODENDRON CALIFORNICUM AND PINUS MONOPHYLLA WITH ERIOGONUM SP AND ARCTOSTAPHYLOS SP.						
General:	IN 2011 9 PLANTS SEEN IN THE WESTERN POLYGON (MOST OF THESE PLANTS REPORTED AS BEING IN POOR CONDITION); 5 PLANTS SEEN IN THE EASTERN POLYGON (2 PLANTS REPORTED AS BEING IN VERY BAD CONDITION).						
Owner/Manager:	USFS-ANGELES NF						
Occurrence No.	119	Map Index:	85243	EO Index:	86263	Element Last Seen:	2011-07-17
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2011-07-17	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-03-07	
Quad Summary:	Valyermo (3411747)						
County Summary:	Los Angeles						
Lat/Long:	34.40488 / -117.87107			Accuracy:	80 meters		
UTM:	Zone-11 N3807393 E419941			Elevation (ft):	5250		
PLSS:	T04N, R10W, Sec. 25 (S)			Acres:	0.0		
Location:	DEVILS PUNCHBOWL AREA; ALONG BURKHART TRAIL 0.2 MI FROM JUBILEE RD, ABOUT 2.5 AIR MI NORTH OF MT WILLIAMSON.						
Detailed Location:	FROM TRAIL EDGE TO APPROXIMATELY 100-200 FT SOUTH OF TRAIL. MAPPED BY CNDDDB ACCORDING TO COORDINATES IN A 2011 DAVIS FIELD SURVEY.						
Ecological:	N-FACING HILLSIDE. PLANTS LOCATED UNDER PINUS MONOPHYLLA. OCCURS WITH PINUS JEFFREYI, ARCTOSTAPHYLOS SP, PENSTEMON SP, AND FREMONTODENDRON CALIFORNICUM.						
General:	18 PLANTS SEEN IN 2011, MOST APPEAR TO BE IN VERY GOOD CONDITION.						
Owner/Manager:	USFS-ANGELES NF						



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Occurrence No.	120	Map Index: 85244	EO Index: 86264	Element Last Seen:	2011-05-22
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2011-05-22
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-02-29
Quad Summary:	Juniper Hills (3411748)				
County Summary:	Los Angeles				
Lat/Long:	34.44213 / -117.89777		Accuracy:	1/5 mile	
UTM:	Zone-11 N3811545 E417523		Elevation (ft):	4000	
PLSS:	T04N, R10W, Sec. 11 (S)		Acres:	0.0	
Location:	PALLETT CREEK; APPROXIMATELY 0.1 MILE NORTHWEST FROM THE INTERSECTION OF LONGVIEW RD AND TUMBLEWEED RD, JUNIPER HILLS.				
Detailed Location:	40 FT FROM SOUTH SIDE AND 50-100 FEET FROM NORTH SIDE OF LONGVIEW RD. MAPPED BY CNDDDB 0.1 MILE NORTHWEST FROM INTERSECTION OF TUMBLEWEED RD AND LONGVIEW RD ACCORDING TO A 2011 DAVIS FIELD SURVEY.				
Ecological:	BROMUS IS THE DOMINANT SPECIES IN THE AREA. JUNIPERUS SPP, CHORIZANTHE SPP, CALOCHORTUS KENNEDYI VAR KENNEDYI AND LOTS OF LINANTHUS PARRYAE.				
General:	IN 2011, 1 PLANT SEEN ON THE SOUTH SIDE OF LONGVIEW RD AND 3 PLANTS SEEN ON THE NORTH SIDE.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	121	Map Index: 85246	EO Index: 86266	Element Last Seen:	2009-05-20
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-05-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-02-29
Quad Summary:	Juniper Hills (3411748)				
County Summary:	Los Angeles				
Lat/Long:	34.43805 / -117.95804		Accuracy:	80 meters	
UTM:	Zone-11 N3811144 E411981		Elevation (ft):	4700	
PLSS:	T04N, R10W, Sec. 18 (S)		Acres:	0.0	
Location:	UPPER INDIAN BILL CANYON, JUNIPER HILLS, TRANSVERSE RANGE, SAN GABRIEL MOUNTAINS.				
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO COORDINATES IN A 2009 SWINNEY COLLECTION IN FAR NE1/4 OF SECTION 18.				
Ecological:	CHAPARRAL AND PINYON-JUNIPER WOODLAND WITH ERIOGONUM FASCICULATUM VAR POLIFOLIUM, CEANOTHUS GREGGII, ARCTOSTAPHYLOS GLAUCA, ERICAMERIA LINEARIFOLIA, AND ERIOPHYLLUM CONFERTIFLORUM.				
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 2009 SWINNEY COLLECTION; MENTIONED AS UNCOMMON.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	122	Map Index: 85273	EO Index: 86293	Element Last Seen:	2010-05-23
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-05-23
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-01
Quad Summary:	Pacifico Mountain (3411841)				
County Summary:	Los Angeles				
Lat/Long:	34.40527 / -118.07930		Accuracy:	specific area	
UTM:	Zone-11 N3807621 E400802		Elevation (ft):	4240	
PLSS:	T04N, R11W, Sec. 30 (S)		Acres:	1.0	
Location:	ALISO CYN; ON W SIDE OF ANGELES FOREST HWY 1.0 RD MI S OF JUNCTION WITH ALISO CANYON RD, ABOUT 3 MI NW OF PACIFICO MTN.				
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 DIGITAL DATA IN THE SW 1/4 OF THE NW 1/4 OF SECTION 30.				
Ecological:					
General:	2 PLANTS SEEN IN 2010.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	123	Map Index: 85310	EO Index: 86324	Element Last Seen:	2010-05-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-05-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-05
Quad Summary:	Pacifico Mountain (3411841)				
County Summary:	Los Angeles				
Lat/Long:	34.42007 / -118.09011		Accuracy:	specific area	
UTM:	Zone-11 N3809272 E399826		Elevation (ft):	4110	
PLSS:	T04N, R12W, Sec. 24 (S)		Acres:	1.0	
Location:	ALISO CANYON; 0.3 AIR MI NW OF JUNCTION OF ALISO CANYON RD AND ANGELES FOREST HWY, ABOUT 4.3 AIR MI NW OF PACIFICO MTN.				
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 DIGITAL DATA IN THE NE 1/4 OF THE NW 1/4 OF SECTION 24.				
Ecological:					
General:	1 PLANT SEEN IN 2010.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	124	Map Index: 85309	EO Index: 86325	Element Last Seen:	2010-05-24
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-05-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-12-27
Quad Summary:	Acton (3411842)				
County Summary:	Los Angeles				
Lat/Long:	34.42152 / -118.13246		Accuracy:	specific area	
UTM:	Zone-11 N3809476 E395936		Elevation (ft):	4000	
PLSS:	T04N, R12W, Sec. 21 (S)		Acres:	3.0	
Location:	ALONG USFS RD 4N24, FROM APPROX 0.7 TO 1.2 AIR MILES SOUTH OF ALISO CANYON RD, APPROX 6.2 AIR MILES NW OF PACIFICO MTN.				
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 DIGITAL DATA IN THE SW 1/4 OF THE SW 1/4 OF SECTION 15 AND IN THE NE 1/4 AND THE SE 1/4 OF THE NE 1/4 OF SECTION 21.				
Ecological:					
General:	4 PLANTS SEEN IN 2010 (1 AT EACH POLYGON). INCLUDES FORMER OCCURRENCE #126.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	125	Map Index: 85307	EO Index: 86327	Element Last Seen:	2010-05-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-05-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-05

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.42450 / -118.10600	Accuracy:	specific area
UTM:	Zone-11 N3809780 E398371	Elevation (ft):	3600
PLSS:	T04N, R12W, Sec. 14 (S)	Acres:	1.0

Location: ALISO CANYON; S SIDE OF ALISO CANYON RD, ~1.2 RD MI E OF JUNCTION WITH PRINCE RANCH RD, ~5.3 MI NW OF PACIFICO MTN.
Detailed Location: MAPPED BY CNDDDB ACCORDING TO 2010 DIGITAL DATA IN THE MIDDLE OF THE S1/2 OF THE S1/2 SECTION 14.
Ecological:
General: 1 PLANT SEEN IN 2010.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	127	Map Index: 85313	EO Index: 86333	Element Last Seen:	2010-05-20
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-05-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-05

Quad Summary: Acton (3411842)
County Summary: Los Angeles

Lat/Long:	34.43117 / -118.13135	Accuracy:	specific area
UTM:	Zone-11 N3810545 E396050	Elevation (ft):	3400
PLSS:	T04N, R12W, Sec. 15 (S)	Acres:	3.0

Location: BEARTRAP CANYON; ALONG UNNAMED ROAD, BETWEEN USFS RD 4N25 AND 2N24, ABOUT 6.8 AIR MILES NORTHWEST OF PACIFICO MTN.
Detailed Location: MAPPED BY CNDDDB AS 4 POLYGONS ACCORDING TO 2010 DIGITAL DATA IN THE SE1/4 OF THE NE1/4 OF SECTION 16 AND THE W1/2 OF SECTION 15.
Ecological:
General: 4 PLANTS SEEN IN 2010 (1 AT EACH POLYGON).
Owner/Manager: USFS-ANGELES NF

Occurrence No.	128	Map Index: 85314	EO Index: 86335	Element Last Seen:	2010-05-18
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-05-18
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-05

Quad Summary: Acton (3411842)
County Summary: Los Angeles

Lat/Long:	34.43915 / -118.13477	Accuracy:	specific area
UTM:	Zone-11 N3811434 E395746	Elevation (ft):	3290
PLSS:	T04N, R12W, Sec. 09 (S)	Acres:	1.0

Location: ALISO CANYON; ALONG USFS RD 4N24.2 0.3 ROAD MI N OF JUNCTION WITH ALISO CANYON RD, ~4 AIR MI SW OF MT EMMA.
Detailed Location: MAPPED BY CNDDDB AS 2 POLYGONS ACCORDING TO 2010 DIGITAL DATA IN THE SE 1/4 OF THE SE 1/4 OF SECTION 9.
Ecological:
General: 4 PLANTS SEEN IN 2010 (1 AT THE NORTHERN POINT AND 3 AT THE SOUTHERN POINT).
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	129	Map Index: 85316	EO Index: 86337	Element Last Seen:	2010-05-21
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-05-21
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-05
Quad Summary:	Pacífico Mountain (3411841)				
County Summary:	Los Angeles				
Lat/Long:	34.45065 / -118.12004		Accuracy:	specific area	
UTM:	Zone-11 N3812694 E397113		Elevation (ft):	3730	
PLSS:	T04N, R12W, Sec. 10 (S)		Acres:	1.0	
Location:	KENTUCKY SPRINGS; ALONG USFS RD 4N24.2 0.9 ROAD MI WEST OF JUCTION WITH ANGELES FOREST HWY, ~3.0 AIR MILES W OF MT EMMA.				
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 DIGITAL DATA IN THE NW 1/4 OF THE NE 1/4 OF SECTION 10.				
Ecological:					
General:	1 PLANT SEEN IN 2010.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	130	Map Index: 85318	EO Index: 86339	Element Last Seen:	2010-05-20
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-05-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-05
Quad Summary:	Pacífico Mountain (3411841)				
County Summary:	Los Angeles				
Lat/Long:	34.45587 / -118.12492		Accuracy:	specific area	
UTM:	Zone-11 N3813278 E396671		Elevation (ft):	3800	
PLSS:	T04N, R12W, Sec. 03 (S)		Acres:	1.0	
Location:	KENTUCKY SPRINGS; 0.8 MI WEST OF JUNCTION OF USFS RD 2N24.2 AND ANGELES FOREST HWY, ABOUT 3.2 MI WEST OF MT EMMA.				
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 DIGITAL DATA IN THE NE 1/4 OF THE SW 1/4 OF SECTION 3.				
Ecological:					
General:	1 PLANT SEEN IN 2010.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	131	Map Index: 85321	EO Index: 86341	Element Last Seen:	2010-05-25
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-05-25
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-05
Quad Summary:	Ritter Ridge (3411852)				
County Summary:	Los Angeles				
Lat/Long:	34.58259 / -118.21001		Accuracy:	specific area	
UTM:	Zone-11 N3827420 E389023		Elevation (ft):	3150	
PLSS:	T06N, R13W, Sec. 25 (S)		Acres:	1.0	
Location:	ANAVERDE VALLEY; ABOUT 0.5 MI WEST OF INTERSECTION OF W CITY RANCH RD AND RANCH CENTER DR, ~5 MI NW OF LAKE PALMDALE.				
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 DIGITAL DATA IN THE SE 1/4 OF THE NW 1/4 OF SECTION 25.				
Ecological:					
General:	1 PLANT SEEN IN 2010.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	132	Map Index: 85323	EO Index: 86344	Element Last Seen:	2010-01-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-01-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-05

Quad Summary: Ritter Ridge (3411852)

County Summary: Los Angeles

Lat/Long:	34.59198 / -118.22036	Accuracy:	specific area
UTM:	Zone-11 N3828473 E388086	Elevation (ft):	3110
PLSS:	T06N, R13W, Sec. 23 (S)	Acres:	1.0

Location: LEONA VALLEY; 0.2 MI S OF ELIZABETH LAKE RD, 0.5 ROAD MI EAST OF CHERRY TREE LN, 5.8 AIR MI NW OF LAKE PALMDALE.

Detailed Location: SOUTH OF 4WD ROAD. MAPPED BY CNDDDB ACCORDING TO 2010 DIGITAL DATA IN THE NE 1/4 OF THE SE 1/4 OF SECTION 23.

Ecological:

General: 6 PLANTS SEEN IN 2010.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	133	Map Index: 85325	EO Index: 86345	Element Last Seen:	2010-06-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-06-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-05

Quad Summary: Ritter Ridge (3411852)

County Summary: Los Angeles

Lat/Long:	34.59612 / -118.22446	Accuracy:	specific area
UTM:	Zone-11 N3828937 E387716	Elevation (ft):	2920
PLSS:	T06N, R13W, Sec. 23 (S)	Acres:	1.0

Location: LEONA VALLEY; 0.1 MI N OF ELIZABETH LAKE RD, 0.3 ROAD MI EAST OF CHERRY TREE LN, 6 AIR MI NW OF LAKE PALMDALE.

Detailed Location: ON BOTH SIDES OF 4WD ROAD. MAPPED BY CNDDDB AS 2 POLYGONS ACCORDING TO 2010 DIGITAL DATA IN THE SW 1/4 OF THE NE 1/4 OF SECTION 23.

Ecological:

General: 2 PLANTS SEEN IN 2010 (1 PLANT AT EACH POLYGON).

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	134	Map Index: 85326	EO Index: 86347	Element Last Seen:	2010-05-26
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-05-26
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-05

Quad Summary: Ritter Ridge (3411852)

County Summary: Los Angeles

Lat/Long:	34.60335 / -118.22862	Accuracy:	specific area
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UTM:	Zone-11 N3829743 E387344	Elevation (ft):	3160
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PLSS:	T06N, R13W, Sec. 14 (S)	Acres:	3.0
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Location: LEONA VALLEY; 0.4 MI S OF HACIENDA RANCH RD, 0.6 ROAD MI W OF JUNCTION WITH OPHIR RD, ~6.5 MI NW OF LAKE PALMDALE.

Detailed Location: MAPPED BY CNDDDB ACCORDING TO 2010 DIGITAL DATA IN THE S 1/2 OF SECTION 14 AND IN THE NE 1/4 OF THE NW 1/4 OF SECTION 23.

Ecological:

General: 4 PLANTS SEEN IN 2010 (1 AT EACH POLYGON).

Owner/Manager: USFS-ANGELES NF

Occurrence No.	135	Map Index: 85328	EO Index: 86349	Element Last Seen:	2010-06-08
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-06-08
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-03-05

Quad Summary: Ritter Ridge (3411852)

County Summary: Los Angeles

Lat/Long:	34.61659 / -118.24527	Accuracy:	specific area
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UTM:	Zone-11 N3831231 E385835	Elevation (ft):	3650
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PLSS:	T06N, R13W, Sec. 10 (S)	Acres:	1.0
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Location: PORTAL RIDGE; ON BOTH SIDES OF POOR RD 0.5 ROAD MILE S OF 70TH ST W, ABOUT 8 AIR MI NW OF LAKE PALMDALE.

Detailed Location: MAPPED BY CNDDDB ACCORDING TO 2010 DIGITAL DATA IN THE SE 1/4 OF THE SW 1/4 OF SECTION 10 AND THE NE 1/4 OF THE NW 1/4 OF SECTION 15.

Ecological:

General: 7 PLANTS SEEN IN 2010 (1 AT THE NORTHERN POLYGON ANND 6 AT THE SOUTHERN POLYGON).

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	136	Map Index:	87759	EO Index:	88723	Element Last Seen:	2012-05-26
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2012-05-26	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-12-27	
Quad Summary:	Mescal Creek (3411746)						
County Summary:	Los Angeles						
Lat/Long:	34.45770 / -117.67083	Accuracy:	80 meters				
UTM:	Zone-11 N3813111 E438383	Elevation (ft):	3860				
PLSS:	T04N, R08W, Sec. 01 (S)	Acres:	0.0				
Location:	APPROXIMATELY 100 METERS SSE OF SR 138 CROSSING OF PUZZLE CANYON CREEK, APPROXIMATELY 2 AIR MILES NW OF PINON HILLS.						
Detailed Location:	IN THE SE 1/4 OF THE SW 1/4 OF SECTION 1.						
Ecological:	CA JUNIPER SERIES, WITH JOSHUA TREE CO-DOMINANT. ASSOCIATED WITH BLACKBRUSH, YUCCA, WHITE BURSAGE, AND CREOSOTE.						
General:	10-15 PLANTS OBSERVED IN 2012.						
Owner/Manager:	CALTRANS, PVT						
Occurrence No.	138	Map Index:	87762	EO Index:	88726	Element Last Seen:	2002-05-01
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2002-05-01	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-12-28	
Quad Summary:	Green Valley (3411854)						
County Summary:	Los Angeles						
Lat/Long:	34.54614 / -118.45685	Accuracy:	3/5 mile				
UTM:	Zone-11 N3823678 E366324	Elevation (ft):					
PLSS:	T05N, R15W, Sec. 04 (S)	Acres:	0.0				
Location:	UPPER HEADWATERS OF HASKELL CANYON, DEL SUR RIDGE, ANGELES NATIONAL FOREST.						
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS AROUND THE UPPER PORTIONS OF HASKELL CANYON.						
Ecological:							
General:	ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 2002 PHOTO BY TAYLOR IN CALPHOTOS. NEEDS FIELDWORK.						
Owner/Manager:	USFS-ANGELES NF						



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<i>Nemacladus secundiflorus var. robbinsii</i>		Element Code: PDCAM0F0B2	
Robbins' nemacladus			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G3T2T3
	State: None		State: S2S3
	Other: Rare Plant Rank - 1B.2, USFS_S-Sensitive		
Habitat:	General: CHAPARRAL, VALLEY AND FOOTHILL GRASSLAND.		
	Micro: DRY, SANDY OR GRAVELLY SLOPES. 350-1700 M.		
Occurrence No.	1	Map Index: 79321	EO Index: 80303
Occ. Rank:	Unknown	Presence: Presumed Extant	Element Last Seen: 1929-05-19
Occ. Type:	Natural/Native occurrence	Trend: Unknown	Site Last Seen: 1929-05-19
			Record Last Updated: 2010-07-07
Quad Summary:	Mount San Antonio (3411736), Crystal Lake (3411737), Waterman Mtn. (3411738), Mescal Creek (3411746), Valyermo (3411747), Juniper Hills (3411748)		
County Summary:	Los Angeles		
Lat/Long:	34.41965 / -117.81712	Accuracy:	5 miles
UTM:	Zone-11 N3808990 E424912	Elevation (ft):	
PLSS:	T04N, R09W, Sec. 22 (S)	Acres:	0.0
Location:	BIG ROCK CREEK, SAN GABRIEL MOUNTAINS.		
Detailed Location:	EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB TO ENCOMPASS THE ENTIRE CREEK WITHIN THE SAN GABRIEL MOUNTAINS.		
Ecological:	SANDY SLOPE.		
General:	OCCURRENCE KNOWN ONLY FROM A 1929 COLLECTION BY HOFFMANN. IDENTIFICATION OF SPECIMEN IS SOMEWHAT UNCERTAIN, COULD ALSO BE N. S. VAR. SECUNDIFLORUS OR MIXED WITH N. SIGMOIDEUS. NEEDS FIELDWORK.		
Owner/Manager:	UNKNOWN		



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<i>Loeflingia squarrosa var. artemisiarum</i>		Element Code: PDCAR0E011	
sagebrush loeflingia			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5T2T3
	State: None		State: S2
	Other: Rare Plant Rank - 2B.2, BLM_S-Sensitive		
Habitat:	General: GREAT BASIN SCRUB, SONORAN DESERT SCRUB, DESERT DUNES.		
	Micro: SANDY FLATS AND DUNES. SANDY AREAS AROUND CLAY SLICKS W/SARCOBATUS, ATRIPLEX, TETRADYMIA, ETC. 700-1615 M.		

Occurrence No.	23	Map Index: 64630	EO Index: 64709	Element Last Seen: 2005-07-XX
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 2005-07-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2006-05-04
Quad Summary:	Palmdale (3411851)			
County Summary:	Los Angeles			
Lat/Long:	34.53199 / -118.01410		Accuracy: 80 meters	
UTM:	Zone-11 N3821611 E406935		Elevation (ft): 2800	
PLSS:	T05N, R11W, Sec. 10 (S)		Acres: 0.0	
Location:	GRAVEL QUARRY, NORTHEAST SIDE OF PEARBLOSSOM HIGHWAY (HWY 138), ABOUT 1.2 MILES SOUTHEAST OF FOUR POINTS.			
Detailed Location:	ALONG NARROW DIRT ROAD WHICH TRAVELS FROM NW TO SE THROUGH PROJECT AREA. MAPPED ACCORDING TO UTM COORDINATES PROVIDED BY YOUNG: UTM ZONE 11 NAD27 407017E/3821415N. MAPPED NEAR THE CENTER OF THE SE 1/4 OF SECTION 10.			
Ecological:	DOMINANTS INCLUDE ENCELIA SPP. AND BROMUS MADRITENSIS.			
General:	UNKNOWN NUMBER OF PLANTS OBSERVED BY YOUNG IN 2005.			
Owner/Manager:	PVT			

Occurrence No.	24	Map Index: 64631	EO Index: 64710	Element Last Seen: 2005-05-04
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen: 2005-05-04
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2006-05-04
Quad Summary:	Lancaster East (3411861)			
County Summary:	Los Angeles			
Lat/Long:	34.66875 / -118.10401		Accuracy: 80 meters	
UTM:	Zone-11 N3836865 E398850		Elevation (ft): 2450	
PLSS:	T07N, R12W, Sec. 25 (S)		Acres: 0.0	
Location:	ABOUT 0.5 MILE SOUTH OF AVENUE K, MIDWAY BETWEEN 10TH AND 20TH STREETS, EAST OF SUNRISE.			
Detailed Location:	PLANTS MOSTLY FOUND ON ABANDONED HARD PACKED ROAD & DISTURBED SINKS THAT HAD PONDED WATER DURING WINTER & SPRING. MAPPED ACCORDING TO COORDINATES PROVIDED BY YOUNG: UTM ZONE11 NAD27 398932E/3836669N. MAPPED WITHIN THE SE 1/4 OF SECTION 10.			
Ecological:	JOSHUA TREE UPPERSTORY WITH SALTBUSH SCRUB UNDERSTORY. SOIL: SANDY/LOAMY. SLOPE:0. PLANTS SEEM TO BE CONCENTRATED ALONG EDGE OF SINKS AND DEPRESSIONS IN HARD-PACKED SANDY AREAS.			
General:	40 PLANTS OBSERVED BY YOUNG IN 2005. PLANTS DETECTED DURING MOHAVE GROUND SQUIRREL TRAPPING.			
Owner/Manager:	PVT			

<i>Calystegia peirsonii</i>		Element Code: PDCON040A0	
Peirson's morning-glory			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G3
	State: None		State: S3.2
	Other: Rare Plant Rank - 4.2		



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Habitat:	General:	CHAPARRAL, COASTAL SCRUB, CHENOPOD SCRUB, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.		
	Micro:	OFTEN IN DISTURBED AREAS OR ALONG ROADSIDES OR IN GRASSY, OPEN AREAS. 390-1470M.		

Occurrence No.	2	Map Index:	01916	EO Index:	13786	Element Last Seen:	1982-XX-XX
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:	1982-XX-XX		
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:	1995-07-11		

Quad Summary: Sleepy Valley (3411853)
County Summary: Los Angeles

Lat/Long:	34.58818 / -118.29071	Accuracy:	specific area
UTM:	Zone-11 N3828132 E381629	Elevation (ft):	3600
PLSS:	T06N, R13W, Sec. 19 (S)	Acres:	94.4

Location: BOUQUET CYN RD, FROM 2.4-3.3 MI FROM JCT W/ELIZABETH LAKE ROAD.
Detailed Location:
Ecological: IN CHAMISE CHAPARRAL ON ROADCUT UNDER POWER LINES. ASSOCIATED WITH ERIOGONUM FASCICULATUM, CASTILLEJA SP. AND YUCCA WHIPPLEI.
General: 12 PLANTS SEEN IN 1979.
Owner/Manager: PVT IN USFS-ANGELES NF

Occurrence No.	3	Map Index:	01210	EO Index:	18563	Element Last Seen:	1972-XX-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:	1979-06-12		
Occ. Type:	Natural/Native occurrence	Trend:	Decreasing	Record Last Updated:	1989-08-11		

Quad Summary: Burnt Peak (3411865)
County Summary: Los Angeles

Lat/Long:	34.69858 / -118.50925	Accuracy:	1/5 mile
UTM:	Zone-11 N3840654 E361769	Elevation (ft):	3800
PLSS:	T07N, R15W, Sec. 18 (S)	Acres:	0.0

Location: 0.1 MI SE OF PINE CYN FOREST STATION, W OF LAKE HUGHES, ALONG HWY N2.
Detailed Location:
Ecological: IN WOODLAND. ASSOCIATED WITH QUERCUS CHRYSOLEPIS, POISON OAK AND RHAMNUS CROCEA.
General:
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	4	Map Index: 01881	EO Index: 18564	Element Last Seen: 1972-06-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1972-06-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1989-08-11

Quad Summary: Sleepy Valley (3411853)
County Summary: Los Angeles

Lat/Long:	34.58470 / -118.31591	Accuracy:	1/5 mile
UTM:	Zone-11 N3827776 E379313	Elevation (ft):	3440
PLSS:	T06N, R14W, Sec. 25 (S)	Acres:	0.0

Location: 3.9 MI W OF JCT ELIZABETH LAKE ROAD, ALONG BOUQUET CANYON ROAD.

Detailed Location:

Ecological:

General:

Owner/Manager: USFS-ANGELES NF

Occurrence No.	8	Map Index: 01500	EO Index: 18557	Element Last Seen: 1982-05-07
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1982-05-07
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-09-10

Quad Summary: Mint Canyon (3411844), Green Valley (3411854)
County Summary: Los Angeles

Lat/Long:	34.50067 / -118.43794	Accuracy:	nonspecific area
UTM:	Zone-11 N3818610 E367988	Elevation (ft):	1900
PLSS:	T05N, R15W, Sec. 22 (S)	Acres:	90.0

Location: TEXAS CANYON ROAD, 1.6 MI AND 2.1 MI FROM JCT W/BOUQUET CANYON RD.

Detailed Location: MAPPED ALONG TEXAS CYN, ALONG MILEAGES GIVEN IN SEC 27, 22 AND 23.

Ecological: OPEN AREA ALONG ROADSIDE ON LOOSE ROCKY SOIL; ASSOCIATED WITH ERIOGONUM FASCICULATUM AT ONE SITE AND WITH QUERCUS DUMOSA AND GRASSES AT THE OTHER.

General: EO 9 LUMPED HERE.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	10	Map Index: 01470	EO Index: 13785	Element Last Seen: 1982-05-07
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 1982-05-07
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-09-10

Quad Summary: Green Valley (3411854)
County Summary: Los Angeles

Lat/Long:	34.51604 / -118.44775	Accuracy:	specific area
UTM:	Zone-11 N3820327 E367112	Elevation (ft):	1800
PLSS:	T05N, R15W, Sec. 15 (S)	Acres:	47.1

Location: 0.2-0.7 MI NORTH OF TEXAS CANYON RANGER STATION (FIRE CONTROL STA) ON BOUQUET CANYON RD.

Detailed Location:

Ecological: ON LOOSE ROCKY SOIL ON ROAD CUTS, RIPARIAN AREAS AND EXPOSED ROCKY CLIFFSIDES ABOVE AND ON BOTH SIDES OF ROAD. ASSOCIATED WITH ERIOGONUM FASCICULATUM, QUERCUS CHRYSOLEPIS AND PHYSALIS SP.

General: SAN BERNARDINO POPULATIONS IN GOOD CONDITION IN 1982.

Owner/Manager: USFS-ANGELES NF?



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Occurrence No.	11	Map Index: 01523	EO Index: 18553	Element Last Seen: 1982-XX-XX
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 1982-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-09-10

Quad Summary: Green Valley (3411854)
County Summary: Los Angeles

Lat/Long:	34.54748 / -118.43231	Accuracy:	1/5 mile
UTM:	Zone-11 N3823794 E368578	Elevation (ft):	2300
PLSS:	T05N, R15W, Sec. 03 (S)	Acres:	0.0

Location: BIG OAKS CAMPGROUND, BOUQUET CANYON ROAD.

Detailed Location: ALONG ROADSIDE.

Ecological:

General: IN GOOD CONDITION IN 1982.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	12	Map Index: 01788	EO Index: 18555	Element Last Seen: 1982-XX-XX
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen: 1982-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-09-10

Quad Summary: Sleepy Valley (3411853)
County Summary: Los Angeles

Lat/Long:	34.56086 / -118.35597	Accuracy:	2/5 mile
UTM:	Zone-11 N3825181 E375603	Elevation (ft):	4850
PLSS:	T06N, R14W, Sec. 34 (S)	Acres:	0.0

Location: SIERRA PELONA RIDGE, NEAR LOOKOUT.

Detailed Location: MAPPED NEAR BM "SIERRA" ON SIERRA PELONA RIDGE. UNCLEAR WHERE LOOKOUT IS LOCATED.

Ecological:

General: NEED BETTER LOCATION INFORMATION.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	13	Map Index: 01913	EO Index: 18556	Element Last Seen: 1982-06-24
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen: 1982-06-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-09-10

Quad Summary: Sleepy Valley (3411853)
County Summary: Los Angeles

Lat/Long:	34.51966 / -118.29999	Accuracy:	nonspecific area
UTM:	Zone-11 N3820545 E380680	Elevation (ft):	2700
PLSS:	T05N, R14W, Sec. 13 (S)	Acres:	144.0

Location: SIERRA PELONA VALLEY NEAR 32.17 MI MARKER ON SIERRA HWY.

Detailed Location: NOT SURE WHERE MILE MARKER IS; MAPPED ALONG SIERRA HWY IN SIERRA PELONA VALLEY.

Ecological: OPEN DISTURBED AREA ALONG SOUTH SIDE OF ROAD; ASSOCIATED WITH ERIOGONUM FASCICULATUM AND AVENA SP.

General:

Owner/Manager: PVT



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Occurrence No.	14	Map Index: 01724	EO Index: 18552	Element Last Seen: 1982-06-17
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen: 1982-06-17
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-09-10
Quad Summary:	Del Sur (3411863), Lake Hughes (3411864)			
County Summary:	Los Angeles			
Lat/Long:	34.64998 / -118.37675		Accuracy: 1/5 mile	
UTM:	Zone-11 N3835090 E373832		Elevation (ft): 3600	
PLSS:	T07N, R14W, Sec. 32 (S)		Acres: 0.0	
Location:	ELIZABETH LAKE RD, 0.1 MI N OF JCT W/SAN FRANCISQUITO CANYON RD, NEAR ANDRADE CORNER.			
Detailed Location:				
Ecological:	DISTURBED AREA WITH LOOSE, LIGHT SOIL ON EAST ROADSIDE. ASSOCIATED WITH ERIOGONUM FASCICULATUM AND GRASS SPP.			
General:				
Owner/Manager:	PVT			
Occurrence No.	15	Map Index: 01843	EO Index: 18551	Element Last Seen: 1982-06-17
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen: 1982-06-17
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-09-10
Quad Summary:	Del Sur (3411863)			
County Summary:	Los Angeles			
Lat/Long:	34.63142 / -118.33375		Accuracy: nonspecific area	
UTM:	Zone-11 N3832979 E377745		Elevation (ft): 3400	
PLSS:	T06N, R14W, Sec. 02 (S)		Acres: 82.0	
Location:	ELIZABETH LAKE RD, 2.6 MI SOUTH OF JCT W/SAN FRANCISQUITO CANYON RD.			
Detailed Location:				
Ecological:	GRASSY AREA BETWEEN ROAD CUT AND PASTURE AND ON NORTHEAST ROADSIDE IN LOOSE EXPOSED SOIL.			
General:				
Owner/Manager:	PVT			
Occurrence No.	16	Map Index: 01386	EO Index: 18554	Element Last Seen: 1982-XX-XX
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 1982-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-09-11
Quad Summary:	Lake Hughes (3411864)			
County Summary:	Los Angeles			
Lat/Long:	34.69948 / -118.46240		Accuracy: 2/5 mile	
UTM:	Zone-11 N3840691 E366061		Elevation (ft): 4000	
PLSS:	T07N, R15W, Sec. 15 (S)		Acres: 0.0	
Location:	TROEDEL SPRINGS PLATEAU, PORTAL RIDGE.			
Detailed Location:	MAPPED IN VICINITY OF TROEDEL SPRINGS; LOCATION VAGUE.			
Ecological:				
General:	NEEDS FIELDWORK.			
Owner/Manager:	UNKNOWN			



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Occurrence No.	17	Map Index: 01262	EO Index: 18550	Element Last Seen: 1982-06-17
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 1982-06-17
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-09-10

Quad Summary: Lake Hughes (3411864)
County Summary: Los Angeles

Lat/Long:	34.69831 / -118.49703	Accuracy:	1/5 mile
UTM:	Zone-11 N3840607 E362888	Elevation (ft):	3800
PLSS:	T07N, R15W, Sec. 17 (S)	Acres:	0.0

Location: 0.7 MI UP DIRT RD NORTH OF PINE CANYON RD, 0.3 TO 0.5 MI E OF REST AREA.

Detailed Location:

Ecological: IN LOOSE, LIGHT SOIL AND ROCKY OUTCROPS; ASSOCIATED WITH ERIOGONUM FASCICULATUM, YUCCA WHIPPLEI, QUERCUS DUMOSA, AVENA SP., AND CERCOCARPUS BETULOIDES.

General: EXCELLENT TO GOOD CONDITION IN 1982.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	18	Map Index: 02644	EO Index: 18549	Element Last Seen: 1982-06-11
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 1982-06-11
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-09-10

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.41266 / -117.82443	Accuracy:	nonspecific area
UTM:	Zone-11 N3808220 E424234	Elevation (ft):	4200
PLSS:	T04N, R09W, Sec. 21 (S)	Acres:	103.0

Location: BIG ROCK CREEK ROAD FROM VIC OF OLD POINT COMFORT SOUTH TO SYCAMORE FLAT AND TO ABOUT 2.2 MI S OF JCT WITH VALYERMO RD.

Detailed Location: MAPPED ALONG ROAD IN SECTIONS 21 AND 28.

Ecological: DISTURBED ROAD CUTS, WEST FACING SLOPES, IN OPEN AREAS WITH ROCKY SOIL. WITH CERCOCARPUS BETULOIDES, PURSHIA GLANDULOSA, ERIOGONUM FASCICULATUM, YUCCA WHIPPLEI, ETC.

General: TYPE LOCALITY. EOS 19 AND 20 LUMPED HERE.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	21	Map Index: 01448	EO Index: 18546	Element Last Seen: 1982-XX-XX
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 1982-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-09-10

Quad Summary: Green Valley (3411854)
County Summary: Los Angeles

Lat/Long:	34.58776 / -118.45426	Accuracy:	1/5 mile
UTM:	Zone-11 N3828289 E366628	Elevation (ft):	2200
PLSS:	T06N, R15W, Sec. 22 (S)	Acres:	0.0

Location: 0.1 MI SOUTH ON SAN FRANCISQUITO RD FROM POWERHOUSE.

Detailed Location:

Ecological:

General:

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	22	Map Index: 01263	EO Index: 18547	Element Last Seen: 1982-XX-XX
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen: 1982-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-09-10

Quad Summary: Green Valley (3411854), Warm Springs Mountain (3411855)

County Summary: Los Angeles

Lat/Long:	34.54192 / -118.49785	Accuracy:	1/5 mile
UTM:	Zone-11 N3823264 E362555	Elevation (ft):	2300
PLSS:	T05N, R15W, Sec. 06 (S)	Acres:	0.0

Location: DRINKWATER FLAT, SAN FRANCISQUITO CANYON.

Detailed Location:

Ecological:

General:

Owner/Manager: USFS-ANGELES NF

Occurrence No.	27	Map Index: 01011	EO Index: 18541	Element Last Seen: 1982-05-28
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen: 1982-05-28
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-09-11

Quad Summary: Burnt Peak (3411865)

County Summary: Los Angeles

Lat/Long:	34.63165 / -118.54107	Accuracy:	nonspecific area
UTM:	Zone-11 N3833276 E358740	Elevation (ft):	2000
PLSS:	T06N, R16W, Sec. 11 (S)	Acres:	62.0

Location: LAKE HUGHES RD, 6.5 MI S OF JCT W/ELIZABETH LAKE RD.

Detailed Location: MAPPED FROM VICINITY OF RED FOX CANYON SOUTH FOR ABOUT 0.8 MI ALONG LAKE HUGHES RD.

Ecological: GRASSY OPEN AREAS. ASSOCIATED WITH AVENA SP.

General:

Owner/Manager: USFS-ANGELES NF

Occurrence No.	28	Map Index: 01047	EO Index: 18540	Element Last Seen: 1982-XX-XX
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen: 1982-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-09-10

Quad Summary: Lake Hughes (3411864)

County Summary: Los Angeles

Lat/Long:	34.67891 / -118.45222	Accuracy:	2/5 mile
UTM:	Zone-11 N3838395 E366961	Elevation (ft):	1800
PLSS:	T07N, R15W, Sec. 22 (S)	Acres:	0.0

Location: NEAR JCT LAKE HUGHES RD & ELIZABETH LAKE CANYON RD.

Detailed Location:

Ecological:

General:

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	29	Map Index: 01019	EO Index: 12608	Element Last Seen: 1982-XX-XX
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen: 1982-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-09-10

Quad Summary: Lake Hughes (3411864)

County Summary: Los Angeles

Lat/Long:	34.68865 / -118.47912	Accuracy:	2/5 mile
UTM:	Zone-11 N3839512 E364512	Elevation (ft):	2000
PLSS:	T07N, R15W, Sec. 16 (S)	Acres:	0.0

Location: 1.8 MI NW OF JCT OF LAKE HUGHES RD & ELIZABETH LAKE CANYON RD.

Detailed Location:

Ecological:

General:

Owner/Manager: USFS-ANGELES NF

Occurrence No.	31	Map Index: 00802	EO Index: 18537	Element Last Seen: 1982-05-28
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen: 1982-05-28
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-09-10

Quad Summary: Whitaker Peak (3411856), Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.61112 / -118.65273	Accuracy:	1 mile
UTM:	Zone-11 N3831160 E348467	Elevation (ft):	1900
PLSS:	T06N, R17W, Sec. 14 (S)	Acres:	0.0

Location: FISH CANYON TRUCK TRAIL FROM CROSSING AT CASTAIC CR TO CIENAGA CAMPGROUND.

Detailed Location: ALSO IN SECTIONS 12,13 AND 15.

Ecological: OPEN AREAS ALONG ROAD, EXPOSED ROCKY SOILS AND ON STEEP CLIFFS. ASSOCIATED WITH QUERCUS DUMOSA, ERIOGONUM FASCICULATUM AND CALOCHORTUS VENUSTUS.

General:

Owner/Manager: USFS-ANGELES NF

Arctostaphylos glandulosa ssp. gabrielensis **Element Code:** PDERI042P0

San Gabriel manzanita

Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G5T2
	State: None		State: S2
	Other: Rare Plant Rank - 1B.2, BLM_S-Sensitive, SB_RSABG-Rancho Santa Ana Botanic Garden, USFS_S-Sensitive		
Habitat:	General: CHAPARRAL.		
	Micro: ROCKY OUTCROPS; CAN BE DOMINANT SHRUB WHERE IT OCCURS. 1500 M.		



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Occurrence No.	1	Map Index: 26514	EO Index: 1588	Element Last Seen:	2010-05-27
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2010-05-27
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-15

Quad Summary: Pacifico Mountain (3411841)

County Summary: Los Angeles

Lat/Long:	34.38802 / -118.08091	Accuracy:	specific area
UTM:	Zone-11 N3805709 E400633	Elevation (ft):	5000
PLSS:	T04N, R12W, Sec. 36 (S)	Acres:	42.0

Location: MILL CREEK SUMMIT; AROUND TIE SUMMIT STATION AND ALONG ANGELES FOREST HWY AND PACIFICO MOUNTAIN RD, SAN GABRIEL MTNS.

Detailed Location: MAPPED AS TWO POLYGONS IN THE NE 1/4 OF SEC 36 AND THE W 1/2 OF SEC 31 BASED ON 2010 ICF DIGITAL DATA AND COORDINATES GIVEN IN A 2006 FRAGA REPORT AND 2008 MISTRETTA FIELD SURVEYS.

Ecological: SITE HEAVILY MODIFIED INTO AN OPEN WOODLAND OF PLANTED CONIFERS AND CHAPARRAL. ASSOCIATES INCLUDE ADENOSTEMA FASCICULATUM, CHRYSOTHAMNUS NAUSEOSUS, CEANOTHUS LEUCODERMIS, ARTEMISIA TRIDENTATA, PENSTEMON CENTRANTHIFOLIUS, ETC.

General: TYPE LOCALITY. 20 INDIVIDUALS SEEN IN PORTION OF SOUTHERN POLYGON IN 2008; PLANT NOTED AS COMMON THROUGHOUT THE AREA IN ANOTHER SURVEY OF THE SAME YEAR. 99 PLANTS SEEN IN THE NORTHERN POLYGON AND 753 IN THE SOUTHERN POLYGON IN 2010.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	19	Map Index: 84439	EO Index: 85468	Element Last Seen:	2011-06-26
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-06-26
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-06

Quad Summary: Chilao Flat (3411831), Pacifico Mountain (3411841)

County Summary: Los Angeles

Lat/Long:	34.37147 / -118.07081	Accuracy:	3/5 mile
UTM:	Zone-11 N3803865 E401543	Elevation (ft):	
PLSS:	T03N, R11W, Sec. 06 (S)	Acres:	0.0

Location: GRANITE MOUNTAIN, ANGELES NATIONAL FOREST.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDB AS BEST GUESS IN THE VICINITY OF GRANITE MOUNTAIN.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A SET OF 2011 KRAMER PHOTOS; KRAMER NOTES PHOTO WAS TAKEN APPROXIMATELY TWO YEARS AFTER THE STATION FIRE. NEED MAP DETAIL FOR THIS SITE; POSSIBLY REFERRING TO NEARBY OCCURRENCES ALONG MILL CREEK.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	20	Map Index: 84440	EO Index: 85469	Element Last Seen:	2010-06-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-06-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-06

Quad Summary: Condor Peak (3411832), Acton (3411842)

County Summary: Los Angeles

Lat/Long:	34.37237 / -118.14955	Accuracy:	specific area
UTM:	Zone-11 N3804044 E394303	Elevation (ft):	5500
PLSS:	T03N, R12W, Sec. 04 (S)	Acres:	3.0

Location: SSW OF LITTLE GLEASON FORESTRY PLANTATION ON 3N27; AT JCT WITH MOUNT GLEASON RD AND 0.3 MILE SOUTH, SAN GABRIEL MTNS.

Detailed Location: MAPPED AS TWO POLYGONS IN THE SW 1/4 OF THE NW 1/4 AND THE NW 1/4 OF THE SW 1/4 OF SECTION 4 BASED ON 2010 ICF DIGITAL DATA.

Ecological:

General: 1349 PLANTS SEEN IN THE NORTHERN POLYGON AND 200 IN THE SOUTHERN POLYGON IN 2010.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	21	Map Index: 84441	EO Index: 85470	Element Last Seen:	1995-06-20
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1995-06-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-06

Quad Summary: Pacifico Mountain (3411841)

County Summary: Los Angeles

Lat/Long:	34.37907 / -118.02626	Accuracy:	1/5 mile
UTM:	Zone-11 N3804665 E405647	Elevation (ft):	6600
PLSS:	T03N, R11W, Sec. 03 (S)	Acres:	0.0

Location: EAST OF PACIFICO MOUNTAIN; FOUNTAINHEAD SPRING, SAN GABRIEL MOUNTAINS.

Detailed Location: SOURCE STATES "SAN GABRIEL MOUNTAINS: BARE MOUNTAIN CANYON. FOUNTAINHEAD SPRING, E OF PACIFICO MTN. 6600 FT. T3N R11W SEC 3. N SLOPE." MAPPED IN THE NW 1/4 OF SEC 3 AROUND THE N SLOPES OF FOUNTAINHEAD SPRING AT 6600 FT IN ELEVATION.

Ecological: N SLOPE, FULL SUN, MOIST, GRANITIC LOAM, YELLOW PINE WOODLAND. ASSOCIATED WITH PINUS JEFFREYI, ABIES CONCOLOR, CALOEDRUS DECURRENS, POTENTILLA GLANDULOSA, SOLIDAGO CALIFORNICA, AND ERIOGONUM WRIGHTII VAR. SUBSCAPOSUM.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1995 MISTRETTA COLLECTION.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	22	Map Index: 84443	EO Index: 85472	Element Last Seen:	2010-06-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-06-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-06

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.37814 / -118.08977	Accuracy:	specific area
UTM:	Zone-11 N3804623 E399807	Elevation (ft):	4350
PLSS:	T03N, R12W, Sec. 01 (S)	Acres:	9.0

Location: EAST OF MILL CREEK; APPROXIMATELY 0.5 MILE NW OF FALCON MINE ALONG FOREST SERVICE RD 4N18, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED IN THE CENTER OF THE NORTH 1/2 OF SECTION 1 BASED ON 2010 ICF DIGITAL DATA.
Ecological:
General: 103 PLANTS SEEN IN 2010.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	23	Map Index: 84444	EO Index: 85473	Element Last Seen:	2010-05-28
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-05-28
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-06

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.38231 / -118.08453	Accuracy:	specific area
UTM:	Zone-11 N3805080 E400294	Elevation (ft):	5150
PLSS:	T04N, R12W, Sec. 36 (S)	Acres:	1.0

Location: EAST OF MILL CREEK; APPROXIMATELY 0.6 AIR MILE NORTH OF FALCON MINE, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED IN THE SW 1/4 OF THE SE 1/4 OF SECTION 36 BASED ON 2010 ICF DIGITAL DATA.
Ecological:
General: 5 PLANTS SEEN IN 2010.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	24	Map Index: 84447	EO Index: 85475	Element Last Seen:	1992-08-20
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1992-08-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-06

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.39820 / -118.10392	Accuracy:	nonspecific area
UTM:	Zone-11 N3806861 E398530	Elevation (ft):	5630
PLSS:	T04N, R12W, Sec. 26 (S)	Acres:	37.0

Location: ROAD TO MOUNT GLEASON; 3.7 KM WEST OF MILL CREEK SUMMIT, SAN GABRIEL MOUNTAINS.
Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS AT AROUND 3.7 KM WEST OF MILL CREEK SUMMIT ALONG MOUNT GLEASON RD. ELEVATION IN AREA IS 1716 M (5630 FT) WHICH IS SLIGHTLY HIGHER THAN THAT GIVEN IN SOURCES (1665 M, 5460 FT).
Ecological:
General: SITE BASED ON FOUR 1992 KEELEY COLLECTIONS FROM "SAN GABRIEL MOUNTAINS REGION, ROAD TO MT. GLEASON, 3.7 KM WEST OF MILL CREEK SUMMIT. 1665 M."
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	25	Map Index: 84450	EO Index: 85478	Element Last Seen:	2010-05-25
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-05-25
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-06

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.40193 / -118.07593	Accuracy:	specific area
UTM:	Zone-11 N3807247 E401108	Elevation (ft):	4400
PLSS:	T04N, R11W, Sec. 30 (S)	Acres:	4.0

Location: ALISO CANYON; AT JUNCTION WITH TIE CANYON AND 0.2 AIR MILE NORTH, ON WEST SIDE OF ANGELES FOREST HWY, SAN GABRIEL MTNS.
Detailed Location: MAPPED AS TWO POLYGONS IN THE SW 1/4 OF SECTION 30 BASED ON 2010 ICF DIGITAL DATA.
Ecological:
General: 53 PLANTS SEEN IN NORTHERN POLYGON AND 20 IN THE SOUTHERN POLYGON IN 2010.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	26	Map Index: 84456	EO Index: 85484	Element Last Seen:	2010-05-20
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-05-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-08

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.41202 / -118.08180	Accuracy:	specific area
UTM:	Zone-11 N3808372 E400580	Elevation (ft):	4300
PLSS:	T04N, R12W, Sec. 24 (S)	Acres:	1.0

Location: ALISO CANYON; ~0.6 AIR MI SW OF WAGONWHEEL RANCH, SW SIDE OF JCT OF DIRT ROAD AND ANGELES FOREST HWY, SAN GABRIEL MTNS.
Detailed Location: MAPPED IN THE CENTER OF THE EAST 1/2 OF THE SE 1/4 OF SECTION 24 BASED ON 2010 ICF DIGITAL DATA.
Ecological:
General: 15 PLANTS WERE SEEN IN 2010.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	27	Map Index: 84465	EO Index: 85485	Element Last Seen:	2010-06-17
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-06-17
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-07

Quad Summary: Condor Peak (3411832), Acton (3411842)

County Summary: Los Angeles

Lat/Long:	34.37719 / -118.16883	Accuracy:	specific area
UTM:	Zone-11 N3804598 E392536	Elevation (ft):	6000
PLSS:	T03N, R12W, Sec. 06 (S)	Acres:	17.0

Location: MOUNT GLEASON; SCATTERED ALONG MT GLEASON ROAD FROM ~0.3 TO 1.25 RD MI EAST OF JCT WITH ROAD TO PEAK, SAN GABRIEL MTNS.

Detailed Location: MAPPED AS FOUR POLYGONS IN THE EAST 1/2 OF THE NE 1/4 OF SECTION 6 AND THE NW 1/4 OF SECTION 5 BASED ON 2010 ICF DIGITAL DATA.

Ecological:

General: PLANT COUNTS IN 2010: (FROM W TO E POLYS) 80, 1280, 16985, 155. A VAGUE 1978 KEELEY COLLECTION FROM "MT. GLEASON" AND A 1992 KEELEY COLLECTION FROM "ROAD TO MT. GLEASON, 9 KM WEST OF MILL CREEK SUMMIT" ARE ALSO ATTRIBUTED TO THIS SITE.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	28	Map Index: 84467	EO Index: 85492	Element Last Seen:	2010-06-15
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-06-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-07

Quad Summary: Acton (3411842)

County Summary: Los Angeles

Lat/Long:	34.37908 / -118.15826	Accuracy:	specific area
UTM:	Zone-11 N3804797 E393511	Elevation (ft):	5500
PLSS:	T03N, R12W, Sec. 05 (S)	Acres:	4.0

Location: APPROXIMATELY 0.7 AIR MILE WSW OF LITTLE GLEASON FORESTRY PLANTATION ALONG MOUNT GLEASON ROAD, SAN GABRIEL MOUNTAINS.

Detailed Location: MAPPED IN THE NW 1/4 OF THE NE 1/4 OF SECTION 5 BASED ON 2010 ICF DIGITAL DATA.

Ecological:

General: 2605 PLANTS WERE SEEN IN 2010.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	29	Map Index: 84468	EO Index: 85493	Element Last Seen:	2010-05-26
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-05-26
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-07

Quad Summary: Acton (3411842)
County Summary: Los Angeles

Lat/Long:	34.38199 / -118.14608	Accuracy:	specific area
UTM:	Zone-11 N3805106 E394635	Elevation (ft):	5600
PLSS:	T04N, R12W, Sec. 33 (S)	Acres:	1.0

Location: LITTLE GLEASON FORESTRY PLANTATION; SOUTH SIDE OF PACIFIC CREST TRAIL, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED IN THE SW 1/4 OF THE SW 1/4 OF SECTION 33 BASED ON 2010 ICF DIGITAL DATA.
Ecological:
General: 2 PLANTS WERE SEEN IN 2010.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	36	Map Index: 84483	EO Index: 85505	Element Last Seen:	1992-08-20
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1992-08-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-08

Quad Summary: Waterman Mtn. (3411738), Juniper Hills (3411748)
County Summary: Los Angeles

Lat/Long:	34.37754 / -117.98976	Accuracy:	1/5 mile
UTM:	Zone-11 N3804462 E409002	Elevation (ft):	5282
PLSS:	T03N, R11W, Sec. 01 (S)	Acres:	0.0

Location: PINYON FLATS; NORTH OF SULPHUR SPRINGS CAMPGROUND, NORTH OF ANGELES CREST HWY, SAN GABRIEL MOUNTAINS.
Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS AROUND PINYON FLATS AREA, NORTH OF SULPHUR SPRINGS CAMPGROUND, TO ENCOMPASS ELEVATION OF 1610 M (5282 FT) GIVEN IN SOURCE.
Ecological:
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1992 KEELEY COLLECTION.
Owner/Manager: USFS-ANGELES NF

<i>Astragalus leucolobus</i>		Element Code: PDFAB0F4T0
Big Bear Valley woollypod		
Listing Status:	Federal: None	CNDDDB Element Ranks: Global: G2
	State: None	State: S2
	Other: Rare Plant Rank - 1B.2	
Habitat:	General: LOWER MONTANE CONIFEROUS FOREST, PEBBLE PLAIN, PINYON AND JUNIPER WOODLAND, UPPER MONTANE CONIFEROUS FOREST.	
	Micro: DRY PINE WOODS, GRAVELLY KNOLLS AMONG SAGEBRUSH, OR STONY LAKE SHORES IN THE PINE BELT. 1750-2885 M.	



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Occurrence No.	11	Map Index: 47924	EO Index: 47924	Element Last Seen:	1996-05-27
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1996-05-27
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-02-02
Quad Summary:	Mount San Antonio (3411736), Mescal Creek (3411746)				
County Summary:	Los Angeles				
Lat/Long:	34.37710 / -117.67506		Accuracy:	nonspecific area	
UTM:	Zone-11 N3804175 E437935		Elevation (ft):	7000	
PLSS:	T03N, R08W, Sec. 01 (S)		Acres:	35.0	
Location:	BETWEEN THE TWO SUMMITS OF TABLE MOUNTAIN, NW OF WRIGHTWOOD.				
Detailed Location:	MAPPED AS 2 NON-SPECIFIC POLYGONS, BASED ON COLLECTION SITE DESCRIPTIONS. NE SITE DESCRIBED AS RIGETOP, 0.25 MI SE OF SMITHSONIAN OBSERVATORY, SE/4 NW/4 SEC 1. SW SITE FROM CIRCA 200 M N OF HWY 2 AT MOUNTAIN HIGH SKI RESORT, E RUNWAY.				
Ecological:	MONTANE CONIFEROUS FOREST WITH PINUS JEFFREYI AND QUERCUS CHRYSOLEPIS.				
General:	POPULATION DESCRIBED AS "COMMON" AT NE SITE AND "ABUNDANT" AT SW SITE IN 1996. 1900 HALL COLLECTION FROM "SWARTHOUT CANYON, 6000 FT" ALSO ATTRIBUTED HERE.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	12	Map Index: 02895	EO Index: 29490	Element Last Seen:	2010-07-24
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2010-07-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-02-02
Quad Summary:	Mescal Creek (3411746)				
County Summary:	Los Angeles				
Lat/Long:	34.38021 / -117.68649		Accuracy:	nonspecific area	
UTM:	Zone-11 N3804528 E436887		Elevation (ft):	7200	
PLSS:	T03N, R08W, Sec. 02 (S)		Acres:	11.0	
Location:	BETWEEN BIG PINES STATION AND THE WESTERN SUMMIT OF TABLE MOUNTAIN, NW OF WRIGHTWOOD.				
Detailed Location:	ALONG USFS ROAD 4N21, 1/4 MILE EAST OF TABLE MOUNTAIN ROAD.				
Ecological:	MIXED OAK/PINE MONTANE FOREST.				
General:	THOUSANDS OF PLANTS OBSERVED IN 1992 IN THIS GENERAL VICINITY, BUT THE EXACT LOCATION(S) OF THE 1992 OBSERVATIONS ARE NOT KNOWN. 2 PLANTS OBSERVED AT THIS SITE ALONG THE ROAD IN 2010.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	25	Map Index: 35343	EO Index: 29491	Element Last Seen:	1998-07-02
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	1998-07-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-02-03

Quad Summary: Mescal Creek (3411746)

County Summary: Los Angeles

Lat/Long:	34.37943 / -117.65892	Accuracy:	specific area
UTM:	Zone-11 N3804424 E439421	Elevation (ft):	7200
PLSS:	T03N, R07W, Sec. 06 (S)	Acres:	52.3

Location: NORTH OF WRIGHTWOOD AT THE EAST END OF TABLE MOUNTAIN, JUST WEST OF SBD/LAX COUNTY LINE, SAN GABRIEL MOUNTAINS.

Detailed Location: MAPPED WITHIN T03N R07W W 1/2 OF NW 1/4 OF SECTION 6 AND T03N 08W NE 1/4 OF NE 1/4 OF SECTION 1.

Ecological: GRANITIC AND LIMESTONE SUBSTRATES. MONTANE CONIFEROUS FOREST AND PINYON-JUNIPER WOODLAND WITH MENTZELIA, BROMUS TECTORUM, TURRICULA PARRYI, CRYPTANTHA, ELYMUS ELYMOIDES, POA SECUNDA, FREMONTODENDRON, MALACOTHAMNUS, QUERCUS CHRYSOLEPIS, ETC.

General: 500+ PLANTS OBSERVED IN 1987. ALSO OBSERVED IN THIS AREA IN 1996-1998.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	26	Map Index: 35342	EO Index: 29489	Element Last Seen:	1987-06-08
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	1987-06-08
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-02-03

Quad Summary: Mescal Creek (3411746)

County Summary: Los Angeles

Lat/Long:	34.39432 / -117.71176	Accuracy:	nonspecific area
UTM:	Zone-11 N3806108 E434574	Elevation (ft):	6000
PLSS:	T04N, R08W, Sec. 34 (S)	Acres:	33.0

Location: 1 TO 2 MILES NW OF BIG PINES, SAN GABRIEL MOUNTAINS.

Detailed Location: MAPPED BY CNDDDB AS 4 POLYGONS. 3 NORTHWESTERN POLYGONS MAPPED BASED ON SPECIFIC LOCATION INFORMATION BY BOYD & KOPASE. 1 SOUTHEASTERN POLYGON MAPPED ALONG HIGHWAY BASED ON INTERPRETATION OF ROAD DIRECTIONS BY STADLER.

Ecological: YELLOW PINE FOREST WITH PINUS PONDEROSA, CALOCEDRUS, QUERCUS CHRYSOLEPIS, AND Q. KELLOGGII. SPARSE UNDERSTORY WITH ERIOGONUM, LUPINUS, AND POA. CONSIDERABLE ORGANICS WITH MUCH OPEN SAND.

General: IN 1987: <20 PLANTS OBSERVED IN FAR NW POLYGON, <50 IN NEXT POLY TO SE, AND <30 PLANTS IN THE NEXT POLY TO SE. ONLY INFO FOR FAR SE POLY IS 1966 STADLER COLLECTION FROM 1.5 MI W OF BIG PINES JUNCTION ON BIG PINES HWY, 2 FEET OFF THE ROAD.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	41	Map Index: 47920	EO Index: 47920	Element Last Seen:	2000-05-04
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2000-05-04
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-02-04

Quad Summary: Mescal Creek (3411746)

County Summary: Los Angeles

Lat/Long:	34.39687 / -117.72867	Accuracy:	nonspecific area
UTM:	Zone-11 N3806403 E433022	Elevation (ft):	6000
PLSS:	T04N, R08W, Sec. 33 (S)	Acres:	49.0

Location: NE OF BIG PINES HIGHWAY, FROM ABOUT 1/4 MILE NORTH TO 3/4 MILE NW OF JACKSON LAKE, SAN GABRIEL MOUNTAINS.

Detailed Location: MAPPED BY CNDDDB AS 2 POLYGONS. NW POLYGON BASED ON NON-SPECIFIC LOCATION INFORMATION FROM SWINNEY: CANYON BOTTOM, UPPER END OF BOULDER CANYON, CIRCA 100 M N OF HIGHWAY, SE 1/4 OF SEC 29. EXTENT OF SE POLYGON BASED ON SPECIFIC MAP BY WRIGHT.

Ecological: IN MONTANE CONIFEROUS FOREST WITH WEAK RIPARIAN DEVELOPMENT, IN OPEN FOREST, AND IN CHAPARRAL MIX. ASSOCIATED WITH QUERCUS KELLOGGII, Q. CHRYSOLEPIS, PINUS JEFFREYI, CERCOCARPUS BETULOIDES, PHACELIA IMBRICATA, ARCTOSTAPHYLOS, AND ARTEMISIA.

General: PLANTS WERE DESCRIBED AS SCARCE IN NW POLYGON IN 1999. 536 PLANTS OBSERVED IN SE POLYGON IN 2000.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	84	Map Index: 81714	EO Index: 82684	Element Last Seen:	2010-07-24
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2010-07-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-02-10

Quad Summary: Mescal Creek (3411746)

County Summary: Los Angeles

Lat/Long:	34.38672 / -117.69165	Accuracy:	80 meters
UTM:	Zone-11 N3805253 E436417	Elevation (ft):	7200
PLSS:	T04N, R08W, Sec. 35 (S)	Acres:	0.0

Location: TABLE MOUNTAIN CAMPGROUND, BETWEEN THE HOST SITE AND THE FIRST BATHROOM, TABLE MOUNTAIN, SAN GABRIEL MOUNTAINS.

Detailed Location:

Ecological: OPEN GRAVELLY AREA WITHIN MONTANE CONIFEROUS FOREST. ASSOCIATED WITH VIOLA PINETORUM SSP. GRISEA, LUPINUS EXCUBITUS VAR. JOHNSTONII, ERIOGONUM WRIGHTII SSP. SUBSCAPOSUM, CEANOTHUS CORDULATUS, CHRYSOTHAMNUS NAUSEOSUS, LOTUS CRASSIFOLIUS.

General: 1 PLANT OBSERVED IN 2010. 1993 COLLECTION BY MISTRETTA FROM SUNRISE SKI AREA ALSO ATTRIBUTED TO THIS OCCURRENCE.

Owner/Manager: USFS-ANGELES NF



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<i>Astragalus preussii</i> var. <i>laxiflorus</i>		Element Code: PDFAB0F721	
Lancaster milk-vetch			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G4T2
	State: None		State: S1
	Other: Rare Plant Rank - 1B.1		
Habitat:	General: CHENOPOD SCRUB.		
	Micro: ALKALINE CLAY FLATS OR GRAVELLY OR SANDY WASHES AND ALONG DRAWS IN GULLIED BADLANDS. 725M IN CALIFORNIA.		

Occurrence No.	1	Map Index: 27633	EO Index: 13967	Element Last Seen: 1902-06-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 1902-06-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2011-10-19

Quad Summary: Lancaster East (3411861), Lancaster West (3411862)
County Summary: Los Angeles

Lat/Long:	34.69828 / -118.13809	Accuracy:	1 mile
UTM:	Zone-11 N3840173 E395765	Elevation (ft):	2400
PLSS:	T07N, R12W, Sec. 15 (S)	Acres:	0.0

Location: LANCASTER, ANTELOPE VALLEY.
Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB IN GENERAL VICINITY OF LANCASTER.
Ecological:
General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1902 COLLECTION BY ELMER. SITE IS PROBABLY NO LONGER EXTANT ACCORDING TO LAPRE (1999).
Owner/Manager: UNKNOWN



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<i>Astragalus lentiginosus var. antonius</i>		Element Code: PDFAB0FB92	
San Antonio milk-vetch			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G5T2
	State: None		State: S2
	Other: Rare Plant Rank - 1B.3, USFS_S-Sensitive		
Habitat:	General: LOWER MONTANE CONIFEROUS FOREST, UPPER MONTANE CONIFEROUS FOREST.		
	Micro: DRY SLOPES IN OPEN YELLOW PINE FOREST. 1500-2600M.		

Occurrence No.	4	Map Index: 34633	EO Index: 485	Element Last Seen:	1927-05-14
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2003-06-13
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2004-10-18

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.40216 / -117.78523	Accuracy:	1 mile
UTM:	Zone-11 N3807027 E427828	Elevation (ft):	6000
PLSS:	T04N, R09W, Sec. 26 (S)	Acres:	0.0

Location: PINON RIDGE, SAN GABRIEL MOUNTAINS.
Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS IN CENTER OF PINON RIDGE. RIDGE EXTENDS TO NW AND SE OF MAPPED CIRCLE FROM APPROXIMATELY 5600-6535 FT ELEVATION.
Ecological:
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1927 COLLECTION BY STASON. PLANTS NOT SEEN IN 2003 SURVEY BY SOZA. AREA SEARCHED INCLUDES BOTH SIDES OF USFS ROAD 4N56 ALONG TOP OF PINON RIDGE FROM 5800-6200 FT.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	12	Map Index: 81099	EO Index: 82082	Element Last Seen:	1933-05-15
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1933-05-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-12-15

Quad Summary: Mount San Antonio (3411736), Mescal Creek (3411746)
County Summary: Los Angeles

Lat/Long:	34.37766 / -117.69098	Accuracy:	1 mile
UTM:	Zone-11 N3804248 E436471	Elevation (ft):	7000
PLSS:	T03N, R08W, Sec. 02 (S)	Acres:	0.0

Location: EAST BLUE RIDGE, BIG PINES PARK, SAN GABRIEL MOUNTAINS.
Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS CENTERED ON BIG PINES.
Ecological: FOREST OF PINUS SP. AND ABIES CONCOLOR.
General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1933 COLLECTION BY TEMPLETON.
Owner/Manager: USFS-ANGELES NF

<i>Lupinus peirsonii</i>		Element Code: PDFAB2B330	
Peirson's lupine			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G2
	State: None		State: S2
	Other: Rare Plant Rank - 1B.3, USFS_S-Sensitive		
Habitat:	General: JOSHUA TREE WOODLAND, PINYON-JUNIPER WOODLAND, LOWER MONTANE CONIFEROUS FOREST, UPPER MONTANE CONIFEROUS FOREST.		



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Micro: DECOMPOSED GRANITE SLIDE AND TALUS, ON SLOPES AND RIDGES. 1000-2500 M.

Occurrence No.	4	Map Index:	59043	EO Index:	59079	Element Last Seen:	1977-06-04
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1977-06-04	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2010-12-28	

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.40536 / -117.81954	Accuracy:	nonspecific area
UTM:	Zone-11 N3807407 E424677	Elevation (ft):	4600
PLSS:	T04N, R09W, Sec. 28 (S)	Acres:	47.0

Location: BIG ROCK CREEK, 3 MILES N OF BIG ROCK CREEK CAMPGROUND, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED AS BEST GUESS ALONG BIG ROCK CREEK, ABOUT 3 MI N OF BIG ROCK CRK CAMPGROUND.
Ecological: GRAVELLY SLOPES OF ROAD SHOULDER IN OPEN SUN.
General: 2 PLANTS SEEN IN 1930 BY PEIRSON ON "NORTH SLOPE OF ROCK CREEK, 4500 FT". 1926 MASON COLLECTION "ROCK CREEK, 4250 FT" AND 1949 DEARING COLLECTION "ALONG ROCK CREEK" ATTRIBUTED TO THIS OCCURRENCE.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	5	Map Index:	59045	EO Index:	59081	Element Last Seen:	2011-10-23
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:		2011-10-23	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-02-01	

Quad Summary: Juniper Hills (3411748)
County Summary: Los Angeles

Lat/Long:	34.38179 / -117.89258	Accuracy:	specific area
UTM:	Zone-11 N3804850 E417940	Elevation (ft):	6650
PLSS:	T04N, R10W, Sec. 35 (S)	Acres:	12.0

Location: NORTH AND SOUTH SIDE OF TRAIL. JUST S OF BURKHART SADDLE, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED BY CNDDDB TO ENCOMPASS COORDINATES IN 2011 FIELD SURVEY.
Ecological: SOUTHWEST-FACING STEEP, SUNNY SLOPE WITH GRANITIC SCREE. ASSOCIATED WITH QUERCUS CHRYSOLEPIS, PINUS LAMBERTIANA, P. MONOPHYLLA, P. JEFFREYI, ABIES CONCOLOR, YUCCA WHIPPLEI, CERCOCARPUS LEDIFOLIUS VAR. INTERMONTANUS, QUERCUS WISLIZENI, ETC.
General: 45 PLANTS OBSERVED IN 2011.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	6	Map Index: 59085	EO Index: 59121	Element Last Seen: 198X-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 198X-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2010-12-28

Quad Summary: Crystal Lake (3411737), Valyermo (3411747)

County Summary: Los Angeles

Lat/Long:	34.37625 / -117.75609	Accuracy:	nonspecific area
UTM:	Zone-11 N3804134 E430484	Elevation (ft):	
PLSS:	T03N, R08W, Sec. 06 (S)	Acres:	55.8

Location: ALONG UPPER ROAD INTO BIG ROCK CREEK NEAR JUNCTION WITH ANGELES CREST HIGHWAY, SAN GABRIEL MOUNTAINS.

Detailed Location: MAPPED ALONG ROAD DESCENDING TO BIG ROCK CREEK IN VICINITY OF HIGHWAY 2 JUNCTION AT VINCENT GAP.

Ecological:

General: ONLY SOURCE IS UNDATED OBSERVATION BY LONG IN "THE 1970S-1980S." NEEDS FIELDWORK.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	11	Map Index: 81209	EO Index: 82197	Element Last Seen: 1994-09-22
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1994-09-22
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2010-12-28

Quad Summary: Valyermo (3411747), Juniper Hills (3411748)

County Summary: Los Angeles

Lat/Long:	34.40462 / -117.87757	Accuracy:	3/5 mile
UTM:	Zone-11 N3807370 E419342	Elevation (ft):	5800
PLSS:	T04N, R10W, Sec. 25 (S)	Acres:	0.0

Location: RIDGE E OF CARUTHERS CREEK, SW OF DEVILS PUNCHBOWL, SAN GABRIEL MOUNTAINS.

Detailed Location: ON E SIDE OF RIDGE.

Ecological: IN FULL SUN, ROCKY GRANITIC SOIL. ASSOCIATED SPECIES INCLUDE ARCTOSTAPHYLOS PATULA, CERCOCARPUS LEDIFOLIUS, QUERCUS CHRYSOLEPIS, ERIOGONUM WRIGHTII VAR. SUBSCAPOSUM, ELYMUS ELYMOIDES, ETC.

General: "SMALL POPULATION" NOTED IN 1994. ONLY SOURCE OF INFORMATION IS A 1994 MISTRETTE COLLECTION.

Owner/Manager: USFS-ANGELES NF



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California macrophylla

Element Code: PDGER01070

round-leaved filaree

Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G2
	State: None		State: S2
	Other: Rare Plant Rank - 1B.1, BLM_S-Sensitive, SB_RSABG-Rancho Santa Ana Botanic Garden, SB_SBBG-Santa Barbara Botanic Garden		
Habitat:	General: CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.		
	Micro: CLAY SOILS. 15-1200 M.		

Occurrence No.	7	Map Index:	01640	EO Index:	45686	Element Last Seen:	1888-06-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1888-06-XX	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2001-08-28	

Quad Summary: Lake Hughes (3411864)

County Summary: Los Angeles

Lat/Long:	34.66387 / -118.40396	Accuracy:	1 mile
UTM:	Zone-11 N3836665 E371359	Elevation (ft):	
PLSS:	T07N, R14W, Sec. 30 (S)	Acres:	0.0

Location: ELIZABETH LAKE.

Detailed Location:

Ecological:

General: SITE BASED ON AN 1888 COLLECTION BY PARISH. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN



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<i>Lepechinia rossii</i>		Element Code: PDLAM0V060	
Ross' pitcher sage			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G1
	State: None		State: S1
	Other: Rare Plant Rank - 1B.2, SB_RSABG-Rancho Santa Ana Botanic Garden, USFS_S-Sensitive		
Habitat:	General: CHAPARRAL.		
	Micro: SOIL DERIVED FROM FINE-GRAINED, REDDISH SEDIMENTARY ROCK. 305-790 M.		
Occurrence No.	3	Map Index: 68008	EO Index: 68158
Occ. Rank:	Unknown	Presence: Presumed Extant	Element Last Seen: 2004-05-11
Occ. Type:	Natural/Native occurrence	Trend: Unknown	Site Last Seen: 2004-05-11
			Record Last Updated: 2007-02-01
Quad Summary:	Green Valley (3411854)		
County Summary:	Los Angeles		
Lat/Long:	34.59249 / -118.49231	Accuracy:	80 meters
UTM:	Zone-11 N3828866 E363146	Elevation (ft):	3000
PLSS:	T06N, R15W, Sec. 20 (S)	Acres:	0.0
Location:	HEAD OF RUBY CANYON ON NORTHERN FLANK OF RED MOUNTAIN, LIEBRE MOUNTAINS REGION.		
Detailed Location:	MAPPED ACCORDING TO COORDINATES PROVIDED BY BOYD & MORGAN: 34 35 33 N, 118 29 29 W (NAD27).		
Ecological:	ASSOCIATED WITH CHAPARRAL VEGETATION WITH ADENOSTOMA FASCICULATUM, CERCOCARPUS BETULOIDES, CLEMATIS LASIANTHA, ERIODICTYON CRASSIFOLIUM VAR. NIGRESCENS, ERIOGONUM FASCICULATUM VAR. FOLIOLOSUM, ERIOPHYLLUM CONFERTIFLORUM, ETC.		
General:	TYPE LOCATION. COLLECTED HERE BY BOYD AND MISTRETTE IN 2004.		
Owner/Manager:	UNKNOWN		



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<i>Malacothamnus davidsonii</i>		Element Code: PDMAL0Q040	
Davidson's bush-mallow			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G2
	State: None		State: S2
	Other: Rare Plant Rank - 1B.2		
Habitat:	General: COASTAL SCRUB, RIPARIAN WOODLAND, CHAPARRAL, CISMONTANE WOODLAND.		
	Micro: SANDY WASHES. 185-855 M.		

Occurrence No.	25	Map Index: 45637	EO Index: 64278	Element Last Seen:	1923-09-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1923-09-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-03-09

Quad Summary: Mescal Creek (3411746)
County Summary: Los Angeles

Lat/Long:	34.37868 / -117.69158	Accuracy:	1/5 mile
UTM:	Zone-11 N3804361 E436418	Elevation (ft):	6000
PLSS:	T03N, R08W, Sec. 02 (S)	Acres:	0.0

Location: AT RANGER STATION NEAR SWARTHOUT VALLEY; SAN ANTONIO MOUNTAINS.
Detailed Location: EXACT LOCATION UNKNOWN; MAPPED AS BEST GUESS BY CNDDB IN VICINITY OF BIG PINES STATION, WEST OF SWARTHOUT VALLEY.
Ecological: STONY SOIL AT EDGE OF MEADOW.
General: 1923 MUNZ COLLECTION IS THE ONLY SOURCE FOR THIS SITE. NEEDS FIELDWORK.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	26	Map Index: 64184	EO Index: 64279	Element Last Seen:	1936-08-05
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1936-08-05
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-03-09

Quad Summary: Mescal Creek (3411746)
County Summary: Los Angeles

Lat/Long:	34.42471 / -117.71363	Accuracy:	nonspecific area
UTM:	Zone-11 N3809479 E434426	Elevation (ft):	4800
PLSS:	T04N, R08W, Sec. 21 (S)	Acres:	73.0

Location: MESCAL CREEK AT 4800 FT ELEV; SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED NE OF BIG JOHN FLAT ALONG MESCAL CREEK.
Ecological:
General: 1936 ANDORFER COLLECTION IS THE ONLY SOURCE FOR THIS SITE. NEEDS FIELDWORK.
Owner/Manager: UNKNOWN



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<i>Clarkia xantiana ssp. parviflora</i>		Element Code: PDONA05181	
Kern Canyon clarkia			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G4T3
	State: None		State: S3
	Other: Rare Plant Rank - 4.2, SB_RSABG-Rancho Santa Ana Botanic Garden		
Habitat:	General: CISMONTANE WOODLAND, GREAT BASIN SCRUB.		
	Micro: DRY SLOPES. 800-3620 M.		

Occurrence No.	8	Map Index: 65089	EO Index: 65168	Element Last Seen:	1995-06-06
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1995-06-06
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-07-12
Quad Summary:	Valyermo (3411747)				
County Summary:	Los Angeles				
Lat/Long:	34.43230 / -117.84183		Accuracy:	2/5 mile	
UTM:	Zone-11 N3810412 E422653		Elevation (ft):		
PLSS:	T04N, R09W, Sec. 17 (S)		Acres:	0.0	
Location:	ABOUT 2 KM SOUTHEAST OF VALYERMO POST OFFICE, OFF LA COUNTY ROAD JUST WEST OF MOUTH OF CANYON OF BIG ROCK CREEK.				
Detailed Location:					
Ecological:	ON E-FACING SLOPE IN LOOSE SOIL; UNDER AND BETWEEN SHRUBS INCLUDING ARTEMISIA, JUNIPERUS, AND PURSHIA.				
General:	A FEW HUNDRED INDIVIDUALS SEEN. 1995 GEBER COLLECTION IS THE ONLY SOURCE FOR THIS OCCURRENCE. NEEDS FIELDWORK.				
Owner/Manager:	UNKNOWN				

<i>Orobanche valida ssp. valida</i>		Element Code: PDORO040G2	
Rock Creek broomrape			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G3T2
	State: None		State: S2
	Other: Rare Plant Rank - 1B.2, USFS_S-Sensitive		
Habitat:	General: CHAPARRAL, PINYON-JUNIPER WOODLAND.		
	Micro: ON SLOPES OF LOOSE DECOMPOSED GRANITE; PARASITIC ON VARIOUS CHAPARRAL SHRUBS. 1705-1820M.		



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Occurrence No.	1	Map Index: 02624	EO Index: 29074	Element Last Seen:	1999-07-17
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	1999-07-17
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-03-21

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.38274 / -117.83392	Accuracy:	specific area
UTM:	Zone-11 N3804910 E423334	Elevation (ft):	5400
PLSS:	T04N, R09W, Sec. 33 (S)	Acres:	4.0

Location: SOUTH FORK BIG ROCK CREEK, ALONG TRAIL BETWEEN SOUTH FORK CAMPGROUND AND ISLIP SADDLE, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED AS A SERIES OF 5 POLYGONS BASED ON MISTRETТА MAP FROM 1.0-1.8 MI SW OF CAMPGROUND ALONG TRAIL NEAR SWITCHBACKS AS YOU LEAVE THE RIVER (W SIDE OF TRAIL) AND BEFORE MILE MARKER 2. ELEVATION FROM 5300-5600 FT.
Ecological: IN CHAPARREL PINYON WOODLAND, E AND SE-FACING SLOPES ON COARSE GRANITE TALUS. ASSOCIATED WITH GARRYA FLAVESCENS (HOST), MELICA IMPERFECTA, STIPA SP., ERIODICTYON TRICHOCALYX (HOST), CERCOCARPUS BETULOIDES, AND ACHNATHERUM SPECIOSUM (HOST).
General: TYPE LOCALITY. ~50 PLANTS IN 1979, AT LEAST 100 IN 1982, AND 9 IN 1992 IN 2 SUBPOPS. 300-500 PLANTS IN 1994 AMONG 5 POLYS (POSSIBLY MORE IF SURROUNDING HABITAT SURVEYED MORE THOROUGHLY). 1999 PHOTOS FROM AREA ALSO ATTRIBUTED TO THIS SITE.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	8	Map Index: 82044	EO Index: 83026	Element Last Seen:	2011-07-23
Occ. Rank:	Excellent		Presence: Presumed Extant	Site Last Seen:	2011-07-23
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-02-22

Quad Summary: Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.39983 / -117.83442	Accuracy:	specific area
UTM:	Zone-11 N3806806 E423304	Elevation (ft):	4800
PLSS:	T04N, R09W, Sec. 28 (S)	Acres:	10.0

Location: WEST OF SOUTH FORK BIG ROCK CREEK, NW OF SOUTH FORK CAMPGROUND, SAN GABRIEL MOUNTAINS.
Detailed Location: ALONG TRAIL TO DEVIL'S PUNCHBOWL COUNTY PARK TOWARDS HOLCOMB CANYON LOCATED AT 0.7 MI, 1 MILE AND 1.3 MILES NW OF CAMPGROUND. MAPPED AS 3 POLYGONS BASED ON MISTRETТА MAP AND DAVIS COORDINATES IN THE SW 1/4 SECTION 28 AND SE 1/4 SECTION 29.
Ecological: S AND SW-FACING SLOPES. COARSE LOAM SOIL. FAIRLY OPEN CHAPARRAL AND PINYON-JUNIPER ASSOCIATION WITH GARRYA FLAVESCENS (HOST), YUCCA WHIPPLEI, ACHNATHERUM SPECIOSUM, FREMONTODENDRON CALIFORNICUM SSP. CALIFORNICUM, CEANOTHUS GREGGII, ETC.
General: 10 PLANTS IN W POLYGON AND 200 PLANTS EACH IN CENTER & E POLYGONS IN 1995. IN 2011, 130 PLANTS WERE SEEN IN E-MOST POLYGON & 45 PLANTS IN CENTER POLYGON. AN ADDITIONAL POPULATION OF 53 PLANTS SEEN FURTHER TO W IN 2011 (NEED COORDINATES).
Owner/Manager: USFS-ANGELES NF, LAX COUNTY



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Occurrence No.	9	Map Index: 82045	EO Index: 83027	Element Last Seen:	2011-08-07
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2011-08-07
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-02-23
Quad Summary:	Valyermo (3411747)				
County Summary:	Los Angeles				
Lat/Long:	34.39504 / -117.81834		Accuracy:	specific area	
UTM:	Zone-11 N3806262 E424778		Elevation (ft):	4900	
PLSS:	T04N, R09W, Sec. 33 (S)		Acres:	12.0	
Location:	BIG ROCK CREEK, SE OF CONFLUENCE WITH SOUTH FORK BIG ROCK CREEK, JUST S & E OF SOUTH FORK CAMPGROUND, SAN GABRIEL MTNS.				
Detailed Location:	ON SOUTH SIDE OF CANYON SLOPE OF BIG ROCK CREEK, WEST OF PARADISE SPRINGS. MAPPED AS 4 POLYGONS BASED ON MISTRETTA MAP AND DAVIS FIELD SURVEY.				
Ecological:	S AND SW-FACING SLOPES. COARSE LOAM SOIL WITH CONSIDERABLE LEAF LITTER. FAIRLY OPEN CHAPARRAL AND PINYON-JUNIPER ASSOCIATION WITH GARRYA FLAVESCENS, ACHNATHERUM SPECIOSUM, QUERCUS JOHN-TUCKERI, AND CERCOCARPUS BETULOIDES ALL AS HOSTS.				
General:	300 PLANTS SEEN IN 1995 IN THE TWO NE POPULATIONS. IN 2011, 78 PLANTS WERE SEEN IN THE SOUTHERNMOST POLYGON AND 85 PLANTS WERE SEEN IN THE POLYGON JUST EAST OF SOUTH FORK CAMPGROUND.				
Owner/Manager:	USFS-ANGELES NF				

Occurrence No.	10	Map Index: 82046	EO Index: 83028	Element Last Seen:	1995-06-30
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1995-06-30
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-03-21
Quad Summary:	Valyermo (3411747)				
County Summary:	Los Angeles				
Lat/Long:	34.38939 / -117.80785		Accuracy:	specific area	
UTM:	Zone-11 N3805628 E425737		Elevation (ft):	5450	
PLSS:	T04N, R09W, Sec. 34 (S)		Acres:	2.0	
Location:	BIG ROCK CREEK, SE OF CONFLUENCE WITH SOUTH FORK BIG ROCK CREEK, 0.8 MI SE OF SOUTH FORK CAMPGROUND, SAN GABRIEL MTNS.				
Detailed Location:	SLOPES SOUTH OF PARADISE SPRINGS. MAPPED BASED ON MISTRETTA MAP NEAR THE CENTER OF SECTION 34, IN THE SW 1/4 NE 1/4 SECTION 34.				
Ecological:	N-FACING SLOPE. COARSE LOAM SOIL. FAIRLY OPEN CHAPARRAL AND PINYON-JUNIPER ASSOCIATION WITH GARRYA FLAVESCENS (HOST), PSEUDOTSUGA MACROCARPA, YUCCA WHIPPLEI, ACHNATHERUM SPECIOSUM, CERCOCARPUS BETULOIDES, ERIOGONUM DAVIDSONII, ETC.				
General:	150 PLANTS SEEN IN 1995 ABOVE AND BELOW TRAIL. SURVEY CONTINUED UP TRAIL TO DORR CANYON WITH NO ADDITIONAL PLANTS FOUND.				
Owner/Manager:	USFS-ANGELES NF				

Canbya candida		Element Code: PDPAP05020
white pygmy-poppy		
Listing Status:	Federal: None	CNDDB Element Ranks: Global: G3
	State: None	State: S3.2
	Other: Rare Plant Rank - 4.2, SB_RSABG-Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	
Habitat:	General: JOSHUA TREE WOODLAND, MOJAVEAN DESERT SCRUB.	
	Micro: SANDY PLACES. 725-1250 M.	



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Occurrence No.	6	Map Index: 27637	EO Index: 869	Element Last Seen: 1986-05-16
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1986-05-16
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1996-01-31

Quad Summary: Phelan (3411745), Mescal Creek (3411746)
County Summary: San Bernardino

Lat/Long:	34.44076 / -117.63412	Accuracy:	nonspecific area
UTM:	Zone-11 N3811210 E441744	Elevation (ft):	3900
PLSS:	T04N, R07W, Sec. 08 (S)	Acres:	63.7

Location: PINON HILLS, ALONG SMOKE TREE ROAD AT FIRST WASH EAST OF HIGHWAY 138.
Detailed Location: EXACT SITE OF "FIRST WASH" UNKNOWN. MAPPED TO INCLUDE THE AREA FROM HWY 138 EAST FOR ABOUT 1 MILE. MAPPED ALONG ROAD AT BOTTOM EDGE OF SECTION 8.

Ecological:
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1986 COLLECTION BY HARPER.
Owner/Manager: UNKNOWN

Occurrence No.	7	Map Index: 27636	EO Index: 870	Element Last Seen: 1986-03-31
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1986-03-31
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1996-01-31

Quad Summary: Mescal Creek (3411746)
County Summary: Los Angeles

Lat/Long:	34.46452 / -117.68161	Accuracy:	nonspecific area
UTM:	Zone-11 N3813873 E437398	Elevation (ft):	3800
PLSS:	T04N, R08W, Sec. 02 (S)	Acres:	59.2

Location: NW OF PINON HILLS, ALONG HIGHWAY 138; 4 MILES EAST OF HIGHWAY 18.
Detailed Location: MAPPED 4 MILES SE OF PEARBLOSSOM HIGHWAY. ORIGINAL LABEL GIVES "...NE OF PINYON HILLS".

Ecological:
General: COMMON BUT INCONSPICUOUS IN 1986. ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1986 COLLECTION BY BOYD.
Owner/Manager: UNKNOWN

Occurrence No.	11	Map Index: 27633	EO Index: 13969	Element Last Seen: XXXX-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: XXXX-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 1995-12-15

Quad Summary: Lancaster East (3411861), Lancaster West (3411862)
County Summary: Los Angeles

Lat/Long:	34.69828 / -118.13809	Accuracy:	1 mile
UTM:	Zone-11 N3840173 E395765	Elevation (ft):	2400
PLSS:	T07N, R12W, Sec. 15 (S)	Acres:	0.0

Location: LANCASTER.

Detailed Location:

Ecological:
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS UNDATED COLLECTION BY DAVIDSON (SN, UNKNOWN HERB) CITED IN 1922 JEPSON FLORA.
Owner/Manager: UNKNOWN



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Occurrence No.	30	Map Index: 33418	EO Index: 32983	Element Last Seen: 1926-04-26
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1926-04-26
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2007-11-20

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.45882 / -118.01803	Accuracy:	specific area
UTM:	Zone-11 N3813501 E406493	Elevation (ft):	3400
PLSS:	T04N, R11W, Sec. 03 (S)	Acres:	141.4

Location: LITTLE ROCK CREEK.
Detailed Location: COLLECTION MADE ON SAND FLAT ALONG LITTLE ROCK CREEK AT 3400' ELEVATION. SITE MAPPED BY CNDDDB ALONG LITTLE ROCK CREEK FROM LITTLE ROCK RESERVOIR SOUTH FOR ABOUT 1.8 MILES.
Ecological:
General: TWO COLLECTIONS ATTRIBUTED TO THIS SITE: PEIRSON (#2412 UNKNOWN HERB) IN 1921 AND MASON (#3020 UC) IN 1926. NEEDS FIELDWORK.
Owner/Manager: USFS-ANGELES NF

Chorizanthe parryi var. fernandina **Element Code:** PDPGN040J1
 San Fernando Valley spineflower

Listing Status:	Federal: Candidate	CNDDB Element Ranks:	Global: G2T1
	State: Endangered		State: S1
	Other: Rare Plant Rank - 1B.1, SB_RSABG-Rancho Santa Ana Botanic Garden, USFS_S-Sensitive		
Habitat:	General: COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND.		
	Micro: SANDY SOILS. 150-1220 M.		

Occurrence No.	2	Map Index: 01640	EO Index: 21126	Element Last Seen: 1929-05-21
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen: 199X-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2008-09-29

Quad Summary: Lake Hughes (3411864)
County Summary: Los Angeles

Lat/Long:	34.66387 / -118.40396	Accuracy:	1 mile
UTM:	Zone-11 N3836665 E371359	Elevation (ft):	3320
PLSS:	T07N, R14W, Sec. 30 (S)	Acres:	0.0

Location: ELIZABETH LAKE.
Detailed Location: MAPPED AT ELIZABETH LAKE IN THE ANGELES NATIONAL FOREST.
Ecological: FOUND ON SANDY BANKS.
General: SITE BASED ON 3 COLLECTIONS; HOFFMANN IN 1928 & 1929, AND AN UNDATED COLLECTION BY HALL. NO INDIVIDUALS LOCATED DURING SURVEYS IN THIS AREA OVER THE LAST TEN YEARS, DESPITE THE PRESENCE OF SUITABLE HABITAT (SEE STO99U0001). NEEDS FIELDWORK.
Owner/Manager: UNKNOWN



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Chorizanthe parryi var. parryi

Element Code: PDPGN040J2

Parry's spineflower

Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G3T3
	State: None		State: S3
	Other: Rare Plant Rank - 1B.1, BLM_S-Sensitive, SB_RSABG-Rancho Santa Ana Botanic Garden, USFS_S-Sensitive		
Habitat:	General: COASTAL SCRUB, CHAPARRAL, CISMONTANE WOODLAND, VALLEY AND FOOTHILL GRASSLAND.		
	Micro: DRY SLOPES AND FLATS; SOMETIMES AT INTERFACE OF 2 VEGETATION TYPES, SUCH AS CHAPARRAL AND OAK WOODLAND; DRY, SANDY SOILS. 225-1220 M.		

Occurrence No.	38	Map Index:	27633	EO Index:	42078	Element Last Seen:	1896-06-XX
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:			1896-06-XX
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2008-10-20

Quad Summary: Lancaster East (3411861), Lancaster West (3411862)

County Summary: Los Angeles

Lat/Long:	34.69828 / -118.13809	Accuracy:	1 mile
UTM:	Zone-11 N3840173 E395765	Elevation (ft):	2350
PLSS:	T07N, R12W, Sec. 15 (S)	Acres:	0.0

Location: LANCASTER.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED BY CNDDDB AS BEST GUESS IN GENERAL VICINITY OF LANCASTER.

Ecological:

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1892 DAVIDSON COLLECTION. SANDERS (2008) THINKS THAT THIS SITE IS LIKELY A MIS-ID OR BAD LOCALITY. SPECIMEN NEEDS TO BE EXAMINED.

Owner/Manager: UNKNOWN

Occurrence No.	95	Map Index:	72617	EO Index:	73500	Element Last Seen:	1995-05-04
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:			1995-05-04
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:			2008-10-20

Quad Summary: Green Valley (3411854)

County Summary: Los Angeles

Lat/Long:	34.51456 / -118.40855	Accuracy:	1/5 mile
UTM:	Zone-11 N3820113 E370707	Elevation (ft):	2100
PLSS:	T05N, R15W, Sec. 13 (S)	Acres:	0.0

Location: CA. 3.6 ROAD MILES NE OF BOUQUET CANYON ROAD, TEXAS CANYON, LIEBRE MOUNTAINS.

Detailed Location: MAPPED BY CNDDDB AS BEST GUESS IN THE CENTER OF THE SW1/4 OF SECTION 13 ACCORDING TO A 1995 ROSS & PORTER COLLECTION.

Ecological: CANYON BOTTOM WITH A FAIRLY NARROW MEANDERING STREAM AND GRASSY OLD-FORMATION BENCHES; ADJACENT SLOPES WITH CHAPARRAL AND COASTAL SAGE SCRUB ELEMENTS.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1995 ROSS & PORTER COLLECTION; MENTIONED AS "LOCALIZED ON STEEP EAST SLOPE" IN 1995. NEEDS FIELDWORK.

Owner/Manager: UNKNOWN



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<i>Eriastrum rosamondense</i>		Element Code: PDPLM030G0	
Rosamond eriastrum			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G1
	State: None		State: S1
	Other: Rare Plant Rank - 1B.1		
Habitat:	General: CHENOPOD SCRUB, VERNAL POOLS.		
	Micro: ALKALI POOL BEDS SEPARATED BY VERY LOW HUMMOCKS WITH OPEN CHEOPOD SCRUB. OFTEN SANDY SOIL. 700-715 M.		

Occurrence No.	2	Map Index: 92698	EO Index: 93850	Element Last Seen:	2005-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2005-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-06-09
Quad Summary:	Lancaster West (3411862)				
County Summary:	Los Angeles				
Lat/Long:	34.73461 / -118.19560		Accuracy:	1/5 mile	
UTM:	Zone-11 N3844264 E390544		Elevation (ft):	2325	
PLSS:	T08N, R12W, Sec. 31 (S)		Acres:	0.0	
Location:	ANTELOPE VALLEY, WEST OF LANCASTER, NORTH SIDE OF AVENUE G.				
Detailed Location:	MAPPED BY CNDDDB JUST NORTH OF COORDINATES ON AVENUE G GIVEN ON COLLECTION LABEL: "NEAR 34 43' 59.2" N 118 11' 41.9" W."				
Ecological:	ALKALI SCALDS.				
General:	MAIN SOURCE OF INFORMATION FOR THIS SITE IS A 1998 PORTER COLLECTION. SEEN IN 2005 BY DE GROOT.				
Owner/Manager:	UNKNOWN				

Occurrence No.	3	Map Index: 92699	EO Index: 93851	Element Last Seen:	1993-05-06
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1993-05-06
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-06-09
Quad Summary:	Lancaster West (3411862)				
County Summary:	Los Angeles				
Lat/Long:	34.73421 / -118.14340		Accuracy:	1/10 mile	
UTM:	Zone-11 N3844164 E395323		Elevation (ft):	2316	
PLSS:	T08N, R12W, Sec. 34 (S)		Acres:	0.0	
Location:	12 MILES NORTH OF PALMDALE, SIERRA HIGHWAY AT AVE G TO 1/10 MI NW OF INTERSECTION.				
Detailed Location:	MAPPED BY CNDDDB TO ENCOMPASS GIVEN INTERSECTION AND AREA 0.1 MILE NORTHWEST OF INTERSECTION.				
Ecological:	SHADSCALE SCRUB ON SANDY AND SILTY SOIL WITH LOW HUMMOCKS AND SHALLOW DRIED POOLS BETWEEN.				
General:	MAIN SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1993 SANDERS COLLECTION, PLANTS NOTED AS "FAIRLY COMMON." HISTORIC COLLECTIONS FROM 1892, 1909, AND 1930 FROM LANCASTER ARE ALSO ATTRIBUTED TO THIS OCCURRENCE.				
Owner/Manager:	UNKNOWN				

<i>Linanthus concinnus</i>		Element Code: PDPLM090D0	
San Gabriel linanthus			
Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G3
	State: None		State: S3
	Other: Rare Plant Rank - 1B.2, SB_RSABG-Rancho Santa Ana Botanic Garden, USFS_S-Sensitive		
Habitat:	General: LOWER MONTANE CONIFEROUS FOREST, UPPER MONTANE CONIFEROUS FOREST.		
	Micro: DRY ROCKY SLOPES, OFTEN IN JEFFREY PINE/CANYON OAK FOREST. 1575-2545 M.		



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Occurrence No.	6	Map Index: 35446	EO Index: 25583	Element Last Seen:	1923-05-26
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	2004-05-27
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-12-01
Quad Summary:	Mount San Antonio (3411736), Crystal Lake (3411737), Mescal Creek (3411746), Valyermo (3411747)				
County Summary:	Los Angeles				
Lat/Long:	34.37215 / -117.74980		Accuracy:	2/5 mile	
UTM:	Zone-11 N3803675 E431060		Elevation (ft):	6700	
PLSS:	T03N, R08W (S)		Acres:	0.0	
Location:	VINCENT GULCH, SAN GABRIEL MOUNTAINS.				
Detailed Location:	COLLECTED AT 6700' ELEVATION.				
Ecological:	OCCASIONAL ON WARM, DRY SLOPES.				
General:	LAST SEEN IN 1923. NO PLANTS SEEN IN 2003 OR 2004 SURVEYS BY SOZA.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	13	Map Index: 28853	EO Index: 30441	Element Last Seen:	1992-XX-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	2003-05-13
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-11-30
Quad Summary:	Valyermo (3411747)				
County Summary:	Los Angeles				
Lat/Long:	34.40414 / -117.86698		Accuracy:	80 meters	
UTM:	Zone-11 N3807308 E420316		Elevation (ft):	5300	
PLSS:	T04N, R09W, Sec. 30 (S)		Acres:	0.0	
Location:	PUNCHBOWL CANYON SOUTHWEST OF DEVILS PUNCHBOWL COUNTY PARK, NORTH SLOPE OF SAN GABRIEL MOUNTAINS.				
Detailed Location:	SOUTHEAST SIDE OF CANYON ABOUT 500 METERS SOUTH OF THE 5270' ELEVATION MARKER. MAPPED WITHIN THE SW 1/4 OF THE NW 1/4 OF SECTION 30.				
Ecological:	OPEN AREA IN COULTER PINE FOREST. WEST-FACING SLOPE. ASSOCIATED WITH LINANTHUS BREVICULUS.				
General:	SPECIES OBSERVED HERE IN 1992. AREA SEARCHED IN 1994 AND 2003 BUT NO PLANTS FOUND.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	19	Map Index: 77479	EO Index: 78420	Element Last Seen:	2004-05-26
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2004-05-26
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-12-16
Quad Summary:	Valyermo (3411747)				
County Summary:	Los Angeles				
Lat/Long:	34.38818 / -117.80223		Accuracy:	specific area	
UTM:	Zone-11 N3805490 E426252		Elevation (ft):	5500	
PLSS:	T04N, R09W, Sec. 34 (S)		Acres:	2.0	
Location:	SLOPES ABOVE THE MANZANITA TRAIL; ~1.74 MI SE OF S FORK CAMPGROUND, SAN GABRIEL MTNS.				
Detailed Location:	MAPPED BY CNDDDB BASED ON A 2004 FRAGA FIELD SURVEY MAP.				
Ecological:	IN FULL SUN W/NO OVERSTORY. IN DRY, LOOSE, BARE, ROCKY, GRAVELLY, SANDY, SOIL ON E-FACING, UPPER SLOPE. MANZANITA-CANYON LIVE OAK CHAPARRAL W/QUERCUS CHRYSOLEPIS, PDEUDOTSUGA MACROCARPA, PINUS MONOPHYLLA, YUCCA WHIPPLEI, SALVIA COLUMBARIE.				
General:	1500 PLANTS SEEN IN 2004. A 2003 SOZA & FRAGA COLLECTION FROM "BIG ROCK CREEK, MANZANITA TRAIL" ALSO ATTRIBUTED TO THIS SITE.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	22	Map Index: 77485	EO Index: 78432	Element Last Seen:	2003-06-06
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2003-06-06
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-12-10
Quad Summary:	Valyermo (3411747)				
County Summary:	Los Angeles				
Lat/Long:	34.42776 / -117.84622		Accuracy:	2/5 mile	
UTM:	Zone-11 N3809911 E422246		Elevation (ft):	4700	
PLSS:	T04N, R09W, Sec. 17 (S)		Acres:	0.0	
Location:	APPROXIMATELY 2 MILES NW OF DEVILS PUNCHBOWL AT 4700', SAN GABRIEL MOUNTAINS.				
Detailed Location:	MAPPED BY CNDDDB AS BEST GUESS BASED ON ELEVATION AT 4700' BUT MAY BE FURTHER TO THE NW.				
Ecological:					
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS FROM A 1979 HOWE COLLECTION. NEEDS FIELDWORK.				
Owner/Manager:	UNKNOWN				
Occurrence No.	23	Map Index: 77486	EO Index: 78436	Element Last Seen:	1998-07-06
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1998-07-06
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-12-03
Quad Summary:	Mescal Creek (3411746)				
County Summary:	Los Angeles				
Lat/Long:	34.40005 / -117.72062		Accuracy:	nonspecific area	
UTM:	Zone-11 N3806750 E433764		Elevation (ft):	5600	
PLSS:	T04N, R08W, Sec. 28 (S)		Acres:	21.0	
Location:	~50 M WEST OF MESCAL CYN RD, ~1.1 MI N OF JCT OF HWY 2 AND MESCAL CYN RD.				
Detailed Location:	MAPPED BY CNDDDB AS BEST GUESS ~50 M WEST OF MESCAL CYN RD, ~1.1 MI N OF JCT OF HWY 2 AND MESCAL CYN RD.				
Ecological:	E-FACING SLOPE; MONTANE CONIFEROUS FOREST WITH QUERCUS CHRYSOLEPIS, ARTEMISIA TRIDENTATA, PINUS JEFFREYI, ETC.				
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1998 SWINNEY COLLECTION.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	29	Map Index: 77498	EO Index: 78456	Element Last Seen:	2004-05-26
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen:	2004-05-26
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-12-03
Quad Summary:	Valyermo (3411747)				
County Summary:	Los Angeles				
Lat/Long:	34.42419 / -117.76486		Accuracy:	specific area	
UTM:	Zone-11 N3809456 E429718		Elevation (ft):	5100	
PLSS:	T04N, R08W, Sec. 19 (S)		Acres:	2.0	
Location:	OFF OF LARGO VISTA RD, NEAR INTERSECTION OF DIRT RD THAT LEADS TO BIG JOHN FLAT, SAN GABRIEL MTNS.				
Detailed Location:	MAPPED BY CNDDDB AS 3 POLYGONS BASED ON A 2004 FRAGA FIELD SURVEY FORM.				
Ecological:	ON S-FACING SLOPE IN DESERT CHAPARRAL DOMINATED BY ARCTOSTAPHYLOS GLAUCA W/SCATTERED PINUS MONOPHYLLA. OTHER ASSOCIATES INCLUDE ACHNATHERUM SPECIOSUM, ARTEMISIA TRIDENTATA, CAMISSONIA SP., CENTROSTEGIA THURBERI, CHRYSOTHAMNUS NAUSEOSUS.				
General:	71 PLANTS SEEN IN N POLY, 224 IN MIDDLE POLY, AND 1100 IN S POLY IN 2004.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	31	Map Index: 84957	EO Index: 85991	Element Last Seen:	2008-06-18
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-06-18
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-01-31
Quad Summary:	Juniper Hills (3411748)				
County Summary:	Los Angeles				
Lat/Long:	34.39004 / -117.90098		Accuracy:	80 meters	
UTM:	Zone-11 N3805772 E417176		Elevation (ft):	6600	
PLSS:	T04N, R10W, Sec. 35 (S)		Acres:	0.0	
Location:	BURKHART TRAIL 0.7 MILE WNW OF BURKHART SADDLE, JUNCTION OF TRAIL AND W FORK OF CRUTHERS CREEK, SAN GABRIEL MTNS.				
Detailed Location:	MAPPED BY CNDDDB AS A BEST GUESS AT JUNCTION OF TRAIL AND CREEK IN THE SW 1/4 OF THE NW 1/4 OF SECTION 35.				
Ecological:	CANYON BOTTOM; RIPARIAN ZONE SURROUNDED BY CONIFEROUS FOREST WITH PRUNUS VIRGINIANA, RHAMNUS CALIFORNICA, RIBES, MONARDELLA, ETC.				
General:	ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 2008 COLLECTION BY SWINNEY.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	32	Map Index: 84958	EO Index: 85992	Element Last Seen:	2011-06-25
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-06-25
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-02-10

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.40951 / -118.08055	Accuracy:	specific area
UTM:	Zone-11 N3808092 E400692	Elevation (ft):	4300
PLSS:	T04N, R12W, Sec. 24 (S)	Acres:	1.0

Location: ALISO CANYON; APPROXIMATELY 1.2 AIR MILES NORTH OF MILL CREEK SUMMIT, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED BY CNDDDB IN THE SE 1/4 OF THE SE 1/4 OF SECTION 24 ACCORDING TO 2010 DIGITAL DATA FROM ICF INTERNATIONAL.

Ecological:

General: 16 PLANTS OBSERVED IN 2010. 2011 KRAMER PHOTOS IN CALPHOTOS FROM "NORTH OF MILL CREEK SUMMIT, ANGELES NF" ARE ALSO ATTRIBUTED TO THIS OCCURRENCE.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	33	Map Index: 84959	EO Index: 85993	Element Last Seen:	2010-05-27
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-05-27
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-02-10

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.38720 / -118.08161	Accuracy:	specific area
UTM:	Zone-11 N3805620 E400568	Elevation (ft):	5050
PLSS:	T04N, R12W, Sec. 36 (S)	Acres:	1.0

Location: ALONG UNNAMED ROAD JUST SOUTH OF MILL CREEK SUMMIT, APPROXIMATELY 0.9 AIR MILE NORTH OF FALCON MINE, SAN GABRIEL MTNS.
Detailed Location: MAPPED BY CNDDDB ACCORDING TO 2010 DIGITAL DATA FROM ICF INTERNATIONAL.

Ecological:

General: 16 PLANTS OBSERVED IN 2010.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	34	Map Index: 84960	EO Index: 85994	Element Last Seen:	2010-06-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2010-06-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-02-10

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.37607 / -118.08913	Accuracy:	specific area
UTM:	Zone-11 N3804392 E399863	Elevation (ft):	4500
PLSS:	T03N, R12W, Sec. 01 (S)	Acres:	1.0

Location: ALONG USFS ROAD 4N18.1, APPROXIMATELY 0.3 AIR MILE WNW OF FALCON MINE, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED BY CNDDDB IN THE SW 1/4 OF THE NE 1/4 OF SECTION 1 ACCORDING TO 2010 DIGITAL DATA FROM ICF INTERNATIONAL.

Ecological:

General: 300 PLANTS OBSERVED IN 2010.

Owner/Manager: USFS-ANGELES NF



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Castilleja gleasoni

Element Code: PDSCROD140

Mt. Gleason paintbrush

Listing Status:	Federal: None	CNDDB Element Ranks:	Global: G2
	State: Rare		State: S2
	Other: Rare Plant Rank - 1B.2, BLM_S-Sensitive, SB_RSABG-Rancho Santa Ana Botanic Garden, USFS_S-Sensitive		
Habitat:	General: LOWER MONTANE CONIFEROUS FOREST, CHAPARRAL, PINYON AND JUNIPER WOODLAND.		
	Micro: ON OPEN FLATS OR SLOPES IN GRANITIC SOIL. RESTRICTED TO THE SAN GABRIEL MOUNTAINS. 1160-2170 M.		

Occurrence No.	2	Map Index:	02131	EO Index:	13641	Element Last Seen:	2011-09-13
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2011-09-13	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-02-06	

Quad Summary: Condor Peak (3411832), Acton (3411842)

County Summary: Los Angeles

Lat/Long:	34.37554 / -118.16883	Accuracy:	specific area
UTM:	Zone-11 N3804416 E392535	Elevation (ft):	6400
PLSS:	T03N, R12W, Sec. 06 (S)	Acres:	45.0

Location: MT GLEASON ROAD ABOUT 0.8 MILE SOUTHEAST TO ABOUT 1 MILE EAST OF MT GLEASON SUMMIT, ANGELES NATIONAL FOREST.

Detailed Location: SEVERAL COLONIES MAPPED BY CNDDDB AS 5 POLYGONS ALONG ROAD FROM JUST NORTH OF MICROWAVE TOWER TO 0.6 AIR MILE NE OF MICROWAVE TOWER.

Ecological: IN SHADE & EDGES OF OPENINGS IN MIXED CONIFER FOREST OF PINUS PONDEROSA, P. COULTERI, ABIES CONCOLOR, & PSEUDOTSUGA MACROCARPA. MOST CLOSELY ASSOCIATED WITH GALIUM ANGUSTIFOLIUM & LEPTODACTYLON CALIFORNICUM. MOSTLY ON E SLOPE IN UNDERSTORY.

General: UNKNOWN NUMBER OF PLANTS OBSERVED IN 1979 & 1986. 1200 PLANTS OBSERVED IN 1987. UNKNOWN NUMBER OF PLANTS OBSERVED IN 2006 & 2007. ~150 PLANTS OBSERVED IN 2010. ~30 PLANTS OBSERVED IN 2011. ID OF PLANTS COLLECTED IN 2010 & 2011 IS TENTATIVE.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	5	Map Index:	02105	EO Index:	17880	Element Last Seen:	2007-06-28
Occ. Rank:	Good	Presence:	Presumed Extant	Site Last Seen:		2007-06-07	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2013-02-06	

Quad Summary: Condor Peak (3411832), Acton (3411842)

County Summary: Los Angeles

Lat/Long:	34.38288 / -118.19596	Accuracy:	nonspecific area
UTM:	Zone-11 N3805259 E390050	Elevation (ft):	5800
PLSS:	T04N, R13W, Sec. 36 (S)	Acres:	92.0

Location: NORTH SLOPE OF MESSENGER PEAK EXTENDING EAST TO MESSENGER FLATS AREA, AND RIDGETOP ABOVE CHIMNEY CYN, W OF MT GLEASON.

Detailed Location: N POLYGON MAPPED BASED ON SPECIFIC DATA, MOSTLY ALONG THE PACIFIC CREST TRAIL. S POLYGON MAPPED BASED ON NON-SPECIFIC DATA FROM 2007 SILVERMAN PHOTO: "ALONG SANTA CLARA DIVIDE RD...SW OF MESSENGER PEAK, AT RIDGETOP AT CHIMNEY CYN...1720 M".

Ecological: IN OPEN CONIFER, LIVE OAK, CHAPARRAL MOSAIC WITH INTERVENING OPEN AREAS OF GRASSLAND. ASSOCIATED WITH PINUS PONDEROSA, P. COULTERI, P. LAMBERTIANA, PSEUDOTSUGA MACROCARPA, QUERCUS CHRYSOLEPIS, CHRYSOTHAMNUS SPP., ERIOGONUM SPP., ETC.

General: 200 PLANTS OBSERVED IN NORTHERN POLYGON IN 1987. SOUTHERN POLYGON OBSERVED IN 2007; NEED ADDITIONAL INFORMATION. A 1980 KRANTZ COLLECTION, A 1990 ROSS COLLECTION, AND 2004 & 2007 SILVERMAN PHOTOS IN CALPHOTOS ARE ALSO ATTRIBUTED HERE.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	9	Map Index: 38973	EO Index: 48045	Element Last Seen:	1995-05-10
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1995-05-10
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-09
Quad Summary:	Pacifico Mountain (3411841)				
County Summary:	Los Angeles				
Lat/Long:	34.42201 / -118.01296		Accuracy:	1/10 mile	
UTM:	Zone-11 N3809414 E406918		Elevation (ft):	4100	
PLSS:	T04N, R11W, Sec. 22 (S)		Acres:	0.0	
Location:	NORTH SLOPE OF WEST FORK BARE MTN CANYON, ABOUT 0.25 MI WEST OF CONFLUENCE WITH BARE MTN CANYON, SAN GABRIEL MOUNTAINS.				
Detailed Location:	MAPPED ABOUT 0.15 MILE UPSLOPE (NORTH) OF WEST FORK CANYON ACCORDING TO A 1995 MAP FROM MISTRETТА.				
Ecological:	LOCATED ON DRY BENCH IN FULL SUN ON COARSE GRANITIC LOAM WITH LINANTHUS BREVICULUS, ERIOPHYLLUM PRINGLEI, POA SECUNDA SSP. JUNCIFOLIA, RHUS TRILOBATA, CAMISSONIA STRIGULOSA, AND SENECIO FLACCIDUS VAR. MONENSIS.				
General:	PLANTS FEW AND SCATTERED IN 1995.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	13	Map Index: 84490	EO Index: 85510	Element Last Seen:	1990-05-23
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1990-05-23
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-21
Quad Summary:	Acton (3411842)				
County Summary:	Los Angeles				
Lat/Long:	34.39881 / -118.20958		Accuracy:	1/10 mile	
UTM:	Zone-11 N3807039 E388819		Elevation (ft):	4200	
PLSS:	T04N, R13W, Sec. 26 (S)		Acres:	0.0	
Location:	NNW RIDGE DESCENDING FROM MESSENGER PEAK ON THE DIVIDE BETWEEN MILL CANYON AND MOODY CANYON, W OF PERSPIRATION POINT.				
Detailed Location:	MAPPED BY CNDDDB IN VICINITY OF GIVEN TRS: T4N R13W SW1/4 NW1/4 SE1/4 SECTION 26. ELEVATION ~4100-4280 FT.				
Ecological:	LOCAL SLOPES DOMINATED BY CHAPARRAL ELEMENTS; QUERCUS WISLIZENII, CEANOTHUS GREGGII VESTITUS X C. CRASSIFOLIUS, ADENOSTOMA FASCICULATUM, CERCOARPUS BETULOIDES, ARCTOSTAPHYLOS GLAUCA, YUCCA WHIPPLEI CAESPITOSA, ETC.				
General:	PLANTS NOTED AS "LOCALLY SCARCE" IN A 1990 COLLECTION BY ROSS & BOYD.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	14	Map Index: 84491	EO Index: 85511	Element Last Seen:	1990-05-23
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1990-05-23
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-13
Quad Summary:	Acton (3411842)				
County Summary:	Los Angeles				
Lat/Long:	34.39250 / -118.20411		Accuracy:	nonspecific area	
UTM:	Zone-11 N3806334 E389313		Elevation (ft):	4800	
PLSS:	T04N, R13W, Sec. 35 (S)		Acres:	40.0	
Location:	NNW RIDGE DESCENDING FROM MESSENGER PEAK ON THE DIVIDE BETWEEN MILL CANYON AND MOODY CANYON, S OF PERSPIRATION POINT.				
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO GIVEN TRS: T4N R13W NE 1/4 NE 1/4 SECTION 35. ELEVATION ~4780-4900 FT.				
Ecological:	LOCAL SLOPES DOMINATED BY UPPER CHAPARRAL BELT ELEMENTS: QUERCUS WISLIZENII, Q. CHRYSOLEPIS, CEANOTHUS GREGGI VESTITUS, C. INTEGERRIMUS, ADENOSTOMA FASCICULATUM, PINUS COULTERI, CERCOCARPUS BETULOIDES, RIBES ROEZLII, ETC.				
General:	PLANTS NOTED AS "SCATTERED LOCALLY" IN A 1990 ROSS & BOYD COLLECTION.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	15	Map Index: 84492	EO Index: 85512	Element Last Seen:	2006-06-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2006-06-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-13
Quad Summary:	Acton (3411842)				
County Summary:	Los Angeles				
Lat/Long:	34.37876 / -118.23062		Accuracy:	80 meters	
UTM:	Zone-11 N3804839 E386858		Elevation (ft):	5300	
PLSS:	T03N, R13W, Sec. 03 (S)		Acres:	0.0	
Location:	ALONG USFS ROAD 3N17.6, APPROXIMATELY 1.4 AIR MILES SOUTHEAST OF NORTH FORK SADDLE STATION.				
Detailed Location:	PLANTS ON SUNNY SLOPE JUST ABOVE THE ROAD, SHORT DISTANCE FROM WHERE THE ROAD CUTS ACROSS THE NORTH FORK OF PACOIMA CANYON. MAPPED ACCORDING TO COORDINATES PROVIDED IN A 2006 USFS REPORT.				
Ecological:	SUNNY SLOPE.				
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2006.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	16	Map Index: 84493	EO Index: 85513	Element Last Seen:	1998-04-28
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1998-04-28
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-13

Quad Summary: Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.71566 / -118.71060	Accuracy:	1/10 mile
UTM:	Zone-11 N3842843 E343358	Elevation (ft):	3940
PLSS:	T07N, R17W, Sec. 08 (S)	Acres:	0.0

Location: WESTERN END OF LIEBRE MOUNTAIN, AT JUNCTION OF USFS RD 8S04 AND RD 7N23 ON DIVIDE BETWEEN SALT CREEK AND LIEBRE GULCH.

Detailed Location: MAPPED BY CNDDDB IN VICINITY OF GIVEN TRS: T7N R17W NE 1/4 SW 1/4 NW 1/4 SECTION 8.

Ecological: GENTLY SLOPING RIDGETOP; DECOMPOSED GRANITE SOIL. DISTURBED SCRUB WITH CHRYSOTHAMNUS NAUSEOSUS, ERIOGONUM FASCICULATUM, AND CORETHROGYNE FILAGINIFOLIA.

General: PLANTS NOTED AS "OCCASIONAL" IN A 1998 BOYD AND SOZA COLLECTION.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	17	Map Index: 84494	EO Index: 85514	Element Last Seen:	1997-03-31
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1997-03-31
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2011-12-21

Quad Summary: Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.68784 / -118.66410	Accuracy:	1/5 mile
UTM:	Zone-11 N3839687 E347565	Elevation (ft):	3200
PLSS:	T07N, R17W, Sec. 22 (S)	Acres:	0.0

Location: KNAPP RANCH AREA AT UPPER END OF CASTAIC CREEK DRAINAGE IN VALLEY AT HEAD OF CIENAGA CANYON, SOUTH OF LIEBRE MOUNTAIN.

Detailed Location: STEEP SLOPES TO EAST AND WEST OF OLD RANCH COMPOUND. EXACT LOCATION UNKNOWN, MAPPED AS BEST GUESS BY CNDDDB IN GENERAL VICINITY OF KNAPP RANCH.

Ecological: BROAD, GENTLY SLOPING VALLEY FLOOR OF DEEP ALLUVIUM, MOSTLY OF DECOMPOSED GRANITE, MOSTLY REDDISH METAMORPHICS. VALLEY BOTTOM WITH SCRUB OF ERIOGONUM FASCICULATUM VAR. FOLIOSUM, CHRYSOTHAMNUS NAUSEOSUS, ERICAMERIA LINEARIFOLIA, ETC.

General: PLANTS NOTED AS "INFREQUENT" IN A 1997 COLLECTION BY BOYD & RAZ.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	18	Map Index: 84552	EO Index: 85570	Element Last Seen: 1994-05-03
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1994-05-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2011-12-21

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.39148 / -118.08088	Accuracy:	nonspecific area
UTM:	Zone-11 N3806093 E400640	Elevation (ft):	4900
PLSS:	T04N, R12W, Sec. 36 (S)	Acres:	85.0

Location: ANGELES CREST HIGHWAY BELOW FOREST STATION, SOUTH OF KENTUCKY SPRINGS, EAST OF MOUNT GLEASON.
Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDDB ALONG THE HIGHWAY IN VICINITY OF THE SUMMIT STATION AND MILL CREEK SUMMIT, WHICH IS SOUTH OF KENTUCKY SPRINGS AND DUE EAST OF MOUNT GLEASON.
Ecological: ROAD CUT.
General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1994 COLLECTION BY REISER. NEEDS FIELDWORK.
Owner/Manager: USFS-ANGELES NF

<i>Viola pinetorum var. grisea</i>		Element Code: PDVIO04431
grey-leaved violet		
Listing Status:	Federal: None	CNDDDB Element Ranks: Global: G4G5T3?
	State: None	State: S3?
	Other: Rare Plant Rank - 1B.3	
Habitat:	General: SUBALPINE CONIFEROUS FOREST, UPPER MONTANE CONIFEROUS FOREST, MEADOWS AND SEEPS.	
	Micro: DRY MOUNTAIN PEAKS AND SLOPES. 1500-3400 M.	

Occurrence No.	38	Map Index: 81714	EO Index: 83489	Element Last Seen: 2010-07-24
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen: 2010-07-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2012-02-23

Quad Summary: Mescal Creek (3411746)
County Summary: Los Angeles

Lat/Long:	34.38672 / -117.69165	Accuracy:	80 meters
UTM:	Zone-11 N3805253 E436417	Elevation (ft):	7200
PLSS:	T04N, R08W, Sec. 35 (S)	Acres:	0.0

Location: TABLE MOUNTAIN CAMPGROUND; BETWEEN THE HOST SITE AND THE FIRST BATHROOM, TABLE MOUNTAIN, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED BETWEEN HOST SITE AND RESTROOM ACCORDING TO A 2010 FIELD SURVEY AND EMAIL BY STRONG.
Ecological: OPEN GRAVELLY AREA WITHIN MONTANE CONIFEROUS FOREST. ASSOCIATED WITH LUPINUS EXCUBITUS VAR. JOHNSTONII, ERIOGONUM WRIGHTII SSP. SUBSCAPOSUM, AND ASTRAGALUS LEUCOLOBUS.
General: 30-40 PLANTS SEEN IN 2010. THIS LOCATION IS FAR FROM OTHER KNOWN LOCALITIES OF THIS SUBSPECIES BUT ID WAS VERIFIED BY R. JOHN LITTLE (1993 JEPSON MANUAL AUTHOR FOR VIOLACEAE).
Owner/Manager: USFS-ANGELES NF

<i>Calochortus clavatus var. gracilis</i>		Element Code: PMLI0D096
slender mariposa-lily		
Listing Status:	Federal: None	CNDDDB Element Ranks: Global: G4T2T3
	State: None	State: S2S3
	Other: Rare Plant Rank - 1B.2, BLM_S-Sensitive, SB_RSABG-Rancho Santa Ana Botanic Garden, USFS_S-Sensitive	
Habitat:	General: CHAPARRAL, COASTAL SCRUB, VALLEY AND FOOTHILL GRASSLAND.	
	Micro: SHADED FOOTHILL CANYONS; OFTEN ON GRASSY SLOPES WITHIN OTHER HABITAT. 320-1000 M.	



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Occurrence No.	4	Map Index: 26507	EO Index: 1660	Element Last Seen:	1922-06-12
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1922-06-12
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-04-07
Quad Summary:	Green Valley (3411854)				
County Summary:	Los Angeles				
Lat/Long:	34.58922 / -118.45295		Accuracy:	2/5 mile	
UTM:	Zone-11 N3828449 E366751		Elevation (ft):	2200	
PLSS:	T06N, R15W (S)		Acres:	0.0	
Location:	SAN FRANCISQUITO CANYON, NEAR POWER PLANT NO. 1.				
Detailed Location:	MAPPED NEAR CONFLUENCE OF CLEARWATER CANYON AND SAN FRANCISQUITO CANYON.				
Ecological:					
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1922 COLLECTION BY MOXLEY #1113 (RM). COLLECTION CITED IN OWNBEY'S 1940 "MONOGRAPH OF CALOCHORTUS" IN ANNALS OF THE MISSOURI BOTANICAL GARDEN.				
Owner/Manager:	USFS-ANGELES NF				

Occurrence No.	17	Map Index: 64543	EO Index: 64622	Element Last Seen:	1997-05-06
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1997-05-06
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-04-21
Quad Summary:	Green Valley (3411854)				
County Summary:	Los Angeles				
Lat/Long:	34.57237 / -118.46341		Accuracy:	nonspecific area	
UTM:	Zone-11 N3826596 E365764		Elevation (ft):	2200	
PLSS:	T06N, R15W, Sec. 34 (S)		Acres:	25.2	
Location:	SAN FRANCISQUITO CANYON, JUST NORTH OF CONFLUENCE WITH BEE CANYON, 1.5 ROAD MILES SOUTH OF USFS ROAD 6N24.				
Detailed Location:					
Ecological:	STEEP SLOPES OF BEDDED SANDSTONE. BURNED 1996. BEFORE BURN, VEGETATION WAS CHAPARRAL OF ADENOSTOMA FASCICULATUM, CEANOTHUS CUNEATUS, ARCTOSTAPHYLOS GLAUCA, AND ERIOGONUM FASCICULATUM.				
General:	ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1997 COLLECTION BY BOYD & RAZ. PRESENCE NOTED AS "LOCALLY COMMON" IN 1997.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	19	Map Index: 64546	EO Index: 64625	Element Last Seen: 1997-04-30
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1997-04-30
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2006-04-21

Quad Summary: Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.67221 / -118.65926	Accuracy:	1/10 mile
UTM:	Zone-11 N3837946 E347980	Elevation (ft):	2900
PLSS:	T07N, R17W, Sec. 26 (S)	Acres:	0.0

Location: NEAR THE CONFLUENCE OF BEAR CANYON AND PINE CANYON, SW OF GILLETTE MINE.

Detailed Location:

Ecological: STEEP-SIDED, ROCKY CANYON OF WEATHERED GNEISS. ASSOCIATED WITH SALVIA APIANA, S. MELLIFERA, ERIOGONUM FASCICULATUM, ADENOSTOMA FASCICULATUM, YUCCA WHIPPLEA, CERCOCARPUS BETULOIDES, ERICAMERIA LINEARIFOLIA, ARCTOSTAPHYLOS GLAUCA, ETC.

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1997 COLLECTION BY BOYD & RAZ.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	20	Map Index: 64547	EO Index: 64626	Element Last Seen: 1997-04-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 1997-04-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2006-04-21

Quad Summary: Whitaker Peak (3411856), Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.62608 / -118.71244	Accuracy:	1/10 mile
UTM:	Zone-11 N3832911 E343021	Elevation (ft):	2800
PLSS:	T06N, R17W, Sec. 08 (S)	Acres:	0.0

Location: VICINITY OF OSITO FLAT; UPPER WATERSHED OF OSITO CANYON BETWEEN I-5 AND THE OLD RIDGE ROUTE, LIEBRE MTNS.

Detailed Location: UNDER THE TRANSMISSION LINES.

Ecological: BURNED 1996. BEFORE BURN, VEGETATION WAS OPEN CHAPARRAL OF ADENOSTOMA FASCICULATUM, ERIOGONUM FASCICULATUM, CEANOTHUS CUNEATUS, AND CERCOCARPUS BETULOIDES WITH GRASSLAND OF STIPA, AVENA FATUA, AND HEMIZONIA FASCICULATA.

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 1997 COLLECTION BY BOYD ET AL. PRESENCE NOTED AS COMMON AT SITE IN 1997.

Owner/Manager: UNKNOWN



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Occurrence No.	47	Map Index:	77691	EO Index:	78591	Element Last Seen:	1993-05-23
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1993-05-23	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2009-12-21	

Quad Summary: Green Valley (3411854)

County Summary: Los Angeles

Lat/Long:	34.58861 / -118.48619	Accuracy:	1/10 mile
UTM:	Zone-11 N3828427 E363701	Elevation (ft):	3100
PLSS:	T06N, R15W, Sec. 20 (S)	Acres:	0.0

Location: 700-840 M SE OF THE SADDLE BETWEEN RUBY AND CLEARWATER CYNS, EASTERLY RIDGE RED MOUNTAIN, LOWER REGION OF LIEBRE MTNS.

Detailed Location: SCATTERED LOCALLY ON N SIDE OF THE RIDGE. MAPPED BY CNDDDB BASED ON COORDINATES FROM A 1993 ROSS COLLECTION, DATUM NOT SPECIFIED.

Ecological: ON DISTURBED, EXPOSED RIDGETOP WITH STIPA LEPIDA, HELIANTHUS GRACILENTUS, MALACOTHRIX SAXATILIS TENUIFOLIA, LOMATIUM DASYCARPUM, ERIOGONUM FASCICULATUM, ADENOSTOMA FASCICULATUM, ERIDICTYON CRASSIFOLIUM NIGRESCENS, SALVIA MELLIFERA, ETC.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1993 ROSS & BOYD COLLECTION.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	48	Map Index:	77692	EO Index:	78592	Element Last Seen:	1995-05-04
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		1995-05-04	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2009-12-21	

Quad Summary: Green Valley (3411854)

County Summary: Los Angeles

Lat/Long:	34.51321 / -118.40964	Accuracy:	nonspecific area
UTM:	Zone-11 N3819964 E370605	Elevation (ft):	2150
PLSS:	T05N, R15W, Sec. 13 (S)	Acres:	37.0

Location: TEXAS CANYON; ~3.6 ROAD MILES NE OF BOUQUET CANYON RD, LIEBRE MOUNTAINS.

Detailed Location: MAPPED BY CNDDDB AS BEST GUESS ALONG TEXAS CANYON RD; ~3.6 ROAD MILES NE OF BOUQUET CANYON RD IN THE SW 1/4 OF SECTION 13.

Ecological: ON CANYON BOTTOM WITH A FAIRLY NARROW MEANDERING STREAM AND GRASSY OLD-FORMATION BENCHES; ADJACENT SLOPE WITH CHAPARRAL AND COASTAL SAGE SCRUB.

General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1995 ROSS AND PORTER COLLECTION.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	53	Map Index: 77710	EO Index: 78610	Element Last Seen:	2006-06-18
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2006-06-18
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-01-05

Quad Summary: Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.65702 / -118.74671	Accuracy:	80 meters
UTM:	Zone-11 N3836397 E339938	Elevation (ft):	3000
PLSS:	T07N, R18W, Sec. 36 (S)	Acres:	0.0

Location: RESERVOIR SUMMIT RD (7N26); ~3.5 MILES FROM THE FS ROADS JUNCTION WITH OLD RIDGE ROUTE (8N04), POSEY CANYON.

Detailed Location: WITHIN 10 TO 15 FT OF ROAD. MAPPED BY CNDDDB BASED ON COORDINATES FROM A 2006 FRAGA SURVEY.

Ecological: DOMINATED BY HERBACEOUS ANNUALS, GRASSES, AND OPEN, MIXED CHAPARRAL OF ADENOSTOMA FASCICULATUM.

General: UNKNOWN NUMBER OF PLANTS SEEN IN 2006.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	54	Map Index: 77711	EO Index: 78611	Element Last Seen:	2006-05-24
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2006-05-24
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-12-22

Quad Summary: Liebre Mtn. (3411866)

County Summary: Los Angeles

Lat/Long:	34.71543 / -118.72850	Accuracy:	80 meters
UTM:	Zone-11 N3842846 E341718	Elevation (ft):	3260
PLSS:	T07N, R17W, Sec. 07 (S)	Acres:	0.0

Location: LIEBRE GULCH RD (8N01); ~0.1 MILE FROM THE FS ROADS JUNCTION WITH TUMBLE INN RD (8N05), LIEBRE GULCH.

Detailed Location: WITHIN 10 TO 15 FT OF ROAD. MAPPED BY CNDDDB BASED ON COORDINATES FROM A 2006 FRAGA SURVEY.

Ecological: DOMINATED BY HERBACEOUS ANNUALS, GRASSES, AND OPEN, MIXED CHAPARRAL OF ADENOSTOMA FASCICULATUM.

General: UNKNOWN NUMBER OF PLANTS SEEN IN 2006.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	79	Map Index:	85059	EO Index:	86075	Element Last Seen:	2010-06-03
Occ. Rank:	Poor	Presence:	Presumed Extant	Site Last Seen:		2010-06-03	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-03-05	
Quad Summary:	Sleepy Valley (3411853)						
County Summary:	Los Angeles						
Lat/Long:	34.62122 / -118.25191	Accuracy:	80 meters				
UTM:	Zone-11 N3831751 E385233	Elevation (ft):	3620				
PLSS:	T06N, R13W, Sec. 10 (S)	Acres:	0.0				
Location:	SE END OF PORTAL RIDGE; ALONG POOR ROAD ABOUT 1.3 ROAD MILES NORTH OF ITS JUNCTION WITH GODDE HILL ROAD.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO 2010 ICF INTERNATIONAL, INC DIGITAL DATA IN THE NW 1/4 OF THE SW 1/4 OF SECTION 10.						
Ecological:	DESERT SAGE SCRUB. ASSOCIATED WITH ERIOGONUM FASCICULATUM FOLIOLOSUM, ARTEMISIA TRIDENTATA, ERICAMERIA COOPERI, MUILLA MARITIMA, CHORIZANTHE STATICOIDES, DELPHINIUM PARISHII, LOTUS SCOPARIUS, AND LAYIA GLANDULOSA.						
General:	1 PLANT OBSERVED IN 2010.						
Owner/Manager:	UNKNOWN						
Occurrence No.	88	Map Index:	91762	EO Index:	92859	Element Last Seen:	2008-06-01
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2008-06-01	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-03-06	
Quad Summary:	Sleepy Valley (3411853)						
County Summary:	Los Angeles						
Lat/Long:	34.57482 / -118.36845	Accuracy:	specific area				
UTM:	Zone-11 N3826744 E374479	Elevation (ft):	3500				
PLSS:	T06N, R14W, Sec. 28 (S)	Acres:	12.0				
Location:	ALONG ROAD 3414W19, NW OF JUNCTION WITH USFS RD 6N08, SE OF BOUQUET RESERVOIR, ANGELES NATIONAL FOREST.						
Detailed Location:	POPULATION EXTENDS FROM JUNCTION TO ~0.20 ROAD MILE NW ALONG ROAD, AND IS MOSTLY ON THE NORTH SIDE OF THE ROAD. MAPPED BASED ON DIGITAL DATA PROVIDED BY VINZANT, IN THE SE 1/4 OF THE SW 1/4 OF SECTION 28.						
Ecological:							
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008.						
Owner/Manager:	USFS-ANGELES NF						



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Occurrence No.	89	Map Index: 91763	EO Index: 92860	Element Last Seen:	2008-05-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-05-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-03-06
Quad Summary:	Sleepy Valley (3411853)				
County Summary:	Los Angeles				
Lat/Long:	34.52794 / -118.31108		Accuracy:	specific area	
UTM:	Zone-11 N3821476 E379674		Elevation (ft):	3000	
PLSS:	T05N, R14W, Sec. 11 (S)		Acres:	6.0	
Location:	UNDER POWERLINES NE OF THEIR CROSSING OF PACIFIC CREST TRAIL, BETWEEN MINT CANYON AND SIERRA PELONA VALLEY.				
Detailed Location:	TWO POLYGONS MAPPED BASED ON DIGITAL DATA PROVIDED BY VINZANT, IN THE SW 1/4 AND THE SE 1/4 OF THE SE 1/4 OF SECTION 11.				
Ecological:					
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	90	Map Index: 91764	EO Index: 92861	Element Last Seen:	2008-05-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-05-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-03-06
Quad Summary:	Sleepy Valley (3411853)				
County Summary:	Los Angeles				
Lat/Long:	34.53138 / -118.30333		Accuracy:	specific area	
UTM:	Zone-11 N3821849 E380390		Elevation (ft):	3300	
PLSS:	T05N, R14W, Sec. 12 (S)		Acres:	2.0	
Location:	~0.14 MILE NE OF POWERLINE CROSSING OF PEPPERTREE LANE, BETWEEN MINT CANYON AND SIERRA PELONA VALLEY.				
Detailed Location:	MAPPED BASED ON DIGITAL DATA PROVIDED BY VINZANT, IN THE NE 1/4 OF THE SW 1/4 OF SECTION 12.				
Ecological:					
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	91	Map Index: 91765	EO Index: 92862	Element Last Seen:	2008-05-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-05-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-03-06
Quad Summary:	Sleepy Valley (3411853)				
County Summary:	Los Angeles				
Lat/Long:	34.53312 / -118.29597		Accuracy:	specific area	
UTM:	Zone-11 N3822033 E381069		Elevation (ft):	3180	
PLSS:	T05N, R14W, Sec. 12 (S)		Acres:	2.0	
Location:	UNDER POWERLINES NORTH OF THE FORK OF JAYHAWKER ROAD, BETWEEN MINT CANYON AND SIERRA PELONA VALLEY.				
Detailed Location:	MAPPED BASED ON DIGITAL DATA PROVIDED BY VINZANT, IN THE SW 1/4 OF THE NE 1/4 OF SECTION 12.				
Ecological:					
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	92	Map Index: 91772	EO Index: 92869	Element Last Seen:	2009-06-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-06-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-03-07

Quad Summary: Green Valley (3411854)

County Summary: Los Angeles

Lat/Long:	34.56775 / -118.45499	Accuracy:	specific area
UTM:	Zone-11 N3826072 E366530	Elevation (ft):	2300
PLSS:	T06N, R15W, Sec. 34 (S)	Acres:	3.0

Location: ALONG CITY HIGHLINE RD (USFS RD 6N21), ~0.4 AIR MILE EAST OF JUNCTION OF BEE CANYON AND SAN FRANCISQUITO CANYON.

Detailed Location: TWO COLONIES MAPPED AS ONE POLYGON BASED ON DIGITAL DATA PROVIDED BY VINZANT, JUST NORTH OF THE CENTER OF SECTION 34, MOSTLY ON THE SE SIDE OF THE ROAD.

Ecological:

General: UNKNOWN NUMBER OF PLANTS OBSERVED IN 2009.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	93	Map Index: 91774	EO Index: 92870	Element Last Seen:	2009-06-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-06-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-03-07

Quad Summary: Green Valley (3411854)

County Summary: Los Angeles

Lat/Long:	34.55808 / -118.45944	Accuracy:	specific area
UTM:	Zone-11 N3825005 E366106	Elevation (ft):	2700
PLSS:	T05N, R15W, Sec. 04 (S)	Acres:	1.0

Location: ALONG CITY HIGHLINE RD (USFS RD 6N21), ~0.8 AIR MILE SE OF JUNCTION OF BAIRD CANYON AND SAN FRANCISQUITO CANYON.

Detailed Location: MAPPED ACCORDING TO DIGITAL DATA PROVIDED BY VINZANT, IN THE NE 1/4 OF THE NW 1/4 OF SECTION 4.

Ecological:

General: UNKNOWN NUMBER OF PLANTS OBSERVED IN 2009.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	94	Map Index: 91777	EO Index: 92872	Element Last Seen:	2009-07-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2009-07-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-03-07
Quad Summary:	Green Valley (3411854)				
County Summary:	Los Angeles				
Lat/Long:	34.54999 / -118.48359		Accuracy:	specific area	
UTM:	Zone-11 N3824140 E363877		Elevation (ft):	2400	
PLSS:	T05N, R15W, Sec. 05 (S)		Acres:	39.0	
Location:	ALONG CITY HIGHLAND RD (USFS RD 6N21), BETWEEN ROADS 3416W01 AND 3416W02, NEAR THE HEAD OF DRY CANYON.				
Detailed Location:	8 COLONIES MAPPED AS 5 POLYGONS BASED ON DIGITAL DATA PROVIDED BY VINZANT, IN THE N 1/2 OF SECTION 5 AND THE NE 1/4 OF THE SE 1/4 OF SECTION 6.				
Ecological:					
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008 AND 2009.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	95	Map Index: 91778	EO Index: 92873	Element Last Seen:	2008-06-12
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-06-12
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-03-07
Quad Summary:	Green Valley (3411854)				
County Summary:	Los Angeles				
Lat/Long:	34.55476 / -118.43127		Accuracy:	specific area	
UTM:	Zone-11 N3824599 E368685		Elevation (ft):	3000	
PLSS:	T05N, R15W, Sec. 03 (S)		Acres:	20.0	
Location:	~0.3 AIR MILE N OF STREAMSIDE CAMPGROUND AND ALONG SAUGUS-DEL SUR RD (USFS RD 6N18) NE OF QUARRY, DEL SUR RIDGE.				
Detailed Location:	2 POLYGONS MAPPED BASED ON DIGITAL DATA PROVIDED BY VINZANT, IN THE SW 1/4 OF THE SE 1/4 OF SECTION 35, THE NE 1/4 OF THE NE 1/4 OF SECTION 3, AND THE WEST 1/2 OF THE NW 1/4 OF SECTION 2.				
Ecological:					
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	96	Map Index: 91779	EO Index: 92874	Element Last Seen:	2008-05-14
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-05-14
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-03-07
Quad Summary:	Green Valley (3411854)				
County Summary:	Los Angeles				
Lat/Long:	34.55973 / -118.42236		Accuracy:	specific area	
UTM:	Zone-11 N3825140 E369510		Elevation (ft):	3100	
PLSS:	T06N, R15W, Sec. 36 (S)		Acres:	2.0	
Location:	W SIDE OF USFS RD 6N19, ~0.5 AIR MILE SE OF JUNCTION WITH SAUGUS-DEL SUR RD (USFS RD 6N18), DEL SUR RIDGE.				
Detailed Location:	MAPPED ACCORDING TO DIGITAL DATA PROVIDED BY VINZANT, IN THE SE 1/4 OF THE SW 1/4 OF SECTION 36.				
Ecological:					
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	97	Map Index: 91780	EO Index: 92875	Element Last Seen: 2008-06-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 2008-06-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2014-03-07

Quad Summary: Green Valley (3411854)
County Summary: Los Angeles

Lat/Long:	34.56242 / -118.41472	Accuracy:	specific area
UTM:	Zone-11 N3825428 E370216	Elevation (ft):	3200
PLSS:	T06N, R15W, Sec. 36 (S)	Acres:	8.0

Location: ~0.6 TO 0.7 AIR MILE NNW OF BOUQUET CAMPGROUND NO. 3, DEL SUR RIDGE, ANGELES NATIONAL FOREST.
Detailed Location: 3 POLYGONS MAPPED BASED ON DIGITAL DATA PROVIDED BY VINZANT, IN THE SE 1/4 OF SECTION 36.
Ecological:
General: UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	98	Map Index: 91783	EO Index: 92876	Element Last Seen: 2008-XX-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 2008-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2014-03-11

Quad Summary: Green Valley (3411854)
County Summary: Los Angeles

Lat/Long:	34.55348 / -118.40902	Accuracy:	specific area
UTM:	Zone-11 N3824429 E370724	Elevation (ft):	2600
PLSS:	T05N, R15W, Sec. 01 (S)	Acres:	16.0

Location: BOUQUET CAMPGROUND NO. 3, SOUTH SIDE OF USFS ROAD 5N41, ANGELES NATIONAL FOREST.
Detailed Location: MAPPED ACCORDING TO DIGITAL DATA PROVIDED BY VINZANT, IN THE WEST 1/2 OF THE NW 1/4 OF SECTION 1.
Ecological:
General: UNKNOWN NUMBER OF PLANTS OBSERVED. DATE IS NOT PROVIDED, BUT NEARBY SURVEYS WERE CONDUCTED IN MAY AND JUNE OF 2008.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	99	Map Index: 91807	EO Index: 92881	Element Last Seen: 2008-05-15
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 2008-05-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2014-03-10

Quad Summary: Green Valley (3411854)
County Summary: Los Angeles

Lat/Long:	34.54549 / -118.44752	Accuracy:	specific area
UTM:	Zone-11 N3823593 E367179	Elevation (ft):	3100
PLSS:	T05N, R15W, Sec. 03 (S)	Acres:	10.0

Location: ~0.7 AIR MILE W AND ~0.8 AIR MILE WSW OF BOUQUET CAMPGROUND, DEL SUR RIDGE, ANGELES NATIONAL FOREST.
Detailed Location: TWO POLYGONS MAPPED ACCORDING TO DIGITAL DATA PROVIDED BY VINZANT, IN THE NW 1/4 AND THE SW 1/4 OF THE SW 1/4 OF SECTION 3.
Ecological:
General: UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008.
Owner/Manager: USFS-ANGELES NF



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Occurrence No.	100	Map Index: 91808	EO Index: 92883	Element Last Seen:	2008-06-01
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-06-01
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-03-10
Quad Summary:	Green Valley (3411854)				
County Summary:	Los Angeles				
Lat/Long:	34.54410 / -118.44130		Accuracy:	specific area	
UTM:	Zone-11 N3823431 E367747		Elevation (ft):	2600	
PLSS:	T05N, R15W, Sec. 03 (S)		Acres:	17.0	
Location:	FROM ~0.2 AIR MILE NW TO ~0.7 AIR MILE SW OF BOUQUET CAMPGROUND, ANGELES NATIONAL FOREST.				
Detailed Location:	6 COLONIES MAPPED AS 5 POLYGONS BASED ON DIGITAL DATA PROVIDED BY VINZANT, IN THE NW 1/4 OF THE SE 1/4 OF SECTION 3, THE SE 1/4 OF THE SW 1/4 OF SECTION 3, AND THE NE 1/4 OF THE NW 1/4 OF SECTION 10.				
Ecological:					
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	101	Map Index: 91809	EO Index: 92884	Element Last Seen:	2008-05-17
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-05-17
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-03-10
Quad Summary:	Green Valley (3411854)				
County Summary:	Los Angeles				
Lat/Long:	34.53567 / -118.45621		Accuracy:	specific area	
UTM:	Zone-11 N3822516 E366366		Elevation (ft):	3500	
PLSS:	T05N, R15W, Sec. 09 (S)		Acres:	4.0	
Location:	SE SIDE OF SAUGUS-DEL SUR RD (USFS RD 6N18), ~1.3 AIR MILE SW OF BOUQUET CAMPGROUND, ANGELES NATIONAL FOREST.				
Detailed Location:	MAPPED ACCORDING TO DIGITAL DATA PROVIDED BY VINZANT, IN THE SW 1/4 OF THE NE 1/4 OF SECTION 9.				
Ecological:					
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008.				
Owner/Manager:	USFS-ANGELES NF				
Occurrence No.	102	Map Index: 91810	EO Index: 92885	Element Last Seen:	2008-05-20
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2008-05-20
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2014-03-10
Quad Summary:	Green Valley (3411854)				
County Summary:	Los Angeles				
Lat/Long:	34.53412 / -118.44928		Accuracy:	specific area	
UTM:	Zone-11 N3822334 E366999		Elevation (ft):	2800	
PLSS:	T05N, R15W, Sec. 10 (S)		Acres:	7.0	
Location:	~1.1 AIR MILES SW OF BOUQUET CAMPGROUND, SE SLOPE OF DEL SUR RIDGE, ANGELES NATIONAL FOREST.				
Detailed Location:	MAPPED ACCORDING TO DIGITAL DATA PROVIDED BY VINZANT, IN THE SE 1/4 OF THE NE 1/4 OF SECTION 9 AND THE SW 1/4 OF THE NW 1/4 OF SECTION 10.				
Ecological:					
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008.				
Owner/Manager:	USFS-ANGELES NF				



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Occurrence No.	103	Map Index: 91812	EO Index: 92886	Element Last Seen: 2006-05-26
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 2006-05-26
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2014-03-10

Quad Summary: Green Valley (3411854)

County Summary: Los Angeles

Lat/Long: 34.53048 / -118.42673 **Accuracy:** 2/5 mile

UTM: Zone-11 N3821901 E369063 **Elevation (ft):** 3200

PLSS: T05N, R15W, Sec. 11 (S) **Acres:** 0.0

Location: 100 M EAST OF USFS ROAD 6N07, SOUTHWESTERN END OF SIERRA PELONA RIDGE.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS EAST OF USFS RD 6N07 IN THE VICINITY OF THE GIVEN ELEVATION OF 975 M (~3200 FT).

Ecological: IN POST-FIRE SHRUBLAND DOMINATED BY RELATIVELY SPARSE ERIOGONUM FASCICULATUM WITH LOTUS SCOPARIUS AND AVENA FATUA.

General: FROM 2006 SPECIMEN LABEL: "11 FLOWERING INDIVIDUALS FOUND IN POPULATION, WITH 3 OTHER INDIVIDUALS ALONG 200 M OF ROAD TO NORTH. MAIN POPULATION ON TOP OF SPUR EAST OF SIERRA PELONA RIDGE AND USFS RD 6N07." NEED MAP DETAIL.

Owner/Manager: USFS-ANGELES NF

Occurrence No.	104	Map Index: 91814	EO Index: 92887	Element Last Seen: 2008-05-15
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen: 2008-05-15
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated: 2014-03-10

Quad Summary: Mint Canyon (3411844), Green Valley (3411854)

County Summary: Los Angeles

Lat/Long: 34.50037 / -118.48893 **Accuracy:** specific area

UTM: Zone-11 N3818645 E363306 **Elevation (ft):** 1900

PLSS: T05N, R15W, Sec. 19 (S) **Acres:** 4.0

Location: ~0.3 TO 0.5 AIR MILE WEST OF JUNCTION OF SAUGUS-DEL SUR RD AND COARSE GOLD RD, SW END OF DEL SUR RIDGE.

Detailed Location: TWO POLYGONS MAPPED BASED ON DIGITAL DATA PROVIDED BY VINZANT, NEAR THE CENTER OF THE SE 1/4 OF SECTION 19.

Ecological:

General: UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008.

Owner/Manager: USFS-ANGELES NF



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Occurrence No.	109	Map Index:	91826	EO Index:	92892	Element Last Seen:	2013-04-29
Occ. Rank:	Fair	Presence:	Presumed Extant	Site Last Seen:		2013-04-29	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-03-11	
Quad Summary:	Liebre Mtn. (3411866)						
County Summary:	Los Angeles						
Lat/Long:	34.64847 / -118.72808			Accuracy:	80 meters		
UTM:	Zone-11 N3835419 E341629			Elevation (ft):	3400		
PLSS:	T07N, R17W, Sec. 31 (S)			Acres:	0.0		
Location:	ALONGSIDE OLD RIDGE ROUTE IN ANGELES NATIONAL FOREST, ~1.65 AIR MILES EAST OF PYRAMID LAKE AT MOUTH OF POSEY CANYON.						
Detailed Location:	APPROXIMATELY 30 FT FROM A PAVED ROAD. MAPPED ACCORDING TO COORDINATES PROVIDED BY LOGSDON, IN THE SW 1/4 OF THE SW 1/4 OF SECTION 31.						
Ecological:	PIPELINE RIGHT-OF-WAY. SURROUNDING AREA IS 80% VEGETATED, MOSTLY SHRUBS. SMALL PATCH OF NON-NATIVE GRASSLAND IN A LARGER CHAMISE CHAPARRAL/COASTAL SAGE SCRUB COMMUNITY. WITH BROMUS MADRITENSIS, ADENOSTOMA FASCICULATUM, HIRSCHFELDIA INCANA.						
General:	3 PLANTS OBSERVED IN 2013.						
Owner/Manager:	USFS-ANGELES NF						

Occurrence No.	110	Map Index:	91819	EO Index:	92893	Element Last Seen:	2009-06-01
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2009-06-01	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2014-03-10	
Quad Summary:	Black Mtn. (3411867)						
County Summary:	Los Angeles						
Lat/Long:	34.73426 / -118.75656			Accuracy:	specific area		
UTM:	Zone-11 N3844979 E339184			Elevation (ft):	3300		
PLSS:	T08N, R18W, Sec. 35 (S)			Acres:	1.0		
Location:	LIEBRE GULCH, ~2.6 AIR MILES SOUTH OF QUAIL LAKE PARKING AREA, ANGELES NATIONAL FOREST.						
Detailed Location:	TWO COLONIES MAPPED AS ONE POLYGON BASED ON DIGITAL DATA PROVIDED BY VINZANT, IN THE WEST 1/2 OF THE SE 1/4 OF SECTION 35.						
Ecological:							
General:	UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008 AND 2009.						
Owner/Manager:	USFS-ANGELES NF						

<i>Calochortus palmeri</i> var. <i>palmeri</i>			Element Code: PMLIL0D122		
Palmer's mariposa-lily					
Listing Status:	Federal:	None	CNDDB Element Ranks:	Global:	G3T3?
	State:	None		State:	S3?
	Other:	Rare Plant Rank - 1B.2, BLM_S-Sensitive, SB_RSABG-Rancho Santa Ana Botanic Garden, USFS_S-Sensitive			
Habitat:	General:	MEADOWS AND SEEPS, CHAPARRAL, LOWER MONTANE CONIFEROUS FOREST.			
	Micro:	VERNALLY MOIST PLACES IN YELLOW-PINE FOREST, CHAPARRAL. 1000-2390 M.			



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Occurrence No.	51	Map Index: 80235	EO Index: 81221	Element Last Seen:	2011-05-XX
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2011-05-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-12-12

Quad Summary: Valyermo (3411747)

County Summary: Los Angeles

Lat/Long:	34.41977 / -117.84822	Accuracy:	nonspecific area
UTM:	Zone-11 N3809027 E422054	Elevation (ft):	4200
PLSS:	T04N, R09W, Sec. 20 (S)	Acres:	53.0

Location: WEST FORK PUNCHBOWL CANYON, 0.6 MI SW OF BIG ROCK CREEK ROAD, NEAR NORTH BOUNDARY OF DEVILS PUNCHBOWL COUNTY PARK.

Detailed Location: EXACT LOCATION UNKNOWN. MAPPED AS BEST GUESS BY CNDDDB ALONG THE CREEK IN PUNCHBOWL CANYON WITHIN SECTION 20 ACCORDING TO TRS PROVIDED BY SWINNEY.

Ecological: SANDY CANYON BOTTOM AND MOIST FLAT SHELVES OF SEASONAL DRAINAGES. PINYON-JUNIPER AND CHAPARRAL ON ADJACENT DRY SLOPES. ASSOCIATED WITH BROMUS TECTORUM, POA SECUNDA, YUCCA WHIPPLEI SSP. CAESPITOSA, CERCOCARPUS BETULOIDES, SALIX EXIGUA, ETC.

General: 100 PLANTS IN 1995. UNCOMMON IN 2008. OCCURRENCE IS BASED ON AN 1893 DAVIDSON COLLECTION FROM BIG ROCK, TWO 1995 COLLECTIONS BY MISTRETTA AND ELVIN, A 2008 COLLECTION BY SWINNEY, AND 2011 TRIEGER PHOTOS. NEEDS SPECIFIC LOCATION INFORMATION.

Owner/Manager: UNKNOWN

Occurrence No.	52	Map Index: 80236	EO Index: 81222	Element Last Seen:	2001-06-02
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	2001-06-02
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2010-10-04

Quad Summary: Juniper Hills (3411748)

County Summary: Los Angeles

Lat/Long:	34.44095 / -117.89646	Accuracy:	1/10 mile
UTM:	Zone-11 N3811414 E417642	Elevation (ft):	3980
PLSS:	T04N, R10W, Sec. 14 (S)	Acres:	0.0

Location: JUNCTION OF TUMBLEWEED ROAD AND LONG VIEW ROAD (131ST STREET EAST), JUNIPER HILLS.

Detailed Location: MAPPED AS BEST GUESS BY CNDDDB AT GIVEN JUNCTION ON THE BORDER BETWEEN SECTIONS 11 AND 14.

Ecological: CONFINED TO MOIST AREA IN RAVINE IN PINYON-JUNIPER WOODLAND. ASSOCIATED WITH SONCHUS, POLYPOGON, FORESTIERA PUBESCENS, ETC.

General: ONLY SOURCE OF INFORMATION FOR THIS OCCURRENCE IS A 2001 COLLECTION BY SWINNEY. NEEDS POPULATION INFORMATION.

Owner/Manager: UNKNOWN



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Occurrence No.	53	Map Index:	80239	EO Index:	81224	Element Last Seen:	2005-06-23
Occ. Rank:	Unknown	Presence:	Presumed Extant	Site Last Seen:		2005-06-23	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2012-12-12	
Quad Summary:	Juniper Hills (3411748)						
County Summary:	Los Angeles						
Lat/Long:	34.37623 / -117.98289			Accuracy:	80 meters		
UTM:	Zone-11 N3804310 E409632			Elevation (ft):	5100		
PLSS:	T03N, R11W, Sec. 01 (S)			Acres:	0.0		
Location:	ALONG USFS ROAD 5N04, 2.2 ROAD MILES NE OF ALDER SADDLE, JUST EAST OF PINYON FLATS, SAN GABRIEL MOUNTAINS.						
Detailed Location:	MAPPED BY CNDDDB ACCORDING TO COORDINATES PROVIDED ALONG WITH A 2005 COLLECTION BY GROSS IN THE SW 1/4 OF THE NE 1/4 OF SECTION 1.						
Ecological:	COARSE GRANITIC SUBSTRATE, FULL SUN, MOIST. ASSOCIATED WITH HORKELIA, SALIX LASIOLEPIS, TRIFOLIUM, CAREX OCCIDENTALIS, SCUTELLARIA SIPHOCAMPYLOIDES, CASTILLEJA STENANTHA, PINUS JEFFREYI, ETC.						
General:	OCCURRENCE ONLY KNOWN FROM 4 COLLECTIONS. 1992 MISTRETTA COLLECTION, WITH LOCALITY GIVEN SIMPLY AS "LITTLE ROCK CREEK" IS ATTRIBUTED HERE, WHERE THE POPULATION WAS DESCRIBED AS "COMMON ALONG DRAINAGE." OBSERVED AT MAPPED SITE IN 2005.						
Owner/Manager:	USFS-ANGELES NF						

<i>Calochortus striatus</i>	Element Code: PMLIL0D190
alkali mariposa-lily	
Listing Status:	Federal: None
	State: None
	Other: Rare Plant Rank - 1B.2, BLM_S-Sensitive, SB_RSABG-Rancho Santa Ana Botanic Garden, USFS_S-Sensitive
Habitat:	General: CHAPARRAL, CHENOPOD SCRUB, MOJAVEAN DESERT SCRUB, MEADOWS.
	Micro: ALKALINE MEADOWS AND EPHEMERAL WASHES. 90-1595 M.
	CNDDDB Element Ranks: Global: G2
	State: S2

Occurrence No.	22	Map Index:	02210	EO Index:	18062	Element Last Seen:	2005-05-11
Occ. Rank:	Excellent	Presence:	Presumed Extant	Site Last Seen:		2005-05-11	
Occ. Type:	Natural/Native occurrence	Trend:	Unknown	Record Last Updated:		2009-06-17	
Quad Summary:	Lancaster East (3411861)						
County Summary:	Los Angeles						
Lat/Long:	34.71537 / -118.11310			Accuracy:	80 meters		
UTM:	Zone-11 N3842043 E398074			Elevation (ft):	2350		
PLSS:	T07N, R12W, Sec. 11 (S)			Acres:	0.0		
Location:	0.7 MILE NORTH OF EAST AVENUE I ALONG CHALLENGER WAY (10TH ST), LANCASTER.						
Detailed Location:	250 FEET WEST OF CHALLENGER WAY, AT A POINT 150 FEET SOUTH OF ENTRANCE TO TRAILER PARK.						
Ecological:	SALTBUSH SCRUB AND ALKALI CLAY PAN. ASSOCIATED WITH ATRIPLEX, SPOROBOLUS, AND DISTICHLIS. BROMUS RUBENS COMMON IN AREA.						
General:	189 PLANTS OBSERVED IN 1988 OVER AN AREA OF APPROXIMATELY 1 ACRE. POPULATION DESCRIBED AS VERY HEALTHY AND IN GOOD CONDITION. PRESENCE OF SHRUBS AT THE SITE MAY DETER OFF ROAD USE AND TRAMPLING.						
Owner/Manager:	PVT						



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Occurrence No.	23	Map Index: 02152	EO Index: 29484	Element Last Seen:	2011-05-05
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2011-05-05
Occ. Type:	Natural/Native occurrence		Trend: Decreasing	Record Last Updated:	2012-07-26
Quad Summary:	Lancaster West (3411862), Rosamond Lake (3411871), Rosamond (3411872)				
County Summary:	Kern, Los Angeles				
Lat/Long:	34.78360 / -118.14972		Accuracy:	specific area	
UTM:	Zone-11 N3849648 E394807		Elevation (ft):	2310	
PLSS:	T08N, R12W, Sec. 16 (S)		Acres:	1169.0	
Location:	ALONG THE SIERRA HIGHWAY NORTH OF LANCASTER, FROM JUST SOUTH OF AVENUE G NORTH PAST PATTERSON ROAD.				
Detailed Location:	FREQUENT FOR ABOUT 8 MILES ALONG THE HIGHWAY. ALSO FOUND ALONG AT&T RIGHT OF WAY (10TH STREET) FROM PATTERSON ROAD TO AVENUE G.				
Ecological:	FOUND ON SILT/CAKED MUD, IN OPEN SPACES BETWEEN SHRUBS AND ON EDGES OF SALT PANS AND MINI ALKALI PLAYAS. ASSOCIATED WITH ANNUAL GRASSES, ATRIPLEX CANESCENS, CHRYSOTHAMNUS NAUSEOSUS, DISTICHLIS SPICATA, LASTHENIA CALIFORNICA, AND WEEDY SPP.				
General:	THOUSANDS IN 1995 & 2003. 2500 IN 1998 ALONG AT&T ROW. 25+ IN 2000 AT SIERRA HWY & AVE G AND 100+ ALONG AT&T ROW. 21 IN 2009 AT SMALL SE POLY. 5490 AT N END OF EO IN 2010. 1000S IN 2011 IN PORTIONS OF EO. INCLUDES FORMER EO#S 20 & 24.				
Owner/Manager:	PVT				
Occurrence No.	39	Map Index: 24272	EO Index: 7179	Element Last Seen:	1988-06-05
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	1988-06-05
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1993-10-13
Quad Summary:	Lancaster West (3411862)				
County Summary:	Los Angeles				
Lat/Long:	34.69047 / -118.22484		Accuracy:	specific area	
UTM:	Zone-11 N3839401 E387809		Elevation (ft):	2340	
PLSS:	T07N, R13W, Sec. 14 (S)		Acres:	117.8	
Location:	ANTELOPE VALLEY, JUST SOUTH OF THE MIRA LOMA DETENTION CENTER, WEST OF LANCASTER.				
Detailed Location:	LOCATED BETWEEN 50TH AND 60TH STREETS AND ALONG EITHER SIDE OF AVENUE J.				
Ecological:	SHADSCALE SCRUB ON ALKALI SOILS. ASSOCIATES INCLUDE ATRIPLEX CONFERTIFOLIA, CHRYSOTHAMNUS, EPHEDRA, LYCIUM, AND CHORIZANTHE SPINOSA.				
General:	APPROXIMATELY 200 PLANTS OBSERVED IN 1988. ONLY 15% OF POPULATION FLOWERED, DUE IN PART TO APPARENT GRAZING (RABBITS?). NO ADDITIONAL INFORMATION ON THE STATUS OF THIS SITE SINCE 1988, NEEDS FIELDWORK.				
Owner/Manager:	LAX COUNTY?				



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Occurrence No.	43	Map Index: 48060	EO Index: 48060	Element Last Seen:	2008-06-03
Occ. Rank:	Good		Presence: Presumed Extant	Site Last Seen:	2008-06-03
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-06-17
Quad Summary:	Lancaster West (3411862)				
County Summary:	Los Angeles				
Lat/Long:	34.74647 / -118.24065		Accuracy:	nonspecific area	
UTM:	Zone-11 N3845629 E386436		Elevation (ft):	2360	
PLSS:	T08N, R13W, Sec. 34 (S)		Acres:	25.0	
Location:	WEST OF GENERAL WILLIAMS J. FOX AIRFIELD, ABOUT 3 MILES NORTH OF MIRA LOMA DETENTION CENTER, NORTHWEST OF LANCASTER.				
Detailed Location:	MAPPED AS TWO NON-SPECIFIC POLYGONS. EASTERN POLYGON BASED ON 1998 PARCEL MAP WITH MARKS FOR "GENERAL AREA OF C. STRIATUS" BY SWIFT. WESTERN POLYGON BASED ON 2008 COORDINATES BY CUMMINS, NO DATUM PROVIDED.				
Ecological:	IN CHENOPOD SCRUB WITH ATRIPLEX HYMENOLYTRA, A. POLYCARPA, AND A. CONFERTIFOLIA. ON FLAT MUDFLAT OPEN AREA WITH OCCASIONAL MOUNDS OF VEGETATION.				
General:	MORE THAN 30 HEALTHY PLANTS OBSERVED IN 1998. UNKNOWN NUMBER OF PLANTS OBSERVED IN 2008.				
Owner/Manager:	LAX COUNTY, DPR				
Occurrence No.	94	Map Index: 64430	EO Index: 64509	Element Last Seen:	1934-05-19
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1934-05-19
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2006-04-06
Quad Summary:	Lovejoy Buttes (3411757)				
County Summary:	Los Angeles				
Lat/Long:	34.60683 / -117.83133		Accuracy:	1/5 mile	
UTM:	Zone-11 N3829757 E423777		Elevation (ft):		
PLSS:	T06N, R09W, Sec. 16 (S)		Acres:	0.0	
Location:	LOVE JOY DAM, WEST MOJAVE DESERT REGION.				
Detailed Location:	MAPPED IN VICINITY OF DAM LABELED ON TOP NEAR LOVEJOY SPRING. NO LAKE APPEARS ON TOPO MAP.				
Ecological:					
General:	ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1934 COLLECTION BY PEIRSON. MUCH OF AREA IS NOT DEVELOPED.				
Owner/Manager:	UNKNOWN				



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Occurrence No.	95	Map Index: 75550	EO Index: 64511	Element Last Seen:	2005-05-XX
Occ. Rank:	Poor		Presence: Presumed Extant	Site Last Seen:	2005-05-XX
Occ. Type:	Natural/Native occurrence		Trend: Decreasing	Record Last Updated:	2009-06-24

Quad Summary: Lancaster West (3411862)

County Summary: Los Angeles

Lat/Long:	34.70277 / -118.16861	Accuracy:	80 meters
UTM:	Zone-11 N3840704 E392974	Elevation (ft):	2325
PLSS:	T07N, R12W, Sec. 17 (S)	Acres:	0.0

Location: SE CORNER OF JUNCTION HWY 14 AND AVENUE I, LANCASTER.

Detailed Location:

Ecological: ALKALI SINKS/SALTBUSH SCRUB.

General: SEVERAL PLANTS OBSERVED IN 2005. HISTORICAL COLLECTIONS WITH LOCALITIES PROVIDED ONLY AS LANCASTER ALSO ATTRIBUTED HERE.

Owner/Manager: PVT

Occurrence No.	97	Map Index: 75554	EO Index: 76559	Element Last Seen:	2005-05-30
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2005-05-30
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-06-18

Quad Summary: Lancaster East (3411861)

County Summary: Los Angeles

Lat/Long:	34.70672 / -118.09629	Accuracy:	nonspecific area
UTM:	Zone-11 N3841067 E399603	Elevation (ft):	2370
PLSS:	T07N, R12W, Sec. 12 (S)	Acres:	17.0

Location: NW CORNER EAST AVENUE I AND 20TH STREET E, LANCASTER.

Detailed Location: DESCRIPTION IN SOURCE: SW CORNER OF 20TH STREET EAST AND AVENUE H12.

Ecological: HALOPHYTIC SALTBUSH AND ALKALI CLAY PANS.

General: UNKNOWN NUMBER OF PLANTS OBSERVED IN 2005 WITHIN A 15 ACRE SITE PROPOSED FOR DEVELOPMENT.

Owner/Manager: PVT

Occurrence No.	98	Map Index: 75555	EO Index: 76560	Element Last Seen:	2005-XX-XX
Occ. Rank:	None		Presence: Possibly Extirpated	Site Last Seen:	2005-XX-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2012-05-22

Quad Summary: Lancaster West (3411862)

County Summary: Los Angeles

Lat/Long:	34.73412 / -118.21873	Accuracy:	1/10 mile
UTM:	Zone-11 N3844235 E388426	Elevation (ft):	2340
PLSS:	T08N, R13W, Sec. 36 (S)	Acres:	0.0

Location: NEAR THE INTERSECTION OF 50TH STREET WEST AND WEST AVENUE G, NORTHWESTERN LANCASTER.

Detailed Location:

Ecological:

General: SEED COLLECTION FROM SITE MADE BY RSA IN 2005 (COLLECTIONS #21773 & 21774). SITE POSSIBLY EXTIRPATED FROM DEVELOPMENT. A 1988 REVEAL COLLECTION FROM "ALONG G ST 0.2 MI E OF G ST ON S SIDE OF HWY AND GENERAL WJ FOX AIRPORT" ATTRIBUTED HERE.

Owner/Manager: UNKNOWN



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Occurrence No.	99	Map Index: 75559	EO Index: 76562	Element Last Seen:	2005-05-12
Occ. Rank:	Fair		Presence: Presumed Extant	Site Last Seen:	2005-05-12
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-06-19
Quad Summary:	Lancaster West (3411862)				
County Summary:	Los Angeles				
Lat/Long:	34.69317 / -118.20573		Accuracy:	nonspecific area	
UTM:	Zone-11 N3839679 E389563		Elevation (ft):	2340	
PLSS:	T07N, R13W, Sec. 13 (S)		Acres:	159.0	
Location:	SW CORNER OF LANCASTER BLVD AND 40TH STREET WEST, LANCASTER.				
Detailed Location:					
Ecological:	SALTBUSH SCRUB/ALKALI SINKS.				
General:	10 PLANTS OBSERVED IN 2005 WITHIN A 100 ACRE SITE.				
Owner/Manager:	PVT				
Occurrence No.	100	Map Index: 75558	EO Index: 76563	Element Last Seen:	2005-05-XX
Occ. Rank:	None		Presence: Extirpated	Site Last Seen:	2005-05-XX
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2009-06-18
Quad Summary:	Lancaster West (3411862)				
County Summary:	Los Angeles				
Lat/Long:	34.68478 / -118.19814		Accuracy:	nonspecific area	
UTM:	Zone-11 N3838741 E390246		Elevation (ft):	2358	
PLSS:	T07N, R12W, Sec. 19 (S)		Acres:	10.0	
Location:	BETWEEN AVENUE J4 AND AVENUE J6, WEST OF 37TH STREET, LANCASTER.				
Detailed Location:					
Ecological:	SALTBUSH SCRUB WITH SCATTERED JOSHUA TREES AND WIDELY SCATTERED JUNIPERS, MUCH OF SITE COVERED WITH EXOTIC GRASSES IN 2005.				
General:	40+ PLANTS OBSERVED IN 2005. OCCURRENCE NOW EXTIRPATED.				
Owner/Manager:	PVT				



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<i>Lilium parryi</i>		Element Code: PMLIL1A0J0	
lemon lily			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G3
	State: None		State: S3
	Other: Rare Plant Rank - 1B.2, SB_RSABG-Rancho Santa Ana Botanic Garden, USFS_S-Sensitive		
Habitat:	General:	LOWER MONTANE CONIFEROUS FOREST, MEADOWS AND SEEPS, RIPARIAN FOREST, UPPER MONTANE CONIFEROUS FOREST.	
	Micro:	WET, MOUNTAINOUS TERRAIN; GENERALLY IN FORESTED AREAS; ON SHADY EDGES OF STREAMS, IN OPEN BOGGY MEADOWS & SEEPS. 1220-2745 M.	

Occurrence No.	68	Map Index:	48441	EO Index:	48441	Element Last Seen:	1967-08-02
Occ. Rank:	None			Presence:	Possibly Extirpated	Site Last Seen:	1994-07-01
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2010-01-25

Quad Summary: Pacifico Mountain (3411841)
County Summary: Los Angeles

Lat/Long:	34.38599 / -118.03704	Accuracy:	1/5 mile
UTM:	Zone-11 N3805442 E404664	Elevation (ft):	6367
PLSS:	T04N, R11W, Sec. 33 (S)	Acres:	0.0

Location: SHEEP CAMP SPRING.
Detailed Location: EXACT LOCATION UNKNOWN, MAPPED IN THE VICINITY OF SHEEP CAMP SPRING.
Ecological:
General: 1967 COLLECTION BY WHEELER ATTRIBUTED TO THIS SITE. SITE MAY BE EXTIRPATED AS NO INDIVIDUALS WERE OBSERVED IN 1994 SURVEYS.
Owner/Manager: USFS-ANGELES NF

Occurrence No.	138	Map Index:	85483	EO Index:	86498	Element Last Seen:	1968-07-23
Occ. Rank:	Unknown			Presence:	Presumed Extant	Site Last Seen:	1968-07-23
Occ. Type:	Natural/Native occurrence			Trend:	Unknown	Record Last Updated:	2012-03-15

Quad Summary: Juniper Hills (3411748)
County Summary: Los Angeles

Lat/Long:	34.38275 / -117.88986	Accuracy:	nonspecific area
UTM:	Zone-11 N3804954 E418192	Elevation (ft):	6600
PLSS:	T04N, R10W, Sec. 35 (S)	Acres:	40.0

Location: BURKHART TRAIL; 0.4 AIR MILE SSE OF BURKHART SADDLE, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED IN THE SE 1/4 OF THE SE 1/4 OF T04N R10W SECTION 35 AS STATED IN A 1968 WHEELER COLLECTION.
Ecological: ALONG AND NEAR STREAMLET IN SUNNY RAVINE, S SLOPE.
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1968 WHEELER COLLECTION. NEEDS FIELDWORK.
Owner/Manager: USFS-ANGELES NF



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<i>Muhlenbergia californica</i>		Element Code: PMPOA480A0	
California muhly			
Listing Status:	Federal: None	CNDDDB Element Ranks:	Global: G3
	State: None		State: S3.3
	Other: Rare Plant Rank - 4.3		
Habitat:	General: COASTAL SAGE, CHAPARRAL, LOWER MONTANE CONIFEROUS FOREST, MEADOWS.		
	Micro: USUALLY FOUND NEAR STREAMS OR SEEPS. 400-2000M.		

Occurrence No.	3	Map Index: 35091	EO Index: 131	Element Last Seen:	1951-07-30
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1951-07-30
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	1996-03-07

Quad Summary: Mount San Antonio (3411736), Crystal Lake (3411737), Mescal Creek (3411746), Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.37434 / -117.76556	Accuracy:	1 mile
UTM:	Zone-11 N3803928 E429613	Elevation (ft):	6500
PLSS:	T03N, R09W, Sec. 01 (S)	Acres:	0.0

Location: BIG ROCK CREEK, NORTH OF MT. BADEN-POWELL, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED ABOUT 1 MILE NORTH OF MT. BADEN-POWELL.
Ecological: INFREQUENT ON EXPOSED SOUTH SLOPE WITH ARTEMISIA TRIDENTATA AND FREMONTODENDRON CALIFORNICUM.
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1951 COLLECTION BY ROOS.
Owner/Manager: UNKNOWN

Occurrence No.	4	Map Index: 02622	EO Index: 137	Element Last Seen:	1933-08-11
Occ. Rank:	Unknown		Presence: Presumed Extant	Site Last Seen:	1933-08-11
Occ. Type:	Natural/Native occurrence		Trend: Unknown	Record Last Updated:	2007-10-19

Quad Summary: Crystal Lake (3411737), Valyermo (3411747)
County Summary: Los Angeles

Lat/Long:	34.37193 / -117.83604	Accuracy:	specific area
UTM:	Zone-11 N3803712 E423130	Elevation (ft):	5250
PLSS:	T03N, R09W, Sec. 05 (S)	Acres:	428.9

Location: SOUTH FORK BIG ROCK CREEK, SAN GABRIEL MOUNTAINS.
Detailed Location: MAPPED ALL ALONG SOUTH FORK BIG ROCK CREEK; LOCATION VAGUE.
Ecological:
General: ONLY SOURCE OF INFORMATION FOR THIS SITE IS 1933 COLLECTION BY DURAN.
Owner/Manager: USFS-ANGELES NF

CNPS *California Native Plant Society* Rare and Endangered Plant Inventory

Plant List

211 matches found. *Click on scientific name for details*

Search Criteria

Found in Los Angeles County

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
<u><i>Abronia maritima</i></u>	red sand-verbena	Nyctaginaceae	perennial herb	4.2	S3?	G4?
<u><i>Abronia villosa</i> var. <i>aurita</i></u>	chaparral sand-verbena	Nyctaginaceae	annual herb	1B.1	S2	G5T3T4
<u><i>Acanthomintha obovata</i> ssp. <i>cordata</i></u>	heart-leaved thorn-mint	Lamiaceae	annual herb	4.2	S3.2?	G3?T3?
<u><i>Acanthoscyphus parishii</i> var. <i>parishii</i></u>	Parish's oxytheca	Polygonaceae	annual herb	4.2	S3.2	G4?T3
<u><i>Allium howellii</i> var. <i>clokeyi</i></u>	Mt. Pinos onion	Alliaceae	perennial bulbiferous herb	1B.3	S2	G4T2
<u><i>Amaranthus watsonii</i></u>	Watson's amaranth	Amaranthaceae	annual herb	4.3	S3.3	G4G5
<u><i>Androsace elongata</i> ssp. <i>acuta</i></u>	California androsace	Primulaceae	annual herb	4.2	S3.2?	G5?T3T4
<u><i>Anomobryum julaceum</i></u>	slender silver moss	Bryaceae	moss	2B.2	S2	G4G5
<u><i>Aphanisma blitoides</i></u>	aphanisma	Chenopodiaceae	annual herb	1B.2	S3	G3G4
<u><i>Arctostaphylos crustacea</i> ssp. <i>subcordata</i></u>	Santa Cruz Island manzanita	Ericaceae	perennial evergreen shrub	4.2	S3.2	G4T3
<u><i>Arctostaphylos glandulosa</i> ssp. <i>gabrielensis</i></u>	San Gabriel manzanita	Ericaceae	perennial evergreen shrub	1B.2	S2	G5T2
<u><i>Arctostaphylos parryana</i> ssp. <i>tumescens</i></u>	interior manzanita	Ericaceae	perennial evergreen shrub	4.3	S3	G4T3
<u><i>Arenaria paludicola</i></u>	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	1B.1	S1	G1
<u><i>Asplenium vespertinum</i></u>	western spleenwort	Aspleniaceae	perennial rhizomatous herb	4.2	S3.2	G3?
<u><i>Astragalus bicristatus</i></u>	crested milk-vetch	Fabaceae	perennial herb	4.3	S3.3	G3
<u><i>Astragalus brauntonii</i></u>	Braunton's milk-vetch	Fabaceae	perennial herb	1B.1	S2	G2
<u><i>Astragalus lentiginosus</i> var. <i>antoniuss</i></u>	San Antonio milk-vetch	Fabaceae	perennial herb	1B.3	S2	G5T2
<u><i>Astragalus lentiginosus</i> var. <i>sierrae</i></u>	Big Bear Valley milk-vetch	Fabaceae	perennial herb	1B.2	S2	G5T2
	Big Bear Valley					

<u>Astragalus leucolobus</u>	woollypod	Fabaceae	perennial herb	1B.2	S2	G2
<u>Astragalus preussii var. laxiflorus</u>	Lancaster milk-vetch	Fabaceae	perennial herb	1B.1	S1	G4T2
<u>Astragalus pycnostachyus var. lanosissimus</u>	Ventura marsh milk-vetch	Fabaceae	perennial herb	1B.1	S1	G2T1
<u>Astragalus tener var. titi</u>	coastal dunes milk-vetch	Fabaceae	annual herb	1B.1	S1	G2T1
<u>Atriplex coulteri</u>	Coulter's saltbush	Chenopodiaceae	perennial herb	1B.2	S2	G2
<u>Atriplex pacifica</u>	South Coast saltscale	Chenopodiaceae	annual herb	1B.2	S2	G3G4
<u>Atriplex parishii</u>	Parish's brittlescale	Chenopodiaceae	annual herb	1B.1	S1	G1G2
<u>Atriplex serenana var. davidsonii</u>	Davidson's saltscale	Chenopodiaceae	annual herb	1B.2	S1	G5T1
<u>Baccharis malibuensis</u>	Malibu baccharis	Asteraceae	perennial deciduous shrub	1B.1	S1	G1
<u>Baccharis plummerae ssp. plummerae</u>	Plummer's baccharis	Asteraceae	perennial deciduous shrub	4.3	S3.2	G3T3
<u>Berberis nevinii</u>	Nevin's barberry	Berberidaceae	perennial evergreen shrub	1B.1	S1	G1
<u>Bergerocactus emoryi</u>	golden-spined cereus	Cactaceae	perennial stem succulent	2B.2	S2	G2
<u>Boechera dispar</u>	pinyon rockcress	Brassicaceae	perennial herb	2B.3	S3	G3
<u>Boechera lincolnensis</u>	Lincoln rockcress	Brassicaceae	perennial herb	2B.3	S2	G4?
<u>Botrychium crenulatum</u>	scalloped moonwort	Ophioglossaceae	perennial rhizomatous herb	2B.2	S2	G3
<u>Brodiaea filifolia</u>	thread-leaved brodiaea	Themidaceae	perennial bulbiferous herb	1B.1	S1	G1
<u>Calandrinia breweri</u>	Brewer's calandrinia	Montiaceae	annual herb	4.2	S3.2?	G4
<u>California macrophylla</u>	round-leaved filaree	Geraniaceae	annual herb	1B.1	S2	G2
<u>Calochortus catalinae</u>	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	4.2	S3.2	G3
<u>Calochortus clavatus var. clavatus</u>	club-haired mariposa lily	Liliaceae	perennial bulbiferous herb	4.3	S3	G4T3
<u>Calochortus clavatus var. gracilis</u>	slender mariposa lily	Liliaceae	perennial bulbiferous herb	1B.2	S2	G4T2
<u>Calochortus fimbriatus</u>	late-flowered mariposa lily	Liliaceae	perennial bulbiferous herb	1B.3	S3	G3
<u>Calochortus palmeri var. palmeri</u>	Palmer's mariposa lily	Liliaceae	perennial bulbiferous herb	1B.2	S3?	G3T3?
<u>Calochortus plummerae</u>	Plummer's mariposa lily	Liliaceae	perennial bulbiferous herb	4.2	S4	G4
<u>Calochortus striatus</u>	alkali mariposa lily	Liliaceae	perennial bulbiferous herb	1B.2	S2	G2
<u>Calochortus weedii var. intermedius</u>	intermediate mariposa lily	Liliaceae	perennial bulbiferous herb	1B.2	S2	G3G4T2
<u>Calystegia peirsonii</u>	Peirson's morning-glory	Convolvulaceae	perennial rhizomatous herb	4.2	S3.2	G3

<u>Calystegia sepium ssp. binghamiae</u>	Santa Barbara morning-glory	Convolvulaceae	perennial rhizomatous herb	1B.1	S1	G5T1
<u>Camissoniopsis lewisii</u>	Lewis' evening-primrose	Onagraceae	annual herb	3	S1S3	G2G3
<u>Canbya candida</u>	white pygmy-poppy	Papaveraceae	annual herb	4.2	S3.2	G3
<u>Carex occidentalis</u>	western sedge	Cyperaceae	perennial rhizomatous herb	2B.3	S2S3	G4
<u>Castilleja gleasoni</u>	Mt. Gleason paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	1B.2	S2.2	G2Q
<u>Castilleja plagiotoma</u>	Mojave paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	4.3	S3.3	G3
<u>Centromadia parryi ssp. australis</u>	southern tarplant	Asteraceae	annual herb	1B.1	S2	G3T2
<u>Cercocarpus betuloides var. blancheae</u>	island mountain-mahogany	Rosaceae	perennial evergreen shrub	4.3	S3.3	G5T3
<u>Chaenactis glabriuscula var. orcuttiana</u>	Orcutt's pincushion	Asteraceae	annual herb	1B.1	S1	G5T1
<u>Chamaebatia australis</u>	southern mountain misery	Rosaceae	perennial evergreen shrub	4.2	S3.2	G4
<u>Chenopodium littoreum</u>	coastal goosefoot	Chenopodiaceae	annual herb	1B.2	S2	G2
<u>Chloropyron maritimum ssp. maritimum</u>	salt marsh bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	1B.2	S1	G4?T1
<u>Chorizanthe parryi var. fernandina</u>	San Fernando Valley spineflower	Polygonaceae	annual herb	1B.1	S1	G2T1
<u>Chorizanthe parryi var. parryi</u>	Parry's spineflower	Polygonaceae	annual herb	1B.1	S2	G2T2
<u>Chorizanthe spinosa</u>	Mojave spineflower	Polygonaceae	annual herb	4.2	S3.2	G3
<u>Chorizanthe xanti var. leucotheca</u>	white-bracted spineflower	Polygonaceae	annual herb	1B.2	S2	G4T2
<u>Cicuta maculata var. bolanderi</u>	Bolander's water-hemlock	Apiaceae	perennial herb	2B.1	S2	G5T3T4
<u>Cistanthe maritima</u>	seaside cistanthe	Montiaceae	annual herb	4.2	S3.2	G3G4
<u>Cladium californicum</u>	California sawgrass	Cyperaceae	perennial rhizomatous herb	2B.2	S2.2	G4
<u>Clarkia xantiana ssp. parviflora</u>	Kern Canyon clarkia	Onagraceae	annual herb	4.2	S3	G4T3
<u>Clinopodium mimuloides</u>	monkey-flower savory	Lamiaceae	perennial herb	4.2	S3.2	G3
<u>Convolvulus simulans</u>	small-flowered morning-glory	Convolvulaceae	annual herb	4.2	S3.2	G3
<u>Crossosoma californicum</u>	Catalina crossosoma	Crossosomataceae	perennial deciduous shrub	1B.2	S2	G2
<u>Cryptantha clokeyi</u>	Clokey's cryptantha	Boraginaceae	annual herb	1B.2	S2	G2
<u>Cryptantha wigginsii</u>	Wiggins' cryptantha	Boraginaceae	annual herb	1B.2	S1	G2
<u>Cuscuta obtusiflora var. glandulosa</u>	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	2B.2	SH	G5T4T5
<u>Cymopterus deserticola</u>	desert cymopterus	Apiaceae	perennial herb	1B.2	S2	G2
<u>Deinandra minthornii</u>	Santa Susana tarplant	Asteraceae	perennial	1B.2	S2.2	G2

			deciduous shrub			
<u>Dichondra occidentalis</u>	western dichondra	Convolvulaceae	perennial rhizomatous herb	4.2	S3.2	G4?
<u>Didymodon norrisii</u>	Norris' beard moss	Pottiaceae	moss	2B.2	S3S4	G3G4
<u>Dithyrea maritima</u>	beach spectaclepod	Brassicaceae	perennial rhizomatous herb	1B.1	S2.1	G2
<u>Dodecahema leptoceras</u>	slender-horned spineflower	Polygonaceae	annual herb	1B.1	S1	G1
<u>Drymocallis cuneifolia var. ewanii</u>	Ewan's woodbeauty	Rosaceae	perennial herb	1B.3	S1	G1T1
<u>Dudleya blochmaniae ssp. blochmaniae</u>	Blochman's dudleya	Crassulaceae	perennial herb	1B.1	S2.1	G2T2
<u>Dudleya cymosa ssp. agourensis</u>	Agoura Hills dudleya	Crassulaceae	perennial herb	1B.2	S2	G5T1
<u>Dudleya cymosa ssp. crebrifolia</u>	San Gabriel River dudleya	Crassulaceae	perennial herb	1B.2	S1	G5T1
<u>Dudleya cymosa ssp. marcescens</u>	marcescent dudleya	Crassulaceae	perennial herb	1B.2	S2	G5T2
<u>Dudleya cymosa ssp. ovatifolia</u>	Santa Monica dudleya	Crassulaceae	perennial herb	1B.2	S1	G5T1
<u>Dudleya densiflora</u>	San Gabriel Mountains dudleya	Crassulaceae	perennial herb	1B.1	S2	G2
<u>Dudleya multicaulis</u>	many-stemmed dudleya	Crassulaceae	perennial herb	1B.2	S2	G2
<u>Dudleya virens ssp. hassei</u>	Catalina Island dudleya	Crassulaceae	perennial herb	1B.2	S2?	G2?T2?
<u>Dudleya virens ssp. insularis</u>	island green dudleya	Crassulaceae	perennial herb	1B.2	S2.2	G2?T2
<u>Dudleya virens ssp. virens</u>	bright green dudleya	Crassulaceae	perennial herb	1B.2	S1	G2?T1
<u>Eriastrum hooveri</u>	Hoover's eriastrum	Polemoniaceae	annual herb	4.2	S3.2	G3
<u>Eriastrum rosamondense</u>	Rosamond eriastrum	Polemoniaceae	annual herb	1B.1	S1	G1
<u>Erigeron breweri var. jacinteus</u>	San Jacinto Mountains daisy	Asteraceae	perennial rhizomatous herb	4.3	S3.3	G5T3
<u>Eriogonum kennedyi var. alpigenum</u>	southern alpine buckwheat	Polygonaceae	perennial herb	1B.3	S2.3	G4T2
<u>Eriogonum microthecum var. johnstonii</u>	Johnston's buckwheat	Polygonaceae	perennial deciduous shrub	1B.3	S2	G5T2
<u>Eriogonum umbellatum var. minus</u>	alpine sulfur-flowered buckwheat	Polygonaceae	perennial herb	4.3	S3.3	G5T3
<u>Eriophyllum mohavense</u>	Barstow woolly sunflower	Asteraceae	annual herb	1B.2	S2	G2
<u>Erysimum suffrutescens</u>	suffrutescent wallflower	Brassicaceae	perennial herb	4.2	S3.2	G3
<u>Euphorbia misera</u>	cliff spurge	Euphorbiaceae	perennial shrub	2B.2	S2	G5
<u>Fimbristylis thermalis</u>	hot springs fimbristylis	Cyperaceae	perennial rhizomatous herb	2B.2	S2.2	G4
<u>Frasera neglecta</u>	pine green-gentian	Gentianaceae	perennial herb	4.3	S3.3	G3

<u>Fritillaria pinetorum</u>	pine fritillary	Liliaceae	perennial bulbiferous herb	4.3	S3.3	G4
<u>Galium andrewsii ssp. gatense</u>	phlox-leaf serpentine bedstraw	Rubiaceae	perennial herb	4.2	S3.2	G5T3
<u>Galium angustifolium ssp. gabrielense</u>	San Antonio Canyon bedstraw	Rubiaceae	perennial herb	4.3	S3.3	G5T3
<u>Galium cliftonsmithii</u>	Santa Barbara bedstraw	Rubiaceae	perennial herb	4.3	S3.3	G3
<u>Galium grande</u>	San Gabriel bedstraw	Rubiaceae	perennial deciduous shrub	1B.2	S2.2	G2
<u>Galium jepsonii</u>	Jepson's bedstraw	Rubiaceae	perennial rhizomatous herb	4.3	S3.3	G3
<u>Galium johnstonii</u>	Johnston's bedstraw	Rubiaceae	perennial herb	4.3	S3.3	G3
<u>Gilia latiflora ssp. cuyamensis</u>	Cuyama gilia	Polemoniaceae	annual herb	4.3	S3.3	G5?T3
<u>Goodmania luteola</u>	golden goodmania	Polygonaceae	annual herb	4.2	S3.2	G3
<u>Harpagonella palmeri</u>	Palmer's grapplinghook	Boraginaceae	annual herb	4.2	S3.2	G4
<u>Helianthus inexpectatus</u>	Newhall sunflower	Asteraceae	perennial rhizomatous herb	1B.1	S1	G1
<u>Helianthus nuttallii ssp. parishii</u>	Los Angeles sunflower	Asteraceae	perennial rhizomatous herb	1A	SH	G5TH
<u>Heuchera abramsii</u>	Abrams' alumroot	Saxifragaceae	perennial rhizomatous herb	4.3	S3.3	G3
<u>Heuchera caespitosa</u>	urn-flowered alumroot	Saxifragaceae	perennial rhizomatous herb	4.3	S3.3	G3
<u>Hordeum intercedens</u>	vernal barley	Poaceae	annual herb	3.2	S3S4	G3G4
<u>Horkelia cuneata var. puberula</u>	mesa horkelia	Rosaceae	perennial herb	1B.1	S2.1	G4T2
<u>Hulsea vestita ssp. gabrielensis</u>	San Gabriel Mountains sunflower	Asteraceae	perennial herb	4.3	S3.3	G5T3
<u>Hulsea vestita ssp. parryi</u>	Parry's sunflower	Asteraceae	perennial herb	4.3	S3.3	G5T3
<u>Imperata brevifolia</u>	California satintail	Poaceae	perennial rhizomatous herb	2B.1	S2.1	G2
<u>Isocoma menziesii var. decumbens</u>	decumbent goldenbush	Asteraceae	perennial shrub	1B.2	S2.2	G3G5T2T3
<u>Juglans californica</u>	Southern California black walnut	Juglandaceae	perennial deciduous tree	4.2	S3.2	G3
<u>Juncus acutus ssp. leopoldii</u>	southwestern spiny rush	Juncaceae	perennial rhizomatous herb	4.2	S3.2	G5T5
<u>Juncus duranii</u>	Duran's rush	Juncaceae	perennial rhizomatous herb	4.3	S3.3	G3
<u>Lasthenia glabrata ssp. coulteri</u>	Coulter's goldfields	Asteraceae	annual herb	1B.1	S2.1	G4T3
<u>Layia heterotricha</u>	pale-yellow layia	Asteraceae	annual herb	1B.1	S2	G2
<u>Lepechinia fragrans</u>	fragrant pitcher sage	Lamiaceae	perennial shrub	4.2	S3.2	G3
<u>Lepechinia rossii</u>	Ross' pitcher sage	Lamiaceae	perennial shrub	1B.2	S1	G1

<u>Lepidium virginicum var. robinsonii</u>	Robinson's pepper-grass	Brassicaceae	annual herb	4.3	S3	G5T3
<u>Lilium humboldtii ssp. ocellatum</u>	ocellated Humboldt lily	Liliaceae	perennial bulbiferous herb	4.2	S3.2	G4T3
<u>Lilium parryi</u>	lemon lily	Liliaceae	perennial bulbiferous herb	1B.2	S3	G3
<u>Linanthus concinnus</u>	San Gabriel linanthus	Polemoniaceae	annual herb	1B.2	S3	G3
<u>Linanthus orcuttii</u>	Orcutt's linanthus	Polemoniaceae	annual herb	1B.3	S2	G4
<u>Loeflingia squarrosa var. artemisiarum</u>	sagebrush loeflingia	Caryophyllaceae	annual herb	2B.2	S2.2	G5T2T3
<u>Lonicera subspicata var. subspicata</u>	Santa Barbara honeysuckle	Caprifoliaceae	perennial evergreen shrub	1B.2	S2	G5T2
<u>Lupinus elatus</u>	silky lupine	Fabaceae	perennial herb	4.3	S3.3	G3
<u>Lupinus excubitus var. johnstonii</u>	interior bush lupine	Fabaceae	perennial shrub	4.3	S3.3	G4T3
<u>Lupinus peirsonii</u>	Peirson's lupine	Fabaceae	perennial herb	1B.3	S2	G2
<u>Lycium brevipes var. hassei</u>	Santa Catalina Island desert-thorn	Solanaceae	perennial deciduous shrub	1B.1	S1	G1Q
<u>Lycium californicum</u>	California box-thorn	Solanaceae	perennial shrub	4.2	S3.2	G4
<u>Malacothamnus davidsonii</u>	Davidson's bush-mallow	Malvaceae	perennial deciduous shrub	1B.2	S2	G2
<u>Microseris douglasii ssp. platycarpha</u>	small-flowered microseris	Asteraceae	annual herb	4.2	S3.2	G4T3
<u>Microseris sylvatica</u>	sylvan microseris	Asteraceae	perennial herb	4.2	S3.2	G3
<u>Mimulus johnstonii</u>	Johnston's monkeyflower	Phrymaceae	annual herb	4.3	S3.3	G3
<u>Monardella australis ssp. cinerea</u>	gray monardella	Lamiaceae	perennial rhizomatous herb	4.3	S3.3	G4T3
<u>Monardella hypoleuca ssp. hypoleuca</u>	white-veined monardella	Lamiaceae	perennial herb	1B.3	S2S3	G4T2T3
<u>Monardella macrantha ssp. hallii</u>	Hall's monardella	Lamiaceae	perennial rhizomatous herb	1B.3	S3	G5T3
<u>Monardella saxicola</u>	rock monardella	Lamiaceae	perennial rhizomatous herb	4.2	S3.2	G3
<u>Mucronea californica</u>	California spineflower	Polygonaceae	annual herb	4.2	S3	G3
<u>Muhlenbergia appressa</u>	appressed muhly	Poaceae	annual herb	2B.2	S3	G4
<u>Muhlenbergia californica</u>	California muhly	Poaceae	perennial rhizomatous herb	4.3	S3.3	G3
<u>Muilla coronata</u>	crowned muilla	Themidaceae	perennial bulbiferous herb	4.2	S3.2?	G3
<u>Nama stenocarpum</u>	mud nama	Boraginaceae	annual / perennial herb	2B.2	S1S2	G4G5
<u>Nasturtium gambelii</u>	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	1B.1	S1	G1
<u>Navarretia fossalis</u>	spreading navarretia	Polemoniaceae	annual herb	1B.1	S1	G1

Navarretia ojaiensis	Ojai navarretia	Polemoniaceae	annual herb	1B.1	S1	G1
Navarretia peninsularis	Baja navarretia	Polemoniaceae	annual herb	1B.2	S2	G3?
Navarretia prostrata	prostrate vernal pool navarretia	Polemoniaceae	annual herb	1B.1	S2	G2
Navarretia setiloba	Piute Mountains navarretia	Polemoniaceae	annual herb	1B.1	S2	G2
Nemacaulis denudata var. denudata	coast woolly-heads	Polygonaceae	annual herb	1B.2	S2.2	G3G4T3?
Nemacladus gracilis	slender nemacladus	Campanulaceae	annual herb	4.3	S3.3	G3
Nemacladus secundiflorus var. robbinsii	Robbins' nemacladus	Campanulaceae	annual herb	1B.2	S2S3	G3T2T3
Opuntia basilaris var. brachyclada	short-joint beavertail	Cactaceae	perennial stem succulent	1B.2	S3	G5T3
Opuntia basilaris var. treleasei	Bakersfield cactus	Cactaceae	perennial stem succulent	1B.1	S1	G5T1
Orcuttia californica	California Orcutt grass	Poaceae	annual herb	1B.1	S1	G1
Oreonana vestita	woolly mountain-parsley	Apiaceae	perennial herb	1B.3	S3	G3
Orobanche parishii ssp. brachyloba	short-lobed broomrape	Orobanchaceae	perennial herb (parasitic)	4.2	S3.2	G4?T3
Orobanche valida ssp. valida	Rock Creek broomrape	Orobanchaceae	perennial herb (parasitic)	1B.2	S2	G3T2
Oxytropis oreophila var. oreophila	rock-loving oxytrope	Fabaceae	perennial herb	2B.3	S2	G5T4
Packera bernardina	San Bernardino ragwort	Asteraceae	perennial herb	1B.2	S2	G2
Packera ionophylla	Tehachapi ragwort	Asteraceae	perennial herb	4.3	S3.3	G3
Parnassia cirrata var. cirrata	San Bernardino grass-of-Parnassus	Parnassiaceae	perennial herb	1B.3	S2.3	G5T2
Pentachaeta aurea ssp. aurea	golden-rayed pentachaeta	Asteraceae	annual herb	4.2	S3	G4T3
Pentachaeta lyonii	Lyon's pentachaeta	Asteraceae	annual herb	1B.1	S2	G2
Perideridia gairdneri ssp. gairdneri	Gairdner's yampah	Apiaceae	perennial herb	4.2	S3.2	G5T3
Perideridia pringlei	adobe yampah	Apiaceae	perennial herb	4.3	S3.3	G3
Phacelia exilis	Transverse Range phacelia	Boraginaceae	annual herb	4.3	S3.3	G3Q
Phacelia hubbyi	Hubby's phacelia	Boraginaceae	annual herb	4.2	S3.2	G3
Phacelia mohavensis	Mojave phacelia	Boraginaceae	annual herb	4.3	S3.3	G3Q
Phacelia ramosissima var. austrolitoralis	south coast branching phacelia	Boraginaceae	perennial herb	3.2	S3.2	G5?T3
Phacelia stellaris	Brand's star phacelia	Boraginaceae	annual herb	1B.1	S1	G1
Pickeringia montana var. tomentosa	woolly chaparral-pea	Fabaceae	evergreen shrub	4.3	S2S4.3	G5T2T4
Piperia cooperi	chaparral rein orchid narrow-petaled rein	Orchidaceae	perennial herb	4.2	S3.2	G4

Piperia leptopetala	orchid	Orchidaceae	perennial herb	4.3	S3.3	G3
Piperia michaelii	Michael's rein orchid	Orchidaceae	perennial herb	4.2	S3.2	G3
Plagiobothrys parishii	Parish's popcorn-flower	Boraginaceae	annual herb	1B.1	S1	G1
Polygala cornuta var. fishiae	Fish's milkwort	Polygalaceae	perennial deciduous shrub	4.3	S3.3	G5T4
Potentilla multijuga	Ballona cinquefoil	Rosaceae	perennial herb	1A	SX	GX
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	perennial herb	2B.2	S2S3.2	G4
Quercus durata var. gabrielensis	San Gabriel oak	Fagaceae	perennial evergreen shrub	4.2	S3.2	G4T3
Quercus engelmannii	Engelmann oak	Fagaceae	perennial deciduous tree	4.2	S3.2	G3
Ribes divaricatum var. parishii	Parish's gooseberry	Grossulariaceae	perennial deciduous shrub	1A	SH	G4TH
Ribes viburnifolium	Santa Catalina Island currant	Grossulariaceae	perennial evergreen shrub	1B.2	S2?	G2?
Romneya coulteri	Coulter's matilija poppy	Papaveraceae	perennial rhizomatous herb	4.2	S3.2	G3
Rupertia rigida	Parish's rupertia	Fabaceae	perennial herb	4.3	S3.3	G3
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	Lamiaceae	perennial rhizomatous herb	1B.2	S2	G4T2
Selaginella asprella	bluish spike-moss	Selaginellaceae	perennial rhizomatous herb	4.3	S3.3	G4G5
Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	2B.2	S2	G3?
Senecio astephanus	San Gabriel ragwort	Asteraceae	perennial herb	4.3	S3	G3
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	2B.2	S2S3	G4?
Sidotheca caryophylloides	chickweed oxytheca	Polygonaceae	annual herb	4.3	S3.3	G3
Stylocline masonii	Mason's neststraw	Asteraceae	annual herb	1B.1	S1	G1
Suaeda esteroa	estuary seablite	Chenopodiaceae	perennial herb	1B.2	S2	G3
Suaeda taxifolia	woolly seablite	Chenopodiaceae	perennial evergreen shrub	4.2	S2S3	G3?
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	1B.2	S2	G2
Symphyotrichum greatae	Greata's aster	Asteraceae	perennial rhizomatous herb	1B.3	S2.3	G2
Syntrichopappus lemmonii	Lemmon's syntrichopappus	Asteraceae	annual herb	4.3	S3.3	G3
Thelypteris puberula var. sonorensis	Sonoran maiden fern	Thelypteridaceae	perennial rhizomatous herb	2B.2	S2.2?	G5T3
Thermopsis californica var. argentata	silvery false lupine	Fabaceae	perennial rhizomatous herb	4.3	S3.3	G3T3
Thysanocarpus rigidus	rigid fringepod	Brassicaceae	annual herb	1B.2	S1S2	G1G2
Tortula californica	California screw-moss	Pottiaceae	moss	1B.2	S2	G2?

Viola pinetorum var. grisea	grey-leaved violet	Violaceae	perennial herb	1B.3	S3?	G4G5T3?
Viola purpurea ssp. aurea	golden violet	Violaceae	perennial herb	2B.2	S2S3	G5T2T3

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Plant List

93 matches found. *Click on scientific name for details*

Search Criteria

Found in San Clemente Island or Santa Catalina Island

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Abronia maritima	red sand-verbena	Nyctaginaceae	perennial herb	4.2	S3?	G4?
Acmispon argophyllus var. adsurgens	San Clemente Island bird's-foot trefoil	Fabaceae	perennial herb	1B.1	S1	G5T1
Acmispon dendroideus var. dendroideus	island broom	Fabaceae	perennial shrub	4.2	S3.2	G4T3
Acmispon dendroideus var. traskiae	San Clemente Island lotus	Fabaceae	perennial shrub	1B.1	S2	G4T2
Aphanisma blitoides	aphanisma	Chenopodiaceae	annual herb	1B.2	S3	G3G4
Arctostaphylos catalinae	Santa Catalina Island manzanita	Ericaceae	perennial evergreen shrub	1B.2	S2?	G2?
Artemisia nesiotica	island sagebrush	Asteraceae	perennial evergreen shrub	4.3	S3.3	G3
Astragalus miguelensis	San Miguel Island milk -vetch	Fabaceae	perennial herb	4.3	S3.3?	G3
Astragalus nevinii	San Clemente Island milk-vetch	Fabaceae	perennial herb	1B.2	S3	G3
Atriplex coulteri	Coulter's saltbush	Chenopodiaceae	perennial herb	1B.2	S2	G2
Atriplex pacifica	South Coast saltscale	Chenopodiaceae	annual herb	1B.2	S2	G3G4
Atriplex serenana var. davidsonii	Davidson's saltscale	Chenopodiaceae	annual herb	1B.2	S1	G5T1
Bergerocactus emoryi	golden-spined cereus	Cactaceae	perennial stem succulent	2B.2	S2	G2
Brodiaea kinkiensis	San Clemente Island brodiaea	Themidaceae	perennial bulbiferous herb	1B.2	S2	G2
Calochortus catalinae	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	4.2	S3.2	G3
Calystegia macrostegia ssp. amplissima	island morning-glory	Convolvulaceae	perennial herb	4.3	S3.3	G4G5T3
Camissoniopsis guadalupensis ssp. clementina	San Clemente Island evening-primrose	Onagraceae	annual herb	1B.2	S3	G3T3
Castilleja grisea	San Clemente Island paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	1B.3	S3	G3
Ceanothus megacarpus var. insularis	island ceanothus	Rhamnaceae	perennial evergreen shrub	4.3	S3.3	G5T3
Centromadia parryi ssp. australis	southern tarplant	Asteraceae	annual herb	1B.1	S2	G3T2

<u>Cercocarpus betuloides var. blancheae</u>	island mountain-mahogany	Rosaceae	perennial evergreen shrub	4.3	S3.3	G5T3
<u>Cercocarpus traskiae</u>	Catalina Island mountain-mahogany	Rosaceae	perennial evergreen shrub	1B.1	S1	G1
<u>Cistanthe maritima</u>	seaside cistanthe	Montiaceae	annual herb	4.2	S3.2	G3G4
<u>Constancea nevinii</u>	Nevin's woolly sunflower	Asteraceae	perennial deciduous shrub	1B.3	S4	G4
<u>Convolvulus simulans</u>	small-flowered morning-glory	Convolvulaceae	annual herb	4.2	S3.2	G3
<u>Crocanthemum greenei</u>	island rush-rose	Cistaceae	perennial evergreen shrub	1B.2	S2	G2
<u>Crossosoma californicum</u>	Catalina crossosoma	Crossosomataceae	perennial deciduous shrub	1B.2	S2	G2
<u>Cryptantha traskiae</u>	Trask's cryptantha	Boraginaceae	annual herb	1B.1	S2	G2
<u>Deinandra clementina</u>	island tarplant	Asteraceae	perennial deciduous shrub	4.3	S3.3	G3
<u>Delphinium variegatum ssp. kinkiense</u>	San Clemente Island larkspur	Ranunculaceae	perennial herb	1B.1	S2	G4T2
<u>Delphinium variegatum ssp. thornei</u>	Thorne's royal larkspur	Ranunculaceae	perennial herb	1B.1	S2	G4T2
<u>Dendromecon harfordii var. rhamnoides</u>	south island bush-poppy	Papaveraceae	perennial evergreen shrub	3.1	S1	G4T1Q
<u>Dichondra occidentalis</u>	western dichondra	Convolvulaceae	perennial rhizomatous herb	4.2	S3.2	G4?
<u>Dissanthelium californicum</u>	California dissanthelium	Poaceae	annual herb	1B.2	S1	G1
<u>Dithyrea maritima</u>	beach spectaclepod	Brassicaceae	perennial rhizomatous herb	1B.1	S2.1	G2
<u>Dudleya greenei</u>	Greene's dudleya	Crassulaceae	perennial herb	4.2	S3.2	G3
<u>Dudleya virens ssp. hassei</u>	Catalina Island dudleya	Crassulaceae	perennial herb	1B.2	S2?	G3?T2?
<u>Dudleya virens ssp. insularis</u>	island green dudleya	Crassulaceae	perennial herb	1B.2	S3	G3?T3
<u>Dudleya virens ssp. virens</u>	bright green dudleya	Crassulaceae	perennial herb	1B.2	S1	G3?T1
<u>Eriogonum giganteum var. formosum</u>	San Clemente Island buckwheat	Polygonaceae	perennial deciduous shrub	1B.2	S3	G3T3
<u>Eriogonum giganteum var. giganteum</u>	Santa Catalina Island buckwheat	Polygonaceae	perennial evergreen shrub	4.3	S3	G3T3
<u>Eriogonum grande var. grande</u>	island buckwheat	Polygonaceae	perennial herb	4.2	S3.2	G3T3
<u>Eschscholzia ramosa</u>	island poppy	Papaveraceae	annual herb	4.3	S3.3	G3
<u>Euphorbia misera</u>	cliff spurge	Euphorbiaceae	perennial shrub	2B.2	S2	G5
<u>Galium catalinense ssp. acrispum</u>	San Clemente Island bedstraw	Rubiaceae	perennial deciduous shrub	1B.2	S2	G4T2
<u>Galium catalinense ssp. catalinense</u>	Santa Catalina Island bedstraw	Rubiaceae	perennial deciduous shrub	1B.2	S2S3	G4T2T3
<u>Galium nuttallii ssp. insulare</u>	Nuttall's island bedstraw	Rubiaceae	perennial herb	4.3	S3.3	G5?T3
<u>Gambelia speciosa</u>	showy island snapdragon	Plantaginaceae	perennial shrub	1B.2	S3	G3
<u>Gilia nevinii</u>	Nevin's gilia	Polemoniaceae	annual herb	4.3	S3.2	G3

Graphis saxorum	Baja rock lichen	Graphidaceae	crustose lichen (saxicolous)	3	S1S3	G1G3
Harpagonella palmeri	Palmer's grapplinghook	Boraginaceae	annual herb	4.2	S3.2	G4
Hazardia cana	San Clemente Island hazardia	Asteraceae	perennial evergreen shrub	1B.2	S2	G2
Hordeum intercedens	vernal barley	Poaceae	annual herb	3.2	S3S4	G3G4
Isocoma menziesii var. decumbens	decumbent goldenbush	Asteraceae	perennial shrub	1B.2	S2	G3G5T2T3
Jepsonia malvifolia	island jepsonia	Saxifragaceae	perennial herb	4.2	S3.3	G3
Lavatera assurgentiflora ssp. glabra	southern island mallow	Malvaceae	perennial evergreen shrub	1B.1	S1	G1T1
Lepechinia fragrans	fragrant pitcher sage	Lamiaceae	perennial shrub	4.2	S3.2	G3
Leptosiphon pygmaeus ssp. pygmaeus	pygmy leptosiphon	Polemoniaceae	annual herb	1B.2	S1	G4T1
Lithophragma maximum	San Clemente Island woodland star	Saxifragaceae	perennial rhizomatous herb	1B.1	S1	G1
Lomatium insulare	San Nicolas Island lomatium	Apiaceae	perennial herb	1B.2	S2S3	G2G3
Lonicera subspicata var. subspicata	Santa Barbara honeysuckle	Caprifoliaceae	perennial evergreen shrub	1B.2	S2	G5T2
Lupinus guadalupensis	Guadalupe Island lupine	Fabaceae	annual herb	4.2	S3	G3
Lycium brevipes var. hassei	Santa Catalina Island desert-thorn	Solanaceae	perennial deciduous shrub	1B.1	S1	G1Q
Lycium californicum	California box-thorn	Solanaceae	perennial shrub	4.2	S3.2	G4
Lyonothamnus floribundus ssp. asplenifolius	Santa Cruz Island ironwood	Rosaceae	perennial evergreen tree	1B.2	S3	G3T3
Lyonothamnus floribundus ssp. floribundus	Santa Catalina Island ironwood	Rosaceae	perennial evergreen tree	1B.2	S2	G3T2
Malacothamnus clementinus	San Clemente Island bush-mallow	Malvaceae	perennial deciduous shrub	1B.1	S2	G2
Malacothrix foliosa ssp. foliosa	leafy malacothrix	Asteraceae	annual herb	4.2	S3.2	G4T3
Malacothrix incana	dunedelion	Asteraceae	perennial herb	4.3	S3.3	G3
Microseris douglasii ssp. platycarpa	small-flowered microseris	Asteraceae	annual herb	4.2	S3.2	G4T3
Mimulus flemingii	island bush monkeyflower	Phrymaceae	perennial evergreen shrub	4.3	S3.3	G3Q
Mimulus traskiae	Santa Catalina Island monkeyflower	Phrymaceae	annual herb	1A	SX	GX
Muhlenbergia appressa	appressed muhly	Poaceae	annual herb	2B.2	S3	G4
Munzothamnus blairii	Blair's munzothamnus	Asteraceae	perennial shrub	1B.2	S2.2	G2
Nama stenocarpum	mud nama	Boraginaceae	annual / perennial herb	2B.2	S1S2	G4G5
Nemacaulis denudata var. denudata	coast woolly-heads	Polygonaceae	annual herb	1B.2	S2.2	G3G4T3?
Orobanche parishii ssp. brachyloba	short-lobed broomrape	Orobanchaceae	perennial herb (parasitic)	4.2	S3.2	G4?T3
Pentachaeta lyonii	Lyon's pentachaeta	Asteraceae	annual herb	1B.1	S2	G2

Phacelia floribunda	many-flowered phacelia	Boraginaceae	annual herb	1B.2	S2	G2
Piperia cooperi	chaparral rein orchid	Orchidaceae	perennial herb	4.2	S3.2	G4
Quercus engelmannii	Engelmann oak	Fagaceae	perennial deciduous tree	4.2	S3.2	G3
Quercus pacifica	island scrub oak	Fagaceae	perennial evergreen shrub	4.2	S3.2	G3
Quercus tomentella	island oak	Fagaceae	perennial evergreen tree	4.2	S3.2	G3
Rhamnus pirifolia	island redberry	Rhamnaceae	perennial evergreen tree	4.2	S3.2	G3
Ribes viburnifolium	Santa Catalina Island currant	Grossulariaceae	perennial evergreen shrub	1B.2	S2?	G2?
Scrophularia villosa	Santa Catalina figwort	Scrophulariaceae	perennial shrub	1B.2	S3	G3
Senecio aphanactis	chaparral ragwort	Asteraceae	annual herb	2B.2	S2	G3?
Sibara filifolia	Santa Cruz Island winged-rockcress	Brassicaceae	annual herb	1B.1	S1	G1
Solanum wallacei	Wallace's nightshade	Solanaceae	perennial herb	1B.1	S2.1	G2Q
Suaeda taxifolia	woolly seablite	Chenopodiaceae	perennial evergreen shrub	4.2	S2S3	G3?
Texosporium sancti-jacobi	woven-spored lichen	Caliciaceae	crustose lichen (terricolous)	3	S1	G3
Trifolium palmeri	southern island clover	Fabaceae	annual herb	4.2	S3.2	G3
Triteleia clementina	San Clemente Island triteleia	Themidaceae	perennial bulbiferous herb	1B.2	S2	G2

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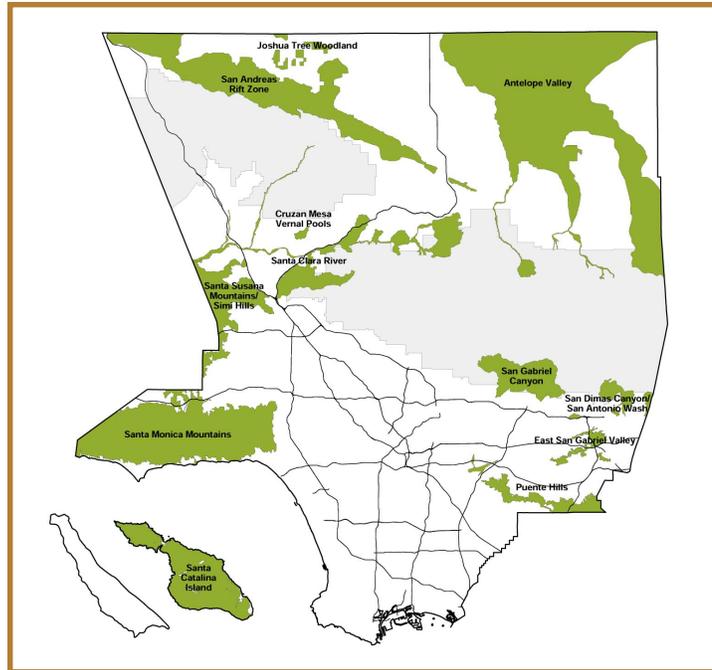
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LOS ANGELES COUNTY SIGNIFICANT ECOLOGICAL AREA UPDATE STUDY 2000



BACKGROUND REPORT

Los Angeles County, California

November 2000



PCR

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EXECUTIVE SUMMARY

The Los Angeles County Significant Ecological Area (SEA) Study has three purposes: To evaluate existing SEAs for changes in biotic conditions and consider additional areas for SEA status within unincorporated Los Angeles County; to delineate SEA boundaries based upon biotic evaluation; and to propose guidelines for managing and conserving biological resources within these areas.

The “original” SEA report was prepared in 1972 by a committee of scientists from the Los Angeles County Museum of Natural History and local academic institutions. This was done as a background study for the 1973 County General Plan. A second SEA study was completed in 1976 by England and Nelson, Environmental Consultants. The 61 SEAs existing today represent the findings of the 1976 Study, as amended through the adoption of a revised General Plan in 1980. After 20 years, it is necessary to re-evaluate the SEA program as part of the next General Plan amendment.

As in 1976, the underlying objective of the SEA program remains the preservation of biotic diversity. Following this objective, it is crucial to identify and designate as proposed SEAs areas that possess examples of biotic resources that cumulatively represent biological diversity. Equally important, this objective has been expanded to include the future sustainability of this diversity through the application of more current practices in conservation planning, primarily by consolidation into larger interconnected SEAs.

The criteria used to identify prospective SEAs were similar to those used in 1976 by England and Nelson. Of the original eight criteria, minor modifications were made to one, and two were omitted from this study without loss to the range of biological diversity subject to this study. The methods used to identify and delineate proposed SEAs was multi-faceted, including: a broad outreach program focused in the government resource agencies, academic institutions, conservation groups, and the general public; a comprehensive database and literature review; an evaluation of existing SEAs in the unincorporated County; the interpretation of aerial photography; and, field study.

The SEA study focused on existing SEAs, within the unincorporated county jurisdiction, and areas nominated for SEA status. Significant Ecological Areas located within cities were not studied, though this analysis recommends that the boundaries of these areas be retained. Significant Ecological Areas remaining within the unincorporated area were consolidated into twelve new areas. These areas were connected to enhance sustainability and biological diversity. As a consequence, the proposed acreage of these areas covers a total of 442,983 acres (unincorporated). This is a

substantial increase in comparison to the 176,174 acres (unincorporated) of SEAs previously designated in 1980 County General Plan.

The proposed SEAs in this study were based on scientifically-grounded concepts regarding their size and connectivity. Most do not focus on a single resource or habitat type. Where feasible, these areas form linkage systems which should greatly improve the probability of achieving the expanded objectives of this study, the preservation of biological diversity in Los Angeles County.

LOS ANGELES COUNTY SEA UPDATE STUDY 2000

BACKGROUND REPORT

1. INTRODUCTION

1.1 PURPOSE

The Los Angeles County General Plan provides guidelines and policies for decision-making regarding new development. As mandated by the State of California, every city and county must adopt and periodically update a comprehensive long-range general plan for physical development within its jurisdiction. The elements of this plan include land use, circulation, housing, safety and noise, open space, and conservation. As part of its General Plan Conservation/Open Space and Land Use elements, Los Angeles County has identified and adopted policies for “Significant Ecological Areas” (SEAs) for certain areas. It has been 20 years, however, since elements of the General Plan, including the SEA component, were last updated.

The purpose of this study is three-fold: First, the study evaluates existing SEAs and additional areas considered for SEA status within unincorporated Los Angeles County. This includes a biotic assessment of existing SEAs for changing conditions, and an evaluation of areas nominated for potential SEA designation. A primary focus of this evaluation is the diversity of ecological resources and potential long-term sustainability. Second, based upon the biotic evaluation, SEA boundaries are delineated to reflect existing conditions or to include additional areas identified with significant ecological resources. Third, this study revisits SEA policies in the Los Angeles County General Plan to propose updated guidelines for managing and conserving resources within these areas. SEAs within city boundaries were not studied, though the analysis recommends that these areas be retained.

1.2 BACKGROUND AND HISTORY

The “original” Significant Ecological Areas report was prepared in 1972 by a committee of scientists from the University of California, Los Angeles, the Los Angeles County Museum of Natural History, and other local academic institutions. That study addressed significant ecological areas that warranted special consideration, due to their high biological resource value. The study served as background for the 1973 Los Angeles County General Plan. The result of that effort was the identification and delineation of 81 such areas throughout the County, including consideration of areas in the Channel Islands and Angeles National Forest.

In 1976, a second study was undertaken by England & Nelson, Environmental Consultants as part of the General Plan revision program. For purposes of this effort the Channel Islands and the Angeles National Forest were excluded from the study. At the conclusion of their work England and Nelson identified 62 SEAs in unincorporated Los Angeles County. Subsequently, the county found it necessary to add two SEAs and delete three others prior to the approval of its revised General Plan in 1980. There are currently 61 existing SEAs designated in the county General Plan. These areas are shown in Figure 1, *Existing Boundaries*, on page 3.

Since their adoption in 1980, Los Angeles County has attempted to update the status of existing SEAs. In 1991 the County hired the consulting firm of Michael Brandman Associates to evaluate seven selected SEAs and complete what is referred to as the “Phase I SEA Study.” In addition, de facto evaluations and status monitoring have been provided in the form of biological assessments for individual projects within SEAs. This has been done through the County’s Significant Ecological Area Technical Advisory Committee (SEATAC) as part of the County’s environmental review process. However, these updates did not include evaluations of all SEAs (as in the case of the Phase I SEA Study); nor, did these studies evaluate entire SEAs.

1.3 GEOGRAPHICAL SCOPE

Los Angeles County possesses an extremely diverse topography. Within its approximately 4,000 square miles, it contains coastal areas, islands, plains, mountains, and desert. Elevations within the County range from sea level to over 10,000 feet. Climates range from mild near the coast, to severe in the high mountains and in the desert. Similarly, soils and underlying geology vary according to prehistoric volcanic activity, marine sedimentation and river deposition. This wide variation in physical environments has produced the very unique and diverse collection of biological resources found in the County today.

The geographical scope of this study encompassed all biological resources within the unincorporated lands of Los Angeles County, including Santa Catalina Island. Lands within incorporated cities, San Clemente Island and the Angeles National Forest were not studied except where existing and prospective SEAs identified within County lands overlapped these jurisdictions. While existing and prospective SEAs entirely within the National Forest or cities were not studied, their designation has been retained.

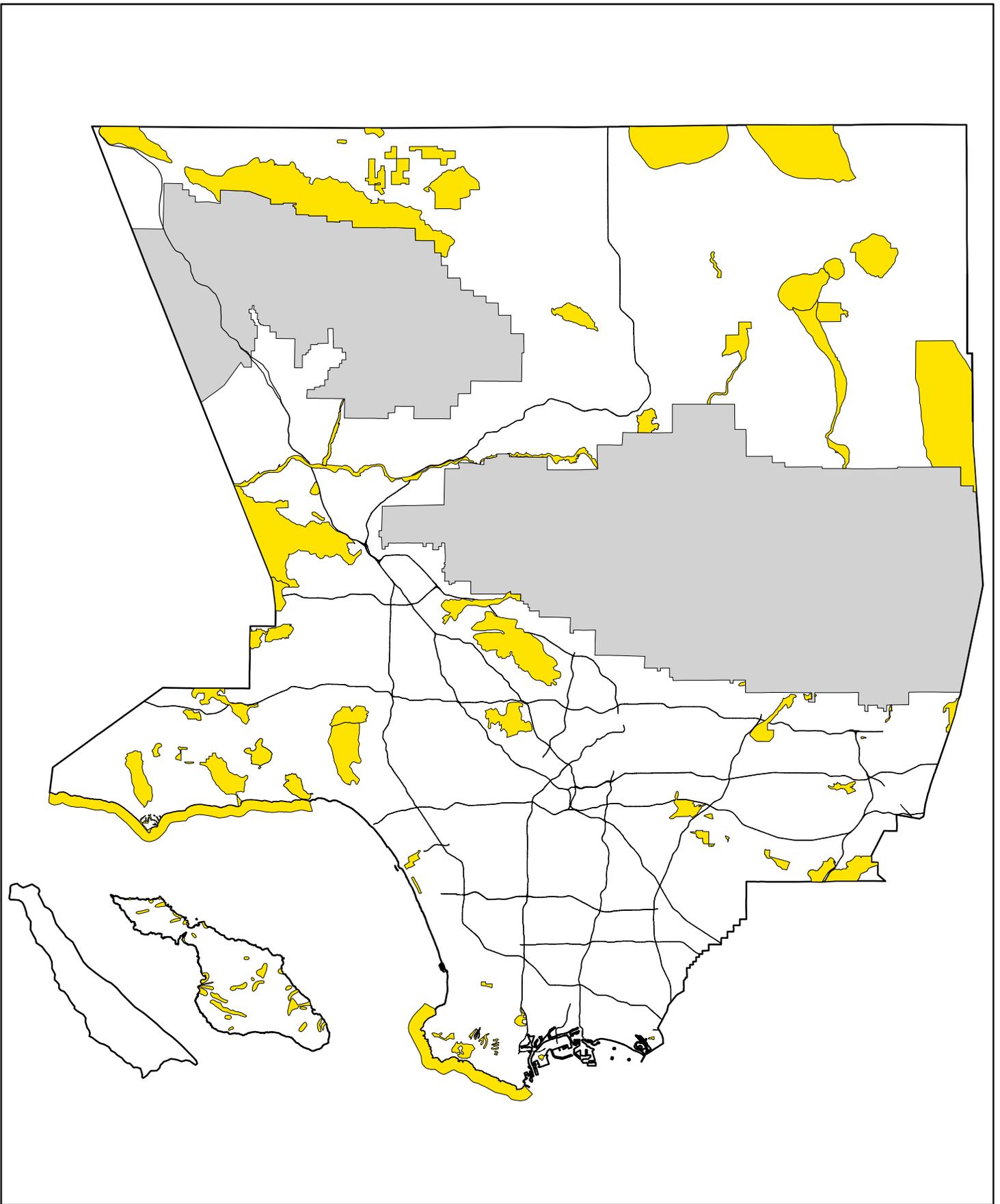


Figure 1

**Significant Ecological Areas
Update Study 2000
Existing Boundaries**

-  Existing Significant Ecological Areas
-  Angeles National Forest

2. STUDY OBJECTIVES

2.1 A HISTORICAL PERSPECTIVE

The overall objective of the original SEA Study (England and Nelson, 1976), as adopted by Los Angeles County in 1980, was to preserve biological diversity within the areas of County jurisdiction. The England and Nelson study described the County's natural diversity in its introductory chapter, and in its concluding chapter, justified the goal of preserving this diversity. In order to meet this goal, the study sought to identify areas within Los Angeles County which possessed biotic resources which were considered to be uncommon, rare, or unique, were absolutely critical to the maintenance of wildlife, or which represented relatively undisturbed examples of the County's more common habitat types. Such criteria were then used as the basis for designating SEAs.

England and Nelson formulated a set of eight selection criteria with which to classify biological resources and identify SEAs. An extensive literature review was conducted; the 1972 committee of scientists was interviewed; the 81 original SEAs were evaluated; and, a survey questionnaire/nomination form was mailed to a broad list of government agencies, academic institutions, conservation groups and individuals. From these combined efforts a total of 62 SEAs were identified and delineated.

The physical limits determined for each SEA were based upon the data and recommendations received, along with interpretation of topographic maps and high altitude color infrared aerial photography. In general, the boundaries chosen conformed to natural topographic features; however, man-made features and artificial boundaries were used where they coincided with appropriate biological limits. Where SEAs required additional protection from adjacent land uses, buffer zones were mapped to protect watershed units or to provide distancing from noise, light, traffic and other development impacts. However, the majority of the original SEAs were thought to consist of more or less self-contained units, not in need of additional buffering. It is important to note here, that the underlying ecological concepts employed during the England and Nelson delineations were based upon recently published theories of "island biogeography," which were at that time (1976) prevalent in the emerging field of conservation planning.

Because it was broadly based on published and unpublished information acquired through a comprehensive outreach approach which accessed literature, governmental resource agencies, academia and private conservation groups, the 1976 SEA study provided an adequate basis for the preservation of biotic diversity in the County for many years; and, it established a foundation of thought and early action upon which effective programs to preserve biotic diversity could be built.

However, land use within the County has undergone tremendous growth during the intervening decades, including considerable development within and adjacent to the original SEAs, and as a consequence, many of the original SEAs have been compromised, surrounded or isolated physically by development, resulting in true islands in a sea of land use changes. Additionally, conservation planning knowledge and application processes have changed somewhat in the years since the SEA Study was drafted, and it is clear that the SEA program needs a thorough conceptual review and analysis of the underlying foundations, employing more modern conservation biology perspectives.

The original SEAs served to slow or modify the type of development within their defined boundaries, but over time many of the smaller areas lost the biotic qualities for which they were nominated, and resource values in some larger SEAs may have been reduced or degraded, particularly where all or portions of an SEA no longer lie within the jurisdiction of Los Angeles County. To some extent, the SEA project review process has adjusted to changing conservation strategies and philosophies, generally as a reflection of the knowledge, concerns and abilities of responsible County staff and the SEATAC. However, the static and somewhat isolated physical parameters of the original SEA units limits the abilities of planners and resource agencies to conserve dynamic resources as they occur across the whole of the County landscape.

Increasingly, conservation plans have employed more fluid approaches to conserving the ever-increasing list of sensitive resources (e.g., endangered species, habitats of limited distribution, and “patchy” habitats such as coastal sage scrub). Recalling that the 1976 study applied a pragmatic interpretation of island biogeographic theory to its SEA delineation rationale, the primary principles for determining SEA boundaries were that: 1) species extinction rates are lower on larger islands than smaller islands; and, 2) isolated habitat areas have less opportunity to regain species by recolonization from other areas. These principles have moved from theory to demonstrated fact during the intervening years, but even as we come to understand that conserving intact biotic diversity requires providing very large, physically connected parcels, land use changes were dramatically reducing the natural open space remaining within the County. When England and Nelson translated the early biogeographic concepts into SEA design (that is, that large SEAs were better than small SEAs, and SEAs closer to the National Forest and other expanses of open space were better than SEAs placed farther away), they did not foresee the rates of growth which have occurred within the County, and despite what seemed at the time to be an adequate application of the theory, they created SEAs which have over time proven to be either too small to conserve habitat biodiversity internally, and/or too distant to provide essential connectivity between them.

Another area of concern not anticipated within the 1976 England and Nelson study is the issue of land stewardship outside the development impact areas. Existing SEAs predominantly depend on a custodial management approach, with the County providing oversight on an as-needed

basis. Conservation easements and management agreements now provide a broader spectrum of options to the land owner, and can free the County of undue responsibility after project completion. Such provisions for long-term natural resource custodianship and sustainability were not emphasized in the original SEA study.

2.2 EXPANDED OBJECTIVES

The preservation of biological diversity today, as in 1976, remains a paramount objective of conservation planning for a variety of reasons. Aesthetically, conserved open space adds value to adjacent developed land, and provides an essential environmental buffer between intensive human activity areas. Natural open space near urban areas can function as a visual amenity, a passive recreational asset, a groundwater recharge site, a reservoir for native species populations, and a buffer between development and surrounding larger land use reserves (such as Natural Forests).

More importantly, large natural open space areas can conserve entire habitats and ecosystems intact, preserving species diversity and insuring that native species do not become extinct or endangered. Open space or low-density zoning areas must be of sufficient size to retain all the essential “pieces” of the system, however to function biologically over time, and while absolute size parameters are not known for many systems, as a general rule, larger is better. The story of the “mouse and the fungus” provides a good example of how conserved systems need sufficient space and their component species to function. Until fairly recently, forestry practices traditionally focused upon the growing of trees, often arrayed in plantations which emphasized space utilization rather than natural habitat values, and therefore lacked many animal species. Despite the massive use of fertilizers, herbicides and pesticides, these plantations rarely yield the quality or quantity of wood found in a native forest of similar tree composition. Ecological studies of forest ecosystems were undertaken, and in time it was demonstrated that most trees cannot efficiently extract nourishment directly from the soil, but rather are sustained biologically by a type of external fungi which grow on their root systems and aid in the uptake of nutrients. The spores of these fungi are eaten, but not digested, by native mice, who then distribute them over the forest floor in their fecal pellets, insuring their availability to seedling and sapling trees. The mouse population is held in balance by owls and other small predators, many of which in turn roost, shelter and nest in the trees. This example and many others have demonstrated that long-term preservation of all ecosystem components-- however unassuming in stature-- is essential to the continued existence of our deserts, wetlands, forests and other natural habitat areas.

On a more pragmatic note, several recent medical discoveries have been made wherein chemicals extracted from tree bark and herbaceous plants provided cures for certain types of cancer; a previously unknown perennial corn species, with the potential to save billions of dollars in

replanting costs, was discovered on a hillside being cleared to plant corn, and a compound derived from the blood of horseshoe crabs has proven to be the most effective way to screen for contaminants in drugs, vaccines, artificial limbs and intravenous drips, and now is used in virtually every hospital in America. Other studies have shown that many insect species have the ability to ingest and modify chemical compounds from their toxic host plants, potentially leading to new or improved ways of treating the way humans react to these compounds. New plant and animal species continue to be found in natural habitats within a few miles of major urban centers, and it is clear that we have only begun to understand the genetic, biochemical and physical diversity-- and potential-- of our own urban "backyard."

While the SEA designation is not directly intended to provide such biological services, it is logical to create SEAs which encompass biotic resources cumulatively representing the biodiversity (and yet-to-be-discovered biological potential) of Los Angeles County. These areas must be designed to sustain themselves into the future, genetically and physically. Therefore, the present SEA study focuses on maintaining biodiversity in the long-term by creating boundaries which follow natural biological parameters, embrace habitats, linkages and corridors, and are of sufficient size to support sustainable populations of their component species. Thus, this study attempts to resolve the issue not adequately addressed in the 1976 study by applying updated conservation planning concepts and philosophies to design a series of larger, interconnected SEAs.

3. SELECTION CRITERIA

3.1 1976 CRITERIA

In 1976, England and Nelson developed a set of eight criteria to identify and designate SEAs. An explanation of each criteria is provided in Appendix A, *1976 Criteria for Selecting and Classifying SEAs*.

Class 1 – The habitat of rare, endangered, and threatened plant and animal species.

Class 2 – Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind, or are restricted in distribution on a regional basis.

Class 3 – Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind, or are restricted in distribution in Los Angeles County.

Class 4 – Habitat that at some point in the life cycle of a species or group of species, serves as a concentrated breeding, feeding, resting, or migrating grounds, and is limited in availability.

Class 5 – Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or they represent an unusual variation in a population or community.

Class 6 – Areas important as game species habitat or as fisheries.

Class 7 – Areas that would provide for a preservation of relatively undisturbed examples of the natural biotic communities in Los Angeles County.

Class 8 – Special areas.

The numbering sequence of one through eight has sometimes been misinterpreted as a priority ranking. England and Nelson actually presented these criteria, or classes of resources, in order of increasing availability. In their 1976 report, England and Nelson clearly stated that the classification system should not be interpreted as a measure of the absolute value of the area, but as an index of how close a certain type of resource is to being lost from Los Angeles County.

3.2 UPDATED CRITERIA

Since the adoption of the 1976 SEA Study, as amended in 1980, the jurisdictional status of some SEAs has changed while others have remained relatively stable. From a jurisdictional standpoint, portions or all of many SEAs were actually designated within cities incorporated prior to 1976. In addition, portions or all of several other SEAs became part of city jurisdictions incorporated since 1976. While some of these cities do not formally recognize SEAs by this title in their General Plans and Zoning Ordinances, others afford some degree of sensitivity through open space designations and protective grading guidelines (See Appendix B, *City and County Survey Responses*).

Incorporation of new cities and annexations are expected to continue and are not processes that selection criteria can reasonably foresee and address. Of greater concern and relevance are examples of SEAs which have remained within City and County jurisdictions where biotic diversity has become threatened or locally extinct. According to a study sponsored by the California Native Plant Society (Landis, 1993) at least five of the SEAs designated for their rare plant habitats have suffered from the effects of weed abatement, freeway construction, illegal dumping, development or invasive plants; at least three SEAs designated for unique or restricted plant communities, vegetative

associations and/or habitats have been disturbed by invasive plants; and, ongoing flood control maintenance and development have degraded three others.

In the cases of these SEAs, it is apparent that the criteria correctly identified the types and range of resources comprising biotic diversity in the county; however, the delineation of SEAs in 1976 failed in some cases to identify all of the resources required to sustain this diversity. This has occurred in the previous examples with or without the incorporation of SEAs into cities. As mentioned, some cities recognize the importance of existing SEAs in their General Plans, Zoning Ordinances and special protective grading guidelines; some have also requested the county continue to designate them as SEAs as part of this study.

Having identified sustainability of diversity as a key challenge, this study also recognized that the status of resources has changed since 1980. In drafting revised selection criteria, this study critically reviewed criteria used by England and Nelson. It was determined that the criteria used in 1976 should be modified. Consequently, one criterion was modified and two were deleted altogether. Criterion Class 1 – The Habitat of Rare, Endangered, and Threatened Plant and Animal Species, was modified to address the habitat of “core populations” of such species but not all populations. This was determined to be necessary to recognize many species within Los Angeles County that have been granted protected status since 1976 and key sites where these species may occur throughout the County. It is also important to note that the designation of critical habitat areas and regulation of endangered species acts is under the purview of the U.S. Fish and Wildlife Service (USFWS) and the State Department of Fish and Game (CDFG). Regardless, the recognition of core populations that contribute significantly to the preservation of biotic diversity could be addressed in the County’s General Plan policies. Criterion Class 6 – Areas Important As Game Species Habitat or as Fisheries, was omitted. This was due to the questionable contribution of these areas to biotic diversity, in the absence of other criteria, which adequately address resources at the species level. In addition, it was determined that the scope of this study does not include the maintenance of recreation, sport, or other commercial activities as they pertain to biological resources which are regulated by the CDFG. Finally, Criterion Class 8 – Special Areas, was deleted due to its vagueness and the ability of the remaining criteria to encompass its objectives.

As in 1976, a revised draft of selection criteria was distributed for public review. These criteria were sent to resource agencies, conservation groups, local jurisdictions and individual members of the public for review and comment. The review indicated support with minor modifications. A number of the respondents recommended that misrepresentation of resources as prioritized according to the numbered criteria scheme be corrected; and, to apply the criteria not simply to targeted resources, also to areas that afforded long-term sustainability. Hence, in some cases, SEA nominations included large areas often conforming to entire watersheds.

The final SEA selection criteria used in this study are presented in Table 1, *Los Angeles County SEA Update Study 2000 Selection Criteria*, on page 11. The difference between the modified criteria and those used by England and Nelson in 1976 has been described above. For the purpose of this study, updated criteria were used to determine if an existing SEA or candidate SEA should be re-designated or designated as a SEA in the Los Angeles County General Plan. In addition to satisfying a minimum of one criterion, any prospective SEA must lie at least partially within an unincorporated area of Los Angeles County.

Table 1
LOS ANGELES COUNTY SEA UPDATE STUDY 2000 SELECTION CRITERIA

Criterion	Intent/Rationale
A) The Habitat of Core Populations of Endangered or Threatened Plant or Animal Species	<p>These areas are important in maintaining viable plant and/or animal populations for those species recognized by state and or federal resource agencies as being extremely low in numbers or having a very limited amount of suitable habitat available. The terms “endangered” and “threatened” have precise meanings defined in both state and federal law (see below). The identification of “core population”¹ will be determined by the United States Fish & Wildlife Service (USFWS) and the California Department of Fish & Game (CDFG). This criterion is not meant to constitute a recovery program for listed species but rather one element of a more comprehensive conservation effort for the long term sustainment of listed species within the county. At the local level, recovery programs of both the CDFG and the USFWS have measures in place which can impose severe penalties for the “take “ of listed species or their habitat.</p> <p><i>Federally Endangered:</i> “any species which is in danger of extinction throughout all or a significant portion of its range ...”</p> <p><i>Federally Threatened:</i> “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.”</p> <p><i>State Endangered:</i> “...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.”</p> <p><i>State Threatened:</i> “... a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter [California Code of Regulations, Title 14, Sec 670.5]. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species.”</p>

¹ The term “core population” as used here is a general biological term referring to a known and/or a viable population. Other locations of endangered or threatened plant or animal species may also occur in Los Angeles County which are not within a SEA. It should also be noted that the concept of core populations is consistent with current thinking of the USFWS and the CDFG.

Table 1
LOS ANGELES COUNTY SEA UPDATE STUDY 2000 SELECTION CRITERIA
 (CONTINUED)

Criterion	Intent/Rationale
B) On a Regional Basis, Biotic Communities, Vegetative Associations, and Habitat of Plant and Animal Species that are either unique, or are restricted in distribution	The purpose of this criterion is to identify biotic resources that are uncommon on a regional basis. The geographical region considered could be as small as the southern California coastal plains, the Transverse mountain ranges, the Mojave Desert, the southern California coastline, etc.; or they could be as large as southern California, the Pacific coast, all of California, the western United States, or even larger. The point being that the community, association, or habitat is either unique or restricted in distribution in an area larger than the political boundaries of Los Angeles County (i.e., coastal sage scrub, native grasslands, or vernal pools). Resources that are limited in distribution in the region being considered, but common elsewhere, are also included under this category.
C) Within Los Angeles County, Biotic Communities, Vegetative Associations, and Habitat of Plant and Animal Species that are either unique, or are restricted in distribution	<p>The purpose of this criterion is to identify biotic resources that are uncommon within the political boundaries of Los Angeles County, regardless of their availability elsewhere. The County has a high diversity of biological components. It and San Diego County are the only counties in the United States that possess coastal, montane, and desert subregions within their boundaries. It is a rich heritage that few local governments have an opportunity to preserve.</p> <p>Many biotic communities that were once common in Los Angeles County have been severely reduced due to urban and agricultural development. This is especially true south of the San Gabriel Mountains, and among the agricultural fields of the North County. Other biotic features have never been common.</p>
D) Habitat that at some point in the life cycle of a species or group of species, serves as Concentrated Breeding, Feeding, Resting, or Migrating Grounds, and is limited in availability either regionally or in Los Angeles County	Species or groups of species, at various points in their life cycles, tend to congregate in certain areas. These areas possess resources that are essential to the maintenance of specific wildlife species. This criterion is intended to identify those areas that are limited in distribution either regionally or in Los Angeles County, and not the primary habitat of common species or groups of species.
E) Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community	Oftentimes scientists learn the most about a biological phenomenon by studying it at an extreme in its distribution. This frequently reveals the biological and ecological parameters under which it can survive. In addition, isolated populations and communities often are relicts of what was present in an area at some previous time, and may show genetic traits not found elsewhere in the species. These biological and ecological parameters may be useful in determining taxonomic relationships.

Table 1
LOS ANGELES COUNTY SEA UPDATE STUDY 2000 SELECTION CRITERIA
 (CONTINUED)

Criterion	Intent/Rationale
F) Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities In Los Angeles County	The intent of this criterion was to identify examples of the primary biotic resources in Los Angeles County. At least one example (e.g., native grassland, valley oak savannah) of each vegetation type will be selected from the various geographical regions in the County in order to preserve basic bio-geographic diversity.

Note: Criterion Class 6 from the 1976 SEA study has been omitted in this study due to a lack of biological significance. The scope of the SEA study entails the evaluation of county biological resources which does not include the maintenance of recreation, sport, or otherwise commercial activities. In addition, many of these activities, as they pertain to biological resources, are managed by the CDFG. Criterion Class 8 from the 1976 SEA study has also been omitted due to its vagueness; remaining criteria cover its objective.

4. IDENTIFICATION AND DELINEATION OF PROPOSED SEAs

4.1 OUTREACH PROGRAM

An outreach program served as the first step in identifying prospective SEAs. The program obtained input from interested parties including the general public, governmental resource agencies, and academic institutions. In an effort to notify interested parties, the PCR Project Team and the Los Angeles County Department of Regional Planning (DRP) jointly assembled a mailing list of over 400 entries. In September 1999, each party on the list was mailed a notice that the study had been initiated (copy provided in Appendix C, *SEA Update Study Notice*). The material included: the purpose of the update study and a schedule of public meetings to solicit public comments.

Public meetings hosted by the DRP and assisted by the PCR project team were held in several areas of the County in late September and early August 1999. After a brief summary presentation, comments were received and recorded and a nomination form was distributed (Appendix D, *Public Meeting Materials*). The survey questionnaire/nomination form was also available time through the County website.

The outreach program also gathered input from resource agencies. Meetings were held in the Carlsbad and Ventura offices of the USFWS with regional representatives from the CDFG attending. The main objective of these meetings was to acquire all available information on federal and state listed species within the County. Of particular interest, were locations of core populations of listed species. This information would be used as supporting evidence for one of the revised criteria designations. Secondly, species account information would be added to sensitive species occurrences within prospective SEAs where applicable. Meetings were also held with resource agencies or groups with a more local focus such as the National Park Service, Whittier Wildlife Corridor Conservation Authority, Catalina Island Conservancy, and the West Mojave Planning Group. Discussions with these groups provided background for review of areas for prospective SEA designation and the eventual boundary delineation.

The final phase of the outreach program consisted of a survey form mailed to all incorporated cities within Los Angeles County that contained entire SEAs or SEA segments within their jurisdictional boundaries (copy of survey questionnaire provided in Appendix E, *City and County Questionnaire Form*). The survey questions focused on determining the extent and condition of biological resources and open space within the city as well as the degree of protection afforded to existing SEAs.

4.2 DATABASE/LITERATURE REVIEW

The second step in the process of identifying prospective SEAs consisted of a thorough literature review. The PCR Project Team started this task by reviewing the year 2000 version of the California Natural Diversity Database covering Los Angeles County. This database provided accounts of sensitive species recorded in the County and was used to support the potential presence of habitats as well. In order to determine the current status of sensitive species, the most recent copies of all listing documents of the USFWS, the CDFG, and the California Native Plant Society were reviewed.

On a more local level, databases and literature that pertained to particular areas of the County were collected from groups focusing on biological resources within those areas. These groups, or agencies, included: National Park Service; Santa Monica Mountains Conservancy; Whittier Wildlife Corridor Conservation Authority; West Mojave Planning Group; Edwards Air Force Base (AFB); Catalina Island Conservancy; Mojave California Poppy Reserve; Frank G. Bonelli Park; and many others. Data including species accounts and vegetation maps gathered from these groups were used to aid in the review and eventual delineation of proposed SEAs in those areas. A complete listing of all sources used in this study is provided in Appendix F, *Comprehensive Study Sources*, of this report.

4.3 EXISTING SEA REVIEW

All existing SEAs in unincorporated Los Angeles County at the time of study were evaluated. The preliminary evaluation of these SEAs consisted of a review of the 1976 SEA Nomination archive files (England and Nelson, 1976). These files included original nomination reports with SEA descriptions, SEA boundaries on USGS topographic maps, and supporting data gathered during the 1976 study.

A second source of literature used to review existing SEAs was previous (SEATAC) biota reports and the Phase 1 SEA Study (Michael Brandman Associates, 1991). The SEATAC reports evaluated potential impacts of proposed projects within existing SEAs and normally included: a description of the SEA; a list of potential sensitive species in the vicinity; a description of the vegetation of the area; current use of the site and adjacent lands; and a list of all species observed. The *Phase 1 SEA Study*, evaluated the condition of seven existing SEAs (No. 6 - Las Virgenes; No. 9 - Cold Creek; No. 10 - Tuna Canyon; No. 15 - Tonner Canyon/Chino Hills; No. 19 - San Francisquito Canyon; No. 45 - Dudleya Desiflora Population, Azusa; No. 61 - Kentucky Springs).

Data obtained from these reports was used in conjunction with ground-truthing field studies (see below) to define the location, extent, and condition of biological resources within each existing SEA. Where applicable, this information was extrapolated to adjacent lands. These data were also used to review the existing SEA boundaries to determine their accuracy and/or potential for recommended modification.

4.4 AERIAL PHOTOGRAPHY

Aerial photos were obtained from two sources to accurately assess biological resources and define boundaries. The DRP provided high resolution, digital, color, ortho-rectified photos taken in the summer of 1999. These images covered most of the existing SEAs in the unincorporated County and some adjacent lands. Photographs of the remaining SEAs in unincorporated County, as well as candidate areas, were acquired from the United States Geological Survey (USGS). These images were high resolution, black and white, digital, ortho-rectified, photos taken five to ten years ago. Approximately 99 percent of the areas encompassed by existing and prospective SEAs were covered aurally. The remaining one percent, mostly within U.S. Forest, was evaluated using USGS Quadrangle maps at 1:24,000 (1" = 2000'). Photographs from both sources were printed and mounted for field use at a scale of 1:12,000 (1" = 1000').

4.5 FIELD STUDY

After reviewing data for existing and prospective SEA areas, field surveys were performed. The objective of the field surveys was to verify the location and evaluate the condition of biological resources previously described in the literature and nomination material. Using mounted aerial photographs as a reference, sites were toured by accessing vantage points which would allow for review of large areas from a single point. Although, not every resource was verified due to the limitations of access to private properties, most areas were field-truthed.

Based on the results of the literature review and field-truthing surveys, preliminary proposed boundaries were formulated and sketched on regional maps. PCR project team biologists next visited each proposed SEA area and refined the boundaries onto aerial photographs. Delineation of the outer boundaries of the proposed SEA's considered many factors. In general they were drawn to include those areas that met the designation criteria and the sustainable biological unit of which they are a part. Most development and other disturbed areas that occurred along the edges of these units were excluded from the SEA. Within the interior of proposed SEAs, only large developments were excluded. After field efforts were completed, boundaries were reviewed and refined a final time to eliminate drawing errors and to ensure the accuracy of the boundary position. The proposed boundaries were then digitized and incorporated in a Geographic Information System (GIS) formatted database.

The final field task involved mapping the vegetative communities within the boundaries of each proposed SEA. Vegetation boundaries were drawn on aerial photographs in the field, then later digitized into the GIS formatted database. Plant communities were classified using standard methodology and terminology. Most of the communities correspond directly with those listed in Holland's Preliminary Descriptions of the Terrestrial Natural Communities of California (1986 and 1992 update). A few communities were classified using standard naming conventions based on dominant species. Where possible, classifications were specific; however, many areas were classified in more general or mixed terms (e.g., riparian, chaparral/coastal sage scrub) due to access limitations. Descriptions of each plant community can be found in the individual proposed SEA reports.

Vegetation maps for two of the proposed SEAs were acquired in digital format from existing sources. The National Park Service provided a map of the Santa Monica Mountains, and the Santa Catalina Island Conservancy provided a map of Santa Catalina Island. These maps were reprojected and printed on USGS topographic maps and reviewed for accuracy. Descriptions of vegetative communities within these SEAs were developed by PCR project team biologists in the field.

Several factors limited the accuracy of field efforts during this study. Access to many areas within unincorporated County is restricted. Some areas within proposed SEAs that were in private property or inaccessible due to terrain or surrounding private property. These areas could only be interpreted from aerial photographs. Secondly, USGS aerial photographs, used in many areas, are out of date and do not reflect land use changes within the last five to ten years. Boundary lines in these areas may not be as precise as others delineated on more recent photographs. Finally, while many areas were mapped using color photographs, the black and white USGS photographs made interpretation of the remaining areas difficult. Designation of community types was particularly difficult with these photographs due to the lack of clear distinctions in gray scale. Although these factors limited the accuracy of the study in some areas, efforts were made wherever possible to increase the precision of the final product.

5. PROPOSED SEAs

5.1 CANDIDATES

The list of candidate SEAs was derived from two primary sources. Initially, the County identified all existing SEAs as candidates with the directive that those SEAs entirely or partially within County unincorporated lands be studied. Those SEAs entirely within incorporated cities were to be retained without further study or modification. The County also identified several areas for consideration that were not existing SEAs but which had been brought to their attention as

candidates by SEATAC members, the County biologist and others. The remaining candidates were obtained through the survey questionnaire/nomination process included in the study's public outreach program. Through this process, numerous additional candidate areas were received for evaluation. A summary of the respondents and their nominations along with this study's response to these nominations is provided in Appendix G, *SEA Nomination Table*.

Nominations were received from the following groups, and individuals: California Native Plant Society, Altadena Foothill Conservancy Planning, Ballona Ecosystem Education Project and Save All of Ballona, Endangered Habitats League, Environment Now, Friends of the Santa Clara River, Los Cerritos Wetlands Task Force, Monrovia Mountain Conservancy, National Audubon Society, Natural History Club of Acton/Agua Dulce, Puente Hills Landfill Native Habitat Conservation Authority, Resource Conservation District of the Santa Monica Mountains, San Gabriel Mountains Regional Conservancy, Santa Monica Mountains Task Force/Sierra Club Chapter, Santa Susana Mountain Park Association, Santa Clarita Organization for Planning the Environment, Sierra Club - Santa Clarity Valley and Santa Clarita Valley Preservation Committee, Sierra Club - Angeles Chapter Conservation Committee, Wildlife Corridor Conservation Authority, The Theodore Payne Foundation for Wildflowers and Native Plants, Inc., and Desert Tortoise Preservation Committee, State of California, Resource Agency - Santa Monica Mountains Conservancy, U.S. Department of Agriculture - National Forest Service - Angeles National Forest, Wilmington Harbor City Harbor Lake Regional Park, U.S. Department of the Interior - National Park Service - Santa Monica Mountains National Recreation Area, U.S. Department of the Interior - Bureau of Land Management - West Mojave Interagency Planning Team, and California Department of Parks and Recreation - Angeles Division, Diamond Bar East Partners, Hacienda Heights Improvement Association, David Brown, Judy Garris, Marcia Scully, and Barbara Wampole. Areas nominated by the respondents varied considerably from modifications to individual existing SEA boundaries to the entire watersheds of major rivers including all tributaries.

5.2 CONCLUSIONS

Twelve SEAs are proposed, based upon this study. These are shown in Figure 2, *Proposed Boundaries*, on page 20. The Proposed SEAs have been designated Antelope Valley, San Andreas Rift Zone, Santa Clara River, Joshua Tree Woodland, Cruzan Mesa Vernal Pools, Santa Susana Mountains/Simi Hills, Santa Monica Mountains, San Gabriel Canyon, San Dimas Canyon/San Antonio Wash, East San Gabriel Valley, Puente Hills, and Santa Catalina Island. In comparison to the approximately 176,174 acres (unincorporated) within the 61 existing SEAs, the twelve proposed SEAs cover approximately 442,983 acres (unincorporated) whereby many existing SEAs are consolidated and linked.

Individual Biological Assessment Reports for each of the proposed SEAs have been prepared under separate covers. These reports include location, description, existing land use, land ownership, vegetation, wildlife, wildlife movement, sensitive resources, regional value, and recommended management practices for each proposed SEA. A list of all plant and animal species potentially occurring within each proposed SEA was also prepared and is included in Appendix H, *Comprehensive Floral and Faunal Compendium*. A summary of the disposition of proposed and existing SEAs is provided in Table 2, *Proposed Versus Existing SEAs*, on page 21. In general, however, proposed changes are the result of incorporating sensitive resource information with current conservation practices.

Recent studies of biological diversity have demonstrated that there are two essential components needed within land use plans to conserve native species and their habitats in an urbanizing environment: sufficient size (of the conservation or open space use area), and connectivity (with other like or supporting systems). Urban "islands" lose biological diversity at a fairly steady rate, commensurate with size (smaller habitat patches losing more, faster), and isolated habitat areas, regardless of size, have less opportunity to regain species by re-colonization from other areas. The distance between habitat areas, and land use within the intervening areas, also influence both the rate of loss and the potential for gain. The criteria used to designate SEAs changed only slightly, but their application was made at a greater scale reflective in part of the changes that have occurred within and around the existing SEAs in the past 25 years.

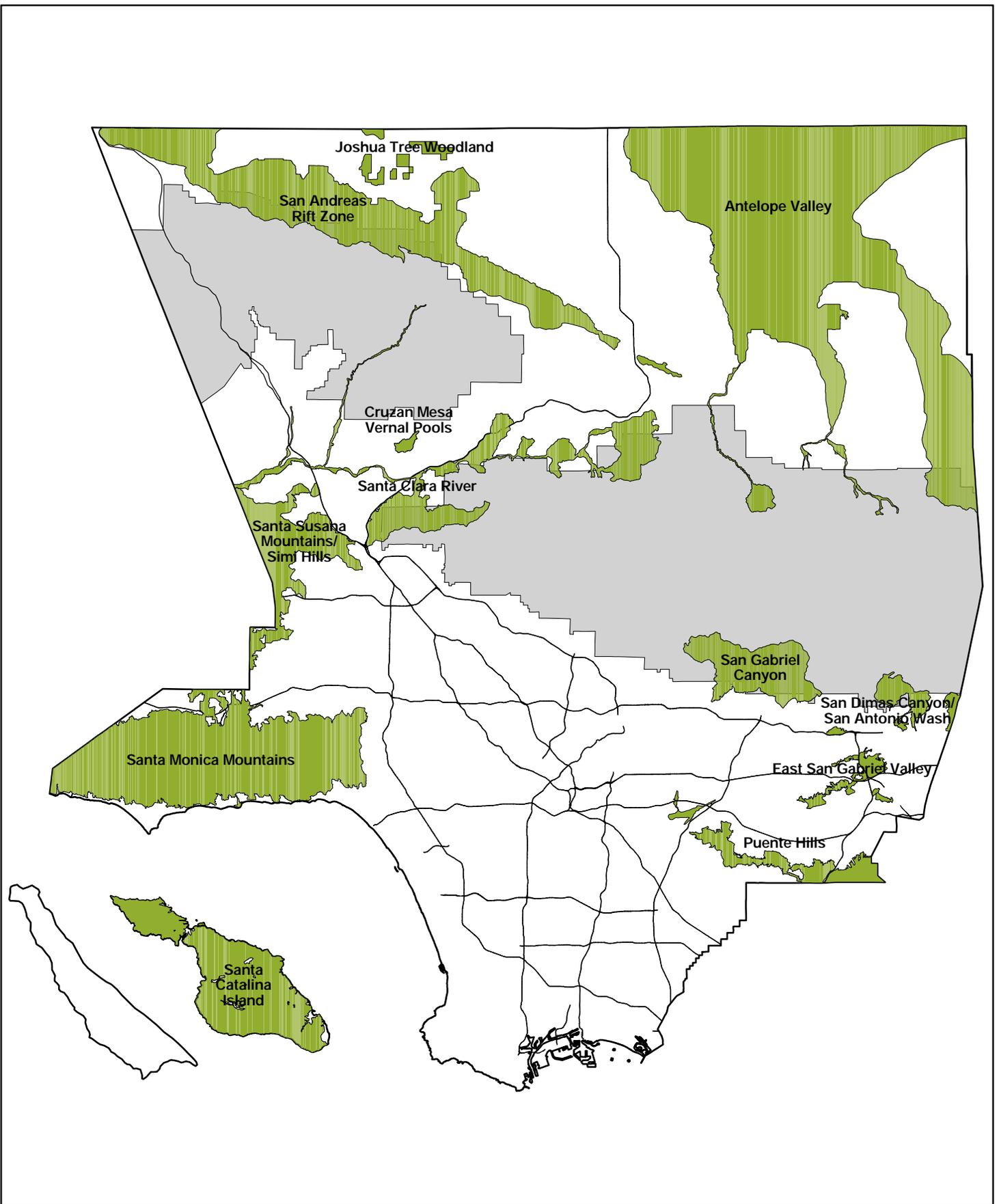


Figure 2

**Significant Ecological Areas
Update Study 2000
Proposed Boundaries**

- Proposed Significant Ecological Areas
- Angeles National Forest

Table 2
PROPOSED VERSUS EXISTING SEA BOUNDARIES

Proposed			Existing			Comparison	
SEA Name	Total Acres	Uninc. Acres	SEA #	SEA Name	Total Acres	Uninc. Acres	
Santa Monica Mountains	99,430	70,880	3	Zuma Canyon	3,202	≈2,900	Consolidated with proposed Santa Monica Mountains SEA.
			4	Upper La Sierra Canyon	287	287	Consolidated with proposed Santa Monica Mountains SEA.
			5	Malibu Canyon and Lagoon	3,680	≈3,500	Consolidated with proposed Santa Monica Mountains SEA.
			6	Las Virgenes	500	≈250	Consolidated with proposed Santa Monica Mountains SEA.
			7	Hepatic Gulch	15	15	Consolidated with proposed Santa Monica Mountains SEA.
			8	Malibu Creek State Park Buffer Area	245	245	Consolidated with proposed Santa Monica Mountains SEA.
			9	Cold Creek	1,552	1,552	Consolidated with proposed Santa Monica Mountains SEA.
			10	Tuna Canyon	1,491	≈1,350	Consolidated with proposed Santa Monica Mountains SEA.
			11	Temescal-Rustic-Sullivan Canyon	5,702	0	Consolidated with proposed Santa Monica Mountains SEA.
			12	Palo Comado Canyon	2,496	≈1,000	Consolidated with proposed Santa Monica Mountains SEA.
			39	Encino Reservoir	2,071	0	Consolidated with proposed Santa Monica Mountains SEA.
			Subtotal	99,430	70,880		
Puente Hills	13,421	10,103	15	Tonner Canyon/Chino Hills	4,145	≈3,950	Consolidated with proposed Puente Hills SEA.
			17	Powder Canyon/Puente Hills	609	≈100	Consolidated with proposed Puente Hills SEA.
			42	Whittier Narrows Dam County Recreation Area	1,585	≈1,300	Consolidated with proposed Puente Hills SEA; except for northerly portions.
			44	Sycamore and Turnball Canyons	607	≈100	Consolidated with proposed Puente Hills SEA.
Subtotal	13,421	10,103			6,946	5,450	

Table 2
PROPOSED VERSUS EXISTING SEA BOUNDARIES
 (CONTINUED)

Proposed			Existing			Comparison	
SEA Name	Total Acres	Uninc. Acres	SEA #	SEA Name	Total Acres	Uninc. Acres	
East San Gabriel Valley	5,175	722	16	Buzzard Peak/ San Jose Hills	601	≈300	Consolidated with proposed East San Gabriel Valley SEA.
			18	Wayhill	27	0	Studied; not included in proposed SEA due to degraded nature of resources and disjunct location.
Subtotal	5,175	722			628	300	
Santa Clara River	37,774	19,408	19	San Francisquito Canyon	747	≈650	Consolidated with proposed Santa Clara River SEA.
			23	Santa Clara River	4,829	≈3,600	Consolidated with proposed Santa Clara River SEA.
			61	Kentucky Springs	1,490	1,490	Consolidated with proposed Santa Clara River SEA.
Subtotal	37,774	19,408			7,066	5,740	
Santa Susana Mountains/ Simi Hills	26,795	23,425	20	Santa Susana Mountains	18,240	≈17,900	Consolidated with proposed Santa Susana Mountains/Simi Hills SEA.
			21	Santa Susana Pass	1,225	≈750	Consolidated with proposed Santa Susana Mountains/Simi Hills SEA.
			13	Chatsworth Reservoir	1,301	0	Consolidated with proposed Santa Susana Mountains/Simi Hills SEA.
			14	Simi Hills	850	≈800	Consolidated with proposed Santa Susana Mountains/Simi Hills SEA.
			63	Lyon Canyon	171	171	Consolidated with proposed Santa Susana Mountains/Simi Hills SEA.
			64	Valley Oaks Savannah	320	320	Consolidated with proposed Santa Susana Mountains/Simi Hills SEA.
Subtotal	26,795	23,425			22,107	19,941	
San Gabriel Canyon	22,966	128	22	Santa Fe Dam Floodplain	2,125	0	Consolidated with proposed San Gabriel Canyon SEA.

Table 2
PROPOSED VERSUS EXISTING SEA BOUNDARIES
 (CONTINUED)

Proposed			Existing			Comparison	
SEA Name	Total Acres	Uninc. Acres	SEA #	SEA Name	Total Acres		Uninc. Acres
			45	Dudleya Densiflora population	151	≈60	Consolidated with proposed San Gabriel Canyon SEA.
			62	Galium Grande Population	84	0	Consolidated with proposed San Gabriel Canyon SEA.
Subtotal	22,966	128			2,360	60	
San Dimas Canyon/San Antonio Wash	6,785	1,568	25	San Dimas Canyon	104	≈15	Consolidated with proposed San Dimas Canyon/San Antonio Wash SEA.
			26	San Antonio Canyon Mouth	766	0	Consolidated with proposed San Dimas Canyon/San Antonio Wash SEA.
Subtotal	6,785	1,568			870	15	
Antelope Valley	222,325	197,634	47	Edwards Air Force Base	17,396	17,396	Consolidated with proposed Antelope Valley SEA.
			48	Big Rock Wash	6,202	6,202	Consolidated with proposed Antelope Valley SEA.
			49	Little Rock Wash	3,225	≈1,300	Consolidated with proposed Antelope Valley SEA.
			50	Rosamond Lake	13,584	13,584	Consolidated with proposed Antelope Valley SEA.
			51	Saddleback Butte State Park	5,362	5,362	Consolidated with proposed Antelope Valley SEA.
			52	Alpine Butte	5,635	≈4,500	Consolidated with proposed Antelope Valley SEA.
			53	Lovejoy Butte	1,955	1,955	Consolidated with proposed Antelope Valley SEA.
			54	Piute Butte	1,295	1,295	Consolidated with proposed Antelope Valley SEA.
			55	Desert Montane Transect	26,775	26,775	Consolidated with proposed Antelope Valley SEA.
Subtotal	222,325	197,634			81,429	78,369	

Table 2
PROPOSED VERSUS EXISTING SEA BOUNDARIES
 (CONTINUED)

Proposed			Existing			Comparison	
SEA Name	Total Acres	Uninc. Acres	SEA #	SEA Name	Total Acres	Uninc. Acres	
San Andreas Rift Zone	89,698	68,722	56	Ritter Ridge	2,290	≈900	Consolidated with proposed San Andreas Rift Zone SEA
			57	Fairmont and Antelope Buttes	5,567	5,567	Consolidated with proposed San Andreas Rift Zone SEA.
			58	Portal Ridge/Liebre Mountains	31,063	31,063	Consolidated with proposed San Andreas Rift Zone SEA.
			59	Tehachapi Foothills	4,611	4,611	Consolidated with proposed San Andreas Rift Zone SEA.
Subtotal	89,698	68,722			43,531	42,141	
Joshua Tree Woodland	4,728	4,728	60	Joshua Tree Woodland Habitat	5,760	5,760	Consolidated with proposed Joshua Tree Woodland SEA (existing boundaries do not correspond with proposed SEA due to past mapping error).
Subtotal	4,728	4,728			5,760	5,760	
Santa Catalina Island	46,537	44,707	N/A	Santa Catalina Island	≈7,200	≈7,050	Consolidated with proposed Santa Catalina Island SEA.
Subtotal	46,537	44,707			7,200	7,050	
Cruzan Mesa Vernal Pools	958	958	N/A	N/A	0	0	No existing SEAs within proposed SEA.
Subtotal	958	958			0	0	
N/A			1	Malibu Coastline	11,754	0	Not studied; marine areas not included in study.
			2	Point Dume	275	0	Not studied; entirely within City of Malibu.
			24	Tujunga Valley/Hansen Dam	2,660	0	Not studied; entirely within City of Los Angeles.
			27	Portugese Bend Landside	893	0	Not studied; entirely within City of Rancho Palos Verdes.
			28	El Segundo Dunes	166	0	Not studied; entirely within City of Los Angeles.
			29	Ballona Creek	459	≈140	Not studied; currently being studied by County/City of Los Angeles Local Coastal Program.

Table 2
PROPOSED VERSUS EXISTING SEA BOUNDARIES
 (CONTINUED)

Proposed			Existing			Comparison	
SEA Name	Total Acres	Uninc. Acres	SEA #	SEA Name	Total Acres	Uninc. Acres	
			30	Alamitos Bay	43	0	Not studied; entirely within City of Long Beach.
			31	Rolling Hills Canyon	520	0	Not studied; entirely within cities of Rolling Hills, Rancho Palos Verdes, and Rolling Hills Estates.
			32	Agua Amarga Canyon	289	0	Not studied; entirely within City of Palos Verde Estate, Rancho Palos Verdes, Rolling Hills Estate.
			33	Terminal Island	87	0	Not studied; entirely within City of Los Angeles.
			34	Palos Verde Peninsula Coastline	8,644	0	Not studied; marine areas not included in study.
			35	Harbor Lake Regional Park	386	0	Not studied; entirely within City of Los Angeles.
			36	Madrona Marsh Total	149	0	Not studied; entirely within City of Torrance.
			37	Griffith Park Total	3,441	0	Not studied; entirely within City of Los Angeles.
			40	Verdugo Mountains	11,554	0	Not studied; entirely within City of Glendale, Burbank, and Los Angeles.
			43	Rio Hondo Wildlife Sanctuary	109	109	Studied; not included in proposed SEA.
Subtotal	N/A	N/A			41,429	249	
GRAND TOTAL	576,592	442,983			240,567	176,174	

Note: Differences between Total Acres and Unincorporated (Uninc.) County acres represents portions of SEAs within incorporated cities and National Forest.

Based on updated evaluation principles, the revised SEAs reflect a more modern and scientifically-grounded concept regarding size and connectivity. Rather than focus on a single resource or habitat type, existing SEAs are connected into a linkage system which should greatly improve the maintenance of critical resources. The SEA designation does not protect biotic resources on land per se, and SEAs are not preserves or conservation areas; rather, SEAs are areas in which planning should be sensitive to resources and maintenance of biological functions as well. By creating larger SEAs, habitat linkage zones are provided between related habitat types (such as the Antelope Valley buttes, or the San Andreas Rift Zone wetlands), and areas of sufficient width, to function as wildlife movement routes between open space areas. The linkages may serve to sustain populational genetic diversity of low-mobility species (such as plants, amphibians, reptiles, rodents), as well as provide refuge areas for migrant species. Corridor routes provide for dispersal between habitat areas by supporting more mobile species. The need for buffer areas has also been eliminated, with SEAs incorporating not only local resources (such as sensitive species) and their habitats, but also the seasonal support habitats for those species, with connections to essential sustaining resource areas (such as corridor areas and hydrological systems). Additionally, potential impacts of non-native species, feral pets, lights, noise, etc., on sensitive habitats have been alleviated by reducing the "edge effect" of urbanization relative to the overall size of the SEAs. In short, by "bridging the current SEA islands" wherever possible, zones of lower intensity human impacts between essential habitat resources have been provided, which help maintain overall species and habitat diversity in Los Angeles County.

6. RECOMMENDATIONS FOR IMPLEMENTATION

6.1 COMPLIANCE WITH FEDERAL AND STATE LAW

Existing federal and state laws mandate the regulatory jurisdiction of government agencies over certain biological resources within SEAs. These include regulation of the following resources: waters and wetlands of the United States (e.g., riparian habitats and most drainages) by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act; federally-listed threatened and endangered species by the USFWS under the federal Endangered Species Act; streambeds, riparian habitats and fisheries by the CDFG under Section 1603 of the California Fish and Game Code; state-listed threatened and endangered species by the CDFG under the California Endangered Species Act; and, water quality by the Regional Water Quality Control Board under Section 401 of the Clean Water Act. The SEA program does not attempt to duplicate these same regulatory programs; rather the implementation of the SEAs is viewed as a complementary program intended to preserve and sustain all biological diversity.

6.2 INTERPRETATION OF MAPPING

The rationale for mapping SEAs was to include, as accurately as possible at 1"=1000' scale, areas of sufficient acreage to ensure that the targeted resources would be sustained into perpetuity. This provides sufficient area for metapopulation stability (e.g., pollinators, water and nutrient supply, genetic exchange, etc.), or to at least provide a broad resource base for the biological elements present, in the event of a natural catastrophe (e.g., fire, flood, etc.) or isolating of the SEA. The margin of error of both the SEA boundaries and the vegetation boundaries at the scale of 1" = 1,000' is subject to several factors: 1) intended location versus actual location of drawn lines; 2) digitizing center versus off center of drawn lines; 3) width of drawn line; and, 4) reprojected coverages. However, the mapping was intended to be interpreted on a project submittal and analysis basis. Therefore, when interpreting SEA boundary maps, the following guidelines are recommended:

- SEA boundaries mapped along natural topographic “breaks”, such as a ridge line or toe of slope, were intended to be delineated without variation.
- Boundaries mapped along man-made features, such as a roadway or an aqueduct, were drawn without variation, and are not intended to stray onto such features or cross them unless there is a clear change in boundary direction.
- Boundaries that conform to the edge of urban development were intended to follow the property lines of developed properties, such as the rear or side yard boundary.
- Pre-existing developed portions of properties within SEAs, such as buildings, landscaped areas, and ancillary structures (e.g., barns, corrals), oil field facilities, roadways, utility infrastructure (e.g., water tanks, flood control, electric towers), etc. were not intended as a part of the SEA. Some such features and their maintenance and operation are not subject to SEATAC review. Regardless, due to considerations of mapping scale these features may have been included within SEA boundaries but are recognized as not being biologically sensitive.

6.3 SEATAC REVIEW

As an outgrowth of the 1976 England and Nelson SEA Study, Los Angeles County formed the Significant Ecological Area Technical Advisory Committee. This committee consists of seven members from the private and public sectors with a range of biological expertise. The members are appointed by the DRP Director of Planning to serve staggered three year terms. The primary role of SEATAC is to review projects proposed within SEAs, coordinated by the Department’s staff biologist. The Significant Ecological Area Technical Advisory Committee procedures and reporting guidelines provide an additional layer of County review and added scientific rigor to the California

Environmental Quality Act compliance process. The findings of this study support the need to continue and to even increase its activities by virtue of the larger and more complex SEAs proposed. As part of the on-going SEATAC role, the following policies are recommended:

- Clearly stress to users the benefits of completing a Biological Constraints Analysis for SEATAC review prior to developing development plans for a project site (i.e., time and processing savings).
- Eliminate the requirement for small mammal trapping due to the risk associated with hantavirus and other pathogens carried by small mammals; rather, rely on species' range information and habitat evaluations.
- Implement a monitoring program relative to SEA issues and concerns for post-approval construction monitoring, restoration measures and monitoring, and reporting requirements to the DRP staff biologist.
- Require project impact analysis and mitigation measures to fully assess the effects of the project on SEA integrity using the existing SEA Design and Compatibility Guidelines; that is, give it equal consideration and emphasis, under its own heading, as the project site itself.
- Screen project applications within SEAs and exempt projects with nominal effects from further SEATAC review, subject to specific conditions, as appropriate and as developed on a case by case basis. Projects that have undergone SEATAC/environmental review (but may have not been approved) should also be considered in this manner. This would enable SEATAC to focus its time and efforts on projects with potentially substantial effects.

6.4 COMPREHENSIVE LAND USE MANAGEMENT PRACTICES

Land use management guidelines are listed below for all projects within SEAs. These guidelines are proposed to be used in concert with the specific recommended management practices provided in each of the individual SEA reports.

General

It is difficult, if not impossible, to anticipate all potential land uses within SEAs. Therefore, the following recommended guidelines identify by example, rather than an exhaustive listing, general considerations for land uses within SEAs.

- High intensity and/or extensive land uses, by their nature, are not generally compatible with SEA resources. Such uses would include expansive housing tracts, regional commercial and business centers, landfills, quarries, surface mining, etc. Only in cases where key resources (e.g., core habitats, linkages, sensitive resources) are avoided and the dedication of open space is such that overall SEA integrity is preserved should such uses be considered.
- As a general rule, lands within SEAs should be used for low rural density development.
- As a target, development of properties within SEAs should disturb no more than 20 percent of the SEA. Considerations should be given to clustering development and dedicating open space that is contiguous with adjacent open space areas. To the extent feasible, place roads, utilities and other infrastructure within development areas and minimize encroaching into adjacent open space areas.
- Avoiding the intrusion and “spillover” of development effects on adjacent habitat areas should be a primary guiding principle in the design of all projects.
- New landscape plantings in developments, particularly at their perimeters, should avoid the use of invasive plant species and revegetate with native plant species indigenous to the surrounding area.
- All outdoor lighting in SEAs should be shielded and directed away from adjacent open space areas; further, lighting for public health and safety should represent the minimum required to conform to applicable ordinances.

Core Habitats

Many wildlife species, particularly carnivores and other wide ranging species require large areas of suitable habitat for genetically and demographically viable populations. In addition, large contiguous blocks of habitat are more likely to encompass diverse habitat types and are more easily buffered from potential impacts from surrounding developed lands. Most proposed SEAs contain large blocks of habitat generally conforming to a significant topographical feature such as a watershed, major river, butte, etc. These habitat blocks are referred to as “core habitats.” Protecting natural open space (i.e., undeveloped land) within and adjacent to or near these large patches will maintain valuable protected core habitats, which, in turn, can protect larger wildlife populations and potentially generate a greater diversity of species and communities.

- Place primary emphasis on the preservation of large unbroken blocks of natural open space and wildlife habitat (i.e., core habitats).

- Preserve substantial areas of common habitats (e.g., chaparral, non-native grassland) along with sensitive and/or limited habitats (e.g., oak and riparian woodland, coastal sage scrub) within core habitat areas. Retention of common habitats should be designed so as to: buffer sensitive habitats from development; preserve ecotones; and, contribute to long-term functioning of plant and animal communities.

Habitat Linkages and Wildlife Corridors

Within the overall range of a species or suite of species, areas which possess sufficient cover, food, forage, water and other essential elements to serve as a movement pathway, or between two or more larger areas of habitat are referred to as “habitat linkages.” An example would be a belt of coastal sage scrub traversing a golf course, and connecting sage scrub habitat areas on either side, providing a “safe passage” zone for smaller, slower-moving species such as lizards and rodents to maintain population connectivity between the two sides of the golf course.

Areas of open space of sufficient width to permit larger, more mobile species (such as foxes, bobcats and coyote) to pass between larger areas of open space, or to disperse from one major open space region to another are referred to as “wildlife corridors.” Such areas generally are several hundred feet wide, unobstructed, and usually possess cover, food and water. The upland margins of a creek channel, open ridgelines, or open valleys in the bottoms of drainages often serve as major corridors locally, as do riparian alignments.

- When determining the portions of a development site to be retained in open space, give priority to the preservation of habitat linkages and movement corridors to maintain habitat connectivity.

Habitat connecting core areas together can mitigate the detrimental effects of shrinking habitat availability and wildlife population isolation. Typically, habitat in the SEAs consists of large contiguous blocks (core habitat areas) with intervening areas of open space containing non-native grassland, roads, rural residential, and other low intensity disturbance. A primary goal of any land use within SEAs should be to maintain high levels of connectivity between core habitat areas via a network of linkages and corridors each of which should be no less than 1,000 feet wide. Such linkages should make use of natural topographic features (ridge lines and drainages), vegetative cover (woodlands and scrub), water sources (streams, springs, and ponds), and road undercrossings (bridges and culverts). They may also take advantage of conservation easements, parklands, and preserves.

Also, when reviewing proposed land uses, linkages between core habitats should be analyzed, then be designated, as open space. The following guidelines should be considered.

- Keep road grading and clearance to a minimum; design any necessary roads that cross or enter linkage areas should be designed to minimize alterations to natural terrain and vegetation.
- To the greatest extent feasible and without compromising public safety, design roads within linkages to rural road standards with minimum widths and reduced speed limits.
- Place signs identifying “wildlife crossing area” along roads within linkage areas.
- Where a road crosses a streambed within a linkage area, utilize a bridge-crossing rather than a culvert; enhance vegetation at undercrossing portals to encourage wildlife use.
- Fencing should be discouraged and where needed should not be of a wildlife obstructing nature (e.g., barbed wire, chain link, solid wall), except around the immediate vicinity of residences and associated yards or where public health and safety dictates its use; all other fencing should be “open” in design and structure (e.g., split rail), and not exceeding four feet in height.
- Incorporate vegetative screening and intervening topography into project design and landscaping as buffers for linkages and corridors.

Fire Management

Many standard fuel management practices, some mandated by local and regional fire control agencies, are essentially incompatible with the desired conservation of natural biological resources within SEAs. Practices such as brushing increase erosion, destroy topsoil and native vegetation, and result in the proliferation of invasive, non-native plants. Repeated brushing may completely remove native habitat values, and altered substrates may not recover except over long periods of time without disturbance, and/or costly restoration programs to return a site to a native condition.

- The DRP should confer with the County Fire Department and Forestry and Fire Warden and sensitize them to this issue.

Fire risk reduction measures have the potential to significantly effect and fragment the habitat values of SEAs. Lot sizes of five acres or less can require over four acres of brush clearance, and within a rural residential subdivision, even with a conservation ethic, this can significantly impair natural habitat values and interrupt movement pathways and linkages. Alternative fire management schemes should be seriously explored with the appropriate fire prevention agencies, with consideration given to the following:

- Keep fuel reduction around residential structures to the minimum footprint necessary to insure public and private sector safety, and to comply with insurance requirements.
- For projects within SEAs, the DRP, through the SEATAC process, require fuel management programs which utilize agency-approved vegetation phasing (layering various types of lower-hazard native shrubs and ground-cover species) around the perimeter, and require that larger woody vegetation be thinned and trimmed rather than removed.
- Plan roadwork, fuelbreak creation and maintenance, and other similar activities performed by fire management agencies within SEAs, to reduce impacts to natural resources to the extent possible.

Public Access and Recreation

In general, public access, passive recreational uses and development of future recreation facilities are compatible with SEA management. Significant portions of any public lands proposed for inclusion in SEAs may have been originally acquired by governmental agencies specifically for recreational purposes. Some of these lands already have been developed as a National Recreation Area and County Regional Parks. It should also be stressed that there may be localized areas within SEAs where the biological resources are so sensitive that no access would be appropriate. These areas should be identified at the project level during the SEATAC review process. In addition, the following guidelines are recommended for the design of golf courses:

- Avoid areas supporting sensitive species and/or sensitive habitats (e.g., riparian areas, vernal pools, etc.).
- Incorporate conservation programs such as water and nutrient recycling and avoid changes in hydrology (groundwater and surface).
- Use indigenous native landscaping exclusively and divert runoff containing herbicides, pesticides, and other chemicals from reaching natural water courses and water bodies prior to clarification.

There are many examples of golf courses across the country that have been designed to achieve an “environmental friendly” character. In some cases, golf courses serve as manufactured linkages between habitat reserves. On a case-by-case basis, a new golf course proposed within a SEA should follow avoidance, preservation, and compensation measures, in that order, so the net result is minimal loss in biological resource value and function.

Infrastructure

Certain public infrastructure necessary for public health, safety or welfare may be unavoidable within SEAs. These include: arterial and other identified roads; water lines and associated facilities (e.g., pump stations, pressure control facilities, and access roads), regional water storage and treatment facilities; sewer lines and pump stations; electric, telephone, and natural gas facilities; and storm drain and flood control facilities. The following guidelines are recommended for use in the siting and construction of infrastructure, both existing and proposed, within SEAs.

- To the greatest extent feasible, siting of new infrastructure within SEAs should minimize impacts to natural habitats, and avoid sensitive species.
- Consider flexibility in future design and siting of facilities since many such facilities may not be constructed in the immediate future (e.g., certain arterial roads and water facilities to support growth), and the service environment for public utilities will change over time.

Routine operation and maintenance activities for existing and proposed facilities are to be expected within facility easements. These activities may include: road maintenance; regular patrol and inspection; insulator washing; facility operations; clearing and weed abatement around facilities; routine maintenance and repair of facilities; replacement, rehabilitation and upgrading of facilities; and, other activities mandated by regulation or law affecting public health, safety, and welfare.

For other activities, of a non-routine nature, the following guidelines are recommended:

- Facility operation, maintenance, and repairs that extend outside areas already cleared, should first document existing biological resources in the area to be disturbed using existing or new surveys, to be submitted for review to the DRP staff biologist. A revegetation plan should be prepared, implemented and monitored, by the agency proposing the action. The monitoring results should be submitted for review to the DRP staff biologist.
- Where feasible and consistent with public safety, encourage joint use for public access on infrastructure access roads in order to reduce the need for new trail construction.
- Undertake activities before or after the breeding/nesting season (typically March 15 to June 15).

The following guidelines are recommended to apply to the construction of new facilities.

- To the greatest extent feasible, locate and design infrastructure to minimize or avoid impacts to sensitive resources within SEAs, considering physical and engineering requirements of the proposed infrastructure.
- Design access roads for facilities that minimize disturbance and avoid impacts to sensitive resources. This will generally be the shortest feasible route. The cleared roadbed should be the minimum feasible width taking into account specific slope and safety requirements. Necessary erosion control measures and/or drainage pipes are also recommended.
- Require that a qualified biologist document the resources and vegetation in the area to be disturbed by the proposed facility; use the biological findings to provide the basis for revegetation and monitoring plans.

Wetlands, Riparian Habitats and Streambeds

Many land uses may have adverse effects on the quality, structure, and function of natural streambeds and their associated wetlands and riparian habitats. These uses include urban development, roads, mining, grazing, agriculture, recreational activities, reservoirs and flood control, among others. Because these resources are so critical to healthy ecosystems especially in semi-arid environments such as Los Angeles County, their conservation is considered vital to the long-term maintenance of SEAs.

The inherent functions and values of these habitats within local and regional ecosystems should be retained, such as: their importance to upstream, downstream and surrounding habitat systems; their critical value to migratory birds; their important contribution to habitat linkage and wildlife corridor networks; and their role in maintaining subsurface and surface water quality. For project planning and design purposes for all projects within SEAs resource conservation areas and buffer areas should be established adjacent to wetland, riparian and streambed habitat formations including: riparian and oak riparian woodlands, forests and scrub; desert riparian and wash; vernal pools; marshes, seeps and springs; and natural ponds. The purpose of using this approach is to define preservation areas where uses are excluded within wetland, riparian and streambed habitats (conservation area), plus an adjacent area with limited uses (buffer area). The buffer area serves to reduce impacts to the primary conservation or streamside area to accommodate water quality, fisheries, and terrestrial habitat management requirements. Consideration for resource conservation areas and buffer area setbacks should extend to habitat areas associated with all perennial, intermittent and ephemeral waters. Recommended guidelines to apply this concept are outlined below:

- Establish wetland, riparian and streambed resource conservation areas consisting of the target wetland, riparian and streambed habitat with minimum widths delineated as follows:
 - Riparian and oak riparian scrub, woodlands and forests – at the edge of the riparian vegetation (i.e., the dripline) on either side of the active stream channel; if riparian vegetation is absent or sparse, use the bed and bank of the stream channel.
 - Desert riparian and wash – because the associated riparian vegetation is typically sparse or xeric in life form, use the bed and bank of the active channel inclusive of any braided channel conditions.
 - Vernal pools – use the maximum pool extent.
 - Marshes, seeps and springs – use the edge of the saturated soil.
- Avoid impacts to resource conservation areas associated with channelization, bridge construction, mining and gravel extraction, utility crossings, etc.
- Designate resource conservation areas to be use exclusion areas and prohibit ground disturbing activities and vegetation removal.
- Establish buffer areas adjacent to and around resource conservation areas with minimum buffer setbacks measured from the edge of the resource conservation area as follows:
 - Riparian and oak riparian scrub, woodlands and forests and desert riparian and washes – 300 feet for rivers and streams with resource conservation area width greater than 100 feet; 150 feet for rivers and streams with resource conservation area width 50 to 100 feet; 75 feet for rivers and streams with resource conservation area width less than 50 feet.
 - Vernal pools – 150 feet, or the watershed boundary, whichever is greater.
 - Marshes, seeps and springs – 300 feet for resource conservation area greater than 1 acre; 150 feet for resource conservation area 0.5 to 1 acre; 75 feet for resource conservation area less than 0.5 acre.
- Measure buffer setbacks horizontally, in plan view, since they are intended to serve as spatial buffers; consider lesser setbacks if topography and/or other physical features are determined to provide adequate screening and buffering.
- Designate buffer areas as limited use areas; compatible uses may include agriculture and grazing, passive recreation (hiking, riding, golf and parks with no night lighting), and brush thinning for fire hazard reduction (no removal of trees).

The above guidelines are intended as a general rule for the treatment of wetlands, riparian habitats and streambeds. At times, land uses may necessitate encroachment into the recommended resource conservation areas and buffer areas due to topography or other constraints and road and utility crossings. In these cases the following guidelines are recommended.

- If necessary, encroachment of land uses other than those considered as compatible above should be minimized.
- Crossings of riparian habitats and streambeds should be designed to be as perpendicular as possible to drainage courses in order to minimize resource disturbance.
- Whenever feasible, drainage courses should be bridged with minimal intrusions of abutments and bridge supports into the drainage in order to minimize disturbances and effects on natural surface flow.

Non-riparian/Upland Woodlands

Similar to riparian habitats and streambeds, it is recommended that upland woodlands consisting of oak species, California walnut, joshua tree, native conifers, and cherry (Island and Mainland) be considered sensitive and require avoidance and setback guidelines. Typically, native trees are susceptible to changes in hydrology, soil compaction, impermeable surfaces within their driplines, loss of root systems due to trenching, and other modifications to their integrity and microclimate. Presently, the County administers an oak tree ordinance that has provisions for mitigation of potential impacts and replacement of oak trees but not necessarily oak woodland habitat values. In addition, qualified biologists and certified arborists are available to provide tree-specific recommendations for management. For the purpose of this study, however, these approaches should be followed only after considerations are made for the avoidance of oaks and all other native trees. This is particularly acute when dealing with woodlands that have their own distinct community character and provide unique and valuable habitat for many plant and animal species. Consideration for resource conservation areas and buffer area setbacks should also extend to non-riparian/upland woodlands. Recommended guidelines for this purpose are outlined below.

- Establish non-riparian/upland woodland resource conservation areas with a minimum outer boundary of the dripline of edge trees in the target woodland.
- Designate resource conservation areas as use exclusion areas and prohibit ground disturbing activities and vegetation removal.
- Establish buffer areas adjacent to and around resource conservation areas with minimum buffer setbacks of 150 feet measured from the edge of resource conservation areas.

- Measure buffer setbacks horizontally, in plan view, since they are intended to serve as spatial buffers; consider lesser setbacks if topography and/or other physical features are determined to provide adequate screening and buffering.
- Designate buffer areas as limited use areas; compatible uses include agriculture and grazing, passive recreation (hiking, riding, golf and parks with no night lighting), and brush thinning for fire hazard reduction (no removal of trees).

The above guidelines are intended as a general rule for the treatment of non-riparian/upland woodland habitats. At times, land uses may necessitate encroachment into the recommended resource conservation areas and buffer areas due to topography or other constraints and road and utility placement. In these cases the following guideline is recommended:

- If necessary, encroachment of land uses other than those considered as compatible above should be minimized.

APPENDIX A

1976 Criteria for Selecting and Classifying SEAs

Criteria for Selecting and Classifying Significant Ecological Areas

CLASS 1 – The habitat of rare, endangered, and threatened plant and animal species.

These areas are important for the maintenance of plant and animal species that are recognized as being either extremely low in numbers or having a very limited amount of habitat available. The terms rare, endangered, and threatened have precise meanings defined in both state and federal law.

State of California

Rare – An animal of a species or subspecies of birds, mammals, fish, amphibia, or reptiles that, although not presently threatened with extinction is in such small numbers throughout its range that it may be endangered if its environment worsens.

Endangered – An animal of a species or subspecies of birds, mammals, fish, amphibia, or reptiles the prospects of which are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.

United States Government

Threatened – Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Endangered – Any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary (of the Interior) to constitute a pest whose protection under the provisions of this Act would present an overwhelming and overriding risk to man.

Severe penalties can be imposed for destroying individual organisms or their habitat. The California Department of Fish and Game, and the United States Fish and Wildlife Service publish official lists of rare, endangered, and threatened species. Both agencies recognize mammals, birds, reptiles, and amphibians, but only the Fish and Wildlife Service is empowered to recognize insects and plants.

The literature on rare, endangered, and threatened species is extensive, and increasing all the time. This information was used to identify existing habitat in Los Angeles County.

CLASS 2 – Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind, or are restricted in distribution on a regional basis.

The purpose of this criteria is to identify biotic resources that are uncommon on a regional basis. The geographical region considered could be as small as the southern California coastal plains, the transverse mountain ranges, the Mojave Desert, the southern California coastline, etc; or they could be as large as southern California, the Pacific coast, all of California, the western United States, or even larger. The point being that community, association, or habitat is either unique or restricted in distribution in an area larger than the political boundaries of Los Angeles County. Resources that are limited in distribution in an area larger than the political boundaries of Los Angeles County. Resources that are limited in distribution in the region being considered, but common elsewhere, are also included under this category.

CLASS 3 – Biotic communities, vegetative associations, and habitat of plant and animal species that are either one of a kind, or are restricted in distribution in Los Angeles County.

The purpose of this criteria is to identify biotic resources that are uncommon within the political boundaries of Los Angeles County, regardless of their availability elsewhere. The County has a high diversity of biological components. It and San Diego County are the only counties in the United States that possess coastal, montane, and desert communities within their boundaries. It is a rich heritage that few local governments can attempt to preserve.

Many of the communities that were once common in Los Angeles County have been severely reduced due to urban and agricultural development. This is especially true south of the San Gabriel Mountains, and among the agricultural fields of the north County. Other biotic features have never been common.

CLASS 4 – Habitat that at some point in the life cycle of a species or group of species, serves as a concentrated breeding, feeding, resting, or migrating grounds, and is limited in availability.

Certain areas tend to concentrate a species or group of species at various points in their life cycles. These areas possess specialized characteristics that are essential to the maintenance of wildlife. This criteria is intended to identify those areas that are limited in distribution, and not the specialized habitat of a common species or group of species.

CLASS 5 – Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or they represent an unusual variation in a population or community.

Oftentimes scientists learn the most about biological phenomenon by studying it at an extreme in its distribution. This reveals what the extremes are under which it can survive.

In addition, isolated populations and communities are often relicts of what was present in an area at some previous time, and often show genetic traits not found elsewhere in the species. These characteristics may be useful in determining taxonomic relationships.

CLASS 6 – Areas important as game species habitat or as fisheries.

The criteria was designed to identify areas that are critical to the maintenance of game and fish populations in Los Angeles County.

CLASS 7 – Areas that would provide for the preservation of relatively undisturbed examples of natural biotic communities in Los Angeles County.

The intent of this criteria was to identify examples of the more common biotic resources in Los Angeles County. As often as possible, the areas selected:

1. were completely or nearly undisturbed
2. had a diversity of habitats
3. were large enough to support a representative sample of the native fauna.
4. were more or less isolated from outside impacts, such as a self-contained watershed or isolated mountain peak.

Examples of each vegetation type were selected from the various geographical regions in the County in order to preserve geographic diversity.

CLASS 8 – Special areas.

Certain areas that are worthy of inclusion, but that do not fit any of the above criteria, should be pointed out at this time. Each area has its own special characteristics that are discussed on the individual area description sheets.

APPENDIX B

City and County Survey Responses

Los Angeles County SEA Update Study City & County Survey Questionnaire

Date Received:	Respondent:	Summary of Comments:	Response:
10-21-99	<p>City of Claremont Community Development Department 207 Harvard Avenue Claremont, CA 91711-0880</p> <p>Contact: Jennifer Craven, Assistant Planner</p>	Remove SEA #26 (San Antonio Canyon Mouth) from the County's list due to approved and built development, as well as, other disturbances to the area.	Due to remaining biological resources of regional significance, principally extensive undisturbed alluvial fan scrub, this SEA is proposed to be retained and consolidated into the proposed San Dimas Canyon/San Antonio Wash SEA.
12-20-99	<p>City of Diamond Bar 21660 E. Copley Drive, Suite 100 Diamond Bar, CA 91765-4177</p> <p>Contact: James DeStefano, Deputy City Manager</p>	Modify the boundaries of SEA #15 (Tonner Canyon/Chino Hills) to include only the area located in the unincorporated County. The City is opposed to any expansion or additional SEAs within City boundaries or its Sphere of Influence. The City maintains a Significant Ecological Area Technical Advisory Committee as a component of its development review and environmental evaluation process. The City also requires development meet special conditions under a Hillside Conditional Use Permit and Hillside Management Ordinance.	Existing SEA #31 has been consolidated with the proposed Puente Hills SEA, including areas within the City and spheres of influence. This is due to the inter-relationship with region-wide ecological systems throughout the Puente/Chino Hills region.
12-01-99	<p>City of Glendale 633 E. Broadway, Rm. 103 Glendale, CA 91206-4386</p> <p>Contact: David Bobardt, Senior Planner</p>	City acknowledges SEA #40 (Verdugo Mountains), in its General Plan Open Space and Conservation Elements, even though a 572-unit development in the SEA is currently pending. Often, most sensitive biological areas are set aside for protection during development review. City's Hillside Ordinance provides further direction on this issue.	Existing SEA #40 was not studied due to its location outside of the unincorporated jurisdiction. Existing SEAs within city boundaries are retained as originally approved.
11-03-99	<p>City of Glendora Department of Planning & Redevelopment 116 E. Foothill Boulevard Glendora, CA 91741</p> <p>Contact: Bill Rodrigues, Assistant Planner</p>	No SEAs are located within the City boundaries, but the General Plan promotes protection of biotic resources, including the San Gabriel Mountains live-forever (<i>Dudleya densiflora</i>).	Existing SEA #45 (<i>Dudleya densiflora</i> Population) is consolidated into the San Gabriel Canyon SEA which also includes additional areas supporting the species. A portion of existing SEA #45 is located within the City of Glendora. In correspondence dated November 3, 1999, the City noted that areas with <i>Brodiaea filifolia</i> are designated Open Space in the zoning and General Plan classifications. The portion within the city will be retained as an SEA.
11-09-99	<p>City of La Verne 3660 D Street La Verne, CA 91750</p> <p>Contact: Hal Frederickson, Community Development Director Ili Lobaco, Graduate Planning Intern</p>	City supports SEA #25 (San Dimas Canyon) and agrees it should continue to be classified as a SEA. City General Plan contains a Resource Management Chapter including policies and implementation measures to address biological resources.	San Dimas Canyon, including the entire existing SEA #25 has been consolidated into the proposed San Dimas Canyon/San Antonio Wash SEA.

Los Angeles County SEA Update Study

City & County Survey Questionnaire

Date Received:	Respondent:	Summary of Comments:	Response:
10-04-99	City of Long Beach Planning & Building Department City Hall, Fourth Floor Long Beach, CA 90802	Biotic resources within the City are addressed under the PD (Planned Development) zoning designation. There are no other mechanisms in place.	The City of Long Beach recently acquired Alamitos Bay, an existing SEA, through annexation. This area was not studied due to its location outside of the unincorporated jurisdiction. Existing SEAs within city boundaries are retained as originally approved.
10-20-99	City of Los Angeles Los Angeles Department of City Planning 221 South Figueroa, Ste. 210 Los Angeles, CA 90012 Contact: Anne Howell	LA City responses were received on the following existing SEAs: #11 (Temescal/Rustic/Sullivan Canyons), #13 (Chatsworth Reservoir), #14 (Simi Hills), #21 (Santa Susana Pass), #24 (Tujunga Valley/Hansen Dam), #29 (Ballona Creek), #33 (Terminal Island), #35 (Harbor Lake Regional Park), #37 (Griffith Park), #39 (Encino Reservoir), and #40 (Verdugo Mountains). Zoning designations for these SEAs are as follows unless noted otherwise below. Publicly owned land in an SEA is zoned open space, whereas privately owned land in an SEA will have open space, agricultural or very low-density designations. <ul style="list-style-type: none"> • SEA #24: a portion of the Tujunga Wash has been approved for a golf course. • Delete portions of SEA #28 along the east boundary because it is not included in the habitat protection project for the El Segundo Blue Butterfly. • Portions of SEA #29, Ballona Creek, are proposed or approved for restoration. • A large commercial-residential-recreation-industrial project is approved for a major portion of the area NE of SEA #29. • SEA #29 should be modified to include restoration areas and delete developed areas. • SEA #33 should be deleted because the Least Tern nesting site has been relocated to the outer harbor. • In SEA #35, the area north of Pacific Coast Highway should be deleted due to residential development. 	Existing SEAs #11 and #39 have been included within the proposed Santa Monica Mountains SEA. Existing SEAs #13, #14, and #21 have been consolidated into the proposed Santa Susana Mountains/Simi Hills SEA. SEAs #24, #33, #35, #37, and #40 are entirely outside lands within County jurisdiction. Existing SEAs #24, #33, #35, #37 and #40 were not studied due to location of these areas outside of the unincorporated jurisdiction. With exception to SEA #33, existing SEAs within city boundaries are retained as originally approved. SEA #33 (Terminal Island) can be deleted; in correspondence dated October 19, 1999, the City recommended that SEA #33 be relocated to new land created in the outer harbor area. According to the City, this recommendation was made by the U.S. Fish and Wildlife Service, and State Department of Fish and Game. Existing SEA #29, Ballona Creek, was not a part of the study, and it will be retained as originally approved. The analysis of this SEA is undergoing an independent review by a joint County/City of Los Angeles Local Coastal Program study. No changes are proposed to this SEA until an assessment of existing conditions has been completed by this study. Existing SEAs within city boundaries are not a part of the study and are being retained as originally approved. The analysis of this area is also pending an independent review by a joint County/City of Los Angeles Local Coastal Program study. No changes are proposed until an assessment of existing conditions has been completed. Existing SEA #28 will be retained as originally approved.

Los Angeles County SEA Update Study City & County Survey Questionnaire

Date Received:	Respondent:	Summary of Comments:	Response:
12-15-99	<p>City of Monrovia 415 South Ivy Avenue Monrovia, CA 91016-2888</p> <p>Contact: Robert A. Kastenbaum, Director of Community Development Craig Jimenez, Alice Griselle</p>	<p>City Council approved resolution 99-68 on 12-14-99, nominating the Monrovia Hillside an SEA. This area is located east of Arcadia's City limits, south of the Angeles National Forest and west of Monrovia Canyon Park. The site is approximately 957 acres in size.</p>	<p>The entire area nominated has been consolidated into the proposed San Gabriel Canyon SEA.</p>
02-16-99	<p>City of Rancho Palos Verdes 30940 Hawthorne Blvd. Rancho Palos Verdes, CA 90275-5391</p> <p>Contact: David Snow, Principal Planner</p>	<p>Request the final document note that the SEAs in the City (existing SEA #27 – Portuguese Bend Landslide, #31 – Rolling Hills Canyons, and #32 – Agua Amarga Canyon) do not fall under County regulatory guidelines. Slope regulations, open space hazard zoning, and overlay zones for natural areas are tools that Rancho Palos Verdes uses to protect biotic resources. However, special planning recognition is not directly attributed to SEA designations. In fact, several projects have been approved and two projects are currently pending within the SEAs. The City is currently preparing a Natural Communities Conservation Plan (NCCP).</p>	<p>These SEAs are located outside of the unincorporated area. Existing SEAs within city boundaries are not a part of the study and are being retained as originally approved.</p>
11-02-99	<p>City of Rolling Hills No. 2 Portuguese Bend Road Rolling Hills, CA 90274</p> <p>Contact: Lola Ungar</p>	<p>Preservation of natural habitat in the City is called out in the City's General Plan and reflected in its zoning ordinance. Deeply wooded hillsides and canyons or natural drainages that have also been designated as existing County SEAs are considered Open Space Resources and are defined as Canyon Open Space. Special conditions typically apply to such areas.</p>	<p>Existing SEAs within city boundaries are not a part of the study and are being retained as originally approved.</p>
11-29-99	<p>City of Santa Clarita Planning & Building Services 23920 Valencia Blvd., Ste. 300 Santa Clarita, CA 91355-2196</p> <p>Contact: Jeff Lambert, Director</p>	<p>Recommend approximately 3,800 acres in portions of Placerita, Whitney, Los Pinetos & Elsmere Canyons and Los Pinetos Spring be designated as an SEA.</p>	<p>The subject area is consolidated into the proposed Santa Clara River SEA.</p>
10-20-99	<p>City of South El Monte 1415 N. Santa Anita Avenue South El Monte, CA 91733</p> <p>Contact: Gary Dean Myrick, Director of Community Development</p>	<p>City is unaware of any biotic resources within their boundaries.</p>	<p>Reconfigured SEA #42 will no longer extend into the jurisdiction of South El Monte.</p>

Los Angeles County SEA Update Study City & County Survey Questionnaire

Date Received:	Respondent:	Summary of Comments:	Response:
11-18-99	City of Torrance Planning Department 3031 Torrance Blvd. Torrance, CA 90509-2970 Contact: Tony Gardea	SEA #36 (Madrona Marsh), is maintained as a natural preserve, which was dedicated to the City, but is now smaller than the original SEA due to the Park Del Amo planned development.	Existing SEA #36 is not within the unincorporated area and was not studied. SEAs within city boundaries are retained as originally approved.
12-16-99	City of Whittier 13230 Penn Street Whittier, CA 90602-1772 Contact: Thomas Mauk	Whittier City Council passed a resolution urging LA County to restore SEA #44 (Sycamore and Turnbull Canyons) to the original pre-1980 boundaries, incorporating Sycamore Canyon, Dark Canyon, & portions of Turnbull Canyon. Sent follow-up letter regarding SEA #44 and to support for the nominations submitted by Wildlife Corridor Conservation Authority (WCCA).	Consistent with development patterns over the past 20 years, existing SEA #44 has been expanded and consolidated into the proposed Puente Hills SEA. This also corresponds to the nomination submitted by WCCA.
11-04-99	Kern County Planning Department 2700 M Street, Suite 100 Bakersfield, CA 93301-2323 Contact: Steve Strait	Kern County does not have a land use designation or other form of program to identify, protect or monitor biological resources.	While Los Angeles County has no jurisdiction to designate SEAs in Kern County, connection with areas of biotic significance outside of Los Angeles County can be accomplished through the proposed San Andreas Rift Zone SEA.

APPENDIX C

SEA Update Study Notice

SEA Meeting Schedule

**Dept. of Regional Planning
Commission Hearing Room 150**
September 22nd from 2:00 to 5:00 pm
320 W. Temple Street, Los Angeles

Valencia Public Library*
September 23rd from 7:30 to 8:30 pm
23743 W. Valencia Blvd., Santa Clarita

**Las Virgenes Municipal*
Water District**
Board Hearing Room
September 29th from 6:30 to 8:30 pm
4243 Las Virgenes Road, Calabasas

Lancaster Regional Library*
October 12th from 7:00 to 8:00 pm
601 W. Lancaster Blvd., Lancaster

* Please note that these meetings will be preceded by workshops on updating the Housing and Safety Elements of the Los Angeles County General Plan. These meetings may still be in session at the time of your arrival.



**General Plan Section
Department of Regional Planning
320 W. Temple Street, 13th Floor
Los Angeles, CA 90012
(213) 974-6417**

G E N E R A L P L A N

The Los Angeles County Department of Regional Planning

**invites you to attend a Workshop to update the
Significant Ecological Areas (SEAs) in the County.
Your ideas and comments are welcomed!**

Si no entiende este aviso o necesita mas información por favor llame este numero (213) 974-6466

Significant Ecological Area Update Study

The Department of Regional Planning is undertaking a revision of the Los Angeles County General Plan. The General Plan Update devotes special consideration to areas with biologically significant plant or animal species. These Significant Ecological Areas (SEAs) are identified based on biological resources found in the area. Environmental preservation is the fundamental goal behind identifying SEAs. Increased urbanization in Los Angeles County makes the preservation of these resources an important priority. Careful designation of SEAs lead to better land use decisions that maintain a balance between environmental resources and new development.



Meeting Objectives

Due to the ever-changing nature of biological habitats, the County is conducting an SEA Study to update the status of existing SEA designated-sites and where appropriate to identify additional sites as deserving SEA status. These meetings will focus on identifying possible sites for further evaluation of biological significance and eligibility for SEA designation by the County's consultant team. Members of the public and government agencies are encouraged to attend and contribute their ideas and suggestions during the four SEA meetings being held in September and October. Your contribution is an important component to the success of the study.



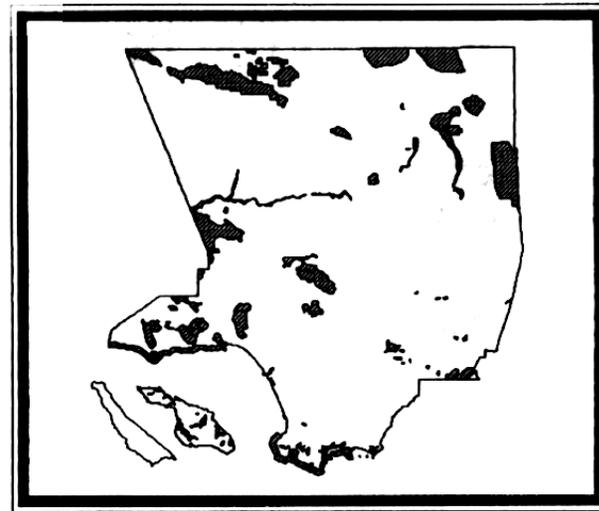
Criteria for SEA Designation

General Criteria for SEA designation include those areas that contain:

1. Biological resources, which are rare or unique to the area;
2. Habitat appropriate to endangered, threatened or otherwise protected species;
3. Undisturbed biological communities of plants or animal species;
4. A vital element necessary to another species' life-cycle, such as breeding, feeding or migratory locations, and are found in limited concentrations;
5. Species found in limited geographical areas, such as the Mojave Desert.
6. Habitat important to game species and fish communities; OR
7. Other special characteristics not mentioned above, but deserving of further study.

Special Accommodations

Individuals who require special accommodations or material in alternate format, please contact the ADA Coordinator, Mary Blair, at (213) 974-6488 (VOICE) or (213) 617-2292 (TDD), with at least 3 business days' notice prior to the scheduled workshop date.



Map of Existing SEAs

Response to Draft Elements

If you are unable to attend the workshops, you may obtain a copy of the draft materials handed out at the meetings by contacting staff at the below listed number. You may also view the drafts on the Department of Regional Planning's website located at www.planning.co.la.ca.us. We welcome your comments, which may be sent to the staff of the General Plan Development Section in any of the following forms:

Mail: Department of Regional Planning
General Plan Development Section
320 W. Temple Street
Los Angeles, CA 90012

Phone: (213) 974-6417

Fax: (213) 626-0434

Email: gmalone@planning.co.la.ca.us

For additional information, a copy of the draft documents, or to be placed on the General Plan mailing list, please contact the General Plan Staff by mail, phone, fax or email.

APPENDIX D

Public Meeting Materials



SIGNIFICANT ECOLOGICAL AREAS STUDY 1999-2000



Study Objectives

The Department of Regional Planning is undertaking a revision of the Los Angeles County General Plan. As part of this effort, the department is conducting a Significant Ecological Areas (SEAs) Study to update the status of existing SEA designated-sites and, where appropriate, to identify additional sites as deserving SEA status. The department has contracted with PCR, in association with Frank Hovore & Associates, and Forma (the PCR Project Team) to undertake such analysis, studies, field surveys, and research as is necessary to prepare a comprehensive reevaluation of Significant Ecological Areas (SEAs) within the unincorporated areas of Los Angeles County. This study will evaluate the continuing viability of existing designated SEAs, will update all pertinent information about the SEAs, and will recommend boundary adjustments as may be deemed necessary, considering changed circumstances due to public ownership changes, development activity, and environmental changes. The study shall also undertake a survey and analysis of selected areas for possible nomination for inclusion as SEAs in the General Plan.

The PCR Project Team will provide an overall product that assists the Department of Regional Planning in its land use regulatory role, specifically in the areas of natural/biological resource conservation and protection. This task will be accomplished through: the application of knowledge about individual SEAs gained through firsthand experience; the compilation of updated and reliable data; the formulation of clear policies for implementation; and, the development of baseline condition reports and a GIS-linked database. Ultimately, the study will be intended to be used as a tool to guide project applicants, Regional Planning staff, the SEA Technical Advisory Committee, and county decision-makers in sound stewardship of the biological resources within the county's SEAs.

A draft of the study will be released in the Spring of 2000, and the public will be given an opportunity to review and comment on this draft before a final version is completed. The study is expected to last one year from July 1999 to June 2000. Once completed, the Regional Planning staff will use the study to prepare amendments to the General Plan. Public hearings on these amendments will be heard before the Regional Planning Commission and the Board of Supervisors.

Geographic Coverage

Whereas the original SEA Study of 1976 nominated potential sites throughout the county, and included candidate areas that were completely within city jurisdictions, this study calls for a more circumscribed study area. The geographic focus of the study will be on areas wholly or partial within the unincorporated areas of the county. SEAs within the National Forest and public park lands will be studied only to the extent necessary to provide an

overview of the habitat area that is the subject of the SEA within privately-owned adjacent unincorporated areas.

The study will include the following existing SEAs as identified below: 19 sites that are wholly within the unincorporated area of the county, 22 sites that are partially within both a city and unincorporated area, multiple sites on Santa Catalina Island, Environmentally Sensitive Habitat Areas (ESHAs) associated with five SEAs and potential sites that may be nominated for SEA designation during the course of the study. Since SEAs vary considerably in size – from just a few acres to many square miles – the study will be further guided by the following criteria: first consideration will be given to those SEAs that are wholly within unincorporated areas; second consideration will be given to those SEAs that are predominately under private ownership as opposed to those that are predominately in open space or committed to a long term open space use; and thirdly, for those SEAs that are split between city and unincorporated areas, priority will be given to SEAs that are predominately within the unincorporated area. See accompanying maps for location of SEAs.

SEAs Wholly within Unincorporated Jurisdiction: (19 sites)

Predominately in Private Ownership: (11 sites)

4. Upper La Sierra Canyon
7. Hepatic Gulch
48. Big Rock Wash
53. Lovejoy Butte
54. Piute Butte
55. Desert Montane Transect
58. Portal Ridge/Liebre Mountain
59. Tehachapi Foothills
60. Joshua Tree Woodland Habitat
61. Kentucky Springs*
63. Lyon Canyon

Predominately committed to Open Space or Public Ownership: (8 sites)

8. Malibu Creek State Park Buffer Area
9. Cold Creek*
43. Rio Hondo College Wildlife Sanctuary
47. Edwards Air Force Base
50. Rosamond Lake
51. Saddleback Butte State Park
57. Fairmont and Antelope Buttes
64. Valley Oaks Savannah, Newhall

SEAs Partially within a City and County Jurisdiction: (30 sites)

* SEAs marked with an * were included in the 1991 SEA Study (Phase 1) prepared by Michael Brandman Associates. These SEAs need only to be analyzed if changes such as new species, a need for a boundary change, or significant development, etc., have occurred. SEAs located completely within the boundaries of incorporated cities are not a part of this study.

Predominately in Unincorporated Area and in Private Ownership: (7 sites)

10. Tuna Canyon*
14. Simi Hills
15. Tonner Canyon/Chino Hills*
19. San Francisquito Canyon*
20. Santa Susana Mountains
21. Santa Susana Pass
44. Sycamore and Turnbull Canyon

Predominately in City Area and in Private Ownership: (11 sites)

6. Las Virgenes*
12. Palo Comado Canyon
16. Buzzard Peak/San Jose Hills
17. Powder Canyon/Puente Hills
23. Santa Clara River
25. San Dimas Canyon
31. Rolling Hills Canyons
45. Dudleya Densiflora Population, Azusa*
49. Little Rock Wash
52. Alpine Butte
56. Ritter Ridge

Predominately in Unincorporated Area and committed to Open Space or Public Ownership: (3 sites)

3. Zuma Canyon
5. Malibu Canyon and Lagoon
42. Whittier Narrows Dam Recreation Area
Santa Catalina Island (multiple areas)

Predominately in City Area and in Public Ownership: (1 site)

35. Harbor Lake Regional Park

Environmentally Sensitive Habitat Areas (ESHAs) associated with the following SEAs:

3. Zuma Canyon (Zuma Canyon ESHA)
99. Zuma Canyon Buffer (Newton Canyon and Ramirez Canyon ESHAs)
4. Upper La Sierra Canyon (Upper La Sierra Canyon ESHA)
5. Malibu Canyon and Lagoon (Malibu Creek and Dark Canyon ESHAs)
9. Cold Creek (Cold Creek ESHA)
10. Tuna Canyon (Tuna Canyon and Pena Canyon ESHAs)

Potential SEA Candidates

SEAs marked with an * were included in the 1991 SEA Study (Phase 1) prepared by Michael Brandman Associates. These SEAs need only to be analyzed if changes such as new species, a need for a boundary change, or significant development, etc., have occurred. SEAs located completely within the boundaries of incorporated cities are not a part of this study.

Leo Carrillo State Park (Santa Monica Mountains)
Cruzan Mesa (north of Santa Clarita)
Bee Canyon (Canyon Country)
Barrel Springs (Palmdale area)
Buffer Areas (primarily watershed areas in Santa Monica Mountains)
And other areas that may be nominated and agreed to during course of contract

Release Date: September 21, 1999



SIGNIFICANT ECOLOGICAL AREA NOMINATING FORM 1999-2000



Prepared by the PCR Project Team

Please review the attached supporting materials before completing this form. Based on the 1999 update study criteria, nominate areas you or your group feel should be considered for the Significant Ecological Area designation in the Los Angeles County General Plan Update. Given the immensity of the reviewing task, we strongly suggest submitting a nomination form with as much detail as possible. This will allow for a more thorough review of each nomination area. Additional sheets may be attached if needed. Use a separate form for each nomination area.

1. **Location:** Briefly describe the general location of the nomination area.

2. **Boundaries:** Briefly describe the approximate boundaries of the candidate area and attach a United States Geological Service (USGS) quad map with the boundaries delineated.

3. **Size:** Estimate the approximate area of the nomination site.

4. **Owner (if known):**

5. **Current land uses:**

6. **Resources:** Describe the resources present in the nominating area which would warrant this area being designated as a significant ecological area. Indicate which criteria are met.

7. **References:** List any published or unpublished information sources for the areas as well as other persons knowledgeable about the area.

Thank you for your input.

Return your nominating material to:

George Malone
SEA Study Project Manager
Department of Regional Planning
320 West Temple Street
Los Angeles CA 90012

Optional:

Should we need to contact you about your submittal, please provide us with your name and address.

Name _____

Address _____

Phone _____

Questions regarding this form, the SEA Study, or the Los Angeles County General Plan Update Program may be answered by the General Plan Development Section staff at (213) 974-6417.

George Malone, Project Manager

Release Date: September 21, 1999

APPENDIX E

City and County Questionnaire Form

**DEPARTMENT OF REGIONAL PLANNING
SIGNIFICANT ECOLOGICAL AREAS
SURVEY QUESTIONNAIRE UPDATE**

I. Do you have biotic resources in the city that are protected by your city's general plan or zoning ordinance?

YES NO

If yes, what resources and how protected? _____

II. Do you provide special planning recognition to the biotic resources within the city that have been identified by the County as Significant Ecological Areas (SEAS)?

YES NO

III. What General Plan category and definition do you have for significant biotic resources in the City for a County designated SEA?

General Plan Designation _____
Description _____

IV. What Zoning designation do you use for significant biotic resources of SEA areas?

Zoning Designation _____
Description _____

V. Have any development projects been approved within County-designated Significant Ecological Areas located in your city since 1980?

YES NO

If yes, please provide information concerning the nature of the approved projects (i.e., location, acreage, type of approved development, etc.).

VI. Do you utilize any mechanism to regulate development within City or County-designated Significant Ecological Areas?

YES NO

If yes, please explain. _____

VII. Do you maintain updated information on the boundaries or biotic resources within Significant Ecological Areas located within your jurisdiction?

YES

NO

If yes, please explain what information you have available and if the County Planning Department may have access to this information.

VIII. List any projects within SEAs currently pending?

IX. What type of conditions, restrictions or development constraints are applied to projects proposed within SEA areas?

X. Do you have any other land use designations within the city that are used to designate biologic or ecologic resource areas?

If yes, please explain. _____

XI. Do you have any type of development monitoring program within the city?

If yes, please explain. _____

APPENDIX F

Comprehensive Study Sources

APPENDIX F: COMPREHENSIVE STUDY SOURCES

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APPENDIX G

SEA Nomination Table

Los Angeles County SEA Update Study

SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
12-15-99	Altadena Foothill Conservancy Planning 153 Jaxine Drive Altadena, CA 91001-3817 Contact: Lori Paul	Nominated a section of the Altadena Foothills in the San Gabriel Mountain foothill corridor, between Arroyo Seco and Hastings Canyon.	A field analysis determined that the Altadena Foothills do not contain biotic resources with significant regional resource values, as those found within the proposed San Gabriel Canyon and San Dimas Canyon/San Antonio Wash SEAs. This area, therefore, is not proposed as an SEA, but may be designated as “Open Space” in the Los Angeles County General Plan.
12-01-99	Ballona Ecosystem Education Project & Save All of Ballona 6038 75 th St. Los Angeles, CA 90045 Contact: Rex Frankel Spirit of the Sage Council 1122 Oak Street Santa Monica, CA 90405 Contact: Kathy Knight	Nominated an expansion of Ballona Creek SEA #29 to include 1,087-acre lowland and 44-acre undeveloped bluff, total acres – 1,130. Pictures, maps, articles and species information on file with DRP in room 1356.	Existing SEA #29, Ballona Creek, was not a part of the study, and it will be retained as originally approved. The analysis of this SEA is undergoing an independent review by a joint County/City of Los Angeles Local Coastal Program study. No changes are proposed to this SEA until an assessment of existing conditions has been completed by this study. Existing SEAs within city boundaries are not a part of the study and are being retained as originally approved. The analysis of this area is also pending an independent review by a joint County/City of Los Angeles Local Coastal Program study. No changes are proposed until an assessment of existing conditions has been completed.
12-07-99	Brown, David 5860 Belbert Circle Calabasas, CA 91302 Contact: David Brown	Nominated Solstice Canyon watershed	Solstice Canyon has been consolidated with the proposed Santa Monica Mountains SEA.
12-01-99	California Department of Parks and Recreation, Angeles Division 1925 Las Virgenes Road Calabasas, CA 91302 Contact: Russ Dingman, District Planner	The following areas were nominated: <ul style="list-style-type: none"> • Solstice Canyon watershed area, especially where Corral Canyon and Pacific Coast Highway cross the stream; • Watershed of Arroyo Sequit, approximately 4,500 acres (half of which is state or federal parkland); • Area that borders the northwest side of Malibu Creek State Park; • 32 acre inholding in Malibu Creek State Park; • Liberty Canyon Natural Preserve Area; • An area just east of Malibu Lake; • North slope of Castro Peak; • Bulldog Canyon watershed located along the west side of Malibu Creek State Park; • Expand the Malibu Creek State Park Buffer SEA/April Road; • Additions to the Cold Creek SEA bordering on the west side and the north and northeast sides of the SEA, including Calabasas Peak. 	All of the areas nominated have been consolidated with the proposed Santa Monica Mountains SEA.

Los Angeles County SEA Update Study

SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
12-15-99	<p>California Native Plant Society – Los Angeles/Santa Monica Mtns. Chapter 3908 Mandeville Canyon Road Los Angeles, CA 90049</p> <p>Contact: Betsey Landis, Vice President, Education</p>	<p>The following nominations were made for eight Regional SEAs, with boundaries that correspond with major watershed areas and natural drainage channels:</p> <ul style="list-style-type: none"> • The entire Santa Catalina Island, excluding Avalon, Two Harbors, the Airport, Wrigley Ranch, and some private holdings, which total approximately 42,400 acres; • Western Antelope Valley, Mojave Desert, Portal Ranch, Liebre Mtn., Angeles National Forest, and SEAs #57 (Fairmont and Antelope Buttes), #58 (Portal Ridge/Liebre Mountain), & #60 (Tehachapi Foothills); • Little Rock Wash, Big Rock Wash, eastern Mojave, and the northern San Gabriel Mtns. watershed. Located within this area are SEAs #47 (Edwards AFB), #48 (Big Rock Wash), #49 (Little Rock Wash), #50 (Rosamond Lake), #51 (Saddleback Butte State Park), #53 (Lovejoy Butte), #54 (Piute Butte), #55 (Desert – Montane Transect) and the Angeles National Forest; • Santa Clara River and its watersheds. Located within this area are SEAs #19 (San Francisquito Canyon), #20 (Santa Susana Mountains), #23 (Santa Clara River), #63 (Lyon Canyon), #64 (Valley Oaks Savannah) and the Angeles National Forest; 	<ul style="list-style-type: none"> • The entire Santa Catalina Island, excluding Avalon and other developed areas, has been proposed as an SEA. • The proposed San Andreas Rift Zone and Joshua Tree Woodland SEAs include existing SEAs #57, #58 and #60 and key biotic resources. Portions of the nomination were not included where field survey found no significant resources. The proposed SEAs do not include Amargosa Creek due to high levels of disturbance along its course through the cities of Palmdale, Quartz Hill, and Lancaster. • Existing SEAs #47, #48, #49, #50, #51, #53, #54, #55, and a substantial portion of the other areas nominated have been included in the proposed Antelope Valley SEA. The proposed SEA differs from the nomination in two ways: 1) Areas within the National Forest are recognized, but are outside the unincorporated jurisdiction. These areas are designated as “Open Space” on the Los Angeles County General Plan Land Use Policy Map and, 2) a northeasterly region was not included. • Existing SEAs #19 and #23 along with several other tributaries to the Santa Clara River have been included in the proposed Santa Clara River SEA. Existing SEAs #20, #63, and #64 have been included in the proposed Santa Susana Mountains/Simi Hills SEA. These proposed SEAs do not include large portions of the National Forest and the entire Santa Clara River watershed. Areas within the National Forest are recognized, but are outside the unincorporated jurisdiction; these areas are designated as “Open Space” on the Los Angeles County General Plan Land Use Policy Map. While this study advocates appropriate watershed management practices, a field survey determined that regionally significant biotic resources did not exist in a number of nominated areas.

Los Angeles County SEA Update Study

SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
12-15-99 (cont.)	California Native Plant Society –	<ul style="list-style-type: none"> • Santa Monica Mtns., Simi Hills and Baldwin Hills as a wildlife corridor; • Los Angeles River System. Located within the watershed area are SEAs #13 (Chatsworth Reservoir), #14 (Simi Hills), #20 (Santa Susana Mountains), #21 (Santa Susana Pass), #24 (Tujunga Valley – Hanson Dam), #33 (Terminal Island), #35 (Harbor Lake Regional Park), #37 (Griffith Park), #40 (Verdugo Mountains), #46 (Tujunga Spreading Grounds) and numerous canyons, creeks and other water channels; • San Gabriel Valley River System. Located within the watershed area are SEAs #15 (Tonner Canyon – Chino Hills), #16 (Buzzard Peak – San Jose Hills), #17 (Powder Canyon – Puente Hills), #22 (Santa Fe Dam Floodplain), #25 (San Dimas Canyon), #26 (San Antonio Cyn Mouth), #30 (Alamitos Bay), #41 (Rio Hondo Spreading Grounds), #42 (Whittier Narrows), #43 (Rio Hondo College), #44 (Sycamore – Turnbull Canyons), #45 (<i>Dudleya Densiflora</i> Population) and Frank G. Bonnelli County Park; 	<ul style="list-style-type: none"> • Undeveloped portions of the Santa Monica Mountains, including existing SEAs and connections to the Simi Hills have been proposed as a regional SEA. The Los Angeles County undeveloped portions of the Simi Hills are also included as part of the proposed Santa Susana Mountains/ Simi Hills SEA. Developed areas and/or areas outside of Los Angeles County jurisdiction are not included. These are found in the vicinity of Agoura, the western Santa Monica Mountains, and Baldwin Hills. • Existing SEAs #13, #14, #20 and #21 have been incorporated in the proposed Santa Susana Mountains/Simi Hills SEA. SEA #45 has been included in the proposed San Gabriel Canyon SEA. In these cases, proposed SEAs include much larger areas than the existing SEAs. Existing SEAs within city boundaries are not a part of the study and are being retained as originally approved. These include the following existing SEAs: #24, #33, #35, #37 and #40. The Tujunga Spreading grounds (#46), within the City of Los Angeles, was originally identified by the England and Nelson study in 1976 as a prospective SEA; subsequent analysis prior to adoption of the 1980 General Plan revision determined that biotic resources within this area were not significant. Consequently, this area is designated as “Open Space” on the Los Angeles County General Plan. The “Open Space” designation will be retained. Further, the Los Angeles River system is not proposed as part of an SEA due to its channelized condition within highly urbanized areas. • Existing SEAs #15, #16, #17, #25, #26, #42, #44, #45, and a substantial portion of other areas nominated have been incorporated into either the proposed Puente Hills SEA, the proposed East San Gabriel Valley SEA, the proposed San Gabriel Canyon SEA, or the proposed San Dimas Canyon/ San Antonio Wash SEA. In these cases, proposed SEAs include much larger areas than the existing SEAs. However, most of the remaining undeveloped portions of the nominated SEA are entirely outside lands within County jurisdiction including existing SEA #30. Existing SEAs within city boundaries are not a part of the study and are

Los Angeles County SEA Update Study

SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
12-15-99 (cont.)	California Native Plant Society –	<ul style="list-style-type: none"> • Palos Verdes Peninsula and coastline from the peninsula to El Segundo Dunes. Located in this watershed area are SEAs #27 (Portuguese Bend Landslide), #28 (El Segundo Dunes), #31 (Rolling Hills Canyons), #32 (Agua Amarga Canyon), and #34 (Palos Verdes Peninsula Coastline). <p>Specific comments pertaining to existing SEAs also included the following:</p> <ul style="list-style-type: none"> • Eliminate SEA #18 (Way Hill) and establish Frank G. Bonelli County Park as an SEA. • Retain SEA #36 (Madrona Marsh) 	<p>being retained as originally approved. The Rio Hondo Spreading Grounds (#46) within the City of Industry, was originally identified by the England and Nelson study in 1976 as a prospective SEA; subsequent analysis prior to adoption of the 1980 General Plan revision determined that biotic resources within this area were not significant. Consequently, this area is designated as “Open Space” on the Los Angeles County General Plan. The “Open Space” designation will be retained. Existing SEA #22 was not proposed due to isolation by surrounding development and lack of long-term sustainability. Based on field study, SEA #43 is isolated from the proposed Puente Hills SEA and does not contribute significantly to regional biological value. Therefore, SEA #43 is not proposed to be retained in this study. Finally, the San Gabriel River has been designated as “Open Space” in the Los Angeles County General Plan. The Open Space designation will be retained.</p> <ul style="list-style-type: none"> • None of the existing SEAs or other open space referenced are proposed as part of the update study due to either their location entirely outside of lands within County jurisdiction or the lack of significant biological resources. It is important to note, however, that existing SEAs within city boundaries are being retained as originally approved. • Existing SEA #18 is not proposed as part of this update study due to disturbance which has eliminated the population of <i>Dudleya multicaulis</i>, for which the SEA was originally designated. Frank G. Bonelli County Park has been consolidated into the proposed East San Gabriel Valley SEA. • SEA # 36 is located outside of the unincorporated jurisdiction. Existing SEAs within city boundaries are not a part of the study and are being retained as originally approved.
2-10-00	Diamond Bar East Partners 3480 Torrance Boulevard, Suite 300 Torrance, CA 90503 Contact: Kurt Nelson	Opposes the inclusion of two graded and developed properties in Diamond Bar within the area nominated by the Wildlife Corridor Conservation Authority.	The proposed Puente Hills SEA includes most of the open space remaining in the unincorporated portion of the Puente Hills and Chino Hills area; the SEA also includes natural areas of the Whittier Narrows Recreation and Flood Control Basin. Existing Seas #15, #42, and #44 are consolidated with the SEA with minor boundary modifications. The focus of this study

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			and the proposed SEAs is on regionally sustainable areas with regionally significant biotic resources.
12-15-99	Endangered Habitats League PMB 592, 8424-A Santa Monica Blvd. Los Angeles, CA 90069-4267 Contact: Dan Silver, Coordinator	Would like Los Angeles County to take a more forward-thinking and comprehensive approach to protecting natural habitats. Suggested Riverside County's Multiple Species Habitat Conservation Plan as a model.	In addition to maintaining biological diversity throughout the County, the SEA Update Study emphasized current approaches to conservation biology, including a multi-species approach, larger SEA designations, and the need for connectivity.
12-09-99	Environment Now 11777 San Vicente Blvd, Suite 555 Los Angeles, CA 90049 Contact: David Myerson, Park to Playa Coordinator	Nominated Baldwin Hills area located in West Los Angeles, south of Jefferson Blvd, west of La Brea Avenue, north of Slauson Avenue and east of Jefferson Blvd., which totals approximately 800 acres of open space. This area could be linked to the Ballona Creek SEA.	Baldwin Hills is a highly disturbed area that was included as a prospective SEA under the England and Nelson Study in 1976, based on likely restoration. Subsequent analysis, prior to adoption of the 1980 General Plan revision determined that biotic resources within this area were not significant. The area was designated in the Los Angeles County General Plan as "Open Space." Circumstances have not changed since 1980 and the area remains of limited significant biotic value. Designation as an SEA is, therefore, not proposed; the "Open Space" designation will be retained.
03-31-00	Friends of the Santa Clara River 660 Randy Drive Newbury Park, California 91320-3036 Contact: Ron Bottroff, Chair	Supports the California Native Plant Society nomination of a regional SEA including the slopes and drainages that comprise the watershed of the Santa Clara River in Los Angeles County.	See California Native Plant Society.
11-24-99	Garris, Judy 7402 Remmet Avenue Canoga Park, CA 91303 Contact: Judy Garris	Nominated the Santa Susana Mountains and the Simi Hills.	The undeveloped portions of the Santa Susana Mountains and the Simi Hills located within Los Angeles County are proposed as a single regional SEA.
11-15-99	Hacienda Heights Improvement Assoc. 1622 S. Adalia Avenue Hacienda Heights, CA 91745 Contact: Jeff Yann, Environmental Chair	Expressed support for a large SEA that encompasses the Puente/Chino Hills Wildlife Corridor (see submittal by the Puente/Chino Hills Wildlife Corridor Conservation Authority) and retention of SEAs #17 (Powder Canyon/Puente Hills) and #44 (Sycamore and Turnbull Canyons). Specifically nominated the addition of three areas adjacent to SEA #44: <ul style="list-style-type: none"> • Canyons south & west of Seventh & Orange Grove Avenues; • Canyons on the south slope of Oak Canyon; • Canyon on the west end of Vallecito to Workman Hill. 	SEAs #17 and #44 have been retained within a much larger area proposed as the Puente Hills SEA. The majority of the three nominated areas have been included as well.

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Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
11-22-99	Los Cerritos Wetlands Task Force 5710 East Seventh St., Suite 168 Long Beach, CA 90803 Contact: Don May, President	Relist the Los Cerritos Wetland as an SEA. This would be an 85-acre parcel, much smaller than the original 2,400 acre San Gabriel River Estuary. It is more accurately described as the Los Cerritos Tidal Salt Marsh located in the southeast corner of Long Beach. (submittal included a video tape)	This area was not considered for designation as a County SEA due to its location entirely within the City of Long Beach.
12-21-99	Monrovia Mountain Conservancy PO Box 522 Monrovia, CA 91017 Contact: Stephanie Granger Kurzweil, President	Supports the Monrovia mountains and foothills as a SEA.	Undeveloped portions of the Monrovia mountains and foothills have been incorporated into the proposed San Gabriel Canyon SEA.
12-20-99	National Audubon Society 6042 Monte Vista Street Los Angeles, CA 90042 Contact: Mike San Miguel	Nominated approximately 27 acres adjacent to the Santa Anita Wash, at the mouth of Santa Anita Canyon, in the City of Arcadia.	Whereas, the mouths of several other canyons exiting the San Gabriel Mountains have been proposed as SEAs, the nominated area was not due to its location within an active groundwater recharge facility. However, Santa Anita Canyon upstream of the Dam is proposed as part of the San Gabriel Canyon SEA.
11-30-99	Natural History Club of Acton/Agua Dulce PO Box 965 Acton, CA 93510 Contact: Stacey Nickels, President	Nominated the entire area of the Santa Clara River including a buffer from its headwaters in the San Gabriel Mountains, east of Acton, to the City of Santa Clarita limits, west of Agua Dulce. Also, include Vasquez Rocks County Park in the SEA.	The proposed Santa Clara River SEA includes the Santa Clara River, several tributary drainage areas, adjacent buffer area and Vasquez Rocks County Park.
3-15-00	Puente Hills Landfill Native Habitat Conservation Authority 1955 Workman Mill Road Whittier, CA 90601 Contract: Bob Henderson, Chair	Requested the active disposal area of the Puente Hills Landfill, as included in the area nominated by the Wildlife Corridor Conservation Authority, be removed from SEA consideration.	In drafting the boundaries of the proposed Puente Hills SEA, active disposal areas, as evident from recent aerial photography, were excluded from SEA consideration. Based on past approvals, certain areas are already approved for SEA status.
11-16-99	Resource Conservation District of the Santa Monica Mountains 122 North Topanga Canyon Blvd. Topanga, CA 90290 Contact: Rosi Dagit	Suggested that the most appropriate way to afford protection of region-wide resources would be to create a Santa Monica Mountains SEA which included all undeveloped lands that are not already under public ownership. Specifically, focused on the following areas: <ul style="list-style-type: none"> • Lower Topanga Canyon; • Upper areas of Old Topanga Canyon (sub-drainage); • Expand Tuna Canyon SEA (#10) to include all adjacent significant portions of the watershed and Little Las Flores Canyon. 	A Santa Monica Mountains SEA similar to the nominated is proposed, including existing SEA #3 (Zuma Canyon), #3A (Buffer), #3B (Buffer), #4 (Upper La Sierra Canyon), #5 (Malibu Canyon and Lagoon), #B5 (Buffer), #6 (Las Virgenes), #8 (Malibu Creek State Park Buffer Area), #9 (Cold Creek), #10 (Tuna Canyon), #11 (Temescal-Rustic-Sullivan Canyons), #12 (Palo Comado Canyon) and #39 (Encino Reservoir), and additional areas considered.

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SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
12-14-99	San Gabriel Mountains Regional Conservancy (SGMRC) PO Box 963 Glendora, CA 91740 Contact: Dr. Ann Croissant	Recommended that SEA designation take a more strategic regional approach pointing out the need to protect watershed and wildlife corridor areas. Example SEAs based on this approach include: <ul style="list-style-type: none"> • San Gabriel Foothills and Mountains • San Gabriel River and its tributaries • San Gabriel Valley ridgelines 	For the reasons suggested, the San Gabriel Mountain Foothills, the Puente Hills, and the East San Gabriel Valley SEAs are proposed. The analysis also determined that the San Gabriel River and its tributaries are channelized; under these circumstances an SEA designation is not appropriate, though the river can be designated as “Open Space” in the Los Angeles County General Plan.
11-14-99	Santa Monica Mountains Task Force / Sierra Club Angeles Chapter PO Box 344 Woodland Hills, CA 91365-0344 Contact: David Brown	Nominated the following areas: <ul style="list-style-type: none"> • Five acres along Malibu Creek State Park; • Area between Ventura Freeway & Liberty Canyon; • Area between Castro Park, Malibu Creek State Park, Malibu Lake Community, & Peter Strauss Ranch; • Solstice Canyon rises on Castro Park; • Watershed of Arroyo Sequit; • West border of Cold Creek SEA. 	All of the nominated areas have been consolidated into the proposed Santa Monica Mountains SEA.
12-02-99	Santa Susana Mountain Park Assoc. 5922 Corbin Avenue Tarzana, CA 91356 Dorian Keyser, Vice-President and Lands Committee Chair	Retain and expand SEAs #14 (Simi Hills) and #13 (Chatsworth Reservoir) to insure the inclusion of the Chatsworth Nature Preserve/Reservoir and portions of Simi Hills. Expand the Santa Susana Pass State Historic Park.	Existing SEAs #13 and #14 have been consolidated into the proposed Santa Susana Mountains/Simi Hills SEA.
12-13-99	SCOPE Santa Clarita Organization for Planning the Environment PO Box 1182 Santa Clarita, CA 91386 Contact: Michael Kotch	The following comments were provided: <ul style="list-style-type: none"> • Supports the Sierra Club’s nomination of the three adjacent watersheds in Elsmere, Whitney and Placerita Canyons east of the 14 Freeway as one SEA; • Request that an additional criterion be added to the program: aquifer re-charge areas; • Oppose any SEA reduction. 	<ul style="list-style-type: none"> • These canyons have been consolidated into the proposed Santa Clara River SEA. • An analysis of aquifer re-charge areas, as a distinct criterion, was beyond the scope of the SEA update study. It should be noted, however, that biological/ hydrological relationships were used in part to delineate the boundaries of the proposed Antelope Valley SEA. • As a general approach, consistent with current conservation planning practices, proposed SEAs include existing SEAs, as well as expanses of land in between these areas; consolidating areas situated between SEAs provides connectivity. Following this approach, the area of SEAs were significantly increased in size. Reduction of SEAs occurred only rarely in unincorporated Los Angeles County, where development or reduction of biotic resources failed to justify retainment of the SEA designation.

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SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
12-07-99	Scully, Marcia 6292 Hillside Lane Whittier, CA 90601-3832 Contact: Marcia Scully	All open space within the jurisdiction of the Whittier/ Puente Hills Conservation Authority, generally delineated by I-605 on the west, SR-60 on the north, Hacienda Boulevard on the east, and Whittier Boulevard on the south.	The majority of the open space within the nominated area has been included in the proposed Puente Hills SEA.
9- 21-99	Sierra Club – Santa Clarita Valley & SCV Canyons Preservation Committee 26617 Gavilan Drive Santa Clarita, CA 91350 Contact: Karen Pearson	Nominated: <ul style="list-style-type: none"> • Whitney Canyon • Elsmere Canyon • Placerita Canyon (combined, these areas total 4,390 acres).	These canyons have been consolidated into the proposed Santa Clara River SEA.
11-22-99	Sierra Club, Angeles Chapter Conservation Committee 3435 Wilshire Blvd., Ste. 320 Los Angeles, CA 90010-1904 Contact: Kevin Finny, Vice Chair	Sierra Club endorsed nominations included: <ul style="list-style-type: none"> • Puente / Chino Hills Wildlife Corridor (a 30 mile corridor extending to the Cleveland National Forest). The boundary would include Tonner Canyon to Whittier Narrows. • Elsmere Canyon, Whitney Canyon and Placerita Canyon, which would represent the last wildlife corridor between the Santa Susana and San Gabriel Mountains. This corridor would encompass the watersheds of Elsmere, Whitney and Placerita Canyons from Highway 14 to the Angeles National Forest boundary. • Eastern Desert SEA linking the desert Montane transect with Big Rock Wash, Butte Complex and Little Rock Wash to Edwards Airforce Base and Rosamond Lake. • Watershed area of Solstice Canyon and two tributary canyons. • California Buckeye Grove on the south slope of Oak Canyon in Hacienda Heights. • Western Desert SEA, which would link the San Francisquito watershed buffer with Portal Ridge to the Butte Complex and Joshua Tree Woodlands through northern drainages. 	<ul style="list-style-type: none"> • The proposed Puente Hills SEA embodies this nomination within Los Angeles County. • These canyons have been incorporated into the proposed Santa Clara River SEA. • The proposed Antelope Valley SEA embodies this nomination. • This area has been incorporated into the proposed Santa Monica Mountains SEA. • This area has been incorporated into the proposed Puente Hills SEA. • The proposed Santa Clara River SEA includes San Francisquito Creek until it is “cut-off” by development in Green Valley. The Portal Ridge/Butte complex is consolidated with the proposed San Andreas Rift Zone SEA. The consolidation of these areas provides a connection to the Angeles National Forest. The proposed Joshua Tree Woodland SEA is not linked due to intervening disturbances.

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SEA Nominations

Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
11-22-99 (cont.)	Sierra Club, Angeles Chapter Conservation Committee	<ul style="list-style-type: none"> • Increase SEA #64 (Valley Oak Savannah) to include the area along the freeway adjacent to Dale Poe Parkway. • Link a canyon extending from the end of Vallecito Drive in Hacienda Heights to Workman Hill with the adjacent Turnbull/Worsham Canyon SEA #44. • Broaden the Santa Clara River SEA to include watersheds Cruzan Mesa and Bouquet Canyon. • Arroyo Sequit in Leo Carillo State Park. • Three canyons southwest of Seventh and Orange Grove Avenues in Hacienda Heights. • Increase the size of the Ballona Wetlands SEA. • Simi Hills including linkages to Chatsworth Reservoir, Santa Susana Pass and Santa Susana Mountains. • Chatsworth Reservoir. • Soft bottom portions of the Los Angeles River, Sepulveda Dam and Glendale Narrows, including linkages to the Arroyo Seco through Mt. Washington. 	<ul style="list-style-type: none"> • The existing SEA and additional area have been incorporated into the proposed Santa Susana Mtns./Simi Hills SEA. • The proposed Puente Hills SEA includes this nomination. • The proposed Cruzan Mesa Vernal Pool SEA covers most of the Cruzan Mesa region. Bouquet Canyon was not considered due to disturbance by development. • This area has been consolidated into the proposed Santa Monica Mountains SEA. • These canyons have been included within the proposed Puente Hills SEA. • Existing SEA #29, Ballona Creek, was not a part of the study, and it will be retained as originally approved. The analysis of this SEA is undergoing an independent review by a joint County/City of Los Angeles Local Coastal Program study. No changes are proposed to this SEA until an assessment of existing conditions has been completed by this study. Existing SEAs within city boundaries are not a part of the study and are being retained as originally approved. The analysis of this area is also pending an independent review by a joint County/City of Los Angeles Local Coastal Program study. No changes are proposed until an assessment of existing conditions has been completed. • The nominated areas have been consolidated with the proposed Santa Susana Mountains/Simi Hills SEA. • The nominated area is outside of the unincorporated jurisdiction. However, the Chatsworth Reservoir has been consolidated with the proposed Santa Susana Mountains/Simi Hills SEA. • “Chatsworth Reservoir, the nomination area, is currently designated as SEA #13. While this SEA was not a part of the study, because it was outside the unincorporated area, proposed modifications to the boundaries of existing Simi Hills SEA #14 has resulted in linking of SEA #13 with the

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Date:	Respondent:	Comments/ Area(s) Nominated:	Response:
11-22-99 (cont.)	Sierra Club, Angeles Chapter Conservation Committee	<ul style="list-style-type: none"> • Least Tern nesting grounds at the mouth of the Los Angeles River. • Soft bottom portions of the San Gabriel River extending from Whittier Narrows to Angeles National Forest. • Worsham Canyon should be fully included within the boundary of SEA #44 (Sycamore – Turnbull Canyons). • Beaches and Dune remnants from Marina del Rey to the Palos Verdes Peninsula. • Add the Liberty Canyon Wildlife Corridor to the Las Virgenes SEA to link the Santa Monica Mountains to the Simi Hills and Santa Susana Mountains. • Recharge areas of the Santa Clara River that lie outside the current boundaries of SEA #23 (Santa Clara River). • Isolated habitats on Palos Verdes Peninsula. • Revise Malibu Creek State Park Buffer (SEA #8). 	<p>expanded and combined Santa Susana Mountains/Simi Hills SEA.</p> <ul style="list-style-type: none"> • This area has not been included in the update study due to its location entirely outside County jurisdiction. The nominated area is within the City of Los Angeles. In correspondence dated October 19, 1999, the City recommended that existing SEA #33 (Terminal Island) be relocated to new land created in the outer harbor area. According to the City, this recommendation was made by the U.S. Fish and Wildlife Service, and State Department of Fish and Game. • The analysis determined that the San Gabriel River and its tributaries are channelized; under these circumstances an SEA designation is not appropriate, though the river can be designated as “Open Space” in the Los Angeles County General Plan. • Worsham Canyon has been consolidated with the proposed Puente Hills SEA. • See California Native Plant Society. • The undeveloped portions of this area have been included within the proposed Santa Monica Mountains SEA. • Existing SEAs #19 and #23 along with several other tributaries to the Santa Clara River have been included in the proposed Santa Clara River SEA. Existing SEAs #20, #63, and #64 have been included in the proposed Santa Susana Mountains/Simi Hills SEA. These proposed SEAs do not include large portions of the National Forest and the entire Santa Clara River water-shed. While this study advocates appropriate watershed management practices, a field survey determined that significant biotic resources did not exist in a number of nominated areas. • See California Native Plant Society. • This area has been consolidated into the proposed Santa Monica Mountains SEA.

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11-22-99 (cont.)	Sierra Club, Angeles Chapter Conservation Committee	<ul style="list-style-type: none"> • Canyon that extends from Nicoya Drive in Hacienda Heights to Powder Canyon (SEA #17). • Wildlife Corridor extending from San Dimas Canyon and the San Antonio Canyon floodplain south through Bonnelli Park and Upper Tonner Canyon to interconnect with Puente/Chino Hills Corridor. • Add north side of Castro Peak to SEA #4 (Upper Sierra Cyn.) • Wildlife corridor extending along Mulholland Scenic Parkway to Hollywood Reservoir and Griffith Park. • San Martinez Grande Canyon watershed near Val Verde 	<ul style="list-style-type: none"> • The nominated area is included in the proposed Puente Hills SEA. • The proposed East San Gabriel Valley SEA serves this purpose. • This area has been consolidated into the proposed Santa Monica Mountains SEA. • The proposed Santa Monica Mountains SEA extends east to the Encino Reservoir/Temescal-Rustic-Sullivan Canyons area. Areas further to the east were not considered for SEA status due to existing development and numerous high traffic volume freeways. The remaining area was outside of the unincorporated jurisdiction. It is important to note, however, that existing SEAs within city boundaries are not a part of the study and are being retained as originally approved. • This proposed linkage was not included due to its location in the Newhall Ranch project area. Environmental review determined that linkages further to the west within Ventura County serve this purpose; the area within Ventura County, along the Santa Clara River, is also located closer to the National Forest, which is generally not developed.
07-01-99	United States Department of the Interior Bureau of Land Management: West Mojave Interagency Planning Team 2601 Barstow Road Barstow, CA 92311 Contact: Lawrence F. LaPre, PhD	Provided the following comments: <ul style="list-style-type: none"> • Recommend expansion of SEA #48 (Big Rock Wash); • Add 160 acres Northeast of SEA #51 (Saddleback Butte); • Adjust boundaries of SEA #54 (Piute Butte); • Link SEAs #57 (Fairmont – Antelope Buttes), #58 (Portal Ridge – Liebre Mtns.), and #60 (Joshua Tree Woodland); • Support SEAs #47 (Edwards AFB), #50 (Rosamond Lake), #52 (Alpine Butte), #53 (Lovejoy Butte), and #55 (Desert Montane Transect). 	Areas nominated for expansion and linkage are consolidated in the proposed Antelope Valley, San Andreas Rift Zone and Joshua Tree Woodland SEAs.

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07-25-99	<p>United States Department of the Interior, National Park Service - Santa Monica Mountains National Recreation Area 401 West Hillcrest Drive Thousand Oaks, CA 91360-4207</p> <p>Contacts: Arthur E. Eck, Superintendent Melanie Beck, Outdoor Recreational Planner</p>	<p>Nominated the Santa Monica Mountains as a full Mountain range, including all existing SEAs. Stressed the importance of north-south linkages to connect with the Simi Hills, east-west linkages through the Santa Monica Mountains, and additions to core habitat areas.</p>	<p>Essentially, the entire mountain range, including all existing SEAs, (#3 (Zuma Canyon), #4 (Upper La Sierra Canyon), #5 (Malibu Canyon and Lagoon), #6 (Las Virgenes), #7, #8 (Malibu Creed State Park Buffer Area), #9 (Cold Creek), #10 (Tuna Canyon), #11 (Temescal-Rustic-Sullivan Canyons), #12 (Palo Comado Canyon), and #39 (Encino Reservoir) as well as linkages with the Simi Hills have been consolidated into the proposed Santa Monica Mountains SEA. The proposed SEA also includes linkages to the Simi Hills across the Ventura County line.</p>
12-06-99	<p>Wampole, Barbara 28006 San Martinez Grande Road Saugus, CA 91384</p>	<p>Nominated a corridor linking the Santa Clara River to Los Padres and Angeles National Forest lands, west of the communities of Val Verde and Castaic.</p>	<p>This proposed linkage was not included due to its location in the Newhall Ranch project area. Environmental review determined that linkages further to the west within Ventura County serve this purpose; the area within Ventura County, along the Santa Clara River, is also located closer to the National Forest, which is generally not developed.</p>
12-20-99	<p>Wildlife Corridor Conservation Authority 2500 East Imperial Highway, #201-357 Brea, CA 92821</p> <p>Contact: Jennifer Schlotterbeck, Staff Analyst</p> <p>Additional information for the Whittier-Puente Hills SEA nomination</p>	<p>Nominated a Whittier-Puente Hills Wildlife Corridor (especially the areas between SEA #44 (Sycamore-Turnbull Canyons) and #17 (Powder Canyon)). The corridor encompasses existing open space within the Chino Hills & Puente Hills from the Cleveland National Forest in Orange County to the Whittier Narrows area in Los Angeles County.</p>	<p>As proposed, the Puente Hills SEA includes the majority of open space remaining in the county portion of the Puente Hills and Chino Hills and the natural areas of the Whittier Narrows Recreation Area and Flood Control Basin. Existing SEAs #15 (Tonner Canyon-Chino Hills), #17, #42 (Whittier Narrows), and #44 are included in this SEA with minor modifications to their boundaries.</p>
10-22-99	<p>Wilmington-Harbor City Harbor Lake Regional Park 221 South Figueroa Street Los Angeles, CA 90012</p> <p>Contact: Anne Howell</p>	<p>Requested retention of SEA #35 (Harbor Lake Regional Park) (possibly reduce to just the drainage channel).</p>	<p>The nominated area is within the City of Los Angeles. In correspondence dated October 19, 1999, the City noted that existing SEA #35 (Harbor Lake Regional Park) is zoned as OS (Open Space Publicly Owned) and is in park use. The city also recommended deleting the area northerly of Pacific Coast Highway, due to channelization for flood control purposes as well as existing residential development.</p>

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04-10-00	United States Department of Agriculture National Forest Service – Angeles National Forest 701 North Santa Anita Avenue Arcadia, CA 91006-2725 Contact: Susan R. Swinson, Acting Forest Supervisor	Expressed support of the regional SEA concept submitted by the California native Plant Society in December 1999.	See California Native Plant Society.
03-15-00	The Theodore Payne Foundation for Wildflowers and Native Plants, Inc. 10459 Tuxford Street Sun Valley, CA 91352 Contact: Michael Sorich, President of the Board of Directors	Expressed support of the regional SEA concept submitted by the California native Plant Society in December 1999.	See California Native Plant Society.
12-16-99	State of California, The Resources Agency – Santa Monica Mountains Conservancy 5750 Ramirez Canyon Road Malibu, CA 90265 Contact: Elizabeth A. Cheadle, Chairperson	Expressed support for the nominations submitted by the National Park Service, The Resource Conservation District of the Santa Monica Mountains, the Wildlife Corridor Conservation Authority, the City of Santa Clarita/Sierra Club Santa Clarita Chapter, and the Sierra Club—Angeles Chapter.	See National Park Service, the Resource Conservation District of the Santa Monica Mountains, the Wildlife Corridor Conservation Authority, the City of Santa Clarita/Sierra Club Santa Clarita Chapter, and the Sierra Club—Angeles Chapter.
02-10-00	Desert Tortoise Preserve Committee, Inc. 4067 Mission Inn Avenue Riverside, CA 92501 Contact: Michael J. Conner, Ph.D., Executive Director	Expressed support of the regional SEA concept submitted by the California Native Plant Society in December 1999. Specifically recommended SEA status for the designated critical habitat for the desert tortoise and Saddleback Butte State Park in the northeastern corner of the county.	See California Native Plant Society. In addition, a portion of the Critical Habitat Area is located in Saddleback Butte Park, which has been consolidated in the proposed Antelope Valley SEA. This study, nevertheless, recommends expansion of the proposed SEA boundaries to include the majority of the Desert Tortoise Critical Habitat Area within Los Angeles County.

APPENDIX H

Comprehensive Floral and Faunal Compendium

**APPENDIX H
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FLORAL COMPENDIUM

VASCULAR PLANTS—Gymnosperms		SIGNIFICANT ECOLOGICAL AREAS												
Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI	
Cupressaceae		Cypress Family												
* <i>Calocedrus decurrens</i>	incense cedar	X	X	X					X	X				
<i>Cupressus arizonica</i>	Arizona cypress		X											
<i>Juniperus californica</i>	California juniper	X	X	X	X			X						
Ephedraceae		Ephedra Family												
<i>Ephedra californica</i>	desert tea	X	X	X	X									
<i>Ephedra nevadensis</i>	Nevada tea	X	X	X	X		X							
<i>Ephedra viridis</i>	green ephedra	X	X	X	X		X							
Pinaceae		Pine Family												
<i>Abies concolor</i>	white fir		X											
<i>Pinus attenuata</i>	knobcone pine						X		X	X				
<i>Pinus contorta</i>	lodgepole pine												X	
* <i>Pinus coulteri</i>	coulter pine	X	X				X		X	X				
<i>Pinus jefferyi</i>	Jeffery pine	X	X						X	X				
<i>Pinus lambertiana</i>	sugar pine	X	X						X	X				
<i>Pinus monophylla</i>	single-leaf pinyon pine	X	X						X	X				

* = Non-native Species

AV=Antelope Valley
 CM=Cruzan Mesa Vernal Pools
 SD=San Dimas Canyon/San Antonio Wash

SA=San Andreas Rift Zone
 SS=Santa Susana Mtns/Simi Hills
 ES=East San Gabriel Valley

SC=Santa Clara River
 SM=Santa Monica Mountains
 PH=Puente Hills

JT=Joshua Tree Woodland
 SG=San Gabriel Canyon
 CI=Santa Catalina Island

VASCULAR PLANTS–Gymnosperms		SIGNIFICANT ECOLOGICAL AREAS											
Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI
<i>Pinus ponderosa</i>	ponderosa pine	X	X						X	X			
<i>Pinus sabiniana</i>	gray or foothill pine	X	X	X			X						
<i>Pseudotsuga macrocarpa</i>	bigcone spruce	X	X	X			X		X	X			

* = Non-native Species

AV=Antelope Valley

CM=Cruzan Mesa Vernal Pools

SD=San Dimas Canyon/San Antonio Wash

SA=San Andreas Rift Zone

SS=Santa Susana Mtns/Simi Hills

ES=East San Gabriel Valley

SC=Santa Clara River

SM=Santa Monica Mountains

PH=Puente Hills

JT=Joshua Tree Woodland

SG=San Gabriel Canyon

CI=Santa Catalina Island

VASCULAR PLANTS—Ferns and Fern Allies		SIGNIFICANT ECOLOGICAL AREAS											
Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI
Aspleniaceae	Spleenwort Family												
<i>Asplenium vespertinum</i>		X						X	X	X	X	X	
Azollaceae	Mosquito Fern Family												
<i>Azolla filiculoides</i>	duckweed fern	X	X	X	X	X	X	X	X	X	X	X	X
Blechnaceae	Deer Fern Family												
<i>Woodwardia fimbriata</i>	giant chain fern		X	X			X	X	X	X	X	X	X
Dennstaedtiaceae	Bracken Family												
<i>Pteridium aquilinum</i>	Bracken fern	X	X	X		X	X	X	X	X	X	X	X
Dryopteridaceae	Wood Fern Family												
<i>Cystopteris fragilis</i>	fragile fern		X	X			X	X	X	X	X	X	X
<i>Dryopteris arguta</i>	coastal wood fern	X	X	X			X	X	X	X	X	X	X
Equisetaceae	Horsetail Family												
<i>Equisetum hyemale</i>	common scouring-rush	X	X	X		X	X	X	X	X	X	X	X
<i>Equisetum laevigatum</i>	smooth scouring-rush	X	X	X			X	X	X	X	X	X	X
<i>Equisetum telmateia</i>	giant horsetail		X				X	X			X	X	X
Marsileaceae	Marsilea Family												
<i>Marsilea vestita</i>	hairy pepperwort		X				X	X	X	X	X	X	
<i>Pilularia americana</i>			X				X	X	X	X	X	X	

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Ophioglossaceae		Adder's-tongue Family											
<i>Botrychium crenulatum</i>	scalloped moonwort	X	X					X	X	X	X	X	X
<i>Ophioglossum californicum</i>	California adder's tongue							X	X	X	X	X	
Polypodiaceae		Polypody Family											
<i>Polypodium californicum</i>	California polypody	X	X	X		X	X	X	X	X	X	X	X
Pteridaceae		Brake Family											
<i>Adiantum capillus-veneris</i>	southern maiden-hair	X	X	X		X	X	X				X	X
<i>Adiantum jordanii</i>	California maidenhair	X	X	X		X	X	X	X	X	X	X	X
<i>Aspidotis californica</i>	California lace fern	X	X	X		X	X	X	X	X	X	X	X
<i>Cheilanthes clevelandii</i>	Cleveland's lip fern										X	X	
<i>Cheilanthes covillei</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Cheilanthes newberryi</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Notholaena californica</i>		X					X	X			X	X	X
<i>Pellaea andromedifolia</i>	coffee fern	X	X	X		X	X	X	X	X	X	X	X
<i>Pellaea mucronata</i>	birds-foot fern	X	X	X		X	X	X	X	X			
<i>Pentagramma triangularis</i>	goldenback fern		X	X			X	X	X	X	X	X	X
Selaginellaceae		Spike-Moss Family											
<i>Selaginella asprella</i>	bluish spike-moss	X	X										
<i>Selaginella bigelovii</i>	Bigelow's spike-moss	X	X	X				X	X	X	X	X	X

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Thelypteridaceae	Thelypteris Family												
<i>Thelypteris puberula</i>	Sonoran maiden fern							X	X	X	X	X	X

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VASCULAR PLANTS—Angiosperms (Dicotyledons)		SIGNIFICANT ECOLOGICAL AREAS											
Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI
Aceraceae		Maple Family											
<i>Acer macrophyllum</i>	big-leaf maple	X	X	X		X	X	X	X	X	X	X	X
<i>Acer negundo</i>	California box-elder	X	X	X			X	X	X	X	X	X	
Amaranthaceae		Amaranth Family											
* <i>Amaranthus albus</i>	tumbleweed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Amaranthus blitoides</i>	prostrate amaranth	X	X	X	X	X	X	X	X	X	X	X	X
<i>Amaranthus californicus</i>	California amaranth	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Amaranthus deflexus</i>	low amaranth	X	X	X	X	X	X	X	X	X	X	X	X
<i>Amaranthus fimbriatus</i>	fringed amaranth	X	X		X								
* <i>Amaranthus hybridus</i>	slender pigweed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Amaranthus palmeri</i>	Palmer's amaranth	X	X		X								
* <i>Amaranthus retroflexus</i>	rough pigweed	X	X	X	X	X	X	X	X	X	X	X	X
Anacardiaceae		Sumac or Cashew Family											
<i>Malosma laurina</i>	laurel sumac	X	X	X		X	X	X	X	X	X	X	X
<i>Rhus integrifolia</i>	lemonade berry	X	X	X		X	X	X	X	X	X	X	X
<i>Rhus ovata</i>	sugar bush	X	X	X		X	X	X	X	X	X	X	X
<i>Rhus trilobata</i>	skunkbrush (squawbush)	X	X	X		X	X	X	X	X	X	X	X
<i>Toxicodendron diversilobum</i>	poison oak	X	X	X		X	X	X	X	X	X	X	X

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Apiaceae	Carrot Family												
* <i>Anthriscus caucalis</i>	bur-chervil	X	X	X		X	X	X	X	X	X	X	X
<i>Apiastrum angustifolium</i>	wild celery	X	X	X		X	X	X	X	X	X	X	X
* <i>Apium graveolens</i>	celery	X	X	X	X	X	X	X	X	X	X	X	X
<i>Berula erecta</i>	cutleaf waterparsnip	X	X	X		X	X	X	X	X	X	X	X
<i>Bowlesia incana</i>	bowlesia	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Ciclospermum leptophyllum</i>	marsh-parsley	X	X	X		X	X	X	X	X	X	X	X
<i>Cicuta douglasii</i>	western water hemlock						X	X	X	X	X	X	X
* <i>Conium maculatum</i>	poison hemlock	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Coriandrum sativum</i>	coriander	X	X	X		X	X	X	X	X	X	X	X
<i>Cymopterus deserticola</i>	desert cymopterus	X	X		X								
* <i>Daucus pusillus</i>	rattlesnake weed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Eryngium aristulatum</i>	San Diego button-celery					X	X	X	X	X	X	X	X
* <i>Foeniculum vulgare</i>	fennel	X	X	X	X	X	X	X	X	X	X	X	X
<i>Heracleum lantanum</i>	cow parsnip	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Hydrocotyle moschata</i>							X	X					
<i>Hydrocotyle umbellata</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Lomatium californicum</i>		X	X	X			X	X					
<i>Lomatium dasycarpum</i>	woolly-fruited lomatium	X	X	X		X	X	X	X	X	X	X	X

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<i>Lomatium dissectum</i> var. <i>multifidum</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Lomatium insulare</i>	San Nicolas Island lomatium												X
<i>Lomatium lucidum</i>	shiny lomatium	X						X	X	X	X	X	
<i>Lomatium mohavense</i>	lomatium	X	X	X	X	X	X	X					
<i>Lomatium nevadense</i> var. <i>parishii</i>			X				X		X	X			
<i>Lomatium utriculatum</i>	common lomatium		X	X		X	X	X			X	X	X
<i>Oenanthe sarmentosa</i>	dropwort							X	X	X	X	X	X
<i>Oreonana vestita</i>	woolly mountain-parsley	X							X	X			
<i>Osmorhiza brachypoda</i>	California sweet Cicely (osmorhiza)	X	X	X		X	X	X	X	X			
<i>Perideridia gairdneri</i>	Gairdner's yampah							X	X	X			
<i>Perideridia parishii</i>	Parish yampah	X	X	X		X	X	X	X	X	X	X	X
<i>Perideridia pringlei</i>	adobe yampah	X	X	X		X		X					
<i>Sanicula arguta</i>	sharp-toothed sanicle							X					
<i>Sanicula bipinnata</i>	poison sanicle			X				X					
<i>Sanicula crassicaulis</i>	Pacific sanicle		X					X					
<i>Sanicula graveolens</i>			X										
<i>Sanicula maritima</i>	adobe sanicle								X	X			
<i>Sanicula tuberosa</i>	tuberous sanicle, snakeroot		X					X					
<i>Scandix pecten-veneris</i>	shepherd's needle		X					X					

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<i>Tauschia arguta</i>	southern tauschia		X				X	X					
<i>Tauschia hartwegii</i>			X					X					
<i>Tauschia parishii</i>			X										
<i>Torilis nodosa</i>								X					
<i>Yabea microcarpa</i>	California hedge parsley		X					X					X
Asclepiadaceae		Milkweed Family											
<i>Asclepias californica</i>	California milkweed		X	X			X	X				X	
<i>Asclepias eriocarpa</i>	Indian milkweed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Asclepias erosa</i>	desert milkweed	X	X	X		X	X	X	X	X	X	X	X
<i>Asclepias fascicularis</i>	narrow-leaf milkweed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Asclepias vestita</i>	woolly milkweed	X	X		X	X	X	X	X	X			
<i>Cynanchum utahense</i>	Utah vine milkweed	X	X		X								
<i>Matelea parvifolia</i>	spearleaf	X	X		X								
<i>Sarcostemma cynanchoides</i>	climbing milkweed	X	X		X								
Asteraceae		Sunflower Family											
<i>Acamptopappus sphaerocephalus</i>	goldenhead	X	X		X	X	X		X	X	X	X	
<i>Achillea millefolium</i>	California yarrow	X	X	X		X	X	X	X	X	X	X	X
<i>Achyrachaena mollis</i>	blow-wives	X	X	X		X	X	X	X	X	X	X	X
<i>Acourtia microcephala</i>	sacapellote	X	X	X		X	X	X	X	X	X	X	X

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* <i>Acroptilon repens</i>	Russian knapweed	X	X	X		X	X	X	X	X	X	X	X
* <i>Ageratina adenophora</i>	eupatory			X			X	X	X	X	X	X	X
<i>Agoseris grandiflora</i>	mountain dandelion	X	X	X		X	X	X	X	X	X	X	X
<i>Agoseris heterophylla</i>	agosseris	X	X	X		X	X	X	X	X	X	X	X
<i>Agoseris retrorsa</i>	spear-leaved agoseris	X	X	X		X	X	X	X	X	X	X	X
<i>Amblyopappus pusillus</i>								X					X
<i>Ambrosia acanthicarpa</i>	annual bur-sage	X	X	X	X	X	X	X	X	X	X	X	X
<i>Ambrosia chamissonis</i>	beach bur							X					X
<i>Ambrosia confertiflora</i>							X	X	X	X	X	X	
<i>Ambrosia dumosa</i>	burro-bush	X	X		X								
<i>Ambrosia psilostachya</i>	western ragweed (sandbur)	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Ancistrocarphus filagineus</i>		X	X	X	X	X	X		X	X	X	X	
<i>Anisocoma acaulis</i>	scalebud	X	X		X				X	X	X	X	
<i>Antennaria marginata</i>	white-margined everlasting								X	X			
* <i>Anthemis cotula</i>	mayweed	X	X	X		X	X	X	X	X	X	X	X
* <i>Artemisia biennis</i>	biennial sagewort	X	X	X		X	X	X	X	X	X	X	
<i>Artemisia californica</i>	California sagebrush	X	X	X		X	X	X	X	X	X	X	X
<i>Artemisia douglasiana</i>	mugwort	X	X	X		X	X	X	X	X	X	X	X
<i>Artemisia dracunculus</i>	tarragon	X	X	X		X	X	X	X	X	X	X	X

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<i>Artemisia palmeri</i>	Palmer sagewort							X	X	X	X	X	
<i>Artemisia spinescens</i>	budsage	X	X		X								
<i>Artemisia tridentata</i>	basin sagebrush	X	X					X	X	X	X	X	
<i>Aster frondosus</i>		X	X	X		X	X	X	X	X	X	X	
<i>Aster greatae</i>	Greata's aster	X	X	X			X		X	X			
<i>Aster lanceolatus hesperus</i>	aster							X	X	X	X	X	
<i>Aster subulatus</i>	broom aster	X	X	X		X	X	X	X	X	X	X	X
<i>Baccharis douglasii</i>	marsh baccharis							X	X	X	X	X	
<i>Baccharis emoryi</i>	Emory baccharis	X	X	X		X	X	X	X	X	X	X	
<i>Baccharis pilularis</i>	coyote brush						X	X			X	X	X
<i>Baccharis plummerae</i>	Plummer's baccharis		X	X		X	X	X	X	X	X	X	X
<i>Baccharis salicifolia</i>	mulefat	X	X	X		X	X	X	X	X	X	X	X
<i>Baccharis sarothroides</i>	broom baccharis	X	X		X						X	X	
<i>Baileya pleniradiata</i>	desert marigold	X	X		X								
<i>Balsamorhiza deltoidea</i>	deltoid balsam-root		X	X		X	X	X					
* <i>Bellis perennis</i>	English daisy	X	X	X		X	X	X	X	X	X	X	X
<i>Bidens frondosa</i>	stick tight	X	X	X		X	X	X	X	X	X	X	X
<i>Bidens laevis</i>	bur-marigold	X	X	X		X	X	X	X	X	X	X	X
* <i>Bidens pilosa</i>	beggar-ticks	X	X	X		X	X	X	X	X	X	X	X

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<i>Brickellia californica</i>	California brickellbush	X	X	X	X	X	X	X	X	X	X	X	X
<i>Brickellia desertorum</i>	desert brickellia	X	X		X								
<i>Brickellia microphylla</i>	little-leaved brickelbush	X	X	X		X	X	X	X	X	X		
<i>Brickellia nevinii</i>	Nevin's brickellbush	X	X	X	X	X	X	X	X	X	X		
<i>Calycadenia villosa</i>	dwarf calycadenia							X	X	X	X	X	
<i>Calycoseris parryi</i>	yellow tack stem	X	X						X	X	X	X	
* <i>Carduus pycnocephalus</i>	Italian thistle	X	X	X		X	X	X	X	X	X	X	X
* <i>Centaurea melitensis</i>	tochalote	X	X	X		X	X	X	X	X	X	X	X
* <i>Centaurea solstitialis</i>	yellow star-thistle	X	X	X		X	X	X	X	X	X	X	X
* <i>Chaenactis artemisiaefolia</i>	white pincushion										X	X	
<i>Chaenactis carphoclinia</i>	pebble pincushion flower	X	X										
<i>Chaenactis fremontii</i>	fremont pincushion flower	X	X		X				X	X	X	X	
<i>Chaenactis glabriuscula</i>	yellow pincushion	X	X	X	X	X	X	X	X	X	X	X	X
<i>Chaenactis macrantha</i>	large-flowered pincushion flower	X											
<i>Chaenactis parishii</i>	Parish's chaenaetis								X	X	X	X	
<i>Chaenactis santolinoides</i>	perennial pincushion flower	X	X	X		X	X	X	X	X			
<i>Chaenactis stevioides</i>	desert pincushion	X	X										
<i>Chaenactis xantiana</i>		X	X	X	X	X	X	X	X	X			
<i>Chamomilla occidentalis</i>	alkali pineapple weed	X						X			X	X	

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* <i>Chamomilla suaveolens</i>	pineapple weed		X	X				X	X	X	X	X	
* <i>Chrysanthemum coronarium</i>	garland daisy							X	X	X	X	X	
<i>Chrysothamnus nauseosus</i>	rubber rabbitbrush	X	X	X	X	X	X	X	X	X	X	X	
<i>Chrysothamnus teretifolius</i>		X	X	X	X	X	X	X	X	X			
* <i>Cichorium intybus</i>	chichory	X	X	X		X	X	X	X	X	X	X	X
<i>Cirsium occidentale</i>	thistle	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Cirsium vulgare</i>	bull thistle	X	X	X		X	X	X	X	X	X	X	X
* <i>Cnicus benedictus</i>	blessed thistle	X	X	X		X		X	X	X	X	X	
* <i>Conyza bonariensis</i>	flax-leaved horseweed	X	X	X		X	X	X	X	X	X	X	X
* <i>Conyza canadensis</i>	horseweed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Conyza coulteri</i>	Coulter's horseweed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Coreopsis bigelovii</i>	Bigelow's coreopsis	X	X	X	X	X	X	X	X	X			
<i>Coreopsis californica</i>	California coreopsis	X	X		X								
<i>Coreopsis calliopsidea</i>	leafy-stemmed coreopsis	X	X	X	X	X	X	X	X	X			
<i>Coreopsis gigantea</i>	sea dahlia							X	X	X	X	X	X
* <i>Cotula australis</i>	Australian brass-buttons							X	X	X	X	X	
* <i>Cotula coronopifolia</i>	brass-buttons							X	X	X	X	X	
* <i>Cynara cardunculus</i>	cardoon	X	X	X		X	X	X	X	X	X	X	X
<i>Dicoria canscens</i>	bugseed	X	X		X								

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VASCULAR PLANTS—Angiosperms (Dicotyledons)		SIGNIFICANT ECOLOGICAL AREAS											
Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI
<i>Dimorphotheca sinuata</i>	cape-marigold							X	X	X	X	X	
<i>Eclipta prostrata</i>	false daisy	X	X	X		X	X	X	X	X	X	X	X
<i>Encelia actoni</i>	Acton's encelia	X	X	X	X								
<i>Encelia californica</i>	California bush sunflower		X	X			X	X	X	X	X	X	X
<i>Encelia farinosa</i>	brittlebush										X	X	
<i>Encelia virginensis</i>	bush sunflower	X			X								
<i>Ericameria cooperi</i>		X	X		X								
<i>Ericameria cuneata</i>		X	X	X		X	X	X	X	X	X	X	
<i>Ericameria ericoides</i>	heather goldenbush							X			X	X	
<i>Ericameria linearifolia</i>	interior goldenbush	X	X	X	X	X	X	X					
<i>Ericameria palmeri</i>	Palmer's goldenbush							X	X	X		X	
<i>Ericameria parishii</i>	Parish's goldenbush			X			X		X	X		X	
<i>Ericameria pinifolia</i>	pinebush		X	X		X	X	X				X	
<i>Erigeron breweri</i>	San Jacinto Mountains daisy	X	X	X		X	X	X	X	X			
<i>Erigeron foliosus</i>	leafy fleabane	X	X	X		X	X	X	X	X	X	X	X
<i>Erigeron uncialis uncialis</i>	limestone daisy		X						X	X			
<i>Eriogonum giganteum</i>	San Clemente Island buckwheat												X
<i>Eriophyllum confertiflorum</i>	golden yarrow	X	X	X		X	X	X	X	X	X	X	X
<i>Eriophyllum lanatum halli</i>	Fort Tejon woolly sunflower	X	X	X	X	X	X	X	X	X	X	X	X

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<i>Eriophyllum mohavense</i>	Barstow woolly sunflower	X	X										
<i>Eriophyllum nevinii</i>	Nevin's woolly sunflower												X
<i>Eriophyllum pringlei</i>		X	X	X	X	X	X	X	X	X			
<i>Eriophyllum wallacei</i>		X	X	X	X	X	X		X	X			
<i>Euthamia occidentalis</i>	western goldenrod	X	X	X		X	X	X	X	X	X	X	X
<i>Filago arizonica</i>	Arizona filago							X	X	X	X	X	X
<i>Filago californica</i>	California fluffweed	X	X	X		X	X	X	X	X	X	X	X
<i>Filago depressa</i>		X	X					X	X	X	X	X	
* <i>Filago gallica</i>	narrow-leaved filago	X	X	X		X	X	X	X	X	X	X	X
<i>Galinsoga parviflora</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Gnaphalium bicolor</i>	bicolored cudweed							X	X	X	X	X	X
<i>Gnaphalium californicum</i>	California everlasting	X	X	X		X	X	X	X	X	X	X	X
<i>Gnaphalium canescens</i>	felty everlasting	X	X	X	X	X	X	X	X	X	X	X	X
<i>Gnaphalium leucocephalum</i>								X			X	X	X
* <i>Gnaphalium luteo-album</i>	white cudweed	X	X	X		X	X	X	X	X	X	X	X
<i>Gnaphalium palustre</i>	lowland cudweed	X	X	X		X	X	X	X	X	X	X	X
<i>Gnaphalium ramoisissimum</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Gnaphalium stramineum</i>	cotton-batting plant	X	X	X		X	X	X	X	X	X	X	X
<i>Grindelia camporum</i>	gum-plant	X	X	X		X	X	X	X	X	X	X	X

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<i>Grindelia hirsutula</i>	San Diego gum-plant	X	X	X		X	X	X	X	X	X	X	X
<i>Gutierrezia californica</i>	California matchweed	X	X	X		X	X	X	X	X	X	X	X
<i>Gutierrezia microcephala</i>	small-flowered matchweed	X	X					X	X	X	X	X	
<i>Gutierrezia sarothrae</i>	broom matchweed	X	X	X	X	X	X	X	X	X	X	X	
<i>Hazardia cana</i>	San Clemente Island hazardia												X
<i>Hazardia squarrosa</i>	saw-toothed goldenbush	X	X	X		X	X	X	X	X	X	X	X
* <i>Hedynois cretica</i>	crete hedynois							X	X	X	X	X	
<i>Helenium puberulum</i>	sneezeweed		X	X		X	X	X			X	X	
<i>Helianthus annuus</i>	common sunflower	X	X	X	X	X	X	X	X	X	X	X	X
<i>Helianthus californicus</i>								X	X	X	X	X	
<i>Helianthus gracilentus</i>	slender sunflower	X	X	X		X	X	X	X	X	X	X	X
<i>Helianthus nuttallii</i>	Los Angeles sunflower	X		X			X		X	X			
<i>Hemizonia clementia</i>	island tarplant												X
<i>Hemizonia fasciculata</i>	fascicled tarweed	X	X	X		X	X	X	X	X	X	X	X
<i>Hemizonia kelloggii</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Hemizonia minthornii</i>	Santa Susana tarplant						X	X					
<i>Hemizonia mohavensis</i>	Mohave tarplant								X	X			
<i>Hemizonia paniculata</i>	San Diego tarweed							X	X	X	X	X	
<i>Hemizonia parryi</i>	southern tarweed				X								X

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* <i>Hemizonia pungens</i>	common spikeweed	X	X	X		X	X	X	X	X	X	X	X
<i>Heterotheca grandiflora</i>	telegraph weed		X										
<i>Heterotheca sessiliflora</i>	hairy golden-aster	X	X	X		X	X	X	X	X	X	X	X
<i>Hieracium argutum</i>		X		X			X	X	X	X	X	X	
<i>Holocarpha heermannii</i>			X										
<i>Holocarpha virgata</i>	graceful tarplant							X	X	X	X	X	
<i>Hulsea heterochroma</i>			X								X		X
<i>Hulsea vestita</i>	beautiful hulsea	X	X	X			X	X	X	X		X	
<i>Hymenoclea salsola</i>	burrobrush	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Hypochaeris glabra</i>	smooth cat's-ear	X	X	X		X	X	X	X	X	X	X	X
<i>Hypochaeris radicata</i>	hairy cat's-ear							X					
<i>Isocoma acradenius</i>	alkali golden bush	X	X										
<i>Isocoma menziesii</i>	coastal goldenbush		X	X		X	X	X	X	X	X	X	X
<i>Iva axillaris</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Jaumea carnosa</i>	fleshy Jaumea							X					
* <i>Lactuca serriola</i>	prickly lettuce	X	X	X		X	X	X	X	X	X	X	X
<i>Lagophylla ramiosissima</i>	common hareleaf	X	X	X		X	X	X	X	X	X	X	X
<i>Lasthenia californica</i>	coast goldfields	X	X	X	X	X	X	X	X	X	X	X	X
<i>Lasthenia coronaria</i>		X	X					X	X	X	X	X	

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<i>Lasthenia glabrata</i>	Coulter goldfields	X	X	X		X	X	X	X	X	X	X	
<i>Layia glandulosa</i>	white layia	X	X	X		X	X	X	X	X	X	X	X
<i>Layia heterotricha</i>	pale-yellow layia		X										
<i>Layia platyglossa</i>	tidy-tips	X	X	X		X	X	X	X	X	X	X	X
<i>Lepidospartum squamatum</i>	scale-broom	X	X	X		X	X	X	X	X	X	X	X
<i>Lessingia filaginifolia</i>	California aster	X	X	X		X	X	X	X	X	X	X	X
* <i>Leucanthemum vulgare</i>	ox-eye daisy		X	X		X	X	X			X	X	
<i>Machaeranthera asteroides</i>	Laguna Mountains aster								X	X	X	X	
<i>Machaeranthera carnosia</i>	shrubby alkali aster	X	X		X								
<i>Madia elegans</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Madia exigua</i>	threadstem madia	X	X	X		X	X	X	X	X	X	X	X
<i>Madia gracilis</i>	slender tarweed	X	X	X		X	X	X	X	X	X	X	X
<i>Malacothrix californica</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Malacothrix coulteri</i>	snake's head	X	X	X		X	X	X			X	X	
<i>Malacothrix glabrata</i>	desert dandelion	X	X										
<i>Malacothrix incana</i>	dunedelion							X					
<i>Malacothrix saxatilis</i>	cliff aster	X	X	X		X	X	X	X	X	X	X	X
<i>Malacothrix sonchoides</i>	yellow saucers	X	X										
<i>Micropus californicus</i>	slender cottonweed	X	X	X		X	X	X	X	X	X	X	X

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<i>Microseris douglasii</i>	Douglas's microseris		X					X	X	X	X	X	X
<i>Microseris elegans</i>								X	X	X	X	X	X
<i>Monolopia lanceolata</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Monoloptilon bellidiforme</i>	mojave desert star	X	X		X								
<i>Nicolletia occidentalis</i>	hole-in-the-sand plant	X	X		X								
<i>Osmadenia tenella</i>	southern rosinweed	X	X	X		X	X	X	X	X	X	X	X
* <i>Osteospermum ecklonis</i>	training African daisy		X	X		X	X	X					
<i>Pentachaeta aurea</i>	golden daisy			X			X		X	X	X	X	
<i>Pentachaeta lyonii</i>	Lyon's pentachaeta							X					X
<i>Perityle emoryi</i>		X	X	X		X	X	X	X	X	X	X	X
* <i>Picris echioides</i>	bristly ox-tongue	X	X	X		X	X	X	X	X	X	X	X
<i>Pluchea odorata</i>	salt marsh fleabane	X	X	X		X	X	X	X	X	X	X	X
<i>Pluchea sericea</i>	arrow weed	X	X	X		X	X	X	X	X	X	X	X
<i>Porophyllym gracile</i>	odora	X	X										
<i>Prenanthes exiguua</i>	annual mitre	X	X		X								
<i>Psathrotes annua</i>	mealy rosettes	X	X		X								
<i>Psilocarphus brevissimus</i>	woolly marbles	X	X	X		X	X	X	X	X	X	X	X
<i>Psilocarphus tenellus</i>	slender woolly-heads	X	X	X		X	X	X	X	X	X	X	X
* <i>Pulicaria paludosa</i>	Spanish sunflower	X	X	X		X	X	X	X	X	X	X	X

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<i>Rafinesquia californica</i>	California chicory	X	X	X	X	X	X	X	X	X	X	X	X
<i>Rafinesquia neomexicana</i>	California chicory	X	X		X								
<i>Rigiopappus leptocladus</i>		X	X	X		X	X	X	X	X			
<i>Senecio aphanactis</i>	Rayless ragwort							X	X	X	X	X	X
<i>Senecio breweri</i>		X	X	X		X	X	X					
<i>Senecio californicus</i>	California butterweed	X	X	X		X	X	X	X	X	X	X	X
<i>Senecio flaccidus</i>	shrubby butterweed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Senecio ionophyllus</i>	Tehachapi ragwort	X	X	X			X		X	X			
<i>Senecio lyonii</i>	island ragwort												X
* <i>Senecio vulgaris</i>	common groundsel	X	X	X		X	X	X	X	X	X	X	X
* <i>Silybum marianum</i>	milk thistle							X	X	X	X	X	X
<i>Solidago californica</i>	California goldenrod	X	X	X		X	X	X	X	X	X	X	X
<i>Solidago confinis</i>	southern goldenrod	X	X	X		X	X	X	X	X	X	X	X
* <i>Soliva sessilis</i>		X	X	X		X	X	X	X	X	X	X	X
* <i>Sonchus asper</i>	prickly sow thistle	X	X	X		X	X	X	X	X	X	X	X
* <i>Sonchus oleraceus</i>	common sow thistle	X	X	X		X	X	X	X	X	X	X	X
<i>Stebbinsoseris heterocarpa</i>	brown microseris							X	X	X	X	X	X
<i>Stephanomeria cichoriacea</i>	Tejon milk-aster							X	X	X	X	X	X
<i>Stephanomeria diegensis</i>		X	X	X		X	X	X	X	X	X	X	X

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<i>Stephanomeria exigua</i>	small wreathplant	X	X	X		X	X	X	X	X	X	X	X
<i>Stephanomeria parryi</i>	rock pink	X	X		X								
<i>Stephanomeria pauciflora</i>	wire-lettuce	X	X	X	X	X	X	X	X	X	X	X	
<i>Stephanomeria virgata</i>	twiggy wreathplant	X	X	X	X	X	X	X	X	X	X	X	X
<i>Stylocline masonii</i>	Mason's neststraw		X										
<i>Stylocline micropoides</i>	desert nest straw	X											
<i>Stylocline psilocarphoides</i>	peck nest straw	X	X		X								
<i>Syntrichopappus fremontii</i>		X	X		X								
<i>Syntrichopappus lemmonii</i>	Lemmon's syntrichopappus	X	X	X		X	X	X	X	X			
<i>Tetradymia axillaris</i>	cotton-thorn	X	X		X								
<i>Tetradymia canescens</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Tetradymia comosa</i>	hairy horsebrush	X	X	X		X	X	X	X	X	X	X	
<i>Tetradymia glabrata</i>	desert horsebrush	X	X		X								
<i>Tetradymia stenolepis</i>	felt-thorn	X	X		X								
* <i>Tragopogon porrifolius</i>	salsify, oyster plant	X	X	X		X	X	X	X	X	X	X	X
* <i>Trichocoronis wrightii</i>	Wright's trichocoronis							X	X	X	X	X	
<i>Uropappus lindleyi</i>	silver puffs	X	X	X	X	X	X	X	X	X	X	X	X
<i>Venegasia carpesioides</i>	canyon-sunflower	X	X	X		X	X	X	X	X	X	X	X
* <i>Verbesina encelioides</i>	golden crownbeard							X	X	X	X	X	

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<i>Xanthium spinosum</i>	spiny cocklebur	X	X	X		X	X	X	X	X	X	X	X
* <i>Xanthium strumarium</i>	cocklebur	X	X	X	X	X	X	X	X	X	X	X	X
<i>Xylorhiza tortifolia</i>	mojave aster	X	X		X								
Bataceae	Saltwort Family												
<i>Batis maritima</i>	saltwort							X					
Berberidaceae	Barberry Family												
<i>Berberis fremontii</i>	Fremont barberry	X	X								X	X	
<i>Berberis nevinii</i>	Nevin's barberry	X	X	X		X	X	X	X	X	X	X	X
<i>Berberis pinnata</i>	Oregon grape	X	X	X		X	X	X	X	X	X	X	
Betulaceae	Birch Family												
<i>Alnus rhombifolia</i>	white alder	X	X	X			X	X	X	X	X	X	
Boraginaceae	Borage Family												
<i>Amsinckia menziesii</i>	fiddleneck	X	X	X		X	X	X	X	X	X	X	X
<i>Amsinckia tessellata</i>		X	X	X		X	X						
<i>Cryptantha angustifolia</i>	caterpillar forget-me-not	X	X		X								
<i>Cryptantha circumscissa</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Cryptantha clevelandii</i>								X	X	X	X	X	X
<i>Cryptantha decipiens</i>		X	X	X		X	X	X					
<i>Cryptantha dumetorum</i>	twining cryptantha	X	X	X									

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VASCULAR PLANTS—Angiosperms (Dicotyledons)		SIGNIFICANT ECOLOGICAL AREAS											
Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI
<i>Cryptantha holoptera</i>	winged cryptantha	X	X		X								
<i>Cryptantha intermedia</i>	common forget-me-not	X	X	X		X	X	X	X	X	X	X	X
<i>Cryptantha maritima</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Cryptantha micrantha</i>		X	X				X						
<i>Cryptantha micromeres</i>	minute-flowered cryptantha	X	X	X	X	X	X	X	X	X	X	X	X
<i>Cryptantha microstachys</i>	ribbed cryptantha		X				X	X					
<i>Cryptantha muricata</i>	prickly cryptantha	X	X	X	X	X	X	X	X	X	X	X	X
<i>Cryptantha nevadensis</i>		X	X				X						
<i>Cryptantha oxygona</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Cryptantha pterocarya</i>			X										
<i>Cryptantha simulanus</i>			X										
<i>Harpagonella palmeri</i>	Palmer's grappling hook		X										X
<i>Heliotropum curassavicum</i>	saltmarsh heliotrope	X	X	X	X	X	X	X	X	X	X	X	X
<i>Pectocarya heterocarpa</i>	odd fruited combbur	X											
<i>Pectocarya linearis</i>	slender pectocarya	X	X	X	X	X	X	X	X	X	X	X	X
<i>Pectocarya penicillata</i>	winged pectocarya	X	X	X	X	X	X	X	X	X	X	X	X
<i>Pectocarya platycarpa</i>	broad-margined combbur	X	X		X								
<i>Pectocarya recurvata</i>		X	X		X								
<i>Pectocarya setosa</i>		X	X	X	X	X	X	X	X	X	X	X	X

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<i>Plagiobothrys acanthocarpus</i>	adobe allocarya							X					
<i>Plagiobothrys arizonicus</i>		X	X	X		X	X		X	X			
<i>Plagiobothrys bracteatus</i>	vernal pool popcornflower	X	X	X		X	X	X	X	X	X	X	X
<i>Plagiobothrys canescens</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Plagiobothrys collinus</i>	California popcornflower	X	X	X	X	X	X	X	X	X	X	X	X
<i>Plagiobothrys jonesii</i>		X	X		X								
<i>Plagiobothrys nothofulvus</i>	popcornflower	X	X	X	X	X	X	X	X	X	X	X	X
<i>Tiquila nuttalliana</i>	annual coldenia	X	X										
<i>Tiquila plicata</i>	plaited coldenia	X	X										
Brassicaceae		Mustard Family											
<i>Arabis glabra</i>	tower mustard	X	X	X	X	X	X	X	X	X	X	X	X
<i>Arabis pulchra</i>		X	X										
<i>Arabis shockleyi</i>	Shockley's rock cress	X	X										
<i>Arabis sparsiflora</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Athysanus pusillus</i>	dwarf athysanus	X	X	X	X	X	X	X	X	X	X	X	X
<i>Barbarea orthoceras</i>	winter-cress	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Brassica nigra</i>	black mustard	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Brassica rapa</i>	field mustard	X	X	X	X	X	X	X	X	X	X	X	X
<i>Brassica tournefortii</i>	Sahara mustard	X	X	X	X	X	X	X	X	X	X	X	X

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	<i>Cakile maritima</i>							X					
*	<i>Capsella bursa-pastoris</i>	X	X	X	X	X	X	X	X	X	X	X	X
	<i>Cardamine californica</i>	X	X	X	X	X	X	X	X	X	X	X	X
	<i>Cardamine ogliosperma</i>	X	X	X		X	X	X	X	X	X	X	X
*	<i>Cardaria chalepensis</i>	X	X	X		X	X	X	X	X	X	X	X
	<i>Cardaria draba</i>	X	X	X		X	X	X	X	X	X	X	X
*	<i>Cardaria pubescens</i>	X	X	X	X	X	X	X	X	X	X	X	X
	<i>Caulanthus amplexicaulis</i>		X	X			X	X	X	X			
	<i>Caulanthus cooperi</i>	X	X	X	X								
	<i>Caulanthus heterophyllus</i>	X	X	X		X	X	X	X	X	X	X	X
	<i>Caulanthus inflatus</i>	X	X										
	<i>Coronopus didymus</i>	X	X	X	X	X	X	X	X	X	X	X	X
	<i>Descurainia pinnata</i>	X	X	X		X	X	X	X	X	X	X	X
*	<i>Descurainia sophia</i>	X	X	X	X	X	X	X	X	X	X	X	X
	<i>Dithyrea californica</i>	X	X		X								
	<i>Dithyrea maritima</i>							X					X
	<i>Draba cuneifolia</i>	X	X	X	X	X	X	X	X	X	X	X	X
	<i>Draba verna</i>	X	X	X	X	X	X	X	X	X	X	X	X
	<i>Erysimum capitatum</i>	X	X	X	X	X	X	X	X	X	X	X	X

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<i>Erysimum insulare</i>	wallflower							X					
<i>Guillenia lasiophylla</i>	California mustard	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Hirshfeldia incana</i>	short-podded mustard							X	X	X	X	X	
<i>Hutchinsia procumbens</i>	hutchinsia	X	X	X		X	X	X	X	X	X	X	X
<i>Lepidium flavum</i>	yellow pepper-grass	X	X		X								
<i>Lepidium fremontii</i>	desert alyssum	X	X		X								
<i>Lepidium lasiocarpum</i>	peppergrass	X	X	X	X	X	X	X	X	X	X	X	X
<i>Lepidium latifolium</i>	peppergrass							X					X
<i>Lepidium latipes</i>	dwarf peppergrass							X	X	X	X	X	
<i>Lepidium nitidum</i>	shining peppergrass	X	X	X	X	X	X	X	X	X	X	X	X
<i>Lepidium oblongum</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Lepidium perfoliatum</i>	shield-cress	X	X		X								
<i>Lepidium virginicum</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Lesquerella kingii</i>	San Bernardino Mountains bladderpod		X						X	X			
* <i>Lobularia maritima</i>	sweet-alyssum							X	X	X	X	X	
* <i>Matthiola incana</i>								X					
* <i>Raphanus raphanistrum</i>	jointed charlock	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Raphanus sativus</i>	radish	X	X	X	X	X	X	X	X	X	X	X	X
<i>Rorippa curvisiliqua</i>		X	X	X			X	X	X	X	X	X	X

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<i>Rorippa gambellii</i>	Gambel's water cress								X	X			
<i>Rorippa nasturtium-aquaticum</i>	water-cress							X	X	X	X	X	
<i>Rorippa palustris</i>	Pacific yellow cress	X	X	X			X	X	X	X	X	X	X
<i>Sibara filifolia</i>	Santa Cruz Island rock cress												X
* <i>Sinapsis arvensis</i>	charlock	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Sisymbrium altissimum</i>	tumble mustard	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Sisymbrium irio</i>	London rocket	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Sisymbrium officinale</i>	hedge mustard	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Sisymbrium orientale</i>	Oriental mustard	X	X	X	X	X	X	X	X	X	X	X	X
<i>Stanleya pinnata</i>	prince's plume	X	X	X	X	X	X	X	X	X			
<i>Streptanthella longirostris</i>	little twist flower	X	X		X								
<i>Streptanthus bernardinus</i>	Laguna Mountains jewelflower	X	X						X	X			
<i>Streptanthus campestris</i>	southern jewelflower	X	X						X	X			
<i>Thysanocarpus curvipes</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Thysanocarpus laciniatus</i>	narrow-leaved fringe pod	X	X	X	X	X	X	X	X	X	X	X	X
<i>Tropidocarpum gracile</i>	slender dobie-pod	X	X	X	X	X	X	X	X	X	X	X	X
Cactaceae		Cactus Family											
<i>Bergerocactus emoryi</i>	golden-spined cereus												X
<i>Echinocactus polycephalus</i>	cotton top cactus	X											

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<i>Escobaria vivipara</i>	foxtail cactus	X	X		X								
<i>Opuntia acanthocarpa</i>	buckhorn cholla	X	X		X								
<i>Opuntia basilaris</i>	beavertail cactus	X	X	X	X		X		X	X			
<i>Opuntia echinocarpa</i>	silver or golden cholla	X	X		X								
* <i>Opuntia ficus-indica</i>	Indian fig							X				X	X
<i>Opuntia littoralis</i>	coastal prickly pear							X	X	X	X	X	X
<i>Opuntia ×occidentalis</i>	western pricklypear							X	X	X	X	X	X
<i>Opuntia oricola</i>	pancake prickly pear		X	X			X	X	X	X	X	X	X
<i>Opuntia parryi</i>	cane cholla	X	X	X		X	X	X	X	X	X	X	
<i>Opuntia prolifera</i>	cholla		X	X		X	X	X	X	X	X	X	X
<i>Opuntia ramoisissima</i>	diamond cholla	X	X		X								
<i>Opuntia ×vaseyi</i>	mesa prickly pear							X	X	X	X	X	
Callitrichaceae		Water Starwort Family											
<i>Callitriche marginata</i>	California water-starwort	X	X	X		X	X	X	X	X	X	X	X
Campanulaceae		Bellflower Family											
<i>Githopsis diffusa</i>	bluecup	X	X	X		X	X	X	X	X			
<i>Lobelia dunnii</i>							X	X	X	X			
<i>Nemacladus glanduliferus</i>	thread-stem	X	X										
<i>Nemacladus gracilis</i>	slender nemacladus	X	X	X									

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<i>Nemacladus ramossisima</i>	Nuttall's nemacladus	X	X	X		X	X	X	X	X	X	X	
<i>Nemacladus sigmoideus</i>		X	X		X								
<i>Triodanis biflora</i>		X	X	X	X	X	X	X	X	X	X	X	X
Capparaceae		Caper Family											
<i>Cleomella obtusifolia</i>	Mohave stinkweed	X	X		X								
<i>Isomeris arborea</i>	bladderpod	X	X	X	X	X	X	X	X	X	X	X	X
<i>Wislizenia refracta</i>	jackass-clover	X	X		X								
Caprifoliaceae		Honeysuckle Family											
<i>Lonicera hispidula</i>	wild honeysuckle	X	X	X		X	X	X	X	X	X	X	X
<i>Lonicera interrupta</i>	chaparral honeysuckle	X	X	X		X	X	X	X	X	X	X	X
<i>Lonicera subspicata</i>	southern honeysuckle	X	X	X		X	X	X	X	X	X	X	X
<i>Sambucus mexicana</i>	Mexican elderberry	X	X	X		X	X	X	X	X	X	X	X
<i>Symphoricarpos albus</i>	snowberry	X	X	X			X	X	X	X	X	X	X
<i>Symphoricarpos mollis</i>	creeping snowberry	X	X	X			X	X	X	X	X	X	X
Caryophyllaceae		Pink Family											
<i>Arenaria macradenia</i>	desert sandwort		X						X	X			
<i>Cardionema ramosissimum</i>	sand mat							X					
* <i>Cerastium glomeratum</i>	mouse-ear chickweed	X	X	X		X	X	X	X	X	X	X	X
* <i>Herniaria hirsuta</i>								X			X	X	

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<i>Loeflingia squarrosa</i>	California loeflingia	X			X			X	X	X	X	X	
<i>Minuartia douglasii</i>	Douglas's sandwort	X	X	X		X	X	X	X	X	X	X	X
<i>Polycarpon depressum</i>								X			X	X	
* <i>Polycarpon tetraphyllum</i>	four-leaved allseed	X		X				X	X	X	X	X	
<i>Silene antirrhina</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Silene californica</i>			X	X		X	X	X					
* <i>Silene gallica</i>	common catchfly	X	X	X		X	X	X	X	X	X	X	X
<i>Silene laciniata</i>	fringed Indian pink	X	X	X		X	X	X	X	X	X	X	X
<i>Silene lemmonii</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Silene multinervia</i>	many-nerved catchfly	X	X	X		X	X	X	X	X	X	X	X
<i>Silene verecunda</i>		X	X	X		X	X	X	X	X	X	X	
* <i>Spergula arvensis</i>	stickwort							X	X	X	X	X	
<i>Spergularia atrosperma</i>	mat sand-spurrey										X	X	
* <i>Spergularia bocconii</i>	Boccone's sandspurrey							X	X	X	X	X	X
<i>Spergularia macrotheca</i>	alkali spurrey	X	X		X			X	X	X	X	X	X
<i>Spergularia marina</i>	saltmarsh sandspurrey	X	X		X			X	X	X	X	X	X
* <i>Spergularia villosa</i>	villous sand-spurrey												X
* <i>Stellaria media</i>	common chickweed							X	X	X	X	X	X
<i>Stellaria nitens</i>	shining chickweed	X	X	X		X	X	X	X	X	X	X	X

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Chenopodiaceae	Goosefoot Family												
<i>Allenrolfea occidentalis</i>	iodine bush	X	X										
<i>Aphanisma blitoides</i>	aphanisma							X					X
<i>Atriplex argentea</i>	silverscale	X	X								X	X	
<i>Atriplex californica</i>	California saltbush							X					X
<i>Atriplex canescens</i>	fourwing saltbush	X	X	X	X	X	X	X	X	X	X	X	
<i>Atriplex confertifolia</i>	shadscale	X	X										
<i>Atriplex coronata</i>	crownscale							X			X	X	
<i>Atriplex coulteri</i>	Coulter's saltbush							X					X
<i>Atriplex hymenelytra</i>	desert holly	X	X		X								
* <i>Atriplex lentiformis</i>	big saltbush	X	X	X	X	X	X	X	X	X	X	X	
<i>Atriplex leucophylla</i>								X					X
<i>Atriplex pacifica</i>	south coast saltbush							X					X
<i>Atriplex parishii</i>	Parish's brittle scale							X					
<i>Atriplex parryi</i>	Parry's saltbush	X	X										
<i>Atriplex phyllostegia</i>	arrowscale	X	X		X								
<i>Atriplex polycarpa</i>		X	X										
* <i>Atriplex rosea</i>	tumbling oracle	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Atriplex semibaccata</i>	Australian saltbush	X	X	X	X	X	X	X	X	X	X	X	X

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<i>Atriplex serenana</i>	bractscale	X	X					X					
<i>Atriplex spinifera</i>	spinescale	X	X										
<i>Atriplex triangularis</i>	spearscale							X					X
<i>Atriplex watsonii</i>								X					X
* <i>Bassia hyssopifolia</i>	five-hooked bassia	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Beta vulgaris</i>	beet							X			X	X	X
* <i>Chenopodium album</i>	lamb's quarters	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Chenopodium ambrosioides</i>	Mexican tea	X	X	X		X	X	X	X	X	X	X	X
<i>Chenopodium berlandieri</i>	pitseed goosefoot	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Chenopodium botrys</i>	Jerusalem oak	X	X	X	X	X	X	X	X	X	X	X	X
<i>Chenopodium californicum</i>	California goosefoot	X	X	X	X	X	X	X	X	X	X	X	X
<i>Chenopodium fremontii</i>		X	X				X	X					
<i>Chenopodium incognitum</i>		X	X				X	X					
* <i>Chenopodium macrospermum</i>	goosefoot							X					
* <i>Chenopodium multifidum</i>	cut-leaved goosefoot							X				X	
* <i>Chenopodium murale</i>	nettle-leaved goosefoot	X	X	X	X	X	X	X	X	X	X	X	X
<i>Chenopodium pratericola</i>			X	X		X	X	X					
* <i>Chenopodium pumilio</i>		X	X	X		X	X	X	X	X	X	X	
* <i>Chenopodium rubrum</i>			X					X					

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VASCULAR PLANTS—Angiosperms (Dicotyledons)		SIGNIFICANT ECOLOGICAL AREAS											
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* <i>Chenopodium strictum</i>								X			X	X	
<i>Grayia spinosa</i>			X				X	X					
* <i>Halogeton glomeratus</i>	halogeton	X	X		X								
<i>Kochia californica</i>	Mojave red sage	X	X										
* <i>Kochia scoparia</i>	kochia	X	X		X			X			X	X	
<i>Krascheninnikovia lanata</i>		X	X				X	X					
<i>Monolepis nuttalliana</i>	patata	X	X	X	X	X	X	X	X	X	X	X	X
<i>Nitrophila occidentalis</i>	alkali weed	X	X					X			X	X	
<i>Salicornia bigevolii</i>								X					
<i>Salicornia europaea</i>			X					X					
<i>Salicornia subterminalis</i>		X	X					X					X
<i>Salicornia virginica</i>	common pickleweed							X					X
* <i>Salsola tragus</i>	Russian thistle	X	X	X	X	X	X	X	X	X	X	X	X
<i>Sarcobatus vermiculatus</i>	greasewood	X	X		X								
<i>Suaeda calceoliformis</i>	horned sea-blite	X	X	X		X		X			X	X	
<i>Suaeda californica</i>	California sea-blite							X					
<i>Suaeda esteroa</i>	estuary seablite							X					
<i>Suaeda moquinii</i>	bush seepweed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Suaeda taxifolia</i>	woolly sea-blite							X					X

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Cistaceae		Rock-Rose Family											
* <i>Cistus ladanifer</i>	gum cistus		X						X	X			
<i>Helianthemum greenei</i>	island rush-rose												X
<i>Helianthemum scoparium</i>	peak rush-rose		X				X						
Convolvulaceae		Morning-Glory Family											
<i>Calystegia longipes</i>		X	X		X								
<i>Calystegia macrostegia</i>	chaparral morning glory							X	X	X	X	X	X
<i>Calystegia malacophylla</i>			X	X		X	X	X					
<i>Calystegia occidentalis</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Calystegia peirsonii</i>	Peirson's morning glory	X	X	X									
<i>Calystegia purpurata</i>								X					
<i>Calystegia soldanella</i>	Beach morning glory							X					
* <i>Convolvulus arvensis</i>	bindweed	X	X	X			X	X	X	X	X	X	
<i>Convolvulus simulans</i>	small-flowered morning glory	X	X	X		X	X	X	X	X	X	X	X
<i>Cressa truxillensis</i>	alkali weed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Dichondra occidentalis</i>	western dichondra							X			X	X	X
* <i>Ipomoea purpurea</i>	common morning-glory	X	X	X		X	X	X	X	X	X	X	X
Cornaceae		Dogwood Family											
<i>Cornus glabrata</i>	brown dogwood	X	X	X		X	X	X	X	X	X	X	X

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Crassulaceae	Stonecrop Family												
<i>Crassula aquatica</i>	vernal pool pygmy-weed	X	X	X		X		X			X	X	X
<i>Crassula connata</i>	pygmy-weed	X	X	X		X	X	X	X	X	X	X	X
<i>Dudleya abramsii</i>	conejo dudleya	X	X	X			X	X	X	X	X	X	X
<i>Dudleya blochmaniae</i>								X					
<i>Dudleya caespitosa</i>								X					
<i>Dudleya cymosa</i>		X	X	X			X	X	X	X	X	X	
<i>Dudleya densiflora</i>	San Gabriel Mountains dudleya	X		X					X	X			
<i>Dudleya edulis</i>								X			X	X	
<i>Dudleya greenei</i>	Greene's dudleya							X					
<i>Dudleya hassei</i>	Catalina Island dudleya												X
<i>Dudleya lanceolata</i>	lance-leaved dudleya	X	X	X			X	X	X	X	X	X	
<i>Dudleya multicaulis</i>	many stemmed dudleya						X	X	X	X	X	X	
<i>Dudleya pulverulenta</i>	chalk dudleya	X	X	X		X	X	X	X	X	X	X	
<i>Dudleya saxosa</i>	panamint dudleya										X	X	
<i>Dudleya verityi</i>	Verity's dudleya							X					
<i>Dudleya virens</i>	bright green dudleya							X					X
<i>Sedum spathulifolium</i>		X	X				X	X	X	X			

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Crossomataceae	Crossosoma Family												
<i>Crossosoma californicum</i>	Catalina crossosoma												X
Cucurbitaceae	Gourd Family												
<i>Cucurbita foetidissima</i>	calabazilla	X	X	X	X	X	X	X	X	X	X	X	X
<i>Cucurbita palmata</i>	coyote melon	X	X	X	X	X	X	X	X	X	X	X	X
<i>Marah fabaceus</i>	California man-root	X	X	X		X	X	X	X	X	X	X	X
<i>Marah horridus</i>			X										
<i>Marah macrocarpus</i>	wild cucumber	X	X	X		X	X	X	X	X	X	X	X
Cuscutaceae	Dodder Family												
<i>Cuscuta californica</i>	California dodder	X	X	X		X	X	X	X	X	X	X	X
<i>Cuscuta pentagona</i>								X	X	X	X	X	
<i>Cuscuta salina</i>								X					
Datisceae	Datisca Family												
<i>Datisca glomerata</i>	durango root	X	X	X		X	X	X	X	X	X	X	X
Elatinaceae	Waterwort Family												
<i>Elatine brachysperma</i>	yerba fango	X	X	X	X	X	X	X	X	X	X	X	X
<i>Elatine chilensis</i>											X	X	
Ericaceae	Heath Family												
<i>Arctostaphylos catalinae</i>	Santa Catalina Island manzanita												X

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<i>Arctostaphylos gabrielensis</i>	San Gabriel manzanita	X		X					X	X			
<i>Arctostaphylos glandulosa</i>	Eastwood's manzanita	X	X	X		X	X	X	X	X	X	X	X
<i>Arctostaphylos glauca</i>	bigberry manzanita	X	X	X		X	X	X	X	X	X	X	
<i>Arctostaphylos parryana</i>		X	X	X		X	X		X	X			
<i>Comarostaphylis diversifolia</i>	summer holly							X					
<i>Xylococcus bicolor</i>	mission manzanita							X	X	X	X	X	X
Euphorbiaceae		Spurge Family											
<i>Chamaesyce albomarginata</i>	rattlesnake weed	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Chamaesyce maculata</i>	spotted spurge	X	X	X		X	X	X	X	X	X	X	X
<i>Chamaesyce melanadenia</i>	squaw spurge	X	X	X		X	X	X	X	X	X	X	X
<i>Chamaesyce micromeria</i>	sonoran sandmat	X	X		X								
<i>Chamaesyce ocellata</i>	yellow sandmat	X	X	X	X	X	X	X	X	X	X	X	X
<i>Chamaesyce polycarpa</i>	golondrina	X	X	X	X	X	X	X	X	X	X	X	X
<i>Chamaesyce serpyllifolia</i>	thyme-leafed spurge	X	X	X	X	X	X	X	X	X	X	X	X
<i>Croton californicus</i>	California croton	X	X		X			X	X	X	X	X	
<i>Ditaxis californica</i>	California ditaxis	X	X		X								
<i>Eremocarpus setigerus</i>	dove weed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Euphorbia crenulata</i>	Chinese caps	X	X	X		X	X	X	X	X	X	X	X
<i>Euphorbia misera</i>	cliff spurge							X					X

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* <i>Euphorbia peplus</i>	petty spurge	X	X	X		X	X	X	X	X	X	X	X
<i>Euphorbia spathulata</i>	reticulate-seeded spurge	X	X	X		X	X	X	X	X	X	X	X
* <i>Ricinus communis</i>	castor bean			X			X	X	X	X	X	X	
<i>Stillingia linearifolia</i>	linear-leaved stillingia	X	X	X	X	X	X	X	X	X	X	X	X
<i>Stillingia paucidentata</i>	toothleaf	X	X		X								
Fabaceae		Legume Family											
<i>Amorpha californica</i>	California false indigo	X	X	X		X	X	X	X	X			
<i>Amorpha fruticosa</i>	western false indigo							X			X	X	
<i>Astragalus acutirostris</i>	keel beak	X	X		X								
<i>Astragalus bicristatus</i>	crested milkvetch	X		X					X	X			
<i>Astragalus brauntonii</i>	Braunton's milkvetch							X	X	X	X	X	
<i>Astragalus didymocarpus</i>	two-seeded milkvetch	X	X	X	X	X	X	X	X	X	X	X	X
<i>Astragalus douglasii</i>	Jacumba milkvetch	X	X	X		X	X	X	X	X	X	X	X
<i>Astragalus gambelianus</i>	Gambell's dwarf locoweed	X	X	X		X	X	X	X	X	X	X	X
<i>Astragalus layneae</i>	layne milkvetch	X	X		X								
<i>Astragalus lentiginosus</i>	freckled milkvetch	X	X	X	X	X	X	X	X	X	X	X	X
<i>Astragalus leucolobus</i>	Bear Valley woollypod								X	X			
<i>Astragalus pachypus</i>	Jaeger's milkvetch	X	X	X	X	X	X	X	X	X	X	X	X
<i>Astragalus pomonensis</i>	Pomona rattleweed							X	X	X	X	X	

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<i>Astragalus tener</i>	coastal dunes milkvetch							X					
<i>Astragalus trichopodus</i>	Santa Barbara locoweed	X	X	X		X	X	X	X	X	X	X	X
<i>Astragalus preussii</i>	Lancaster milkvetch	X	X		X								
<i>Astragalus purshii</i>		X	X		X								
<i>Astragalus pycnostachyus</i>	Ventura marsh milkvetch							X					
<i>Glycyrrhiza lepidota</i>	wild licorice	X	X	X	X	X	X	X	X	X	X	X	X
<i>Hoita macrostachya</i>	leather root	X	X	X		X	X	X	X	X	X	X	X
<i>Hoita orbicularis</i>	round-leaved psoralea	X	X	X		X	X	X	X	X	X	X	X
* <i>Lathyrus latifolius</i>	perennial sweet pea	X	X	X		X	X	X	X	X	X	X	X
<i>Lathyrus splendens</i>	pride of California							X			X	X	
<i>Lathyrus vestitus</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Lotus argophyllus</i>		X		X		X	X	X	X	X	X	X	X
* <i>Lotus corniculatus</i>	birdfoot trefoil	X	X	X		X	X	X	X	X	X	X	X
<i>Lotus crassifolius</i>		X	X	X		X	X	X	X	X	X	X	
<i>Lotus dendroideus</i>	island broom												X
<i>Lotus grandiflorus</i>	large-flowered lotus	X	X	X		X	X	X	X	X	X	X	
<i>Lotus hamatus</i>	San Diego lotus							X	X	X	X	X	X
<i>Lotus heermannii</i>	woolly lotus							X	X	X	X	X	
<i>Lotus humistratus</i>	hill (short podded) lotus	X	X	X	X	X	X	X	X	X	X	X	X

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<i>Lotus micranthus</i>								X	X	X	X	X	
<i>Lotus oblongifolius</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Lotus procumbens</i>	low silver lotus	X	X	X	X	X	X	X	X	X	X	X	
<i>Lotus purshianus</i>	Spanish clover	X	X	X	X	X	X	X	X	X	X	X	X
<i>Lotus salsuginosus</i>	coastal lotus	X	X	X	X	X	X	X	X	X	X	X	
<i>Lotus scoparius</i>	deerweed	X	X	X		X	X	X	X	X	X	X	X
<i>Lotus strigosus</i>	strigose lotus	X	X	X	X	X	X	X	X	X	X	X	X
<i>Lotus wrangelianus</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Lupinus albifrons</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Lupinus andersonii</i>			X	X		X	X						
<i>Lupinus benthamii</i>	spider lupine		X										
<i>Lupinus bicolor</i>	miniature lupine	X	X	X		X	X	X	X	X	X	X	X
<i>Lupinus chamissonis</i>								X					
<i>Lupinus concinnus</i>	bajada lupine	X	X	X	X	X	X	X	X	X	X	X	X
<i>Lupinus excubitus</i>	grape soda lupine	X	X	X	X	X	X	X	X	X	X	X	X
<i>Lupinus formosus</i>	summer lupine	X	X	X		X	X	X	X	X	X	X	X
<i>Lupinus hirsutissimus</i>	stinging lupine	X	X	X		X	X	X	X	X	X	X	X
<i>Lupinus latifolius</i>	broad-leaved lupine	X	X	X	X	X	X	X	X	X	X	X	X
<i>Lupinus longifolius</i>	Watson's bush lupine	X	X	X		X	X	X	X	X	X	X	X

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<i>Lupinus microcarpus</i>	chick lupine	X	X	X	X	X	X	X	X	X	X	X	X
<i>Lupinus nanus</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Lupinus odoratus</i>	Mojave lupine	X	X		X								
<i>Lupinus peirsonii</i>	Peirson's lupine	X		X			X		X	X			
<i>Lupinus shockleyi</i>	desert lupine	X	X		X								
<i>Lupinus sparsiflorus</i>	Coulter's lupine	X	X	X	X	X	X	X	X	X	X	X	X
<i>Lupinus succulentus</i>	arroyo lupine	X	X	X		X	X	X	X	X	X	X	X
<i>Lupinus truncatus</i>	collar lupine	X	X	X		X	X	X	X	X	X	X	X
* <i>Medicago lupulina</i>	black medick	X	X	X		X	X	X	X	X	X	X	X
* <i>Medicago orbicularis</i>	bur clover	X	X	X		X	X	X	X	X	X	X	X
* <i>Medicago polymorpha</i>	California burclover	X	X	X		X	X	X	X	X	X	X	X
* <i>Medicago sativa</i>	alfalfa	X	X	X		X	X	X	X	X	X	X	X
* <i>Melilotus alba</i>	white sweetclover	X	X	X		X	X	X	X	X	X	X	X
* <i>Melilotus indica</i>	sourclover	X	X	X		X	X	X	X	X	X	X	X
* <i>Melilotus officinalis</i>	yellow sweet clover	X	X	X		X	X	X	X	X	X	X	X
* <i>Parkinsonia aculeata</i>	Mexican palo verde	X	X	X		X	X	X	X	X	X	X	X
<i>Pickeringia montana</i>	chaparral pea	X	X	X		X	X	X	X	X	X	X	X
<i>Prosopis glandulosa</i>	mesquite	X	X		X								
<i>Psoralea argyrea</i>	indigo bush	X	X		X								

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<i>Rupertia physodes</i>								X	X	X	X	X	
<i>Rupertia rigida</i>	Parish's psoralea								X	X	X	X	
<i>Thermopsis macrophylla</i>	Santa Ynez false lupine	X	X	X		X	X	X	X	X	X	X	X
<i>Trifolium albopurpureum</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Trifolium ciliolatum</i>	tree clover	X	X	X		X	X	X	X	X	X	X	X
<i>Trifolium depauperatum</i>	bladder clover	X	X					X	X	X	X	X	X
<i>Trifolium fucatum</i>	bull clover							X	X	X	X	X	X
<i>Trifolium gracilentum</i>	pinpoint clover	X	X	X		X	X	X	X	X	X	X	X
* <i>Trifolium hirtum</i>	rose clover	X	X	X		X	X	X	X	X	X	X	X
<i>Trifolium incarnatum</i>	crimson clover	X	X	X		X	X	X	X	X	X	X	X
<i>Trifolium microcephalum</i>	small-headed clover							X	X	X	X	X	X
<i>Trifolium obtusiflorum</i>	creek clover	X		X			X	X	X	X	X	X	
<i>Trifolium variegatum</i>	white tip clover	X	X	X		X	X	X	X	X	X	X	X
<i>Trifolium willdenovii</i>	tomcat clover	X	X	X		X	X	X	X	X	X	X	X
<i>Trifolium wormskioldii</i>	cow clover							X	X	X	X	X	
<i>Vicia americana</i>	American vetch	X	X	X		X	X	X	X	X	X	X	X
<i>Vicia hassei</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Vicia ludoviciana</i>								X	X	X	X	X	X
* <i>Vicia villosa</i>	hairy vetch	X	X	X		X	X	X	X	X	X	X	X

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VASCULAR PLANTS—Angiosperms (Dicotyledons)		SIGNIFICANT ECOLOGICAL AREAS											
Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI
Fagaceae	Oak Family												
<i>Quercus agrifolia</i>	coast live oak	X	X	X		X	X	X	X	X	X	X	X
<i>Quercus berberidifolia</i>	scrub oak	X	X	X		X	X	X	X	X	X	X	X
<i>Quercus chrysolepis</i>	canyon oak	X	X	X		X	X	X	X	X	X	X	X
<i>Quercus douglasii</i>	blue oak	X	X	X		X	X	X	X	X			X
<i>Quercus dumosa</i>	coastal scrub oak						X	X	X	X	X	X	X
<i>Quercus engelmannii</i>	Engelmann oak	X		X		X		X	X	X	X	X	X
<i>Quercus garryana</i>		X	X	X		X	X	X	X	X			X
<i>Quercus john-tuckeri</i>	Tucker's oak	X	X	X		X	X	X	X	X	X		X
<i>Quercus kelloggii</i>	California black oak	X	X	X		X	X						
<i>Quercus lobata</i>	valley oak	X	X	X		X	X	X	X	X	X	X	X
<i>Quercus macdonaldii</i>	MacDonald's oak												X
<i>Quercus tomentella</i>	island oak												X
<i>Quercus wislizenii</i>	interior live oak	X	X	X		X	X	X	X	X	X	X	
Frankeniaceae	Frankenia Family												
<i>Frankenia palmeri</i>	Palmer's frankenia							X	X	X	X	X	
<i>Frankenia salina</i>	alkali heath	X	X		X			X	X	X	X	X	X
Garryaceae	Silk Tassel Family												
<i>Garrya flavescens</i>		X	X	X		X	X	X	X	X	X	X	X

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<i>Garrya veatchii</i>		X	X	X		X	X	X	X	X	X	X	X
Gentianaceae	Gentian Family												
<i>Centaurium exaltatum</i>		X	X	X	X				X	X	X	X	X
<i>Centaurium venustum</i>	canchalagua	X	X	X	X	X	X	X	X	X	X	X	X
<i>Eustoma exaltatum</i>	alkali chalice							X	X	X	X	X	
<i>Swertia neglecta</i>	pine green-gentian	X	X	X		X	X	X	X	X			X
Geraniaceae	Geranium Family												
* <i>Erodium botrys</i>	broad-lobed filaree	X	X	X		X	X	X	X	X	X	X	X
* <i>Erodium brachycarpum</i>	long-beaked filaree	X	X	X		X	X	X	X	X	X	X	X
* <i>Erodium cicutarium</i>	red-stemmed filaree	X	X	X	X	X	X	X	X	X	X	X	X
	<i>Erodium macrophyllum</i>		X					X	X	X	X	X	
* <i>Erodium moschatum</i>	white-stemmed filaree	X	X	X		X	X	X	X	X	X	X	X
	<i>Erodium texanum</i>	X	X		X			X	X	X	X	X	X
	<i>Geranium carolinianum</i>	X	X	X		X	X	X	X	X	X	X	X
	<i>Geranium molle</i>	X	X	X		X	X	X	X	X	X	X	X
Grossulariaceae	Gooseberry Family												
	<i>Ribes aureum</i>	X	X	X		X	X	X	X	X	X	X	X
	<i>Ribes californicum</i>	X	X	X		X	X	X	X	X	X	X	X
	<i>Ribes canthariforme</i>								X	X	X	X	

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<i>Ribes divaricatum</i>	Douglas shrub							X	X	X	X	X	
<i>Ribes indecorum</i>	white flowering currant	X	X	X		X	X	X	X	X	X	X	X
<i>Ribes malvaceum</i>	chaparral currant	X	X	X		X	X	X	X	X	X	X	X
<i>Ribes quercetorum</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Ribes roezlii</i>	Sierra gooseberry	X	X	X		X	X	X	X	X	X	X	X
<i>Ribes speciosum</i>	fuchsia-flowered gooseberry	X	X	X		X	X	X	X	X	X	X	X
<i>Ribes viburnifolium</i>	Santa Catalina Island currant										X	X	X
Hippocastanaceae		Buckeye Family											
<i>Aesculus californica</i>	California buckeye	X	X		X								
Hydrophyllaceae		Waterleaf Family											
<i>Emmenanthe penduliflora</i>	whispering bells	X	X	X		X	X	X	X	X	X	X	X
<i>Eriodictyon crassifolium</i>	thick-leaved yerba santa	X	X	X		X	X	X	X	X	X	X	X
<i>Eriodictyon trichocalyx</i>	hairy yerba santa	X	X	X				X	X	X	X	X	
<i>Eucrypta chrysanthemifolia</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Nama pusillumpum</i>	small-leaved nama	X	X		X								
<i>Nama stenocarpum</i>	mud nama	X	X	X		X	X	X	X	X	X	X	X
<i>Nemophila menziesii</i>	baby blue eyes	X	X	X	X	X	X	X	X	X	X	X	X
<i>Nemophila pedunculata</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Phacelia bicolor</i>	sticky yellow-throats	X	X		X								

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<i>Phacelia brachyloba</i>	short-lobed phacelia	X	X	X		X	X	X	X	X	X	X	
<i>Phacelia cicutaria</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Phacelia ciliata</i>		X	X	X		X	X	X	X	X	X	X	
<i>Phacelia crenulata</i>	purple phacelia	X	X		X								
<i>Phacelia davidsonii</i>		X	X	X		X	X	X	X	X	X	X	
<i>Phacelia distans</i>	fern-leaf phacelia	X	X	X	X	X	X	X	X	X	X	X	X
<i>Phacelia douglasii</i>	Douglas's phacelia	X	X	X	X	X	X	X	X	X			X
<i>Phacelia egena</i>		X	X	X		X	X	X	X	X			X
<i>Phacelia exilis</i>	transverse range phacelia	X	X	X		X	X	X	X	X			X
<i>Phacelia floridunda</i>	many-flowered phacelia												X
<i>Phacelia fremontii</i>	yellow-throats	X	X	X		X	X	X	X	X	X	X	X
<i>Phacelia grandiflora</i>	large-flowered phacelia	X	X	X		X	X	X	X	X	X	X	X
<i>Phacelia imbricata</i>	imbricate phacelia	X	X	X		X	X	X	X	X	X	X	X
<i>Phacelia longipes</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Phacelia minor</i>	wild canterbury-bell	X	X	X		X	X	X	X	X	X	X	X
<i>Phacelia mohavensis</i>	Mojave phacelia								X	X			
<i>Phacelia parryi</i>	Parry's phacelia	X	X	X		X	X	X	X	X	X	X	X
<i>Phacelia ramosissima</i>	branching phacelia	X	X	X		X	X	X	X	X	X	X	X
<i>Phacelia stellaris</i>	Brand's phacelia	X	X	X		X	X	X	X	X	X	X	X

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<i>Phacelia suaveolens</i>	Santiago peak phacelia							X	X	X	X	X	
<i>Phacelia tanacetifolia</i>	tansy phacelia	X	X	X	X	X	X	X	X	X	X	X	
<i>Phacelia viscida</i>	sticky phacelia	X	X	X		X	X	X	X	X	X	X	X
<i>Pholistoma auritum</i>	blue fiesta flower	X	X	X		X	X	X	X	X	X	X	X
<i>Pholistoma membranaceum</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Pholistoma racemosum</i>								X	X	X	X	X	X
<i>Turicula parryi</i>	poodle-dog bush	X	X	X		X	X	X	X	X	X	X	X
Hypericaceae		St. John's Family											
<i>Hypericum formosum</i>	St. John's wort	X	X	X		X	X	X	X	X	X	X	X
Juglandaceae		Walnut Family											
<i>Juglans californica</i>	California black walnut	X	X	X		X	X	X	X	X	X	X	X
Lamiaceae		Mint Family											
<i>Acanthomintha ilicifolia</i>	San Diego thorn mint							X	X	X	X	X	
<i>Acanthomintha obovata</i>	heart-leaved thorn mint	X	X	X		X	X	X	X	X	X	X	X
<i>Lepechinia cardiophylla</i>	heart-leaved pitcher sage								X	X	X		
<i>Lepechinia fragrans</i>	fragrant pitcher sage							X	X	X		X	X
<i>Lepechinia ganderi</i>	Gander's pitcher sage								X	X	X	X	
* <i>Marrubium vulgare</i>	horehound	X	X	X		X	X	X	X	X	X	X	X
<i>Mentha arvensis</i>	field mint	X	X	X		X	X	X	X	X	X	X	X

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	<i>Mentha pulegium</i>							X	X	X	X	X	
*	<i>Mentha spicata</i>	X	X	X		X	X	X	X	X	X	X	X
*	<i>Mentha suaveolens</i>		X					X	X	X	X	X	
	<i>Monardella brewerii</i>	X	X	X		X	X	X	X	X	X	X	X
	<i>Monardella cinerea</i>	X		X				X	X	X	X	X	
	<i>Monardella exilis</i>	X	X		X								
	<i>Monardella hypoleuca</i>	X	X	X		X	X	X	X	X	X	X	X
	<i>Monardella lanceolata</i>	X	X	X		X	X	X	X	X	X	X	X
	<i>Monardella linoides</i>								X	X			
	<i>Monardella macrantha</i>	X	X	X		X	X	X	X	X	X	X	X
	<i>Monardella nana</i>								X	X	X	X	
	<i>Monardella viridis</i>	X							X	X		X	
	<i>Pogogyne abramsii</i>					X		X	X	X	X	X	
	<i>Pogogyne nudiuscula</i>					X		X	X	X	X	X	
	<i>Pycnanthemum californicum</i>	X	X	X		X	X	X	X	X	X	X	X
	<i>Salazaria mexicana</i>		X										
	<i>Salvia apiana</i>	X	X	X		X	X	X	X	X	X	X	X
	<i>Salvia carduacea</i>	X	X	X		X	X	X	X	X	X	X	X
	<i>Salvia columbariae</i>	X	X	X		X	X	X	X	X	X	X	X

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<i>Salvia dorrii</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Salvia leucophylla</i>	purple sage	X	X	X		X	X	X	X	X	X	X	X
<i>Salvia mellifera</i>	black sage	X	X	X		X	X	X	X	X	X	X	X
<i>Salvia munzii</i>	Munz's sage										X	X	
<i>Salvia spathacea</i>	hummingbird sage	X	X	X		X	X	X	X	X	X	X	X
<i>Satureja chandleri</i>	San Miguel savory								X	X	X	X	
<i>Satureja douglasii</i>	yerba buena	X	X	X		X	X	X	X	X	X	X	X
<i>Satureja mimuloides</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Scutellaria bolanderi</i>	southern skullcap	X	X	X	X	X	X	X	X	X	X	X	
<i>Scutellaria siphocampyloides</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Scutellaria tuberosa</i>	Danny's skullcap	X	X	X		X	X	X	X	X	X	X	X
<i>Stachys ajugoides</i>	hedge-nettle	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Stachys albens</i>	white hedge-nettle	X	X	X		X	X	X	X	X	X	X	X
<i>Stachys bullata</i>	California hedge-nettle	X	X	X		X	X	X	X	X	X	X	X
<i>Trichostema austromontanum</i>	hidden lake bluecurls	X	X	X		X	X	X	X	X	X	X	X
<i>Trichostema lanatum</i>	woolly bluecurls	X	X	X		X	X	X	X	X	X	X	X
<i>Trichostema lanceolatum</i>	vinegar weed	X	X	X		X	X	X	X	X	X	X	X
Lauraceae													
<i>Umbellularia californica</i>	California laurel	X	X	X		X	X	X	X	X	X	X	X

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Lennoaceae	Lennoa Family												
<i>Pholisma arenarium</i>	scaly-stemmed sandfood	X						X	X	X	X	X	
Limnanthaceae	Meadowfoam Family												
<i>Limnanthes gracilis</i>		X	X	X	X	X	X	X	X	X	X	X	X
Linaceae	Flax Family												
<i>Hesperolinon micranthum</i>	dwarf flax	X	X	X		X	X	X	X	X	X	X	X
<i>Linium grandiflorum</i>								X					
Loasaceae	Loasa Family												
<i>Mentzelia affinis</i>	yellow comet	X	X	X		X	X	X	X	X	X	X	X
<i>Mentzelia albicaulis</i>	white-stemmed blazing star	X	X	X					X	X			
<i>Mentzelia dispersa</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Mentzelia gracilentia</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Mentzelia laevicaulis</i>	giant blazing star	X	X	X	X	X	X	X	X	X	X	X	X
<i>Mentzelia micrantha</i>	small-flowered stick-leaf	X	X	X		X	X	X	X	X	X	X	X
<i>Mentzelia veatchiana</i>	blazing star	X	X	X		X	X	X	X	X	X	X	X
<i>Petalonyx thurberi</i>	sandpaper plant	X	X	X		X	X	X	X	X	X	X	X
Lythraceae	Loosestrife Family												
<i>Ammannia coccinea</i>	valley red-stem	X	X	X		X	X	X	X	X	X	X	X
<i>Lythrum californicum</i>	California loosestrife	X	X	X		X	X	X	X	X	X	X	X

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* <i>Lythrum hyssopifolia</i>	Hyssop loosestrife	X	X	X		X	X	X	X	X	X	X	X
Malvaceae		Mallow Family											
<i>Eremalche exilis</i>	white desert mallow	X											
<i>Eremalche parryi</i>	mallow	X	X	X		X	X	X	X	X	X	X	X
<i>Eremalche rotundifolia</i>	desert five-spot	X											
<i>Herissantia crispa</i>	curly herissantia										X	X	
<i>Lavatera assurgentiflora</i>	malva rosa, island mallow							X	X	X	X	X	X
<i>Malacomamnus aboriginum</i>	Indian Valley bush mallow							X	X	X	X	X	
<i>Malacothamnus clementinus</i>	San Clemente Island bushmallow												X
<i>Malacothamnus davidsonii</i>	Davidson's bushmallow						X	X	X	X	X	X	
<i>Malacothamnus densiflorus</i>	many-flowered mallow										X	X	
<i>Malacothamnus fasciculatus</i>	mesa bushmallow	X	X	X		X	X	X	X	X	X	X	X
<i>Malacothamnus fremontii</i>		X	X	X		X	X	X	X	X			X
<i>Malacothamnus marrubioides</i>		X	X	X		X	X	X	X	X			X
<i>Malacothamnus palmeri</i>	Arroyo Seco bush mallow								X	X			
* <i>Malva neglecta</i>	common mallow	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Malva parviflora</i>	cheeseweed	X	X	X			X	X	X	X		X	X
<i>Malvella leprosa</i>	alkali-mallow	X	X	X	X	X	X	X	X	X	X	X	X
<i>Modiola caroliniana</i>		X	X	X		X	X	X	X	X	X	X	X

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VASCULAR PLANTS—Angiosperms (Dicotyledons)		SIGNIFICANT ECOLOGICAL AREAS											
Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI
<i>Sidalcea hickmanii</i>	checkerbloom	X	X	X		X	X	X	X	X	X	X	X
<i>Sidalcea malvaeflora</i>	checker mallow		X					X					
<i>Sidalcea neomexicana</i>	salt spring checkerbloom	X	X	X				X	X	X	X	X	X
<i>Sidalcea pedata</i>	bird-footed checkerbloom								X	X			
<i>Sphaeralcea ambigua</i>	apricot mallow	X											
<i>Sphaeralcea emoryi</i>		X	X		X								
Martyniaceae		Unicorn-Plant Family											
<i>Proboscidea louisianica</i>	common unicorn-plant							X	X	X	X	X	
Myricaceae		Wax Myrtle Family											
<i>Myrica californica</i>	California wax myrtle							X	X	X	X	X	
Nyctaginaceae		Four O'Clock Family											
<i>Abronia maritima</i>	red sand-verbena							X	X	X	X	X	X
<i>Abronia nana</i>	dwarf abronia		X		X				X	X		X	
<i>Abronia pogonantha</i>	Mojave sand-verbena	X	X		X								
<i>Abronia umbellata</i>								X	X	X	X	X	
<i>Abronia villosa</i>	sand-verbena	X						X	X	X	X	X	
<i>Mirabilis bigelovii</i>	rough wishbone plant	X											
<i>Mirabilis californica</i>	California wishbone bush	X	X	X		X	X	X	X	X	X	X	X
<i>Mirabilis multiflora</i>			X										

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Nymphaeaceae	Waterlily Family												
<i>Nymphaea luteum</i>	cow lily, pond lily		X					X					
Oleaceae	Olive Family												
<i>Forestiera pubescens</i>	desert olive	X	X	X		X	X	X	X	X			X
<i>Fraxinus dipetala</i>	California ash	X	X	X		X	X	X	X	X	X	X	X
<i>Fraxinus velutina</i>	velvet ash	X	X	X	X	X	X	X	X	X	X	X	X
Onagraceae	Evening Primrose Family												
<i>Camissonia bistorta</i>	California sun cup	X	X	X		X	X	X	X	X	X	X	X
<i>Camissonia boothii</i>	Booth's evening primrose	X	X	X	X			X					
<i>Camissonia californica</i>	California evening primrose	X	X	X	X	X	X	X	X	X	X	X	X
<i>Camissonia campestris</i>	Mojave sun cup	X	X	X	X		X	X	X	X	X	X	X
<i>Camissonia cheiranthifolia</i>	Beach evening primrose							X	X	X	X	X	X
<i>Camissonia claviformis</i>	evening primrose	X	X		X						X	X	
<i>Camissonia confusa</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Camissonia graciliflora</i>		X	X	X		X	X	X	X	X			X
<i>Camissonia guadalupensis</i>	San Clemente Island evening-primrose												X
<i>Camissonia hirtella</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Camissonia ignota</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Camissonia intermedia</i>	intermediate sun-cups	X	X	X		X	X	X	X	X	X	X	X

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<i>Camissonia lewisii</i>	Lewis' evening primrose							X	X	X	X	X	
<i>Camissonia micrantha</i>	small primrose	X	X	X		X	X	X	X	X	X	X	X
<i>Camissonia pallida</i>		X	X		X								
<i>Camissonia palmeri</i>	Palmer primrose	X	X	X	X	X	X	X	X	X			X
<i>Camissonia strigulosa</i>	field evening primrose	X	X	X		X	X	X	X	X	X	X	X
<i>Clarkia bottae</i>	punchbowl godetia	X	X	X		X	X	X	X	X	X	X	X
<i>Clarkia cylindrica</i>	speckled clarkia		X	X		X	X	X					
<i>Clarkia epilobioides</i>	willow-herb clarkia	X	X	X		X	X	X	X	X	X	X	X
<i>Clarkia purpurea</i>	winecup clarkia	X	X	X		X	X	X	X	X	X	X	X
<i>Clarkia rhomboidea</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Clarkia unguiculata</i>	elegant clarkia	X	X	X		X	X	X	X	X		X	
<i>Clarkia xantiana</i>		X	X	X		X	X	X	X	X			X
<i>Epilobium brachycarpum</i>	parched fireweed	X	X			X	X	X	X	X	X	X	X
<i>Epilobium canum</i>	California fuchsia	X	X	X		X	X	X	X	X	X	X	X
<i>Epilobium ciliatum</i>	California cottonweed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Epilobium foliosum</i>			X										
<i>Epilobium pygmaeum</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Gaura coccinea</i>	wild honeysuckle	X	X	X		X	X	X	X	X	X	X	X
<i>Gaura sinuata</i>	wavy-leaved gaura	X	X	X		X	X	X	X	X	X	X	X

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<i>Gayophytum diffusum</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Heterogaura heterandra</i>			X										
<i>Ludwigia peploides</i>	peploides	X	X	X	X	X	X	X	X	X	X		X
<i>Oenothera californica</i>	California evening primrose	X	X	X		X	X	X	X	X	X	X	X
<i>Oenothera deltoides</i>	basket evening primrose						X						
<i>Oenothera elata</i>	evening primrose	X	X	X	X	X	X	X	X	X	X	X	X
<i>Oenothera primavera</i>	yellow-evening primrose	X											
Orobanchaceae		Broom-rape Family											
<i>Orobanche bulbosa</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Orobanche californica</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Orobanche fasciculata</i>	clustered broom-rape	X	X	X		X	X	X	X	X	X	X	X
<i>Orobanche parishii</i>	short-lobed broom-rape	X	X	X		X	X	X	X	X	X	X	X
<i>Orobanche uniflora</i>	naked broom-rape		X					X	X	X	X	X	
* <i>Orobanche valida</i>	rock creek broom-rape	X	X	X		X	X	X	X	X	X		X
<i>Orobanche vallicola</i>								X	X	X	X	X	
Oxalidaceae		Oxalis Family											
<i>Oxalis albicans</i>	California wood-sorrel	X	X	X		X	X	X	X	X	X	X	X
* <i>Oxalis corniculata</i>	creeping wood-sorrel	X	X	X		X	X	X	X	X	X	X	X
<i>Oxalis rubra</i>								X					

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Paeoniaceae	Peony Family												
<i>Paeonia californica</i>	California peony		X	X			X	X				X	
Papaveraceae	Poppy Family												
<i>Argemone corymbosa</i>		X	X		X								
<i>Argemone munita</i>	prickly poppy	X	X	X		X	X	X	X	X	X	X	X
<i>Canbya candida</i>	pigmy poppy	X	X		X				X	X			
<i>Dendromecon harfordii</i>	island tree poppy			X									X
<i>Dendromecon rigida</i>	bush poppy	X	X	X		X	X	X	X	X	X	X	X
<i>Dicentra chrysantha</i>	golden ear-drops	X	X	X		X	X	X	X	X	X	X	X
<i>Dicentra ochroleuca</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Eschscholzia caespitosa</i>	poppy	X	X	X		X	X	X	X	X	X	X	X
<i>Eschscholzia californica</i>	California poppy	X	X	X	X	X	X	X	X	X	X	X	X
<i>Eschscholzia minutiflora</i>		X	X		X								
<i>Eschscholzia ramosa</i>	island poppy												X
<i>Meconella denticulata</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Papaver californicum</i>	fire poppy	X	X	X		X	X	X	X	X	X	X	X
<i>Papaver somniferum</i>	opium poppy	X	X	X		X	X	X	X	X	X	X	X
<i>Platystemon californicus</i>	cream cups	X	X	X		X	X	X	X	X	X	X	X
<i>Stylomecon heterophylla</i>	orange poppy	X	X	X		X	X	X	X	X	X	X	X

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Plantaginaceae	Plantain Family												
<i>Plantago elongata</i>	annual coast plantain	X	X	X		X	X	X	X	X	X	X	X
<i>Plantago erecta</i>	western plantain	X	X	X		X	X	X	X	X	X	X	X
* <i>Plantago lanceolata</i>	English plantain	X	X	X		X	X	X	X	X	X	X	X
* <i>Plantago major</i>	common plantain	X	X	X		X	X	X	X	X	X	X	X
<i>Plantago patagonica</i>		X	X		X								
Platanaceae	Sycamore Family												
<i>Platanus racemosa</i>	western sycamore	X	X	X		X	X	X	X	X	X	X	X
Plumbaginaceae	Leadwort Family												
<i>Limonium californicum</i>	western marsh-rosemary							X	X	X	X	X	
<i>Limonium perezii</i>								X	X	X	X	X	
<i>Limonium sinatum</i>								X	X	X	X	X	
Polemoniaceae	Phlox Family												
<i>Allophyllum divaricatum</i>	allophyllum		X	X		X		X					
<i>Allophyllum gilioides</i>	false gilia		X	X		X		X					
<i>Allophyllum glutinosum</i>	blue false gilia		X	X		X	X	X					
<i>Collomia grandiflora</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Eriastrum densifolium</i>	woolly-star flower	X	X	X	X	X	X	X	X	X	X	X	X
<i>Eriastrum diffusum</i>	spreading blue mantle	X			X								

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<i>Eriastrum eremicum</i>	blue mantle	X			X								
<i>Eriastrum filifolium</i>			X					X	X	X	X	X	
<i>Eriastrum pluriflorum</i>	many flowered eriastrum	X	X		X								
<i>Eriastrum sapphirinum</i>	sapphire eriastrum	X	X	X		X	X	X	X	X	X	X	X
<i>Eriastrum sparsiflorum</i>			X										
<i>Gilia achilleifolia</i>	blue gilia			X			X	X	X	X	X	X	
<i>Gilia aliquanta</i>		X	X	X	X				X	X			
<i>Gilia angelensis</i>	angel gilia	X	X	X		X	X	X	X	X	X	X	X
<i>Gilia australis</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Gilia brecciarum</i>		X	X	X		X	X	X	X	X			X
<i>Gilia cana</i>	gilia	X	X		X								
<i>Gilia capitata</i>	blue field gilia	X	X	X		X	X	X	X	X	X	X	X
<i>Gilia caryifolia</i>	caraway-leaved gilia										X	X	
<i>Gilia clivorum</i>	hillside gilia	X	X	X		X	X	X	X	X	X		X
<i>Gilia diegensis</i>		X	X	X					X	X	X	X	
<i>Gilia hutchinsifolia</i>	desert pale gilia	X	X		X								
<i>Gilia latiflora</i>	broad flowered gilia	X	X		X								
<i>Gilia leptomeria</i>	sand gilia	X											
<i>Gilia malior</i>		X	X		X								

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<i>Gilia micromeria</i>	small flowered gilia	X											
<i>Gilia minor</i>	dwarf gilia	X	X		X								
<i>Gilia nevinii</i>	Nevin's gilia			X									X
<i>Gilia ochroleuca</i>		X	X	X	X				X	X			
<i>Gilia sinuata</i>	gilia	X	X		X		X						
<i>Gilia splendens</i>	splendid gilia		X					X			X	X	
<i>Ipomopsis tenuifolia</i>	slender-leaved ipomopsis										X	X	
<i>Leptodactylon californicum</i>	prickly phlox	X	X	X		X	X	X	X	X	X	X	X
<i>Linanthus aureus</i>	golden gilia	X	X		X								
<i>Linanthus bigelovii</i>		X	X	X		X	X	X	X	X			X
<i>Linanthus breviculus</i>		X	X	X	X				X	X			
<i>Linanthus ciliatus</i>	whisker brush	X	X	X		X	X	X	X	X	X	X	X
<i>Linanthus concinnus</i>	San Gabriel linanthus	X		X					X	X			
<i>Linanthus dianthiflorus</i>	ground-pink	X	X	X		X	X	X	X	X			X
<i>Linanthus dichotomus</i>	evening snow	X	X	X		X	X	X	X	X	X	X	X
<i>Linanthus floribundus</i>	Santa Rosa Mountains linanthus	X		X					X	X	X	X	
<i>Linanthus liniflorus</i>	flax-flowered linanthus	X	X	X	X	X	X	X	X	X	X	X	X
<i>Linanthus orcuttii</i>	Orcutt's linanthus								X	X		X	
<i>Linanthus parryae</i>	sand blossom	X	X	X	X	X	X	X	X	X	X	X	X

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<i>Linanthus parviflorus</i>	coast baby-star	X	X	X		X	X	X	X	X	X	X	X
<i>Linanthus pygmaeus</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Loeseliastrum matthewsii</i>	desert calico	X	X		X								
<i>Loeseliastrum schottii</i>	little sunbonnets	X	X		X								
<i>Navarretia atractyloides</i>	holly-leaved navarretia	X	X	X		X	X	X	X	X			X
<i>Navarretia fossalis</i>	spreading navarretia	X	X	X		X	X	X	X	X	X	X	X
<i>Navarretia hamata</i>	hooked navarretia	X	X	X		X	X	X	X	X	X	X	X
<i>Navarretia jaredii</i>	paso robles navarretia	X	X	X		X	X	X	X	X	X	X	X
<i>Navarretia peninsularis</i>	Baja navarretia	X	X	X	X	X	X	X	X	X	X	X	X
<i>Navarretia prostrata</i>	prostrate navarretia							X	X	X	X	X	
<i>Navarretia pubescens</i>								X					
<i>Phlox gracilis</i>		X	X	X	X	X	X	X	X	X	X	X	X
Polygalaceae		Milkwort Family											
<i>Polygala cornuta</i>	Fish's milkwort	X	X	X		X	X	X	X	X	X	X	
Polygonaceae		Buckwheat Family											
<i>Centrostegia thurberi</i>	Thurber's spineflower	X	X	X	X	X	X	X	X	X	X	X	X
<i>Chorizanthe blakleyi</i>	Blakley's spineflower	X	X	X		X	X	X	X	X	X		X
<i>Chorizanthe brevicornu</i>	brittle spineflower	X	X		X								
<i>Chorizanthe fimbriata</i>	fringed spineflower										X	X	

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<i>Chorizanthe parryi</i>		X	X	X		X	X	X	X	X		X	X
<i>Chorizanthe polygonoides</i>	long-spined spineflower	X	X	X		X	X	X	X	X	X	X	X
<i>Chorizanthe procumbens</i>	prostrate spineflower	X	X	X		X	X	X	X	X	X	X	X
<i>Chorizanthe rigida</i>	rigid spiny-herb	X	X		X								
<i>Chorizanthe spinosa</i>	Mohave spineflower	X	X		X								
<i>Chorizanthe staticoides</i>	turkish rugging		X	X			X	X					
<i>Chorizanthe watsonii</i>	Watson's spineflower	X	X		X								
<i>Chorizanthe xanti</i>	spineflower	X	X	X		X	X	X	X	X			X
<i>Dodecahema leptoceras</i>	slender-horned spineflower	X	X	X		X	X	X	X	X			X
<i>Eriogonum angulosum</i>	angle-stem skeletonweed	X	X								X	X	
<i>Eriogonum baileyi</i>	Bailey skeletonweed	X	X	X	X	X	X	X	X	X			X
<i>Eriogonum brachyanthum</i>	wild buckwheat	X	X		X		X						
<i>Eriogonum cinereum</i>	ashy-leaved buckwheat							X	X	X	X	X	
<i>Eriogonum cithariforme</i>			X					X					
<i>Eriogonum crocatum</i>	conejo buckwheat							X					
<i>Eriogonum davidsonii</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Eriogonum deflexum</i>	skeletonweed	X	X		X				X	X			
<i>Eriogonum elongatum</i>	wand buckwheat	X	X	X	X	X	X	X	X	X	X	X	X
<i>Eriogonum fasciculatum</i>	California buckwheat	X	X	X	X	X	X	X	X	X	X	X	X

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VASCULAR PLANTS—Angiosperms (Dicotyledons)		SIGNIFICANT ECOLOGICAL AREAS											
Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI
<i>Eriogonum foliosum</i>	leafy buckwheat								X	X	X	X	
<i>Eriogonum giganteum</i>	St. Catherine's lace												X
<i>Eriogonum gracile</i>	slender woolly buckwheat	X	X	X	X	X	X	X	X	X	X	X	X
<i>Eriogonum gracillium</i>	slender skeletonweed	X	X	X		X	X	X	X	X			
<i>Eriogonum grande</i>	island buckwheat												X
<i>Eriogonum inerme</i>		X	X	X		X	X	X	X	X			
<i>Eriogonum inflatum</i>	desert trumpet	X	X		X								
<i>Eriogonum kennedyi</i>	southern mountain buckwheat	X	X	X		X	X	X	X	X			X
<i>Eriogonum maculatum</i>	Spotted buckwheat	X	X	X		X	X	X	X	X			X
<i>Eriogonum microthecum</i>	San Bernardino buckwheat	X	X	X	X	X	X	X	X	X	X	X	X
<i>Eriogonum mohavense</i>	Mohave skeletonweed	X	X		X								
<i>Eriogonum nidularium</i>	bird's nest buckwheat	X	X		X								
<i>Eriogonum nudum</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Eriogonum ordii</i>		X	X	X		X	X	X	X	X			X
<i>Eriogonum ovalifolium</i>	Cushenbury buckwheat								X	X			
<i>Eriogonum parishii</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Eriogonum parvifolium</i>								X	X	X	X	X	
<i>Eriogonum plumatella</i>	flat topped perennial buckwheat	X	X		X								
<i>Eriogonum pusillum</i>	yellow turbans	X	X	X	X	X	X	X	X	X			X

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<i>Eriogonum reinforme</i>	kidney skeletonweed	X	X		X								
<i>Eriogonum roseum</i>		X	X	X		X	X	X	X	X			X
<i>Eriogonum saxatile</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Eriogonum thurberi</i>		X	X		X				X	X	X	X	
<i>Eriogonum trichopes</i>	little trumpets	X	X	X	X	X	X	X	X	X			X
<i>Eriogonum umbellatum</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Eriogonum viridescens</i>	leafy stem buckwheat	X	X	X	X	X	X	X	X	X			X
<i>Eriogonum wrightii</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Goodmania luteola</i>	golden goodmania	X	X		X								
<i>Lastarriaea coriacea</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Mucronea californica</i>	California spineflower	X	X	X		X	X	X	X	X	X	X	X
<i>Mucronea perfoliata</i>	punctured bract	X	X	X		X	X	X	X	X			X
<i>Nemacaulis denudata</i>	coast woolly heads	X	X	X		X	X	X	X	X	X	X	X
<i>Oxytheca caryophylloides</i>	chickweed oxytheca	X	X	X		X	X	X	X	X	X		
<i>Oxytheca parishii</i>	Abram's oxytheca	X	X	X		X	X	X	X	X			
<i>Oxytheca perfoliata</i>	red saucers	X	X		X								
<i>Oxytheca trilobata</i>		X	X	X		X			X	X	X	X	
<i>Polygala cornuta</i>	Fish's milkwort	X	X	X		X	X	X	X	X	X	X	
<i>Polygonum amphibium</i>	water smartweed	X	X	X		X	X	X	X	X	X	X	X

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* <i>Polygonum arenastrum</i>	common knotweed	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Polygonum argyrocoleon</i>	knotweed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Polygonum hydropiperoides</i>	water pepper	X	X	X		X	X	X	X	X	X	X	X
<i>Polygonum lapathifolium</i>	willow-weed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Polygonum punctatum</i>	perennial smartweed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Pterostegia drymarioides</i>	California thread-stem	X	X	X	X	X	X	X	X	X	X	X	X
<i>Rumex acetosella</i>	sheep sorrel	X	X	X		X	X	X	X	X	X	X	X
* <i>Rumex conglomeratus</i>	whorled dock	X	X	X		X	X	X	X	X	X	X	X
* <i>Rumex crispus</i>	curly dock	X	X	X	X	X	X	X	X	X	X	X	X
<i>Rumex hymenosepalus</i>	desert rhubarb	X	X	X	X	X	X	X	X	X	X	X	X
<i>Rumex kernerii</i>								X	X	X	X	X	
<i>Rumex maritimus</i>	golden dock	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Rumex pulcher</i>	Fiddle rock	X	X	X	X	X	X	X	X	X	X	X	X
<i>Rumex salicifolius</i>	willow dock	X	X	X		X	X	X	X	X	X	X	X
Portulacaceae		Purslane Family											
<i>Calandrinia breweri</i>	Brewer's calandrinia	X	X	X		X	X	X	X	X	X	X	
<i>Calandrinia ciliata</i>	red maids	X	X	X		X	X	X	X	X	X	X	X
<i>Calandrinia maritima</i>	seaside calandrinia			X				X	X	X	X	X	X
<i>Calyptidium monandrum</i>	common calyptidium	X	X	X		X	X	X	X	X	X	X	X

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<i>Claytonia exigua</i>		X	X	X		X	X	X	X	X	X	X	
<i>Claytonia lanceolata</i>	Peirson's spring beauty	X		X					X	X			
<i>Claytonia parviflora</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Claytonia perfoliata</i>	miner's lettuce	X	X	X		X	X	X	X	X	X	X	X
<i>Claytonia rubra</i>			X										
<i>Lewisia brachycalyx</i>	short-sepaed lewisia								X	X	X	X	
<i>Lewisia rediviva</i>	bitter root	X	X	X		X	X	X	X	X			
<i>Portulaca halimoides</i>	desert portulaca	X	X	X		X	X	X	X	X	X	X	X
* <i>Portulaca oleracea</i>	common purslane	X	X	X	X	X	X	X	X	X	X	X	X
Primulaceae		Primrose Family											
<i>Adrosace elongata</i>	California androsace		X					X	X	X	X	X	
* <i>Anagallis arvensis</i>	scarlet pimpernel	X	X	X		X	X	X	X	X	X	X	X
<i>Centunculus minimis</i>	common chaffweed							X	X	X	X	X	
<i>Dodecatheon clevelandii</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Samolus parviflorus</i>	water-pimpernel, brookweed	X	X	X		X	X	X	X	X			
Ranunculaceae		Buttercup Family											
<i>Aquilegia formosa</i>	columbine	X	X	X		X	X	X	X	X	X	X	
<i>Camissonia lewisii</i>	Lewis's evening-primrose			X					X	X	X	X	
<i>Clematis lasiantha</i>	pipestems	X	X	X		X	X	X	X	X	X	X	X

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<i>Clematis ligusticifolia</i>	virgin's bower	X	X	X	X	X	X	X	X	X	X	X	X
<i>Clematis pauciflora</i>	ropevine	X	X	X		X	X	X	X	X	X	X	X
<i>Delphinium cardinale</i>	scarlet larkspur	X	X	X		X	X	X	X	X	X	X	X
<i>Delphinium hesperium</i>	Cuyamaca larkspur								X	X	X	X	
<i>Delphinium inopinum</i>	unexpected larkspur								X	X			
<i>Delphinium parishii</i>	desert larkspur	X	X	X		X	X	X	X	X			
<i>Delphinium patens</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Delphinium variegatum</i>	royal larkspur												X
<i>Isopyrum occidentale</i>		X	X	X		X	X	X	X	X			
<i>Myosurus minimus</i>	little mousetail		X			X		X					
<i>Populus fremontii</i>	cottonwood	X					X						
<i>Ranunculus aquatilis</i>		X	X	X		X	X	X	X	X	X	X	
<i>Ranunculus californicus</i>	California buttercup	X	X	X		X	X	X	X	X	X	X	X
<i>Ranunculus cymbalaria</i>		X	X		X			X					
<i>Ranunculus hebecarpus</i>		X	X	X		X	X	X	X	X	X	X	
<i>Ranunculus repens</i>								X	X	X	X	X	
<i>Thalictrum fendleri</i>		X	X	X		X	X	X	X	X	X	X	
Resdaceae													
Mignonette Family													
<i>Oligomeris linifolia</i>	narrow-leaved oligomeris	X	X	X		X	X	X	X	X	X	X	X

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Rhamnaceae	Buckthorn Family												
<i>Ceanothus arboreus</i>	Catalina ceanothus												X
<i>Ceanothus crassifolius</i>	hoary leaf ceanothus	X	X	X		X	X	X	X	X	X	X	
<i>Ceanothus cuneatus</i>	buck brush	X	X	X		X	X	X	X	X	X	X	X
<i>Ceanothus greggii</i>	desert California lilac	X	X	X		X	X	X	X	X	X	X	
<i>Ceanothus integerrimus</i>	deer brush	X	X	X		X	X	X	X	X	X	X	
<i>Ceanothus leucodermis</i>	chaparral whitethorn	X	X	X		X	X	X	X	X	X	X	
<i>Ceanothus megacarpus</i>	big-podded ceanothus												X
<i>Ceanothus oliganthus</i>	hairy ceanothus	X	X	X		X	X	X	X	X	X	X	
<i>Ceanothus spinosus</i>	green bark ceanothus	X	X	X		X	X	X	X	X	X	X	
<i>Ceanothus tomentosus</i>	woolly-leaved ceanothus						X	X	X	X	X	X	
<i>Ceanothus verrucosus</i>	wart-stemmed ceanothus						X	X	X	X	X	X	
<i>Rhamnus californica</i>	California coffeeberry	X	X	X		X	X	X	X	X	X	X	X
<i>Rhamnus crocea</i>	spiny redberry	X	X	X		X	X	X	X	X	X	X	X
<i>Rhamnus ilicifolia</i>	holly-leaf redberry	X	X	X		X	X	X	X	X	X	X	X
<i>Rhamnus pirifolia</i>	island buckthorn												X
<i>Rhamnus tomentella</i>		X	X	X		X	X	X	X	X	X	X	X
Rosaceae	Rose Family												
<i>Adenostoma fasciculatum</i>	chamise	X	X	X		X	X	X	X	X	X	X	X

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<i>Adenostoma sparsifolium</i>	red shanks	X	X	X		X	X	X	X	X	X	X	
<i>Amelanchier utahensis</i>	Utah service-berry	X	X	X		X	X	X	X	X	X	X	X
<i>Aphanes occidentalis</i>	western lady's mantle	X	X	X		X	X	X	X	X	X	X	X
<i>Cercocarpus betuloides</i>	birch-leaf mountain-mahogany	X	X	X		X	X	X	X	X	X	X	X
<i>Cercocarpus traskiae</i>	Catalina Island Mountain-mahogany												X
<i>Heteromeles arbutifolia</i>	toyon	X	X	X		X	X	X	X	X	X	X	X
<i>Heteromeles arbutifolia macrocarpa</i>	toyon	X	X	X		X	X	X	X	X	X	X	X
<i>Holodiscus discolor</i>	oceanspray	X	X	X		X	X	X	X	X			X
<i>Horkelia cuneata</i>								X	X	X		X	
<i>Horkelia truncata</i>	ramona horkelia								X	X	X	X	
<i>Lyonothamnus floribundus</i>	Santa Catalina Island ironwood												X
<i>Potentilla anserina</i>	sticky cinquefoil							X	X	X	X	X	
<i>Potentilla glandulosa</i>	cinquefoil	X	X	X		X	X	X	X	X	X	X	X
<i>Potentilla multijuga</i>	ballona cinquefoil							X					
* <i>Prunus dulcis</i>	almond		X										
<i>Prunus emarginata</i>	bitter cherry	X	X	X		X	X	X	X	X	X	X	
<i>Prunus fasciculata</i>	desert almond	X	X	X		X	X	X	X	X	X	X	
<i>Prunus ilicifolia</i>	holly-leaved cherry	X	X	X		X	X	X	X	X	X	X	X
<i>Prunus virginiana</i>	western choke-cherry	X	X	X		X	X	X	X	X	X	X	X

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<i>Purshia tridentata</i>	antelope bush	X	X	X		X	X	X	X	X	X	X	
<i>Rosa californica</i>	California wild rose	X	X	X		X	X	X	X	X	X	X	X
<i>Rosa gymnocarpa</i>	wild rose						X		X	X	X	X	
* <i>Rubus discolor</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Rubus glaucifolius</i>	Cuyamaca raspberry		X								X	X	
<i>Rubus ursinus</i>	California blackberry	X	X	X		X	X	X	X	X	X	X	X
Rubiaceae		Madder Family											
<i>Galium andrewsii</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Galium angustifolium</i>	shrubby bedstraw	X	X	X		X	X	X	X	X	X	X	X
* <i>Galium aparine</i>	goose grass	X	X	X		X	X	X	X	X	X	X	X
<i>Galium californicum</i>	Cone Peak bedstraw	X	X	X		X	X	X	X	X	X	X	
<i>Galium catalinense</i>	Santa Catalina bedstraw												X
<i>Galium cliftonsmithii</i>	Santa Barbara bedstraw	X	X	X		X	X	X					
<i>Galium grande</i>	San Gabriel bedstraw	X		X			X		X	X			
<i>Galium hallii</i>	nodding bedstraw	X	X	X		X	X	X	X	X			
<i>Galium jepsonii</i>	Jepson's bedstraw	X		X			X		X	X			
<i>Galium johnstonii</i>	Johnston's bedstraw	X		X			X		X	X			
<i>Galium nuttallii</i>	San Diego bedstraw	X	X	X		X	X	X	X	X	X	X	X
* <i>Galium parisiense</i>	wall bedstraw		X										

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<i>Galium porrigens</i>	climbing bedstraw	X	X	X		X	X	X	X	X	X	X	X
<i>Sherardia arvensis</i>								X	X	X	X	X	
Salicaceae Willow Family													
<i>Populus balsamifera</i>	black cottonwood	X	X	X			X	X	X	X	X	X	X
<i>Populus fremontii</i>	Fremont's cottonwood	X	X	X			X	X	X	X	X	X	X
<i>Populus tremuloides</i>	quaking aspen								X	X			
<i>Salix exigua</i>	sandbar willow	X	X	X			X	X	X	X	X	X	X
<i>Salix goodingii</i>	black willow	X	X				X	X	X	X		X	
<i>Salix laevigata</i>	red willow	X	X	X			X	X	X	X	X	X	X
<i>Salix lasiolepis</i>	arroyo willow	X	X	X			X	X	X	X	X	X	X
<i>Salix lucida</i>	shining willow	X	X	X			X	X	X	X	X	X	X
Saururaceae Lizard's-Tail Family													
<i>Anemopsis californica</i>	yerba mansa	X	X	X	X			X	X	X		X	
Saxifragaceae Saxifrage Family													
<i>Boykinia occidentalis</i>		X	X	X		X	X	X	X	X			
<i>Boykinia rotundifolia</i>	round-leaved boykinia	X	X	X		X	X	X	X	X	X	X	
<i>Heuchera abramsii</i>	Abram's alumroot	X		X			X		X	X			
<i>Heuchera brevistaminea</i>	wiggins (Mount Laguna alumroot)										X	X	
<i>Heuchera elegans</i>	urn-flowered alumroot	X		X			X		X	X			

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<i>Heuchera rubescens</i>	San Diego county alumroot		X								X	X	
<i>Jepsonia malvaefolia</i>	island jepsonia												X
<i>Jepsonia parryi</i>	mesa saxifrage							X	X	X	X	X	
<i>Lithophragma affine</i>	woodland star	X	X	X		X	X	X	X	X	X	X	X
<i>Lithophragma bolanderi</i>		X	X	X					X	X			
<i>Lithophragma heterophyllum</i>	saxifrage		X	X		X	X	X					
<i>Lithophragma parviflorum</i>		X	X	X		X	X	X					
<i>Ribes californicum</i>	hillside gooseberry	X	X	X		X	X	X	X	X	X	X	
<i>Ribes speciosum</i>	fuchsia flowered gooseberry	X	X	X		X	X	X	X	X	X	X	
<i>Saxifraga californica</i>	California saxifrage	X	X	X		X	X	X	X	X	X	X	X
Scrophulariaceae		Figwort Family											
<i>Antirrhinum coulterianum</i>	white snapdragon	X	X	X		X	X	X	X	X	X	X	
<i>Antirrhinum kelloggii</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Antirrhinum multiflorum</i>		X	X	X		X	X	X	X	X			
<i>Antirrhinum nuttallianum</i>	Nuttall's snapdragon	X	X	X		X	X	X	X	X	X	X	X
<i>Castilleja affinis</i>	coast paintbrush	X	X	X		X	X	X	X	X	X	X	X
<i>Castilleja chromosa</i>	Indian paintbrush		X				X						
<i>Castilleja densiflora</i>	dense-flowered owl's-clover	X	X	X		X	X	X	X	X	X	X	X
<i>Castilleja exserta</i>	purple owl's-clover	X	X	X		X	X	X	X	X	X	X	X

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VASCULAR PLANTS—Angiosperms (Dicotyledons)		SIGNIFICANT ECOLOGICAL AREAS											
Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI
<i>Castilleja foliolosa</i>	woolly Indian paintbrush		X					X					X
<i>Castilleja lasiorhyncha</i>	San Bernardino Mountains owl's clover										X	X	
<i>Castilleja linariifolia</i>		X	X	X	X	X	X	X	X	X			
<i>Castilleja minor</i>			X					X			X	X	X
<i>Castilleja montigena</i>	Heckard's Indian paintbrush								X	X			
<i>Castilleja plagiotoma</i>	Mojave Indian paintbrush	X	X	X	X	X	X	X	X	X			
<i>Castilleja subinclusa</i>		X	X	X		X	X	X	X	X			
<i>Collinsia bartsiiifolia</i>	lowland Chinese houses	X	X		X								
<i>Collinsia callosa</i>		X	X	X		X	X	X	X	X			
<i>Collinsia childii</i>		X	X	X		X	X	X	X	X	X	X	
<i>Collinsia heterophylla</i>	Chinese houses	X	X	X		X	X	X	X	X	X	X	X
<i>Collinsia parryi</i>	Collinsia	X	X	X		X	X	X	X	X			
<i>Collinsia parviflora</i>	blue-eyed Mary	X	X	X		X	X	X	X	X			X
<i>Cordylanthus eremicus</i>	desert bird's beak								X	X			
<i>Cordylanthus filifolius</i>	dark-tipped bird's beak						X						
<i>Cordylanthus maritimus</i>	alkali bird's beak	X						X	X	X	X	X	
<i>Cordylanthus rigidus</i>	thread-leaved bird's-beak	X	X	X		X	X	X	X	X	X	X	X
<i>Galvezia speciosa</i>	showy island snapdragon												X
<i>Keckiella antirrhinoides</i>		X	X		X						X	X	

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<i>Keckiella breviflora</i>	small-leaved penstemon	X	X	X		X	X	X	X	X			
<i>Keckiella cordifolia</i>	heart-leaved penstemon	X	X	X		X	X	X	X	X	X	X	X
<i>Keckiella ternata</i>		X	X	X		X	X	X	X	X	X	X	X
* <i>Kickxia elatine</i>	fluellin	X	X	X		X	X	X	X	X	X	X	X
* <i>Kickxia spurria</i>	fluellin	X	X	X		X	X	X	X	X	X	X	X
<i>Linaria canadensis</i>	blue toadflax	X	X	X		X	X	X	X	X			
<i>Mimulus androsaceus</i>		X	X	X		X	X	X					
<i>Mimulus aurantiacus</i>	orange bush monkey-flower	X	X	X		X	X	X	X	X	X	X	X
<i>Mimulus brevipes</i>	wide-throated monkey-flower	X	X	X		X	X	X	X	X	X	X	X
<i>Mimulus cardinalis</i>	scarlet monkey-flower	X	X	X		X	X	X	X	X	X	X	X
<i>Mimulus clevelandii</i>	Cleveland's bush monkey-flower										X	X	
<i>Mimulus constrictus</i>	orange bush monkey-flower	X	X	X		X	X						
<i>Mimulus floribundus</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Mimulus fremontii</i>	fremont monkeyflower	X	X	X		X	X	X	X	X	X	X	X
<i>Mimulus guttatus</i>	common monkey-flower		X	X			X	X				X	
<i>Mimulus latidens</i>			X					X	X	X	X	X	
<i>Mimulus parishii</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Mimulus pilosus</i>	mimianthe	X	X	X		X	X	X	X	X	X	X	X
<i>Mimulus rubellus</i>	red monkeyflower	X											

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<i>Mimulus traskiae</i>	Santa Catalina Island monkey-flower												X
<i>Orobanche bulbosa</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Orobanche fasciculata</i>	clustered broom-rape	X	X	X		X	X	X	X	X	X	X	X
<i>Orobanche parishii</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Pedicularis densiflora</i>	Indian warrior	X	X	X		X	X	X	X	X	X	X	X
<i>Penstemon californicus</i>	California beardtongue								X	X	X	X	
<i>Penstemon centranthifolius</i>	scarlet bugler	X	X	X		X	X	X	X	X	X	X	X
<i>Penstemon clevelandii</i>	San Jacinto beardtongue										X	X	
<i>Penstemon grinnelli</i>		X	X	X		X	X				X		
<i>Penstemon heterophyllus</i>	foothill penstemon		X	X				X				X	
<i>Penstemon labrosus</i>		X	X	X		X	X	X	X	X	X	X	
<i>Penstemon rostriflorus</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Penstemon spectabilis</i>	royal penstemon	X	X	X		X	X	X	X	X	X	X	
<i>Penstemon thurberi</i>	Thurber's beardtongue	X	X		X				X	X	X	X	
<i>Scrophularia californica</i>	California figwort	X	X	X		X	X	X	X	X	X	X	X
<i>Scrophularia villosa</i>	Santa Catalina figwort												X
* <i>Verbascum thapsus</i>	woolly mullein	X	X	X		X	X	X	X	X	X	X	X
* <i>Verbascum virgatum</i>	wand mullein	X	X	X		X	X	X	X	X	X	X	X

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Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI
Solanaceae		Nightshade Family											
* <i>Datura stramonium</i>	jimson weed	X	X	X		X	X	X	X	X	X	X	X
<i>Datura wrightii</i>	jimson weed	X	X	X		X	X	X	X	X	X	X	X
<i>Lycium andersonii</i>	wolfberry	X	X	X		X	X	X	X	X	X	X	
<i>Lycium brevipes</i>	Santa Catalina Island desert-thorn							X	X	X	X	X	X
<i>Lycium californicum</i>	California box-thorn							X	X	X	X	X	X
<i>Lycium cooperi</i>	peachthorn	X	X		X								
<i>Lycium hassei</i>	Santa Catalina Island desert thorn							X	X	X		X	X
<i>Lycium parishii</i>	Parish's desert-thorn							X	X	X	X	X	
<i>Nicotiana attenuata</i>	coyote tobacco	X	X	X	X	X	X		X	X	X	X	
<i>Nicotiana bigelovii</i>	Wallace's tobacco			X									
* <i>Nicotiana glauca</i>	tree tobacco	X	X	X		X	X	X	X	X	X	X	X
<i>Nicotiana quadrivalvis</i>	Wallace's tobacco	X	X	X		X	X	X	X	X	X	X	X
<i>Petunia parviflora</i>	wild petunia							X	X	X	X	X	
<i>Solanum americanum</i>	small-flowered nightshade	X	X	X		X	X	X	X	X	X	X	X
<i>Solanum douglasii</i>	Douglas' nightshade	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Solanum elaeagnifolium</i>	white horse-nettle	X	X	X	X	X	X	X	X	X	X	X	X
<i>Solanum nigrum</i>	black nightshade	X											
<i>Solanum parishii</i>	Parish's nightshade	X	X	X		X	X	X	X	X	X	X	X

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Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI
* <i>Solanum rostratum</i>	buffalo berry							X	X	X	X	X	
* <i>Solanum sarrachoides</i>	hairy nightshade							X	X	X	X	X	
<i>Solanum umbelliferum</i>	blue witch	X	X	X		X	X	X	X	X	X	X	X
<i>Solanum wallacei</i>	Wallace's nightshade												X
<i>Solanum xanti</i>	chaparral nightshade	X	X	X		X	X	X	X	X	X	X	X
Sterculiaceae		Cacao Family											
<i>Fremontodendron californicum</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Fremontodendron mexicanum</i>	Mexican flannelbrush								X	X	X	X	
Tamaricaceae		Tamarisk Family											
* <i>Tamarix aphylla</i>	athel	X	X					X	X	X	X	X	
* <i>Tamarix chinensis</i>	tamarisk	X	X		X			X	X	X	X	X	
* <i>Tamarix parviflora</i>	small-flowered tamarisk	X	X		X			X	X	X	X	X	
* <i>Tamarix ramosissima</i>	Mediterranean tamarisk	X	X	X	X	X	X	X	X	X			
Urticaceae		Nettle Family											
<i>Hesperocnide tenella</i>	western nettle	X	X	X		X	X	X	X	X	X	X	X
<i>Parietaria hespera</i>	western pellitory	X	X	X		X	X	X	X	X	X	X	X
<i>Soleirolia soleirolii</i>	Baby's tears							X	X	X	X	X	
<i>Urtica dioica</i>	giant creek nettle	X	X	X		X	X	X	X	X	X	X	X
<i>Urtica holosericea</i>	stinging nettle	X	X	X		X	X	X	X	X	X	X	X

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* <i>Urtica urens</i>	dwarf nettle	X	X	X		X	X	X	X	X	X	X	X
Valerianaceae Valerian Family													
<i>Plectritis ciliosa</i>	long-spurred plectritis	X	X	X		X	X	X	X	X	X	X	X
Verbenaceae Vervain Family													
<i>Phyla lanceolata</i>		X	X		X			X	X	X	X	X	
<i>Phyla nodiflora</i>								X	X	X	X	X	
<i>Verbena lasiostachys</i>	western verbena	X	X	X		X	X	X	X	X	X	X	X
<i>Verbena menthifolia</i>	mint-leaved verbena						X	X	X	X	X	X	
<i>Verbena robusta</i>	verbena						X						
Violaceae Violet Family													
<i>Viola aurea</i>	golden violet	X	X		X				X	X			
<i>Viola pedunculata</i>	johnny-jump-up	X	X	X		X	X	X	X	X	X	X	X
<i>Viola pinetorum</i>	grey-leaved violet	X	X	X		X	X	X					
<i>Viola purpurea</i>		X	X	X		X	X	X	X	X	X	X	X
Viscaceae Mistletoe Family													
<i>Arceuthobium occidentale</i>	foothill pine dwarf mistletoe	X	X	X		X	X	X					
<i>Phoradendron californicum</i>	desert mistletoe	X	X		X								
<i>Phoradendron densum</i>	dense mistletoe	X	X	X		X	X	X	X	X	X	X	
<i>Phoradendron macrophyllum</i>	big leaf mistletoe	X	X	X		X	X	X	X	X	X	X	

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<i>Phoradendron villosum</i>	oak mistletoe	X	X	X		X	X	X	X	X	X	X	
Vitaceae	Grape Family												
<i>Vitis girdiana</i>	desert wild grape	X	X	X		X	X	X	X	X	X	X	X
Zygophyllaceae	Caltrop Family												
<i>Larrea tridentata</i>		X	X		X								

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Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI
Alismataceae	Water-Plantain Family												
<i>Alisma plantago-aquatica</i>	water plantain	X	X	X		X	X	X	X	X	X	X	X
<i>Echinodorus berteroi</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Sagittaria sanfordii</i>	Sanford's arrowhead							X	X	X	X	X	
Cyperaceae	Sedge Family												
<i>Carex alma</i>		X	X	X		X	X	X	X	X	X	X	
<i>Carex barbarae</i>								X	X	X	X	X	
<i>Carex diandra</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Carex fracta</i>		X	X	X		X	X	X	X	X	X	X	
<i>Carex lanuginosa</i>	woolly sedge	X	X	X	X				X	X			
<i>Carex multicaulis</i>		X	X	X		X	X	X	X	X	X	X	
<i>Carex praegracilis</i>	clustered field sedge	X	X	X		X	X	X	X	X	X	X	X
<i>Carex schottii</i>		X	X	X		X	X	X	X	X	X	X	
<i>Carex senta</i>	rough sedge	X	X	X		X	X	X	X	X	X	X	X
<i>Carex spissa</i>	San Diego sedge							X	X	X	X	X	
<i>Carex triquetra</i>	triangular-fruited sedge	X	X	X		X	X	X	X	X	X	X	X
* <i>Cyperus difformis</i>	variable nutsedge	X	X	X		X	X	X	X	X	X	X	X
<i>Cyperus eragrostis</i>	tall cyperus	X	X	X		X	X	X	X	X	X	X	X
<i>Cyperus erythrorhizos</i>	red-rooted cyperus	X	X	X	X	X	X	X	X	X	X	X	X

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<i>Cyperus esculentus</i>	yellow nut-grass	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Cyperus involucratus</i>	umbrella-plant							X	X	X	X	X	
<i>Cyperus niger</i>	brown cyperus							X	X	X	X	X	
<i>Cyperus odoratus</i>	coarse cyperus							X	X	X	X	X	
* <i>Cyperus rotundus</i>	purple nutsedge							X	X	X	X	X	
<i>Eleocharis acicularis</i>	needle-stemmed spikerush	X	X	X		X	X	X	X	X	X	X	X
<i>Eleocharis macrostachya</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Eleocharis montevidensis</i>	Argentine spike-rush	X	X	X		X	X	X	X	X	X	X	X
<i>Eleocharis parishii</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Eleocharis parvula</i>	small spike-rush	X	X		X								
<i>Eleocharis radicans</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Scirpus acutus</i>	hard-stemmed bulrush	X	X	X		X	X	X	X	X	X	X	X
<i>Scirpus americanus</i>	winged three-square	X	X	X		X	X	X	X	X	X	X	X
<i>Scirpus californicus</i>	California bulrush	X	X					X	X	X	X	X	
<i>Scirpus cernuus</i>	California clubrush							X	X	X	X	X	
<i>Scirpus maritimus</i>	river bulrush	X	X	X		X	X	X	X	X	X	X	X
<i>Scirpus microcarpus</i>	small-fruited bulrush	X	X	X		X	X	X	X	X	X	X	X
<i>Scirpus pungens</i>	common threesquare	X	X					X	X	X	X	X	
<i>Scirpus robustus</i>	Pacific coast bulrush							X	X	X	X	X	

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Iridaceae	Iris Family												
<i>Sisyrinchium bellum</i>	blue-eyed-grass	X	X	X		X	X	X	X	X	X	X	X
Juncaceae	Rush Family	7	1	4	2	5	6	3	8	8	12	9	10
<i>Juncus acutus</i>	spiny rush							X	X	X	X	X	X
<i>Juncus balticus</i>	wire rush	X	X	X		X	X	X	X	X	X	X	X
<i>Juncus bufonius</i>	toad rush	X	X	X		X	X	X	X	X	X	X	X
<i>Juncus dubius</i>	mariposa rush										X	X	X
<i>Juncus duranii</i>	Duran's rush	X		X					X	X		X	
<i>Juncus effusus</i>	bog rush	X	X	X		X	X	X	X	X	X	X	X
<i>Juncus macrophyllus</i>	long-leaved rush	X	X	X		X	X	X	X	X			
<i>Juncus mexicanus</i>	Mexican rush	X	X	X		X	X	X	X	X	X	X	X
<i>Juncus oxymersis</i>	pointed rush	X	X	X		X	X	X	X	X			
<i>Juncus patens</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Juncus phaeocephalus</i> var. <i>paniculatus</i>								X	X	X	X	X	
<i>Juncus rugulosus</i>	wrinkled rush	X	X	X		X	X	X	X	X	X	X	
<i>Juncus textilis</i>	Indian rush	X	X	X		X	X	X	X	X	X	X	X
<i>Juncus torreyi</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Juncus xiphioides</i>	iris-leaved rush	X	X	X		X	X	X	X	X	X	X	X

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VASCULAR PLANTS—Angiosperms (Monocotyledons)		SIGNIFICANT ECOLOGICAL AREAS											
Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI
Juncaginaceae <i>Triglochin concinna</i>			X					X	X	X	X	X	
Arrow-Grass Family													
Lemnaceae <i>Lemna gibba</i>		X	X	X		X	X	X	X	X	X	X	X
Duckweed Family													
<i>Lemna minor</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Lemna trisulca</i>		X	X					X			X	X	
<i>Wolfiella lingulata</i>								X	X	X	X	X	
Mud-midget													
Liliaceae <i>Allium burlewii</i>		X	X	X	X	X	X	X	X	X	X	X	X
Lily Family													
<i>Allium campanulatum</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Allium fimbriatum</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Allium fimbriatum</i> var. <i>mohavense</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Allium haematochiton</i>		X	X	X		X	X	X	X	X	X	X	
<i>Allium howellii</i>		X	X	X		X	X	X	X	X			
<i>Allium lacunosum</i>		X	X	X	X	X	X	X	X	X	X	X	
<i>Allium munzii</i>								X			X	X	
<i>Allium parishii</i>		X	X		X								
<i>Allium peninsulare</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Allium praecox</i>		X	X	X		X	X	X	X	X	X	X	X
early onion													

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	<i>Androstephium breviflorum</i>	X	X		X								
*	<i>Asparagus officinalis</i>	X	X	X		X	X	X	X	X	X	X	X
	<i>Bloomeria crocea</i>	X	X	X		X	X	X	X	X	X	X	
	<i>Brodiaea filifolia</i>							X			X	X	X
	<i>Brodiaea jolonensis</i>	X	X	X		X	X	X	X	X	X	X	X
	<i>Brodiaea orcuttii</i>										X	X	
	<i>Calochortus albus</i>	X	X	X		X	X	X	X	X			
	<i>Calochortus catalinae</i>							X	X	X	X	X	X
	<i>Calochortus clavatus</i>	X	X	X		X	X	X	X	X			
	<i>Calochortus dunni</i>								X	X	X	X	
	<i>Calochortus invenustus</i>	X	X	X		X	X	X	X	X	X	X	X
	<i>Calochortus kennedyi</i>	X	X	X	X	X	X	X	X	X			
	<i>Calochortus palmeri</i>	X	X	X		X	X	X	X	X			
	<i>Calochortus plummerae</i>							X	X	X	X	X	
	<i>Calochortus splendens</i>	X	X	X		X	X	X	X	X	X	X	X
	<i>Calochortus striatus</i>	X	X		X								
	<i>Calochortus venustus</i>	X	X	X		X	X	X	X	X			
	<i>Calochortus weedii</i>	X	X	X		X	X	X	X	X	X	X	
	<i>Chlorogalum parviflorum</i>							X	X	X	X	X	

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<i>Chlorogalum pomeridianum</i>	soap plant	X	X	X		X	X	X	X	X	X	X	X
<i>Chlorogalum purpureum</i>									X	X			
<i>Dichelostemma capitatum</i>	blue dicks	X	X	X	X	X	X	X	X	X	X	X	X
<i>Fritillaria biflora</i>	chocolate lily	X	X	X		X	X	X	X	X	X	X	X
<i>Lilium humboldtii</i>	Humboldt lily	X	X	X			X	X	X	X	X	X	
<i>Lilium parryi</i>	lemon lily	X	X	X					X	X			
<i>Muilla coronata</i>	crowned muilla	X	X		X				X	X			
<i>Muilla maritima</i>	common muilla	X	X	X		X	X	X	X	X	X	X	X
<i>Nolina parryi</i>	Parry's nolina	X	X	X		X	X	X	X	X	X	X	X
<i>Yucca brevifolia</i>		X	X		X								
<i>Yucca whipplei</i>	Our Lord's candle	X	X	X		X	X	X	X	X	X	X	X
<i>Zigadenus brevibracteatus</i>	desert zigadene	X	X		X								
<i>Zigadenus fremontii</i>	Fremont's star-lily	X	X	X		X	X	X	X	X	X	X	X
Orchidaceae		Orchid Family											
<i>Epipactis gigantea</i>	stream orchid	X	X	X		X	X	X	X	X	X	X	
<i>Piperia leptopetala</i>		X	X	X		X	X	X	X	X	X	X	
<i>Platanthera leucostachys</i>	white-flowered bog-orchid	X	X	X		X	X	X	X	X	X	X	X
Poaceae		Grass Family											
<i>Achnatherum coronatum</i>	giant needlegrass	X	X	X		X	X	X	X	X	X	X	X

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<i>Achnatherum diegoense</i>	San Diego county needle grass										X	X	X
<i>Agrostis exarata</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Agrostis gigantea</i>		X	X	X		X	X	X	X	X	X	X	X
<i>Agrostis pallens</i>	leafy bentgrass	X	X	X		X	X	X	X	X	X	X	X
* <i>Agrostis stolonifera</i>	redtop	X	X	X		X	X	X	X	X	X	X	
* <i>Agrostis viridis</i>	water bent	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Ammophila arenaria</i>	european beachgrass							X					
* <i>Andropogon glomeratus</i> var. <i>scabriglumis</i>	southwestern bushy bluestem	X	X	X		X	X	X	X	X	X	X	X
<i>Aristida adscensionis</i>	six-weeks three-awn	X	X	X	X	X	X	X	X	X	X	X	X
<i>Aristida purpurea</i>	parish threeawn	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Arundo donax</i>	giant reed	X		X				X	X	X	X	X	
* <i>Avena barbata</i>	slender wild oat	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Avena fatua</i>	wild oat	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Avena sativa</i>	cultivated oat	X	X	X		X	X	X	X	X	X	X	X
<i>Bothriochloa barbinodis</i>	cane bluestem	X	X	X		X	X	X	X	X	X	X	X
<i>Brachypodium distachyon</i>	false-brome							X	X	X	X	X	X
* <i>Bromus arenarius</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Bromus arizonicus</i>		X	X		X			X	X	X	X	X	X
<i>Bromus carinatus</i>	California brome	X	X	X	X	X	X	X	X	X	X	X	X

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* <i>Bromus catharticus</i>	rescue grass	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Bromus diandrus</i>	ripgut grass	X	X	X	X	X	X	X	X	X	X	X	X
	<i>Bromus grandis</i>	X	X	X		X	X	X	X	X	X	X	
* <i>Bromus hordeaceus</i>	soft chess	X	X	X		X	X	X	X	X	X	X	X
	<i>Bromus laevipus</i>	X	X	X		X	X	X	X	X	X	X	
* <i>Bromus madritensis</i>	foxtail chess	X	X	X	X	X	X	X	X	X	X	X	X
	<i>Bromus marginatus</i>		X										
* <i>Bromus mollis</i>	soft brome						X						
	<i>Bromus orcuttianus</i>	X	X	X		X	X	X	X	X	X	X	
* <i>Bromus tectorum</i>	cheat grass	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Bromus trinii</i>	Chilean chess	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Cenchrus longispinus</i>	mat sandbur	X	X		X			X	X	X	X	X	
* <i>Chloris gayana</i>	Rhodes grass							X	X	X	X	X	
* <i>Chloris virgata</i>	fingergrass	X	X		X			X	X	X	X	X	
* <i>Cortaderia jubata</i>								X					
* <i>Cortaderia selloana</i>	pampas grass							X	X	X	X	X	
* <i>Crypsis schoednoides</i>	swamp grass	X	X	X		X	X	X	X	X	X	X	X
* <i>Crypsis vaginiflora</i>		X	X	X		X	X	X	X	X	X	X	X
* <i>Cynodon dactylon</i>	Bermuda grass	X	X	X	X	X	X	X	X	X	X	X	X

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* <i>Dactylis glomerata</i>	orchard grass	X	X	X		X	X	X	X	X	X	X	X
<i>Deschampsia danthonioides</i>	annual hairgrass	X	X	X		X	X	X	X	X	X	X	X
* <i>Digitaria ischaemum</i>								X	X	X	X	X	
* <i>Digitaria sanguinalis</i>	hairy crabgrass							X	X	X	X	X	
<i>Dissantheium californicum</i>	california dissantheium												X
<i>Distichlis spicata</i>	saltgrass	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Echinochloa crus-galli</i>	barnyard grass	X	X	X	X	X	X	X	X	X	X	X	X
<i>Elymus elymoides</i>	squirreltail	X	X	X	X	X	X	X	X	X	X	X	
<i>Elymus glaucus</i>	blue wildrye	X	X	X	X	X	X	X	X	X	X	X	X
<i>Elymus multisetus</i>	big squirreltail	X	X	X	X	X	X	X	X	X	X	X	X
<i>Elymus stebbinsii</i>	wheatgrass	X	X	X		X	X	X	X	X	X	X	X
* <i>Erastgrostis barrelieri</i>		X	X	X		X	X	X	X	X	X	X	X
* <i>Erastgrostis cilianensis</i>	stink grass	X	X	X	X	X	X	X	X	X	X	X	X
<i>Erastgrostis pectinacea</i>		X	X	X	X	X	X	X	X	X	X	X	X
* <i>Festuca arundinacea</i>	tall fescue	X	X	X		X	X	X	X	X	X	X	X
* <i>Festuca pratensis</i>	meadow fescue	X	X	X		X	X	X	X	X	X	X	X
* <i>Gastridium ventricosum</i>	nit grass	X	X	X		X	X	X	X	X	X	X	X
<i>Hordeum brachyantherum</i>	meadow barley	X	X	X	X	X	X	X	X	X	X	X	X
<i>Hordeum depressum</i>	alkali barley	X	X	X	X	X	X	X	X	X	X	X	X

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<i>Hordeum intercedens</i>	vernal barley	X	X	X		X	X	X	X	X	X	X	X
<i>Hordeum jubatum</i>	foxtail barley	X	X	X	X	X	X	X	X	X	X	X	X
<i>Koeleria macrantha</i>	June grass	X	X	X		X	X	X	X	X	X	X	X
* <i>Lamarckia aurea</i>	goldentop	X	X	X	X	X	X	X	X	X	X	X	X
<i>Leptochloa uninervia</i>	Mexican sprangletop	X	X	X		X	X	X	X	X	X	X	X
<i>Leymus cinereus</i>	alkali rye	X	X	X		X	X	X	X	X		X	
<i>Leymus condensatus</i>		X	X	X	X	X	X	X	X	X	X	X	X
<i>Leymus condensatus</i>	giant wild rye	X	X	X	X	X	X	X	X	X	X	X	X
<i>Leymus triticoides</i>	beardless wild rye	X	X	X		X	X	X	X	X	X	X	X
* <i>Lolium temulentum</i>	darnel	X	X	X		X	X	X	X	X	X	X	X
<i>Melica imperfecta</i>	coast range melic	X	X	X	X	X	X	X	X	X	X	X	X
<i>Melica stricta</i>		X	X	X		X	X	X	X	X			X
<i>Monanthochloe littoralis</i>								X	X	X	X	X	X
<i>Muhlenbergia appressa</i>	appressed muhly												X
<i>Muhlenbergia asperifolia</i>	scratch grass	X	X	X	X	X	X	X	X	X	X	X	X
<i>Muhlenbergia californica</i>	california muhly	X		X				X	X	X	X	X	
<i>Muhlenbergia microsperma</i>	littleseed muhly	X	X	X	X	X	X	X	X	X	X	X	X
<i>Muhlenbergia rigens</i>	deergrass	X	X	X		X	X	X	X	X	X	X	X
<i>Nassella cernua</i>	nodding needlegrass	X	X	X		X	X	X	X	X	X	X	X

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<i>Nassella lepida</i>	small-flowered needlegrass	X	X	X		X	X	X	X	X	X	X	X
<i>Nassella pulchra</i>	purple needlegrass	X	X	X		X	X	X	X	X	X	X	X
<i>Orcuttia californica</i>	California orcutt grass	X	X	X		X	X	X	X	X	X	X	X
<i>Panicum capillare</i>	witchgrass	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Panicum miliaceum</i>	broom corn millet	X	X	X		X	X	X	X	X	X	X	X
* <i>Parapholis incurva</i>	sickle grass							X	X	X	X	X	X
* <i>Paspalum dilatatum</i>	dallis grass	X	X	X	X	X	X	X	X	X	X	X	X
<i>Paspalum distichum</i>	knotgrass	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Pennisetum clandestinum</i>	kikuyu grass							X	X	X	X	X	
* <i>Pennisetum setaceum</i>	fountain grass		X					X	X	X	X	X	
* <i>Phalaris aquatica</i>	Harding grass		X					X	X	X	X	X	
* <i>Phalaris canariensis</i>	canary grass			X				X	X	X	X	X	
* <i>Phalaris minor</i>	Mediterranean canary grass	X	X	X		X	X	X	X	X	X	X	X
* <i>Phalaris paradoxa</i>		X	X	X		X	X	X	X	X	X	X	X
* <i>Piptatherum miliaceum</i>	smilo grass		X					X	X	X	X	X	X
* <i>Poa annua</i>	annual bluegrass	X	X	X	X	X	X	X	X	X	X	X	X
<i>Poa atropurpurea</i>	San Bernardino blue grass								X	X	X	X	
* <i>Poa palustris</i>	fowl bluegrass	X		X				X	X	X			
* <i>Poa pratensis</i>	Kentucky bluegrass	X	X	X	X	X	X	X	X	X	X	X	X

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<i>Poa secunda</i>	Malpais bluegrass	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Polypogon interruptus</i>	ditch beard grass	X	X	X	X	X	X	X	X	X	X	X	X
* <i>Polypogon monspeliensis</i>	annual beard grass	X	X	X	X	X	X	X	X	X	X	X	X
<i>Puccinellia simplex</i>	alkali grass	X	X		X								
* <i>Schismus arabicus</i>	Arabian grass	X	X		X								X
* <i>Schismus barbatus</i>	Mediterranean schismus	X	X	X		X	X	X	X	X	X	X	X
<i>Setaria gracilis</i>		X	X		X			X	X	X	X	X	
* <i>Setaria pumila</i>	yellow bristle grass	X	X		X			X	X	X	X	X	
* <i>Setaria viridis</i>		X	X	X		X	X	X	X	X	X	X	X
* <i>Sorghum halepense</i>	Johnsongrass	X	X	X		X	X	X	X	X	X	X	X
<i>Sphenopholis obtusata</i>	prairie wedge grass							X	X	X	X	X	
<i>Sporobolus airoides</i>	alkali sacaton	X	X	X		X	X	X	X	X	X	X	X
* <i>Sporobolus indicus</i>	smutgrass							X	X	X	X	X	
* <i>Stenotaphrum secundatum</i>	St. Augustine grass							X	X	X	X	X	
* <i>Vulpia bromoides</i>	false brome fescue	X	X	X		X	X	X	X	X	X	X	X
<i>Vulpia microstachys</i>	Pacific fescue	X	X	X		X	X	X	X	X	X	X	X
* <i>Vulpia myuros</i>	fescue	X	X	X	X	X	X	X	X	X	X	X	X
<i>Vulpia octoflora</i>	hairy six-weeks fescue	X	X	X	X	X	X	X	X	X	X	X	X

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VASCULAR PLANTS—Angiosperms (Monocotyledons)		SIGNIFICANT ECOLOGICAL AREAS											
Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI
Potamogetonaceae	Pondweed Family												
<i>Potamogeton crispus</i>	Crispate-leaved pondweed	X	X	X	X			X	X	X	X	X	X
<i>Potamogeton foliosus</i>	leafy pondweed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Potamogeton nodosus</i>	long-leaved pondweed	X	X		X			X	X	X	X	X	
<i>Potamogeton pectinatus</i>	fennel-leaf pondweed	X	X	X	X	X	X	X	X	X	X	X	X
<i>Ruppia maritima</i>	ditch-grass							X	X	X	X	X	X
Typhaceae	Cattail Family												
<i>Typha angustifolia</i>	narrow-leaved cattail							X	X	X	X	X	
<i>Typha domingensis</i>	slender cattail	X	X	X	X	X	X	X	X	X	X	X	X
<i>Typha latifolia</i>	broad-leaved cattail	X	X	X	X	X	X	X	X	X	X	X	X
Zannichelliaceae	Horned-Pondweed Family												
<i>Zannichellia palustris</i>	horned pondweed	X	X	X	X	X	X	X	X	X	X	X	X
Zosteraceae	Eel-Grass Family												
<i>Phyllospadix scouleri</i>	surf-grass							X	X	X	X	X	
<i>Phyllospadix torreyi</i>	surf-grass							X	X	X	X	X	
<i>Zostera marina</i>	eel-grass							X	X	X	X	X	X

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FAUNAL COMPENDIUM

FISH		SIGNIFICANT ECOLOGICAL AREAS												
Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI	
Gasterosteidae Family	Stickleback Family													
<i>Gasterosteus aculeatus aculeatus</i>	fully armored three-spine stickleback						X							
<i>Gasterosteus aculeatus microcephalus</i>	partly armored three-spine stickleback							X						
<i>Gasterosteus aculeatus williamsoni</i>	unarmored three-spine stickleback			X										
Ictaluridae Family	Catfish Family													
* <i>Ictalurus nebulosus</i>	brown bullhead		X	X				X	X	X	X			
* <i>Ictalurus punctatus</i>	channel catfish		X	X				X	X	X	X			
Poeciliidae Family	Livebearer Family													
* <i>Gambusia affinis</i>	mosquitofish	X	X	X	X	X	X	X	X	X	X	X		
Cottidae Family	Sculpin Family													
<i>Cottus asper</i>	prickly sculpin			X										
Gobiidae Family	Goby Family													
<i>Eucyclogobius newberryi</i>	tidewater goby							X					X	
Salmonidae Family	Trout and Salmon Family													
<i>Oncorhynchus mykiss iridius</i>	steelhead rainbow trout							X						
<i>Oncorhynchus mykiss</i>	rainbow trout		X				X	X	X	X	X			

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Embiotocidae Family	Surfperch Family												
<i>Hysterocarpus traski</i>	tuleperch		X										
Centrarchidae Family	Sunfish Family												
* <i>Micropterus salmoides</i>	largemouth bass		X	X			X	X	X	X	X		
* <i>Lepomis macrochirus</i>	bluegill		X	X			X	X	X	X	X		
* <i>Lepomis cyanellus</i>	green sunfish		X	X			X	X	X	X	X		
* <i>Pomoxis annularis</i>	white crappie							X			X		
* <i>Pomoxis nigromaculatus</i>	black crappie							X			X		
Castostomidae Family	Sucker Family												
<i>Catostomus santaanae</i>	Santa Ana sucker			X			X		X	X	X		
Cyprinidae Family	Minnnow Family												
* <i>Cyprinus carpio</i>	carp								X	X	X		
* <i>Notemigonus crysoleucas</i>	golden shiner			X									
* <i>Pimephales promelas</i>	fathead minnow			X				X					
<i>Gila orcutti</i>	arroyo chub		X	X			X	X	X	X			
<i>Rhinichthys osculus</i>	speckled dace			X					X	X			

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AMPHIBIANS		SIGNIFICANT ECOLOGICAL AREAS											
Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SD	SD	ES	PH	CI
Salamandridae	Newts												
<i>Taricha torosa torosa</i>	Coast Range newt			X		X	X	X	X	X		X	
Plethodontidae	Lungless Salamanders												
<i>Ensatina eschscholtzi eschscholtzi</i>	Monterey salamander	X	X	X		X	X	X	X	X		X	
<i>Ensatina eschscholtzi crocreater</i>	Yellow-blotched salamander								X	X			
<i>Aneides lugubris</i>	arboreal salamander	X	X	X		X	X	X	X	X	X	X	
<i>Batrachoseps nigriventris</i>	black-bellied slender salamander	X	X	X		X	X	X	X	X	X	X	
<i>Batrachoseps pacificus</i>	Pacific slender salamander						X	X	X	X	X	X	X
<i>Batrachoseps pacificus major</i>	garden slender salamander								X	X	X	X	
<i>Batrachoseps stebbinsi</i>	Tehachapi slender salamander		X										
Pelobatidae	Spadefoot Toads												
<i>Spea hammondii</i>	western spadefoot						X	X	X	X	X	X	
Bufo	True Toads												
<i>Bufo boreas halophilus</i>	California toad	X	X	X		X	X	X	X	X	X	X	
<i>Bufo punctatus</i>	red-spotted toad	X											
<i>Bufo microscaphus californicus</i>	Arroyo southwestern toad	X	X										
Hylidae	Tree Frogs												
<i>Hyla cadaverina</i>	California treefrog	X	X	X		X	X	X	X	X	X	X	
<i>Hyla regilla</i>	Pacific treefrog	X	X	X	X	X	X	X	X	X	X	X	X

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Ranidae		True Frogs											
<i>Rana aurora draytonii</i>	California red-legged frog			X				X					
<i>Rana boylei</i>	Foothill yellow-legged frog		X						X	X			
<i>Rana muscosa</i>	Mountain yellow-legged frog	X							X	X			
* <i>Rana catesbeiana</i>	bullfrog	X	X	X	X	X	X	X	X	X	X	X	X
Pipidae		Tongueless Frogs											
* <i>Xenopus laevis</i>	African clawed frog	X	X	X		X	X	X	X	X	X	X	X

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REPTILES		SIGNIFICANT ECOLOGICAL AREAS											
Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI
Emydidae	Box and Water Turtles												
<i>Clemmys marmorata pallida</i>	southwestern pond turtle	X	X	X		X	X	X	X	X	X	X	
Testudinidae	Land Tortoises												
<i>Gopherus agassizii</i>	desert tortoise	X											
Gekkonidae	Geckos												
<i>Coleonyx variegatus abbotti</i>	San Diego banded gecko	X		X		X	X	X	X	X	X	X	
Iguanidae	Iguanid Lizards												
<i>Dipsosaurus dorsalis</i>	desert iguana	X											
<i>Sceloporus magister uniformi</i>	yellow-backed spiny lizard	X											
<i>Gambelia wislizenii wislizenii</i>	large-spotted leopard lizard	X											
<i>Crotaphytus insularis bicinctores</i>	Great Basin collared lizard	X											
<i>Sauromalus obesus obesus</i>	western chuckwalla	X											
<i>Callisaurus draconoides draconoides</i>	common zebra-tailed lizard	X											
<i>Uma scoparia</i>	Mojave fringe-toed lizard	X											
<i>Sceloporus occidentalis biseriatus</i>	Great Basin fence lizard	X	X	X	X	X	X	X	X	X	X	X	
<i>Sceloporus graciosus vandenburgianus</i>	southern sagebrush lizard	X	X										
<i>Uta stansburiana</i>	side-blotched lizard		X	X	X	X	X	X	X	X	X	X	
<i>Urosaurus graciosus graciosus</i>	western brush lizard	X											
<i>Phrynosoma coronatum blainvillei</i>	San Diego coast horned lizard	X		X		X	X	X	X	X	X	X	

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<i>Lichanura trivirgata gracia</i>	desert rosy boa	X			X								
<i>Lichanura trivirgata roseofusca</i>	Coastal rosy boa		X	X			X	X	X	X		X	
Colubridae		Colubrid Snakes											
<i>Diadophis punctatus modestus</i>	San Bernardino ringneck snake			X			X	X	X	X	X	X	X
<i>Diadophis punctatus similis</i>	San Diego ringneck snake											X	X
<i>Phyllorhynchus decurtatus perkinsi</i>	western spotted leaf-nosed snake	X							X	X			
<i>Coluber constrictor mormon</i>	western yellow-bellied racer		X	X				X					
<i>Masticophis flagellum piceus</i>	red coachwhip	X	X	X	X	X	X	X	X	X	X	X	
<i>Masticophis lateralis lateralis</i>	Chaparral whipsnake	X	X	X			X	X	X	X	X	X	
<i>Salvadora hexalepis virgulata</i>	Coast patch-nosed snake		X	X	X	X	X	X	X	X		X	
<i>Arizona elegans occidentalis</i>	California glossy snake											X	
<i>Pituophis cantenifer annectens</i>	San Diego gopher snake		X	X			X	X	X	X	X	X	
<i>Pitouphis cantenifer deserticola</i>	Great Basin gopher snake	X			X								
<i>Lampropeltis getula californiae</i>	California kingsnake	X	X	X	X	X	X	X	X	X	X	X	
<i>Lampropeltis zonata parvirubra</i>	San Bernardino Mountain kingsnake						X		X	X			
<i>Lampropeltis zonata pulchra</i>	San Diego Mountain kingsnake							X					
<i>Rhinocheilus lecontei lecontei</i>	western long-nosed snake	X	X	X	X	X	X	X	X	X	X	X	
<i>Thamnophis sirtalis infernalis</i>	California red-sided garter snake			X			X	X					
<i>Thamnophis hammondi</i>	two-striped garter snake	X	X	X		X	X	X	X	X			X

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<i>Chionactis occipitalis occipitalis</i>	Mojave shovel-nosed snake	X											
<i>Tantilla planiceps</i>	California black-headed snake			X			X	X				X	
<i>Trimorphodon biscutatus vandenburghi</i>	California lyre snake	X	X	X			X	X	X	X			
<i>Hypsiglena torquata</i>	night snake	X	X	X	X	X	X	X	X	X	X	X	
Viperidae		Vipers											
<i>Crotalus ruber ruber</i>	northern red diamond rattlesnake												X
<i>Crotalus mitchellii pyrrhus</i>	southwestern speckled rattlesnake	X							X	X			
<i>Crotalus cerastes cerastes</i>	Mojave Desert sidewinder	X											
<i>Crotalus scutulatus scutulatus</i>	Mojave green rattlesnake	X											
<i>Crotalus viridis helleri</i>	southern pacific rattlesnake		X	X			X	X	X	X	X	X	

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BIRDS		SIGNIFICANT ECOLOGICAL AREAS											
Scientific Name	Common Name	AV	SA	SC	JT	CM	SS	SM	SG	SD	ES	PH	CI
Gaviidae	Loons												
<i>Gavia stellata</i>	red-throated loon												X
<i>Gavia arctica</i>	Pacific loon												X
<i>Gavia immer</i>	common loon												X
Podicipedidae	Grebes												
<i>Podilymbus podiceps</i>	pied-billed grebe		X					X			X		X
<i>Podiceps auritus</i>	horned grebe		X					X			X		X
<i>Podiceps nigricollis</i>	eared grebe		X					X			X		X
<i>Aechmophorus clarkii</i>	Clark's grebe		X					X			X		X
<i>Aechmophorus occidentalis</i>	western grebe		X					X			X		X
Pelecanidae	Pelicans												
<i>Pelecanus erythrorhynchos</i>	American white pelican	X											X
<i>Pelecanus occidentalis californicus</i>	California brown pelican							X			X		X
Phalacrocoracidae	Cormorants												
<i>Phalacrocorax auritus</i>	double-crested cormorant	X	X					X	X	X	X		X
<i>Phalacrocorax penicillatus</i>	Brandt's cormorant												X
<i>Phalacrocorax pelagicus</i>	pelagic cormorant												X

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Ardeidae		Hérons											
<i>Botaurus lentiginosus</i>	American bittern	X	X				X	X	X	X	X		
<i>Ixobrychus exilis hesperis</i>	western least bittern	X	X	X				X	X	X	X		
<i>Ardea herodias</i>	great blue heron	X	X	X			X	X	X	X	X	X	X
<i>Ardea alba</i>	great egret	X	X	X			X	X	X	X	X	X	X
<i>Egretta thula</i>	snowy egret	X	X	X			X	X	X	X	X	X	X
<i>Bubulcus ibis</i>	cattle egret	X	X	X			X	X	X	X	X	X	X
<i>Butorides striatus</i>	green heron	X	X	X			X	X	X	X	X		X
<i>Nycticorax nycticorax</i>	black-crowned night-heron	X	X	X			X	X	X	X	X		X
Threskiornithidae		Ibises											
<i>Plegadis chihi</i>	white-faced ibis	X						X	X	X	X		
Anatidae		Waterfowl											
<i>Anser albifrons</i>	greater white-fronted goose	X		X				X			X		
<i>Branta bernicla</i>	brant	X						X			X		
<i>Branta canadensis</i>	Canada goose	X	X	X			X	X	X	X	X	X	X
<i>Chen caerulescens</i>	snow goose	X		X				X			X		
<i>Aix sponsa</i>	wood duck			X				X			X		
<i>Anas crecca</i>	green-winged teal	X	X	X			X	X	X	X	X	X	X
<i>Anas platyrhynchos</i>	mallard	X	X	X			X	X	X	X	X	X	X

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<i>Anas acuta</i>	northern pintail	X	X	X			X	X	X	X	X	X	X
<i>Anas discors</i>	blue-winged teal	X	X	X			X	X	X	X	X	X	X
<i>Anas cyanoptera</i>	cinnamon teal	X	X	X			X	X	X	X	X	X	X
<i>Anas clypeata</i>	northern shoveler	X	X	X			X	X	X	X	X	X	X
<i>Anas strepera</i>	gadwall	X	X	X			X	X	X	X	X	X	X
<i>Anas americana</i>	American wigeon	X	X	X			X	X	X	X	X	X	X
<i>Anas penelope</i>	Eurasian wigeon	X	X	X			X	X	X	X	X	X	X
<i>Aythya valisineria</i>	canvasback	X	X	X				X	X	X	X		
<i>Aythya americana</i>	redhead	X	X	X			X	X	X	X	X	X	X
<i>Aythya collaris</i>	ring-necked duck	X	X	X			X	X	X	X	X	X	X
<i>Aythya marila</i>	greater scaup		X					X					X
<i>Aythya affinis</i>	lesser scaup		X					X					
<i>Melanitta nigra</i>	black scoter							X					X
<i>Melanitta perspicillata</i>	surf scoter							X					X
<i>Melanitta fusca</i>	white-winged scoter							X					X
<i>Bucephala clangula</i>	common goldeneye	X	X	X			X	X	X	X	X	X	X
<i>Bucephala albeola</i>	bufflehead	X	X	X			X	X	X	X	X	X	X
<i>Lophodytes cucullatus</i>	hooded merganser		X					X			X		X
<i>Mergus merganser</i>	common merganser		X					X			X		X

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<i>Mergus serrator</i>	red-breasted merganser												X
<i>Oxyura jamaicensis</i>	ruddy duck	X	X	X			X	X	X	X	X	X	X
Cathartidae		New World Vultures											
<i>Cathartes aura</i>	turkey vulture	X	X	X	X	X	X	X	X	X	X	X	X
<i>Gymnogyps californicus</i>	California condor		X										
Accipitridae		Hawks											
<i>Elanus leucurus</i>	white-tailed kite	X	X	X		X	X	X	X	X	X	X	X
<i>Pandion haliaetus</i>	osprey	X	X	X			X		X	X	X		X
<i>Haliaeetus leucocephalus</i>	bald eagle	X	X					X	X	X	X		X
<i>Circus cyaneus</i>	northern harrier	X	X	X	X	X	X	X	X	X	X	X	X
<i>Accipiter striatus</i>	sharp-shinned hawk		X	X	X		X	X	X	X	X	X	X
<i>Accipiter cooperii</i>	Cooper's hawk		X	X	X		X	X	X	X	X	X	X
<i>Accipiter gentilis</i>	northern goshawk		X						X	X	X		
<i>Buteo lineatus</i>	red-shouldered hawk		X	X			X	X			X	X	X
<i>Buteo swainsoni</i>	Swainson's hawk	X	X	X	X		X	X	X	X		X	
<i>Buteo jamaicensis</i>	red-tailed hawk	X	X	X	X		X	X	X	X	X	X	
<i>Buteo regalis</i>	ferruginous hawk	X	X	X	X		X				X	X	
<i>Buteo lagopus</i>	rough-legged hawk	X			X			X					
<i>Aquila chrysaetos</i>	golden eagle	X	X	X	X	X	X	X	X	X	X	X	

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BIRDS		SIGNIFICANT ECOLOGICAL AREAS											
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Falconidae		Falcons											
<i>Falco sparverius</i>	American kestrel	X	X	X	X	X	X	X	X	X	X	X	
<i>Falco columbarius</i>	merlin	X	X	X			X	X	X	X	X	X	
<i>Falco mexicanus</i>	prairie falcon	X	X	X	X	X	X	X	X	X	X	X	
<i>Falco peregrinus anatum</i>	American peregrine falcon	X	X	X				X	X	X			X
Phasianidae		Pheasants and Quails											
* <i>Phasianus colchicus</i>	ring-necked pheasant		X										
<i>Callipepla californica</i>	California quail	X	X	X	X	X	X	X	X	X	X	X	
<i>Oreortyx pictus</i>	mountain quail		X				X		X	X			
Rallidae		Rails and Gallinules											
<i>Rallus longirostris leripes</i>	light-footed clapper rail			X				X					
<i>Rallus limicola</i>	Virginia rail		X	X			X	X					
<i>Porzana carolina</i>	sora		X	X			X	X					X
<i>Gallinula chloropus</i>	common moorhen	X	X	X			X	X	X	X	X		X
<i>Fulica americana</i>	American coot	X	X	X			X	X			X		X
Charadriidae		Plovers											
<i>Pluvialis squatarola</i>	black-bellied plover	X	X					X					X
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	X						X					X
<i>Charadrius montanus</i>	mountain plover	X	X										

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<i>Charadrius semipalmatus</i>	semipalmated plover							X					X
<i>Charadrius vociferus</i>	killdeer	X	X	X	X	X	X	X	X	X	X	X	X
Haematopodidae		Oystercatchers											
<i>Haematopus bachmani</i>	black oystercatcher							X					X
Recurvirostridae		Stilts and Avocets											
<i>Himantopus mexicanus</i>	black-necked stilt	X					X	X	X	X	X		X
<i>Recurvirostra americana</i>	American avocet	X					X	X	X	X	X		X
Scolopacidae		Sandpipers											
<i>Tringa melanoleuca</i>	greater yellowlegs		X				X	X					X
<i>Tringa flavipes</i>	lesser yellowlegs		X				X	X					X
<i>Catoptrophorus semipalmatus</i>	willet												X
<i>Heteroscelus incanus</i>	wandering tattler												X
<i>Actitis macularia</i>	spotted sandpiper	X	X	X			X	X	X	X			X
<i>Numenius phaeopus</i>	whimbrel												X
<i>Numenius americanus</i>	long-billed curlew												X
<i>Limosa fedoa</i>	marbled godwit												X
<i>Arenaria interpres</i>	ruddy turnstone												X
<i>Arenaria melanocephala</i>	black turnstone												X
<i>Aphriza virgata</i>	surfbird												X

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<i>Calidris canutus</i>	red knot												X
<i>Calidris alba</i>	sanderling												X
<i>Calidris mauri</i>	western sandpiper												X
<i>Calidris minutilla</i>	least sandpiper												X
<i>Calidris alpina</i>	dunlin												X
<i>Limnodromus griseus</i>	short-billed dowitcher												X
<i>Limnodromus scolopaceus</i>	long-billed dowitcher												X
<i>Gallinago gallinago</i>	common snipe	X	X	X				X					X
<i>Phalaropus tricolor</i>	Wilson's phalarope												X
<i>Phalaropus lobatus</i>	red-necked phalarope												X
Laridae		Gulls and Terns											
<i>Chidonias niger</i>	black tern	X											
<i>Larus philadelphia</i>	Bonaparte's gull												X
<i>Larus heermanni</i>	Heermann's gull												X
<i>Larus delawarensis</i>	ring-billed gull	X						X	X	X	X	X	X
<i>Larus californicus</i>	California gull	X						X	X	X	X	X	X
<i>Larus argentatus</i>	herring gull	X						X	X	X	X	X	X
<i>Larus occidentalis</i>	western gull	X						X	X	X	X	X	X
<i>Sterna caspia</i>	Caspian tern							X					X

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<i>Sterna forsteri</i>	Forster's tern							X					X
<i>Sterna antillarum browni</i>	California least tern							X					
<i>Rynchops niger</i>	black skimmer												X
Alcidae		Auks, Murres, and Puffins											
<i>Uria aalge</i>	common murre												X
<i>Synthliboramphus hypoleucus</i>	Xantus' murrelet												X
<i>Ptychoramphus aleuticus</i>	Cassin's auklet												X
<i>Cerorhinca monocerata</i>	Rhinoceros auklet												X
Columbidae		Pigeons and Doves											
* <i>Columba livia</i>	rock dove	X	X	X			X	X	X	X	X	X	X
<i>Columba fasciata</i>	band-tailed		X	X			X	X				X	
* <i>Streptopelia chinensis</i>	spotted dove										X		
<i>Zenaida macroura</i>	mourning dove	X	X	X	X	X	X	X	X	X	X	X	X
<i>Columbina passerina</i>	common ground-dove	X											
Cuculidae		Cuckoos and Roadrunners											
<i>Geococcyx californianus</i>	greater roadrunner	X		X			X	X				X	
Tytonidae		Barn Owls											
<i>Tyto alba</i>	barn owl		X	X			X	X	X	X	X	X	X

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Strigidae		True Owls											
<i>Otus kennicottii</i>	western screech-owl		X	X			X	X					
<i>Bubo virginianus</i>	great horned owl	X	X	X			X	X	X	X	X	X	X
<i>Glaucidium gnoma</i>	northern pygmy-owl						X						
<i>Athene cunicularia hypugea</i>	burrowing owl	X	X	X	X	X	X	X	X	X	X	X	X
<i>Strix occidentalis occidentalis</i>	spotted owl	X	X	X					X	X			
<i>Asio flammeus</i>	short-eared owl	X					X	X			X	X	X
<i>Asio otus</i>	long-eared owl	X	X	X			X	X	X	X	X	X	
<i>Aegolius acadicus</i>	northern saw-whet owl	X	X						X	X			
Caprimulgidae		Goatsuckers											
<i>Chordeiles acutipennis</i>	lesser nighthawk			X									
<i>Chordeiles minor</i>	common nighthawk		X				X	X	X	X			
<i>Phalaenoptilus nuttallii</i>	common poorwill	X	X	X			X	X	X	X	X		
Apodidae		Swifts											
<i>Cypseloides niger</i>	black swift							X	X	X			
<i>Chaetura vauxi</i>	Vaux's swift	X	X	X			X		X	X	X	X	
<i>Aeronautes saxatalis</i>	white-throated swift	X	X	X	X		X	X	X	X	X	X	X
Trochilidae		Hummingbirds											
<i>Archilochus alexandri</i>	black-chinned hummingbird		X	X			X	X	X	X	X	X	X

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<i>Calypte annae</i>	Anna's hummingbird		X	X			X	X	X	X	X	X	X
<i>Calypte costae</i>	Costa's hummingbird		X	X			X	X	X	X	X	X	X
<i>Stellula calliope</i>	Calliope hummingbird		X				X		X	X			
<i>Selasphorus rufus</i>	rufous hummingbird			X			X	X	X	X	X	X	
<i>Selasphorus sasin</i>	Allen's hummingbird			X			X	X	X	X	X	X	X
Alcedinidae		Kingfishers											
<i>Ceryle alcyon</i>	belted kingfisher		X	X			X	X	X	X			X
Picidae		Woodpeckers											
<i>Melanerpes formicivorus</i>	acorn woodpecker		X	X			X	X	X	X	X	X	X
<i>Melanerpes lewisi</i>	Lewis's woodpecker		X				X						
<i>Sphyrapicus ruber</i>	red-breasted sapsucker			X			X	X				X	
<i>Sphyrapicus thyroideus</i>	Williamson's sapsucker		X										
<i>Picoides scalaris</i>	ladder-backed woodpecker	X											
<i>Picoides nuttallii</i>	Nuttall's woodpecker		X	X			X	X	X	X		X	X
<i>Picoides pubescens</i>	downy woodpecker		X	X			X	X	X	X		X	X
<i>Picoides villosus</i>	hairy woodpecker		X	X			X	X	X	X		X	X
<i>Colaptes auratus</i>	northern flicker	X	X	X	X	X	X	X	X	X		X	X
Tyrannidae		Tyrant Flycatchers											
<i>Contopus cooperi</i>	olive-sided flycatcher		X	X			X	X	X	X		X	

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<i>Contopus sordidulus</i>	western wood-pewee		X	X			X	X	X	X		X	
<i>Empidonax wrightii</i>	gray flycatcher			X									
<i>Empidonax traillii</i> ssp.	willow flycatcher	X	X						X	X	X	X	
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher		X	X			X	X	X	X	X	X	
<i>Empidonax oberholseri</i>	dusky flycatcher			X									
<i>Empidonax hammondi</i>	Hammond's flycatcher			X									
<i>Empidonax difficilis</i>	Pacific-slope flycatcher		X	X			X	X	X	X	X	X	
<i>Empidonax traillii brewsteri</i>	little willow flycatcher	X	X										
<i>Pyrocephalus rubinus</i>	vermillion flycatcher						X						
<i>Sayornis nigricans</i>	black phoebe	X	X	X			X	X	X	X	X	X	X
<i>Sayornis saya</i>	Say's phoebe			X			X	X				X	
<i>Myiarchus cinerascens</i>	ash-throated flycatcher	X	X	X	X	X	X	X	X	X	X	X	X
<i>Tyrannus vociferans</i>	Cassin's kingbird	X	X	X	X	X	X	X	X	X	X	X	
<i>Tyrannus verticalis</i>	western kingbird	X	X	X	X	X	X	X	X	X	X	X	
Alaudidae		Larks											
<i>Eremophila alpestris actia</i>	horned lark	X		X	X		X	X	X	X	X	X	
Hirundinidae		Swallows											
<i>Progne subis</i>	purple martin						X	X	X	X	X	X	
<i>Tachycineta bicolor</i>	tree swallow			X			X					X	

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<i>Tachycineta thalassina</i>	violet-green swallow		X	X			X	X	X	X	X	X	X
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow		X	X			X	X	X	X	X	X	X
<i>Petrochelidon pyrrhonota</i>	cliff swallow		X	X			X	X	X	X	X	X	X
<i>Hirundo rustica</i>	barn swallow		X	X			X	X	X	X	X	X	
<i>Riparia riparia</i>	bank swallow	X						X	X	X			
Corvidae		Jays and Crows											
<i>Cyanocitta stelleri</i>	Steller's jay		X						X	X			
<i>Aphelocoma californica</i>	western scrub-jay		X	X			X	X	X	X	X	X	X
<i>Gymnorhinus cyanocephalus</i>	Pinyon jay		X										
<i>Corvus brachyrhynchos</i>	American crow		X	X			X	X	X	X	X	X	
<i>Corvus corax</i>	common raven	X	X	X	X	X	X	X	X	X	X	X	X
Paridae		Titmice											
<i>Poecile gambeli</i>	mountain chickadee		X						X	X			
<i>Baeolophus inornatus</i>	oak titmouse		X	X			X	X	X	X	X	X	
Remizidae		Verdins											
<i>Auriparus flaviceps</i>	verdin	X											
Aegithalidae		Bushtits											
<i>Psaltriparus minimus</i>	bushtit	X	X	X	X	X	X	X	X	X	X	X	X

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Sittidae	Nuthatches												
<i>Sitta canadensis</i>	red-breasted nuthatch		X										
<i>Sitta carolinensis</i>	white-breasted nuthatch		X	X			X	X	X	X		X	
<i>Sitta pygmaea</i>	pygmy nuthatch		X										
Certhiidae	Creepers												
<i>Certhia americana</i>	brown creeper		X	X					X	X			
Troglodytidae	Wrens												
<i>Campylorhynchus brunneicapillus couesi</i>	coastal cactus wren							X	X	X	X	X	
<i>Salpinctes obsoletus</i>	rock wren	X	X	X			X	X	X	X			
<i>Catherpes mexicanus</i>	canyon wren		X	X			X	X	X	X			
<i>Thryomanes bewickii</i>	Bewick's wren		X	X			X	X	X	X	X	X	
<i>Thryomanes bewickii catalinae</i>	Catalina Bewick's wren												X
<i>Troglodytes aedon</i>	house wren		X	X			X	X	X	X	X	X	
<i>Cistothorus palustris</i>	marsh wren		X	X			X	X			X		
Cinclidae	Dippers												
<i>Cinclus mexicanus</i>	American dipper		X										
Regulidae	Kinglets												
<i>Regulus satrapa</i>	golden-crowned kinglet	X	X	X			X	X				X	
<i>Regulus calendula</i>	ruby-crowned kinglet	X	X	X			X	X			X	X	X

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Sylviidae	Old World Warblers, Gnatcatchers												
<i>Polioptila caerulea</i>	blue-gray gnatcatcher			X			X	X				X	
<i>Polioptila californica californica</i>	coastal California gnatcatcher			X		X	X	X	X	X	X	X	
Turdidae	Thrushes												
<i>Myadestes townsendi</i>	Townsend's solitaire		X										
<i>Catharus ustulatus</i>	Swainson's thrush		X	X			X	X	X	X		X	X
<i>Catharus guttatus</i>	hermit thrush		X	X			X	X	X	X		X	X
<i>Turdus migratorius</i>	American robin		X	X			X	X	X	X		X	X
<i>Ixoreus naevius</i>	varied thrush							X					
<i>Sialia currucoides</i>	mountain bluebird		X						X	X			
<i>Sialia mexicana</i>	western bluebird		X	X			X	X	X	X	X	X	X
Muscicapidae	Wrentits												
<i>Chamaea fasciata</i>	wrentit		X	X			X	X	X	X	X	X	X
Mimidae	Thrashers												
<i>Mimus polyglottos</i>	northern mockingbird	X	X	X	X	X	X	X	X	X	X	X	X
<i>Toxostoma crissale</i>	Crissal thrasher	X											
<i>Toxostoma lecontei</i>	Le Conte's thrasher	X	X		X								
<i>Toxostoma redivivum</i>	California thrasher	X	X	X	X		X	X	X	X	X	X	

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Motacillidae	Pipits												
<i>Anthus rubescens</i>	American pipit		X	X			X	X	X	X	X	X	
Bombycillidae	Waxwings												
<i>Bombycilla cedrorum</i>	cedar waxing		X	X			X	X	X	X	X	X	
Ptilonotidae	Silky Flycatchers												
<i>Phainopepla nitens</i>	phainopepla	X	X	X	X		X	X	X	X	X	X	
Laniidae	Shrikes												
<i>Lanius ludovicianus</i>	loggerhead shrike	X	X	X	X	X	X	X	X	X	X	X	X
Sturnidae	Starlings												
* <i>Sturnus vulgaris</i>	European starling	X	X	X	X	X	X	X	X	X	X	X	
Vireonidae	Vireos												
<i>Vireo bellii pusillus</i>	least Bell's vireo		X	X			X	X	X	X	X	X	
<i>Vireo cassini</i>	Cassin's vireo						X	X				X	
<i>Vireo huttoni</i>	Hutton's vireo						X	X			X	X	
<i>Vireo gilvus</i>	warbling vireo		X	X			X	X			X	X	
<i>Vireo vicinior</i>	gray vireo	X	X				X						
Porulidae	Wood Warblers												
<i>Vermivora celata</i>	orange-crowned warbler			X			X	X				X	
<i>Vermivora peregrina</i>	Tennessee warbler						X						

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BIRDS		SIGNIFICANT ECOLOGICAL AREAS											
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<i>Vermivora ruficapilla</i>	Nashville warbler			X			X	X				X	
<i>Vermivora virginiae</i>	Virginia warbler		X		X		X		X	X			
<i>Dendroica petechia brewsteri</i>	yellow warbler		X	X			X	X	X	X	X	X	X
<i>Dendroica coronata</i>	yellow-rumped warbler	X	X	X	X		X	X			X	X	
<i>Dendroica nigrescens</i>	black-throated gray warbler			X			X	X				X	
<i>Dendroica townsendi</i>	Townsend's warbler			X			X	X				X	
<i>Dendroica occidentalis</i>	hermit warbler			X			X	X				X	
<i>Oporornis tolmiei</i>	MacGillivray's warbler			X			X	X				X	
<i>Geothlypis trichas</i>	common yellowthroat	X	X	X			X	X	X	X	X	X	
<i>Wilsonia pusilla</i>	Wilson's warbler			X			X	X				X	
<i>Icteria virens</i>	yellow-breasted chat		X	X			X		X	X	X	X	X
Cardinalidae		Cardinals											
<i>Pheucticus melanocephalus</i>	black-headed grosbeak			X			X	X				X	
<i>Guiraca caerulea</i>	blue grosbeak		X	X			X				X	X	X
<i>Passerina amoena</i>	lazuli bunting		X	X			X	X			X	X	X
Thraupidae		Tanagers											
<i>Piranga rubra</i>	summer tanager			X			X	X	X	X			
<i>Piranga ludoviciana</i>	western tanager			X			X	X				X	

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Emberizidae	Emberizids												
<i>Pipilo chlorurus</i>	green-tailed towhee	X	X						X	X			
<i>Pipilo crissalis</i>	California towhee			X			X	X				X	X
<i>Pipilo maculatus</i>	spotted towhee		X	X			X	X	X	X	X	X	
<i>Aimophila ruficeps canescens</i>	Southern California rufous-crowned sparrow		X	X		X	X	X	X	X	X	X	X
<i>Spizella passerina</i>	chipping sparrow			X			X					X	
<i>Spizella breweri</i>	Brewer's sparrow						X						
<i>Spizella atrogularis</i>	black-chinned sparrow						X					X	
<i>Poocetes gramineus</i>	vesper sparrow			X									
<i>Chondestes grammacus</i>	lark sparrow			X			X	X				X	
<i>Amphispiza bilineata</i>	black-throated sparrow		X				X						
<i>Amphispiza belli</i>	sage sparrow						X					X	
<i>Amphispiza belli belli</i>	Bell's sage sparrow		X	X	X	X	X	X	X	X		X	
<i>Passerculus sandwichensis</i>	savannah sparrow			X								X	
<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow							X					
<i>Ammodramus savannarum</i>	grasshopper sparrow	X											
<i>Passerella iliaca</i>	fox sparrow			X			X	X				X	
<i>Melospiza melodia</i>	song sparrow		X	X			X	X	X	X	X	X	

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<i>Melospiza lincolni</i>	Lincoln's sparrow			X			X	X				X	
<i>Zonotrichia atricapilla</i>	golden-crowned sparrow			X			X	X				X	
<i>Zonotrichia leucophrys</i>	white-crowned sparrow		X	X			X	X	X	X	X	X	
<i>Zonotrichia querula</i>	Harris' sparrow						X						
<i>Junco hyemalis</i>	dark-eyed junco		X	X			X	X			X	X	
Icteridox		Blackbirds											
<i>Agelaius phoeniceus</i>	red-winged blackbird	X	X	X			X	X	X	X	X	X	X
<i>Agelaius tricolor</i>	tricolored blackbird	X	X	X			X	X	X	X	X		
<i>Sturnella neglecta</i>	western meadowlark		X	X			X	X	X	X	X	X	X
<i>Xanthocephalus xanthocephalus</i>	yellow-headed blackbird		X				X						
<i>Euphagus cyanocephalus</i>	Brewer's blackbird		X	X			X	X			X	X	X
<i>Quiscalus mexicanus</i>	great-tailed grackle								X	X	X		
<i>Molothrus ater</i>	brown-headed cowbird		X	X			X	X	X	X	X	X	X
<i>Icterus bullockii</i>	Bullock's oriole		X	X			X	X	X	X	X	X	X
<i>Icterus cucullatus</i>	hooded oriole		X	X			X	X	X	X	X	X	X
<i>Icterus parisorum</i>	Scott's oriole	X			X								
Fringillidae		Finches											
<i>Carpodacus purpureus</i>	purple finch			X			X					X	
<i>Carpodacus cassinii</i>	Cassin's finch		X	X			X		X	X	X		

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<i>Carpodacus mexicanus</i>	house finch	X	X	X	X	X	X	X	X	X	X	X	X
<i>Loxia curvirostra</i>	red crossbill		X										
<i>Carduelis pinus</i>	pine siskin	X	X	X			X	X	X	X	X	X	
<i>Carduelis psaltria</i>	lesser goldfinch		X	X			X	X	X	X	X	X	X
<i>Carduelis lawrencei</i>	Lawrence's goldfinch			X			X	X				X	
<i>Carduelis tristis</i>	American goldfinch	X	X	X			X	X	X	X	X	X	X
Passeridae		Old World Sparrows											
* <i>Passer domesticus</i>	house sparrow	X	X	X	X	X	X	X	X	X	X	X	X

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Didelphidae		New World Opossums											
* <i>Didelphis virginiana</i>	Virginia opossum	X	X	X	X	X	X	X	X	X	X	X	
Soricidae		Shrews											
<i>Sorex ornatus</i>	ornate shrew			X			X	X				X	
<i>Sorex ornatus willetti</i>	Santa Catalina shrew												X
<i>Notiosorex crawfordi</i>	desert shrew	X		X	X								
Talpidae		Moles											
<i>Scapanus latimanus</i>	broad-footed mole		X	X		X	X		X	X	X	X	
<i>Scapanus latimanus occultus</i>	broad-handed mole							X					
Phyllostomidae		Leaf-Nosed Bat Family											
<i>Macrotus californicus</i>	California leaf-nosed bat		X	X	X		X						
Vespertilionidae		Evening Bats											
<i>Antrozous pallidus pacificus</i>	pallid bat		X	X			X	X	X	X	X	X	X
<i>Corynorhinus (=Plecotus) townsendii pallescens</i>	pale big-eared bat						X						X
<i>Myotis californicus californicus</i>	California myotis			X			X	X				X	
<i>Myotis ciliolabrum</i>	small-footed myotis								X	X			
<i>Myotis evotis evotis</i>	long-eared myotis			X					X	X		X	
<i>Myotis leibii</i>	small-footed myotis			X								X	
<i>Myotis lucifugus</i>	little brown myotis			X								X	

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<i>Myotis occultus</i> (= <i>Myotis lucifugus occultus</i>)	occult little brown bat (AKA Arizona myotis)						X	X					
<i>Myotis thysanodes</i>	fringed myotis	X		X					X	X		X	
<i>Myotis volans</i>	long-legged myotis	X		X			X	X	X	X		X	
<i>Myotis yumanensis</i>	Yuma myotis (AKA San Joaquin myotis)		X	X			X	X	X	X		X	
<i>Lasiurus borealis</i>	red bat			X								X	
<i>Lasiurus cinereus</i>	hoary bat			X				X				X	
<i>Lasiurus cinereus</i>	hoary bat	X	X										
<i>Pipistrellus hesperus</i>	western pipistrelle			X			X	X				X	
<i>Eptesicus fuscus</i>	big brown bat			X			X	X				X	
<i>Euderma maculatum</i>	spotted bat		X	X	X		X	X					
<i>Plecotus townsendii pallescens</i>	Townsend's big-eared bat		X	X			X	X	X	X		X	
<i>Corynorhinus</i> (= <i>Plecotus</i>) <i>townsendii townsendii</i>	Townsend's western big-eared bat	X	X				X	X	X	X		X	
Molossidae		Free-Tailed Bats											
<i>Tadarida brasiliensis</i>	Brazilian free-tailed bat			X									X
<i>Tadarida brasiliensis mexicana</i>	guano bat						X	X					
<i>Tadarida femorosacca</i>	pocketed free-tailed bat			X								X	
<i>Eumops perotis californicus</i>	western mastiff bat		X	X	X		X	X	X	X	X	X	

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Leporidae		Hares and Rabbits											
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit			X			X	X	X	X	X	X	
<i>Sylvilagus audubonii</i>	desert cottontail			X			X						X
<i>Sylvilagus audubonii sanctdiegi</i>	Audobon's cottontail						X	X					
<i>Sylvilagus bachmani</i>	brush rabbit			X			X	X					X
Sciuridae		Squirrels											
<i>Tamias merriami</i>	Merriam's chipmunk		X				X						
<i>Ammospermophilus leucurus</i>	white-tailed antelope squirrel	X			X								
<i>Spermophilus beecheyi nesioticus</i>	California ground squirrel	X	X	X	X		X	X	X	X	X	X	
<i>Spermophilus mohavensis</i>	Mohave ground squirrel	X	X		X								
<i>Sciurus griseus</i>	western gray squirrel			X				X					X
Geomyidae		Pocket Gophers											
<i>Thomomys bottae</i>	Botta's pocket gopher	X	X	X			X	X	X	X	X	X	
Heteromyidae		Pocket Mice and Kangaroo Rats											
<i>Perognathus alticola inexpectatus</i>	white-eared pocket mouse		X		X								
<i>Perognathus inornatus inornatus</i>	San Joaquin pocket mouse	X											
<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse			X			X	X	X	X	X	X	
<i>Perognathus longimembris pacificus</i>	Pacific little pocket mouse		X			X							
<i>Chaetodipus californicus</i>	California pocket mouse			X			X	X					X

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<i>Chaetodipus fallax</i>	San Diego pocket mouse								X	X		X	
<i>Chaetodipus penicillatus</i>	desert pocket mouse	X											
<i>Dipodomys agilis</i>	Pacific kangaroo rat			X			X	X				X	
<i>Dipodomys heermanni</i>	Heermann's kangaroo rat						X						
<i>Dipodomys merriami</i>	Merriam's kangaroo rat								X	X			
<i>Dipodomys merriami parvus</i>	San Bernardino Merriam's kangaroo rat		X	X					X	X			
Muridae		Mice, Rats, and Voles											
<i>Reithrodontomys megalotis</i>	western harvest mouse			X				X				X	
<i>Reithrodontomys megalotis catalinae</i>	western harvest mouse						X						
<i>Peromyscus boylei</i>	brush mouse			X			X	X					
<i>Peromyscus californicus</i>	California mouse			X								X	
<i>Peromyscus californicus insignis</i>	California parasitic mouse						X	X					
<i>Peromyscus crinitus</i>	canyon mouse			X									
<i>Peromyscus eremicus</i>	cactus mouse							X				X	
<i>Peromyscus maniculatus catalinae</i>	deer mouse			X			X	X				X	
<i>Peromyscus truei</i>	pinon mouse						X						
<i>Onychomys torridus ramonia</i>	southern grasshopper mouse		X	X	X	X	X		X	X			
<i>Neotoma fuscipes</i>	dusky-footed woodrat			X			X	X				X	
<i>Neotoma fuscipes riparia</i>	riparian woodrat								X	X		X	X

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<i>Neotoma lepida</i>	desert woodrat	X											
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	X	X	X	X		X	X	X	X	X	X	
* <i>Rattus norvegicus</i>	Norway rat			X									
* <i>Rattus rattus</i>	black rat			X									
* <i>Mus musculus</i>	house mouse			X				X				X	
<i>Microtus californicus</i>	California vole			X			X	X				X	
Canidae		Wolves and Foxes											
<i>Canis latrans</i>	coyote	X	X	X	X	X	X	X	X	X	X	X	X
<i>Vulpes velox</i>	kit fox	X		X									
* <i>Vulpes fulva</i>	red fox			X			X						
<i>Urocyon littoralis catalinae</i>	island fox												X
<i>Urocyon cinereoargenteus</i>	gray fox		X	X			X	X	X	X	X	X	
Ursidae		Bears											
<i>Ursus americanus</i>	black bear	X	X	X					X	X			
Otariidae		Eared Seals											
<i>Zalophus californianus</i>	California sea lion												X
Phocidae		Hair Seals											
<i>Phoca vitulina</i>	harbor seal												X
<i>Mirounga angustirostris</i>	northern elephant seal												X

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Procyonidae		Raccoons											
<i>Bassariscus astutus ocellatus</i>	ringtail cat		X	X			X	X	X	X			
<i>Procyon lotor</i>	raccoon	X	X	X	X	X	X	X	X	X	X	X	
Mustelidae		Weasels, Skunks, and Otters											
<i>Mustela frenata</i>	long-tailed weasel		X	X			X	X	X	X		X	
<i>Taxidea taxus</i>	American badger		X	X			X	X	X	X		X	
<i>Spilogale gracilis</i>	western spotted skunk	X	X	X			X	X	X	X		X	
<i>Mephitis mephitis</i>	striped skunk	X	X	X	X	X	X	X	X	X	X	X	
Felidae		Cats											
<i>Felis concolor</i>	mountain lion		X	X			X	X	X	X		X	
<i>Felis rufus</i>	bobcat		X	X			X	X	X	X		X	
Suidae		Pigs											
* <i>Sus scrofa</i>	wild pig		X										
Cervidae		Deer											
<i>Odocoileus hemionus</i>	mule deer	X	X	X	X		X	X	X	X	X	X	
Bovidae		Bison, Goats, and Sheep											
<i>Capra hircus</i>	goat												X
<i>Ovis canadensis</i>	bighorn sheep								X	X			
<i>Bison bison</i>	bison												X

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PCR SANTA MONICA

233 Wilshire Boulevard
Suite 130
Santa Monica, California 90401
TEL 310.451.4488
FAX 310.451.5279
EMAIL info@pcrnet.com

PCR KOTIN

12100 Wilshire Boulevard
Suite 1050
Los Angeles, California 90025
TEL 310.820.0900
FAX 310.820.1703
EMAIL info@pcrnet.com

PCR IRVINE

One Venture
Suite 150
Irvine, California 92618
TEL 949.753.7001
FAX 949.753.7002
EMAIL info@pcrnet.com



**South Coast Missing Linkages:
A Wildland Network
for the South Coast Ecoregion**





SOUTH COAST WILDLANDS

Produced by South Coast Wildlands: Our Mission is to protect and restore systems of connected wildlands that support native wildlife and the ecosystems upon which they rely.

Project Partners: We would like to recognize our partners on the South Coast Missing Linkages Project, including The Wildlands Conservancy, The Resources Agency, U.S. Forest Service, California State Parks, California State Parks Foundation, National Park Service, San Diego State University Field Stations Program, Environment Now, The Nature Conservancy, Conservation Biology Institute, Santa Monica Mountains Conservancy, Wetlands Recovery Project, Mountain Lion Foundation, Rivers and Mountains Conservancy, California Wilderness Coalition, Wildlands Project, Zoological Society of San Diego Center for Reproduction of Endangered Species, Pronatura, Conabio, and Universidad Autonoma de Baja California. We are committed to collaboration to secure a wildlands network for the South Coast Ecoregion and beyond and look forward to adding additional agencies and organizations to our list of partners.



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Executive Summary: A Network of Wildlands

Only a century ago, southern California was one vast wildland supporting a dazzling array of habitats and a veritable treasure trove of life. Creatures great and small, mobile and stationary – many found no where else on earth - thrived in these habitats. Grizzly bears dominated the landscape and mountain lions roamed from the mountains to the sea.

Much of this vast wildland has been lost to housing developments, freeways, and strip malls, with drastic impacts on the abundant plant and animal communities that flourished here. Yet, much of the unique vegetation and wildlife that dominated this pre-development landscape can still be found, and what remains can be maintained, despite the changes we've made and continue making to the landscape.

Habitat loss and fragmentation are the leading threats to biodiversity worldwide, and nowhere is the risk more severe than in southern California. Countering these threats requires protecting connections between our existing open space areas to form a regional wildland network. Such an interconnected set of reserves would allow natural ecological processes—such as migration and range shifts with climate change—to continue operating as they have for millennia.

The South Coast Missing Linkages project has developed a comprehensive plan for such a regional network that would maintain and restore critical habitat linkages between existing reserves. These linkages form the backbone of a conservation strategy for southern California where the whole would be greater than the sum of the parts. This strategy represents the best hope for maintaining what remains of southern California's wildlife legacy, while ensuring quality of life for our citizens via clean air, clean water, and recreational opportunities.

South Coast Missing Linkages is a highly collaborative inter-agency effort to identify and conserve the highest-priority linkages in the South Coast Ecoregion. Partners include South Coast Wildlands, National Park Service, U.S. Forest Service, California State Parks, The Wildlands Conservancy, The Resources Agency, California State Parks Foundation, The Nature Conservancy, Santa Monica Mountains Conservancy, Resources Legacy Foundation, Conservation Biology Institute, San Diego State University Field Stations Program, Environment Now, Mountain Lion Foundation, and the Zoological Society of San Diego's Conservation and Research for Endangered Species, among others.

Cross-border alliances have also been formed with Pronatura, Universidad Autonoma de Baja California, Terra Peninsular, and Conabio, in recognition of our shared vision for ecological connectivity across the border into Baja.



The South Coast Ecoregion encompasses roughly 8% of California and extends 190 miles into Baja.

Nature Needs Room to Roam

Movement is essential to wildlife survival, whether it be the day-to-day movements of individuals seeking food, shelter, or mates, dispersal of offspring to find new homes, or seasonal migration to find favorable conditions. Movement is essential for gene flow, for recolonizing unoccupied habitat after a local population goes extinct, and for species to shift their geographic range in response to global climate change. Disruption of these natural movement patterns by roads, development, or other impediments can alter these essential ecosystem functions and lead to losses of species and critical environmental services.

The tension between habitat fragmentation and conservation is particularly acute in southern California, one of 25 hotspots of biological diversity on Earth, and one of our nation's largest urban areas. It is also one of the most threatened areas, with over 400 species of plants and animals considered endangered, threatened or sensitive by government agencies and conservation groups. Existing reserves conserve many of these species, but wide-ranging species like mountain lions, badgers, and bighorn sheep may be lost from even the largest areas if highways and urbanization isolate each major wildland.

Despite a half-century of rapid habitat conversion, the South Coast Ecoregion retains valuable wildlands, and opportunities remain to conserve and restore a functional wildland network. The region's archipelago of conserved wildlands is fundamentally one interconnected system, and the goal of South Coast Missing Linkages is to keep it so. It is our hope that the South Coast Missing Linkages plan will serve as a catalyst for directing funds and attention toward the protection of ecological connectivity for the South Coast Ecoregion and beyond.



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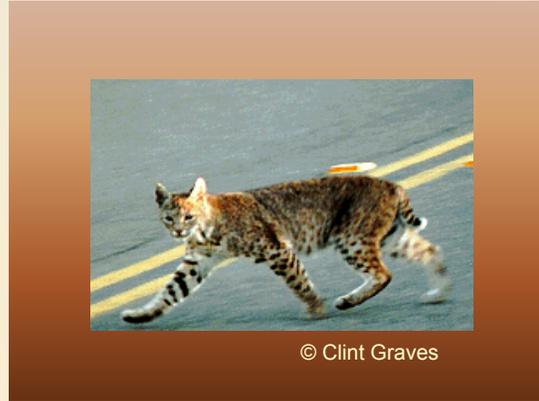
"Without connectivity, landscapes may be reduced to pathetic remnants that sustain few species and provide little ecological value."

E.O. Wilson

Impediments to Wildlife Movement

Impediments to wildlife movement include roads, railroads, dams, canals, urban development, and agriculture. Loss of connectivity is by no means inevitable, and development does not have to result in a proliferation of barriers to wildlife movement.

In our Ecoregion, roads and urbanization are the major obstacles to wildlife movement. Road effects extend far beyond the road itself and include road kill, disruption of animal movements, spread of exotic species, and increases in pollution, noise, light and fire in wildlife habitats. Roads can fragment large habitat areas into smaller patches that support smaller populations, which are consequently more prone to local extinction. Many of these effects can be mitigated and recommendations to do just that are an important component of our plan for restoring ecological connectivity to the South Coast Ecoregion.



Urban developments, unlike roads, create movement barriers that cannot be readily removed, restored, or mitigated. The impacts of urbanization include removal of native vegetation, spread of non-native vegetation, dogs and cats killing and harassing wildlife, artificial night lighting impeding night-time movement, pesticides, rodenticides, noise, disruption of fire regimes, pollution, conflicts with wild animals that eat domestic plants and animals, and altered patterns of water in streams and ponds.

Conservation Planning Approach

South Coast Missing Linkages incorporates advanced conservation planning techniques and the expertise of preeminent scientists. Our approach has been highly collaborative and interdisciplinary with participation by experts in biology, conservation design, and implementation in a reiterative process. This approach has yielded a strong biological foundation and a quantifiable, repeatable conservation design methodology (Appendix A, Conservation Planning Approach) that can be used as the basis for conservation action.

South Coast Missing Linkages developed the linkage designs based on inputs from a series of workshops at which 270 participants from 126 agencies, academic institutions, land managers, planners, conservation organizations, and community groups identified 109 focal species, including 26 plants, 25 insects, 4 fish, 5 amphibians, 12 reptiles, 20 birds and 17 mammals. These focal species cover a broad range of habitat and movement requirements such that planning adequate linkages for their needs is expected to cover connectivity needs for the ecosystems they represent. The linkage designs are based on state-of-the-art GIS analyses informed by experts on each focal species, and contain multiple strands to serve the needs of various species.

To identify potential routes between existing protected areas we conducted landscape permeability analyses for selected focal species for which appropriate data were available. Permeability analyses model the relative cost for a species to move between protected core habitat or population areas. We defined a least-cost corridor—or best potential route—for each species, and then combined these into a Least Cost Union. We then analyzed the size and configuration of suitable habitat patches within this Least Cost Union for all focal species to verify

that the final Linkage Design would suit the live-in or move-through habitat needs of all. Where the Least Cost Union omitted areas essential to the needs of a particular species, we expanded the Linkage Design to accommodate that species' particular requirements, and ensure that no species was left behind. We also visited priority areas in the field to identify and evaluate barriers to wildlife movement. We also suggest restoration strategies to mitigate those barriers, with special emphasis on opportunities to reduce the adverse effects of transportation barriers.

The resultant linkage designs are broad to 1) buffer against edge effects; 2) provide live-in habitat for species needing multiple generations to achieve gene flow through the linkage; 3) ensure availability of key resources; 4) allow natural processes to operate, and 5) allow species and natural communities to respond to climatic changes. A crucial element of each linkage design is a set of recommendations to mitigate barriers, restore habitats, and manage the linkage.

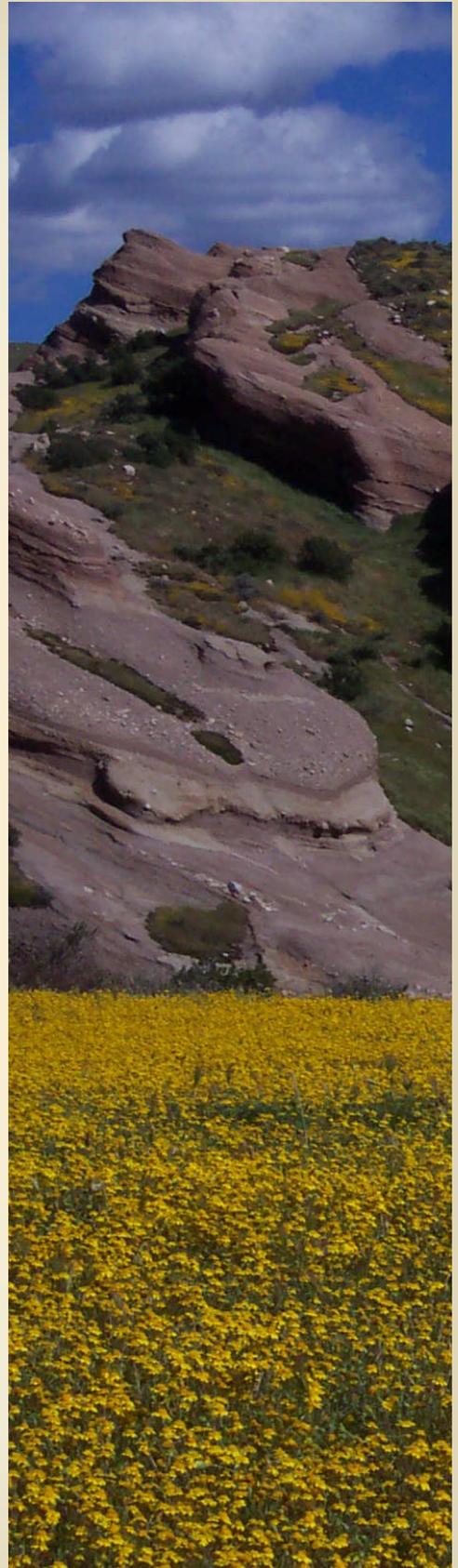
A Scientifically Sound Plan for Conservation Action

The South Coast Missing Linkages conservation plan addresses the challenges posed to our natural environment by the ever-increasing human footprint by seeking to influence regional development and land-management patterns in a manner that best preserves landscape level processes while accommodating economic development needs. We hope this linkage conservation plan will be used to protect an interconnected system of natural space where our native biodiversity can thrive at minimal cost to other human endeavors. For example, the plan can be used as a resource for regional land managers to guide how they can best help sustain biodiversity and ecosystem processes by implementing the linkage designs. Relevant aspects of the plan can be folded into management plans of agencies and organizations administering conservation lands in the region.

Transportation agencies can use the plan to design new projects and find opportunities to upgrade existing structures. Regulatory agencies can use this information to help inform decisions regarding impacts on streams and other habitats.

This report can also help motivate and inform construction of wildlife crossings, watershed planning, habitat restoration, conservation easements, zoning, and land acquisition. Implementing this plan will likely take decades, and will require collaboration among county planners, land and resource management agencies, transportation agencies, conservancies, and private landowners.

Public education and outreach are vital to the success of this effort – both to change land use activities that threaten wildlife



movement and to generate appreciation for the importance of the linkages and the wildland network they will sustain. The biological information, maps, figures, tables, and photographs in this plan are ready materials for interpretive programs. Public education can encourage residents at the urban-wildland interface to become active stewards of the land and generate a sense of place and ownership for local habitats and processes. Such voluntary cooperation is essential to preserving linkage function.

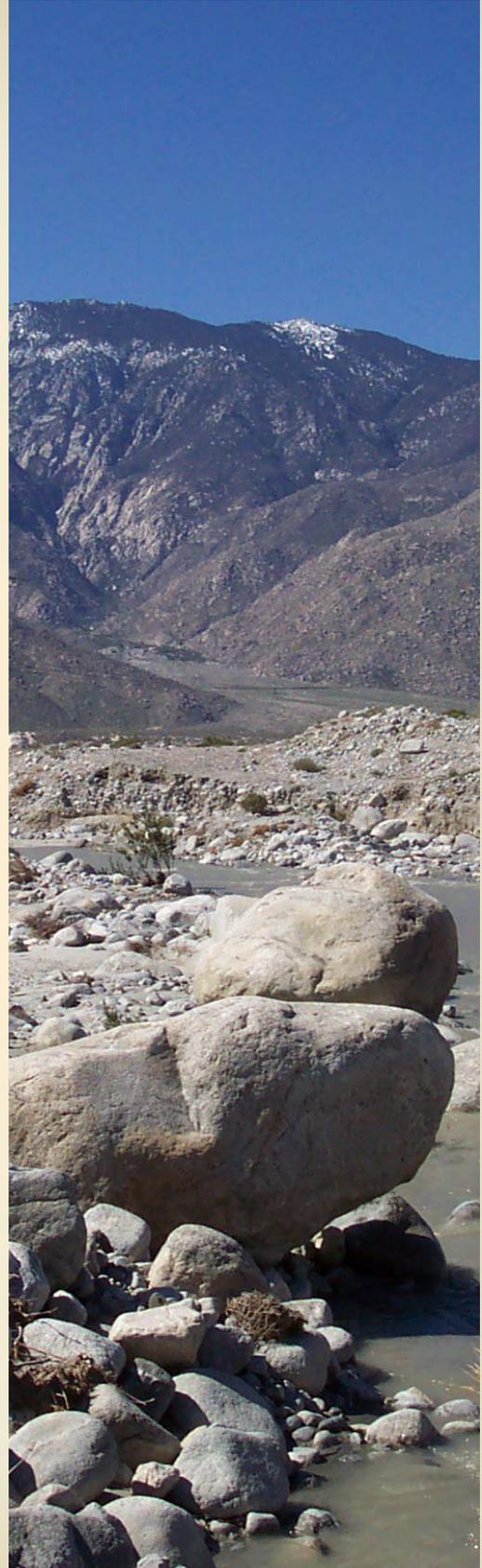
South Coast Wildland Network

South Coast Missing Linkages has prioritized and designed landscape linkages that are widely considered the backbone of a conservation strategy for southern California. The linkages designed by South Coast Missing Linkages stitch together over 18 million acres of our existing conservation investments (national forests, state and national parks, etc.) to form the South Coast Wildland Network (Appendix B, Existing Conservation Investments). The network encompasses 19,435,105 acres (94% is already protected), maintaining connected wildlife populations from the southern Sierra Nevada to Baja California, and from the beaches of Camp Pendleton eastward to the deserts of Anza-Borrego Desert State Park. These critically important linkages must be secured if we are to maintain the region's tremendous biodiversity.

The ecological, educational, recreational, and spiritual values of protected wildlands in the South Coast Ecoregion are immense. These conserved lands also represent an investment of tens of billions of dollars. We need to ensure the ecological health of this investment by securing these linkages.

The linkages identified by South Coast Missing Linkages are key to the ultimate protection and restoration of a wildlands network where our native biodiversity can thrive. The unbroken chain of mountains and foothills created by the South Coast Wildland Network will allow wide-ranging species like the mountain lion to roam from the Sierra Nevada to the Sierra Juarez in Baja California Norte. The South Coast Wildland Network will also provide unparalleled recreational, educational, and spiritual opportunities for more than 17 million people who make southern California their home, while promoting the long-term health of the state's land, water and air.

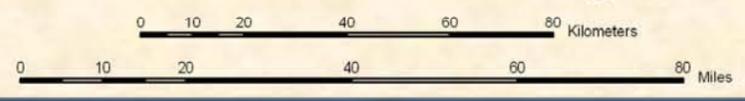
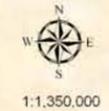
The following section provides an overview of the critical linkages: where they lie on the landscape, what they connect and the species that use them. The descriptions also provide some recommendations for improving wildlife



movement in each linkage. For a complete description of what is required to conserve and improve functional habitat connectivity in each linkage, please see the full linkage reports available at www.scwildlands.org.



**South Coast Missing Linkages:
A Wildland Network for the
South Coast Ecoregion**



- Linkage Design
- Conservation Lands
- Department of Defense Lands
- South Coast Ecoregion
- Highway
- Major River or Stream
- County Boundary

Las Californias Binational Conservation Initiative

Tehachapi Connection

This linkage has statewide importance as the sole wildland connection between the Sierra Nevada-Cascade system that stretches for over 2000 miles from Kern County into British Columbia, and the 800 mile long upland system comprised of the Sierra Madre (the coast ranges from San Francisco to Los Angeles), Transverse (Santa Monica, San Gabriel, San Bernardino, and San Jacintos Mountains), and Peninsular Ranges (Santa Ana, Palomar, and Laguna Mountains of San Diego County, and the Sierra Juarez of Baja). This linkage is also situated at the juncture of several ecoregions, including the Sierra Nevada, South Coast, Central Valley, and the Mojave Desert. The Tehachapis have been described as a “biogeographic crossroads” and a “crucible of evolution”, and are home to a stunning variety of plant and animal life (White et al. 2003). As might be expected in this remarkable landscape, the Linkage Design encompasses a diversity of natural communities, including over 30 vegetation types. About 15% (102,355 out of 663,257 total acres) of the Linkage Design currently enjoys some level of conservation protection, mostly in land administered by the Bureau of Land Management.



Looking down Bear Trap Canyon in the Tehachapi Mountains toward the Sierra Madre Ranges, Los Padres National Forest (Photo Andrew Harvey, VisualJourneys.net).

The Linkage Design has four main strands, which tend to follow elevational contours that connect along areas of similar ecological conditions. One strand includes a swath of grassland and foothill habitats along the southern rim of the San Joaquin Valley to serve the suite of grassland-dependent species clinging to existence there, such as the endangered San Joaquin kit fox and blunt-nosed leopard lizard. A second strand connects a series of higher elevation forest and shrubland habitats serving species, such as puma, western gray squirrel, and mule deer. A third strand follows the desert-side slopes of the Tehachapis, connecting habitats for species, such as

the Tehachapi pocket mouse, that are restricted to the unique conditions of this biogeographic contact zone. These three major strands, or linkages, are clearly separated in the northeast where each connects into the Sierra Nevada, but they tend to fuse in the more geographically constrained southwestern portion of the study area, in the western Tehachapis. Some cross connections were included between these strands to serve the movement needs of species, such as the western pond turtle, that require aquatic and riparian habitats running perpendicular to the main contour-following linkages. The fourth strand follows alluvial habitats along the Kern River across the San Joaquin Valley to connect alluvial grasslands and rare alkali habitats required by valley-floor species, such as the endangered Tipton kangaroo rat.

Interstate 5 and State Route 58 are the primary impediments to movement, with I-5 being the most substantial barrier. It bisects the southern part of the linkage and currently lacks adequate crossing structures. Given the continental importance of this linkage, we have identified four locations on I-5 and three locations on SR-58 at which first-class crossing structures should be located. At each of these locations, we recommend either a vegetated landbridge, or a bridged undercrossing large enough to allow natural vegetation to grow throughout the structure.

The top priority for a crossing structure on I-5 is where Grapevine Creek crosses I-5 just south of Ft. Tejon State Park and Tejon Ranch Headquarters. The least cost corridors for puma, mule deer, and western gray squirrel cross the freeway here, and appropriate habitats occur for numerous other species. Grapevine Creek now crosses I-5 in a small box culvert, which should be replaced with a large bridged undercrossing. To maximize the utility of Grapevine Creek as a movement area, we recommend removal of several buildings of the Tejon Ranch Headquarters (two administrative buildings, about a dozen homes, and an old school), and the associated mile of Lebec Road. The area vacated by these buildings should be restored to native vegetation.

Another priority area for improved crossing structures along I-5 is a 3-mile stretch south of the village of Gorman and north of the SR138 interchange. The least cost path of the Tehachapi pocket mouse crosses I-5 here, and suitable habitat occurs for several other focal species. The vegetation on the steep slopes appears to have been overgrazed and now lacks woody cover except in drainage bottoms; restoration or cessation of grazing domestic livestock would be needed. Four box culverts about 5 feet tall and wide are spaced one-half to 1 mile apart, and suggest locations for bridged undercrossings. Each culvert opens directly into Hungry Valley State Park on the west, and into Gorman Valley on the east. Alternatively, a vegetated land bridge may also be feasible in this area.



Culvert on Interstate-5 for Gorman Creek with Hungry Valley State Park in the foreground. Note steep degraded slopes on far side of I-5.

SR-58 is a 4-lane road with heavy traffic volumes. A concrete center divider runs almost continuously from the western foothills to the Tehachapi Creek Bridge at Keene, and again for another mile near Tehachapi. This barrier is about 5 ft tall from its west end to Bealville Road; elsewhere it is about 2.5 ft tall. The major feeder road to SR-58 in the western part of the linkage area (Bear Mountain Road SR-223) is a quiet country lane that is not a major impediment today. However, if lanes are added to SR-233, wildlife passage should be accommodated. Further east, SR-202 runs eastward from the city of Tehachapi into the agricultural but increasingly urban Cummings Valley and nearby residential developments of Stallion Springs and Bear Valley.



We recommend first-class crossing structures (canyon-spanning bridges, or vegetated overcrossings) in three areas along SR-58. The first area is in the grasslands near the San Joaquin Valley floor, between the 900-ft and 1400-ft elevation contours. The least cost corridors for blunt-nosed leopard lizard, San Joaquin kit fox, and badger all lie in this 2.5-mile wide stretch of SR-58. The best location for an underpass is at the 1020-ft elevation contour, where the freeway now sits on a 40-ft fill slope that spans a small canyon. Replacing this fill slope with a bridge 40 ft above the canyon bottom and about 500 ft long would provide an excellent crossing opportunity. At the 1280-ft contour, there is a similar fill slope that provides another location for a bridge of similar dimensions. The lower elevation area was modeled as the best habitat for focal species, but habitat quality is high at both sites. There are no dwellings or significant infrastructure (besides the highway) in the area.

The second area we propose an improved crossing structure is in the oak woodlands between the Hart Flat Road interchange with SR-58 and the village of Keene. The least cost corridors for mule deer and western gray squirrel cross SR-58 here and the entire area is excellent mountain lion habitat. The best location for an underpass is at the 2440-ft contour, where the highway now sits on a 20-ft fill slope that should be replaced with a bridge. Alternatively, it may be possible to construct a vegetated overcrossing here.

We also recommend maintaining the rural character of the landscape at the bridge over Tehachapi Creek. Although this bridge is an excellent crossing, it is not sufficient as the sole structure in the oak woodland belt for several reasons. First, it's on the periphery of the linkage. Second, the crossing structure contains a railroad and a 2-lane paved road. Finally, the wildland approaches to the underpass are steep slopes on both sides of the freeway. To the extent that animals tend to follow streams, an animal that descended the steep slope to reach the underpass may follow Tehachapi Creek east or west (village of Keene in both directions) rather than ascend the steep slope on the other side.

The third area we recommend a crossing structure is in the transition between Mojave Desert, grassland, and woodland west of Tehachapi, where two bridges now span Sand Creek. The least cost corridors of Tehachapi pocket mouse, mule deer, and mountain lion all cross SR-58 here. Excellent bridges already exist. We recommend enhancement of riparian vegetation underneath the bridges and approaching them.



Fill slope along SR-58 that should be replaced with a bridge.



Oak woodlands between Hart Flat Rd interchange with SR58 and Keene.



SR-58 bridge over Tehachapi Creek. The paved road connects the east and west portions of Keene.



The north side of SR-58 at Sand Creek.

Santa Monica-Sierra Madre Connection

This linkage is one of the few coastal to inland connections remaining in the South Coast Ecoegion. It stretches from the rugged Santa Monica Mountains at the coast to the jagged peaks of the Santa Susana Mountains and the Sierra Madre Ranges of Los Padres National Forest. The Linkage Design includes substantial public ownership that protects natural habitats from development, with 34% (43,249 of 125,613 acres) of the linkage currently enjoying some level of conservation protection. The linkage is comprised of a rich mosaic of oak woodland, savanna, chaparral, coastal sage scrub, grasslands, and riparian forests and woodlands, and has several major strands to accommodate diverse species and ecosystem functions.



Looking toward the coast over the gently sloping Simi Hills and the rugged Santa Monica Mountains. Photo Credit: Andrew M. Harvey, VisualJourneys.net

For most species, U.S. Route 101 and State Routes (SR) 23, 118, and 126 are the most obvious barriers between core reserves in the Santa Monica and Sierra Madre mountains, while Interstate 5 (I-5) and SR-14 impede movement between the Santa Susana and San Gabriel Mountains. The 101 Freeway is the most substantial impediment to movement. Several existing structures facilitate various levels of animal movement across these freeways.

Liberty Canyon was delineated by the landscape permeability analysis for mule deer, but also provides connectivity for species such as mountain lion and badger. Much research has been done to document the importance of this connection to wildlife (Soulé 1989, Kohn et al. 1999, Edelman 1991, Sauvajot et al. 2000, Allen 2001, Riley et al. 2003, Ng et al. 2004, Riley et al.

2006a). The existing bridge is regularly utilized by deer, coyotes, and raccoons (Ng et al. 2004). The National Park Service is working with Caltrans to provide a wildlife-specific crossing structure at this location, either a bridged underpass or an overpass, to prevent co-location of vehicle traffic and animal movement options (the current situation). Habitat restoration is also recommended, as well as fencing to direct animals towards the structure.

A variety of wildlife has been documented using the bridge at Alamos Canyon, including mountain lion, bobcat, coyote mule deer, striped skunk, raccoon, small mammals and birds (Ng 2000, Psomas 2002, LSA 2004). This bridge should be maintained, and if the existing road is not needed for vehicular access for maintenance purposes, we suggest removal of the pavement and habitat restoration. We advise conservation of contiguous natural habitats between Happy Camp Canyon Park and protected areas in the Simi Hills and Tierra Rejada Valley.

Rocky Peak is in the eastern strand of the linkage and was delineated by the least cost corridor analyses for mountain lion, badger, and mule deer, but also provides habitat for virtually every other focal species modeled. Several protected areas occur here, including Rocky Peak, Santa Susana State Historic, and Corriganville parks. This roadway overpass (roughly 60 feet wide and 130 feet long) connects Santa Susana State Historic Park south of SR-118, with Rocky Peak Park to the north. Mule deer, coyote, bobcat, raccoon, and skunk have been recorded utilizing this structure. The existing bridge could be converted to a vegetated land bridge, with native shrubs and trees tall enough to block lighting and reduce noise from traffic. One lane could be decomposed granite for emergency vehicle access.

Caltrans is working with the National Park Service to monitor wildlife movement at several culverts under SR-23. Proposed improvements include clearing tunnels and culverts and installing wildlife-proof fencing with escape gates to direct animals off the road and through underpasses. The pipe culvert to the right is located north of the Tierra Rejada Valley. Ng et al. (2004) recorded bobcat, coyote, and raccoon using this structure. We encourage protection of remaining natural habitats and conservation measures to maintain the rural character of the Tierra Rejada Valley.



Looking toward the Simi Hills through the Liberty Canyon underpass.



Looking toward the Santa Susanas through the bridge at Alamos Canyon.



Looking south at the Rocky Peak overpass.



Pipe culvert north of Tierra Rejada; typical of most structures on SR-23.



Sierra Madre-Castaic Connection

This linkage serves to connect the Los Padres and Angeles national forests. The Linkage Design encompasses 398,944 acres, of which 75% is already protected. It covers very diverse ecological settings and encompasses several major vegetation types. It has several main strands, reflecting variation in the habitat needs of different sets of target species. The northern strand is dominated by pinyon-juniper woodland, sagebrush, and desert scrub habitats and serves linkage needs of badger, puma, and mule deer. The central strands connect at generally higher elevations, including a series of hardwood, conifer, chaparral, and riparian habitats. They serve the needs of numerous focal species, including puma, mule deer, Pacific kangaroo rat, California spotted owl, acorn woodpecker, mountain kingsnake, pond turtle, two-striped garter snake, Monterey salamander, and bear sphinx moth. The southernmost strand of the Linkage Design follows the southern foothills and is dominated by coastal oak woodland, coastal sage scrub, valley foothill riparian, and grassland habitats. It provides the only fairly contiguous belt of coastal habitats in the Linkage Design, and provides connectivity for mule deer; Pacific kangaroo rat, acorn woodpecker and Monterey salamander, as well as many other species.



View from the Ridge Route of the Castaic Ranges in spring.

Interstate 5 and State Highway 33 are major transportation routes and are the greatest barriers to wildlife movement. By far the largest of these impediments is I-5, which bisects the linkage for a distance of 27 miles, and currently lacks adequate crossing structures. We call attention to five particular areas (Gorman Creek, Coyote Canyon, Cherry Canyon, Forest Road 6N43, and Big Oak Flat/Canton Canyon) where large crossing structures are needed on Interstate 5. These five areas are important because they provide opportunities for movement of animals via riparian and upland habitats and correspond to least-cost corridors for focal species.

Just south of the SR 138 interchange, Gorman Creek flows through a large bridged undercrossing with concrete flooring. It is then diverted to a concrete channel and funneled toward Pyramid Lake. The channel is fenced with chain link and barbed wire. We recommend removing the concrete flooring of the structure, the entire length of the concrete channel, and the fencing; restoring riparian habitat through the structure; and, if necessary, tapping the water of Gorman Creek farther south. Coordination with the California Department of Water Resources and other agencies will be essential to restore Gorman Creek.



Gorman Creek undercrossing just south of I-5/SR-138 interchange.

Cherry Canyon provides suitable habitat for puma, mule deer, Pacific kangaroo rat, and California spotted owl. At present Cherry Canyon leads to a steep fill slope at I-5. There are many deer trails on this slope, and a major deer trail up Cherry Canyon to the toe of the fill slope. Clearly deer are currently crossing at grade. Topography would allow a wildlife overpass on either the west or the east ridge of Cherry Canyon. Since this is one of the largest canyons crossing I-5, and it offers a direct link to Piru Creek below Pyramid dam, we suggest either a wildlife overpass (where existing cut banks occur) or a bridge be installed across the main wash that follows the contours that existed before the fill slope was created.



Potential site for vegetated landbridge on I-5 on the east ridge of Cherry Canyon.

The bridged underpass for Templin Highway at Canton Canyon is the only large underpass south of Pyramid Lake and currently provides one of the safest wildlife crossings. It is also used by (a) about 20 residences in the area, (b) a few recreationists, and (d) workers at the Castaic power plant. We recommend working with landowners to minimize land uses that compromise linkage function. We suggest reducing the pavement in the underpass from 4 to 2 lanes, restoring and redirecting Canton wash from the concrete culvert, and making the bridge wide enough to accommodate the wash. This would provide ample room to enhance wildlife movement and provide vehicular access.

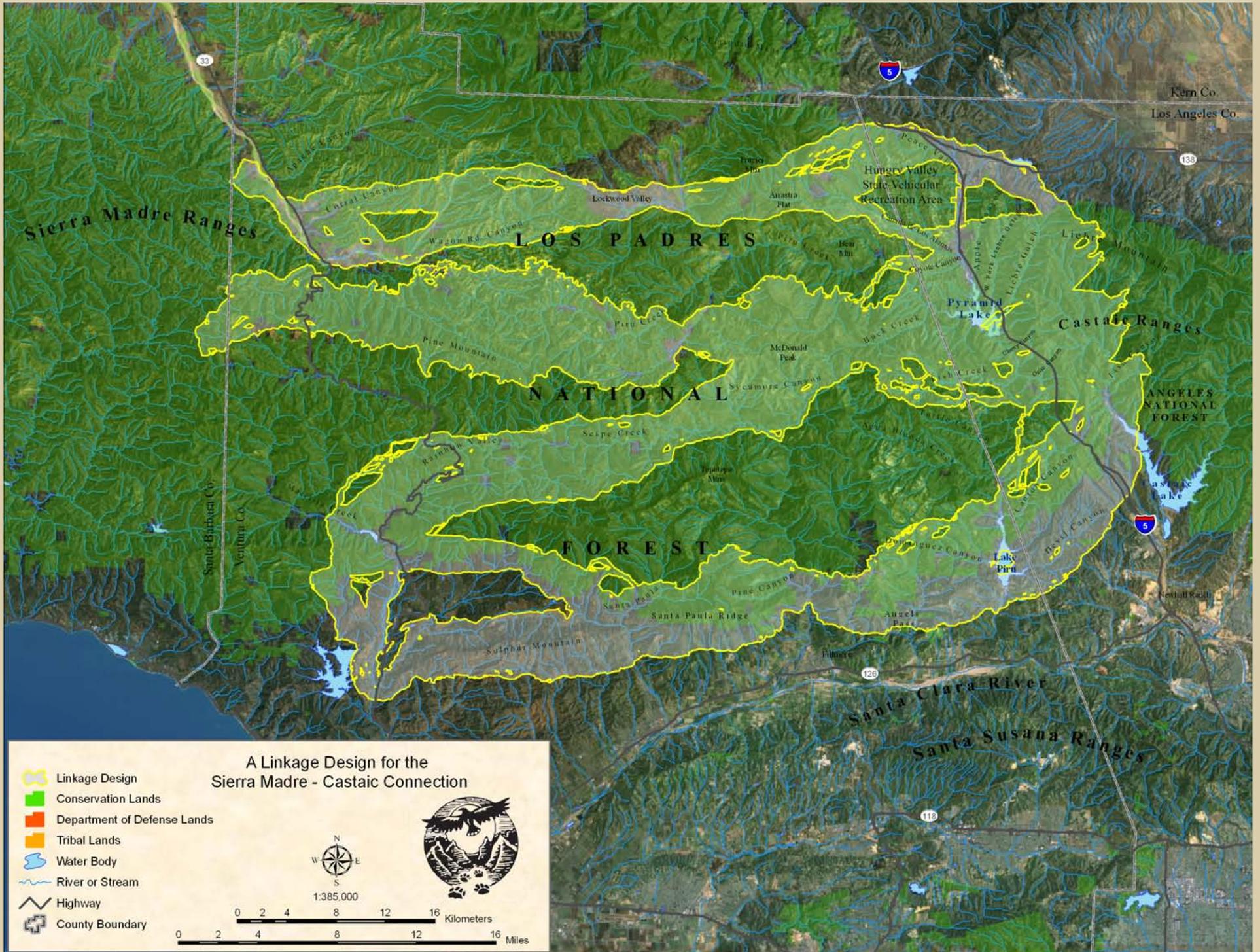


Canton Canyon with Templin Highway underpass at the center of the photo.

The Linkage Design crosses SR 33 in four areas. The best existing structure south of Ojai, which should be maintained is where San Antonio Creek passes under the 33 to join the Ventura River. From the north end of Meiners Oaks and Ojai to the confluence of Apache Canyon with the Cuyama River, we suggest constructing at least one expansive bridge every mile and crossing structures for reptiles, amphibians, and small mammals every 450-900 feet.



San Antonio Creek passing under the 33 to join the Ventura River.



San Gabriel-Castaic Connection

The majority of both the San Gabriel and Castaic ranges are included in the National Forest system, together forming the Angeles National Forest. The linkage encompasses a unique transition zone between coastal and desert landscapes, featuring coastal sage and chaparral on the west, and desert scrub, juniper and Joshua tree woodlands to the east. The Santa Clara River, one of the last free-flowing rivers in southern California and an integral part of the linkage, provides breeding sites and traveling routes for a variety of wildlife, and supports other critical natural processes such as natural flood control, recharge of groundwater basins, and nutrient cycling. Approximately 12% (2,772 out of 23,947 total acres) of the Linkage Design currently benefits from some level of conservation protection, mostly in Bureau of Land Management parcels and Vasquez Rocks County Park.



Looking toward the San Gabriel Mountains from Vasquez Rocks County Park. Photo credit Andrew M. Harvey, VisualJourneys.net.

The Linkage Design has three strands. The northwest strand is dominated by coastal sage scrub and chaparral and encompasses all or portions of Bee, Spring, Tapie, Tick, and Mint Canyons. It serves most of the focal species, including puma, mule deer, Pacific kangaroo rat, and California thrasher. The eastern strand connects a series of desert scrub and juniper woodland habitats, thereby linking habitat for species such as badger, burrowing owl, and bear sphinx moth that prefer the open habitats that are prevalent in desert plant communities. The third distinct strand of the Linkage Design follows the Santa Clara River and Soledad Canyon and provides large stepping-stones of habitat for semi-aquatic species, such as the western pond turtle, two-striped garter snake, and mountain kingsnake; it also serves a suite of aquatic and riparian-dependent

species (e.g., Unarmored three-spine stickleback, Santa Ana sucker, arroyo chub, California red-legged frog, arroyo toad), not specifically addressed by our analyses.

State Route 14 and Sierra Highway are major transportation routes and pose the greatest barriers to wildlife movement. By far the largest of these impediments is SR-14, which bisects the southern part of the linkage for a distance of eight miles. We have identified four locations at which crossing structures should be located (1) near the confluence of Spring Canyon, Bee Canyon and the Santa Clara River; (2) Agua Dulce Canyon; and (3 & 4) both places where Escondido Creek crosses the freeway.

The least cost corridors for puma, badger, mule deer, and Pacific kangaroo rat cross the freeway near the confluence of Spring Canyon, Bee Canyon, and the Santa Clara River. The existing bridge for Spring Canyon Road is inadequate to accommodate wildlife movement due to the steep fill slope for Soledad Canyon Road, lack of natural vegetation, asphalt in the two-lane underpass, and the mining operation in the Santa Clara River make it unlikely that this structure and the surrounding habitat can be restored to provide meaningful connectivity in the foreseeable future. We recommend a new bridge about 1200 feet east of the existing structure, and redirecting the main channel of Spring Canyon so that it would join Bee Canyon just south of SR-14, near the Santa Clara River. The new bridge would replace a section of fill slope along the low ridge between lower Spring and Bee Canyons. This design would provide a long and essentially undisturbed canyon (Spring Canyon) that would funnel animals toward a SR-14 underpass from the north. The south side of the freeway is close to both riparian and upland habitats, and away from the gravel mine.

At present Agua Dulce Creek passes under SR-14 via an oversized concrete pipe culvert, with concrete flooring, poor visibility to the other side, and no vegetation in the structure, reducing the likelihood for plant and animal movement. South of SR-14, the riparian vegetation is well developed with cottonwoods, sycamores, and willows, and no significant riparian or upland impediments between SR-14 and Soledad Canyon (and the Angeles NF boundary) about two miles to the south. Immediately north of the freeway, the riparian vegetation is much reduced, and the town of Agua Dulce lies about one mile north, impeding meaningful riparian connectivity at this time. To maximize the utility of Agua Dulce Creek as a movement area, we recommend removing the fill slope under SR-14 and upgrading the existing vehicle underpass to a bridged undercrossing that spans the canyon. Improving this structure could help animals get to Vasquez Rocks or funnel them toward the middle strand of the Linkage Design to Spring, Tapie, and Tick Canyons.



Removing the fill slope under SR-14 would route Spring Canyon to Bee Canyon and the Santa Clara River.



Agua Dulce Canyon vehicle underpass, with drainage culvert for stream visible to the left of the underpass.

San Gabriel-San Bernardino Connection

This linkage provides connectivity between two expansive areas of the Angeles and San Bernardino National Forests. Approximately 66% (77,941 out of 129,901) of the Linkage Design currently enjoys some level of conservation protection, mostly in National Forest land, whose management policies do not allow conversion to urban or agricultural use. The San Andreas Rift Zone runs through the linkage, producing steep rugged topography and a variety of microhabitats that support a rich diversity of natural communities, from coastal sage scrub and alluvial fan habitats in the southern foothills, chaparral, mixed conifer and oak woodlands in the central part of the linkage, transitioning to pinyon-juniper woodlands and desert scrub in the north. This linkage provides live-in and move-through habitat for rare wildlife such as bighorn sheep, San Bernardino kangaroo rat, and the metalmark butterfly.



Snow capped peaks in the San Gabriel-San Bernardino Connection.

At first glance, the linkage between the San Bernardino and San Gabriel Mountain Ranges seems simply to be a matter of getting plants and animals across Interstate 15. Indeed, for most species, the freeway is the most obvious barrier between core population centers, and National Forest land abuts both sides of the freeway for several miles. However, a Linkage Design that simply maintained and improved permeability along I-15's frontage with Forest Service land would fail to provide connectivity for lowland species along the southern foothills, and could result in Baldy Mesa becoming an island or peninsula of habitat, hemmed in by urban and agricultural land on the north, increasingly dense ranchette development on the south and west, and I-15 on the south and east. Therefore, the Linkage Design has three roughly parallel routes to accommodate diverse species and ecosystem functions.

The northern strand offers a high desert connection dominated by chaparral with scattered patches of desert scrub, juniper and Joshua tree woodlands, grassland, and riparian habitats, serving species such as the badger, rock wren, horned lizard, and metalmark butterfly. It extends

from the Upper North Fork of Lytle Creek, across Stockton Flat, down into Lone Pine Canyon, across Cajon Pass to Horsethief Canyon, up into Summit Valley and then on to the West Fork of the Mojave River. The central strand links a series of higher elevation forest and shrubland habitats serving numerous species, including puma, mule deer, spotted owl, mountain quail, and wrentit. This strand also offers the best potential connection for bighorn sheep, pygmy nuthatch, treefrog, whipsnake, and speckled dace. It encompasses the majority of land between Upper Lytle Creek Ridge, lower Lone Pine Canyon, Crowder and Cleghorn Canyons in the north and Cucamonga and Arrowhead Peaks in the south. The southern strand encompasses coastal and alluvial fan scrub habitats from San Antonio, Cucamonga, Deer, Day, Etiwanda, Morse, and San Sevaine creeks, to Lytle Creek and Cajon Wash, serving the movement needs of the endangered San Bernardino kangaroo rat and slender-horned spineflower, as well as the Pacific kangaroo rat, tarantula hawk, giant flower-loving fly, and California sagebrush.

Interstate 15 and State Route 138 are the major transportation routes and pose the most substantial barriers to wildlife movement. Interstate 15 is by far the most severe impediment, bisecting the linkage for a distance of roughly 17 miles, with 46 million vehicles a year traveling through the pass (USDA Forest Service 2004). Currently, State Route 138 (Rim of the World) is a two-lane road that receives light tourist traffic, though substantial increases in traffic and upgrading of the highway are planned. The US Forest Service is working with the Department of Transportation and Biological Resources division of US Geological Survey to design adequate linkages that will include one or more bridges and other large crossing structures to accommodate wildlife movement. Historic Route 66 and several major rail lines run alongside the freeway in many areas, adding to the barrier effect.

There are currently three bridges along I-15 that accommodate animal movement. All three occur within a one and a half mile long section of the highway south of the Cajon interchange. By far the best of these is the bridge at Cleghorn Canyon. The Least Cost Corridors for puma, mule deer, and bighorn sheep cross I-15 at Cleghorn Canyon, and there is a perennial spring in the upper canyon that draws animals into the drainage. Until new or upgraded crossing structures are available, it is critical that this structure be maintained and that the private and public lands near it are protected from urban development.

The other two bridged crossings lie to the north of Cleghorn Canyon and south of the site of old Cajon. Compared to the bridge at Cleghorn Canyon, these bridges have shorter spans, less clearance above the wash, and the canyons drain much smaller watersheds (100 to 300 acres, compared to about 1500 acres for Cleghorn). They may be expected to serve focal species, such as the Pacific kangaroo rat, San Diego horned lizard, and Chaparral whipsnake.



View down Cleghorn Canyon under I-15.



Bridges on I-15 north of Cleghorn Canyon; the top is 0.7 miles north of Cleghorn; the bottom is 400 yards south of the Cajon interchange.

San Bernardino-Granite Connection

This linkage connects the San Bernardino National Forest with extensive natural lands in the Granite, Ord, and Rodman Mountains. The Linkage Design encompasses 11,322 acres, of which approximately 38% (4,272 acres) currently enjoys some level of conservation protection, mostly Bureau of Land Management lands in the eastern strand of the linkage. This linkage is also within the California Desert Conservation Area and is addressed by the West Mojave Plan (BLM 2003, 2005). The linkage comprises two main strands, which accommodate overlapping but somewhat different suites of species.

The western strand was delineated by the permeability analyses for bighorn sheep, badger, and Pacific kangaroo rat and includes both riparian and upland habitats. It would also serve the movement needs of such diverse species as antelope ground squirrel, desert woodrat, and speckled rattlesnake. It extends from the San Bernardino Mountains, encompassing both Grapevine and Lovelace canyons, through Fifteenmile Valley and across State Highway 18, to enter the Granite Mountains at Fifteenmile Point. There is little surface water in the linkage, but Grapevine Canyon flows out of the San Bernardino Mountains through a dense riparian forest dominated by cottonwood (*Populus fremontii*) and various willow species (*Salix* spp.) before emptying into a broad bajada in Fifteenmile Valley. In addition to facilitating movements for several focal species, this strand supports habitat for several listed and sensitive species, including the Mojave ground squirrel (CDFG 2005).



The eastern strand of the Linkage Design encompasses rocky terrain and is dominated by creosote bush with scattered Joshua trees.

The eastern strand of the Linkage Design encompasses more rocky terrain. It was also delineated by the permeability analysis for bighorn sheep but should also serve badger, antelope ground squirrel, Pacific kangaroo rat, Merriam's kangaroo rat, and rock wren. This strand extends from Black Hawk Mountain near Cushenberry Canyon in the San Bernardino Mountains, through Fry Valley to the Fry and Rodman Mountains, crossing State Highway 247 between Lucerne and

Johnson Valleys. It encompasses Joshua tree woodland and pinyon-juniper woodland in the foothills of the San Bernardino Mountains, desert scrub through the valley and Fry Mountains, and sagebrush habitats in the Rodman Mountains. The eastern strand of the linkage includes substantial public ownerships that protect natural habitats from development.

State Highway 18 (Happy Trails Highway) and Highway 247 (Old Woman Spring Road) are the only major transportation routes crossing the linkage and the only paved roads. State Highway 18 bisects the western strand of the linkage and State Highway 247 crosses the eastern strand; both are currently at grade for their entire length. Opportunities for using natural topographic features to enhance habitat connectivity in the linkage are limited and no crossing structures currently exist. The speed limit is 55 mph along both stretches of highway in the linkage, but many vehicles far exceed this limit. Although flat desert highways seem to be destined for high speeds, we suggest reducing the speed limit on both highways to 45 mph through each strand of the linkage. We also recommend installing wildlife crossing signs to alert drivers they are entering a wildlife movement corridor. Laser and infrared activated warning signs with flashing lights may be an option to alert drivers to slow down for wildlife (Reed 1981, Messmer et al. 2000, Gordon 2001, Robinson et al. 2002, Huijser and McGowen 2003). These two actions alone could significantly reduce wildlife mortality in the linkage area but other measures can be taken to improve wildlife movement when the next highway improvement projects are undertaken. Future transportation projects will likely widen both of these two-lane highways to at least four lanes. These transportation improvement projects represent timely opportunities to improve habitat connectivity. We suggest a roadkill study as part of the upgrade projects, with design of crossing structures contingent on results.

In the western strand, we recommend burying or elevating a stretch of State Highway 18 at least 650 feet long to provide an at-grade wildlife crossing that conforms to the natural topography of the site. To either side of this structure, we suggest installing several pipe culverts (one foot diameter), spaced fairly frequently to provide passage for small mammals and reptiles.

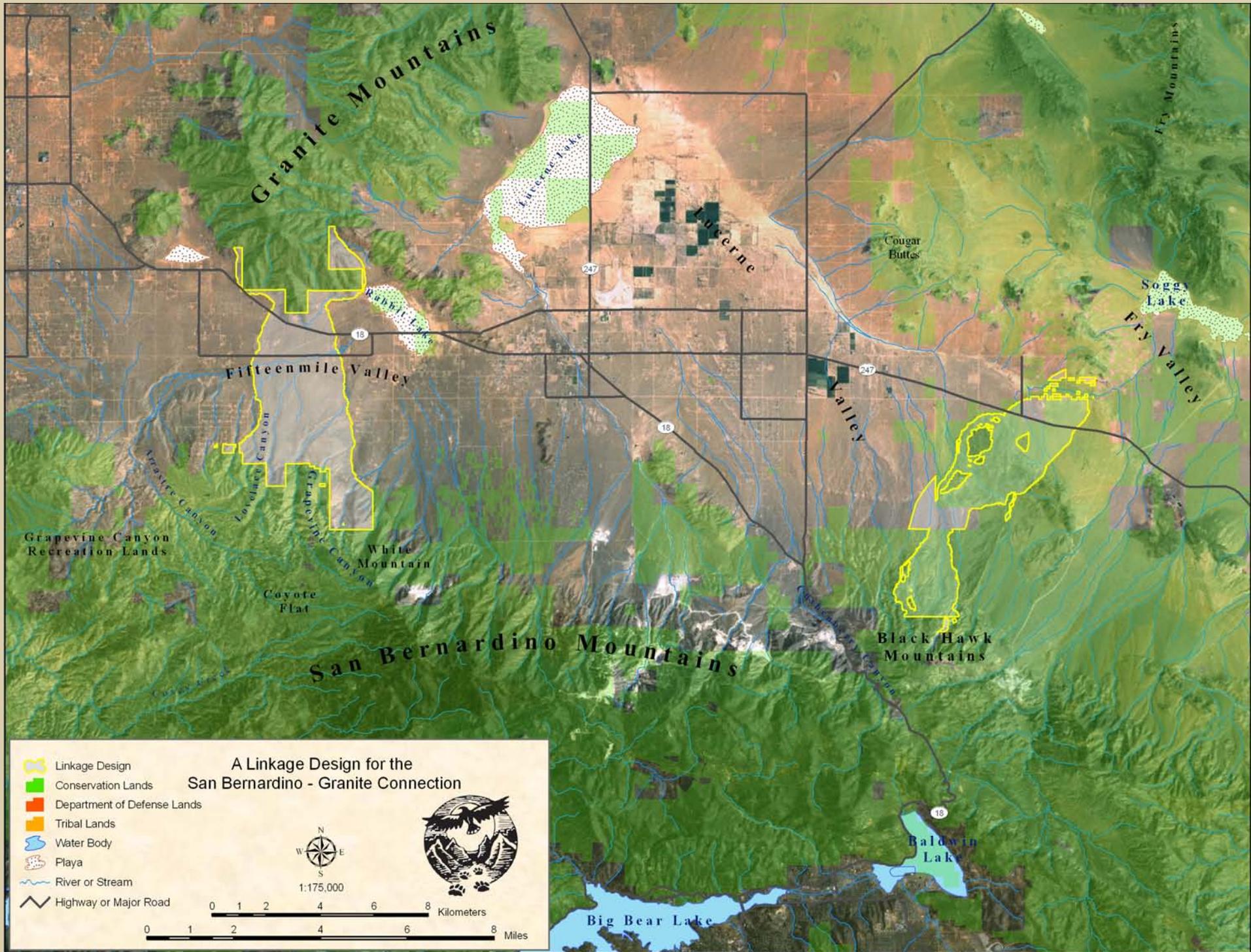
If wildlife movement studies for road improvement projects confirm bighorn sheep movement through the eastern strand of the linkage, we recommend installing a vegetated overpass over State Highway 247. Although the topography in this area isn't ideal to accommodate a ridge-to-ridge overpass, there is a ridge south of the highway that could be extended out and over the roadway, creating an overpass for wildlife and a tunnel for vehicular traffic. The structure should be at least 650 to 985 feet wide and should be strong enough to allow placement of large boulders along each side of the overpass to minimize noise from the highway, with a soil depth sufficient to maintain desert vegetation. The overpass should be vegetated using plants propagated from cuttings and seed collected from the surrounding vegetation communities.



Western strand: State Highway 18 looking south toward Grapevine and Lovelace canyons in the San Bernardino Mountains from Fifteenmile Point in the Granite Mountains.



Eastern strand: the ridge south of the highway could be extended out and over the roadway providing an overpass for wildlife and a tunnel for vehicular traffic.



San Bernardino-Little San Bernardino Connection

This linkage connects San Bernardino National Forest with Joshua Tree National Park. It also connects the South Coast Ecoregion to the Mojave and Sonoran Deserts and encompasses a unique variety of both coastal and desert habitats. The Linkage Design encompasses 60,805 acres, of which approximately 62% (37,650 acres) currently receives some level of conservation protection. The majority of land in the Linkage Design within Riverside County will be included in the Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP).



The Big Morongo Canyon Preserve in the linkage is known internationally for its bird diversity. In this landscape of predominantly dry vegetation, the desert oases provide essential resources that attract a diversity of wildlife such as mountain lion, bighorn sheep as well as rare aquatic species.

The Linkage Design has five major swaths or strands. The most northerly strand is a high desert connection dominated by juniper and Joshua tree woodlands. It extends from Antelope Creek and meanders in and out of Pipes Canyon, takes in a wide swath of habitat between Morongo and Yucca Valleys, and enters Joshua Tree National Park near Burnt Mountain. The next strand extends from Onyx Spring in the San Bernardino Mountains, and follows Little Morongo Canyon; it is especially important for species requiring a contiguous riparian connection. The next strand follows Big Morongo Canyon, which flows out of the San Bernardino Mountains through riparian forests dominated by white alders and cottonwoods before emptying into a broad bajada in the Morongo Basin, which then feeds the oasis in Big Morongo Canyon Preserve. The widest strand extends from Dry Morongo Canyon to Mission Creek and encompasses the steepest terrain along State Route 62. Dry Morongo Creek flows southward out of the San Bernardino Mountains, passes under State Route 62, and then meanders along the highway to empty into Mission Creek. The most southerly strand encompasses much of the Mission Creek watershed, as well as the southern segments of Little Morongo, Big Morongo, and Dry Morongo washes, where they empty into Mission Creek.

State Route 62 is the most substantial impediment to movement within the Linkage Design. Several structures along State Route 62 accommodate various levels of animal movement.

Mission Creek is an excellent lowland linkage that provides live-in and move-through habitat for several species. Desert scrub occurs in the uplands, and desert willows line Mission Creek. There are two well-designed bridges where the creek flows under the highway and animals that follow washes could then enter Big Morongo, Midway, or White House Canyons in the Little San Bernardino Mountains. Big Morongo appears to be the best route; we recorded numerous species using it, including mountain lion, bobcat, and gray fox. Off-road vehicle signs were visible beneath both bridges and efforts should be made to discourage these activities.

The least cost corridor for bighorn sheep crossed State Route 62 in very rugged topography. We recommend a ridge to ridge vegetated overpass. To the extent possible, the overpass should follow the contours that existed prior to the highway being constructed. The structure should be at least 650 to 985 feet wide and strong enough to allow placement of large boulders along each side to minimize noise from the highway. The overpass should be vegetated using plants propagated from cuttings and seed from the area.

A well-designed bridge that allows wildlife movement is found where Dry Morongo Wash flows under State Route 62. There are springs in the upper canyon that draw animals into the drainage. The area is also popular with off-road vehicle enthusiasts. These activities impact soils and vegetation and will inhibit species from using this crossing. We recommend preventing off-road vehicles from entering the canyon and enforcing closures. This structure should be maintained and lands near it protected.

Big Morongo Wash passes under State Route 62 via a box culvert. We recommend a bridge here that is tall enough and sufficiently wide to provide views to the other side, with natural flooring. We recommend measures to confine light and noise pollution to home sites, and advise conservation of land in the broad bajada of the wash, and parcels that straddle the highway to enhance the integrity of the linkage.



One of two bridges for Mission Creek; this is the southernmost bridge.



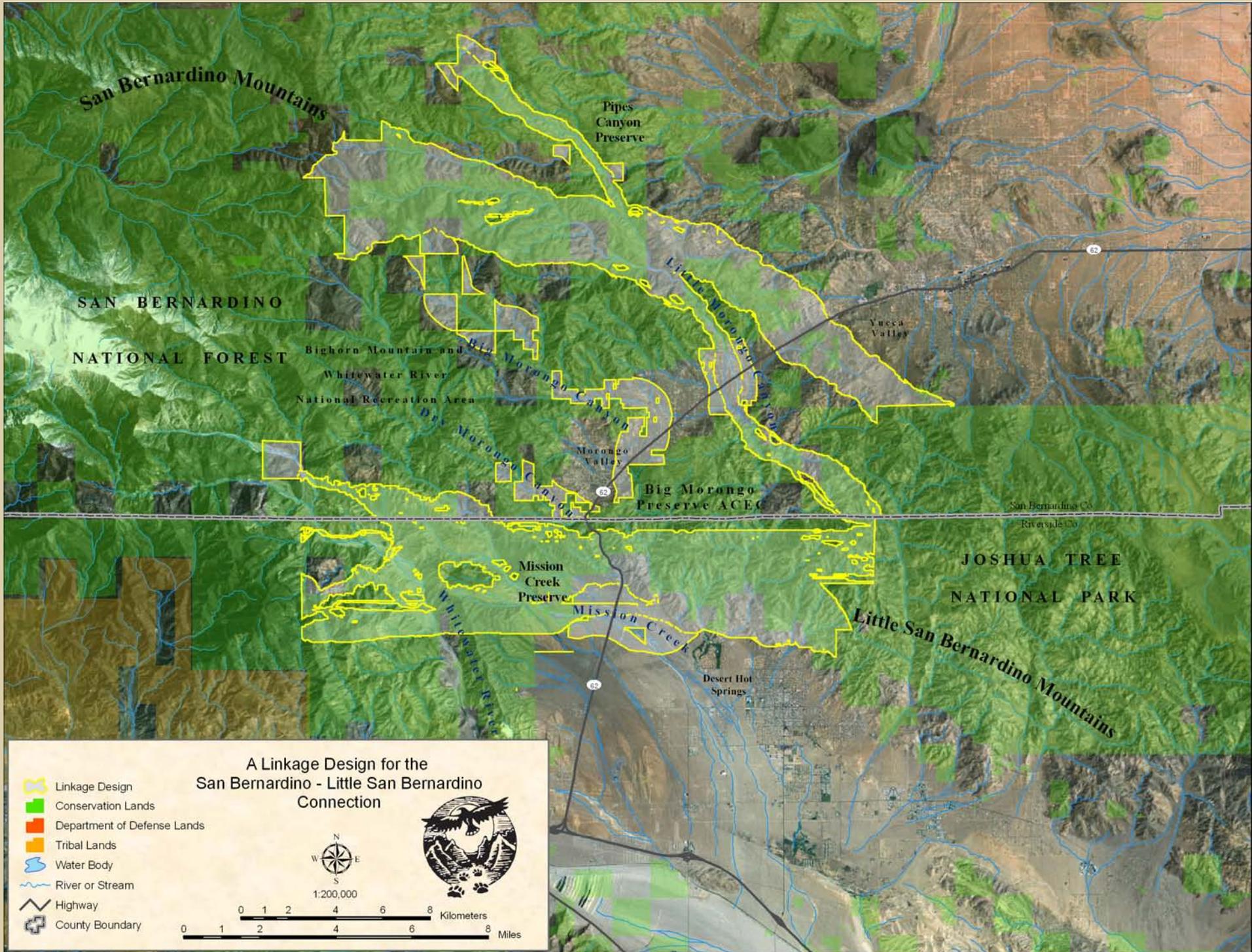
We recommend a vegetated wildlife overpass be built in this area to accommodate bighorn sheep movement.



Looking down Dry Morongo Canyon from BLM parcel west of the highway.



The culvert for Big Morongo Wash flowing under State Route 62.



San Bernardino-San Jacinto Connection

This linkage provides a connection between the San Bernardino and San Jacinto mountains, which together form the San Bernardino National Forest. The San Bernardino Mountains are part of the Transverse Ranges and feature the highest peak in southern California, Mount San Gorgonio, while the San Jacinto Mountains are the highest and northernmost of the Peninsular Ranges. Both coastal and desert habitats occur in the lowlands between these mountain masses, with the San Gorgonio River marking the transition between coastal habitats in the west and desert habitats in the east. The Linkage Design encompasses a total of 74,414 acres, of which approximately 29% (21,223 acres) is currently protected. The majority of unprotected land in the linkage could be conserved through the Western Riverside MSHCP and the Coachella Valley MSHCP (County of Riverside 2002, CVAG 2004).



Looking across the broad bajada of the San Gorgonio River toward the San Jacinto Mountains.

The Linkage Design has five routes to accommodate diverse species and ecosystem functions. The western strand links the San Bernardino Mountains with the Badlands and extends from Noble Creek in the San Bernardino Mountains, taking in the wide swath of natural habitats remaining between the communities of Calimesa and Cherry Valley, and entering San Timoteo Canyon in the Badlands. The next strand encompasses the San Gorgonio River, which forms a substantial alluvial fan through the pass to its confluence with the Whitewater River. This strand is intended to serve badger, large-eared woodrat, Merriam's kangaroo rat, and coast horned lizard. The San Gorgonio River is especially important for a number of rare endemic species associated with alluvial fans (County of Riverside 2002, CVAG 2004). The strand in the foothills of the San Jacinto Mountains near the confluence of Smith Creek and the San Gorgonio River accommodates several focal species including mountain lion, chaparral whipsnake, and slender-horned spinyflower. The Stubbe Canyon Wash strand was delineated by the landscape

permeability analysis for mountain lion but is also expected to serve species such as badger and little pocket mouse. The easternmost strand follows the Whitewater River, which empties into a broad bajada in the San Gorgonio Pass at the base of the San Jacinto Mountains. This strand was delineated by the landscape permeability analysis for puma but also serves focal species such as California treefrog, and white alder.

Interstate 10, Highway 111 and Highway 79 are the major transportation routes posing the most substantial barriers to movement. Interstate 10 bisects the linkage for roughly 11 miles. Several existing structures accommodate various levels of animal movement.

There is a series of crossing structures where the San Gorgonio River flows under Interstate 10, and for the service road between the freeway and the railroad tracks. Animals that follow washes can then enter several canyons in the San Jacinto Mountains. Just downstream, however, a low concrete dike runs almost the full width of the river, deflecting flow to the south bank to protect a mining operation that occupies the river bottom. Mining operations in the river decrease its value as a travel corridor, closing and restoring these areas would benefit this connection.



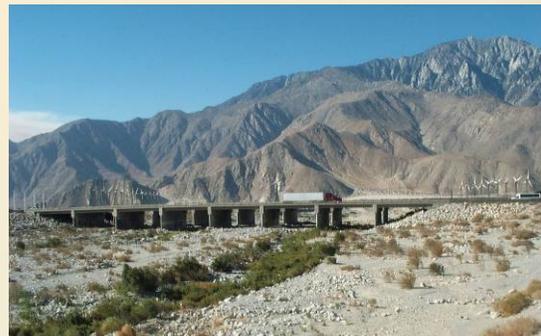
Bridge spanning the San Gorgonio River.

There is a series of under-crossings to accommodate Stubbe Wash, which crosses the freeway and service road in two places, roughly 90 feet apart. There is some native vegetation at the approach of these structures, but virtually no vegetative cover through the entire length of the structures. We suggest planting native shrubbery in between each bridge. We also recommend maintaining the rural character of the landscape by confining light and noise pollution to existing home sites in the vicinity.

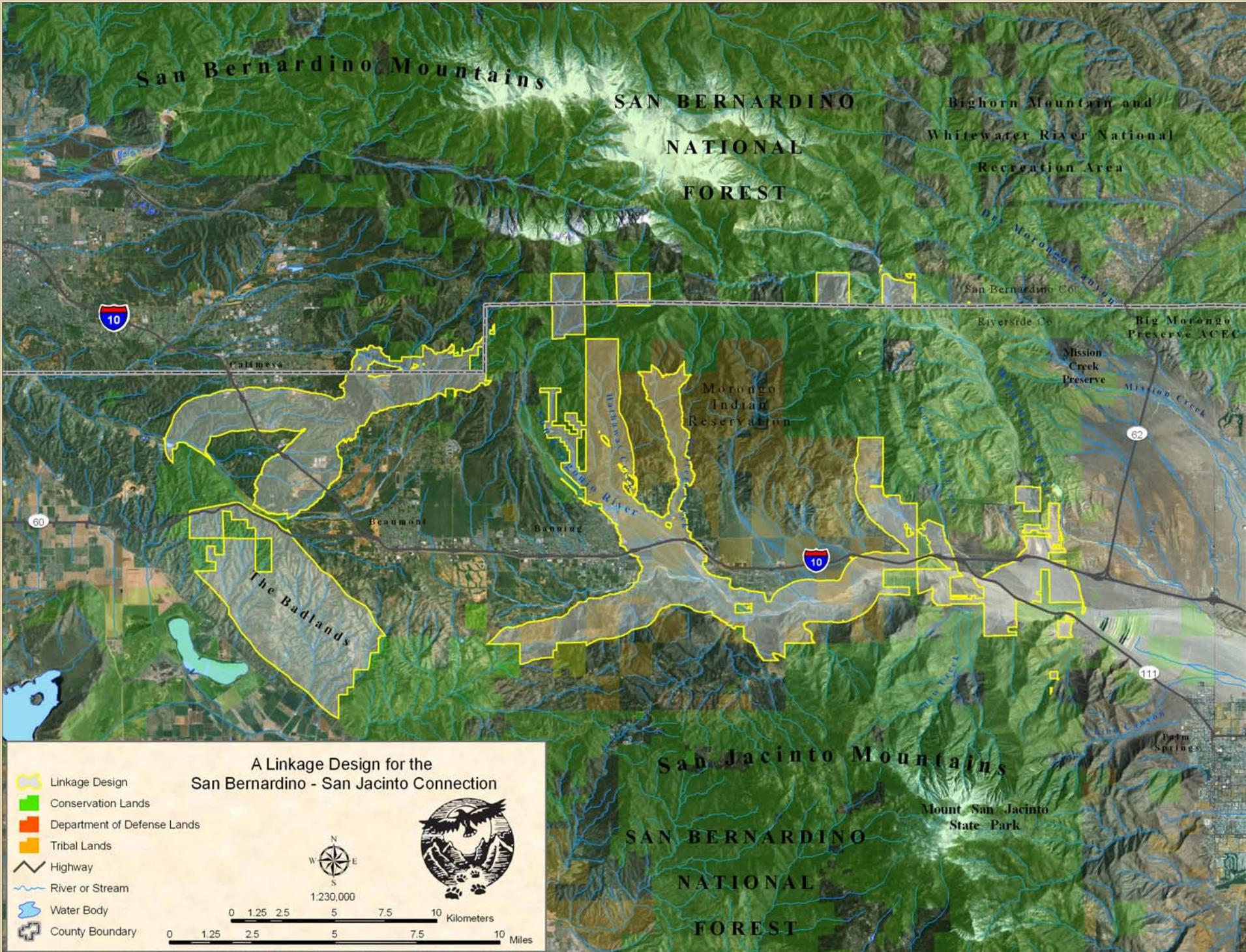


Looking toward the San Jacintos at the westernmost bridges over Stubbe Canyon.

There is also a series of bridges for the Whitewater River, and one for the service road. The Whitewater River had the highest frequency of bobcat use; coyote, rabbit, and roadrunners were also documented here (Myers et al. 1996). Public agencies bulldoze a stretch of the river to increase percolation for groundwater recharge; we recommend habitat restoration here. There are windmills in the river south of the freeway that are enclosed by chain-link fence, which should be removed to allow animals to roam the floodplain and access side canyons more easily.



Looking toward the San Jacintos through the bridge over the Whitewater River.



Palomar-San Jacinto/Santa Rosa Connection

This linkage facilitates wildlife movement between Cleveland and San Bernardino National Forests and Anza Borrego Desert State Park, and overlaps portions of the Cahuilla and Santa Rosa Reservations. The Linkage Design encompasses 204,766 acres, of which approximately 57% (116,396 acres) currently enjoys some level of conservation protection, mostly in land administered by Bureau of Land Management, Forest Service, California State Parks, The Nature Conservancy, and the counties. Portions of the Cahuilla and Santa Rosa reservations also occur and are almost entirely covered by high-quality natural habitats. Coordination with Tribal Councils will be critical for securing this regionally important landscape linkage.



One of many magnificent vistas of the rocky terrain in Anza Borrego Desert State Park.

The Linkage Design has three major strands. The most northerly strand extends from the Palomar Ranges of Cleveland National Forest, encompassing the coastal sage scrub and chaparral habitats surrounding Vail Lake and on Billy Goat, Cahuilla and Little Cahuilla mountains, the riparian habitats along Temecula Creek, Wilson Creek, Bautista Canyon, Lion Canyon, and Cottonwood Creek, and the oak woodland and hardwood conifer habitats in the foothills of the San Jacinto Mountains. This strand was delineated by the landscape permeability analysis for mule deer and mountain lion but also provides the largest core areas of suitable habitat for quino checkerspot butterfly. The central strand follows a series of valleys, from Aguanga Valley near the junction of highways 371 and 79, through the Cahuilla and Anza valleys and up into Garner Valley in the San Jacinto Mountains. This strand was delineated by the landscape permeability analysis for badger, a species that prefers grassland habitats in flat or gently sloping terrain, but it is also intended to serve the Aguanga kangaroo rat, loggerhead shrike, rock wren, and coast horned lizard. The southern strand extends from the Palomar Ranges, and encompasses habitats around Oak Grove, on Beauty Mountain, Tule Peak, and Iron Spring Mountain, and in Copper Canyon, Previt Canyon and the Chihuahua Valley, to Table Mountain in the Santa Rosa Mountains. This strand was defined by the landscape permeability

analysis for mountain lion but it provides live-in and move-through habitat for a number of native species.

State Route 79, and Highways 74, and 371 are the primary impediments to movement. The 79 is a two-lane heavily traveled highway that is at-grade for much of its length, except where it crosses major drainages. Highway 371 runs east-west through the central strand of the linkage, from its juncture with Highway 79 in the Aguanga Valley, to its juncture with Highway 74 near Garner Valley. This busy two-lane road is mostly at grade, with very few existing crossing structures. Highway 74 runs through Garner Valley for roughly 11 miles in the linkage. Several structures exist that facilitate various levels of wildlife movement.

There is a sizeable culvert on Highway 79 for Tule Creek with suitable habitat in the vicinity for mountain lion, badger, large-eared woodrat, western toad, coast horned lizard, and pale swallowtail. Tule Creek supports a well-developed cottonwood willow riparian forest; however tamarisk (*Tamarix ramosissima*), has invaded this system. We recommend habitat restoration to eradicate or control this and other non-native species. If transportation projects are undertaken, the culvert should be replaced with a bridge at least 24 feet wide and as close to 12 feet high as topography will allow.



Looking up Tule Creek at the concrete box culvert under Highway 79.

Chihuahua Creek flows under Highway 79 through an expansive well-designed bridge that facilitates wildlife movement in the southern strand of the linkage. Coast live oak riparian forest lines Chihuahua Creek, with grassland, sagebrush and redshank chaparral in the uplands. The bridge is roughly 30 feet high and 138 feet wide. When transportation projects occur, the dimensions of the structure should remain the same. Lands along the creek effectively link the Palomar and Santa Rosa Mountains, with only a few parcels remaining to secure this fully functional connection.

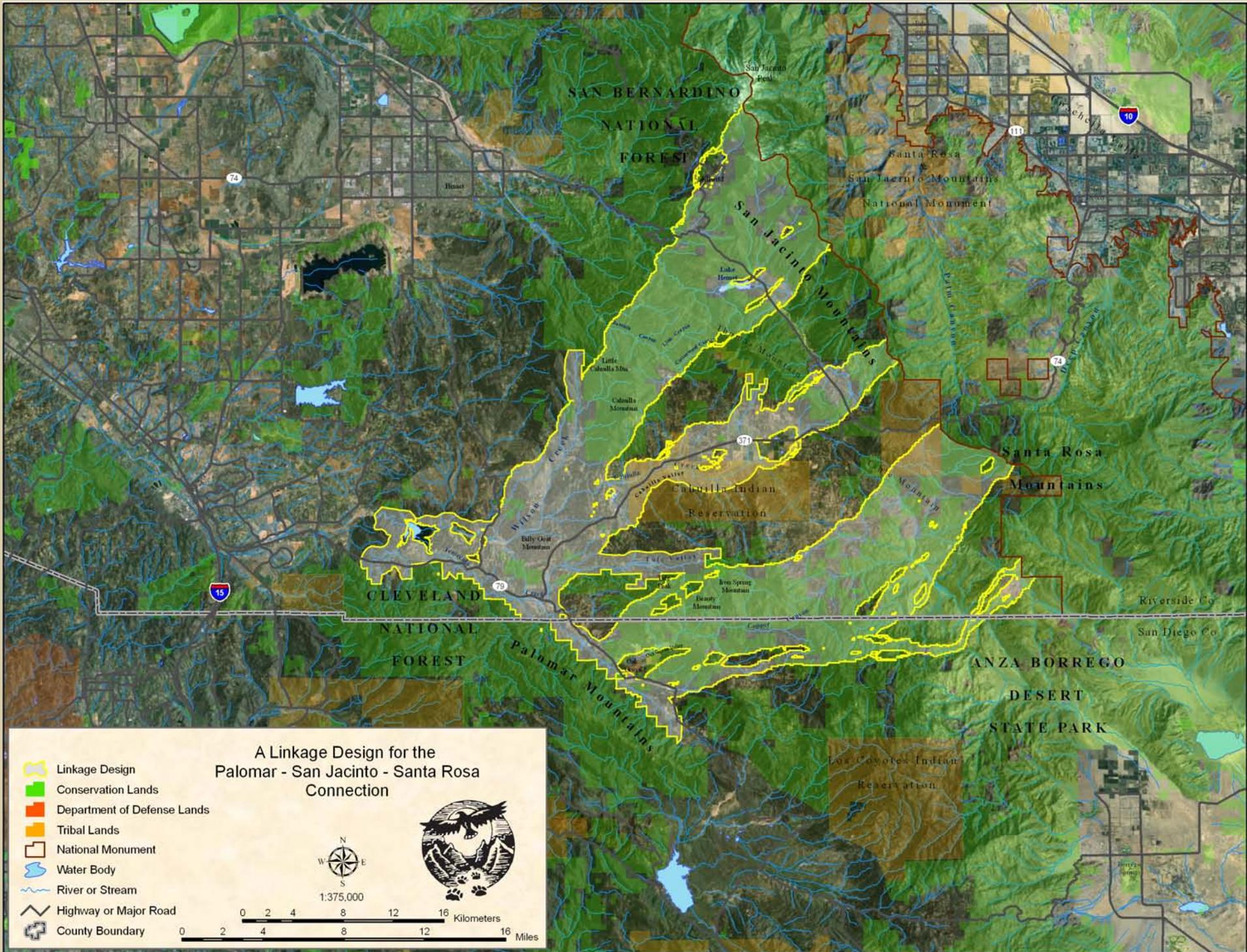


Looking down Chihuahua Creek toward the Palomar Ranges.

Highway 74 runs through Garner Valley for roughly 11 miles in the linkage. Several structures were incorporated into the original road design. There are three box culverts measuring four feet high and wide, and 23 feet long. There are also two box culverts in this stretch of highway but each has a significant drop off at the eastern entrance, which should be fixed to provide passage. There are two bridges (6' high, 43' wide) spaced about 600 feet apart that span Antsell Rock Creek and Servo Creek. Another bridge (10' high, 12' wide) spans Hurkey Creek. These creeks feed expansive wetland habitats that provide habitat for a number of aquatic and semi aquatic species.



Example of a concrete box culvert on Highway 74 in Garner Valley.



Santa Ana-Palomar Connection

This linkage joins the Santa Ana Mountains and its coastal lowlands to the Palomar Mountains and inland ranges of San Diego County, serving to connect extensive natural areas of Cleveland National Forest (CNF) and Camp Pendleton, the largest contiguous block of coastal habitat remaining in the ecoregion. The Linkage Design is a band of habitat roughly 21 miles in width and 75 miles long that extends eastward from the CNF Trabuco Ranger District, and Camp Pendleton to the western and northern boundaries of the CNF Palomar Ranger District. The Santa Margarita River, the longest intact stream corridor in southern California, winds through the linkage; it crosses I-15 and continues up Temecula Creek and across Vail Lake until it reaches the CNF Palomar Ranger District via the Arroyo Secco, Kolb, and Temecula creek drainages. This connection serves aquatic species (arroyo and southern steelhead trout), but also benefits semi-aquatic and terrestrial species that move along canyon bottoms (e.g., western pond turtle, pale swallowtail, or mountain lions). Approximately 1/3 of the 67,888 acres in the Linkage Design are protected from conversion to urban or agricultural use.



Looking west across Interstate 15, toward the Santa Ana Mountains from Sage Scrub Ridge in the Palomar Mountains.

Interstate 15 is the only major freeway in the Linkage Design, and currently lacks crossing structures adequate to accommodate species moving through upland and aquatic habitats. Other paved roads in the Linkage Design are two lanes in width (including Old Highway 394 and the Pala Temecula Road) and show lower levels of use than I-15 or State Route 79. Fisher and Crooks (2001) showed that roads in the linkage area vary substantially in their danger to wildlife depending upon level of use. Larger mammals and low flying birds and insects often are able to

successfully cross roads of this type, but small mammal and reptile mortalities are fairly high (Fisher and Crooks 2001).

The bridge spanning Temecula Creek would permit use by both upland and riparian focal species, but the adjacent Red Hawk Golf Course and commercial and residential developments block movements to and from the bridge on the eastern side. Further upstream there are significant gaps in natural habitats creating a dead-end for species moving eastward along Temecula Creek. We recommend restoring riparian vegetation from the Temecula Creek crossing to natural habitats in the Palomar Mountains and restoring a chaparral connection near the bridge on the east side of I-15 that extends to the ridgeline above the golf course, and removing existing fences and any other barriers. There are also three corrugated metal pipes about three feet in diameter and roughly 144 feet in length but curvature in the pipes prevents visibility to the other side. We recommend these pipes be replaced with expansive underpasses with earthen substrate flooring that are large enough to provide visibility to the other side. Appropriate fencing should be used to guide animals to these passageways. Due to the significance of I-15 as a barrier and the compromised function of the Temecula Creek bridge, a top priority for restoring linkage function is to install a habitat overpass just north of the Border Patrol checkpoint. Beier and Barrett (1993) identified this site as the “most critical link”. During their study, three lions were killed but a juvenile successfully crossed at this location. They also concluded that this connection must be secured for immigration of lions from the Palomar Range to prevent the extinction of the population in the Santa Ana Mountains.

State Highway 79 is a two-lane high-speed road with heavy levels of traffic that crosses key riparian drainages in the eastern portion of the linkage. It crosses Kolb Creek, Arroyo Secco, and Temecula creek drainages above Vail Lake near the Palomar Ranger District. These bridges vary in height from 6 to 30 feet, and all have well-developed riparian and upland vegetation in the vicinity, and provide good visibility to the other side. These bridges provide passageways across the 79 for various species, but use of all of the bridges could be enhanced by installing fencing to guide animals towards the structures.



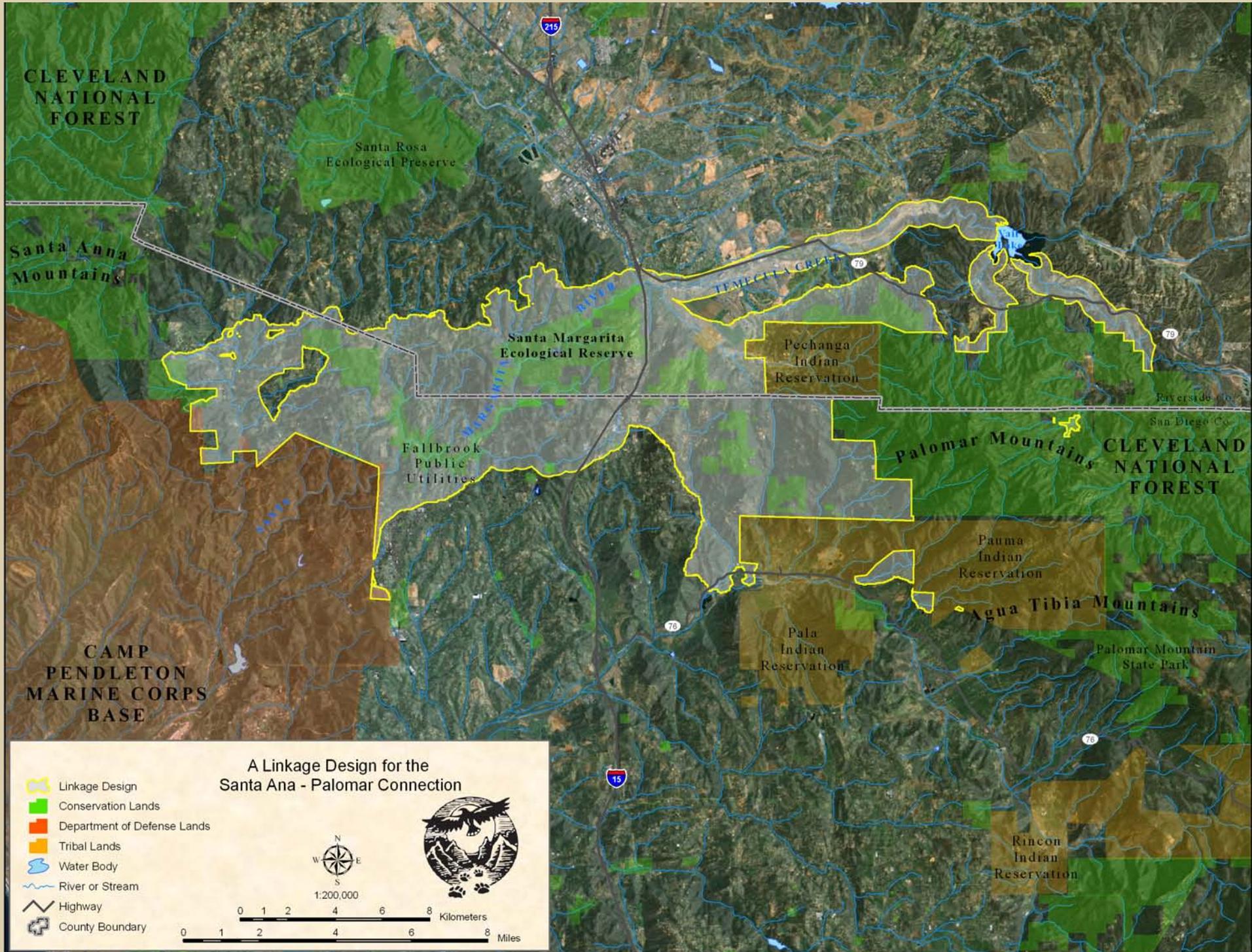
Temecula Creek passing through two extended bridges on Interstate 15.



Potential site for vegetated land bridge on Interstate 15; near call box 15-16.



Kolb Creek bridge on the SR-79.



Peninsular-Borrogo Connection

This linkage connects the coastal habitats of Cleveland National Forest and Cuyamaca Rancho State Park in the Peninsular Ranges with the desert communities of Anza Borrego Desert State Park. The Linkage Design encompasses 127,788 acres, of which approximately 36% (45,521 acres) currently enjoys some level of conservation protection, mostly in land administered by US Forest Service, California State Parks, Bureau of Land Management, Department of Fish and Game, County of San Diego, and The Nature Conservancy. Portions of the Santa Ysabel and Mesa Grande reservations also occur in the linkage.

The Linkage Design has three major strands. The most northerly strand extends from the Palomar and Aguanga mountains of Cleveland National Forest, encompasses habitats surrounding Lake Henshaw in the Warner Basin, the riparian habitats along the San Luis Rey River, San Ysidro, Buena Vista, and Matagual Creeks and the mixed chaparral and oak woodland habitats in the San Felipe Hills near Pinyon Ridge in Anza-Borrogo Desert State Park. This strand was delineated by the landscape permeability analysis for badger but also provides the largest core areas of suitable habitat for grasshopper sparrow and black-tailed jackrabbit.



Looking southeast down Banner Canyon with Granite Mountain in Anza Borrego Desert State Park in the distance.

The central strand extends from Black Mountain in Cleveland National Forest and encompasses riparian and upland habitats along Bloomdale, Witch, and Santa Ysabel creeks, Santa Ysabel Valley, the southern extent of the Volcan Mountains, Banner Canyon, and San Felipe Creek, and enters Anza-Borrogo Desert State Park between Pinyon Ridge and Grapevine Mountain. This strand was delineated by the landscape permeability analysis for mountain lion but is also intended to serve other species such as mule deer, badger, and granite night lizard. Santa Ysabel Creek is especially important for species requiring a contiguous riparian connection.

The southern strand extends from Sutherland Lake and follows the belt of oak savanna, and grassland habitats in the Ballena Valley and the riparian habitats of Witch Creek to the upper San Diego River Gorge, and then up Sentenac Creek to habitats around Lake Cuyamaca in Cuyamaca Rancho State Park and the desert riparian habitats of Vallecito Wash in Anza-Borrego Desert State Park. This strand was defined by the landscape permeability analysis for mule deer.

State Routes 78 and 79 are the major transportation routes and pose the most substantial barriers to movement. SR-79 bisects the linkage for a distance of roughly 27 miles, while SR-78 passes through the central and southern strands of the linkage.

A well-designed bridge conveys flows of Canada Verde Creek under SR-79 near Warner Springs. Coast live oak riparian forest lines the creek with grasslands south of the SR-79 and redshank chaparral the dominant community north of the highway. This bridge is well-suited as a wildlife crossing, as the stream draws animals to the canyon. The Pacific Crest Trail also utilizes this structure, as it passes through the northern strand of the linkage, between Anza-Borrego Desert State Park and Forest Service lands north of SR-79.



Bridge for Canada Verde Creek and the PCT under SR-79.

The least cost corridor for mountain lion crossed SR-79 using Santa Ysabel Creek and researchers have documented lions using the creek as a travel route (Sweaner et al. 2003). There is a well-designed bridge that has natural flooring, provides good visibility, and measures about 30 feet high, 40 feet wide, and 22 feet long. Species that utilize riparian, grassland, or oak savanna habitats (e.g., badger, mule deer, black-tailed jackrabbit, and grasshopper sparrow) will benefit from this connection. Santa Ysabel Creek provides the most direct riparian connection between targeted areas, and most of the canyon is already protected.



Bridge for Santa Ysabel Creek on SR-79.

The bridge for San Felipe Creek is roughly 30 feet high, 325 feet wide and 30 feet long. San Felipe Creek is designated as a National Natural Landmark, one of the last natural perennial desert streams that supports an incredible diversity of species. Many focal species have been detected, including mountain lion, badger, mule deer, black-tailed jackrabbit, granite night lizard, golden eagle, and black brant. Most of the habitat in the San Felipe Hills and Valley is already conserved. S2 runs along San Felipe Creek at the base of the San Felipe Hills, connecting SR-78 and Sr-79. S22 passes through the northern strand of the linkage, and stretches from the community of Borrego Springs, to the base of the San Felipe Hills. Both of these scenic highways are currently one lane in each direction and almost entirely at grade. Any road improvements should incorporate regularly spaced culverts to increase movement opportunities for smaller species and reduce roadkill.



San Felipe Creek flows beneath SR-78 through a bridge that provides passage to numerous species.



A Linkage Design for the Peninsular - Borrego Connection



**CUYAMACA
RANCHO
STATE PARK**

Missing Linkages along the U.S.-México Border

Linkages along the U.S.-México border in San Diego and Imperial counties are being implemented as part of the *Las Californias Binational Conservation Initiative* (LCBCI; www.consbio.org/cbi/projects), led by The Nature Conservancy, Conservation Biology Institute, Pronatura, and Terra Peninsular, with assistance from the Resources Legacy Fund Foundation, Back Country Land Trust, The Conservation Fund, California State Parks, Bureau of Land Management, and others. As a result of the LCBCI, priority properties have been identified and approximately 3,500 acres have been conserved to date (representing an investment of over \$8 million in private, state, and federal funds), and LCBCI priorities have been included in several agency planning documents. The California Biodiversity Council (CBC) has embraced LCBCI and established a border work group, comprised of agencies and NGOs from both sides of the border, which is collaborating on implementation. We are also working with the San Diego Natural History Museum, U.S. and Mexican agencies, and academic institutions on a binational expedition to increase our understanding of resources in the study area on both sides of the border.

Otay Mountain—Cerro San Ysidro linkage

Otay Mountain in California and Cerro San Ysidro in Baja California represent *sky islands* of endemic plant species and represent the last cross-border coastal sage scrub linkage. This linkage continues along Cottonwood Creek to the Laguna Mountains in the Cleveland National Forest. Completion of this linkage will contribute to the recovery of 22 federally and state listed species and secure protection of some of the most rare and floristically diverse vegetation communities on the planet.

La Posta linkage

This linkage serves to connect the Campo Valley in San Diego County with the El Hongo Valley in Baja California. It occurs in an ecological transition area between the coast and the desert, and between mountain and inland valley biomes. Completing this linkage, by conserving a series of small core areas, will decrease fragmentation, maintain a sanctuary of wilderness values at the edge of an urban metropolis, and ensure conservation across a range of elevational gradients that will enhance the resilience of existing protected lands to global climate change.

Parque-to-Park linkage

This linkage provides a connection between Anza-Borrego Desert State Park in San Diego and Imperial counties, and Parque Constitución de 1857 in Baja California. This is a truly continental-scale linkage along the transboundary region of the Peninsular Ranges, thus ensuring cross-border connectivity through the eastern edge of the South Coast Ecoregion and the Sonoran Desert. Completing this linkage ultimately will allow the endangered Peninsular Bighorn Sheep to repopulate the Sierra Juárez in northern Baja California and encourage binational collaboration in managing bighorn sheep populations on both sides of the border.

Following are a few of the primary implementation objectives:

- Work toward creation of a binational park that links Parque Constitución de 1857 in the Sierra Juárez in Baja California with public wilderness areas in San Diego County.
- Work toward creation of a cross-border linkage between Tijuana and Tecate / San Diego and Campo.
- Conserve the Cottonwood Creek corridor between Cerro San Ysidro, Otay Mountain, and the Laguna Mountains.
- Provide technical support to Mexican partners in conserving large, intact natural areas and working landscapes within Baja California.

Recommendations to Improve Connectivity

Recommendations to Reduce the Effects of Roads: Although road-widening projects and new roads generally increase vehicle traffic, they need not result in more wildlife/vehicle collisions, or a decrease in animal movements. Transportation projects present the greatest opportunity to provide crossing structures to accommodate wildlife movement. Because most of California's roads were not originally designed to accommodate wildlife movement, road improvement projects can dramatically restore permeability. Conversely, we can expect slower progress making canals and railroads more wildlife-friendly because these structures are not as regularly upgraded. Nonetheless, most structures are eventually upgraded, creating opportunities to facilitate connectivity, thus it is critical that planners and engineers be aware of the need for connectivity.

Wildlife crossing structures that have been used in North America and Europe to facilitate movement through landscapes fragmented by roads include wildlife overpasses, bridges, culverts, and pipes. While many of these structures were not originally constructed with ecological connectivity in mind, many species benefit from them (Clevenger et al. 2001; Forman et al. 2003). No single crossing structure will allow all species to cross a road. For example rodents prefer to use pipes and small culverts, while bighorn prefer vegetated overpasses or open terrain below high bridges. A concrete box culvert may be readily accepted by a mountain lion or bear, but not by a deer or bighorn sheep. Small mammals, such as deer mice and voles, prefer small culverts (McDonald & St Clair 2004).



Elk using wildlife overpass, Banff National Park, Canada

Although some documents refer to such structures as “corridors” or even “linkages,” we use these terms in their original sense to describe the entire area required to link the landscape and facilitate movement between large wildland blocks. Crossing structures represent only small portions, or choke points, within an overall habitat linkage or movement corridor. Properly designed crossing structures are a means of making barriers more permeable to wildlife movement. However, investing in specific crossing structures may be meaningless if essential lands in the linkage are left unprotected. Thus it is essential to keep the larger landscape context in mind when discussing existing or proposed structures to cross movement barriers. This broader context also allows awareness of a wider variety of restoration options for maintaining functional linkages.

Based on the small but increasing number of scientific studies on wildlife use of highway structures, we offer these general standards and guidelines for *all* existing and future crossing structures intended to facilitate wildlife passage across highways, railroads, and canals.

- **Multiple crossing structures should be constructed to provide connectivity for all species likely to use a given area** (Little 2003). For deer or other ungulates, an open

structure such as a bridge is crucial. For medium-sized mammals, black bear, and mountain lions, large box culverts with natural earthen substrate flooring are optimal (Evink 2002). For small mammals, pipe culverts from 0.3m – 1 m in diameter are preferable (Clevenger et al. 2001; McDonald & St Clair 2004).

- **At least one crossing structure should be located within an individual's home range.** Because most reptiles, small mammals, and amphibians have small home ranges, metal or cement box culverts should be installed at intervals of 150-300 m (Clevenger et al. 2001). For ungulates (deer, bighorn) and large carnivores, larger crossing structures such as bridges, viaducts, or overpasses should be located no more than 1.5 km (0.94 miles) apart (Mata et al. 2005; Clevenger and Wierzchowski 2006).
- **Suitable habitat for species should occur on both sides of the structure** (Ruediger 2001; Barnum 2003; Cain et al. 2003; Ng et al. 2004). "Crossing structures will only be as effective as the land and resource management strategies around them" (Clevenger et al. 2005).
- **Whenever possible, suitable habitat should occur *within* the crossing structure.** This can best be achieved by having a bridge high enough to allow enough light for vegetation to grow under the bridge, and by making sure that the bridge spans upland habitat that is not regularly scoured by floods. Where this is not possible, rows of stumps or strands under large span bridges can provide cover for smaller animals such as reptiles, amphibians, rodents, and invertebrates; regular visits are needed to replace artificial cover removed by flood. Within culverts, earthen floors are preferred by mammals and reptiles.
- **Structures should be monitored for, and cleared of, obstructions that impede movement.** Many box culverts have large accumulations of branches, Russian thistle, sand, or garbage that impede animal movement, while bridged undercrossings rarely have these problems.
- **Fencing should direct animals towards crossing structures** (Yanes et al. 1995). In Florida, construction of a wall to guide animals into a culvert system resulted in 93.5% reduction in roadkill, and also increased the total number of species using the culvert from 28 to 42 (Dodd et al. 2004). One-way ramps on roadside fencing can allow an animal to escape if it is trapped on a road (Forman et al. 2003).
- **Raised sections of road discourage animals from crossing roads, and should be used when possible to encourage animals to use crossing structures.** Clevenger et al. (2003) found that vertebrates were 93% less susceptible to road-kills on sections of road raised on embankments, compared to road segments at the natural grade of the surrounding terrain.
- **Manage human activity near each crossing structure.** Clevenger & Waltho (2000) suggest that human use of crossing structures should be restricted and foot trails relocated away from structures intended for wildlife movement. However, a large crossing structure (viaduct or long, high bridge) should be able to accommodate both recreational and wildlife use. At a minimum, nighttime human use of crossing structures should be restricted.
- **Design culverts specifically to provide for animal movement.** Most culverts are designed to carry water under a road and minimize erosion hazard to the road. Culvert designs adequate for transporting water often have pour-offs at the downstream ends that

prevent wildlife usage. At least one culvert every 150-300m of road should have openings flush with the surrounding terrain, and with native land cover up to both culvert openings, as noted above.

Recommendations to Reduce the Effects of Rail Lines: We recommend a policy of using any railroad realignment as an opportunity not simply to mitigate loss of wildland connectivity, but to improve it. Ameliorating the adverse affects of railroads is similar to that for roads, providing viaducts, bridged underpasses, and tunnels (Reed and Schwarzmeier 1978, Borowske and Heitlinger 1981, Forman 1995).

- We recommend that crossing structures should be sited at least every 1.5 to 2 km.
- We suggest structures for rail lines be aligned with crossing structures on freeways.
- We encourage crossing structures associated with rail lines be integrated with sound walls to reduce noise.
- Structures should be integrated with fences where beneficial to guide animals toward crossing structures. Fencing can be permeable to humans and larger animals, and would not be needed where steep cut and fill slopes already divert animals toward structures.

Recommendations to Reduce the Effects of Streams Barriers: Since 80% of terrestrial vertebrate species depend on riparian systems (Kreuper 1992), it is critical to maintain these communities. Measures to minimize development impacts on aquatic habitats typically focus on establishing riparian buffer zones (Barton et al. 1985, Allan 1995, Willson and Dorcas 2003). Buffers must contain enough upland habitat to maintain water-quality and habitat characteristics essential to the survival of many aquatic and semiaquatic organisms (Brososke et al.1997, Willson and Dorcas 2003). To enhance species use of riparian habitats, we recommend:

- Restore riparian vegetation in all drainages and upland vegetation within 0.6 miles of streams and rivers to encourage plant and animal movement and increase water quality.
- Investigate historic flow regimes and develop surface and groundwater management programs to restore and recover properly functioning aquatic/riparian conditions.
- Remove exotic plants (e.g., tamarisk) and animals (e.g., bullfrogs, African clawed frogs) from washes, streams and rivers. Work with relevant agencies and organizations to survey for invasive species and develop a comprehensive removal strategy.
- Enforce regulations protecting streams and stream vegetation from illegal diversion, alteration, manure dumping, and vegetation removal.
- Enforce regulations restricting farming, gravel mining, suction dredging, and building in streams and floodplains.
- Work with the Resource Conservation Districts to help establish use of Best Management Practices for rural communities in the linkage designs and surrounding communities.
- Support efficient water use and education programs that promote water conservation.
- Discourage development in flood prone areas and prevent the construction of concrete-banked streams and other channelization projects.

- Support the protection of riparian and adjacent upland habitats on private lands. Pursue cooperative programs to improve conditions in riparian and upland habitats.

Recommendations to Reduce the Effects of Mining: Mining operations can be modified with actions that reduce the affects of these industrial activities. Preventing any further mining operations in key areas of a Linkage Design through administrative withdrawals will have the greatest effect on preserving linkage function. Existing mining operations can be targeted for regulatory actions that reduce the effects of these industrial activities. These include, limiting noise from blasting, minimizing night lighting, reducing traffic in sensitive areas or constriction points, monitoring water quality and quantity, minimizing the use of harmful chemicals, and increasing enforcement of existing regulations. The California Surface Mining and Reclamation Act (1975) require that land used in mining operations be restored once operations have ceased.

Recommendations to Reduce the Effects of Urban Barriers: Urban developments, unlike roads, create movement barriers that cannot be readily removed, restored, or mitigated. Preventing urban developments in key areas through acquisition or conservation easements is therefore the strongest option. Mitigation for existing urban developments focuses on designing and managing buffers to reduce penetration of undesirable effects into natural areas (Marzluff and Ewing 2001). Management in buffers can include fencing in pets, reducing human traffic in sensitive areas or constriction points, limiting noise and lighting, reducing traffic speeds, minimizing use of irrigation, maximizing outdoor water use efficiency measures, encouraging the planting of locally native vegetation, minimizing the use of pesticides, poisons and other harmful chemicals, and increasing enforcement of existing regulations.

Recommendations to Reduce the Effect of Agricultural Barriers: Agricultural practices remove native vegetation, require significant water resources, and increase nutrient runoff into streams, and support invasions by exotic species. Waters draining from these developments show elevated levels of nutrients and particles. Many drainages that were once ephemeral become perennial (Fisher and Crooks 2001) and are capable of supporting exotic species such as exotic fish, bullfrogs and giant reed. As with urban developments, acquisition or conservation easements with willing landowners will have the greatest effect on preserving linkage function from agricultural impacts. For existing developments, a variety of Best Management Practices can reduce nutrient runoff and erosion. These include the timing and types of nutrient use, use of native vegetation to absorb surface and subsurface runoff, dirt road design, and soil management. In addition, the pattern of agricultural developments can have a significant affect on species movements. We provide the following initial recommendations to prevent or mitigate the effects of agriculture in the linkage design areas:

- Discourage further agricultural development by purchasing lands with natural vegetation, or developing easements with willing landowners.
- Restore agricultural lands in areas of a linkage where natural habitats have been severely constricted. Where possible, restore a one kilometer wide isthmus of habitat through adjacent agricultural developments.
- Work with The Regional Water Quality Control Board's Total Maximum Daily Load plans to evaluate the cause the water quality deterioration and enact an implementation plan to return water quality to targeted water quality values.
- Encourage research on agriculture that specifically identifies solutions to elevated nutrient runoff, erosion, and effects of perennializing streams.

Recommendations to Reduce the Effects of Recreation: If recreational activities are effectively planned, developed, managed, and monitored, most negative impacts can be avoided or minimized by limiting types of use, directing recreational activities away from particular locations, sometimes only for particular seasons, and with reasonable precautions. We provide the following recommendations:

- Monitor recreational use to provide a baseline for decisions regarding levels, types, and timing of recreational use.
- Collect data on special status species, species movements, and vegetation disturbance in areas of high recreational activity.
- Develop and conduct multi-lingual outreach programs to recreational users on how to lessen impacts in sensitive areas.
- Close, obliterate, and restore any unauthorized off-road vehicle routes.
- Enforce leash laws so that dogs are under restraint at all times.

Translating Plans into Action

Although South Coast Missing Linkages rigorous, detailed designs are central to the approach, the project will not be complete with the publication of the linkage designs. The success of South Coast Missing Linkage will be measured by our effectiveness at *translating our vision of a connected landscape into land-saving actions*. With the completion of the planning and design phase comes the need to disseminate and institutionalize the results and build and support Linkage Implementation Coalitions to undertake the on-the-ground work to conserve our South Coast linkages.

Institutionalization of Linkage Designs

Partners in the South Coast Missing Linkages initiative are designing a strategic outreach plan that will a) focus broad incorporation of the Linkage Designs into relevant governing instruments (e.g. general plans, HCPs, local ordinances, CEQA); b) establish a public expectation of linkage protection; c) organize new constituencies and empower old partners; and d) utilize the unique abilities of each constituency to institutionalize support for these linkages. We are also working with our partners to develop and implement communication strategies to broaden the dissemination of the designs and inform the public and decision makers as to the importance of protecting these linkages.

The South Coast Missing Linkages initiative has already strongly influenced a number of important local, regional, and statewide conservation planning efforts. One direct result of our broad collaboration is the integration of the South Coast Missing Linkages into policy decisions to improve and enforce protection of these regionally important habitat linkages. For example, the four southern California Forests (Los Padres, Angeles, San Bernardino, and Cleveland) recently finalized their Resource Management Plans and identified connecting the four forests to the existing network of protected lands as one of the key strategies for protecting biodiversity in the forests. South Coast Missing Linkages was also recently acknowledged as a vital strategy for improving the status of wildlife in the state by the California Department of Fish and Game in a report prepared for the National State Wildlife Grant Program. *California Wildlife: Conservation Challenges* includes the following as one of its Recommended Region-Specific Conservation Actions:

“To address regional habitat fragmentation, federal, state, and local agencies, along with nongovernmental conservation organizations, should support the protection of the priority wildland linkages identified by the South Coast Missing Linkages project.”

South Coast Wildlands is representing South Coast Missing Linkages in the Western Governors Wildlife Corridors Initiative (<http://www.westgov.org/wga/initiatives/corridors/index.htm>). The governors of the 19 Western States passed a unanimous resolution in 2007 that all future highways, canals, energy developments, and new land-use plans should be consistent with conservation of important wildlife corridors. Although this will be a broad-brush approach, it can profoundly impact the face of the conserved landscape of the Western United States.

Building Implementation Coalitions

The importance of investing in building and maintaining relationships cannot be over-emphasized. Development of technical plans to overcome barriers to animal movement must be matched by efforts to build and maintain linkages among all the players. Partners across the region have already heeded the call to action! The following describes a few of the implementation activities underway to translate our plans into land-saving actions:

In the Santa Ana-Palomar Mountains Linkage, we have been working with the South Coast Conservation Forum, a consortium of county, state, and federal agencies, universities, and non profits formed to advise the Department of Defense on reducing urban encroachment and conflicts with military training maneuvers on Camp Pendleton. South Coast Missing Linkages information provided to the Forum ensured that this linkage was recognized as important to mitigating long-term impacts to sensitive species. The Linkage Design has been used to target Defense Authorization Act funds that will protect thousands of acres within the linkage. In addition, this linkage overlaps planning boundaries for two Multiple Species Conservation Plans, the Western Riverside Multiple Species Habitat Conservation Plan and the Northern San Diego Multiple Species Conservation Plan. Roughly 70% of the linkage in Riverside County and 92% in San Diego County are targeted for conservation by these NCCPs. A Conceptual Area Protection Plan (CAPP) has also been completed which will target state land acquisition funds.

To conserve the linkage between the San Gabriel Mountains and the Castaic Ranges of the Angeles National Forest, we are partnering with Upper Santa Clara Biodiversity Working Group, whose members include Forest Service, Bureau of Land Management, Fish and Wildlife Service, Department of Fish & Game, City of Santa Clarita, Santa Monica Mountains Conservancy (SMMC), Rivers and Mountains Conservancy, Wetlands Recovery Project, and The Nature Conservancy (TNC). The Linkage Design helped the agencies focus on the western part of the linkage; the most important area for promoting wildlife movement. The City of Santa Clarita is focusing its capital improvement project mitigation acquisitions in the Linkage Design even though this area is outside their city limits. The Forest Service is working with National Park Service to reroute the Pacific Crest Trail, now threatened by encroaching development, into our linkage design. A CAPP has also been completed, which will target state land acquisition funds. The Nature Conservancy, Rivers and Mountains Conservancy, & Santa Monica Mountains Conservancy are working with the Land Agent at Wildlife Conservation Board to acquire land in the linkage.

To maintain connectivity between the Santa Monica Mountains and Sierra Madre Ranges, we are working with the National Park Service, Caltrans, SMMC, TNC, Trust for Public Land, and Los Angeles and Ventura Counties. Caltrans used the Linkage Design to identify mitigation opportunities along State Route 118, and has initiated a working group for this transportation improvement project. It is our hope that this working group will evolve into an implementation coalition that covers the entire linkage area.

Exporting the South Coast Missing Linkages Model

The success with which South Coast Missing Linkages has been met propels us to work with our partners beyond the South Coast Ecoregion to identify and design landscape linkages across the state, the west, and the nation. To our great excitement, the state of Arizona has completely adopted the South Coast Missing Linkages methodology for designing landscape linkages, and Colorado has partially adopted it.

The Vision

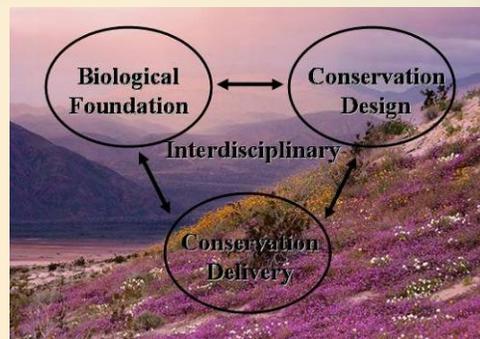
The ecological, educational, recreational, and spiritual values of protected wildlands in the South Coast Ecoregion are immense. These conserved lands also represent an investment of tens of billions of dollars. We need to ensure the ecological health of this investment by securing these linkages. These Linkage Designs represent opportunities to protect truly functional landscape-level connections among these wildlands. If implemented, our plan would not only permit movement of individuals and genes, but should also conserve large-scale ecosystem processes that are essential to the integrity of existing conservation investments throughout the region.

Appendix A Conservation Planning Approach

The goal of linkage conservation planning is to identify specific lands that must be conserved to maintain or restore functional connections for all species or ecological processes of interest, generally between two or more protected core habitat areas. Our approach can be generally summarized as follows:

- 1) *Focal Species Selection*: select focal species from diverse taxonomic groups to represent a diversity of habitat requirements and movement needs.
- 2) *Landscape Permeability Analysis*: conduct landscape permeability analyses to identify a zone of habitat that addresses the needs of multiple species potentially traveling through, or residing in the linkage.
- 3) *Patch Size & Configuration Analysis*: use patch size and configuration analyses to identify the priority areas needed to maintain linkage function.
- 4) *Field Investigations*: conduct fieldwork to ground-truth results of analyses, identify barriers, and document conservation management needs.
- 5) *Linkage Design*: compile results of analyses and fieldwork into a detailed comprehensive report with recommended conservation and restoration opportunities.

Our approach has been highly collaborative and interdisciplinary (Beier et al. 2006). We followed Baxter (2001) in recognizing that successful conservation planning is based on the participation of experts in biology, conservation design, and implementation in a reiterative process. To engage regional biologists and planners early in the process, we held a series of habitat connectivity workshops in 2002. The workshops engaged over 270 participants representing over 126 different agencies, academic institutions, conservation organizations, and community groups. Our partners come from wide and varied backgrounds and include scientific and academic institutions, federal land management agencies, state agencies, local electeds, and conservation non-government organizations.

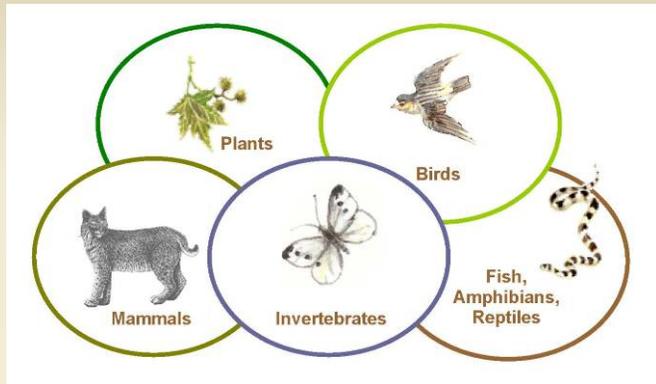


Successful conservation planning requires an interdisciplinary and reiterative approach among biologists, planners, and activists (Baxter 2001).

Focal Species Selection

Although our ultimate goal is to conserve ecosystem function, we designed linkages to serve the needs of particular species. We selected species that covered a wide array of habitat and movement needs in the region, so that planning adequate linkages for these species is expected to cover connectivity needs for the *ecosystems* they represent. We identified species from several taxonomic groups (plants, birds, mammals, invertebrates, fish, amphibians, and reptiles) with 109 focal species selected from across the priority linkages. Our suite of focal species included a few “orthogonal” species, i.e., species that occur within the linkage but not necessarily in the core areas. Planning for such species can help ensure that linkages maintain ecological integrity and are not sterile gauntlets through which other species must pass. Thus, although most of our focal species were “species that need the linkage” (to pass between core areas), the orthogonal taxa represented “species that the linkage needs” (to ensure its integrity).

A taxonomically diverse group of focal species was selected to represent species that are sensitive to habitat loss and fragmentation and to represent the diversity of ecological interactions that can be sustained by successful linkage design. The focal species approach (Beier and Loe 1992) recognizes that species move through and utilize habitat in a wide variety of ways. Focal species were selected because their life history characteristics render them either particularly sensitive to habitat fragmentation or otherwise meaningful to linkage design.

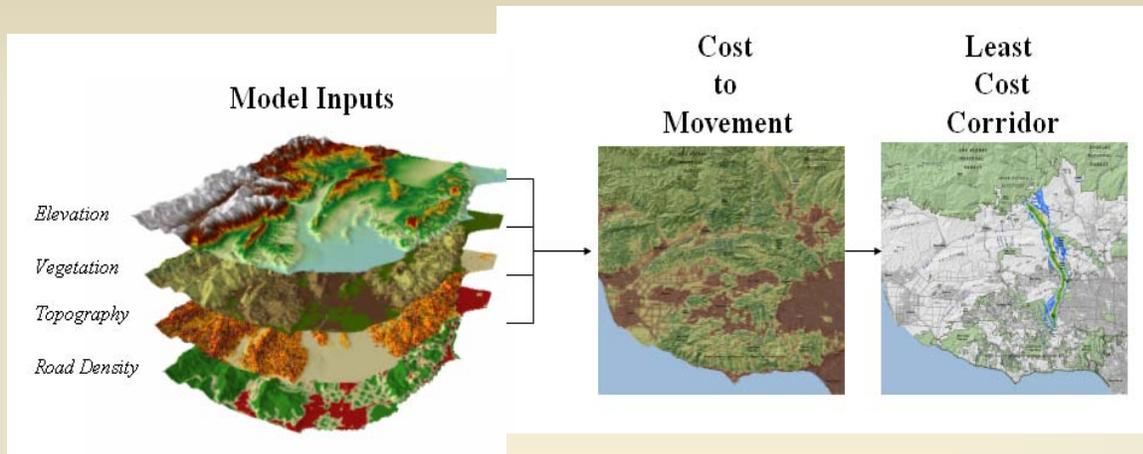


Landscape Permeability Analysis

Landscape permeability analysis is a GIS technique that models the relative cost for a species to move between core areas based on how each species is affected by habitat characteristics, such as slope, elevation, vegetation composition, and road density. This analysis identifies a least-cost corridor, or the best potential route for each species between protected core areas (Walker and Craighead 1997, Craighead et al. 2001, Singleton et al. 2002). The purpose of the analysis was to identify land areas, which would best accommodate all focal species living in or moving through the linkage (Beier et al. 2006). Species used in landscape permeability analysis must be carefully chosen, and were included in this analysis only if:

- We know enough about the movement of the species to reasonably estimate the cost-weighted distance using the data layers available to our analysis.
- The data layers in the analysis reflect the species' ability to move.
- The species occurs in both cores (or historically did so and could be restored) and can potentially move between cores, at least over multiple generations.
- The time scale of gene flow between core areas is shorter than, or not much longer than, the time scale at which currently mapped vegetation is likely to change due to disturbance events and environmental variation (e.g. climatic changes).

The relative cost of travel was assigned for each species based upon its ease of movement through a suite of landscape characteristics (vegetation type, road density, and topographic features). The following spatial data layers were assembled at 30-m resolution: vegetation, roads, elevation, and topographic features. We derived four topographic classes from elevation and slope models: canyon bottoms, ridgelines, flats, or slopes. Road density was measured as kilometers of paved road per square kilometer. Within each data layer, we ranked all categories between 1 (preferred) and 10 (avoided) based on focal species preferences as determined from available literature and expert opinion regarding how movement is facilitated or hindered by natural and urban landscape characteristics. Each input category was ranked and weighted, such that: $(\text{Vegetation} * w\%) + (\text{Road Density} * x\%) + (\text{Topography} * y\%) + (\text{Elevation} * z\%) = \text{Cost to Movement}$, where $w + x + y + z = 100\%$.



Permeability Model Inputs: elevation, vegetation, topography, and road density. Landscape permeability analysis models the relative cost for a species to move between core areas based on how each species is affected by various habitat characteristics.

Weighting allowed the model to capture variation in the influence of each input (vegetation, road density, topography, elevation) on focal species movements. A unique cost surface was thus developed for each species. A corridor function was then performed in GIS to generate a data layer showing the relative degree of permeability between core areas.

For each focal species, the most permeable area of the study window was designated as the least-cost corridor. The least-cost corridor output for all focal species was then combined to generate a Least Cost Union. The biological significance of this Union can best be described as the zone within which all modeled species would encounter the least energy expenditure (i.e., preferred travel route) and the most favorable habitat as they move between targeted protected areas. The output does not identify barriers (which were later identified through fieldwork), mortality risks, dispersal limitations or other biologically significant processes that could prevent a species from successfully reaching a core area. Rather, it identifies the best zone available for focal species movement based on the data layers used in the analyses.

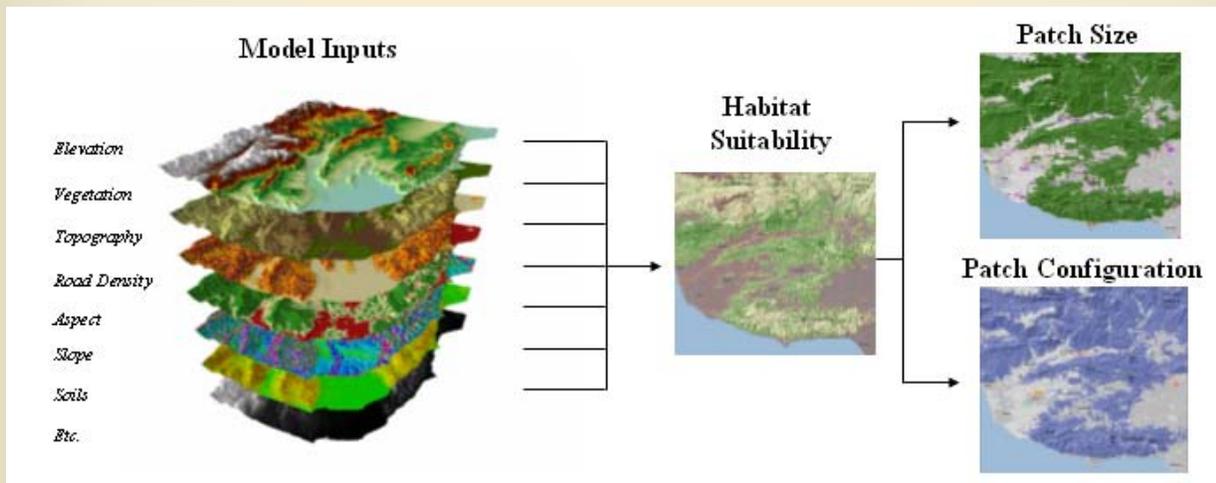
Patch Size & Configuration Analysis

Although the Least-Cost Union identifies the best zone available for movement based on the data layers used in the analyses, it does not address whether suitable habitat in the Union occurs in large enough patches to support viable populations and whether these patches are close enough together to allow for inter-patch dispersal. We therefore conducted patch size and configuration analyses for all focal species (Table 1) and adjusted the boundaries of the Least Cost Union where necessary to enhance the likelihood of movement. Patch size and configuration analyses are particularly important for species that require multiple generations to traverse the linkage. Many species exhibit metapopulation dynamics, whereby the long-term persistence of a local population requires connection to other populations (Hanski and Gilpin 1991). For relatively sedentary species like desert woodrat and terrestrial insects, gene flow will occur over decades through a metapopulation. Thus, the linkage must be able to accommodate metapopulation dynamics to support ecological and evolutionary processes in the long term.

A habitat suitability model formed the basis of the patch size and configuration analyses. Habitat suitability models were developed for each focal species using the literature and expert opinion. Spatial data layers used in the analysis varied by species and included: vegetation, elevation, topographic features, slope, aspect, hydrography, and soils. Using scoring and weighting

schemes similar to those described in the previous section, we generated a spectrum of suitability scores that were divided into five classes using natural breaks: low, low to medium, medium, medium to high, or high. Suitable habitat was identified as all land that scored medium, medium to high, or high.

To identify areas of suitable habitat that were large enough to provide a significant resource for individuals in the linkage, we conducted a patch size analysis. The size of all suitable habitat patches in the planning area were identified and marked as potential cores, patches, or less than a patch. *Potential core areas* were defined as the amount of contiguous suitable habitat necessary to sustain at least 50 individuals. A *patch* was defined as the area of contiguous suitable habitat needed to support at least one male and one female, but less than the potential core area. Potential cores are probably capable of supporting the species for several generations (although with erosion of genetic material if isolated). Patches can support at least one breeding pair of animals (perhaps more if home ranges overlap greatly) and are probably useful to the species if the patch can be linked via dispersal to other patches and core areas.



Model Inputs to Patch Size and Configuration Analyses vary by species. Patch size delineates cores, patches, and stepping-stones of potential habitat. Patch configuration evaluates whether suitable habitat patches and cores are within each species dispersal distance.

To determine whether the distribution of suitable habitat in the linkage supports meta-population processes and allows species to disperse among patches and core areas, we conducted a configuration analysis to identify which patches and core areas were functionally isolated by distances too great for the focal species to traverse. Because the majority of methods used to document dispersal distance underestimate the true value (LaHaye et al. 2001), we assumed each species could disperse twice as far as the longest documented dispersal distance. This assumption is conservative in the sense that it retains habitat patches as potentially important to dispersal for a species even if it may appear to be isolated based on known dispersal distances. Groupings of core areas and patches that were greater than the adopted dispersal distance from other suitable habitat were identified using a unique color.

For each species we compared the configuration and extent of potential cores and patches, relative to the species dispersal ability, to evaluate whether the Least Cost Union was likely to serve the species. If necessary, we added additional habitat to help ensure that the linkage provides sufficient live-in or “move-through” habitat for the species’ needs.

Minimum Linkage Width

While the size and distance among habitats (addressed by patch size and configuration analyses) must be adequate to support species movement, the shape of those habitats also plays a key role. In particular, constriction points—areas where habitats have been narrowed by surrounding development—can prevent organisms from moving through the Least Cost Union. To ensure that functional processes are protected, we imposed a minimum width of 2 km (1.2 mi) for all portions of the final Linkage Design.

For a variety of species, including those we did not formally model, a wide linkage helps ensure availability of appropriate habitat, host plants (e.g., for butterflies), pollinators, and areas with low predation risk. In addition, fires and floods are part of the natural disturbance regime and a wide linkage allows for a semblance of these natural disturbances to operate with minimal constraints from adjacent urban areas. A wide linkage should also enhance the ability of the biota to respond to climate change, and buffer against edge effects.

Field Investigations

We conducted field surveys to ground-truth habitat conditions, document existing barriers and potential passageways, and determine restoration opportunities. Because paved roads present the most formidable barriers, surveyors drove or walked each accessible section of road that transected a linkage. We identified areas where structures could be improved or installed, and opportunities to restore vegetation to improve road crossings and minimize roadkills.

Restoration and Conservation Opportunities and Recommendations

Each Linkage Design provides implementation opportunities for agencies, organizations, and individuals interested in participating in conservation activities in the linkage. Biological and land use summaries include descriptions and maps of vegetation, land cover, land use, roads, road crossings, railroads, and restoration opportunities. Each design also identifies existing planning efforts addressing the conservation and use of natural resources in the planning area. Finally, each provides a flyover animation using aerial imagery, satellite imagery, and digital elevations models, which provide a visualization of the linkage from a landscape perspective.

**Appendix B
South Coast Wildland Network, Existing Conservation Investments**

Linkage	Conservation Investments the Linkage Serves	Regional Significance	Major Conservation Investors
Tehachapi Connection	Links 4,100,994 acres of existing conservation investments. In the Sierra Nevada this includes Sequoia National Forest, 7 other Forests (Sierra, Inyo, Stanislaus, Eldorado, Tahoe, Plumas, Lassen), 3 National Parks (Sequoia-Kings Canyon, Yosemite, and Lassen), and Red Rock Canyon State Park. In the Sierra Madre, this includes Los Padres National Forest, Carrizo Plain National Monument, Bitter Creek National Wildlife Refuge, Hungry Valley State Vehicular Recreation Area, Wind Wolves Preserve, and others.	The only upland connection between the 2000 mile long Sierra-Cascade mountain system and the 800 mile long complex of the Coastal, Transverse, and Peninsular ranges of the S Coast region.	US Forest Service, Bureau of Land Management, US Fish & Wildlife Service, National Park Service, California State Parks, California Department of Fish and Game, The Wildlands Conservancy, The Nature Conservancy, among others.
Santa Monica-Sierra Madre Connection	Links 1,914,175 acres of existing conservation investments. In the Sierra Madre, this includes Los Padres National Forest, Carrizo Plain National Monument, Bitter Creek National Wildlife Refuge, Hungry Valley State Vehicular Recreation Area, and Wind Wolves Preserve. In the Santa Monica Mountains, this includes Santa Monica Mountains National Recreation Area, Point Mugu State Park, Malibu Creek State Park, Topanga State Park, and others.	The Sierra Madre – Sierra Madre Connection is one of the last remaining coastal to inland connections in the South Coast Ecoegion.	US Forest Service, National Park Service, California State Parks, Santa Monica Mtns Conservancy, Mountain Resources Conservation Authority, Conejo Open Space and Conservation Authority, Rancho Simi Dept of Parks and Rec, LA County Dept of Parks and Rec, The Nature Conservancy, among others.
Sierra Madre – Castaic Connection	Links 1,665,624 acres of existing conservation investments. In the Sierra Madre, this includes Los Padres National Forest, Carrizo Plain National Monument, Bitter Creek National Wildlife Refuge, Hungry Valley State Vehicular Recreation Area, and Wind Wolves Preserve. In the Castaic Ranges, this includes Angeles National Forest, Castaic Lake State Recreation Area, and others.	This linkage covers diverse ecological settings and encompasses several major vegetation types, including desert, forest, and coastal vegetation communities.	US Forest Service, US Fish & Wildlife Service, California State Parks, The Wildlands Conservancy, Ventura County Dept. of Parks & Recreation, and The Nature Conservancy, among others
San Gabriel-Castaic Connection	Links 661,023 acres of existing conservation investments. In the San Gabriel Mountains and Castaic Ranges, this includes Angeles National Forest, and Castaic Lake State Recreation Area, and others.	This linkage encompasses a unique transition zone between coastal and desert communities. The Santa Clara River, one of the last free-flowing rivers in southern California, is an integral part of the linkage.	US Forest Service, Bureau of Land Management, Santa Monica Mountains Conservancy, The Nature Conservancy, Rivers and Mountains Conservancy, Los Angeles County, City of Santa Clarita, among others.

San Gabriel – San Bernardino Connection	Links 948,451 acres of existing conservation investments. In the San Gabriel Mountains, this includes the Angeles National Forest. In the San Bernardino Mountains, this includes San Bernardino National Forest, Silverwood Lake State Recreation Area, Mission Creek Preserve, Pipes Canyon Preserve, Oak Glen Preserve and others.	The San Andreas Rift Zone runs through the linkage, producing steep rugged topography and a variety of microhabitats that support a rich diversity of natural communities.	US Forest Service, California State Parks, Bureau of Land Management, California Department of Fish and Game, The Wildlands Conservancy, among others.
San Bernardino – Granite Connection	Links 3,272,463 acres of existing conservation investments. In the San Bernardino Mountains, this includes San Bernardino National Forest, Silverwood Lake State Recreation Area, Mission Creek Preserve, Pipes Canyon Preserve, Oak Glen Preserve and others. In the Granite, Ord, and Rodman Mountains this includes land administered by the Bureau of Land Management, and others.	Ecoregional connection linking the South Coast Ecoregion to the Mojave Ecoregion.	US Forest Service, Bureau of Land Management, California State Parks, California Department of Fish and Game, The Wildlands Conservancy, among others.
San Bernardino – Little San Bernardino	Links 3,236,289 acres of existing conservation investments. In the San Bernardino Mountains, this includes San Bernardino National Forest, Silverwood Lake State Recreation Area, Mission Creek Preserve, Pipes Canyon Preserve, Oak Glen Preserve and others. In the Little San Bernardino Mountains, this includes Joshua Tree National Park, and Big Morongo Canyon Preserve, and others.	Connects the South Coast Ecoregion to the Mojave and Sonoran Desert ecoregions, encompasses a unique variety of both coastal and desert habitats.	San Bernardino National Forest, Bureau of Land Management, The Wildlands Conservancy, Coachella Valley and Mountains Conservancy, among others.
San Bernardino – San Jacinto	Links 656,423 acres of existing conservation investments. In the San Bernardino Mountains, this includes San Bernardino National Forest, Silverwood Lake State Recreation Area, Mission Creek Preserve, Pipes Canyon Preserve, Oak Glen Preserve and others. In the San Jacinto Mountains, this includes San Bernardino National Forest, Mount San Jacinto State Park, and others.	San Bernardino Mountains are part of the Transverse Ranges and feature the highest peak in southern California, Mount San Gorgonio, while the San Jacinto Mountains are the highest and northernmost of the Peninsular Ranges.	US Forest Service, Bureau of Land Management, California State Parks, The Wildlands Conservancy, Coachella Valley Mountains Conservancy, Friends of the Desert Mountains, among others.
Palomar – San Jacinto – Santa Rosa Connection	Links 826,678.4 acres of existing conservation investments. In the San Jacinto Mountains, this includes San Bernardino National Forest, Mount San Jacinto State Park, and others. In the Palomar Mountains, this includes Cleveland National Forest and Palomar Mountain State Park, and others. In the Santa Rosa Mountains, this includes Anza Borrego Desert State Park, Santa Rosa and San Jacinto Mountains National Monument, and others.	Elements of both coastal and desert habitats occur side by side in many areas of this linkage, serving wildlife such as mountain lion, mule deer, Aguanga kangaroo rat, western toad, and the endangered quino checkerspot butterfly.	US Forest Service, Bureau of Land Management, California State Parks, County of San Diego, The Nature Conservancy, among others.

Santa Ana – Palomar Connection	Links 199,904 acres of existing conservation investments. In the Santa Ana Mountains, this includes Cleveland National Forest, Santa Margarita Ecological Reserve, Santa Rosa Ecological Plateau, Camp Pendleton, and others. In the Palomar Mountains, this includes Cleveland National Forest and Palomar Mountain State Park, and others.	The Santa Margarita River, the longest intact stream corridor in southern California, winds through the linkage.	US Forest Service, Bureau of Land Management, California State Parks, County of San Diego, San Diego State University Field Stations Program, The Nature Conservancy, among others.
Peninsular – Borrego Connection	Links 845,224 acres of existing conservation investments. In the Peninsular Ranges, this includes Cleveland National Forest, Cuyamaca Rancho State Park, and others. In the Santa Rosa Mountains, this includes Anza Borrego Desert State Park, Santa Rosa and San Jacinto Mountains National Monument, and others.	The linkage contains a number of rare and sensitive natural communities, including coastal sage scrub, grassland, meadow, palm oasis, coast live oak forest, and Engelmann oak woodland	US Forest Service, Bureau of Land Management, California State Parks, Anza Borrego Foundation and Institute, The Nature Conservancy, among others.
Otay Mountain–Cerro San Ysidro linkage	In the United States this includes, Otay Mountain Wilderness Area, administered by the BLM, Laguna Mountains of Cleveland National Forest, and others. In Baja California this includes Cerro San Ysidro.	Otay Mountain in southern California and Cerra San Ysidro in Baja represent sky islands of endemic plant species, and the last cross-border coastal sage scrub linkage.	US Forest Service, Bureau of Land Management, California State Parks, The Nature Conservancy, Conabio, Pronatura, and Universidad Autonoma de Baja California, among others.
La Posta linkage	This linkages serves to connect the Campo Valley in the United States with the El Hongo Valley in Baja California.	Occurs in an ecological transition zone between the coast and the desert and between mountain and inland valley biomes.	US Forest Service, Bureau of Land Management, California State Parks, The Nature Conservancy, Conabio, Pronatura, and Universidad Autonoma de Baja California, among others.
Parque-to-Park linkage	In the United States, this includes Anza Borrego Desert State Park, Santa Rosa and San Jacinto Mountains National Monument, and others. In the Sierra Juarez Mountains in Baja California, this includes Parque Constitucion de 1857.	Completing this connection will allow the endangered Peninsular bighorn sheep to repopulate the Sierra Juarez in northern Baja.	US Forest Service, Bureau of Land Management, California State Parks, The Nature Conservancy, Conabio, Pronatura, and Universidad Autonoma de Baja California, among others.

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DEIR Appendix H7- Existing SEA Descriptions

Malibu Coastline (SEA 1)

Criteria 2, 3, 4, 5, 6, 7

Santa Monica Mountains Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Triunfo Pass, Point Dume, Malibu Beach, and Topanga. This area is a relatively undisturbed coastal region where upwelling of nutrient-rich waters and a variety of habitats support highly productive and extremely diverse marine communities. The area possesses some of the best kelp bed habitat south of Santa Barbara, and supports the only remaining natural kelp beds off the mainland coast of Los Angeles County. This kind of area may be one hundred times more productive than adjacent sand bottom communities, and provides refuge, food, and nursery grounds for thousands of species.

Rocky outcrops alternate with sandy stretches along this coastline, and outcrops are found to a depth of 600 feet. The stability of the substrate and the variety of exposures provide microhabitats for a great number of organisms. Characteristically, rocky shorelines from the lower intertidal zone to about 100 foot depth can be the most biologically active areas in the world. Point Dume is the only place rocky intertidal habitat occurs between Palos Verdes Peninsula and well into Ventura County.

This coastline also possesses the only complete, undisturbed sandy beaches remaining in Los Angeles County. Although very dynamic in physical stability and therefore unfavorable for the development of a diverse biological community, these areas do offer habitat for a number of organisms. An important micro-community of decomposers is present. Sandy beaches provide feeding areas for many bird species. In addition, the soft substrate offers a repository for eggs and nursery grounds for many species.

Point Dume (SEA 2)

Criteria 3, 4, 5, 7

Santa Monica Mountains Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Point Dume. Point Dume is one of two remaining areas in Los Angeles County where a diverse and healthy mixture of terrestrial and marine habitats can be found in close association. Marine habitats consist of an unprotected rocky shore with out-lying reefs, rocks, kelp beds, sandy beach pockets, and numerous small caves. Due to strong upwellings along the coast bringing in nutrient-rich waters, they possess highly diverse and productive marine communities. This relative healthiness is also due to limited public access, which has protected the fragile marine ecosystems.

Biological Resources

Coastal strand vegetation is found on sandy beaches below bluffs rising 100 to 200 feet above the coast. *Coreopsis gigantea* and *Dudleya caespitosa* are found in these communities at the southern limit of their range. Several small drainages cut through the bluffs and extending up to a mile inland. The slopes are covered by Venturan coastal sage scrub. The value of these communities is increased by the unique geographic position of Point Dume. This headland extends into Santa Monica Bay more than a mile beyond the rest of the Malibu coast, and it is located within the Pacific Flyway. As result, the area is an important resting and jumping-off point for migratory birds. Without the remaining terrestrial habitats, this refuge would be lost.

Zuma Canyon (SEA 3)

Criteria 3, 4, 7

Santa Monica Mountains Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Point Dume. Zuma Canyon is one of the last major drainages in the Santa Monica Mountains having a year-round stream, and remaining in an undeveloped, non-road condition. The upper ridges are dry and support coastal sage scrub. This blends into chaparral on the lower, steeper, shaded slopes. The canyon bottom has a rich riparian community that is more extensive and in better condition than neighboring canyons. This is due in part to the difficulty of public access, but primarily to the presence of a perennial stream. The stream supports abundant wildlife populations, including amphibians and birds that are dependent on surface moisture, a very limited resource in all of southern California. Deer and other large mammals utilize this as a water source, and mountain lions have been sighted in the canyon. The officially endangered plant *Pentachaeta lyonii* occurs in the area.

Upper La Sierra Canyon (SEA 4)

Criteria 1, 2, 3, 5, 7

Santa Monica Mountains Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Point Dume. Upper La Sierra Canyon contains an unusually rich and diverse stand of canyon flora including the Santa Monica Mountain Live-forever (*Dudleya cymosa* ssp. *marcescens*), an officially endangered plant species. The Creek Dogwood (*Cornus glabrata*), found at only one other site within the County, is abundant. The Giant Chain Fern (*Woodwardia fimbriata*), which normally reaches heights of 5½ to 6½ feet, grows eight to nine feet tall at this locality. This species is found at only four other localities in the Santa Monica Mountains, but nowhere else is it as easily accessible as in this canyon. The Humboldt Lily (*Lilium humboldtii*) also reaches heights of nine feet at this location. Accompanying this unusual stand of canyon vegetation is a healthy woodland community. Big-leaf Maple (*Acer macrophyllum*) reaches heights of 60 feet, and is surrounded by dense stands of Coast Live Oak (*Quercus agrifolia*) and California-laurel (*Umbellularia californica*). This dense aggregation of uncommon species makes the area genuinely unique.

Malibu Canyon and Lagoon (SEA 5)

Criteria 2, 3, 4, 5, 6, 7

Santa Monica Mountains Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Malibu Beach. This area contains the only lagoon in Los Angeles County, and it is the only one between Point Mugu in Ventura County and Anaheim Bay in Orange County. The presence of a perennial stream, and its sharp relief between the interior valleys and the coast are unique to the Santa Monicas and allow for the most unique and diverse biota in the region.

The lagoon is brackish and supports two major plant communities, coastal salt marsh and coastal strand. The lagoon area is an important bird refuge where seasonal migrants can rest and feed. Over 200 species of birds have been observed here. The salt marsh vegetation is dominated by two species of pickleweed, *Salicornia virginica* and *S. subterminalis* which serve as valuable non-breeding habitat for Belding's savannah sparrow (*Passerculus sandwichensis beldingi*). This species is classified as endangered by the California Department of Fish and Game.

The perennial stream and its sharp relief between the interior valleys and the coast are unique to the Santa Monicas, and allow for the most unique and diverse biota in the region. The perennial stream in Malibu Canyon supports outstanding oak and riparian woodlands with an unusual variety of tree species. Black cottonwood (*Populus trichocarpa*) and Leatherleaf ash (*Fraxinus velutina* var. *coriacea*) are found here. Neither species is common in this region. There is also an abundance of woodland shrubs, native wildflowers, and other herbaceous growth.

Malibu Canyon bisects the Santa Monica Mountain range. As a result, species normally restricted to the drier interior valleys extend their range down the canyon and grow in association with coastal forms. This has created a very unique flora in the canyon. Despite declining wildlife populations over much of the Santa Monica Mountain region, Malibu Canyon continues to support many unique and uncommon wildlife species including mountain lions and golden eagles. The rich riparian vegetation offers an excellent resting and feeding area for birds migrating along the coast. In addition, Malibu Creek is the one of the few watercourses in southern California where steelhead continue to run and spawn.

Las Virgenes (SEA 6)

Criteria 5, 7

Santa Monica Mountains Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Thousand Oaks and Calabasas. This area contains a number of plants common in the interior areas of southern California, but found nowhere else in the Santa Monica Mountains region. The most conspicuous of these is *Juniperus californica*, the California Juniper. Also common on the hillside is *Haplopappus linearifolius*, a characteristic shrub of interior hillside and desert ranges. *Calochortus venustus*, a species of the interior coast ranges of central California, is at its southern distribution limit in the Santa Monica Mountains and is

Biological Resources

found only at two other localities in the range. In addition, this is the only locality in the Santa Monica Mountains where *Dudleya cymosa* grows in full sun. All other populations of the species grow on steep, north-facing rocky cliffs. The surrounding vegetation of the area consists of coastal sage scrub and chaparral.

Hepatic Gulch (SEA 7)

Criteria 3, 5, 7

Santa Monica Mountains Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Malibu Beach. This area possesses a vegetative association with many uncommon species and unique ecological relationships. Constant micro-slumping of the developing soil creates a variety of micro-habitats in close proximity to one another. As a result, moisture dependent ferns and mosses grow next to xerophytic *Yucca* and *Dudleya* species. In addition, there is an amazing variety of uncommon and fragile liverworts and hornworts.

Malibu Creek State Park Buffer Area (SEA 8)

Criteria 8

Santa Monica Mountains Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Malibu Beach and Point Dume. These buffer areas contain watershed critical to the preservation of important biological resources within Malibu Creek State Park. The park possesses several areas, including Fern Canyon, Mendenhall Canyon, and Lost Canyon, with a rare and fragile flora. These buffers are portions of watersheds which lie outside the park. Their preservation is necessary to maintain the fragile canyon environments.

Cold Creek (SEA 9)

Criteria 3, 5, 7

Santa Monica Mountains Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Malibu Beach. This is a relatively undisturbed natural sandstone basin. The floor of the valley is steep, with springs and a perennial stream, Cold Creek. The year-round surface water, which is uncommon in southern California, supports an unusually diverse flora. The extreme range in physical conditions, from wet streambed to dry rocky ridges, makes the area a show-place for native vegetation. Pristine stands of chaparral, southern oak woodland, coastal sage scrub, and riparian woodland are all found in the area. Several plant species which are uncommon in the general region are found here. Those include stream orchid (*Epipactis gigantea*), red mimulus (*Mimulus cardinalis*), Humboldt lily (*Lilium humboldtii* var. *ocellatum*), big-leaf maple (*Acer macrophyllum*), and red shank (*Adenostoma sparsifolium*). In addition, the presence of several tree-sized flowering ash (*Fraxinus dipetala*), reaching 40 feet in height, is a unique botanical oddity. This shrub species has a normal maximum height of 15 to 20 feet.

Biological Resources

Due to its many outstanding botanical features, the area serves an integral role as part of the instructional program for many academic institutions as well as a site for nature study and scientific research.

Tuna Canyon (SEA 10)

Criteria 3, 4, 7

Santa Monica Mountains Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Topanga. Tuna and Pena Canyons are the last drainages in the central and eastern Santa Monica Mountains that have not sustained development either in the watershed, or between the canyon mouth and the coast. A year-round stream is present in Tuna Canyon. This resource in itself is limited in distribution in the Santa Monica Mountains, and most of southern California. Due to this feature and its coastal exposure, the riparian woodland in the canyon bottom is in excellent health, and supports healthy wildlife populations. Animals utilize the stream as a water source, and forage in the chaparral and coastal sage scrub on adjacent hillsides.

The combined qualities of healthy vegetation, riparian woodland, surface moisture, no development, and an unobstructed opening to the coast are unique in the western Santa Monica Mountains and have caused the canyons to become an important area to migratory bird species. In addition to migratory songbirds, waterfowl have been seen in the canyon during migration.

Temescal-Rustic-Sullivan Canyons (SEA 11)

Criteria 7

San Fernando Valley Planning Area, Westside Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Topanga and Canoga Park. These canyons are representative samples of the dry chaparral and coastal sage scrub plant communities found in the interior canyons of the Santa Monica Mountains. The riparian communities in the canyon bottoms are more open, and do not support a dense understory growth. Wildlife in these canyons is typical of that found in the communities throughout the coastal ranges of southern California. Deer, coyote, mountain lion, hawks, eagles, and owls are the larger species that comprise this type of fauna.

These canyons were chosen for Priority Group 7 because they are contiguous, self-contained watersheds that are large enough in size to support representative samples of native flora and fauna. They are relatively undisturbed, and are the last major pieces of habitat in the Santa Monica Mountains before reaching the dense urban development to the east. This area would serve as a corridor for any gene flow and species movement that may take place between the Santa Monica and San Gabriel Mountains via the Hollywood Hills, Griffith Park and the Verdugo Mountains.

Palo Comado Canyon (SEA 12)

Criteria 3, 7

Santa Monica Mountains Planning Area

Biological Resources

This SEA is located within the following USGS 7.5' topographic quadrangle: Calabasas. This area is one of the last examples of any significant size of southern oak woodland/savannah in Los Angeles County. There are other localities in the area that support southern oak woodland on steep hillsides. However, the savannah type community found in the Palo Comado Canyon area is on gently rolling hills having an open grassy understory. This habitat was once widely distributed, but it has been impacted by extensive utilization for agriculture and urban development. The few remaining areas have also been heavily impacted by cattle grazing. Most native grasses and forbs of the understory have been replaced by Eurasian species. In many cases, cattle have consumed oak seedlings and have prevented recruitment of new trees to replace older individuals as they die. Nevertheless, the trees support an abundant population of raptorial birds and woodpeckers. Large mammals and quail often utilize the watering troughs and saltlicks provided for cattle. The western gray squirrel is also found in these trees. The understory vegetation is utilized by grassland bird species, especially by migratory and wintering populations.

Chatsworth Reservoir (SEA 13)

Criteria 2, 3, 7

San Fernando Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Calabasas and Canoga Park. The concentration of a variety of habitats, and the presence of a large body of freshwater closed to the public, offer important wintering and breeding ground for many songbirds and waterfowl. These features are rapidly disappearing in Los Angeles County and are critical to the remaining diversity of wildlife resources.

The habitat types found include freshwater marsh. This habitat is very scarce in Los Angeles County and is the habitat of many uncommon bird species. This undisturbed body of freshwater adjacent to grasslands and oak savannah offers prime wintering habitat to geese, an uncommon wildlife resource over much of southern California.

The presence of several protected avian communities makes the area valuable for bird study by students, researchers, and naturalists.

Simi Hills (SEA 14)

Criteria 7

San Fernando Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Calabasas. This area contains relatively undisturbed representative examples of most of the biotic communities found in the Simi Hills.

Habitats include chaparral, coastal sage scrub, southern oak woodland and riparian woodland. While all of these are relatively common in Los Angeles County, this is one of two areas that include these cismontane associations at the western edge of the County.

Biological Resources

The area also serves as a buffer and wildlife corridor for movement between the Chatsworth reservoir and the undeveloped portions of the Simi Hills in Ventura County. Genetic exchange and replenishment of native populations in the Chatsworth Reservoir area are important considerations here.

Tonner Canyon/Chino Hills (SEA 15)

Criteria 7

East San Gabriel Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Yorba Linda and La Habra. Tonner Canyon is one of three areas in the hilly region of eastern Los Angeles County that still supports a relatively undisturbed stand of southern oak woodland, chaparral, coastal sage scrub, and riparian woodland complex that was once common there. The remainder of this vegetation type has been converted to agricultural and urban uses. This is true throughout the entire southern California region, making it one of the most rapidly disappearing habitat types. These three areas were chosen to serve as representative samples of these once widespread vegetative associations.

The vegetation in Tonner Canyon is in good condition, and supports heavily forested areas of California walnut (*Juglans californica*). This species is uncommon outside Los Angeles and Ventura Counties, and it has one of its major populations in this portion of Los Angeles County. Tonner Canyon is of sufficient size and is in close enough proximity to the other recommended areas in this region, that it should be able to continue to support relatively healthy animal populations if preserved. This probability is increased by the presence of a riparian woodland and an intermittent stream in the canyon bottom.

Buzzard Peak/San Jose Hills (SEA 16)

Criteria 7

East San Gabriel Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: San Dimas. Buzzard Peak is one of three areas in the hilly region of eastern Los Angeles County that still supports a relatively undisturbed stand of southern oak woodland, chaparral, coastal sage scrub, and riparian woodland complex that were once common in the region. The remainders of these vegetation types have been converted to agricultural and urban uses. This is true throughout the entire southern California region, making them some of the most rapidly disappearing habitat types. These three areas were chosen to serve as representative samples of these once widespread vegetative associations.

The vegetation and wildlife on Buzzard Peak are in relatively, good condition. This is partly as a result of the buffer provided by California State Polytechnic University at Pomona, Mt. San Antonio Junior College, and Forest Lawn Memorial Park. It is also a result of the area being a peak, thus isolating it from disturbances that could arise from an upstream or up-slope source. The area adjacent to Cal Poly supports dense groves of California walnut (*Juglans californica*), which comprise the sensitive walnut woodland habitat. This species is uncommon outside Los Angeles and Ventura Counties, and has one of its major populations in this hilly region. Buzzard Peak is of sufficient size and in close enough proximity to the

Biological Resources

other recommended areas in this region, that is should be able to continue to support relatively healthy animal populations if preserved.

Powder Canyon/Puente Hills (SEA 17)

Criteria 7

East San Gabriel Valley Planning Area, Gateway Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: La Habra. Powder Canyon is one of three areas in the hilly region of eastern Los Angeles County that still supports a relatively undisturbed stand of the southern oak woodland, coastal sage scrub, and riparian woodland complex that was once common there. The remainder of this vegetation has been converted to agricultural and urban uses. This is true throughout the entire southern California region, making it one of the most rapidly disappearing habitat types. These three areas were chosen to save as representative samples of these once widespread vegetative associations.

Powder Canyon is the only recommended area that contains an undisturbed portion of self-contained watershed. As a result of this, the vegetation is in good condition. Preservation of this type of area will eliminate the potential of disturbance from upstream sources. If preserved, Powder Canyon is of sufficient size and in close enough proximity to the other recommended areas in the region that it should be able to continue to support relatively healthy animal populations. The diversity of wildlife is greatly enhanced by the presence of riparian woodland habitat in the canyon bottom.

Way Hill (SEA 18)

Criteria 1, 2, 3, 4, 5, 7

East San Gabriel Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: San Dimas. Way Hill supports a population of *Dudleya multicaulis*, the many-stemmed dudleya. This plant species is recognized as endangered by the U.S. Fish and Wildlife Service, and as such is protected by federal law. It is restricted to dry stony places below 2000 feet in the coastal sage scrub and chaparral communities of Los Angeles, San Bernardino, Riverside, Orange, and San Diego Counties.

San Francisquito Canyon (SEA 19)

Criteria 1, 2, 3, 4, 5, 6, 7

Santa Clarita Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Newhall, Warm Springs Mountain, Green Valley, Sleepy Valley; Lake Hughes and Del Sur. San Francisquito Canyon possesses two populations of the unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*). This species was formerly found in the Los Angeles, San Gabriel, and Santa Ana Rivers, but is now restricted to the Santa Clara River and San Francisquito Canyon. For this reason, the stickleback has been placed on both the state and federal endangered species lists. In San Francisquito Canyon, it is confined to

Biological Resources

permanent streams and pools below Drinkwater Reservoir, and above Baird Canyon. The lower population is dependent on legally mandated water release from Drinkwater Reservoir.

The watershed that supplies San Francisquito Canyon is relatively undisturbed. The hillsides support a dense cover of coastal sage scrub and chaparral. The San Francisquito streamcourse is mostly natural and it maintains a good riparian woodland community. The health of this drainage is evident by the fact that, in addition to supporting the unarmored threespine stickleback, the creek has been classified as an active trout fishing stream by the National Forest Service and the California Department of Fish and Game.

The primary concern for the survival of the unarmored threespine stickleback is the maintenance its habitat. The fish requires clean, free-flowing perennial streams and ponds surrounded by natural vegetation. Intermittent areas where surface water connects perennial streams are also important during the wet season. The natural vegetation along the intermittent portion of the stream slows heavy runoff during the rainy season, decreases destruction and siltation of habitat in downstream areas, and provides habitat for migration between populations.

The unarmored threespine stickleback populations in San Francisquito Canyon are the only ones for which the possibility exists to plan and control development in the majority of the watershed. This is certainly not true for populations in the Santa Clara River valley.

Santa Susana Mountains (SEA 20)

Criteria 2, 3, 5, 7

San Fernando Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: **Santa Susana, Val Verde and Oat Mountain**. The Santa Susana Mountains are one of several relatively small ridges that form the Transverse Ranges and blend eastward into the larger San Gabriel and San Bernardino Mountains. The Santa Monica Mountains are also part of this system and form a coastal barrier shielding the interior ridges from the direct influences of moist marine air, making these interior ridges drier than the coastal ones. The vegetation of the Santa Susana Mountains consists of coastal sage scrub on south-facing slopes, dense chaparral on north-facing slopes, and oak, walnut and riparian woodlands in valleys. The oak woodland communities are extremely diverse, supporting six species of oaks. These include coast live oak (*Quercus agrifolia*), valley oak (*Q. lobata*), canyon live oak (*Q. chrysolepis*), scrub oak (*Q. berberidifolia*), interior live oak (*Q. wislizenii*), and a single known location of Palmer's oak (*Q. palmeri*). The latter species is known in Los Angeles County only from this area. The walnut woodlands are frequently found in canyons of intermittent streams and consist primarily of California black walnut (*Juglans californica*), flowering ash (*Fraxinus dipetala*), Mexican elderberry (*Sambucus mexicana*), and coast live oak. Fires appear to promote the expansion of walnut woodlands. Unusual California walnut-flowering ash woodlands occur at mid-elevations within canyons of the north slopes. This community appears to be unique to the Santa Susana Mountains. The bigcone spruce (*Pseudotsuga macrocarpa*)-canyon live oak forest at higher elevations represents one of the northwesternmost examples of this community.

Biological Resources

The Santa Susana Mountains are the main representative of these low, dry interior mountain ranges in Los Angeles County. The core of this range is in good condition and has not been heavily disturbed by human use. These mountains are becoming isolated from surrounding natural areas as by continued urban expansion in the San Fernando, Simi, and Santa Clarita Valleys. The Santa Susana Mountains have become an important wildlife corridor for gene flow and species movement between the San Gabriel and Santa Monica Mountains via the Simi Hills.

Santa Susana Pass (SEA 21)

Criteria 1, 2, 3, 4, 5, 7

San Fernando Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: **Santa Susana and Oat Mountain**. *Hemizonia minthornii*, the Santa Susana tarweed, is known primarily from the Santa Susana Pass. For this reason, it has been placed on the Federal endangered species list. Six populations have been recorded on these rocky chaparral covered hillsides, four of which are in Los Angeles County.

In addition to supporting this endangered species, the Santa Susana Pass is an important wildlife migration route. As urbanization continues in the San Fernando and Simi Valleys, the Simi Hills and Santa Susana Mountains are becoming isolated from each other. The Pass, however, remains in a relatively natural condition and serves as a corridor for gene flow and species movement.

Santa Fe Dam Floodplain (SEA 22)

Criteria 3, 5, 7

East San Gabriel Valley Planning Area, West San Gabriel Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Azusa and Baldwin Park. The floodplain behind Santa Fe Dam supports one of the last examples of a vegetative type that was once commonly found on the numerous river outwashes of the Los Angeles Basin. The arroyo community found here is composed of scattered shrubs that have become adapted to the rugged shifting substrate. The community has suffered heavy losses through flood control projects and urbanization, making this area increasingly important as a specimen of a once common community. Due to its geographical situation, the value of this area is even greater than might otherwise be expected. It has an undeveloped, unobstructed corridor of natural vegetation connecting it to the San Gabriel Mountains. This allows wildlife to migrate between the areas. As a result, wildlife communities are in good condition, and represent a full complement of species characteristic of this community type. This includes golden eagle and white-tailed kite, both of which are fully protected by the California Department of Fish and Game. Many of these species are becoming increasingly difficult to find near the Los Angeles metropolitan area.

Santa Clara River (SEA 23)

Criteria 1, 2, 3, 4, 5, 7

Antelope Valley Planning Area, Santa Clarita Valley Planning Area

Biological Resources

This SEA is located within the following USGS 7.5' topographic quadrangles: Val Verde, Newhall, Acton, Agua Dulce, and Mint Canyon. Soledad Canyon and the Santa Clara River possess several populations of the unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*). This species was formerly found in the Los Angeles, San Gabriel, and Santa Ana Rivers, but is now restricted to the Santa Clara River and San Francisquito Canyon. For these reasons and due to threats to its habitat, the fish species has been placed on the state and federal endangered species lists. In the Santa Clara River, the unarmored threespine stickleback is limited to permanent streams and pools from the mouth of San Francisquito Canyon west to the Ventura-Los Angeles County line, and from near Lang Station east to Arrastre Canyon.

The reason the unarmored threespine stickleback has been able to survive in the Santa Clara River is that its remaining habitat has been relatively undisturbed. The Santa Clara River is unique in being the only major river draining the San Gabriel Mountains that has not been channelized. The vegetation consists of fresh water marsh, coastal sage scrub, oak woodland, and riparian woodland communities. The broad wash association is unlike that found in steeper mountain canyons, and is exceedingly scarce in the Los Angeles basin. The trees serve as habitat for many raptorial bird species. The red-shouldered hawk is restricted to woodland communities, and the species is becoming increasingly uncommon in southern California due to habitat destruction. The National Audubon Society and others have expressed concern for hawk's welfare.

The primary concern for the survival of the unarmored threespine stickleback is the loss of suitable habitat. The species requires clean, free-flowing, perennial streams and ponds surrounded by native vegetation. Intermittent areas connecting perennial streams are also important during the wet season when surface water is present. The natural vegetation and stream course slow heavy runoff during the rainy season, decrease destruction and siltation of habitat in downstream areas, and provide habitat for stickleback migration between populations.

Tujunga Valley/Hansen Dam (SEA 24)

Criteria 1, 3, 5, 7

San Fernando Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Van Nuys, San Fernando, and Sunland. The Tujunga Canyon/Hansen Dam area possesses several important features. The floodplain behind the dam supports one of the last examples of open coastal sage scrub vegetation that was once found in the numerous arroyos of the Los Angeles basin. Portions of the river bottom have surface moisture, and support small pockets of fresh water marsh, another limited resource in Los Angeles County. The remainder of the arroyo and surrounding hillsides are dry, and support several species of plants that are otherwise found only on the desert slopes of the San Gabriel Mountains. Populations of Nevin's barberry (*Berberis nevinii*) and slender-horned spineflower (*Dodecahema (Chorizanthe) leptoceras*) have been found in the wash. Both species are extremely limited in distribution and have been placed on the federal rare and endangered species list.

The area southwest of the dam is used as a spreading ground. This has created several fresh water marsh areas that are used by marsh birds, migratory waterfowl, and shore birds. The area is also valuable as a

Biological Resources

wildlife corridor. The vegetation in the Tujunga Valley runs nearly uninterrupted from the foot of the Verdugo Mountains well up into the San Gabriel Mountains.

San Dimas Canyon (SEA 25)

Criteria 3, 4, 5, 7

Antelope Valley Planning Area, East San Gabriel Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Glendora. The wash at the mouth of San Dimas Canyon supports a good example of a lowland riparian community. This type of vegetation was once found along the smaller streams draining the San Gabriel Mountains and crossing the Los Angeles basin. Most of the remaining riparian communities in Los Angeles County are of the type found in the canyons of the San Gabriel Mountains, and surrounding hilly regions. The San Dimas wash is one of the last remaining areas that support the more open flatland riparian woodland habitat.

Riparian communities are extremely valuable wildlife habitats. Many birds require the trees or shrubs as nesting and perching sites. Large mammals use it as a migration corridor, and rest area, often using the shade to escape the sun. The habitat is moist and supports a large number of amphibians and invertebrate species. These species add greatly to the diversity and productivity of an area, but would not be able to survive there without the riparian community.

San Antonio Canyon Mouth (SEA 26)

Criteria 3, 5, 7

East San Gabriel Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Mt. Baldy and Ontario. The vegetation found at the mouth of San Antonio Canyon is the best example of arroyo or wash vegetation remaining in Los Angeles County. This area lies downstream from San Antonio Dam and has not been disturbed by flood control measures, as have similar areas behind Hansen and Santa Fe Dams. The area is also different from the other two in that it is not confined to an arroyo or a wash, but is also found on the adjacent alluvial fan. This is the last area in Los Angeles County where this community has not been channelized and the surrounding fan developed.

The vegetation is a dry form of coastal sage scrub that has become adapted to a coarse substrate that often shifts during times of peak run off. Many of the plants found here are desert forms that otherwise do not occur in the Los Angeles Basin. The vegetation is much denser and more stable on this alluvial fan and is a distinct situation from that found in the arroyos behind Santa Fe and Hansen Dams.

Portuguese Bend Landslide (SEA 27)

Criteria 3, 4, 5, 7

South Bay Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Redondo Beach, San Pedro and Torrance. The Portuguese Bend Landslide is the largest area of natural vegetation remaining on the Palos

Biological Resources

Verdes Peninsula. The geographical location and geological history of the peninsula make remaining habitat extremely valuable for ecological and scientific reasons. The peninsula, which was an island in recent geological time, has close floral and faunal similarities to the Channel Islands. This feature makes the Portuguese Bend Landslide area a natural research laboratory for the study of island biogeography and evolutionary ecology.

The vegetation found in the area is coastal sage scrub. This plant community supports a surprising number and variety of species. There are at least three races of birds resident on the peninsula that are found nowhere else except the Channel Islands. These are the insular forms of the orange-crowned warbler, western flycatcher, and Allen's hummingbird. The same phenomena has been documented for plant species. A species of live-forever, *Dudleya virens*, which is endemic to the Channel Islands and the Palos Verdes Peninsula, is found near Point Vicente.

The area also serves as habitat to many migrating birds moving through the region in fall and spring. The Peninsula is a headland that juts into the Pacific several miles further than the surrounding coastline. Migrating terrestrial and shore birds flying over the open ocean on their north-south migration along the Pacific Flyway, spot this headland and stop to rest and feed. Many of these birds will stay and spend the winter in the area. Thus, the geographic position makes this habitat much more important than might otherwise be expected.

El Segundo Dunes (SEA 28)

Criteria 1, 2, 3, 4, 5, 7
Westside Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Venice. The El Segundo Dunes, located at the west end of the Los Angeles International Airport, are the last remnants of a coastal dune system that once stretched several miles further, north and south. The vegetation found here does not occur anywhere else in the County, and is uncommon throughout southern California. The vegetation is southern dune scrub which is adapted to sandy, well-drained soils. The vegetation shows zonation, changing gradually as one moves away from the immediate coast into coastal sage scrub. Many plants and invertebrates are restricted to this environment and are not found elsewhere. One of these endemic organisms is the El Segundo Blue (*Shijimiaeoides battoides allynii*), a butterfly species. The distribution of this butterfly is entirely restricted to the El Segundo Dunes. Because of its rarity and highly limited range, the butterfly is officially recognized as an endangered species by the U.S. Fish and Wildlife Service. This small piece of dune habitat is extremely valuable as the final example of a community which was once more common than at present along the Los Angeles County and southern California coastline.

Ballona Creek (SEA 29)

Criteria 1, 2, 3, 4, 5, 7
Westside Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Venice. Ballona Creek is one of two remaining remnants of salt marsh between Ventura County and the Los Angeles-Orange County line.

Biological Resources

This type of habitat is one of the most productive in the world, and is used as a breeding ground by many marine and terrestrial organisms. Belding's savannah sparrow, a state recognized endangered species, occurs in the pickleweed flats on the south side of the creek. The California least tern breeds in the sandy areas around Ballona Lagoon, and is recognized as an endangered species by the state and federal governments.

The salt marsh, Ballona Creek Channel, Ballona Lagoon, and Del Rey Lagoon form an important complex of habitats that are heavily used by migratory birds. The area is recognized by ornithologists and bird watchers throughout the area for its rich birdlife during the spring and fall migrations, and during the winter season. This type of heavy use is common in salt marsh habitat, but has been artificially increased here by the loss of habitat in Marina Del Rey, and throughout most of southern California. This forces these birds to concentrate in the few remaining areas. Loss of this habitat type has led to reductions in the numbers of these birds present along our coast.

The salt marsh and lagoon at Ballona Creek are heavily used by academic institutions and conservation groups for educational field trips. This area serves as a type specimen of salt marsh habitat, and is the only accessible example in Los Angeles County.

Alamitos Bay (SEA 30)

Criteria 1, 2, 3, 4, 5, 7
Gateway Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Los Alamitos. This area is one of two remaining examples of salt marsh found in Los Angeles County, and the last remnant of the extensive salt marshes once found in Los Alamitos Bay. The majority of this vegetation type has been lost to urbanization, flood control projects, harbors, and marinas. It is one of the most productive types of ecological communities that exists and is extremely important as a breeding ground for both terrestrial and marine organisms, including the majority of commercial fish. This is due in part to the fact that estuaries and salt marshes are the interface between the terrestrial and marine worlds, and are important nutrient cycling centers for marine ecosystems. It is probable that the Belding's savannah sparrow occurs here. This species is restricted to salt marsh habitat, and has been placed on the state endangered species list. This type of habitat is also important as a wintering ground for migratory birds.

Rolling Hills Canyons (SEA 31)

Criteria 3, 4, 5, 7
South Bay Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: San Pedro and Torrance. The Rolling Hills Canyons are one of the last remaining areas of natural vegetation on the Palos Verdes Peninsula. The geographical location and geological history of the peninsula make remaining habitat extremely valuable for ecological and scientific studies. The peninsula, which was an island in recent geological time, has close floral and faunal similarities to the channel islands. This feature makes all remaining native communities on the peninsula a natural research laboratory for the study of island biogeography and evolutionary ecology.

Biological Resources

The vegetation in these canyons is a complex of coastal sage scrub, chaparral, and riparian communities. This association is very diverse, and supports a good complement of native species. Among these are at least three races of bird species that are resident on the peninsula, and found nowhere else except the Channel Islands. These are the insular forms of the orange-crowned warbler, western flycatcher, and Allen's hummingbird. The same phenomenon has been documented for plant species.

These small fingers of vegetation are also exceedingly important as an area for migratory birds. The peninsula is a headland that juts into the Pacific several miles further than the surrounding coastline. Migrating terrestrial and marine birds flying over the open ocean on their north-south migration along the Pacific Flyway, spot this headland and stop to rest and feed. Many of these birds will stay, and spend the winter in the area. Thus, the geographic position of these small canyons make them much more important than might otherwise be expected.

Agua Amarga Canyon (SEA 32)

Criteria 3, 4, 5, 7

South Bay Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Redondo Beach. Agua Amarga Canyon is the last remaining relatively undisturbed drainage on the coastal side of the Palos Verdes Peninsula. The geographical location and geological history of the peninsula make remaining habitat extremely valuable for ecological and scientific studies. The peninsula, which was an island in recent geological time, has close floral and faunal similarities to the Channel Islands. This feature makes all remaining natural habitat on the peninsula a natural research laboratory for the study of island biogeography and evolutionary ecology.

The vegetation in Agua Amarga Canyon is a complex of coastal sage scrub, chaparral, and riparian communities. This association is very diverse, and supports a good complement of native species. Among these are at least three races of birds resident on the peninsula, that are found nowhere else except the channel islands. These are the insular form of the orange-crowned warbler, western flycatcher, and Allen's hummingbird. The same phenomenon has been documented for plant species.

The canyon is also exceedingly important as an area for migratory birds. The peninsula is a headland that just into the Pacific several miles further than the surrounding coastline. Migrating terrestrial and marine birds flying over the open ocean on their north-south migration along the Pacific Flyway, spot this headland and stop to rest and feed. Many of these birds will stay and spend the winter in the area. Thus, the geographic position of the canyon makes it much more important than might otherwise be expected.

Terminal Island (SEA 33)

Criteria 1, 2, 3, 4, 5, 7

South Bay Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: San Pedro. The California least tern (*Sterna albifrons brownii*) nests at this locality. This species is found along the southern California coast from April to September, and breeds in flat sandy areas lacking vegetation. It must be free from disturbances,

Biological Resources

and near an estuary with a good supply of small fish. This type of habitat was once common along the coast of southern California, but has nearly disappeared as estuaries have been filled and channelized, and sandy beaches have become a favorite southern California recreation area. For these reasons this species has been placed on the state and federal endangered species list. Nesting populations are found from San Francisco Bay south, with the majority being bound in Orange and San Diego counties. In Los Angeles County, nesting colonies have been found irregularly at scattered localities with populations breeding regularly on Terminal Island and at Ballona Creek.

Palos Verdes Peninsula Coastline (SEA 34)

Criteria 2, 3, 4, 5, 6, 7
South Bay Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: **Redondo Beach and San Pedro**. Unparalleled headlands, rocky shoreline, and the land-sea interface provide for a tremendous variety of biotic resources in this area. It is one of the most biologically diverse and productive regions in Los Angeles County, and contains several biotic communities including rocky intertidal, kelp bed, coastal strand, and coastal sage scrub. One small sandy beach is periodically present on an ephemeral basis at Portuguese Bend. This ten mile stretch of coastline, between Point Fermin and Bluff Cove, is the only sizeable rocky intertidal area in the county.

Rocky shores support a great number of species. This is primarily due to the highly diverse, oxygen and food-rich environment offered by this habitat. These features are provided by the stability and variety of substrates present, the aeration of water through wave splash, and the upwelling of nutrient-rich waters along the southern California coast.

Kelp beds dominated by giant kelp (*Macrocystis pyrifera*), are found in some locations in the area. These have tremendous value to the biota of inshore areas. Where they occur they may locally account for 90% of the biomass. They provide food and habitat for hundreds of species. Many of the species this habitat supports are the basic component of the food chains of inshore fishes. Kelp beds are also important because they reduce wave shock to shorelines. This protection helps maintain the abundance and complexity of marine life found there.

Kelp beds were originally common off the southern California coast wherever rocks were present at shallow depths. However, due to man-made and natural phenomena, this habitat has been severely diminished in the region, and is now rare in Los Angeles County. A kelp bed habitat restoration program has begun in the area, and kelp has been reestablished at abalone Cove and Halfway Point. Smaller colonies are now reestablishing elsewhere.

The coastal cliffs found in the area range in elevation from 100 to 300 feet and support coastal sage scrub and coastal strand. These and offshore rocks offer ideal roosting and feeding sites for numerous shorebirds, gulls, and other seabirds, including the endangered brown pelican. The area is an important stop for migrating birds as they fly along the coast or across the Santa Monica Bay. In addition, the bluff tops which are now abandoned agricultural fields, are utilized by many species as wintering feeding grounds. One endangered

Biological Resources

species, the peregrine falcon, and one very uncommon species, the prairie falcon, have been known to winter here in recent years.

Madrona Marsh (SEA 36)

Criteria 3, 4, 5, 7

South Bay Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Torrance. Madrona Marsh is a remnant of the wetlands that once covered the South Bay area. The freshwater plants and animals found here are completely surrounded by residential and industrial development. This type of habitat has been filled, drained, and lost to development throughout most of Los Angeles County. In some areas, man-made lakes and ponds have created small fresh-water marshes along their edges, but this is minimal when compared to the large expanses of fresh water marsh that were once found in the Los Angeles Basin.

Freshwater marsh habitat supports a great diversity of wildlife. Most of the bird species found here are dependent in some way on the surface moisture and vegetation, and would not be able to survive without it. It is also a habitat that supports several species of amphibians. Frogs and toads can be found here that are becoming extremely difficult to find throughout southern California. The marsh is also an important area for migratory birds. Because Madrona Marsh and Harbor Lake Regional Park are the only habitat of this type in southern Los Angeles County, they serve as miniature wildlife refuges. Waterfowl, shorebirds, marsh birds, and others can all be found on the marsh in numbers during the spring and fall migration.

Griffith Park (SEA 37)

Criteria 7

Metro Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: **Hollywood and Burbank**. Griffith Park lies at the eastern end of the Santa Monica Mountains. It supports the coastal sage scrub, chaparral, riparian, and southern oak woodland plant communities that are typical in the interior mountain ranges of southern California. What makes Griffith Park important is its geographical location. It has become an island of natural vegetation surrounded by urban and suburban development.

These isolated areas are important for preserving and documenting the geographical variability of vegetation and wildlife that formerly occurred throughout the region. They serve as reservoirs of native species that could be of scientific and economic value in the future. In addition, birds rely on these islands for areas to rest and feed along their north-south migration routes. In the case of Griffith Park, this function is made even greater than might be expected because it serves as a corridor for any gene flow and species movement that may still take place between the Santa Monica and San Gabriel Mountains via the Verdugo Mountains.

Biological Resources

Encino Reservoir (SEA 39)

Criteria 7

San Fernando Valley Planning Area, Westside Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: **Canoga Park and Topanga**. This area contains the best undisturbed stand of inland chaparral, coastal sage scrub, and streamside vegetation remaining on the inland slope of the Santa Monica Mountains. In addition, there is freshwater habitat along the Encino Reservoir.

The absence of moist marine air influences gives the vegetation types found here characteristics that are considerably different than those found in similar communities on the coastal side of the mountains. The species present and their composition vary significantly.

The association between the freshwater habitat and surrounding vegetation enhances the diversity and abundance of wildlife. Under these conditions, the overlap of habitats provides a greater number of resources than are provided by each habitat alone.

Verdugo Mountains (SEA 40)

Criteria 7

San Fernando Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: **Burbank, Sunland, and Pasadena**. The Verdugo Mountains are an extensive, relatively undisturbed island of natural vegetation in an urbanized metropolitan area. Their geographic location makes them important for scientific study, genetic interchange between otherwise isolated populations, and recreation to urban residents.

Chaparral and coastal sage scrub cover the hillsides of the mountains, with riparian vegetation, including California bay, sycamore, ferns, and tiger lilies, found in many of the stream drainages. These plant communities provide habitat essential to the diverse and abundant fauna found in the area.

The area serves as an island refuge, providing what remains of a link between plant and animal populations found in the Santa Monica and San Gabriel Mountains. Genetic interchange, by way of this linkage is important in perpetuating the genetic variability in isolated populations, and consequently the maintenance of healthy ecosystems.

The proximity of the mountains to urban areas provides an excellent opportunity to study the interaction between wild animal populations and humans. The area has already been used for studies concerned with public health.

Whittier Narrows Dam County Recreation Area (SEA 42)

Criteria 3, 4, 5, 7

West San Gabriel Valley Planning Area, Gateway Planning Area

Biological Resources

This SEA is located within the following USGS 7.5' topographic quadrangle: El Monte. The Whittier Narrows Dam County Recreation Area contains an extensive area of excellent lowland riparian and freshwater marsh habitat, most of which has been set aside as a wildlife refuge. A nature center with excellent educational and interpretive facilities has been established on the property, and successful habitat restoration and management programs have been implemented.

The area is located in the southern San Gabriel Valley along the San Gabriel and Rio Hondo Rivers. The area is a low flood plain with a high water table and rich soils. The adjacent portions of the San Gabriel River and most of the Rio Hondo remain in a fairly natural state, supporting impressive streamside vegetation of willows, sycamores, cottonwoods, and mulefat. In addition, there are several lakes in the area which support freshwater marsh vegetation. Many of these habitat areas are protected within the nature center boundaries.

The area provides habitat for a very rich and diverse vertebrate fauna, including 24 species of mammals, 240 species of birds, 8 reptiles, 4 amphibians, and several fish. Many of these are restricted to riparian and freshwater marsh habitats and are uncommon in Los Angeles County.

The nature center provides educational and interpretive programs with a nature trail system, museum, and tours for school children. It also includes a habitat restoration program where replantings with natives and re-introduction of wildlife are reestablishing a natural balance in areas previously affected by man.

Rio Hondo College Wildlife Sanctuary (SEA 43)

Criteria 8

Gateway Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: El Monte. This area has been designated as a Significant Ecological Area because it is currently used as a wildlife sanctuary by the faculty and students at Rio Hondo College. The area possesses good examples of the riparian woodland, chaparral, oak woodland, and coastal sage scrub communities found in the west end of the Puente Hills. Its proximity to the Rio Hondo College campus makes it a highly valuable educational and resource facility.

The biotic communities here contain a variety of plant life and an abundant fauna, including over 100 species of vertebrates. The biological resources of the sanctuary are widely used by students at the college. Only minutes from campus, it is an excellent natural classroom and laboratory.

Sycamore and Turnbull Canyons (SEA 44)

Criteria 7

East San Gabriel Valley Planning Area, Gateway Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: El Monte, Whittier, and La Habra. These canyons and adjacent ridges possess one of the finest undisturbed examples of natural vegetation remaining in the Puente Hills. In addition, Sycamore Canyon contains a stream that usually flows year-round, and supports one of the best examples of riparian woodland found in the region.

Biological Resources

A variety of plant communities is found in the area including riparian woodland, oak woodland, coastal sage scrub, and chaparral. The lush riparian vegetation provides food, nesting sites, and cover for many animals. The surrounding undisturbed vegetation is extensive enough to enable uncommon species like deer, coyote, bobcat, and badger to frequent the area.

Dudleya densiflora Population (SEA 45)

Criteria 2, 3, 5, 7

East San Gabriel Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Azusa. *Dudleya densiflora*, the San Gabriel Mountain live-forever, is recognized as rare and endangered by the California Native Plant Society. This species is highly restricted in distribution, found only at the mouth of the San Gabriel River Canyon, and other nearby canyons in Los Angeles County. It grows in chaparral on rocky cliffs between 800 and 2000 feet. This population, found on a north-facing slope near the mouth of San Gabriel River Canyon is outside the National Forest and should be protected.

Edwards Air Force Base (SEA 47)

Criteria 1, 3, 5, 7

Antelope Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: **Mt. Mesa, and Redman School.** This area contains botanical features that are unique and limited in distribution in Los Angeles County. They include an officially recognized endangered species, the Mojave spineflower (*Chorizanthe spinosa*), and the only good stands of mesquite (*Prosopis glandulosa*) in the County. In addition, the area possesses fine examples of alkali sink and creosote bush scrub communities.

Chorizanthe spinosa is a declining California endemic. Its range includes portions of the western Mojave Desert where it is found in dry, sandy, gravelly places from 2500 to 3500 feet. This species has recently been identified and located in the area just southeast of Buckhorn Lake.

Mesquite is commonly found in washes and low places in the drier portions of southern California. However, this species is limited in Los Angeles County. In many places where it does occur, stands are small and thin. The stands within this area are extensive and dense.

The area contains fine examples of creosote bush scrub, alkali sink, and the transition vegetation between the two. Creosote bush scrub is a common plant community and covers the floors and lower slopes of southern California deserts. It consists of a shrubby vegetation dominated by creosote bush (*Larrea tridentata*), burrobush (*Ambrosia dumosa*), and brittle bush (*Encelia farinosa*). The alkali sink community is found in alkaline flats and low places with little or no drainage. The plants found here are adapted to salty soils. They include pickle-weed (*Salicornia* sp.), saltbush (*Atriplex* sp.), and saltgrass (*Distichlis* sp.). The flora and fauna making up this biotic community are unique to it, and are not found outside this habitat.

Biological Resources

Big Rock Wash (SEA 48)

Criteria 4, 5, 7

Antelope Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: **Littlerock, Lovejoy Butte, and Valyermo**. Desert wash areas are important because they provide critical wildlife habitat and migration corridors, and a means of seed dispersal for many desert plants. In addition, they commonly possess a much greater diversity than surrounding areas, and are important to the stability of many desert ecosystems.

Big Rock Wash is a large and relatively undisturbed example of desert wash. Shadscale scrub, creosote bush scrub, and desert riparian plant communities are found within the area. The wash extends from the San Gabriel Mountains out into the Mojave Desert. Many montane species have extended their range a short distance into the desert along the wash. The unique ecological relationships created by these extensions are of scientific interest to ecologists.

The diverse and comparatively dense plant growth found here provides concentrated nesting habitat for most desert avian species. In desert area, habitat of this nature is found in washes only, and is therefore limited in its availability.

In addition, the area supports a surprising variety and abundance of mammals. The wash banks provide burrowing and denning areas for many species, and the wash vegetation provides necessary cover.

The use of Big Rock Wash as a wildlife migration corridor and as a means of plant seed dispersal is highly significant. In this manner, the area helps to maintain the floral and faunal diversity of surrounding areas. Furthermore, the wash terminates in a group of buttes. Dispersal of organisms into and from the buttes is critical to their functioning as a reservoir of biotic diversity.

Little Rock Wash (SEA 49)

Criteria 4, 5, 7

Antelope Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: **Lancaster East, Palmdale, Little Rock, and Pacifico Mountain**. Desert washes are very important ecological units because they provide essential wildlife habitat and migration corridors, and a means of seed dispersal for many desert plants. In addition, they are commonly much more diverse than surrounding areas and are important to the stability of many desert ecosystems.

Little Rock Wash is the largest and least disturbed habitat of this type in the county. It contains shadscale scrub, creosote bush scrub, and desert riparian habitats. The wash runs from the San Gabriel Mountains out into the Mojave Desert. Many montane plant and animal species have extended their distributions a short distance into the desert by way of the wash. The unique ecological relationships created by these extensions are of scientific interest to ecologists.

Biological Resources

The diverse and comparatively dense vegetation found here provides concentrated nesting habitat for a surprising number of bird species. In the desert, habitat of this nature is found in wash areas only, and is therefore limited in its availability.

In addition, the area supports an impressive variety and abundance of mammals. The arroyo bank provides burrowing and denning areas for many species, and the wash vegetation provides necessary cover.

The use of Little Rock Wash as a wildlife migration corridor and a means of plant dispersal is of great ecological importance. This function helps to maintain the floral and faunal species complement in the surrounding areas.

Rosamond Lake (SEA 50)

Criteria 2, 3, 5, 7

Antelope Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Rosamond Lake and Rosamond. Rosamond Lake is the best example of the shadscale scrub and alkali sink biotic communities in Los Angeles County. It is also the southern most extension of the Great Basin kangaroo rat (*Dipodomys microps*), and is therefore of scientific value. This species and the shadscale scrub plant community are uncommon in California south of the Owens Valley.

The shadscale scrub plant community is found in heavy soils with underlying hardpan, between 3000 and 6000 feet elevation. Vegetation consists of low shrubs including many uncommon species generally found only in the extreme northern Mojave Desert and Owens Valley. The alkali sink plant community is primarily composed of a half dozen salt tolerant species, and presents a rather barren landscape. It can be found on or near salt pans throughout the Mojave Desert.

The Great Basin kangaroo rat has a range covering most of Nevada and portions of California, Oregon, Idaho, Utah, and Arizona. The population at Rosamond Lake is geographically isolated and should be preserved for scientific study. In addition, it is one of the few places this species is known to occur in southern California and the only known locality in Los Angeles County.

Saddleback Butte State Park (SEA 51)

Criteria 7, 8

Antelope Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Hi Vista. This area possesses important desert butte habitat. In addition, it includes most of Saddleback Butte State Park, and is the only one of its kind that is currently protected from development.

In general, desert buttes maintain increased biological diversity over surrounding areas and possess ecological importance as vital habitat to many desert dwelling species. In addition, they serve as critical refuges for many biological resources that are disappearing in the county due to urban and agricultural expansion. These

Biological Resources

functions can continue for Saddleback Butte as long as its integrity is maintained. The buffer zone is important for this purpose.

The area also possesses valuable resources of its own. These include undisturbed examples of desert wildflower habitat, Joshua tree woodland, creosote bush scrub, and desert wash. It is possible that the Mojave ground squirrel inhabits the area. The status of this officially recognized rare species within the area should be determined. Its presence would require the area to be classified as class 1.

Alpine Butte (SEA 52)

Criteria 7

Antelope Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: **Alpine Butte, Hi Vista, and Littlerock**. Increased biotic diversity over surrounding areas and ecological importance as vital habitat to many desert-dwelling species are general characteristics of desert buttes. In addition, they often possess biological resources that are declining in Los Angeles County due to increased agricultural and urban development.

Alpine Butte is the least disturbed butte habitat in the county. It contains excellent stands of Joshua tree woodland and creosote bush scrub. Impressive desert wildflower habitat, now disappearing in the county, is also found in the area.

The number of species present in butte areas is high. This is the result of an increased number of niches available. Sand from the surrounding desert floor is carried by wind up into the buttes, creating a mixture of sandy and rocky habitats. This permits both sand- and rock-inhabiting plant and animal species to occur in a very localized area.

To many wide-ranging animals, buttes are critical habitat. Many birds of prey use the buttes for roosting and nesting. Several large mammal species, which forage in outlying areas, use buttes for denning sites and cover. Without buttes, these species could not exist in many regions of the desert.

This area is potential habitat for the Mojave ground squirrel. This species, once locally common in Los Angeles County, is now officially recognized as rare by the State Department of Fish and Game. The status of the Mojave ground squirrel at Alpine Butte should be determined. If this species is present, the area should be reclassified as class 1.

Like the Mojave ground squirrel, many biological resources are declining in the county's desert regions. Most of these resources are now common only on the buttes and immediately surrounding lands. Preservation of these areas is essential for the maintenance of biotic diversity in the county.

Biological Resources

Lovejoy Butte (SEA 53)

Criteria 7

Antelope Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Lovejoy Butte and Littlerock. In general, desert buttes possess increased biotic diversity over surrounding areas and ecological importance as vital habitat to many desert-dwelling species. In addition, they serve as critical refuges for many biological resources that are now disappearing in Los Angeles County due to increased urban and agricultural development.

Lovejoy Butte contains Joshua tree woodland and creosote bush scrub vegetation. On buttes, these communities often have a more diverse flora and fauna than the desert floor. This is the result of an increase in the number of niches available. Wind-blown sand from the desert floor settles in the buttes, creating a mixture of both rocky and sandy habitats. This permits rock- and sand-dwelling species to occur in a very localized area.

Desert buttes are critical habitat to many birds of prey and large mammals. These wide-ranging species forage in the surrounding desert areas, but use the buttes as essential roosting, nesting, denning and refuge areas.

Most buttes in the county are potential habitat for the Mojave ground squirrel. This rare species is officially recognized by the California Department of Fish and Game. Once fairly common in localized areas, increased urban and agricultural development have caused its decline. This species' status at Lovejoy Butte should be determined. If it is present, the area should be reclassified into classification 1.

Like the Mojave ground squirrel, many biological resources are declining in the county's desert lands. Most of these resources are now common only in buttes and immediately adjacent areas. Preservation of these land is essential for the maintenance of biotic diversity in the county.

Piute Butte (SEA 54)

Criteria 7

Antelope Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Hi Vista. Desert buttes are generally characterized as having increased biotic diversity over surrounding areas and are ecologically important as vital habitat to many desert-dwelling species. Additionally, they serve as critical remnants of many biological resources that have been diminished in Los Angeles County by urban and agricultural expansion.

Joshua tree woodland and creosote bush scrub are found on Piute Butte. In butte areas, these communities commonly possess a more diverse flora and fauna than the desert floor. This is due to an increased number of niches. Wind carries sand from the desert floor up onto the buttes, creating a mixture of sandy and rocky habitats. This allows both sand- and rock-dwelling plant and animal species to exist in a very localized area.

Biological Resources

To many wide-ranging birds of prey and large mammals, desert buttes are critical habitat. These animals forage in the surrounding areas but use the buttes for roosting, nesting, denning, and refuge. Without the buttes these species would not be present in many regions of the desert.

Many of the buttes in Los Angeles County are potential habitat for an officially recognized rare species, the Mojave ground squirrel. This species was once fairly common in butte areas in the county. However, accelerated urban and agricultural expansion has caused it to decline. Its status at Piute Butte should be investigated. This species' presence would require the area to be reclassified as class 1.

As in the case of the Mojave ground squirrel, many biological resources are declining in the county's desert lands. Most of these resources are now common only on buttes and in areas immediately surrounding them. Preservation of these areas is essential for the maintenance of biotic diversity in the county.

Desert-Montane Transect (SEA 55)

Criteria 7

Antelope Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: **Mescal Creek and El Mirage**. The Desert-Montane Transect (SEA No. 55) possesses vegetation types that are representative of the transition between the Mojave Desert and the north slopes of the San Gabriel Mountains. The combination of desert and montane habitats makes this one of the most diverse areas within Los Angeles County, and one of the largest undisturbed areas outside the Angeles National Forest.

Desert communities include creosote bush scrub, sagebrush scrub, and Joshua tree woodland. Creosote bush scrub is found on the desert floor and in the butte areas. Sagebrush scrub and Joshua tree woodland are found above the floor in the broad alluvial fans and at the base of the rocky foothills. The sagebrush scrub community is limited in distribution in southern California. Pinyon-juniper woodland and desert chaparral habitats are found in the foothills and the lower mountain slopes. At higher elevations, a mixed conifer forest occurs, with Jeffrey pine (*Pinus jeffreyi*), ponderosa pine (*Pinus ponderosa*), and big-cone spruce (*Pseudotsuga macrocarpa*) as the dominant species.

Despite the commonness of most of these communities, the area is very valuable because it is the only site where these communities can be found in an uninterrupted band running from the crest of the San Gabriel Mountains to a desert butte. This feature creates an outstanding opportunity for educational use and scientific research. Preservation of this area will also serve as a reservoir in maintaining the diversity of surrounding desert, foothill, and mountain ecosystems.

The area is relatively large, and precise locations of its most unique resources are not known. For this reason, the priority category assigned to the SEA reflects the value of the area as a means of preserving biodiversity. Further studies are needed to determine the exact locations of the more unique resources. Areas containing sagebrush scrub should be identified and placed in category 2. Additional highly valuable resources should be identified and rated accordingly.

Biological Resources

Ritter Ridge (SEA 56)

Criteria 5, 7

Antelope Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Ritter Range. The vegetation on Ritter Ridge is a cross-section of several unspoiled habitats of the desert and foothills. It has one of the finest mixed stands of Joshua trees (*Yucca brevifolia*) and California junipers (*Juniperus californica*) in the County. The area is also an excellent wildlife region possessing a rich fauna.

Ritter Ridge lies between the Sierra Pelona foothills and the Antelope Valley. The vegetation grades into an excellent Joshua tree woodland and California juniper association on the northern slopes. On the higher northern slopes and on the south-facing slopes are fine examples of desert chaparral. This is an excellent combination of desert and foothill plant species, and makes the area valuable for educational and scientific reasons.

Ninety-seven resident vertebrate species have been recorded from the ridge. These include 25 mammals, 53 birds and 19 reptiles. The area is also known as an important refuge for migratory birds.

Fairmont and Antelope Buttes (SEA 57)

Criteria 4, 5, 7

Antelope Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: **Lake Hughes, Little Buttes, Fairmont Butte, and Del Sur**. In general, desert buttes possess increased biotic diversity over surrounding areas. This is due to a high number of niches being created by mixing sandy and rocky habitats. These areas are also vital habitat to many wide ranging species which forage in outlying habitat, but use the buttes for nesting, roosting, denning, and refuge. In addition, they often possess biological resources that are declining in Los Angeles County due to accelerated agricultural and urban development. However, there are additional features which make the Fairmont and Antelope Buttes valuable.

These buttes are the most westerly habitat of this type in the Mojave Desert. Due to the non-uniform distribution of species and the proximity of these buttes to the San Gabriel Mountains, the species composition on them is likely to be different than that found on other butte habitats in the desert. The unique ecological relationships created by these features are of scientific interest.

The buttes also serve as concentrated wintering grounds for birds of prey. They provide excellent roosting sites surrounded by cultivated fields which support a plentiful food supply of rodents, rabbits, and hares. Concentrated raptor habitat of this type is uncommon in Los Angeles County.

Biological Resources

Portal Ridge/Liebre Mountain (SEA 58)

Criteria 5, 7

Antelope Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Lake Hughes, Neenach School, Burnt Peak, La Liebre Ranch, Lebec, and Liebre Mtn. The Portal Ridge/Liebre Mountain area is in close proximity to the Mojave Desert, the San Gabriel Mountains, and the Tehachapi Foothills. This position, at the intersection of three major geographical regions has produced the most diverse and unique flora found in the county. The area contains ten distinct plant communities, representing the transition between desert, foothill, and montane environments. The diversity of the area is further enhanced by the presence of many northern species, some of which are rare in the county, reaching their southern limit here.

Foothill woodland is an uncommon plant community that occurs in this area. It is a community containing both oak parklands of blue oak (*Quercus douglasii*) and valley oak (*Q. lobata*), and digger pine woodland (*Pinus sabiniana*). This community is more common in northern and central California where it occurs along foothill and valley borders in the inner Coastal Ranges and western foothills of the Sierra Nevada. The distribution of this community extends south through the Tehachapi Mountains to the San Gabriel Mountains to reach its southern limit on Portal Ridge/Liebre Mountain. This is the only place this community is found in the county. Similarly, several of the component species including blue oak, digger pine, and California buckeye reach their south limits here, and are found nowhere else in the county.

On the lower slopes and in the valleys south of the main ridgeline, southern oak woodland, valley grassland, riparian woodland, and coastal sage scrub can be found. Higher slopes and ridgetops are covered with chaparral and yellow-pine forest. On the north-facing slopes, which are under desert influences, pinyon-juniper woodland habitat is present. Joshua tree woodland or sagebrush scrub cover the lower desert hillsides in the area.

All of these communities are relatively common in the county with the exception of sagebrush scrub. This community, dominated by great basin sage (*Artemisia tridentata*), is not common in California south of the Owens Valley. Populations in southern California are probably relics from an earlier time when the community extended much further south than it does today.

Despite the commonness of most of the plant communities present, this area is very valuable because it possesses such a concentrated diversity of vegetation types. This creates an outstanding opportunity for educational use, nature study, and scientific research.

The Portal Ridge/Liebre Mountain area is relatively large, and the precise locations of its most unique resources are not known. For this reason, the priority group assigned to it reflects only the value of the entire area for scientific research. However, further studies should be conducted to determine the exact location of the more unique resources within the area. Those containing sagebrush scrub should be identified and placed in priority group 2. Foothill woodland habitat should also be set apart and given a priority group 3 rating. Additional highly valuable resources should be identified and rates as they are found. Enough of the area should be preserved so that the interface between the communities can be maintained.

Biological Resources

Tehachapi Foothills (SEA 59)

Criteria 5, 7

Antelope Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Lebec and Frazier Mountain. The grassy, south-facing slopes of these hills are one of the best foothill wildflower sites in southern California. In addition, the area is located at the junction of the Mojave Desert, the transverse ranges, and the Tehachapi Mountains, and possesses floral and faunal components from each region. As a result, the area is extremely diverse and contains many unique ecological relationships of scientific value.

The herbland vegetation of the area consists primarily of herbs and forbs. Characteristic plant species include buttercup, poppy, owl's clover, and many species of sunflowers. Spectacular wildflower displays are common here.

Several other plant communities are found in the area. These include chaparral, riparian woodland, foothill woodland, southern oak woodland, and valley grassland. This variety of habitats, and the overlap of mountain and desert influences, make the area very valuable.

Joshua Tree Woodland Habitat (SEA 60)

Criteria 7

Antelope Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Neenach School and Fairmont Butte. This area supports an excellent example of joshua tree woodland habitat. Due to accelerated agricultural and urban expansion in the County's desert regions, large dense stands of this habitat are becoming scarce, especially in the western Antelope Valley.

Joshua tree woodland occurs between 2500-4000 feet from the extreme western end to the extreme eastern end of the Mojave Desert. The dominant species is joshua tree, which reaches heights of 5 to 12 meters. Other common species include Mojave yucca, sage, box-thorn, and buckwheat.

Kentucky Springs (SEA 61)

Criteria 2, 3, 5, 7

Antelope Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangles: Acton and Pacifico Mountain. This area contains the best stand of great basin sage (*Artemisia tridentata*) remaining in Los Angeles County, and is one of the best in southern California. In addition, this stand and others in the county support a distinct subspecies of great basin sage (*A. t. parishii*), and are of scientific interest for the study of geographic variation.

Although great basin sage is widespread in the western states, it is very limited in southern California. It is infrequently found from San Diego County north along the western edges of the deserts to the Sierra

Biological Resources

Nevada. In Los Angeles County is known only from a few isolated locations in the Santa Clara River Valley and the Antelope Valley. These are probably relics from an earlier time when the community covered much of southern California.

At present, large, relatively undisturbed stands of *A. t. parishii* exist in the area. However, these are threatened. Numerous roads, an electric company substation, power-lines, and many scattered houses have been developed, and continued development is probable.

Galium grande Population (SEA 62)

Criteria 1, 2, 3, 4, 5, 7

West San Gabriel Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Azusa. *Galium grande*, an endemic species of bedstraw, is recognized as endangered by the United States Fish and Wildlife Service. This species is highly restricted in distribution, being found only at isolated localities on the south slope of the San Gabriel Mountains. This population is in Sawpit Canyon, and is the only place it can be found outside the Angeles National Forest.

Lyon Canyon (SEA 63)

Criteria 7

Santa Clarita Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Oat Mountain. The site consists of a relatively narrow canyon housing both an oak woodland along with an extensive chaparral community. The oak woodland is found in the southerly portion of the area and contains both coast live oak (*Quercus agrifolia*) and the valley oak (*Q. lobata*). Further north up the canyon is found the chaparral community consisting of sugar bush (*Rhus ovata*), California lilac (*Ceanothus* species), black sage (*Salvia mellifera*), mule fat (*Baccharis salicifolia*) and chamise (*Adenostoma fasciculatum*), which is the dominant shrub.

Valley Oaks Savannah, Newhall (SEA 64)

Criteria 7

Santa Clarita Valley Planning Area

This SEA is located within the following USGS 7.5' topographic quadrangle: Newhall. This area contains one of the last remaining stands of valley oak (*Quercus lobata*) in the Santa Clarita Valley. The site consists of such specimens scattered over the southerly 75% of the site. While the trees generally appear to be healthy, there is little evidence of new trees on the property, which raises questions about their sustainability.

The northerly 25% of the site consists of a mixture of plants from coastal sage scrub and chaparral affinities typical of those found in the Santa Clarita Valley. The entire area is the habitat of coyote, deer and other animal life.

Biological Resources

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Conservation and Open Space Element Resources

I. Open Space and Natural Areas in the Antelope Valley

Los Angeles County offers a wide variety of open space and natural areas. The following open space and natural areas are managed by the County or are located primarily within the unincorporated areas:

Angeles National Forest

The Angeles National Forest was established by Executive Order in 1892 and is managed by the U.S. Forest Service. The Forest covers over 650,000 acres. The Angeles National Forest manages the watersheds within its boundaries to provide water to Southern California and to protect surrounding communities from catastrophic floods. The land within the Angeles National Forest is diverse in appearance and terrain, and provides many opportunities for recreational and scenic enjoyment. Much of the Angeles National Forest is covered with dense chaparral, pine and fir covered slopes as elevations in the Angeles National Forest range from 1,200 to 10,064 feet.

Devil's Punchbowl Natural Area

Devil's Punchbowl is a 1,310-acre natural area that consists of rugged wilderness rock formations along the San Andreas Fault on the northern slope of the San Gabriel Mountains. The terrain climbs from 4,200 feet to 6,500 feet in elevation, with natural plant and animal communities ranging from desert scrub to pine forests. A seasonal stream runs through the natural area.

High Desert Wildlife and Wild Flower Sanctuaries

The County currently operates eight wildlife sanctuaries and one wildflower sanctuary in the high desert of Antelope Valley. Ranging from 2,500 to over 3,600 feet in elevation and encompassing more than 2,000 acres, the sanctuaries offer opportunities for spring wildflower viewing, bird watching, hiking and horseback riding. Wildlife seen on the preserves vary from horned lizards, chuckwallas and rattlesnakes, to prairie falcons and golden eagles. Insect life is most abundant during the warmer months, and in spring, the Joshua tree and other large shrubs provide nesting sites for a variety of songbirds. Other protected animals are the kit fox, desert tortoise and Mojave ground squirrel.

Michael D. Antonovich Open Space Preserve

The Michael D. Antonovich Open Space Preserve offers 500 acres of dedicated open space in the Santa Susana Mountains and is managed by the Mountains Recreation and Conservation Authority (MRCA). Located on the northern border of Los Angeles, this open space preserve contains a diversity of flora and fauna, from big cone Douglas fir, California walnut and oak trees to black bears, deer and mountain lions. The Preserve also provides important habitat connections through its numerous wilderness trails in the Rim of the Valley corridor of the Santa Clarita Woodlands Park.

II. Conservancies

The County works with various conservancies to maintain and protect open space land in Los Angeles County. Land conservancies are private, nonprofit organizations and public agencies that share a common goal: to conserve land for the benefit of people and nature. Land conservancies are generally started by community residents who wish to preserve a certain area or piece of open space land on a local or regional scale. Land conservancies have the flexibility to acquire, hold and manage land in the public interest, and also to preserve open space through voluntary conservation agreements with landowners, which permanently protect the land from development, while the title remains with the landowner. Most conservancies work in partnership with local governments and provide various levels of educational programs and land restoration and/or land enhancement projects. In the Antelope Valley, the primary conservancy group in operation is the Antelope Valley Conservancy.

Antelope Valley Conservancy

The Antelope Valley Conservancy is a local land trust conservancy that obtains and stewards lands that are important to the community for quality of life, scenic beauty, and plant and animal habitat. AVC focuses on Joshua tree woodlands, the keystone species of the Mojave Desert, which supports a wide variety of native species. Most of the Conservancy's targeted preservation lands are in the County's designated Significant Ecological Areas. (<http://www.avconservancy.org/>)

III. Regional Habitat Linkages

Habitat linkages are defined as area within the overall range of a species or suite of species that possess sufficient cover, food, forage, water and other essential elements to serve as a movement pathway, or between two or more larger areas of habitat. Depending on the species, linkages vary in size. For example, a belt of coastal sage scrub traversing a golf course, connecting sage scrub habitat areas on either side, providing a safe passage zone for smaller, slower-moving species (such as lizards and rodents) to maintain population connectivity between the two sides of the golf course is one form of habitat linkage.

Wildlife corridors, which are areas of open space of sufficient width to permit larger, mobile species (such as foxes, bobcats and coyote) to pass between larger areas of open space, or to disperse from one major open space region to another, are another type of habitat linkage. Such areas are generally several hundred feet wide, unobstructed, and usually possess cover, food and water. The upland margins of a creek channel, open ridgelines, open valleys or the bottoms of drainages often serve as major corridors locally, as do riparian alignments.

Biological resources are important in a regional context, serving to connect resources in adjacent local jurisdictions. Critical biological resources are maintained through habitat connectivity, which sustains population genetic diversity, and provides refuge for migrant species. Regional habitat linkages are identified in the Conservation and Natural Resources Element. The Antelope Valley, Puente Hills, San Andreas, Santa Clara River, Santa Felicia, Santa Monica Mountains, and Santa Susana Mountains and Simi Hills SEAs serve as important regional habitat linkages. More details about linkages between and within each of these SEAs are provided below:

Antelope Valley SEA

The SEA extends from the Angeles National Forest to the playa lakes within Edwards Air Force

Base, encompassing the whole of the two largest drainages exiting the northern slope of the San Gabriel Mountains. Its geographical features serve as a major habitat linkage and movement corridor for all wildlife species within its vicinity. Ecologically generalist species (such as bobcat, coyote, mule deer, fox, raccoon, etc.) have the ability to move across such vast areas and through-changing habitat types. For such species, the SEA may serve as an important system for long-term inter-populational genetic exchange. For smaller or less-mobile species, or taxa, which are more narrowly restricted in their habitat needs, the SEA can serve as a broad linkage zone, in which individual movement can take place during seasonal or populational dispersal. This provides essential genetic exchange within and between metapopulations. The two drainages, combined with the upland terrestrial Desert-Montane transect portion of the SEA, ensure linkage values and direct movement zones for all of the wildlife species present within the County portion of the Antelope Valley.

San Andreas SEA

The San Andreas SEA includes several important linkages for wildlife movement. The Fault Zone connects with the Santa Clara River drainage in the Lake Hughes area, linking with this large, free-flowing watershed that extends to the Pacific Ocean in Ventura County. The foothills and grassland in the westernmost tip of the SEA are part of an important linkage between the San Gabriel Mountains and the Tehachapi Mountains. This linkage to the Tehachapi Mountains is important because it connects the southernmost extent of the Sierra Nevada Mountains with the San Gabriel Mountains and with the Southern Coast Ranges. The Tehachapi Mountains are the only mountain linkage between the Transverse Ranges and the Southern Coast Ranges to the Sierra Nevada Range. This largely natural area may be an important topographic reference for migrating birds and bats, as well as functioning for essential high elevation foraging grounds along their migration route. The Tehachapi Mountains further provide a valuable link for gene flow between divergent populations of many species, including plants. The SEA includes several large drainages that extend from the San Gabriel Mountains to the western end of the Mojave Desert: the Antelope Valley floor and the Fairmont and Antelope buttes. These washes provide an important linkage for animals traveling between the mountains (all the ranges mentioned above) and the Mojave Desert. In addition, Amargosa Creek facilitates east-west wildlife movement through Liebre Mountain, Portal Ridge, and Ritter Ridge to Barrel Springs in the Antelope Valley near the City of Palmdale. The frequency of valuable riparian communities along this travel route located within an otherwise arid climate, further indicates the importance of this area, which is one of the busiest natural wildlife linkages in the region.

Santa Clara River SEA

Historically (and prehistorically) the riparian corridor along the Santa Clara River has served as the primary east-west linkage between the Pacific coastline, Coast Ranges, interior ranges, high desert and southern Sierra (via the Tehachapi Range). Animals moving through the Santa Clara River at one time had unobstructed passage along the river and within its tributaries. The present configuration of the tributary drainages has reduced connectivity from the Santa Clarita Valley to the north, but the Santa Clara River remains relatively intact and open. The SEA embraces the river corridor and the linkage zones that are considered essential to ensuring connectivity and resource values within the historic movement zones for all of the wildlife species present within the County portion of the Santa Clara River.

IV. Significant Ecological Areas

History of the SEA Program

Los Angeles County's Significant Ecological Areas (SEAs) Program has schematic roots in an initial General Plan guiding document, the 1970 Environmental Development Guide, which was adopted as a preliminary General Plan for the County. The Open Space Concept Plan and 1990 Open Space Policy Map depict greenbelt areas and rural lands that reasonably correspond to the current SEA map.

The original Significant Ecological Area Report was prepared in 1972 by scientists from the University of California, Los Angeles, the Los Angeles County Museum of Natural History and other local academic institutions, at the request of the Los Angeles County Department of Regional Planning (DRP). The DRP asked the report authors to identify "significant ecological areas," which due to their high biological resource value, should receive special consideration during the formulation of the 1973 General Plan. In the final report, 81 such areas were mapped and brief descriptions of the value of each were given. The 81 areas were then included on the Vegetation and Wildlife Map in the Conservation Element of the 1973 General Plan.

In 1976, following the 1975 court decision requiring the preparation of a revised General Plan, the DRP and the Environmental Systems Research Institute commissioned the Los Angeles County Significant Ecological Area Study (1976 SEA Study), from the environmental consulting firm, England and Nelson. After excluding the Channel Islands and national forest lands from the study area, the 1976 SEA Study reviewed the data and criteria used to establish the original significant ecological area list, analyzed new information, developed a set of eight criteria to be used to select and prioritize significant ecological areas and concluded with individual maps and descriptions for each. From an initial list of 115 sites, 62 areas met the criteria and were recommended for adoption by the study. In 1980, 61 of these biologically significant areas were adopted as part of the Conservation and Open Space Element of the Los Angeles County General Plan on the Special Management Areas Policy Map and through individual descriptions of the SEAs in Technical Supplement E of the 1980 General Plan.

In 1991, supplemental studies further assessing the biological resources within seven SEAs were conducted. The Phase I Studies, conducted by Michael Brandman Associates, assessed the following SEA areas: Cold Creek Significant Ecological Area No.9, San Francisquito Canyon Significant Ecological Area No.19, Dudleya Densiflora Population Significant Ecological Area No.45, Kentucky Springs Significant Ecological Area No.61, Las Virgenes Significant Ecological Area No.6, Tonner Canyon and Chino Hills SEA No. 15, and Tuna Canyon SEA No. 10. The studies looked at current ownership patterns, existing resources, development pressures and made recommendations into the future management of the SEAs. All of the Phase I studies found either that the SEA boundaries were adequate in size or recommended the expansion of the boundaries to better encompass and protect biotic resources.

In 2000, the DRP commissioned the Los Angeles County Significant Ecological Area Update Study (2000 Update Study) prepared by PCR Services Corporation, Frank Hovore & Associates and Forma Systems. The 2000 Update Study included an Executive Summary, Background Report and twelve biological resources assessments for the Proposed Antelope Valley SEA, Proposed Cruzan Mesa Vernal Pools SEA, Proposed East San Gabriel Valley SEA, Proposed Joshua Tree Woodlands SEA, Proposed Puente Hills SEA, Proposed San Andreas SEA, Proposed San Dimas Canyon and San Antonio Wash SEA, Proposed San Gabriel Canyon SEA, Proposed Santa Catalina

Island SEA, Proposed Santa Clara River SEA, Proposed Santa Monica Mountains SEA, and the Proposed Santa Susana Mountains and Simi Hills SEA. These twelve biological resource assessment areas consolidated the 1980 unincorporated area SEAs into larger areas for study and proposed inclusion as SEAs.

The 2000 Update Study also examined the assumptions of the original eight SEA designation criteria from the 1976 SEA Study, modifying one criterion and deleting two. The modification of Class 1 changed the language from “the habitat of rare, endangered, and threatened plant and animal species,” to specify “the habitat of *core populations* of rare, endangered and threatened plant and animal species.” Class 6: “areas important as game species habitat or as fisheries” was removed due to the questionable contribution of these areas towards maintaining biotic diversity. Class 8: “special areas” was deleted due to the vague nature of that designation. The six SEA criteria are contained within this Appendix E, and each SEA description lists which criteria it meets.

From 2001 to 2011, the DRP conducted public outreach, solicited additional recommendations on the SEA boundaries and checked the SEA boundaries with an expert panel of biologists convened in 2010.

SEA Designation Principles

Previously, areas were assigned SEA designations in an attempt to slow or modify the type of development within their boundaries. However, as the County underwent a period of unanticipated growth, many of the SEAs experienced a reduction and/or degradation of their biotic diversity. Appendix E uses the definition of biotic or biological diversity provided by the 1990 U.S. Congressional Biodiversity Act, HR1268, which is defined as a full range of variety and variability within and among living organisms and the ecological complexes in which they occur.

Currently, the design of the SEAs is based on scientifically-grounded concepts regarding size and connectivity. Where feasible, SEAs form linkages between core habitats, which are large blocks of habitat generally conforming to a significant topographical feature, such as a watershed, major river, butte, etc., in order to ensure regional species movement.

Most SEA designations do not focus on a single resource or habitat type and, over time, conservation plans have come to employ a fluid approach to conserving an ever-increasing list of sensitive resources (e.g., endangered species, habitats of limited distribution, and “patchy” habitats such as coastal sage scrub). The SEA designations rely on two primary conservation principles: namely that species extinction rates are lower on larger “islands,” or blocks of land, than smaller islands; and that isolated habitat areas have less opportunity to regain species by re-colonization from other areas.

Many wildlife species, particularly carnivores and other wide-ranging species, require large areas of suitable habitat for genetically and demographically viable populations. In addition, large islands are more likely to encompass diverse habitat types and are more easily buffered against potential impacts from surrounding developed lands. The SEAs are designed to provide habitat linkages between related habitat types (such as the Antelope Valley buttes, or the San Andreas Rift Zone wetlands), by encompassing areas of sufficient width to function as wildlife movement routes between these open space areas.

The current SEA designations provide local resources (such as sensitive species) and their habitats, as well as the seasonal support habitats for those resources, with connections to essential

sustaining resource areas (such as corridor areas and hydrological systems). For example, zones of lower intensity human impacts that exist between essential habitat resources have been included in the current SEA designations, thereby helping to maintain the biotic diversity in the County. The designation of Coastal Resource Area (CRA) is given to those SEAs located with the California Coastal Zone.

SEA Selection Criteria

All of the County's SEAs and CRAs must satisfy at least one of the six SEA selection criteria:

A. The habitat of core populations of endangered or threatened plant or animal species.

Intent of Criterion A: These areas are important in maintaining viable plant and/or animal populations for those species recognized by state and or federal resource agencies as being extremely low in numbers or having a very limited amount of suitable habitat available. The terms "endangered" and "threatened" have precise meanings defined in both state and federal law. The identification of "core population" will be determined by the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW). The term "core population" as used here is a general biological term referring to a known and/or a viable population. Other locations of endangered or threatened plant or animal species may also occur in the County, which are not within an SEA. It should also be noted that the concept of core populations is consistent with current thinking of the USFWS and the CDFW.

This criterion is not meant to constitute a recovery program for listed species, but one element of a more comprehensive conservation effort for the long term sustainment of listed species within the County. At the local level, recovery programs of both the CDFW and the USFWS have measures in place that can impose severe penalties for the "take" of listed species or their habitat.

- Federally Endangered: "any species which is in danger of extinction throughout all or a significant portion of its range...."
- Federally Threatened: "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."
- State Endangered: "...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease."
- State Threatened: "...a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter." [California Code of Regulations, Title 1, Sec 670.5]

B. On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.

Intent of Criterion B: The purpose of this criterion is to identify biotic resources that are uncommon on a regional basis. The geographical region considered could be as small as the Southern California coastal plains, the Transverse Mountain Ranges, the Mojave Desert, the Southern

California coastline, etc. The geographical region could also be as large as Southern California, the Pacific coast, all of California, the western United States, or even larger. The community, association, or habitat is either unique or restricted in distribution in an area larger than the political boundaries of the County (i.e., coastal sage scrub, native grasslands, or vernal pools). Resources that are limited in distribution in the region being considered, but common elsewhere, are also included under this category.

C. Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.

Intent of Criterion C: The purpose of this criterion is to identify biotic resources that are uncommon within the political boundaries of the County, regardless of their availability elsewhere. The County has a high diversity of biological components. The County and San Diego County are the only counties in the U.S. that possess coastal, montane, and desert subregions within their boundaries. It is a rich heritage that few local governments have an opportunity to preserve.

Many biotic communities that were once common in the County have been severely reduced due to urban and agricultural development. This is especially true south of the San Gabriel Mountains, and among the agricultural fields of the North County. Other biotic features have never been common.

D. Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, migrating grounds and is limited in availability either regionally or in the County.

Intent of Criterion D: Species or groups of species, at various points in their life cycles, tend to congregate in certain areas. These areas possess resources that are essential to the maintenance of specific wildlife species. This criterion is intended to identify those areas that are limited in distribution either regionally or in the County, and not the primary habitat of common species or groups of species.

E. Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.

Intent of Criterion E: Oftentimes scientists learn the most about a biological phenomenon by studying it at an extreme in its distribution. This frequently reveals the biological and ecological parameters under which it can survive. In addition, isolated populations and communities often are relicts of what was present in an area at some previous time, and may show genetic traits not found elsewhere in the species. These biological and ecological parameters may be useful in determining taxonomic relationships.

F. Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.

Intent of Criterion F: The intent of this criterion was to identify examples of the primary biotic resources in the County. At least one example (e.g., native grassland, valley oak savannah) of each vegetation type will be selected from the various geographical regions in the County in order to preserve basic biogeographic diversity.

SEA Descriptions

The following descriptions of the 21 SEAs include descriptions of the boundaries, resources, wildlife movement, and designation criteria for each. More detailed information about the specific plant and animal species of interest for each SEA is contained within the SEA Program Guide, which is maintained by the Department of Regional Planning. The SEA descriptions, followed by the CRA descriptions, are listed in alphabetical order.

Altadena Foothills and Arroyos SEA

Boundary and Resources Description

The Altadena Foothills and Arroyos SEA is located in the westernmost portion of the San Gabriel Valley. This SEA includes incorporated and unincorporated areas. The SEA represents the lower elevation/urban interface portions of Millard, Alzada, Chiquita, Las Flores, Rubio, and Eaton canyons from the urban edge, to undeveloped wildland areas of the lower elevations of the Angeles National Forest.

The SEA is located within the Mount Wilson and Pasadena United States Geological Survey (USGS) 7.5' California Quadrangles.

On the west side of the Altadena Foothills and Arroyos, the western and southwestern boundaries track along the urban-wildland interface in the undeveloped areas of the Arroyo Seco, Fern, and El Prieto canyons, and the boundary pulls back around a small area of development at the northern-eastern edge of La Cañada-Flintridge. A developed area northeast of the junction of Millard Canyon and El Prieto is excluded. The SEA designation includes the undeveloped portions of sub-watersheds of the Arroyo Seco, and also encompasses undeveloped parts of drainages, including Alzada and Chiquita, which flow into the Devils Gate Reservoir of the Arroyo Seco. The Arroyo Seco is within the Los Angeles River watershed. This SEA includes portions of the cities of Pasadena and La Cañada-Flintridge, the unincorporated community of Altadena, and the Angeles National Forest. The eastern side of the southern boundary encompasses undeveloped areas of the sub-watersheds of Las Flores, Rubio and Eaton canyons, which are tributary to the Rio Hondo and historically to the San Gabriel River. Much, but not all, of the Rio Hondo catchment is diverted via flood-control channels to the Los Angeles River. The southern boundary of the SEA is bordered by developed properties. The southern boundary moves east along the urban-wildland interface to include undeveloped parts of watersheds, which closely follow the perimeter of Devil's Gate Reservoir, in the Hahamongna Park in Pasadena. From Hahamongna Park, the SEA boundary continues east along the edge of development into the San Gabriel River watershed. The eastern border of the SEA is the eastern ridge of Eaton Canyon near the canyon mouth. A finger of the SEA extends downstream along Eaton Wash to include the Eaton Debris Basin and Reservoir. The northern boundary is formed along ridgelines within the Angeles National Forest that define the catchment of the local canyons. Within the Angeles National Forest, development is much less dense, in the form of in-holdings and Angeles National Forest leases, and is often naturally landscaped, albeit disturbed.

The chief attribute of this SEA is a high diversity of species, which is due to the SEA's position between the mountain biome and the valley biome, caused by an abrupt change of slope formed by the thrust fault complex that borders the San Gabriel Mountains. Furthermore, the SEA has as its center the dividing ridge between the two principal rivers of the Los Angeles Basin, the Los Angeles River and the San Gabriel River.

The wide range of elevation, topography, aspect, and geology represent a diverse array of physical habitats within this SEA. In general, the topography of the SEA is moderately steep to very steep, which results in a number of very narrow corridors with elevations ranging from a high of approximately 2,400 feet above mean sea level (MSL) to a low of approximately 1,200 feet above MSL. Consequently, a variety of plant communities exist, including riparian and upland shrublands and woodlands. Within these major community types, there are many vegetation series that vary according to plant species dominance.

Of particular note for this SEA is its potential to accommodate lower elevation east-west linkages. This is significant because of the constraints of development at lower elevations, the very steep terrain, and seasonal snow storms above the SEA, beginning at about 3000 feet—all of which limit potential movement for many species. There is also potential for north-south wildlife movement between the Angeles National Forest and the Verdugo Mountains via the Arroyo Seco and the San Rafael Hills. The Arroyo Seco is the eastern limit of this link and creates a potential movement corridor from the Angeles National Forest, over and under the Interstate-210. Across the Interstate-210, the linkage enters the San Rafael Hills, where blocks of habitat remain in the cities. Some are conserved in natural open space, such as the Cherry Canyon Park and Open Space Preserve of the City of La Cañada-Flintridge, just south of the County Descanso Gardens. These open spaces are interspersed with residential development and are not part of the SEA. From the San Rafael Hills, linkage potential may be traced to the west across State Route-2 and Verdugo Wash, past enclaves of residential development to access the Verdugo Mountains.

Wildlife Movement

Wildlife movement within the SEA takes on two major forms. First, due to the extremely steep intervening topography, considerable movement of wildlife up and down the drainages, which course through this SEA to connect the forest interior with foothill areas, is expected. Consequently, this type of movement occurs on a seasonal basis, particularly for large mobile mammals that typically meet their full range of habitat needs over broad areas.

The second major type of movement occurs across the flanks of the foothills in an east-west direction. Particularly for riparian-obligate and riparian-favoring migratory birds, the corridor linking lower elevation riparian habitats in the SEA are of high importance and heavily utilized.

Regional Biological Value

The SEA meets important SEA designation criteria and supports many regional biological values. Each criterion and how it is met is described below.

CRITERIA ANALYSIS OF THE ALTADENA FOOTHILLS AND ARROYOS SEA

Criterion		Status	Justification
A)	The habitat of core populations of endangered or threatened plant or animal species.	Not Met	None within this SEA.
			The SEA is designating one of the principle ecotones of the

	Criterion	Status	Justification
B)	On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	Southern California coastal areas: the area where the sediment of the coastal alluvial fans from the mountain streams and drainages is exiting the abrupt upthrust rock of the mountains. Here one finds the biotic communities of the mountains meeting the communities of the coastal plain areas, combining with the organisms that are only found at the junction. The natural habitats of this kind of biological area are fast dwindling as urban communities expand to the limits of easily buildable space.
C)	Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The SEA is designating one of the principle ecotone areas of the County coastal exposure: the area where the sediment of the alluvial fans from the mountain streams and drainages is adding to the mile-deep sediments of the Los Angeles Basin, as the watercourses exit the abrupt upthrust rock of the San Gabriel Mountains. It is an area where one can often encounter flora that is characteristic of the Peninsular Ranges to the south and flora of the coastal ranges and Sierra Nevada to the north, among typical flora of the Transverse Ranges. The SEA contains prime examples of coastal sage scrub and other kinds of chaparral, riparian oaks, woodlands of the canyon oak of the mountains, woodlands of the coast live oak, which occurs both in the lower mountains and the valleys, good stands of the San Gabriel endemic oak (<i>Quercus dumosa</i> var. <i>gabrielensis</i>), diverse and beautiful flora characteristic of the continually changing beds of the mountain streams, both perennial and intermittent, and the wildlife that reside in these various habitats.
D)	Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, or migrating grounds and is limited in availability either regionally or in the County.	Met	The SEA provides a low-elevation constrained corridor. The SEA serves as the only corridor to provide interacting component habitat areas for species to feed, rest, and migrate from low basin and foothill elevations to the sub-alpine elevations of the high San Gabriel Mountains.
E)	Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.	Not met	None within this SEA.
F)	Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.	Met	Areas encompassed within the SEA represent the only remaining stands of low-elevation foothill scrub, chaparral, and canyon woodland communities within the north San Gabriel Valley. These communities once extended throughout what are now the communities of the north San Gabriel Valley, bridging the transition between high chaparral on the southern slope of the San Gabriel Mountains to the alluvial fans extending beneath the mountains to the coastal basin.

In conclusion, the area is an SEA because it contains (B - C) a good example of the biotic communities typical of the area where the abrupt upthrust of the mountains meets the alluvial fans of the valleys, a natural habitat that is limited in availability in the County and the coastal Southern California region; (D) it has a constrained connective corridor area near the Devil's Gate Dam where the freeway underpasses provide access between the San Rafael Hills and the San Gabriel Mountains; and (F) it supports intact remnant stands of low-elevation chaparral and scrub communities that were once more widespread within the region.

Antelope Valley SEA

Boundary and Resources Description

The Antelope Valley SEA is located in the central portion of the Antelope Valley, primarily east of the cities of Palmdale and Lancaster, within a predominantly unincorporated area of the County. The SEA is focused on the principal watercourses of the area: Little Rock Creek and Big Rock Creek and tributaries, such as Mescal Creek. The California Audubon recognizes the area of Edwards Air Force Base as a Globally Important Bird Area (IBA), which is visited by tens of thousands of migrant birds during the spring and fall migratory seasons, and supports the breeding of rare and endangered birds during the spring and summer months.

The SEA is located, at least partially, in each of the following United States Geological Survey (USGS) 7.5' California Quadrangles: Rosamond, Rosamond Lake, Redman, Rogers Lake S, Jackrabbit Hill, Lancaster E, Alpine Butte, Hi Vista, Adobe Mountain, Palmdale, Littlerock, Lovejoy Butte, El Mirage, Pacifico Mountain, Juniper Hills, Valyermo, and Mescal Creek.

Watercourses and water features, such as dry lakes and springs, are the focus for desert life and central to connectivity and biodiversity in this region. The SEA was delineated to emphasize the importance of the Little Rock Creek and Big Rock Creek watersheds to the surface and subsurface hydrology of the Antelope Valley and to the dry lakes. The western portion of the SEA extends along the margin of Little Rock Creek Wash and floodplain zone, while the eastern margin follows a tributary of Big Rock Creek, which is Mescal Creek Wash and its tributaries. The origins of the watercourses in the Angeles National Forest are an important aspect of their diversity and connectivity, and the importance of the diverse forest vegetation of this SEA is discussed below. The SEA includes several major buttes and numerous minor ones, which have highly diverse biota along with diverse desert habitats, which range from sand dunes formed from the wind-blown dust that the buttes collect, to rocky crags, which are home to various raptors. The SEA includes the County's portion of the watershed basin for dry lakes, which are the destination for the watercourses. There are three dry lakes and their adjacent plains (protected as part of Edwards Air Force Base) included in the SEA: Rosamond Dry Lake with the adjacent Piute Ponds, Buckhorn Lake, and Rogers Lake. These lakes and ponds are often flooded during the rainy winter-spring seasons, and are the principal resting areas in the region on the Pacific Flyway. The northeastern portion of the SEA encompasses some agricultural cropland (portions of which are fallow) and dispersed rural residential uses; however, the underlying hydrology of the washes remains intact throughout the entire SEA.

Three main watercourse segments originate in the San Gabriel Mountains and flow through the Antelope Valley to dry lakes near the northern County boundary: 1) Little Rock Creek; 2) Big Rock Creek; and 3) Desert-Montane. Desert-Montane centers on Mescal Creek and includes adjacent drainages. The flows of all three drainages are subsurface for much of the year and may be on the surface during rain and snowmelt.

The Little Rock Creek segment (the westernmost segment), goes north from Little Rock-Palmdale Dam as its southern barrier. Upstream from the reservoir is critical habitat for the endangered arroyo toad (*Anaxyrus californicus* FE, SSC). The toad could occur from time to time in the downstream area of the SEA. Heading north to Mount Emma Road, the boundaries follow the flood zone of the Little Rock Creek Wash and also incorporate some of the vegetated slopes that drain to the wash. North from Mount Emma Road, the boundaries follow Federal Emergency Management Agency (FEMA) boundaries except where the braiding is clearly outside of the FEMA boundary, such as near Avenue U, between Avenue S and Avenue T, and north of Avenue Q. In these areas, the line follows the edge of the braiding. North of Avenue M, the lines follow FEMA boundaries to Avenue F. On the west side, just south of Edwards Air Force Base, the SEA boundary heads west to incorporate the conservation area identified by the West Mojave (WEMO) Plan for alkali mariposa lily. North of Avenue F, the eastern boundary follows the FEMA boundary to the Edwards Air Force Base boundary.

All of Edwards Air Force Base that is in the County is included in the SEA because the restricted entry and use protect the dry lakes and their neighboring areas. Many desert plants and wildlife species once found broadly across the Antelope Valley are now found only or primarily within Edwards Air Force Base. The ponds and dry lakes have distributed habitat of marshy alkali grassland, alkali flats, and cattail and bulrush marsh augmented by wastewater treatment facilities that have additional ponds. Some of the nesting rare and uncommon birds include white-faced ibis (*Plegadis chihi*), tricolored blackbird (*Agelaius tricolor*), redhead (*Aythya americana*), gadwall (*Anas strepera*), yellow-headed blackbird (*Xanthocephalus xanthocephalus*), least bittern (*Ixobrychus exilis*), and federally-threatened western snowy plover (*Charadrius alexandrinus nivosus*).

The Big Rock Creek area has western and eastern segments in the SEA. The western segment of the the SEA begins near the northern boundary inside the Angeles National Forest and heads north through and out of the Angeles National Forest along Pallett Creek. The SEA includes parts of Cruthers and Holmes creeks near their junctions with Pallett Creek. SEA boundaries follow the braided stream channel toward the confluence with Big Rock Creek. From the aqueduct at Big Rock Creek to Edwards Air Force Base, the western boundary line follows the FEMA boundaries along the western side of Big Rock Creek braids, including Alpine Butte, and joining to the Little Rock Creek segment along Edwards Air Force Base. On the east segment of Big Rock Creek, the SEA boundaries head north from the Angeles National Forest headwaters of Dorr Canyon (a Big Rock Creek tributary) and the headwater area of Big Rock Creek near State Route-2. The boundaries travel through the Angeles National Forest and follow the wash area of the streams toward the confluence with Pallett Creek. The Angeles National Forest floodplain of the widened area of South Fork of Big Rock Creek is included in the SEA.

South Fork of Big Rock Creek is part of the federally-designated critical habitat of the mountain yellow-legged frog (*Rana muscosa*, FE, SE). This frog is known in the County from only a few high-mountain streams in the San Gabriel Mountains. Climate change and other global factors, such as air pollution, are suspected to be responsible for its endangered status.

Another broad area of the San Andreas Fault Zone near the Valyermo Ranch follows the FEMA boundaries and includes a nesting area for gray vireos near Bobs Gap. Between the Angeles National Forest and the aqueduct, the SEA boundaries follow FEMA boundaries. The eastern boundary follows the FEMA boundary along the main course of Big Rock Creek to the vicinity of Avenue Q East, where it diverges to include sections that have the main area of Lovejoy Buttes. At Avenue O, the eastern boundary returns to the FEMA boundary, and continues northeastward along the FEMA boundary to skirt development in Lake Los Angeles. In the vicinity of Avenue M, the

eastern boundary goes eastward through areas of natural vegetation (from about 100th Street to 215th Street) to include Rocky, Piute, and Saddleback buttes, and connect with the Desert-Montane transect segment.

The southern side branch of the Desert-Montane transect starts in the Angeles National Forest along the ridge of Table Mountain at the San Bernardino-Los Angeles County line. Table Mountain is known for its diverse flora, which includes desert and mountain elements, and some unusual limestone-obligate species. The SEA southern boundary along the ridgeline gradually becomes the western boundary as it skirts the camp developments along the southern base of Table Mountain. The boundary turns north along the western ridge of the Mescal Creek drainage, crossing the California Aqueduct with the State Route-138. The Mescal Creek flora is known to be highly diverse, and the SEA boundaries include much of the Inface Bluff on the west side of Mescal Creek, which adds further diversity to Mescal Creek habitats. From the aqueduct to Avenue R, the western boundary buffers the westernmost desert drainage by 200 feet, which protects the braided area of the watercourse. This part of the SEA includes Black Butte and the Three Sisters (buttes), many smaller unnamed buttes, as well as Mescal and Theodore Payne County wildlife sanctuaries. The east side of the transect is the San Bernardino-Los Angeles County line. At about Avenue U East, the eastern boundary veers off the San Bernardino-Los Angeles County line to the north-northwest, buffering the Puzzle Creek watercourse by about 200 feet, which protects the braiding of the easternmost drainages. Near Avenue R, the boundary trends north, and goes north-northwest near Avenue P to include Moody Butte, lesser unnamed rises, and Blue Rock Butte.

The Desert-Montane segment largely avoids drainages that flow into and out of the Lake Los Angeles community, but the transect includes diffuse watercourses on the south side of Saddleback Butte, Saddleback Butte and the surrounding Saddleback Butte State Park, the Antelope Valley Indian Museum State Park at the base of Piute Butte, and Piute Butte. At about Avenue H and 70th Street East, the boundary turns to the northeast following natural vegetation to the County boundary near Avenue C. Here the boundary turns north along the line to where San Bernardino, Kern and Los Angeles counties meet. This northeastern part of the SEA has WEMO conservation areas for the threatened desert tortoise and state-threatened Mojave ground squirrel. The northeastern area has some BLM land and the County Phacelia Wildlife Sanctuary, which is also County Wildflower Preserve A. The SEA includes large parts of County Wildflower Preserve F.

On Edwards Air Force Base, north to south between Avenues B and E East, and west to east between 140th Street East and the San Bernardino-Los Angeles County line, there is federally-designated critical habitat for the state and federally-threatened desert tortoise (*Gopherus agassizii*). At 190th Street, the critical habitat widens to extend north beyond the County and the SEA into Kern County. At 200th Street, the critical habitat widens to the south to extend to Avenue H and then goes east across the San Bernardino-Los Angeles County line. The desert tortoise critical habitat area on Edwards Air Force Base is included in the SEA, and much of the SEA area north of Avenue H in the eastern drainages of the SEA is designated critical habitat for the tortoise.

The SEA traverses the Antelope Valley from the foothills of the San Gabriel Mountains, to the low elevations of the dry lake basins, and its expanse and considerable topographical relief is reflected in its relatively high floral and faunal diversity. The SEA includes playa lake, alkali marsh, alluvial fan scrub, a mosaic of xeric desert scrubs, Joshua tree woodland, desert riparian woodlands, juniper scrub, pinyon pine, chaparral and mixed conifer, oak, and riparian communities of higher elevations. Transitional zones (ecotones) between these communities often contain unusual species compositions, such as pinyon pine, juniper and Joshua trees together, or Joshua trees adjacent to cottonwood forest.

Edwards Air Force Base has the only good stands of mesquite (*Prosopis glandulosa*) remaining in the County. It has areas of Mojave spineflower (*Chorizanthe spinosa*), creosote bush scrub, alkali sink, and the transition vegetation between the two. Rosamond Lake has the best example of the shadscale scrub and alkali sink biotic communities in the County. Shadscale scrub needs heavy soil with underlying hardpan between 3000-6000 feet elevation, which is unusual in the County, and more common in the north Mojave Desert and Owens Valley. In addition, the playa has the southernmost extension of the Great Basin kangaroo rat (*Dipodomys microps*), which is an isolated geographic population of scientific interest.

The southernmost portions of the three "legs" of the SEA lie within the Angeles National Forest, and include the upper tributary watersheds and streams for Little Rock, Big Rock, and Mescal creeks. These areas support the mixed conifer, which are multi-species oak woodlands that are common to the middle-elevation zones on the north face of the San Gabriel Mountains. The creeks are higher energy systems at those elevations, as they collect water from the surrounding terrain, and are typically lined with woodlands of alder, willow, sycamore and cottonwood, with varying densities and with various compositions of species.

As the creeks drop north of the pressure ridges of the San Andreas Fault Zone, they lose gradient and widen, and most of the flow is beneath the surface, except during high energy storms or in the spring (depending upon rainfall totals in the watersheds). The vegetation becomes sparser and less evenly distributed along the channel margins. Crossing the lowlands of the Antelope Valley, the channels support a variety of desert scrub vegetation within the alluvial plains. Where the alluvial plains are wide and shallow, cottonwood-willow woodland and sycamore woodland vegetation communities often occur within the overall floodplain on stable terraces; around oxbow flow zones in the Antelope Valley; or where the groundwater table is replaced or augmented by agricultural runoff. The surrounding upland habitats are primarily desert scrubs, including creosote and chenopod scrubs, sand sheets (chiefly around the buttes), and Joshua tree woodland. Intact Joshua tree woodland, with native substrates present, supports a relatively high diversity of annual wildflowers, reptiles and mammals. The Joshua trees also provide nest sites for many resident and migratory bird species.

Lovejoy, Alpine, Piute, Black and Saddleback buttes, along with other, smaller unnamed buttes, form most of the topographical relief within the SEA. These areas offer different ecological conditions that are associated with rock shelter, perching sites, nesting sites, denning areas, wind protection and sand sheet accumulation areas. Local and migratory bat species roost and reproduce in the caves and crevices of the butte formations. The higher buttes provide the only local nesting sites for owls and other birds of prey.

Alpine Butte is the least disturbed butte in the County, with excellent stands of Joshua tree woodland and creosote bush scrub, and impressive wildflower displays when rainfall creates appropriate conditions. Lovejoy Butte has Joshua tree woodland and creosote bush scrub, with a central wind-blown sand community for a good mixture of rock and sand habitats. In addition, the close proximity of Lovejoy Butte to Big Rock Creek Wash increases the diversity of habitats in the area. It also suffers from impact from the Lake Los Angeles community, which borders the butte on three sides. The clustering of buttes in the SEA may be important to the abundant, diverse wildlife that inhabits the various vegetation communities around and in the buttes. Saddleback Butte and Piute Butte together are protected as a state park, but Saddleback Butte is also subject to development for campsites and hiking trails. Piute Butte has a prehistoric site that may protect it from much future recreational development. All of the buttes harbor diverse wildlife and flora. Most of them are critical habitat for the state and federally-threatened desert tortoise. Some buttes within the desert tortoise's

critical habitat are not included in the SEA.

The active and fallow open agricultural lands support a diversity of wildlife species, which essentially regard the fields and ditches as irrigated desert. Birds of prey frequently hunt over the open agricultural areas, including fallow fields; wide-ranging predators also find excellent hunting conditions in and around agricultural areas. A spectrum of local and migratory bat species feed over the irrigated fields in the spring and summer, when insect numbers are the highest, and at least one sensitive bat species, the pallid bat, forages in open scrub or ruderal desert habitats.

The northern portion of the SEA contains several unique habitat types, including mesquite bosque (threatened locally by lowering water tables and harvest for firewood), clay pan pools, vernal pools, alkali grasslands, alkali and freshwater marshes, and permanent ponds. Hundreds of bird species have been recorded from the pond and marsh habitats around the dry lakes and ponds, and numerous species nest on the playa margins or in the associated riparian habitats. The open creosote scrub and other xeric habitats on the slopes surrounding the lake playas serve as important wintering areas for many raptor species, as well as large numbers of songbirds.

Wildlife Movement

The SEA extends from the Angeles National Forest to the playa lakes within Edwards Air Force Base, encompassing most of the two largest drainages exiting the northern slope of the San Gabriel Mountain range. The geographical features of the SEA serve as a major habitat linkage and movement corridor for all wildlife species within its vicinity and in an intergenerational sense, many of the plant species. Ecologically generalist species (mountain lion, bobcat, coyote, gray fox, etc.) have the ability to move across such vast areas and through changing habitat types. For such species, the SEA may serve as an important system for long-term and genetic exchange among populations. For smaller or less-mobile species or taxa, which are narrowly restricted in their habitat needs, the SEA can serve as a broad linkage zone, in which individual movement can take place during seasonal population dispersal or over generations. This provides essential genetic exchange within and between metapopulations. The two drainages, combined with the upland terrestrial Desert-Montane transect portion of the SEA, ensure linkage and direct movement areas for all of the wildlife species present within the County portion of the Antelope Valley.

Regional Biological Value

The SEA meets several SEA designation criteria and supports many regional biological values. Each criterion and how it is met described below.

CRITERIA ANALYSIS OF THE ANTELOPE VALLEY SEA

	Criterion	Status	Justification
A)	The habitat of core populations of endangered or threatened plant or animal species.	Met	Critical habitat for the only known Antelope Valley population of the federally-endangered arroyo toad is adjacent to Little Rock Reservoir, upstream in Little Rock Creek, and some may still be found downstream of the dam in the SEA. The SEA encompasses much of the County ranges of the federally-threatened California desert tortoise, including much of the County critical habitat for the tortoise. The state-threatened Mohave ground squirrel occurs throughout

	Criterion	Status	Justification
			much of the SEA. The SEA includes some of the critical habitat of mountain yellow-legged frog in the South Fork of Big Rock Creek. It includes habitat designated in the Western Mojave Plan (WEMO) for the alkali mariposa lily, which is a rare lily of the desert floor.
B)	On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The mesquite bosque, sand sheet, rocky butte, desert riparian woodland, and alluvial fan sage scrub habitats are unique and regionally restricted biotic communities encompassed by the SEA. Desert species not, or rarely, found elsewhere in the County, such as verdin, black-throated sparrow, Mojave rattlesnake, desert banded gecko, Leech's prionid borer, and mesquite borer, occur within these habitats. Additionally, the ponds and other riparian and wetland systems in the northern portion of the SEA support numerous water birds and raptors not found elsewhere in the County.
C)	Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The desert alluvial fan sage scrub, Joshua tree woodland, desert riparian woodland, mesquite bosque, alkali meadow/marsh, desert freshwater marsh, playa lake and seasonal pool habitats are located within, are unique to, or best represented within, the SEA.
D)	Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, migrating grounds and is limited in availability either regionally or in the County.	Met	The freshwater habitats within and around Rosamond, Buckhorn and Rogers dry lake basins have large concentrations of migratory and resident waterfowl and birds of prey, providing them with essential seasonal and permanent resources. The rocky desert buttes are unique roosting, sheltering, perching and nesting sites for birds of prey and bats. This SEA is centered on migratory routes for both plants and animals along principal desert washes and buttes that connect the mountains to freshwater playas.
E)	Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.	Met	The mesquite bosque that is located within the SEA is clearly at an extreme of its geographical range, along with its associated biota, such as the mesquite borer. Edge populations usually represent an unusual genetic variation in a population or community, and therefore meet the criterion of scientific interest as well as the criterion of a population at the extreme physical/geographical limit of its range.
F)	Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.	Met	The SEA encompasses some of the most biotically intact acreages of Joshua tree woodland, desert riparian woodland, and desert alluvial fan sage scrub remaining in the County. Mesquite was formerly widely distributed in the Antelope Valley, but due to harvesting and drawdown of groundwater, is now limited to a few protected areas, such as the Edwards Air Force Base.

In conclusion, the area described is an SEA because it contains: A) the habitat of core populations of endangered and threatened plant and animal species; B-C) biotic communities, vegetative associations, and habitat of plant and animal species that are either unique or are restricted in distribution in the County and regionally; D) concentrated breeding, feeding, resting, or migrating

grounds, which are limited in availability in the County; E) populations of scientific interest at the edge of their range including the desert tortoise, the mesquite bosque, and the Mojave ground squirrel; and F) areas that provide for the preservation of relatively undisturbed examples of original natural biotic communities in the County.

Joshua Tree Woodlands SEA

Boundary and Resources Description

The Joshua Tree Woodlands SEA is located in the western portion of the Antelope Valley west and northwest of the Antelope Valley California Poppy Reserve in an unincorporated area of the County. This SEA encompasses many of the remaining old-growth stands of Joshua trees (*Yucca brevifolia*) on the west side of the Antelope Valley. Joshua tree woodland is a complex biological community of the gradual slopes of higher elevation desert areas that once covered much of this part of the Antelope Valley around the Antelope Wash. Joshua trees only occur within the Mojave Desert, and Los Angeles County populations are at the western limit of the species' range.

Because Joshua trees live in areas that are easily developed for residences and agriculture, this habitat has become very fragmented in the County. The SEA consists of eight separate units, seven of which are in close proximity to each other between the Kern-Los Angeles County line to the north, and the California Aqueduct and Fairmont Butte to the south. The eighth unit is in an arroyo on the north side of the principal western ridgeline of Liebre Mountain, which is near the furthest western extent of Joshua tree woodland in Southern California. This woodland is located partially within the Angeles National Forest, and east and adjacent to the Interstate-5. The eighth unit is bordered on three sides by the San Andreas SEA.

All of the SEA except Unit 8 is within an area designated as the Antelope Valley Globally Important Bird Area (IBA) by the California Audubon. This part of the Antelope Valley is very important as a resource area that supports spring and fall migration of birds, from the small passerines to the larger raptors, such as the state-threatened Swainson's hawk (*Buteo swainsoni*) and turkey vultures (*Cathartes aura*). The Joshua tree woodland is a very important resource to these migrations by supplying perches and food for these animals on their journeys. The SEA is near the San Andreas SEA, the Antelope Valley California Poppy Reserve, the Arthur B. Ripley Desert Woodland State Park, and the County George F. Bones Desert Pines Wildlife Reserve; however, many of these areas are not contiguous with one another nor with the SEA. Unit 2 of the SEA includes much of the Arthur B. Ripley Desert Woodland State Park. Unit 8 of the SEA is contiguous with the San Andreas SEA.

Fragmentation is a concern because the Joshua trees depend on a small moth for reproduction. Only two species of moth can successfully pollinate Joshua trees, and in the SEA, there is only the yucca moth (*Tegeticula synthetica*). The moth may have limited dispersal abilities, and the Joshua trees cannot reproduce from seeds without pollination from this particular moth. Cross pollination is regarded as essential to a species' genetic diversity, which is essential to adaptation to environmental change.

The Joshua trees in the seven units have the growth form of the lower elevation woodlands of the flatter areas, and somewhat spaced from one another and less clumped. The Joshua trees in the eighth unit have a growth form that is more common in the hilly areas, where the individuals sprout from connected rhizomes and are clumped. Many times, these clumps are clones, with individuals all sharing the same genetic identity.

The SEA is located at least partially in each of the following United States Geological Survey (USGS) 7.5' California Quadrangles: Neenach School, Fairmont Butte, Black Mountain, and Lebec.

The SEA is composed of eight units. The overall boundaries are as follows: The western boundary for units 1-7 terminates at 220th Street West (the border between Ranges 15W and 16W). The eastern boundary is 145th Street West. The northern boundary is on Avenue A at the Kern-Los Angeles Countyline. The southern boundary straddles the California Aqueduct, touches the Los Angeles Aqueduct, and is approximately on Avenue F. The southernmost area is located close to the foothills of the western San Gabriel Mountains.

Unit 1: The northernmost unit is bounded by Avenue A on the Kern-Los Angeles County line on the north between 200th Street West and approximately on 218th Street West. It extends irregularly to the south along a desert wash contour, about a 0.7 mile at its greatest extent. The current southern boundary is determined by agricultural clearing. This unit has a Joshua tree woodland with many shrub components of the biological community intact, including a floor covered by the wildflower slender goldfields (*Lasthenia gracilis*) in the spring.

Unit 2: Another unit is located between Avenue C to the north and Avenue F to the south (straddling part of State Route-138 on Avenue D and part of Lancaster Road on Avenue E), and east to west from about 200th Street to about 220th Street West. Vegetation clearance in various parcel units accounts for this unit's irregular shape. Agricultural clearing on both sides of the Antelope Wash has separated this unit from Unit 1 to the north. The intervening area is a broad wash plain with rich alluvial soils. The former agricultural fields may now become fields of photovoltaic panels to generate renewable energy. This unit has a southern square mile that straddles the California Aqueduct and touches the Los Angeles Aqueduct at the base of the San Gabriel Mountains. In the northern area, this unit has old-growth Joshua tree woodlands on a rocky ridge that grades into stands of Joshua trees and woodland that includes California junipers (*Juniperus californica*) in flatter areas toward the south. The southern and eastern parts of this unit overlap with much of the Arthur B. Ripley Desert Woodland State Park. The California Aqueduct is open in this area and is an important resource for bird migration along the desert slopes of the western San Gabriel Mountains, particularly waterfowl. The Los Angeles Aqueduct is generally in concrete pipe for most of its extent, and in this area, is covered by a berm and road. A colony of burrowing owls (*Athene cunicularia*), which is a state species of special concern, was discovered during surveys for an adjacent photovoltaic panel development, and probably other colonies or individuals of the owl live within this unit.

Unit 3: Another unit is located between Avenue D to the north and Avenue E to the south, and between 190th Street and 195th Street West. It is on the broad outwash alluvial area of Kings Canyon and adjacent drainages. This outwash area is somewhat blocked by the aqueducts, but both aqueducts are provided with underpass channels for outflow of the canyons onto the desert floor. The SEA includes a central cleared area that is regenerating the Joshua tree woodland and a residence with less than 40 acres cleared. The area next to Avenue D that has been cleared of Joshua trees is not included.

Unit 4: The square mile between Avenue C and Avenue D, and between 180th Street and 190th Street West has a good stand of Joshua tree and juniper woodland. This is also in the Kings Canyon alluvial wash area. There is a known area of Joshua tree regeneration to the east that is not included in the SEA.

Unit 5: The quarter square mile between Avenue C-5 and Avenue E, and between 180th Street and

185th Street West, is also on the Kings Canyon alluvial wash area and has a good stand of Joshua tree and juniper woodland.

Units 6: An area of a little over one-eighth square mile is located at the corners of both units 4 and 5. It is between Avenues D and E and between 180th Street and what would be 174th Street West. This is also in the Kings Canyon alluvial wash area and has a good stand of Joshua tree and juniper woodland.

Unit 7: A large irregular unit is located roughly between Avenue B, Avenue C5, 145th Street and 180th Street West. It has an extensive area of Joshua tree-juniper woodland that grades into stands of Joshua trees towards the east. There is a known area of Joshua tree regeneration in former agricultural fields between 160th Street West and 170th Street West that is not included in the SEA. The alluvial wash in the SEA is a combined area of outflow from Kings Canyon, unnamed canyons, and Broad Canyon.

Unit 8: The eighth unit is in an arroyo on the north side of the principal western ridgeline of Liebre Mountain, which is near the furthest western extent of Joshua tree woodland in Southern California. This woodland is located partially within the Angeles National Forest. It is east and adjacent to the Interstate-5. The eighth unit is bordered on three sides by the San Andreas SEA. This woodland has the clonal growth that is typical of Joshua trees in hilly areas.

The SEA is located primarily on the western Antelope Valley floor between the Tehachapi Mountains and the western San Gabriel Mountains. The topography of the SEA is extremely flat with the land sloping less than 200 feet in approximately five miles. The location and orientation of the SEA represents a matrix of remnant stands of Joshua tree woodland among a patchwork of disturbed areas. Nearly all of the land within the SEA is undisturbed and vegetated. Most of the land surrounding the SEA is disturbed by agricultural use, and also has some scattered rural residences. The SEA is entirely within the unincorporated area of the County.

Wildlife Movement

Wildlife movement within the SEA is possibly limited to local movement, but large-scale movement across the Antelope Valley floor is probably much facilitated by the Joshua tree habitat as island-like stepping stones. Typically in burned-over areas, animal paths tend to orient toward the Joshua tree habitat. Birds, and possibly bats, and other aerial organisms that use the habitat linkage along the desert side of the San Gabriel Mountains probably use the woodland in the SEA for resting and feeding. Animals foraging within the SEA are unlikely to occur in concentrated numbers due to the heterogeneity of the topography and habitat of the SEA. However, local movement to and from the different SEA areas, as well as to and from the San Gabriel Mountains and the Tehachapi Mountains may be restricted due to the disturbed nature of the Antelope Valley floor. Wildlife movement is likely to converge in areas where movement is still possible, which produces concentrated movement areas or "bottlenecks."

Regional Biological Value

The SEA meets several SEA designation criteria and supports many regional biological values. Each criterion and how it is met described below.

CRITERIA ANALYSIS OF THE JOSHUA TREE WOODLANDS SEA

Criterion		Status	Justification
A)	The habitat of core populations of endangered or threatened plant or animal species.	Not Met	Although there are several listed species that occur within the SEA, this criterion is not met due to the lack of known core population areas.
B)	On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The SEA contains large patches of undisturbed Joshua tree woodland habitat, which has become increasingly rare in the region.
C)	Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution	Met	As stated above, Joshua tree woodlands have become rare in the region, and are even more rare in the County.
D)	Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, or migrating grounds and is limited in availability either regionally or in the County.	Met	The habitat within the SEA has been studied for how it may serve as a concentrated breeding, feeding, resting, or migrating ground for any species. Some cross-desert migratory routes depend, in part, on the cover and habitat of the Joshua tree woodland. The units 1-7 of the SEA on the Antelope Valley floor are in a globally IBA, known as a bird migration route. The Joshua tree woodland is an important component of resources that supports this migration.
E)	Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.	Met	Due to the scarcity of Joshua tree woodland, specimens of the quality found in the SEA are important to science and have become living laboratories. The SEA contains the most westerly extent of this habitat type.
F)	Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.	Met	The Joshua tree woodland contained within the SEA is an excellent example of this community type.

In conclusion, the area is an SEA because it contains: B-C) Joshua tree woodland, a rare community both regionally and within the County; D) habitat important to breeding, feeding, and migration; E) the geographic limit of Joshua tree woodland; and F) an excellent undisturbed example of Joshua tree woodland.

San Andreas SEA

Boundary and Resources Description

The San Andreas SEA is located in the western portion of the Antelope Valley in an unincorporated area of the County. The SEA is the second largest SEA and includes many diverse habitats. This is in large part due to the northwestern area being a meeting place for several diverse biomes and wildlife corridors. There are five ecoregions that meet in this area and have biological species that extend along the SEA and San Andreas Fault in the County. These ecoregions include: California Coastal Mountains; California Central Valley; Tehachapi Mountains, which extend to the southern

Sierra Nevada; San Gabriel Mountains, which extend to other ranges in the Transverse Ranges; and the Antelope Valley, which is the western limit of the Mojave Desert. Wildlife corridors extend along the courses of the mountain ranges, as well as along the San Andreas Fault and Garlock Fault, which provide a great variety of habitats and frequent emergent water that is important for wildlife and plant movement and connectivity. The location and orientation of the SEA coincides with a segment of the San Andreas Fault Zone. The SEA includes a small portion of the western south-facing Tehachapi foothills, which are known for wildflower field displays in years of good rainfall. The SEA goes east and south across grasslands at the western tip of the Antelope Valley, includes Quail Lake, a sag pond enhanced to receive water from the West Branch of the California Aqueduct. From Quail Lake, the SEA extends up the northern foothills of Liebre Mountain and Sawmill Mountain, and includes: Portal Ridge; large portions of Leona Valley; Ritter Ridge, Fairmont and Antelope buttes; and portions of Anaverde Valley. It also includes a disjunct area that encompasses water bodies along the fault, Lake Palmdale, and Una Lake, with a terminus at Barrel Springs.

The Antelope Valley and adjacent desert slopes of the SEA are recognized by California Audubon as the Antelope Valley (Lancaster) Globally Important Bird Area (IBA). Near Lake Palmdale in the disjunct eastern section of the SEA is part of the Antelope Valley (Lancaster) IBA and near Barrel Springs is part of the Santa Clara River IBA.

The SEA is located at least partially in each of the following United States Geological Survey (USGS) 7.5' California Quadrangles: Lebec, La Liebre Ranch, Neenach School, Fairmont Butte, Little Buttes, Liebre Mountain, Burnt Peak, Lake Hughes, Del Sur, Lancaster West, Sleepy Valley, Ritter Ridge, and Palmdale.

The northwestern tip of the SEA encompasses south-facing foothills at the western end of the Tehachapi Mountains, in the northwest corner of the County, on the eastern side of Tejon Pass. The largest extent of native perennial grassland and diverse wildflower fields occurs in this area of the County.

From the Tehachapi Foothills, the southern boundary goes south-southeast along Interstate-5, including much of Peace Valley in the Gorman area, which is the broad faulted area that includes Gorman Creek. The SEA boundary crosses the Western Branch of the California Aqueduct, which is south of the junction of Interstate-5 and State Route-138. The boundary continues south along Interstate-5 until the point where the Liebre Mountain ridgeline dips to the highway, and the SEA boundary turns eastward and follows the ridgeline along the northern side of Liebre Mountain.

Along this section of Interstate-5 are several large underpasses for stream courses that are extremely important for wildlife connectivity across Interstate-5. The Angeles National Forest boundary is just east of the highway, and south of the aqueduct. Just north of the Liebre Mountain ridgeline, the San Andreas borders the north, east, and south sides of the eight unit of the Joshua Tree Woodlands SEA. This woodland is an unnamed arroyo, and it has the clumped growth form that Joshua trees (*Yucca brevifolia*) exhibit in hilly areas. The woodland is located near the westernmost limit of the range of the species, with a small number of stands and individuals known west of the Interstate-5. The SEA includes the northern slope are of the Angeles National Forest with its diversity of chaparral, grasslands, and oak and conifer forests.

After turning east from Interstate-5 and climbing uphill on the northern slope of Liebre Mountain, the SEA boundary crosses the ridgeline to the south to incorporate natural pristine areas of headwaters for all the branches of Liebre Gulch, which are part of the headwaters for Piru Creek, which is the largest tributary of the Santa Clara River in Ventura County. The SEA boundary returns to the north

face of Liebre Gulch at about the location of Sandberg. The boundary tracks the Sawmill Mountain-Maxwell Road, which is generally on the broad ridgeline of the mountains and generally trends in a southeasterly direction. This ridgeline is the headwaters of Castaic Creek, which is the largest tributary of the Santa Clara River in the County. Castaic Creek is above the Castaic Reservoir, which extends into Cienega Canyon and Fish Creek, which is federally-designated critical habitat for the endangered arroyo toad (*Anaxyrus californicus*). In addition, maintenance of clean water in the source areas is critical for the species.

The boundary turns northeast where it meets Lake Hughes Road. This is an extremely important area of connectivity as the canyon along the Lake Hughes Road (Elizabeth Lake Canyon) drains to Castaic Creek and the Santa Clara River, whereas the Amargosa Creek that goes east and west from the Lake Hughes Road in the Fault valley drains to the Antelope Valley in both directions. The junction is topographically broad and well-vegetated though residential, which is excellent for wildlife connectivity in spite of a few houses. This is one of the major connective areas for the Pacific Ocean, the mountains, and the Mojave Desert. Castaic Creek is a principle tributary of the Santa Clara River, which runs to the seacoast in Ventura County. The San Gabriel Mountains are the home of Castaic Creek. The Antelope Valley receives most of the drainages from the San Andreas Fault valley.

The SEA boundary goes north at the junction with Lake Hughes Road and then skirts the Lake Hughes community's extension into Pine Canyon along the San Andreas Fault. In Pine Canyon, the boundary turns north and returns to its southeasterly direction, skirting the Lake Hughes development along the southern edge of Portal Ridge. Portal Ridge is entirely included in the SEA. A side extension of the southern boundary includes Lake Hughes, which is important for migrating waterfowl, with its sheltered position in the Fault valley. The boundary extends along the southern edge of Lake Hughes, Munz Lake, and Elizabeth Lake, and then trends southeast to go along the Leona Divide, including a large portion of Leona Valley.

The entire area along the San Andreas Fault is rich in wetlands and bogs, but Leona Valley has these in abundance, even in many yards. All of the wetlands in the San Andreas Fault valley and Portal Ridge are home to the greatest concentration of the tricolored blackbird in Southern California, many of which are year-round residents. This bird species has experienced great population declines in recent years and is proposed for listing at both state and federal levels. In the community of Leona Valley, the southern SEA boundary goes along Lost Valley Creek and then along Leona Road to exclude some of the denser residential area in this section. The included area in Leona Valley has many of the bogs that line the Fault and the less populated farm areas along Portal Ridge north of Leona Road.

North of the Bouquet Canyon watershed, the southern SEA boundary dips south around an expansive area of drainages and bogs used by the tricolored blackbird on the old Ritter Ranch. From Ritter Canyon to the east, the boundary follows the old Ritter Ranch high road along the Sierra Pelona, crosses from 40th Street to the California Aqueduct along vegetation in the Anaverde Valley (where the boundary transitions from the Amargosa Creek drainage to the Anaverde Creek drainage), and then follows the aqueduct to the area where Anaverde Creek exits from the Fault valley. At the Lancaster Landfill boundary, the SEA boundary goes north and becomes the north SEA boundary at Verde Point.

The northern boundary of the SEA begins at Tejon Pass next to Interstate-5 and follows the Kern-Los Angeles County line eastward to the intersection of the western branch of the California Aqueduct in the western Tehachapi Foothills. This area along the Kern-Los Angeles County line is a

contact boundary with the designated critical habitat for the federally-endangered California condor (*Gymnogyps californicus*), which is a bird that nearly went extinct and was saved by prodigious efforts in captive breeding. The boundary turns southeast to contour along the toe of slopes of low-lying hills where some of the few remaining examples of native perennial bunchgrass communities in California are found. The boundary crosses State Route-138, just east of where Tentrock Canyon also crosses State Route-138 and turns eastward into the Antelope Valley. Here the northern SEA boundary turns east to contour along the foothill area of the northern slope of Liebre Mountain. The boundary continues southeast following the edge of agricultural fields, which are important for raptor foraging. These fields often go along the Los Angeles Aqueduct, which is a little south of the California Aqueduct in this area, or along the California Aqueduct itself.

The boundary eventually tracks along the northeast edge of Fairmont Reservoir (another breeding site for the tricolored blackbird), and turns northeast to include a patchwork of farmed areas between the Fairmont and Antelope buttes, which are known to have tricolored blackbird feeding grounds. The boundary makes an inclusive path to encompass the Broad Canyon Wash, the Fairmont and Antelope buttes, and the Antelope Valley California Poppy Reserve State Park. These desert buttes are concentrated wintering grounds for birds of prey, and provide roosting sites that are surrounded by cultivated fields that support a plentiful food supply of rodents, rabbits, and hares. They are the most westerly buttes in the Mojave Desert, and with their proximity to the San Gabriel Mountains, have unique ecological relationships of scientific interest. Near the southern area of the buttes, the boundary follows agricultural fields along 130th Street West and then 135th Street West south to Munz Ranch Road (Willow Springs Road on some maps). Along 135th Street West, the boundary crosses Myrick Canyon where it spreads out onto the plain of the desert floor. The upstream areas of Myrick Canyon are included in the SEA.

The boundary tracks along the northwest side of Munz Ranch Road and then crosses to include Willow Springs Canyon, where Willow Springs Canyon is in its most undisturbed state. Where Willow Springs Canyon crosses the California Aqueduct, the northern SEA boundary turns east along the California Aqueduct as it passes along the northern base of Portal Ridge. Following the southern edge of the California Aqueduct, the boundary continues in a southeasterly direction to the east side of Ritter Ridge to Leona Siphon. A development along Joshua Tree Ranch Road near the summit of Ritter Ridge is an area excluded from the SEA. The SEA northern boundary turns east for roughly one quarter mile along the southern edge of a tributary to Amargosa Creek. Where the Amargosa Creek terminates Ritter Ridge, the SEA boundary crosses the creek and ascends along the ridgeline of an unnamed ridge to where it meets the southern boundary at Verde Point.

East across the State Route-14 is a disjunct part of the SEA that incorporates Lake Palmdale and Una Lake and extends along the Fault to 37th Street East, including the ridgelines north and south of Barrel Springs Road, which includes the sag ponds or Barrel Springs. The Palmdale Ditch is included in this part of the SEA. Many migrant birds using the desert water features can be observed at these artificial lakes and the natural springs of this area during the spring and fall migration.

The gap between the two portions of the SEA includes the Antelope Valley Landfill, disturbed lots, and State Route-14.

The majority of land within the SEA lies within unincorporated area of the County. Other jurisdictions include the Angeles National Forest, the City of Palmdale, and the City of Lancaster.

Wildlife Movement

The SEA includes several important linkages for wildlife movement. The foothills in the western-most part of the SEA are an important linkage between the San Gabriel Mountains, the Tehachapi Mountains, and the Coastal Ranges. This linkage to the Tehachapi Mountains is important because they connect to the southern-most extent of the Sierra Nevada Mountains. The Tehachapi Mountains represent the only mountain linkage from the Transverse Ranges and the Coast Ranges to the Sierra Nevada Range. This feature may be an important topographic reference for migrating birds, as well as providing high elevation foraging grounds along the migratory route. The several ranges that meet at the western end of the SEA, provide a valuable link for gene flow between divergent subspecies, varieties, and populations of many species. The SEA includes numerous drainages that extend onto the Antelope Valley floor towards resources, such as the Fairmont and Antelope buttes. These washes provide an important linkage for animals traveling between the Valley floor, the buttes and the western part of the San Gabriel Mountains. In addition, Anaverde Creek, Amargosa Creek, and Pine Canyon facilitate east-west wildlife movement through the mountains, Portal Ridge, and Ritter Ridge. Tributary drainages from the Santa Clara River, such as Elizabeth Lake Canyon and San Francisquito Canyon connect the ocean and coastal zones to the Fault. The frequency of valuable riparian communities along this travel route, which are located within an otherwise arid climate, further contributes to the SEA's importance for wildlife and habitat linkages in the region.

Regional Biological Value

The SEA meets several SEA designation criteria and supports many regional biological values. Each criterion and how it is met described below.

CRITERIA ANALYSIS OF THE SAN ANDREAS SEA

Criterion		Status	Justification
A)	The habitat of core populations of endangered or threatened plant or animal species.	Not met Met in Future?	Although there are several listed species that occur within the SEA, this criterion is not met due to the lack of known core population areas. The far northwestern border with Kern County is the edge of critical habitat for the California condor. The tricolored blackbird may soon be listed and has its largest population in Southern California within the SEA.
B)	On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The SEA encompasses a series of marshes and sinks concentrated along the San Andreas Fault Zone, which are both unique and restricted in distribution. The Fairmont and Antelope buttes represent a unique habitat due to their location, as the most westerly buttes of the Mojave Desert and their close proximity to several geographic regions. As the confluence of a number of major geographical areas, the Mojave Desert, the San Gabriel Mountains of the Transverse Ranges, the Coastal Ranges, and the Tehachapi Mountains produces a unique and regionally rare flora that represents a transition between desert, foothill, and several montane environments.

	Criterion	Status	Justification
C)	Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The confluence of five major geographical areas—the Mojave Desert, the San Gabriel Mountains, the Coastal Ranges, the Tehachapi Mountains, and the Central Valley—has produced the most unique and diverse flora found in the County, and represents a transition between desert, foothill, and montane environments. The SEA also includes the southern limit of the foothill woodland community, blue oak, gray or foothill pine, and California buckeye, rare relic stands of Great Basin sagebrush scrub, and rare wildflower fields.
D)	Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, or migrating grounds and is limited in availability either regionally or in the County.	Met	The Fairmont and Antelope buttes provide vital habitat to many wide ranging species, which forage in outlying habitat, but use the buttes for nesting, roosting, denning, and refuge. The buttes also serve as concentrated wintering grounds for birds of prey, which are rare in the County, and which forage on grassland and agricultural fields in the vicinity. Lakes and other wetland areas along the Fault and throughout the SEA provide breeding habitat for amphibians and feeding habitat for migrating birds that traverse the slopes adjacent to the Mojave Desert. The Fault is one of the principle wildlife corridors and connective areas for in the County. Major drainages (Santa Clara River, San Francisquito Canyon, and Lake Elizabeth Canyon) run from the coast through the San Gabriel Mountains and end at the Fault, which also has extensive riparian habitat that facilitates migration. The Fault provides the final westernmost linkage to the Mojave Desert (Antelope Valley). The tricolored blackbird is a year-round resident of the SEA.
E)	Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.	Met	The transition of several habitat types including: creosote bush scrub, Joshua tree/California juniper mixed woodland, and desert chaparral, makes the SEA valuable for educational and scientific reasons. The close proximity of the Fairmont and Antelope buttes to the San Gabriel Mountains renders them unique in their species composition and ecological relationships and, therefore, of interest to scientists. The concentrated diversity of vegetation types, particularly in the western half of the SEA, creates an outstanding opportunity for educational use. This area also harbors the southern limit of the foothill woodland community, blue oak, gray or foothill pine, and California buckeye, as well as rare relic stands of great basin sagebrush scrub.
F)	Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.	Met	The slopes of Ritter Ridge support one of the most pristine mixed stands of Joshua tree and California juniper in Los Angeles County. The location of the SEA at the confluence of five major geographical areas, the Mojave Desert, the Central Valley, the San Gabriel Mountains of the Transverse Ranges, the Coastal Ranges, and the Tehachapi Mountains has produced a community-rich area with desert, foothill, and montane environments. The SEA encompasses large, mostly

	Criterion	Status	Justification
			undisturbed examples of all of these communities.

In conclusion, the area is an SEA because it contains: B-C) biotic communities, vegetative associations, and habitat of plant and animal species that are restricted in distribution in the County and regionally; D) concentrated breeding, feeding, resting, and migrating grounds, which are limited in availability in the County; E) biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community; and F) areas that provide for the preservation of relatively undisturbed examples of original natural biotic communities in the County.

San Dimas Canyon and San Antonio Wash SEA

Boundary and Resources Description

The San Dimas Canyon and San Antonio Wash SEA is located along the cismontane foothills of the eastern San Gabriel Mountains. Generally, the SEA is centered on the mouths of four major canyons, which flow from the mountains and interconnecting terrain. From east to west, these canyons include San Antonio Canyon above the City of Claremont as one component; and Live Oak, Marshall, and San Dimas canyons above the cities of La Verne and San Dimas as a second component. The SEA incorporates areas with diverse natural habitat ranging from high elevations to the foothill alluvial areas of two of the major drainages of the San Gabriel Mountains. San Dimas Canyon is a tributary of the San Gabriel River. San Antonio Wash is a tributary of the Santa Ana River.

The SEA is found within the Mount Baldy and Ontario U.S. Geological Survey (USGS) 7.5' California Quadrangles.

Over most of its boundaries, particularly to the north, east, and west of both the San Dimas Canyon and San Antonio Wash components, the SEA is bordered by open space within the Angeles National Forest. Generally to the south, however, the borders are mostly defined by the edge of urban development within the San Gabriel Valley. The San Dimas Canyon component covers approximately 5,500 acres and includes portions of Live Oak, Marshall, and San Dimas canyons. The smaller component, San Antonio Canyon, covers approximately 1,200 acres of the San Antonio Canyon alluvial outwash. In total, this SEA encompasses 6,727 acres.

In general, the topography of the SEA is severe, consisting of steep-walled canyons and narrow ridgelines. Elevations range from a high of approximately 3,000 feet above mean sea level (MSL) along the ridges of San Dimas Canyon, to a low of approximately 451 feet above MSL in San Antonio Wash. Several major drainages and numerous tributaries exit the San Gabriel Mountains through this SEA.

The wide range of elevation, topography, slope aspect, and geology represent a wide array of physical habitats within this SEA. Consequently, a number of plant communities exist, including grasslands, riparian, shrublands, woodlands, and forests. Within these major community types, there are many sub-communities, which vary according to plant species dominance. This area contains the last remaining relatively well-developed lower montane riparian habitat in the eastern County. Dammed drainages have created significant reservoirs or flood control basins in the SEA. The SEA is within several jurisdictions including: the Angeles National Forest, the unincorporated area of the

County, the City of Claremont, the City of Glendora, the City of La Verne, and the City of San Dimas.

The more westerly component of this SEA generally includes portions of the lower watersheds of San Dimas, Marshall, and Live Oak canyons, which is part of the San Dimas Canyon component. The San Dimas Canyon watershed is part of the Experimental Forest section of the Angeles National Forest. Experiments were conducted and data was collected here during the latter half of the 20th century to determine the relationships among rainfall, topography, vegetation, and runoff. Much of the work and results influenced flood control in the Los Angeles Basin and even other areas of the U.S. The area was carefully protected through very limited and monitored access. The terrain chiefly includes undisturbed natural habitats of rocky canyon walls and canyon forest, riparian areas of many vegetation types, coniferous and oak forest, chaparral, and grassland. A few slopes were altered with vegetation removal in order to experiment on the effect of vegetation, and some of these are still grassland.

This SEA area on the border of the granitic San Gabriel Mountains has unusual rock strata, such as the Glendora Volcanics. Much of the grassland is natural and has unusual vegetation, such as wildflowers that prefer clay substrates. Not too distant from this area are critical habitat areas for the endangered thread-leaved brodiaea (*Brodiaea filifolia*). Some of these brodiaea and other rare wildflowers could occur in appropriate habitat of the SEA in undiscovered populations.

Beginning at Johnstone Peak in the west, the western boundary follows the ridgeline separating Big Dalton Canyon and San Dimas Canyon. Just before this ridgeline is intersected by Big Dalton Canyon Road, the SEA boundary turns east. From the area of Big Dalton Canyon Road, the northern boundary follows and crosses over a series of ridgelines to include the upper portions of several tributary canyons. It continues in this fashion in a southeasterly direction eventually meeting and following the Sunset Ridge Fire Road (Sunset Peak Motorway), which separates Wolfskill and Marshall canyons. The tributaries San Dimas Canyon include Lodi, West Fork of San Dimas, and San Dimas from near the junction with Wolfskill Canyon. The lower section of Wolfskill Canyon with and below the Wolfskill Falls is included in the SEA. The upper section of Wolfskill is not included in the SEA, but much of Marshall Canyon watershed is included, along with watersheds of Live Oak and Webb canyons in the City of Claremont.

A large lobe of the SEA extends from the Sunset Ridge Fire Road on the dividing ridgeline, to include lush canyon forests and chaparral of the slopes above the City of La Verne and City of Claremont. Most of this lobe is in municipal or private ownership. The Angeles National Forest boundary is about a 0.1 mile south of the Sunset Ridge Fire Road. The eastern boundary leaves the fire road and travels south along a ridgeline, including Live Oak Canyon in the SEA, but separating out the more developed watersheds of Palmer, Cobal, Burbank, and Gail canyons in the City of Claremont. A finger of the SEA includes the lush riparian oak forest of Webb Canyon to the edge of development. The lobe of the SEA excludes an area around the residences and equestrian areas that surround Live Oak Reservoir. Live Oak Canyon Reservoir and its riparian oak woodland is included as far south as Base Line Road. The ridges and dissected canyons that border Live Oak Reservoir are included as far south as Base Line Road. However, the flat area of the ridge around Live Oak Reservoir and development in the periphery are excluded. The northwestern edge of the lobe includes the riparian area and slopes of Marshall Creek, but excludes developed areas, such as the Marshall Canyon Regional Park and Golf Course. The lobe boundary returns north into the Angeles National Forest at the Sunset Ridge Fire Road along the edge of Marshall Creek and the western ridge of Marshall Canyon.

From Sunset Ridge Fire Road, the southern boundary of the SEA is within the Angeles National

Forest and follows the ridgeline that includes the watershed of San Dimas Canyon. The San Dimas Reservoir, with good habitat for waterfowl, is included in the SEA. The SEA extends a finger out of the Angeles National Forest along San Dimas Canyon road to include the riparian habitat along the watercourse, which is a rare example of the lowland riparian community. From the Angeles National Forest boundary and rocky cliffs above the west side of San Dimas Canyon, the SEA boundary follows the ridge of Lodi Canyon (tributary of San Dimas Canyon) to Johnstone Peak.

The eastern, disjunct segment of the SEA (San Antonio Wash) follows the San Bernardino-Los Angeles County line as its eastern boundary from about a 0.5 mile upstream of the San Antonio Dam through the San Antonio debris basin, past the San Antonio Dam, to the natural extent of alluvial fan vegetation south of the Interstate-210. This is at an area about a 0.1 mile north of Base Line Road. Downstream of the San Antonio Dam has the best example of arroyo or wash vegetation that remains in the County, and it extends onto the adjacent alluvial fan. The vegetation is a dry form of coastal sage scrub, with included desert plants that are adapted to coarse substrate. The vegetation is much more dense and stable than the alluvial fan in the arroyos behind Santa Fe Dam (San Gabriel Canyon SEA) and Hansen Dam (Tujunga Valley-Hansen Dam SEA). From its southern point, the SEA turns north to include the natural alluvial fan vegetation and border on the existing residential development on the alluvial fan. At the intersection of the San Antonio Wash with Mount Baldy Road, the SEA boundary follows the southeast side of Mount Baldy Road to the watershed of Chicken Canyon, which is a tributary of San Antonio Wash. The boundary crosses the road and includes the undeveloped part of Chicken Canyon. The boundary follows the minor ridgeline up to Potato Mountain, and goes along the south ridge of Evey Canyon back to cross Mount Baldy Road and return to the San Bernardino-Los Angeles County line in the San Antonio Debris Basin. Evey Canyon is outside the SEA, but is a preserve of the Claremont Colleges, and has excellent riparian canyon habitat. The SEA designation acknowledges the need to protect the Evey Canyon watershed. Small tributary watersheds of San Antonio Canyon with chaparral vegetation are included with the Chicken Canyon area.

Wildlife Movement

Wildlife movement within the SEA takes on two major forms. First, due to the extreme intervening topography, it is logical to expect considerable movement of wildlife up and down the many sizeable drainages, which course through this SEA and connect the forest interior with foothill areas. The larger the watershed of the drainages, the greater the volume of movement. Consequently, this type of movement occurs on a seasonal and more frequent basis, particularly for large mobile mammals, such as American black bear, mountain lion, coyote (*Canis latrans*), bobcat (*Lynx rufus*) and mule deer (*Odocoileus hemionus*), whose full range of habitat needs are typically met over broad areas.

The second major type of movement occurs across the flanks of the foothills and lower mountains, in an east-west direction. Particularly for riparian-favoring migratory birds, a corridor linking lower elevational riparian habitats in the SEA is expected to be of high use and importance. In addition to providing essential habitat for resident riparian birds, this SEA contains some of the best developed riparian habitat for birds, which are seasonal visitors to the cismontane region of the County.

Regional Biological Value

The SEA meets several SEA designation criteria and supports many regional biological values. Each criterion and how it is met described below.

Criteria Analysis of the San Dimas Canyon and San Antonio Wash SEA

Criterion		Status	Justification
A)	The habitat of core populations of endangered or threatened plant or animal species.	Not Met	Although the SEA contains rare plant populations, it does not contain a core population of a listed species and therefore does not meet this criterion. The lower slopes in and around San Dimas Canyon support one of the largest populations of the coastal cactus wren in the County, which is a subspecies that is very threatened throughout its range, although not officially recognized by listing.
B)	On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The SEA contains habitat of the rare rock monardella. In addition, several plant communities within this SEA are CDFW highest priority communities due to their restricted distribution in the Southern California region, including: walnut woodland, oak riparian woodland, southern willow scrub, coastal sage scrub, and alluvial fan scrub.
C)	Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution	Met	All of the plant communities and habitats mentioned as being restricted in distribution on a regional basis, are also restricted in distribution within the County.
D)	Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, or migrating grounds and is limited in availability either regionally or in the County.	Met	The major canyons within this SEA support well-developed and diverse riparian woodlands, as well as a source of perennial water. These represent important stopover and overwintering areas for a wide variety of migratory birds, as well as essential habitat for resident species of fauna and flora. These canyons also support seasonal and more frequent movement for wide-ranging mammals, which must move over large areas to fulfill their habitat requirements. The federally-threatened California gnatcatcher has been sighted (2010) in the Glendora foothills, and probably maintains a small population along the lowest slopes of the San Gabriel Mountains.
E)	Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.	Not Met	The SEA does not contain biotic resources that are clearly an extreme in physical/geographical limitations, or represent unusual variation in a population or community, and therefore does not meet this criterion. However, the extreme localization of several species of plants in the SEA may indicate geographical processes that are not well understood at this time that merit scientific inquiry.
F)	Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.	Met	Virtually all of the native biotic communities within this SEA are relatively undisturbed over most of their extent. Because urbanization throughout much of the County's foothill regions has removed large expanses of these communities, those in the SEA are particularly important to the County's natural heritage.

In conclusion, the area is an SEA because it contains: B-C) biotic communities, vegetative associations, and habitat of plant and animal species that are either unique or are restricted in distribution in the County and regionally; D) concentrated breeding, feeding, resting, or migrating grounds, which are limited in availability in the County; and F) areas that would provide for the

preservation of relatively undisturbed examples of the original natural biotic communities in the County.

San Gabriel Canyon SEA

Boundary and Resources Description

The San Gabriel Canyon Significant Ecological Area (SEA) is located along the cismontane foothills of the eastern section of these mountains. Generally, the SEA is centered on the mouths of three major canyons, which flow from the mountains and interconnecting terrain. From west to east these include, Santa Anita, Monrovia and Sawpit, and San Gabriel canyons, which are located above the cities of Sierra Madre, Arcadia, Monrovia, Duarte, Bradbury, Irwindale, and Azusa. A substantial part of the eastern and southern part of the SEA along the San Gabriel River is in the California Audubon-designated State Important Bird Area (IBA) of the Los Angeles Flood Control Basin IBA. The San Gabriel River has largely been dammed and channelized, but with infrequent clearing of the detention basins and wash areas, substantial parts of the San Gabriel River have reverted to riparian habitat or the even more rare alluvial fan habitat, and this attracts many resident birds, as well as numerous spring and winter migrants.

The SEA is found within the, Mount Wilson, Azusa, San Dimas, and Glendora U.S. Geological Survey (USGS) 7.5' California Quadrangles.

Over most of its boundaries (north, east, and west), the SEA is bordered by open space within the Angeles National Forest. However, generally to the south, the borders are defined by the edge of urban development within the San Gabriel Valley. The SEA begins in the west at the peak of Mount Wilson within the Angeles National Forest. Traveling east, the northerly boundary follows a major east-west trending ridgeline to Pine Mountain. This ridgeline defines the separation between the watershed of the San Gabriel River West Fork to the north, and the Santa Anita, Sawpit, and lower San Gabriel canyons to the south. These front-range canyons are tributaries of the San Gabriel River.

At Pine Mountain, the boundary turns south to follow the ridgeline that is the western border of the San Gabriel River, and turns east onto a secondary ridge, and descends towards the San Gabriel River near the Morris Reservoir Dam. This easterly boundary crosses the San Gabriel Canyon at Morris Dam and climbs the adjacent ridgeline to Glendora Ridge and the Glendora Ridge Motorway. The southerly boundary follows the motorway to the west, to the point near the mouth of the San Gabriel Canyon where the motorway leaves the ridgeline. The SEA boundary turns north towards the San Gabriel River, and descends to the opening of the San Gabriel Canyon into the Los Angeles Basin. This is between the Glendora Ridge and the mountains near Fish Canyon. The boundary turns along the southeast side of the San Gabriel River floodplain and follows the east side of the San Gabriel River flood control channel. A development near the mouth of Roberts Canyon that is just north of the river mouth has been excluded from the SEA.

In the mouth of the San Gabriel Canyon is a population of the San Gabriel Mountains live-forever (*Dudleya densiflora*), which is unusual in that it has multiple dense flower clusters, whereas other live-forevers have one or several flower stalks with spaced blooms. This live-forever is extremely limited in range and occurs only on the slopes of granitic rubble and canyon walls in the nearby south face of the San Gabriel Mountains. Another population is on private land about one mile upstream of the canyon mouth, on the north-side slope of the Glendora Ridge. Another live-forever population is upstream in nearby Fish Canyon, which is a little downstream of the Fish Canyon Falls. Collections

have been made from Mystic Canyon to the east, and Van Tassel Canyon to the west.

The mouth of San Gabriel Canyon and nearby canyons are the principle area for the San Gabriel bedstraw (*Galium grande*), which is another local endemic. The only known populations of the bedstraw and the San Gabriel Mountains live-forever on the planet occur in the County in this small area of the San Gabriel Mountains.

The Los Angeles Flood Control Basin IBA covers all of the SEA in the San Gabriel River and downstream at the Santa Fe Dam Recreation Area. Furthermore, the IBA extends upstream beyond the SEA to the confluence area of the West, North, and East forks of the San Gabriel River in the Angeles National Forest, and it extends downstream beyond Santa Fe Dam to the Whittier Narrows Dam.

A finger of the SEA extends along the San Gabriel River, south of its confluence area with Fish and Van Tassel canyons to pass under the Interstate-210. The finger boundary enlarges around the Santa Fe Flood Control Basin and Recreation Area to include one of the last remaining natural alluvial fan habitats in the County. The Santa Fe Flood Control Basin is one of the most unusual vegetation habitats in the County, and has special sensitive species.

The main SEA boundary continues just west of the Van Tassel Canyon confluence along the north side of the Encanto Equestrian Center, along the northern extent of development in the City of Duarte. A lobe of the SEA encloses the natural habitat of the steep watershed areas of Spinks and Maddox canyons, extending to the edge of development in the City of Bradbury. The ridge bordering the southeast side of Bliss Canyon is the western edge of the lobe, and the boundary crosses Bliss Canyon at its upper end near the Van Tassel Truck Trail. At this point the boundary of the SEA has reentered the Angeles National Forest. After crossing Bliss Canyon, the boundary follows the southern ridgeline of Spanish Canyon westward to cross out of the Angeles National Forest, tracking around the northern arm of the City of Monrovia. The Sawpit Debris Basin is included in the SEA as is the undeveloped part of Monrovia Canyon Park. To the west of Monrovia Canyon, a lobe of the SEA extends along the undeveloped ridges of the San Gabriel Mountains bordered by the urban edges of the City of Monrovia and City of Arcadia. These communities extend into the mountains where the cities have municipal water rights. The southern boundary skirts the edge of development in Santa Anita Canyon, but includes the Santa Anita Debris Basin, Arcadia Natural Park, Big Santa Anita Dam and Reservoir, and the Santa Anita Canyon stream course above the Dam, which has numerous lease-hold cabins north of the 1600 feet elevation contour. The boundary reenters the Angeles National Forest just north of Arcadia Natural Park.

The southern ridge of Sawpit Canyon, from its dam to about a 0.5 mile upstream has a population of the endangered San Gabriel bedstraw (*Galium grande*), which is an endemic species of highly restricted distribution. It occurs only on the south slopes of the western section of the San Gabriel Mountains.

Within the SEA, just to the south of Arcadia Natural Park is a Santa Anita Canyon tributary, Clamshell Canyon. On the south banks and ridge of Clamshell Canyon is critical habitat for the federally-endangered Braunton's milk-vetch (*Astragalus brauntonii*), which is a locoweed that prefers interbedded sandstone and carbonate substrate, probably deposited near the coastline of former oceans. Very limited areas of this substrate occur at the boundary of the San Gabriel Mountains in this area. Most of the rocks of the San Gabriel Mountains are igneous granites and metamorphic rocks.

Santa Anita Canyon has some stands of Pacific madrone (*Arbutus menziesii*), which is a plant known elsewhere from the Pacific coast north of Santa Barbara to British Columbia. The Santa Anita stands are isolated occurrences, which is one of the few places madrone is found between Santa Barbara and Baja California.

Near the confluence with Winter Creek in the vicinity of Chantry Flats, the southern boundary of the SEA turns west and climbs the southern ridgeline of Winter Creek, including Winter Creek watershed in the SEA and excluding San Olene Canyon on the south. The boundary follows the ridgeline, marking the southern limits of the Winter Creek watershed to Mount Harvard, and then travels along the Harvard ridgeline to Mount Wilson.

The SEA is comprised of three major canyons: San Gabriel, Sawpit, and Santa Anita. In general, the topography of the SEA is severe, consisting of steep-walled canyons and narrow ridgelines. Elevations range from a high of approximately 5,710 feet above mean sea level (MSL) at Mount Wilson, to a low of approximately 660 feet above MSL in San Gabriel Canyon. Numerous drainages and tributaries of the main canyons are included in the SEA and exit the San Gabriel Mountains into the Los Angeles Basin through this SEA.

The wide range of elevation, topography, slope aspect, and geology represent a wide array of physical habitats within this SEA. Consequently, a number of plant communities exist, including grasslands, riparian, shrublands, woodlands, and forests. Within these major community types, there are many sub-communities, which vary according to plant species dominance. Of particular note, this SEA contains the last remaining relatively well-developed lower montane riparian habitats in the eastern County and dammed drainages that have created significant reservoirs or flood control basins in Sawpit and Santa Anita canyons. Enclaves of sensitive plant species and vegetation habitats are found here. Other jurisdictions within the SEA include the unincorporated area of the County, the City of Arcadia, City of Monrovia, City of Bradbury, City of Irwindale, City of Duarte, City of Azusa, and the City of Glendora.

Wildlife Movement

Wildlife movement within the SEA takes on two major forms. First, due to the extreme intervening topography, it is logical to expect considerable movement of wildlife up and down the sizeable drainages, which course through this SEA to connect the forest interior with foothill areas. Consequently, this type of movement occurs on a seasonal and more frequent basis, particularly for large mobile mammals whose full range of habitat needs are typically met over broad areas, including American black bear, mountain lion, coyote (*Canis latrans*), mule deer (*Odocoileus hemionus*), gray fox (*Urocyon cinereoargenteus*) and other medium-sized mammals.

The second major type of movement occurs across the flanks of the foothills and lower mountains, in an east-west direction. Particularly for riparian-favoring migratory birds, a corridor linking lower elevation riparian habitats in the SEA is of high use and importance. In addition to providing essential habitat for resident riparian birds, this SEA contains some of the best developed riparian habitat for birds, which are seasonal visitors to the cismontane region of the County.

Regional Biological Value

The SEA meets several SEA designation criteria and supports many regional biological values. Each criterion and how it is met described below.

CRITERIA ANALYSIS OF THE SAN GABRIEL CANYON SEA

	Criterion	Status	Justification
A)	The habitat of core populations of endangered or threatened plant or animal species.	Met	The SEA contains a core habitat area for the endangered plant Branton's milkvetch. The upper San Gabriel River is a core habitat of several native fishes, one of the last areas where three of five original natives occur together: federally-threatened Santa Ana sucker, and the arroyo chub and Santa Ana speckled dace, which is of state concern. All three live in the San Gabriel River in the SEA area. A local population of the speckled dace is known from the mouth of Fish Canyon. The very rare San Gabriel bedstraw and San Gabriel Mountains live-forever only occur in this area of the world.
B)	On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	The SEA contains habitat of extremely rare plants: San Gabriel bedstraw and the San Gabriel Mountains dudleya. In addition, several plant communities within this SEA are CDFW highest priority communities due to their restricted distribution in the Southern California region. These communities include walnut woodland, oak riparian woodland, southern willow scrub, coastal sage scrub, and alluvial fan scrub. The federally-endangered California gnatcatcher has been recently sighted in the Glendora foothills, and probably maintains a small population along the lowest slopes of the San Gabriel Mountains.
C)	Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.	Met	All of the plant communities and habitats mentioned as being restricted in distribution on a regional basis, are also restricted in distribution within the County.
D)	Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, or migrating grounds and is limited in availability either regionally or in the County.	Met	The three major canyons within this SEA support well-developed and diverse riparian woodlands, as well as year-round water sources. These represent important stopover and overwintering areas for a wide variety of migratory birds, as well as essential habitat for resident species. These canyons also support seasonal and more frequent movement for wide-ranging mammals, which must move over large areas to fulfill their habitat requirements.
E)	Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.	Met	The SEA contains biotic resources that are of scientific interest for their very restricted distributions: Branton's milkvetch San Gabriel bedstraw, San Gabriel Mountains live-forever, and a local isolated population of Pacific madrone. The population of Santa Ana speckled dace in Fish Canyon may be the remaining extreme western extent of its population.
F)	Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.	Met	Virtually all of the native biotic communities within this SEA are relatively undisturbed over most of their extent. Because urbanization throughout much of the County's foothill regions has removed large expanses of these communities, those in the SEA are particularly important to the County's natural heritage.

In conclusion, the area is an SEA because it contains: A) the habitat of core populations of endangered and threatened plant and animal species; B-C) biotic communities, vegetative associations, and habitat of plant and animal species that are either unique or are restricted in distribution in the County and regionally; D) concentrated breeding, feeding, resting, and migrating grounds, which are limited in availability in the County; E) populations of scientific interest because of very restricted distributions and isolated populations; and F) areas that provide for the preservation of relatively undisturbed examples of original natural biotic communities in the County.

Santa Clara River SEA

Boundary and Resources Description

The Santa Clara River SEA extends along the entire County reach of the Santa Clara River, primarily within unincorporated areas of the County. The SEA encompasses a wide variety of topographic features and habitat types, as well as major tributaries—all of which contribute to this diversity. It is a major biotic corridor for the County (and Ventura County). The orientation and extent of the SEA depends upon the surface and subsurface hydrology of the Santa Clara River, from its headwaters, tributaries, and watershed basin, to the point at which it exits the County's jurisdiction. Nearly all of the SEA is designated by California Audubon as a Globally Important Bird Area (IBA). The Santa Clara River IBA extends beyond the SEA in both upstream and downstream directions (across Soledad Pass to the Barrel Springs area in the Antelope Valley and through Ventura County to the mouth of the River at the Pacific Ocean).

The SEA is located at least partially in each of the following United States Geological Survey (USGS) 7.5' California Quadrangles: Pacifico Mountain, Acton, Agua Dulce, Sunland, San Fernando, Mint Canyon, Oat Mountain, Newhall, and Val Verde.

The SEA covers a wide variety of topographic features and habitat types, including parts of the watershed tributaries. The biological and ecological functionality of the SEA is integrally linked to the Santa Clara River basin for its entire length. The bio-geographic limits of the SEA would extend downstream through Ventura-Los Angeles County line to its mouth at the Pacific Ocean, and encompass significant tributary drainages of Ventura County (Piru Creek, Sespe Creek, Santa Paula Creek, Wheeler Creek, etc.).

The eastern portion of the SEA follows natural contours at the headwaters of the watershed to incorporate much of upper watershed of Soledad Canyon (which becomes the Santa Clara River), the Kentucky Springs and the Aliso Canyon basins, and the downstream unnamed tributaries of the Santa Clara River to Arrastre Creek. This includes the watershed southern headwater areas within the Angeles National Forest. The headwaters of both Kentucky Springs and Aliso Canyon are in the Angeles National Forest, in semi-arid chaparral and desert scrub habitat; however, the drainages themselves support vegetation of desert and interior riparian habitat, which ranges from Great Basin sagebrush in Kentucky Springs Wash to dense, mature, willow-cottonwood-sycamore woodlands along permanent streams in Aliso Canyon. The surrounding uplands in the basins support pinyon-juniper woodlands, chamise, mountain mahogany, and manzanita-dominated chaparral, buckwheat scrub, and ruderal lands. The alluvial plain formed along the southern margin of the Santa Clara River basin below these canyons supports intact, high diversity xeric alluvial fan sage scrub. Alluvial terraces within both drainages have been extensively cultivated for orchard crops and dryland agriculture, and in more recent years, rural and urban-type residential developments have encroached on the watersheds. The Kentucky Springs basin has a large population of Parish's Great Basin sagebrush (*Artemisia tridentata* ssp. *parishii*), which is considered rare and sensitive in the

County. A population of the federally-threatened red-legged frog (*Rana draytonii* FT, SC) is known to inhabit and breed in the Aliso Canyon watershed. Blum Ranch and another area on Aliso Canyon Road are disturbed, with farming development, but important to continuity of the SEA. The Santa Clara River IBA extends in a branch upstream to include Blum Ranch.

The boundary follows the Santa Clara River channel downstream through the Acton basin, paralleling Soledad Canyon Road on the north side, following the toe of the slope of the San Gabriel Mountains to the south. Boundaries continue along the channel margins to the southwest from Acton to Arrastre Creek, where the southern boundary follows watershed contours to take in four upper tributary channels (Arrastre, Moody, and Bootleggers). Downstream from Acton, there are developed areas as along the Santa Clara River. From a little upstream of the Arrastre Creek confluence to a little downstream in the vicinity of the railroad stop of Lang (about 13 miles of river), the floodplain of the Santa Clara River is designated critical habitat for the federally-endangered arroyo toad (*Anaxyrus californicus*). Some of the confluence area of Mill Canyon is also critical habitat for the arroyo toad. Part of the area of critical habitat for the toad was also proposed as critical habitat for the state and federally-endangered unarmored threespine stickleback (*Gasterosteus aculeatus williamsoni*), which is a small three-inch fish that essentially only occurs in the County. It once was widespread throughout the Los Angeles Basin and beyond, but is now restricted to the upper Santa Clara River. The proposal for critical habitat was never approved, and this is now referred to as "essential habitat" for the fish. The type area for the fish is the Arrastre Creek, where it was first collected and described with a museum specimen.

The habitat along the Santa Clara River supports the largest community of riparian-obligate birds between Santa Ynez River in Santa Barbara County and the Prado Basin in Riverside County. In the Soledad Canyon stretch are breeding summer tanager (*Piranga rubra*) and other desert species, along with some instances of least Bell's vireos (*Vireo bellii pusillus*), coastal cactus wrens (*Campylorhynchus brunneicapillus sandiegensis*), and southwestern willow flycatchers (*Empidonax traillii extimus*) from the coastal influence areas. The area is notable for having a combination of species that are characteristic of the desert and characteristic of coastal-influence.

Just west of the confluence with Arrastre Creek the northern boundary loops up to the slopes of Parker Mountain and the eastern watershed of Hughes Canyon around the basal contours of significant rock outcroppings above the river basin, and on the south side, around the Mill Canyon tributary basin. The rocky buttes on the north side of the river, while only a minor part of the watershed of the river, provide important nesting, roosting, and sheltering habitat values for bats, birds of prey, and other sensitive species foraging along the river corridor. The boundaries stay at the river margins west to the watersheds of two northern tributaries, Nellus and Bobcat canyons. These drainages were identified by the South Coast Wildlands Project as important to connectivity across the Santa Clara River between the western and eastern highland areas of the San Gabriel Mountains.

At the Agua Dulce Canyon drainage, the northern boundary loops around the watershed, including the Vasquez Rocks County Natural Area. Agua Dulce Canyon has a permanent stream and supports high quality riparian habitat from the confluence with the river to the intersection with State Route-14. The Santa Clara River IBA extends upstream to include about one mile of the Agua Dulce Canyon.

The Agua Dulce underpass of State Route-14 is an important crossing of the highway barrier for wildlife. From that point, north riparian areas exist where the creeks (Agua Dulce and Escondido) pass through Vasquez Rocks County Natural Area. The Agua Dulce Canyon extension was included

in the SEA for its value as a wildlife corridor to provide connectivity across the Santa Clara River between the western and eastern highland areas of the San Gabriel Mountains. The extension includes the watershed of Bee Canyon, which is a downstream tributary of the Santa Clara River. Bee Canyon has an important population of the federally-endangered slender-horned spineflower (*Dodecahema leptoceras*) in its broad, floodplain area. In the Bee Canyon slopes of coastal sage chaparral, the federally-threatened coastal California gnatcatcher (*Polioptila californica californica*) is sometimes resident. The Bee Canyon area has some underpasses of the State Route-14 that could be used by smaller wildlife if maintained unclogged. The extension includes upper watersheds of Spring and Tick canyons to enhance the connective area. Beyond upper areas of Tick Canyon, the SEA boundaries cross Mint Canyon into the Angeles National Forest and the watershed of Rowher Canyon. The SEA continues to the upper reaches of Rowher Canyon onto the main ridgeline of the Sierra Pelona. At the Mint Canyon crossing, just southwest of the community of Sleepy Valley, a lobe of the SEA extends along Mint Canyon to capture riparian woodlands of coast live oak, with a number of heritage trees (diameters greater than 36 inches). Residences are scattered and the natural communities of chaparral are intact on the canyon slopes.

The southern boundary of the SEA opposite the confluence with Agua Dulce Canyon includes the flood plain. The SEA dips southward into the lower portion of Bear Canyon (tributary of Santa Clara River) and includes undeveloped alluvial terrace slopes of the river downstream of Bear Canyon. The flood plain is a narrowed part of the SEA in the vicinity of Lang, which is a railroad stop on the transcontinental railroad line that runs the length of the Soledad Canyon. Downstream from Lang, the SEA expands to the southern slopes between Lang and Oak Spring Canyon, adjacent to the river channel. Downstream of Oak Canyon, the SEA narrows to the flood plain, passes Sand Canyon, and reaches the west ridge of Sand Canyon. A broad finger of the SEA goes south along the ridgeline of the Sand Canyon watershed, where the finger expands when it reaches the watershed of Placerita Canyon.

The alluvial fans of Oak Springs Canyon and Sand Canyon are important recharge grounds for the river aquifer. Surface flows from both canyons enter the Santa Clara River basin through natural, unconfined channels. Recognizing the importance of the Sand Canyon drainage, the SEA boundaries are drawn to encompass the entire upper Sand Canyon watershed, which is largely natural with scattered residences, as well as the Sand Canyon tributary, Bear Canyon. Most of the upper Sand Canyon and its Bear Canyon tributary are within the Angeles National Forest, and Sand Canyon originates on the peak of Magic Mountain. These canyons form a natural movement zone for wildlife traversing among the western end of the San Gabriel Mountains, the eastern end of the Santa Susana Mountains, and the Santa Clara River basin. Together, they encompass a spectrum of significant and unique habitat, vegetation and wildlife resources. The major habitat linkage zones and watersheds between the river basin and the Angeles National Forest, and the protected areas of the County (Placerita Canyon Natural Area), have also been included within the SEA boundary. Near the peak of Magic Mountain, the boundary contours to the southwest, and then proceeds west along the Santa Clara Divide to its intersection with the junction of Interstate-5 and State Route-14. Natural areas of the Sand Canyon watershed, along with the major topography of ridgelines, earthquake escarpments, grasslands, and canyon habitat features and watersheds of Bear, Placerita, Whitney, and Elsmere canyons are the important features of the wildlife linkage. Existing rural residential developments are excluded from the SEA, but the remaining natural highland areas of the western banks of the Sand Canyon watershed are included. These are integral parts of the river basin recharge system and functional ecosystem.

Parts of this area have coastal sage scrub and are critical habitat for the threatened coastal California gnatcatcher. The watershed of Placerita Canyon southeast of the State Route-14 is

generally critical habitat for the federally-threatened coastal California gnatcatcher. An area of development surrounding the Placerita Creek near State Route-14 is excluded from the critical habitat. The critical habitat area for the gnatcatcher extends along the east side of State Route-14 beyond Placerita Creek and envelops watersheds into the Angeles National Forest along Whitney Canyon, Elsmere Canyon, and southward over the main ridge of the San Gabriel Mountains, into Grapevine Canyon in its upper natural watershed. Upper areas of these canyons with oaks and big-cone Douglas fir are habitat for the California spotted owl (*Strix occidentalis*)

The eastern half of the Los Piñetos undercrossing of State Route-14 on old oil development roads is included, and focuses on a major wildlife conduit connecting the Santa Susana Mountains to the San Gabriel Mountains, and to the Santa Clara River. The adjacent part of the Santa Susana Mountains and Simi Hills SEA includes the west half of the Los Piñetos undercrossing of State Route-14, connecting through the natural oak woodlands and drainages adjacent to the San Fernando Pass. This area, once called "San Francisco" or "Newhall Wedge," is north and west of the junction of Interstate-5 and State Route-14 with The Old Road running through it. The Newhall Wedge area is nearly all critical habitat for the coastal California gnatcatcher. This critical habitat of the Newhall Wedge is adjacent to the gnatcatcher critical habitat across State Route-14 in the SEA, but is in the Santa Susana Mountains and Simi Hills SEA.

The SEA boundary borders State Route-14 from the north ridge of Grapevine Canyon and heads northeast from the Los Piñetos undercrossing, on the natural side of existing development east of State Route-14. The area around development along Running Horse Road off Placerita Canyon has been excluded from the SEA. The movie-shoot ranch at the junction of State Route-14 and Placerita Canyon has much area with development or staging excluded, but there is a connected finger of the SEA in Placerita Canyon that leads to the Placerita Canyon watercourse underpass. Much of the watercourse underpass is used by wildlife to transition between the natural areas of Placerita Canyon and the oil field area on the west side of State Route-14. The SEA narrows to the western hills of Sand Canyon beyond the movie-shoot ranch, to avoid developed areas, and continues back to the river margin at Humphreys railway stop, about a 0.4 mile west of its previous point of departure from the river channel. The boundary was drawn to avoid existing major development, but connect the uplands to the river basin. The narrow aperture for the linkage at the Santa Clara River reflects the remnant nature of the last unobstructed terrestrial passageway between the upland areas and the river.

West of Sand Canyon, the river has been intermittently armored to allow for development within flood hazard zones. From Sand Canyon westward through the residential neighborhoods of Santa Clarita, the SEA boundary continues on the margins of the flood plain to the confluence with San Francisquito Canyon. The segment of the Santa Clara River passing through the City of Santa Clarita is a dry channel, except during seasonal runoff flows. Some irregular extensions go north into tributaries that have remnant riparian habitat and probable outflows from irrigation runoff that flows into neighborhood storm drains. Regardless of the intermittent nature of water, the river bed elevated areas among braided channels support relatively intact stands of alluvial sage scrub, riparian woodland, and southern riparian scrub. The dry zones are essential to the continued genetic isolation and integrity of the unarmored three-spine stickleback population in the upper reaches of the Santa Clara River.

The boundary extends northward upstream into the reaches of San Francisquito Creek (formerly a separate SEA, but now included with the SEA), following the approved development setback limits, north into the Angeles National Forest (Santa Clara/Mojave Rivers District). The SEA continues nearly the length of the San Francisquito Creek to beyond the junction with South Portal Creek in the

vicinity of the community of Green Valley. The Santa Clara River IBA extends in a branch upstream in close proximity to the crossing of Copper Hill Drive.

As the channel enters the Angeles National Forest, flows become less seasonal, and riparian resources expand and diversify. San Francisquito Creek supports dense and mature southern riparian scrub and riparian woodland formations, along with small areas of freshwater marsh, which provide essential wintering areas and resident habitat for waterfowl, wading birds, marshland birds, and a variety of other vertebrate species. The headwaters of San Francisquito Creek are on a low ridge that bounds the San Andreas Fault Zone, and this is an important connective element of the SEA, in that it completes the path from the Pacific Ocean through the mountains to the Mojave Desert. The sub-watershed and flood plain of the San Francisquito Creek perennial flow in the Angeles National Forest jurisdiction is designated critical habitat for the federally-threatened red-legged frog, which extends from about the Angeles National Forest southern boundary to about one mile south of the junction with Bee Canyon. Much of the San Francisquito Creek is considered essential habitat (one of three areas) for the endangered unarmored threespine stickleback, although the fish has not been found in the San Francisquito Canyon in recent years.

The boundaries west of the confluence with San Francisquito Creek follow the river margins under the Interstate-5 to the Castaic Creek confluence, at which point the northern setback line has been drawn around the lower portion of Castaic Creek, which embraces the riparian habitat areas around and above the confluence. Castaic Creek is the tributary with the largest watershed for the Santa Clara River in the County. The SEA boundaries go upstream about four miles along the watercourse of Castaic Creek to the crossing of Lake Hughes Road, which is just downstream of Castaic Lagoon. The Santa Clara River IBA extends in a branch upstream into Castaic Creek for approximately one mile.

Relatively extensive areas of willow-cottonwood forest and southern riparian scrub occur west of San Francisquito Creek and within the junction zone of Castaic Creek and the Santa Clara River. These river forests support numerous sensitive species and provide multi-layered riparian habitat for a wide diversity of wildlife species, particularly birds of prey and riparian-obligate song birds, such as the federally-endangered least Bell's vireo (*Vireo bellii pusillus*) and the southwestern willow flycatcher (*Empidonax traillii extimus*).

Federally-designated critical habitat for the endangered arroyo toad extends from the east side of Interstate-5, from the junction of the Santa Clara River with San Francisquito Creek, under the Interstate-5, about 5.8 miles to the confluence, with an unnamed drainage just upstream of the confluence of the river with San Martinez Chiquito. The critical habitat area for the toad also includes the flood plain of Castaic Creek as far upstream as the Interstate-5 undercrossing (about 2.5 miles), and for about one mile upstream into the natural area of Hasley Canyon, a tributary of Castaic. Coincident with the critical habitat for the toad is critical habitat for the endangered least Bell's vireo (FE, SE). Critical habitat for the vireo extends along the floodplain from the Rye Canyon undercrossing of the river (west side of Interstate-5), over the Ventura-Los Angeles County line, to about a mile short of the confluence of the Santa Clara River with Piru Creek in Ventura County (about 9 miles). The river area from near Interstate-5 towards the Ventura-Los Angeles County line is "essential habitat" for the threespine stickleback. A disjunct SEA area is on a ridge south of the river bend at Castaic Junction (interchange of Interstate-5 and State Route-126). This area supports a population of the federal candidate and state-endangered San Fernando Valley Spineflower (*Chorizanthe parryi* var. *fernandina*, FC, SE), which is a diminutive, once-common flower of slopes within the San Fernando Valley and adjacent passes and mountain ranges. The plant became so rare that it was believed to be extinct until it was rediscovered during required surveys for

development.

Beyond the confluence with Castaic Creek, the boundaries of the SEA follow the margins of the Santa Clara River channel to the Ventura-Los Angeles County line. The Santa Clara River IBA has a lobelike expansion opposite the confluence with San Martin Chiquito, extending south to cover diverse topography from river cliffs to confluence flood plains in the area around Potrero Canyon.

The Santa Clara River channel and its alluvial terraces and tributary creeks together form the single most important and natural wildlife movement zone through the County. Mobile species can enter the river basin anywhere along its length (outside of developed areas) and proceed in either direction without having to pass through narrow culverts or blind channels, with continuous vegetative cover and only short stretches of dry substrates. The overall drainage course provides a continuum of aquatic and terrestrial movement opportunities, shelter, forage, and resident habitat from the mouth of the river at Ventura County and the Pacific Ocean, to the Antelope Valley. The drainage course connects to both districts of the Angeles National Forest, and links together three large public resource preserves (Vasquez Rocks and Placerita County Natural Areas and the Angeles National Forest).

Wildlife Movement

Historically (and prehistorically) the riparian corridor along the Santa Clara River has served as the primary east-west linkage between the Pacific coastline, coast ranges, interior ranges, high desert and southern Sierra (via the Tehachapi Range). Animals moving through the Santa Clara drainage had unobstructed passage along the river and within the riparian systems between the coastal lowlands of Ventura County and the Mojave Desert. The tributary routes extend south into the Santa Susana Mountains, south and north into the San Gabriel Mountains, northward via Castaic, Bouquet and San Francisquito tributaries (over the coastal ranges and San Gabriel Mountains of the Transverse Ranges and into the San Joaquin Valley), west into the central coast ranges, or east through the Tehachapi Mountains, and into the southern Sierra Nevada. The present configuration of the tributary drainages has impinged upon connectivity from the Santa Clarita Valley to the north, but the Santa Clara River remains relatively intact and open. The SEA embraces the river corridor and the linkage zones that are considered essential to ensuring connectivity and resource values within the historic movement zones for all of the wildlife species present within the County portion of the Santa Clara River, including mountain lion, coyote, bobcat, and several medium-sized mammals, as well as birds, reptiles, amphibians, and fishes.

Regional Biological Value

The SEA meets several SEA designation criteria and supports many regional biological values. Each criterion and how it is met described below.

CRITERIA ANALYSIS OF THE SANTA CLARA RIVER SEA

	Criterion	Status	Justification
A)	The habitat of core populations of endangered or threatened plant or animal species.	Met	The only existing natural population of the federally-endangered unarmored three-spine stickleback is within the Santa Clara River and its tributaries, and all of its essential habitat is in this SEA. The

	Criterion	Status	Justification
			<p>federally-threatened Santa Ana sucker occurs in the river, as does the state species of concern, the arroyo chub. The population of state and federally-endangered slender-horned spineflower in Bee Canyon is one of fewer than seven known occurrences for this species, one of only two known occurrences in the County, and one of its largest populations. San Francisquito Creek has a breeding area for the endangered red-legged frog. The San Fernando Valley spineflower (at Newhall Ranch in Interstate-5 vicinity) is found in only a few nearby places. Some of the critical habitat for the threatened California coastal gnatcatcher is included in this SEA. Western spadefoot, which is a species of concern, is extremely rare and local in the County away from this SEA. One of the largest, if not largest populations of least Bell's vireo in the County occurs along the river in the vicinity of the crossing of Interstate-5 near Newhall Ranch. Many RPR-listed rare plants occur within the SEA. Critical habitat occurs in the SEA for the listed arroyo toad, the red-legged frog, the coastal California gnatcatcher, and the least Bell's vireo.</p>
B)	<p>On a regional basis, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.</p>	Met	<p>The low-elevation bigcone Douglas fir-canyon oak forests above Placerita Canyon, the vernal pool in the Placerita Canyon-Sand Canyon divide, the native grassland on the Golden Valley Ranch (upper Placerita Canyon), and the alluvial fans with sage scrub in lower San Francisquito Canyon, Kentucky Springs and Acton are unique and regionally restricted biotic communities. Additionally, the riparian forests and woodlands along the Santa Clara River are among the most extensive, diverse and intact vegetative stands of this type in Southern California. Rare aquatic species, such as the unarmored three-spined stickleback, Santa Ana sucker, red-legged frog, least Bell's vireo, summer tanager, spineflower, and many others represented within the SEA are found nowhere else in the region.</p>
C)	<p>Within the County, biotic communities, vegetative associations, and habitat of plant or animal species that are either unique or are restricted in distribution.</p>	Met	<p>The cottonwood-willow forests and woodlands, alluvial fan sage scrub, and coast live oak riparian forest are best represented in the County within the SEA. The lower elevation examples of bigcone Douglas fir-canyon oak forest communities where they mix with low-elevation biota are restricted to the edges of mountain habitat communities, which are regionally rare and also designated in this SEA.</p>
D)	<p>Habitat that at some point in the life cycle of a species or group of species, serves as concentrated breeding, feeding, resting, or migrating grounds and is limited in availability either regionally or in the County.</p>	Met	<p>The Santa Clara River is simultaneously an oasis running through a dry landscape and an extension of coastal conditions into the dry interior. For this reason, it supports unique populations of aquatic and amphibious species, as well as aridlands species extending towards the coast and coastal species' extension inland. It is a principle migratory route for the County plants and animals and a center of diversity for the County. The Santa Clara River and its tributaries provide breeding opportunities for numerous species otherwise not known to breed within the County, including California red-legged frog, summer tanager, southwestern willow flycatcher, and the unarmored three-spined stickleback . The</p>

	Criterion	Status	Justification
			extensive riparian areas shelter dozens of migrant songbird species during winter, including high concentrations of white-crowned and golden-crowned sparrows, fox sparrow, yellow-rumped warbler, dark-eyed junco, and sharp-shinned hawk. The SEA embraces the river corridor and the linkage zones that are considered essential to ensuring connectivity and resource values for many of the wildlife species that are present within the County portion of the Santa Clara River.
E)	Biotic resources that are of scientific interest because they are either an extreme in physical/geographical limitations, or represent unusual variation in a population or community.	Met	The Santa Clara River represents a unique example of a drainage that stretches from the desert to the coast through the mountains. Its resources are, by definition, present at their geographic extremes. Plants such as western juniper, snake cholla, basin sagebrush, and birds, such as summer tanager are at the southwestern edges of their ranges along the river. Coastal taxa extend to the headwaters in the Acton area. High elevation species, such as bigcone Douglas fir, spotted owl, and Steller's jay occur at fairly low elevations at the edges of Santa Clara River valley, on north facing slopes that remain cool all summer.
F)	Areas that would provide for the preservation of relatively undisturbed examples of the original natural biotic communities in the County.	Met	The SEA encompasses some of the highest quality, least disturbed and biotically intact acreage of bigcone Douglas-fir-canyon oak forest, riparian forest and woodland, coastal sage scrub, and alluvial fan sage scrub that remains in the County, and one of the three known vernal pools along the river. Vernal pools are rare everywhere in California.

In conclusion, the area is an SEA because it contains: A) the habitat of core populations of endangered and threatened plant and animal species; B-C) biotic communities, vegetative associations, and habitat of plant and animal species that are either unique or are restricted in distribution in the County and regionally; D) concentrated breeding, feeding, resting, or migrating grounds, which are limited in availability in the County; E) numerous examples of species at their habitat extremes as the coastal and desert influences meet; and F) areas that provide for the preservation of relatively undisturbed examples of original natural biotic communities in the County.

VI. Watersheds

Antelope Valley Watershed

The southern half of the Lahontan hydrologic region is located in the Antelope Valley. Unlike the coastal watersheds in Los Angeles County, it is a closed basin on the edge of the Mojave Desert, having no outlet to the ocean or major river system. Numerous streams drain the north-facing San Gabriel Mountains, carrying rainfall and snow melt from the Angeles National Forest into the Antelope Valley. Significant stream systems in the Antelope Valley are Amaroosa Creek, Big Rock Creek, and Little Rock Creek.

During most years, the rainfall in the Antelope Valley is scant, averaging less than eight inches per year. Every few years, major storms cause flooding, sending sheets of water flow across the eastern portion of the Antelope Valley to the dry lakebeds of Rosamond and Rodgers lakes in Kern County.

Uninhibited by development, the sheet flow filters into the groundwater basin or evaporates on the lakebeds, leaving the surface smooth and flat. This natural runoff process is important for two reasons: 1) it benefits the local communities with groundwater recharge; and 2) it seasonally resurfaces the dry lake beds, which are used for aircraft landings at Edwards Air Force Base.

The Lahontan Regional Water Quality Control Board monitors the Antelope Valley watershed through its Basin Plan for the region. The Basin Plan calls for land use controls to help reduce pollutants in stormwater runoff. In particular, the Basin Plan advocates for limiting impervious surfaces, restoring natural vegetation and protecting the headwaters of stream channels and riparian areas.

Los Angeles River Watershed

The Los Angeles River watershed covers approximately 870 square miles, a small part of which extends into Ventura County. It includes the San Fernando Valley and is the largest watershed in the Los Angeles Basin. The river extends 51 stream miles, from the confluence of Bell Creek and Arroyo Calabazas, to the Pacific Ocean. The first 32 miles of the river flow through the cities of Los Angeles, Burbank, and Glendale, and then, subsequently, through Vernon, Commerce, Maywood, Bell, Bell Gardens, Lynwood, Compton, South Gate, Paramount, Cudahy, and Long Beach. Numerous tributaries feed the Los Angeles River, as it flows through the San Fernando Valley and the coastal plain to the Long Beach Harbor. These tributaries include Tujunga Wash, Verdugo Wash, Arroyo Seco, Rio Hondo, and Compton Creek. Several important biotic communities exist in the northern tributaries that feed the river, including freshwater marsh areas in Tujunga Canyon and the Hansen Flood Control Basin. The natural habitat in these tributaries provides a semi-protected corridor for wildlife between the Angeles National Forest, Santa Monica Mountains National Area, and the Los Angeles River.

By 1960, the Los Angeles River was lined with concrete along most of its length by the U.S. Army Corps of Engineers in order to prevent the loss of lives and property from flood damage. As a result, the Los Angeles River's sole purpose for years was efficient water conveyance—carrying stormwater from the land to the ocean as quickly as possible. Efforts continue under the auspices of the Los Angeles County Flood Control District to capture as much stormwater as possible and redirect it to regional groundwater recharge areas to replenish groundwater basins, saving thousands of acre-feet of water every year.

The volume of pollutants that enters the Los Angeles River is extremely high due to accumulated urban stormwater runoff from the hundreds of square miles of impervious land uses that flank the Los Angeles River. To address these problems, the County, the Flood Control District, local jurisdictions, a variety of stakeholders, and the Los Angeles Regional Water Quality Control Board are implementing programs to reduce the number and concentration of pollutants that enter the Los Angeles River.

Over the past two decades, interest in the Los Angeles River's recreational and ecological functions has reemerged, culminating in a riverwide planning effort in the 1990s, which resulted in the adoption of the *Los Angeles River Master Plan* by the Board of Supervisors in 1996. The Plan was created through a cooperative effort by the County and many river stakeholder groups for the enhancement of aesthetic, recreational, flood protection and environmental functions of the Los Angeles River. The Plan seeks to do so by expanding bikeway, walking and equestrian trails to and along the Los Angeles River, enhancing existing trails and habitat with landscaping, and promoting economic development opportunities. Since the adoption of the Plan, an advisory committee has

overseen many new projects, including bike trails, pocket parks, equestrian trail enhancements, art and signage. So much public interest in the river has been generated that many more improvements are anticipated in the future. The County's Bicycle Master Plan also prioritizes the Los Angeles River bike path.

The County is also working with various organizations and agencies that are involved in watershed-related planning activities, such as the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy, the Council for Watershed Health, and the Flood Control District. The attention being paid to the watershed has resulted in a better understanding of its functions and generated an unprecedented network of residents, private organizations and government entities dedicated to watershed management. The County has also partnered with the City of Los Angeles on implementation of its 2007 Los Angeles River Revitalization Master Plan. Subsequently, the County Board of Supervisors and Los Angeles City Council adopted the Los Angeles River Memorandum of Understanding, which established the Los Angeles River Cooperation Committee to prioritize cooperative implementation of Los Angeles River projects. In addition, the County is a partner in the U.S. Army Corps of Engineers' Los Angeles River Ecosystem Restoration Feasibility Study (started in 2006 for which the City of Los Angeles is serving as primary local sponsor). The County is also a partner with the U.S. Bureau of Reclamation on the Los Angeles Basin Study to prioritize stormwater capture and infiltration that will result in watershed-wide conservation.

San Gabriel River Watershed

The San Gabriel River watershed encompasses part of the Angeles National Forest, the San Gabriel Valley, and large urban areas in southeast portion of Los Angeles County. It is bounded by the Los Angeles River on much of its western flank, and extends to San Bernardino and Orange counties. Totalling more than 640 square miles, the watershed has extensive areas of un-channeled tributaries, which support riparian and woodland habitats. Its northern reaches in the Angeles National Forest are dramatically different from the developed 167 square miles in the Los Angeles Basin. The U.S. Congress has preserved two wilderness areas within this watershed: the San Gabriel Wilderness Area, 36,215 acres along the west fork of the San Gabriel River, and Sheep Mountain Wilderness Area, 31,680 acres along the east fork of the San Gabriel River.

The main watercourse in this watershed is the San Gabriel River. The San Gabriel River extends 59 stream miles from the Angeles National Forest to the Pacific Ocean, draining 350 square miles of land. It also recharges groundwater tables in several basins. The major tributaries that feed the San Gabriel River include Coyote Creek, Walnut Creek, Puente Creek and San Jose Creek. The upper section of the San Gabriel River and its tributaries are still considered relatively pristine. However, intensive recreational use and erosion due to wildfires in this area may threaten water quality and wildlife that depend on the river. The middle section of the river has been extensively modified throughout the San Gabriel Valley to diminish flood damage and encourage groundwater recharge. The lower section, similar to the Los Angeles River, is lined with concrete from Firestone Boulevard to the bay. In contrast to the upper and middle sections of the river, dry weatherflow in the lower section stems primarily from urban runoff and treated effluent from municipal wastewater treatment facilities.

A clear link exists between the health of this watershed and the quality of life for millions of Los Angeles County residents. The upper reaches of the San Gabriel River support wildlife, deliver drinking water and provide a myriad of recreational opportunities. To protect and enhance the multiple benefits of this resource a riverwide planning effort entitled *San Gabriel River Master Plan* was adopted in 2006. This effort, spearheaded by the County, brings together a dynamic group of

stakeholders, including the 13 cities along the San Gabriel River, residents, environmental groups and many business and community leaders.

The County is working with stakeholders, such as the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy, the Santa Monica Mountains Conservancy, and the Flood Control District. Together, stakeholders developed a watershed and open space plan in 2001 entitled *Common Ground: From the Mountains to the Sea* that provides general guidelines for improvement of the San Gabriel and Lower Los Angeles Rivers watersheds through community development, public awareness, preservation of open space and creation of recreational opportunities—particularly along the rivers.

Santa Clara River Watershed

The Santa Clara River watershed is an extensive hydrologic system that encompasses the western portion of the Angeles National Forest in Los Angeles County and the eastern portion of Los Padres National Forest in Ventura County. The Santa Clara River—an essential component of this watershed—recharges local groundwater, provides riparian habitat and supplies water to downstream agricultural lands in Ventura County. It is the largest relatively unaltered river system in Southern California, and the single most important natural wildlife corridor in Los Angeles County. The Santa Clara River and its tributaries provide drainage for approximately 654 square miles of the upper watershed within Los Angeles County. The Santa Clara River's major tributaries include Soledad Canyon, Castaic Creek, San Francisquito Canyon Creek, Bouquet Canyon Creek, Sand Canyon Creek, Mint Canyon Creek and Santa Clara River South Fork. Several endangered species are found in this watershed, including the arroyo toad and the unarmored three-spine stickleback. Another important stretch of the Santa Clara River supports a variety of riparian-obligate songbirds and birds of prey between Castaic Junction and Blue Cut near the Ventura County line, where the groundwater basin thins and narrows, forcing groundwater toward the surface.

A link exists between the health of this watershed, particularly its tributaries, and development in the area. Urban expansion in the 1990s and early 2000s impacted the watershed on several levels, including a reduction in local water supplies and disappearing open space. Furthermore, the land use activities in this area have created many square miles of impervious surfaces, which have created more urban runoff and reduced the amount of water that would naturally percolate into groundwater basins. By employing watershed management techniques, the County aims to curb this trend.

VI. Agricultural Resources

Agricultural Resource Areas Methodology

Figure 6.5 in the Conservation and Natural Resources Element shows the County's Agricultural Resource Areas (ARAs), where the County promotes the preservation of agricultural activities. The ARA boundaries were derived from farmland identified by the State Department of Conservation, including Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance, and Unique Farmland. In addition, the ARAs include lands that received permits from the Los Angeles County Agricultural Commissioner/Weights and Measures.

To reflect changes in land uses and address environmental concerns, the following were excluded from the ARAs:

- Significant Ecological Areas (SEA) and Ecological Transition Areas (ETA);
- Approved specific plan areas;
- Approved large-scale renewable energy facilities;
- Lands outside of the Santa Clarita and Antelope Valleys, where farming is concentrated; and
- Lands that are designated Public and Semi-Public (P).

Data from the U.S. Census of Agriculture

Table E.1: Change in Number and Acreage of Farms in Los Angeles County, 1987-2007

	1987	1992	1997	2002	2007
Farms (number)	2,035	1,446	1,226	1,543	1,734
Change from previous year	-	-589	-220	317	191
Percent change from previous year	-	-28.94%	-15.21%	25.86%	12.38%
Land in farms (acres)	280,156	183,569	130,838	111,458	108,463
Change from previous year	-	-96,587	-52,731	-19,380	-2,995
Percent change from previous year	-	-34.48%	-28.73%	-14.81%	-2.69%

Source: U.S. Census of Agriculture, 1987-2007.